

# A PRACTICAL MODEL TO IMPLEMENTING IFRS IN THE NATIONAL ACCOUNTING SYSTEM: THE CASE OF AZERBAIJAN

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## ABSTRACT

The purpose of this article is to develop a methodological approach to substantiating the effective consolidation model of national accounting standards (NAS) with International Financial Reporting Standards (IFRS) for Azerbaijan. Using the questionnaire method, the advantages, and obstructions of IFRS implementation in Azerbaijan have been assessed, depending on the practicing models of consolidation of NAS and IFRS. Using fuzzy sets made it possible to determine the levels of development of advantages and obstructions associated with the introduction of IFRS into national accounting practice in Azerbaijan. We determined the most effective model of consolidation of NAS and IFRS for the enterprises of Azerbaijan. The effectiveness of implementing models for the consolidation of NAS and IFRS has been assessed to provide a balance between advantages and destructive factors in the implementation of IFRS.

**Keywords:** IFRS, NAS, Azerbaijan, consolidation model, business entities, transformation.

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## INTRODUCTION

The sale of traditional energy resources (mainly oil and gas) for a long time has remained

the defining driver of the functioning of the Azerbaijan's national economy. The trade turnover of oil and gas alone accounts for about 80% of the total volume of Azerbaijan exports of

goods and services, and finances state expenditures within 60% (Carnegie Moscow Center, 2021; International Energy Agency, 2021). The sale of oil and gas allowed the country in the early 2000s to achieve one of the highest rates of economic development among the post-Soviet countries (Knoema, 2021). In current conditions, most industrialized developed countries that are consumers of Azerbaijan's energy exports, according to the Paris Agreement, pledged to form an economy with zero greenhouse emissions by 2050. (European Commission, 2021). Because of this worldwide long-term climate neutrality strategy, the prospects for energy resources as the primary source of the state budget and exports become uncertain. This puts the development of the national economy at risk. Indeed, the solid and prolonged volatility in crude oil prices in the global energy market in 2014 and 2020 has strengthened the arguments about the vulnerability of the country's economy and the urgent need for its diversification as soon as possible (Trading Economics, 2021; Yasmin, El Refae & Eletter, 2020).

Many scientific studies have shown that increasing trade openness, combined with increased participation in global value chains, can improve export diversification and attract foreign investment, and can provide a 5-10% annual increase in a country's income (Ganbarov, Alieva & Babazade, 2020). However, one of the severe obstacles to achieving the set tasks by Azerbaijan is the presence of numerous differences and incompatibility in the maintenance of financial statements of companies compiled in different countries, e.g. its trade partners. This leads to distortion of information about the actual financial position and the results of enterprises' financial and economic activities which are in dire need of foreign investment.

The country seeks to be part of European structures by aligning with EU norms and standards, and thereby contributing to sustainable business development outside the oil and gas industry (UN Sustainable Development Solutions Network, 2020). Therefore, today the transformation of financial statements following IFRS is a primary condition for businesses in Azerbaijan, as it provides the first step towards

attracting foreign investors to the non-oil sector of the economy and expanding international trade cooperation. The transition to IFRS can give the development of the economy an additional impetus for its diversification, contributing to the transparency and attractiveness of Azerbaijani business for international cooperation.

Republic of Azerbaijan Accounting Law from 2004 has determined the basis for the transformation of accounting and reporting of enterprises following IFRS (Accounting Law, 2004). And the new Accounting Law of 2018 provides for the mandatory consolidation of NAS with IFRS. At the same time, it envisaged that national accounting standards would be completely withdrawn from practice after the translation of IFRS into Azerbaijani. The lack of financial reporting by the requirements entails administrative responsibility (On accounting, 2020).

Today the practical implementation of IFRS standards in Azerbaijan is formal. Organizations have been forced to switch to consolidated financial statements and use the new Chart of Accounts without subaccounts, and only put the mark "following IFRS" without any significant changes or transformations in the process of preparing financial statements. The current situation provokes the risk of a long delay in the implementation of IFRS in Azerbaijani business practice. One of the drivers of a formal attitude to the transformation and consolidation of financial statements is institutional problems that are typical for Azerbaijan and most countries of the post-Soviet camp. First, the updating of IFRS in Azerbaijan is proceeding at a relatively slow pace. The quality of the translation of standards from English does not meet the high standards and the original English texts from the IASB. Therefore, the standards were updated with a considerable delay (Council of CIS Heads of State, 2021). In addition, one of the main problems of effective consolidation of financial statements is that accountants' mentality and professional experience in the country do not correspond to the task. The lack of the required number of qualified personnel specializing in this area and able to carry out measures for the transition to new accounting and reporting standards has led to the fact that, in Azerbaijan, the accounting practice is mainly reduced to calculating taxes,

except for energy sector enterprises (Hajiyeva et al., 2020). It can be stated, therefore, that the prospect of applying IFRS in Azerbaijan and its consolidation with NAS entirely depends on the neutralization of the indicated destructive factors. Therefore, this study aims at substantiating an effective consolidation model, ensuring the coordination of actions and decisions of authorities, enterprises, and representatives of the professional community of accountants and auditors in Azerbaijan.

### LITERATURE REVIEW

The importance of studying the problems of consolidating national accounting and financial statements reporting following IFRS standards, has been considered by researchers from many countries for a long time (Silva, Fontes & Martins, 2021; Madah Marzuki & Abdul Wahab, 2016; Pignatel & Tchuigoua, 2020). Since companies in more than 144 countries use IFRS to prepare accounting reports, numerous studies have been explicitly devoted to the problems of certain inconsistencies and disagreements arising from language differences due to the narrow profile of a commercial document. This leads to a decrease in efficiency and a significant slowdown in the transformation of financial statements using the requirements prescribed by international standards. Companies were taking advantage of the widespread use of such reporting to achieve various goals when a company enters global markets (Hellmann & Patel, 2021).

Particular attention should be paid to works devoted to studying the state of the accounting environment in countries that have adopted and have already switched to the use of IFRS (Pignatel & Tchuigoua, 2020; Müller, 2014). At the same time, an emphasis was made on justifying the fundamental factors (political and economic) that contributed to the consolidation of financial statements or the transition to IFRS (El-Helaly, Ntim & Soliman, 2020). It has been shown that firms in advanced economies, using the example of Western Europe and the United States, are more inclined and have incentives to switch to IFRS. This is due to the formed institutional structure of IFRS in the country and the orientation of most companies to support development financing in the economic and social areas (Pignatel & Tchuigoua, 2020).

Analysis of the state of implementation of IFRS in the accounting practice of companies in developed countries has indicated the strengthening of such trends and the positive effect of using international standards (Müller, 2014). In general, there is an improvement in the quality of financial reporting after adopting IFRS standards in terms of its transparency and information content and the improvement of financial discipline (Huff & Delcours, 2014; Pignatel & Tchuigoua, 2020).

Today, IFRS is characterized by significant advantages when applied as a basis for the standardization and harmonization of the national accounting system. IFRS has little complexity and high cost of adaptation and are created to generalize the experience gained over the field of accounting's centuries-old history and are used widely in the practice of many developing countries, including the post-Soviet space (Silva, Fontes & Martins, 2021; Hajiyeva et al., 2020; Maradona & Chand, 2018). Numerous works have been devoted a thorough study of the consolidation of national accounting with IFRS in developing countries characterized by relatively low dynamics of accounting transformation (Poudel, Hellmann & Perera, 2014). But those who need to attract investment capital to the economy on an ongoing basis and, it would seem, a business should be as interested as possible in the accelerated transition to IFRS. The key issues that hinder the consolidation of national accounting standards were considered (Hajiyeva et al., 2020). Highlighted among the main ones were: the lack of a motivational component for the consolidation and introduction of IFRS; the lack of qualified human resources and funding; and the well-established traditional stereotypes of accountants (Poudel, Hellmann & Perera, 2014; Hajiyeva et al., 2020; Maghlaperidze, Kharadze & Kuspliak, 2021). The results of these scientific studies have given rise to a layer of scientific developments, concentrated mainly on the substantiation of an effective model for the consolidation of NAS and IFRS in developing countries. Depending on the ratio of national standards and IFRS and the scale of use of IFRS, the following models of consolidation of national standards and IFRS have been developed and scientifically and practically justified (Silva, Fontes & Martins, 2021; Hartmann, Marton & Sols, 2020; Bengtsson, 2021):

- Convergence of NAS and IFRS for listed companies (*Mod.List*).
- Convergence of NAS and IFRS for all companies (*Mod.Com*).
- Development of new NAS following to IFRS (*Mod.Dev*).
- using IFRS as NAS for all organizations (*Mod.Int*).
- Non-adoption of IFRS and the only use of NAS (*Mod.Nat*).

These models assume the consolidation of IFRS from existing NAS without changes or through minor adjustments concerning listed (*Mod.List*) or all companies (*Mod.Com*) (Silva, Fontes & Martins, 2021; Madah Marzuki & Abdul Wahab, 2016; Maradona & Chand, 2018). The option of consolidation is possible due to significant changes in NAS or the development of new ones by IFRS (*Mod.Dev*), abolition of NAS, and the use of IFRS exclusively (*Mod.Int*) (Hartmann, Marton & Sols, 2020; Bengtsson, 2021). The opposite model is also possible, corresponding to the rejection of IFRS and the further use of national standards (*Mod.Nat*) (Hartmann, Marton & Sols, 2020).

As noted in the studies (El-Helaly, Ntim & Soliman, 2020; Hartmann, Marton & Sols, 2020; Bengtsson, 2021), it is difficult to discuss the advantages of each of the presented models of consolidation of NAS and IFRS since the positive or negative effect depends on:

- The level of economic development and the institutional framework for the consolidation of financial statements with IFRS.
- The state and potential of development of small and medium-sized enterprises in the country (SME).
- The availability and effectiveness of the state plan for the transition of enterprises to IFRS standards.
- The level of development of the financial market.
- The specifics of economic activity of market economy entities, etc.

These models in particular have not been comprehensively studied in terms of efficiency

and impact on the quality of financial accounting in the countries of the post-Soviet camp, as countries with similar principles of doing business (Hajiyeva et al., 2020; Kim, 2017). Researchers have mainly considered the barriers inherent in these countries, characterized by a low level of confidence on the part of foreign investors due to the subordination of the former socialist state accounting to the purposes of taxation (Hajiyeva et al., 2020; Zolkover et al., 2020; Lysiuk & Britchenko, 2021; Shapran & Britchenko, 2021). This hinders the integration of the business into the global economy and increases economic diversification in the case of countries with resource economies. Because our scientific interest focused on the problems of the implementation of IFRS in the practice of Azerbaijan, which is as indicated in the Introduction at the initial stage of consolidation of national accounting with IFRS, it seems reasonable to scientifically substantiate its most effective model. Doing so will save time and financial resources for its implementation and create an accompanying institutional and legislative framework to achieve a positive economic effect.

## METHODOLOGY

We used econometric methods such as questionnaires and fuzzy sets to conduct the study.

Eight hundred thirty-five (835) respondents took part in the survey during January-March 2021 (Google Form (2021)). The regional structure of the survey respondents is: Baku (29.6%), Nakhchivan (12.7%), Absheron-Khyzy (17.1%), Ganja-Dashkesen (15.4%), Merkezi Aran (13.9%), Shirvan-Salyan (11.3%). The respondents were financial directors, chief accountants, chief economists of state (38.2%), and non-state (61.8%) organizations of various types of economic activity and SMEs. In terms of the kinds of economic activities, respondents represented the following organizations: Mining (18.8%), Manufacturing (14.7%), Agriculture, Forestry and Fishing (10.1), Construction (8.7), Trade (15.3), Financial and Insurance Activities (8.5), Public Administration and Defense (12.6), Administrative and Support Service Activities (11.3). The respondents were interviewed regardless of whether they use International

Financial Reporting Standards (IFRS) in their organization or not. The absence of such a limitation in this study is because organizations that use IFRS can be helpful from a position of greater awareness of the advantages of IFRS and the nuances of the obstructions to using IFRS. Organizations that do not use IFRS are more informative in identifying the most significant destructive factors that impede IFRS implementation.

The factors that ensure the representativeness of the survey results were:

- The geographical diversity of the organizations represented.
- Variety, e.g., the scale of economic efficiency, the form of ownership, and the scope of activities of organizations

- A different experience in applying IFRS.
- Professional suitability, which ensures the competence of the respondents.
- The size of the sample (835 people), which is sufficient at a significance level of  $p = 0.05$  (Taherdoost, 2017).
- Voluntary participation and anonymity.

To check the differences in assessments between different groups of respondents, a  $t$ -test was used for two independent samples.

Based on the results of existing studies and reports on Azerbaijan's transition to IFRS, the advantages and obstructions of using IFRS at the national level are identified (Hajiyeva et al., 2020; Kim, 2017; Council of CIS Heads of State, 2021).

$$E_i = \sum [(0.1 \times \mu_{ij}^L + 0.5 \times \mu_{ij}^M + 0.9 \times \mu_{ij}^H) + (0.9 \times \hat{\mu}_{ij}^L + 0.5 \times \hat{\mu}_{ij}^M + 0.1 \times \hat{\mu}_{ij}^H)] \quad (1)$$

$$\mu_{ij}^L (\hat{\mu}_{ij}^L) = \begin{cases} 1, b_{min} \leq b_{ij} \leq (\frac{4}{5} b_{min} + \frac{1}{5} b_{max}) \\ \frac{3b_{min} + 2b_{max} - 5b_{ij}}{b_{max} - b_{min}}, (\frac{4}{5} b_{min} + \frac{1}{5} b_{max}) < b_{ij} < (\frac{3}{5} b_{min} + \frac{2}{5} b_{max}) \end{cases} \quad (2)$$

$$\mu_{ij}^M (\hat{\mu}_{ij}^M) = \begin{cases} \frac{5b_{ij} - 4b_{min} - b_{max}}{b_{max} - b_{min}}, (\frac{4}{5} b_{min} + \frac{1}{5} b_{max}) < b_{ij} < (\frac{3}{5} b_{min} + \frac{2}{5} b_{max}) \\ 1, (\frac{3}{5} b_{min} + \frac{2}{5} b_{max}) \leq b_{ij} \leq (\frac{2}{5} b_{min} + \frac{3}{5} b_{max}) \\ \frac{b_{min} + 4b_{max} - 5b_{ij}}{b_{max} - b_{min}}, (\frac{2}{5} b_{min} + \frac{3}{5} b_{max}) < b_{ij} < (\frac{1}{5} b_{min} + \frac{4}{5} b_{max}) \end{cases} \quad (3)$$

$$\mu_{ij}^H (\hat{\mu}_{ij}^H) = \begin{cases} \frac{5b_{ij} - 2b_{min} - 3b_{max}}{b_{max} - b_{min}}, (\frac{2}{5} b_{min} + \frac{3}{5} b_{max}) < b_{ij} < (\frac{1}{5} b_{min} + \frac{4}{5} b_{max}) \\ 1, b_{ij} \geq (\frac{1}{5} b_{min} + \frac{4}{5} b_{max}) \end{cases} \quad (4)$$

Where:  $E_i$  is the practicability of introducing the  $i$ -th model of consolidation of NAS with IFRS;

$\mu_{ij}^L, \mu_{ij}^M, \mu_{ij}^H$  is the probability of assigning the  $j$ -th advantage to low, medium, high levels of development, respectively, for the  $i$ -th consolidation model;

$\hat{\mu}_{ij}^L, \hat{\mu}_{ij}^M, \hat{\mu}_{ij}^H$  is the probability of assigning the  $j$ -th obstruction to a low, medium, high level of development for the  $i$ -th consolidation model;

$b_{ij}$  is scoring the degree of manifestation of the  $j$ -th advantage/obstruction for the  $i$ -th consolidation model;

$b_{min}, b_{max}$  is the minimum and maximum possible score for the degree of manifestation of the  $j$ -th advantage/obstruction. Following a 5-point Likert scale, these points correspond to

the values "1" and "5".

The questionnaire aimed to obtain quantitative assessments of the degree of the manifestation of the advantages and obstructions of implementing each consolidation model separately. The questions were designed to assess the impact of benefits and destructive factors not on the country's economy. This formulation of questions is an additional factor in ensuring the representativeness of the survey results since the influence of the type of economic activity of the organization on the estimates obtained is minimized. The assessment was carried out on a 5-point Likert scale. A rating of "1" corresponds to the absence of a particular advantage/obstruction for this consolidation model. A "5" rating compares to the significant impact of the advantage/obstruction on the national economy. The reliability of the questionnaire was assessed using the Cronbach alpha coefficient in the Statistica program 12.0.

We used indicators of the appropriateness of using the model (E) To determine an effective consolidation model. For calculating this indicator, formulas (1-4) have been developed based on the method of fuzzy sets (Galiakhmetova et al., 2019).

The range of possible score values were divided into five identical segments and into the functions for determining the probability of assigning benefits/obstructions to a certain level of development (formulas 2-4). These segments correspond to low, medium, and high levels of growth and two intermediate ones. The choice of the trapezoidal function for classifying the values of benefits/obstructions is because there are no specific critical values of these indicators that divide the range of values into certain levels.

Since the destructive factors of implementing the model pose threats to economic development, when calculating the feasibility indicator (formula 1) we used a correction factor of 0.9 for a low level of obstruction, an average - 0.5, and a high one - 0.1. The proposed indicator of the feasibility of introducing a consolidation model (E) was measured in the range [0.1 to 0.9]. The higher the indicator's value, the more

significant the consolidation of national accounting standards with IFRS is.

The practicability indicators of introducing a consolidation model and particular indicators were determined by dividing the range of values into five equal intervals. The low level of the general indicator of the practicability for implementing the consolidation model was characterized by the absence or low level of advantages and by a high level of manifestations of obstructions on the way to its performance. The introduction of these models is impractical for organizations and the economy as a whole. The average level is inherent in models for which the benefits from implementation are at a level not lower than the average; the manifestation of obstructions is not higher than average. Implementing these models is effective due to the excess of the positive effect over the influence of obstructions. The high level of the practicability indicator indicates significant advantages created during the implementation of the model, which significantly prevails over possible obstacles during the model implementation. Intermediate levels (between low and medium, medium and high) correspond to the indicator's values of the feasibility of implementing the model. According to fuzzy classification rules, there is not a 100% confidence in attributing the indicator to a certain level. The intermediate level between low and medium is characterized by an excess of the effect of obstructions over the benefits, which indicates the ineffectiveness of these models, for a level intermediate between medium and high - about efficiency.

## RESULTS

The average scores for the sample of respondents of the degree of manifestation of advantages and obstructions in implementing models of consolidation of NAS with IFRS in Azerbaijan are given in Tables 1 and 2.

**Table 1:** Average estimates of the degree of manifestation of the advantages to implementing the consolidation models of NAS with IFRS in Azerbaijan

Advantages	Consolidation models				
	<i>Mod. List</i>	<i>Mod. Com</i>	<i>Mod. Dev</i>	<i>Mod. Int</i>	<i>Mod. Nat</i>
<i>AD1</i> – Increased confidence from foreign investors	3.2	3.4	2.8	3.4	1
<i>AD2</i> – Lack of costs for organizations to agree on the procedure for internal and external accounting	4	4.2	3.5	4.2	1
<i>AD3</i> – Reducing the cost of developing NAS	1.9	2.1	1.6	5	1
<i>AD4</i> – Reducing the riskiness of investments due to increased transparency, completeness of financial reporting	3.6	3.9	3.9	3.9	1
<i>AD5</i> – Increasing the investment attractiveness of organizations using IFRS	2	2.2	1.6	2.2	1
<i>AD6</i> – Increasing the validity of economic decision-making due to the availability of information among a broader range of users	3.6	4.2	2.3	4.2	1
<i>AD7</i> – Saving resources due to standardization of software, information flows for accounting, and resource management of parent and subsidiary companies	3	3.8	2.6	3.8	1
<i>AD8</i> – Application of unified standards for the preparation of accounting and management reporting	3.5	4.2	4.2	4.2	1
<i>AD9</i> – Facilitating the entry of companies into international capital markets	2.4	2.6	1.9	3	1
<i>AD10</i> – Improving the efficiency of government control and regulation due to the availability of financial information	2.1	3.2	3.2	3.2	1
<i>AD11</i> – IFRS, to a more extent, reflects the economic meaning of transactions.	2.2	3.4	3.4	3.4	1
Cronbach's Alpha value	0.83				

Source: Authors' finding

**Table 2:** Average estimates of the degree of manifestation of the obstructions to implementing the consolidation models of NAS with IFRS in Azerbaijan

Obstructions	Consolidation models				
	<i>Mod. List</i>	<i>Mod. Com</i>	<i>Mod. Dev</i>	<i>Mod. Int</i>	<i>Mod. Nat</i>
<i>RIS1</i> – The disinterest of heads of organizations in providing reliable financial statements	3.3	3.3	2.8	4	4.2
<i>RIS2</i> – Low professional qualifications of specialists in the field of IFRS, the need to improve their qualifications	2.5	2.8	3.1	3.6	1
<i>RIS3</i> – The difficulty of implementing IFRS among SME	2.7	2.7	2.7	3.7	1
<i>RIS4</i> – Imperfection of the system of control over the reliability of financial statements; the unreliability of published reports	3.9	3.9	4	3.9	4.4
<i>RIS5</i> – Expenses associated with the transition to IFRS, reforming the national accounting and reporting system	3.6	4.1	4.8	4.4	1
<i>RIS6</i> – Difficulty in determining the fair value of financial assets and financial liabilities	2.3	2.3	2.3	2.3	2.1
<i>RIS7</i> – Lack of methodological materials for using IFRS	1.6	1.7	2.6	2.4	1
<i>RIS8</i> – Legal conflicts associated with different interpretations of NAS and IFRS	1.8	1.8	1.5	1	1
<i>RIS9</i> – The need to repurpose personnel due to the increase in the level of automation of accounting	3.2	3.8	4.1	4	1
<i>RIS10</i> – The need to develop software for the transition to IFRS	3.3	3.6	3.3	3.9	1
Cronbach's Alpha value	0.88				

Source: Authors' finding

Cronbach's alpha values calculated by the respondents' scores were 0.83 and 0.88. The values were in the range of 0.7-0.9, which indicates the reliability of the questionnaire (Hair et al., 2017).

The estimates showed no differences in the perception of advantages and obstructions from representatives of organizations engaged in different economic activities and located in other

economic regions of Azerbaijan. Based on the average assessments of the respondents using formulas (2) - (4), the levels of development of advantages/obstructions for the introduction of models of consolidation of NAS with IFRS in Azerbaijan were determined (Table 3).



**Table 3:** Levels of development of advantages/obstructions for the implementation of consolidation models NAS with IFRS in Azerbaijan

Indexes	Probability to assign an indicator to a certain level of development														
	<i>Mod.List</i>			<i>Mod.Com</i>			<i>Mod.Dev</i>			<i>Mod.Int</i>			<i>Mod.Nat</i>		
	$\mu_{ij}^L$	$\mu_{ij}^M$	$\mu_{ij}^H$	$\mu_{ij}^L$	$\mu_{ij}^M$	$\mu_{ij}^H$	$\mu_{ij}^L$	$\mu_{ij}^M$	$\mu_{ij}^H$	$\mu_{ij}^L$	$\mu_{ij}^M$	$\mu_{ij}^H$	$\mu_{ij}^L$	$\mu_{ij}^M$	$\mu_{ij}^H$
<i>AD1</i>	-	1	-	-	1	-	-	1	-	-	1	-	1	-	-
<i>AD2</i>	-	0.3	0.8	-	0	1	-	0.9	0.1	-	-	1	1	-	-
<i>AD3</i>	0.9	0.1	-	0.6	0.4	-	1	-	-	-	-	1	1	-	-
<i>AD4</i>	-	0.8	0.3	-	0.4	0.6	-	0.4	0.6	-	0.4	0.6	1	-	-
<i>AD5</i>	0.8	0.3	-	0.5	0.5	-	1	-	-	0.5	0.5	-	1	-	-
<i>AD6</i>	-	0.8	0.3	-	0	1	0.4	0.6	-	-	-	1	1	-	-
<i>AD7</i>	-	1	-	-	0.5	0.5	-	1	-	-	0.5	0.5	1	-	-
<i>AD8</i>	-	0.9	0.1	-	-	1	-	-	1	-	-	1	1	-	-
<i>AD9</i>	0.3	0.8	-	-	1	-	0.9	0.1	-	-	1	-	1	-	-
<i>AD10</i>	0.6	0.4	-	-	1	-	-	1	-	-	1	-	1	-	-
<i>AD11</i>	0.5	0.5	-	-	1	-	-	1	-	-	1	-	1	-	-
<i>RIS1</i>	-	1	-	-	1	-	-	1	-	-	0.3	0.8	-	-	1
<i>RIS2</i>	0.1	0.9	-	-	1	-	-	1	-	-	0.8	0.3	1	-	-
<i>RIS3</i>	-	1	-	-	1	-	-	1	-	-	0.6	0.4	1	-	-
<i>RIS4</i>	-	0.4	0.6	-	0.4	0.6	-	0.3	0.8	-	0.4	0.6	-	-	1
<i>RIS5</i>	-	0.8	0.3	-	0.1	0.9	-	-	1	-	-	1	1	-	-
<i>RIS6</i>	0.4	0.6	-	0.4	0.6	-	0.4	0.6	-	0.4	0.6	-	0.6	0.4	-
<i>RIS7</i>	1	-	-	1	-	-	-	1	-	0.3	0.8	-	1	-	-
<i>RIS8</i>	1	0	-	1	-	-	1	-	-	1	-	-	1	-	-
<i>RIS9</i>	-	1	-	-	0.5	0.5	-	0.1	0.9	-	0.3	0.8	1	-	-
<i>RIS10</i>	-	1	-	-	0.8	0.3	-	1	-	-	0.4	0.6	1	-	-

Source: Authors' finding

The most advantages of implementing IFRS in Azerbaijan in the current conditions are no costs for organizations to agree on the procedure for internal and external accounting (*AD2*). The possibility of obtaining this advantage for the *Mod.List*, *Mod.Com*, *Mod.Int* models are rated at a high level; for the *Mod.Dev* model, an average level; *Mod.Nat* - low. The broader the scope of organizations using IFRS, the more significant this advantage. The lowest financing costs of the transformation period of the convergence of NAS with IFRS for all companies and the use of IFRS as national standards for all organizations was deterministic when using the models *Mod.Int* и *Mod.Com*;

With respect to the application of unified standards for the preparation of accounting and management reporting (*AD8*), the possibility of obtaining an advantage for the *Mod.Com*, *Mod.Dev*, *Mod.Int* models are rated at a high level; for the *Mod.List* model – at average level; and for *Mod.Nat*, at a low level.

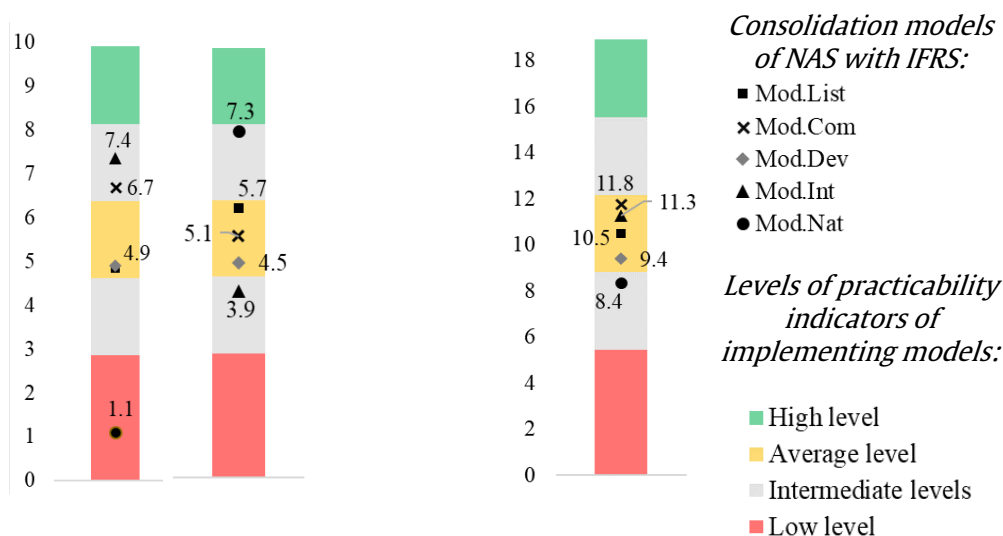
Under the current conditions of the economic development of Azerbaijan and the development of the accounting system, the main advantages of introducing IFRS into national practice are to avoid inconsistencies between the internal and external accounting systems and the provisions of accounting and management reporting, and to minimize the costs associated with the occurrence of these inconsistencies.

Even though the main advantage of IFRS implementation is attracting investors and increasing access to international capital markets (Hajiyeva et al., 2020), based on the analysis results we determined that these advantages are not the most significant since the conditions for their provision and achievement are inherently long-term in nature. In the short-term, *Mod.List*, *Mod.Com*, *Mod.Dev*, *Mod.Int* models are characterized by the middle level. For the *Mod.Nat* model, which does not imply the use of IFRS, all the benefits are missing. An obstacle to using the advantages of IFRS is also

the problem associated with it: lack of interest of heads of organizations in providing reliable financial statements (*RIS1*) and an imperfect system of control over the reliability of financial statements (*RIS4*). Until these shortcomings are eliminated, the significance of which is assessed at medium and high levels, there is a risk of losing benefits from IFRS implementation for the Azerbaijani economy, even in the long term. Other significant destructive factors in the implementation of IFRS are the substantial financial costs required to ensure the institutional and technical basis for performance, reform of the national accounting and reporting system (*RIS5*), and personnel re-profiling due to an increase in the level of accounting automation (*RIS9*). These obstructions are characterized by a high level of influence in implementing all studied models of consolidating national accounting standards with IFRS. There are also obstructions associated with middle and high levels:

- Low professional qualifications of specialists in the field of IFRS and the need to improve their capabilities or hire foreign specialists (*RIS2*);
- The complexity of the consolidation and implementation of the national accounting system IFRS among SME (*RIS3*), which have less unrestricted cash and are not active participants in international economic relations;
- The need to develop software for the transition to IFRS (*RIS10*).

The practicability indicators of using various models of consolidation of national accounting standards with IFRS in Azerbaijan are visualized in Figure 1.



Levels of the practicability indicators of implementing the models of consolidation of NAS with IFRS in the context of hands of advantages (diagram on the left) and obstructions (diagram on the right)

Levels of the general indicator of the practicability of implementing consolidation models

**Figure 1:** An empirical assessment of the practicality to use consolidation models of NAS with IFRS in Azerbaijan

Source: Authors' finding

The most significant advantages for the accounting practice of Azerbaijan have been determined - the use of the model of using IFRS as national standards for all organizations (value of the expediency indicator 7.4 points) and the model of convergence of NAS with IFRS (value of the indicator of expediency 6.7 points). These models of consolidation of financial statements imply the introduction of IFRS standards for all organizations, the unification of accounting and management reporting standards, internal and external audits, and the automation of the accounting system by international requirements and norms. Under such conditions, the accessibility of interested parties to the financial statements of all organizations will be ensured, which will increase the validity of decision-making, ensure the transparency of information exchange for investment, increase confidence in national companies in the country on the part of foreign investors, simplify the reporting system for parent and subsidiary companies (mainly if they are located in different countries), and improve the effectiveness of government control and regulation. To a lesser

extent, these advantages are manifested in the implementation of such consolidation models:

- 1) Convergence of NAS and IFRS only for listed companies due to the smaller scale of the spread of IFRS;
- 2) When developing a new NAS following IFRS, which requires an even more extended implementation period and a higher level of financial costs.

There are no advantages for the model of not adopting IFRS and only using NAS; a score of 1.1 is the minimum possible based on the proposed method for calculating the practicability indicator.

The highest level of benefits of the *Mod.Int* model is accompanied by a higher level of obstruction of practical implementation in the NAS. For this model, the value of the practicability indicator is the minimum - 3.9 points. For the models *Mod.List*, *Mod.Com*, *Mod.Dev*, the practicality of implementation, considering the existing obstructions based on the results of our study, is characterized by an average level of development.

## DISCUSSION

The justification of the advantages of IFRS and the system of destructive factors of influence on their implementation to NAS made it possible to conclude that the most effective model is the convergence of NAS and IFRS for all companies in Azerbaijan. The value of the practicality indicator for this model was 11.8 points, which corresponds to the average level of development of accompanying factors (advantages). The intermediate level of efficiency is also demonstrated by the models of convergence of national standards and IFRS only for listed companies (the value of practicability indicator is 10.5 points), the model of using IFRS as NAS for all organizations (practicability indicator is 11.3 points), and the model of developing new NAS by IFRS (the value of the practicability indicator is 9.4 points). The effectiveness of the model of non-acceptance of IFRS was estimated at 8.4 points, which is the minimum among the models of financial statements consolidation under study.

The results obtained indicate that even in the short term, taking into account all existing obstructions, the implementation of IFRS effectively improves financial reporting and accounting in Azerbaijan. There are prospects for increasing the efficiency of consolidating national accounting standards with IFRS under minimizing the destructive factors. It is advisable for the Azerbaijani government to create or participate in financing and stimulating the creation of specialized business centers to improve the qualifications of accountants and managers and heads of companies in IFRS on preferential terms. The training should be based on:

- ✓ Principles and methods of drawing up financial statements by IFRS and economic effects from the implementation of IFRS;
- ✓ Composition, structure, and procedure for presenting financial statements;
- ✓ Accounting for non-current and current assets;
- ✓ Accounting for capital and liabilities;
- ✓ Accounting of income, expenses, and financial results;
- ✓ Statement of cash flows;

- ✓ Accounting for business combinations and drawing up a consolidated financial statement.

In-depth detailing of financial statements at the legislative level will also contribute to the activation of the implementation of the convergence model of NAS and IFRS, as this is about the development of independent IFRS standards for SMEs in Azerbaijan. As already noted within the framework of the article, if for large public companies the costs of preparing a complete package of IFRS statements are fully justified, then for SME entities, the costs may be high and even unaffordable. In addition, the needs of users of financial statements of small companies differ from those of users of financial statements of large enterprises. The objective of the IFRS for SMEs should be to balance the cost-benefit of preparing financial statements by retaining the core approaches of IFRS but in a somewhat simplified form and eliminating disclosure requirements that are irrelevant for non-public companies. Conceptually, this voluntary framework will allow IFRS to be implemented in SMEs in Azerbaijan.

## CONCLUSION

Based on the conducted empirical research, we concluded that in Azerbaijan today the most effective model is the convergence of NAS and IFRS for all business entities, including SMEs. The implementation of this model will allow achieving a balance between the most effective use of the advantages of IFRS and the depreciation of obstructions for their performance in NAS. The developed approach allows determining the most optimal model for the implementation of IFRS, taking into account the material and technical base of the national accounting system, the legislative basis for its regulation, and the characteristics of the country's national economy. This creates the foundation for attracting financial capital, not only to the country's oil sector but also to develop other promising sectors of the economy, which will contribute to its diversification. These issues we did not consider in this study but will form the basis of our further scientific developments.

## REFERENCES

- Accounting Law. (2004).  
<https://www.iasplus.com/en/binary/country/azerbaijanlaw.pdf>
- Bengtsson, M.M. (2021). Determinants of de jure adoption of international financial reporting standards: a review. *Pacific Accounting Review*. <https://doi.org/10.1108/PAR-10-2020-0193>
- Carnegie Moscow Center. (2021). Managing the Resource Curse Strategies of Oil-Dependent Economies in the Modern Era. [https://carnegieendowment.org/files/Movchan\\_Report\\_Final\\_Print.pdf](https://carnegieendowment.org/files/Movchan_Report_Final_Print.pdf)
- Council of CIS Heads of State. (2021). About the progress of improving national accounting and reporting systems, including the experience of applying IFRS as of January 1, 2021. <https://e-cis.info/cooperation/3008/>
- El-Helaly, M., Ntim, C. G., & Soliman, M. (2020). The Role of National Culture in International Financial Reporting Standards Adoption. *Research in International Business and Finance*, 54, 101241. <https://doi.org/10.1016/j.ribaf.2020.101241>.
- European Commission. (2021). Paris Agreement. [https://ec.europa.eu/clima/eu-action/international-action-climate-change/climate-negotiations/paris-agreement\\_en](https://ec.europa.eu/clima/eu-action/international-action-climate-change/climate-negotiations/paris-agreement_en)
- Galiakhmetova, M. R., Koretskiy, V. P., Mardanova, I. M., & Józsa, L. (2019). Methods and approaches of Complexity Theory and Fuzzy Logic for intensity of university research in terms of Creative Work to be estimated. *Journal of Eastern European and Central Asian Research (JEECAR)*, 6(1), 86-98. <https://doi.org/10.15549/jeecar.v6i1.241>
- Ganbarov, F., Alieva, G., & Babazade, I. (2020). The role of Exchange Rates in non-oil export activity: evidence from Azerbaijan. *Journal of Eastern European and Central Asian Research (JEECAR)*, 7(3), 340-350. <https://doi.org/10.15549/jeecar.v7i3.477>
- Google Form. (2021). Benefits assessment and obstructions of introducing models of consolidation of national standards and IFRS in Azerbaijan. <https://docs.google.com/forms/d/e/1FAIpQLSeA9JxEqCLtoYK7ymNnffRI-eFN0r-Xvs-IDvsGrXoB6cGv5A/viewform>
- Hair, J. F., Hult, G. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks, CA: Sage Publications.
- Hajiyeva, A., Musayeva, N., Hajiyeva, A., Mirzayeva, F., & Prof, A. (2020). The stages and effectiveness of international financial reporting standards implementation. <https://doi.org/10.13140/RG.2.2.19613.13282>.
- Hartmann, B., Marton, J., & Sols, J. A. (2020). IFRS in National Regulatory Space: Insights from Sweden. *Accounting in Europe*, 17, 3, 367-387. <https://doi.org/10.1080/17449480.2020.1824073>
- Hellmann, A., & Patel, C. (2021). Translation of International Financial Reporting Standards and implications for judgments and decision-making. *Journal of Behavioral and Experimental Finance*, 30, 100479. <https://doi.org/10.1016/j.jbef.2021.100479>
- Huff, K., & Delcours, N. (2014). The Method of Choice for Reporting Comprehensive Income. *Journal of Eastern European and Central Asian Research (JEECAR)*, 1(2), 5. <https://doi.org/10.15549/jeecar.v1i2.59>
- International Energy Agency. (2021). Azerbaijan 2021. Energy Policy Review. <https://iea.blob.core.windows.net/assets/49662c46-575f-4561-a541-5541f5342b07/Azerbaijan2021EnergyPolicyReview.pdf>
- Kim, O. (2017). The Effects and Implications of Kazakhstan's Adoption of International Financial Reporting Standards. A Resource Dependence Perspective. *Soviet and Post-Soviet Politics and Society (SPPS)*, 167. <https://ssrn.com/abstract=3096044>
- Knoema. (2021). <https://knoema.ru/atlas>
- Lysiuk, O., & Britchenko, I. (2021). Social entrepreneurship as an instrument of development of small and medium entrepreneurship in Ukraine. *VUZF review*, 6 (1), 38-48. <https://doi.org/10.38188/2534-9228.21.6.04>
- Madah Marzuki, M., & Abdul Wahab, E.A. (2016). Institutional factors and conditional

- conservatism in Malaysia: Does international financial reporting standards convergence matter? *Journal of Contemporary Accounting & Economics*, 12, 3, 191-209.  
<https://doi.org/10.1016/j.jcae.2016.09.004>
- Maghlaferidze, E., Kharadze, N., & Kuspliak, H. (2021). Development of Remote Jobs as a Factor to Increase Labor Efficiency. *Journal of Eastern European and Central Asian Research (JEECAR)*, 8(3), 337-348.  
<https://doi.org/10.15549/jeecar.v8i3.669>
- Maradona, A.F., & Chand, P. (2018). The Pathway of Transition to International Financial Reporting Standards (IFRS) in Developing Countries: Evidence from Indonesia. *Journal of International Accounting, Auditing, and Taxation*, 30, 57-68.  
<https://doi.org/10.1016/j.intaccaudtax.2017.12.005>
- Müller, V.-O. (2014). The Impact of IFRS Adoption on the Quality of Consolidated Financial Reporting. *Procedia - Social and Behavioral Sciences*, 109, 976-982.  
<https://doi.org/10.1016/j.sbspro.2013.12.574>
- On accounting. (2020). Law of the Republic of Azerbaijan on June 29, 2004, No. 716-IIQ. With amendments and additions as of December 22, 2020. [http://continent-online.com/Document/?doc\\_id=30615043#pos=0;0](http://continent-online.com/Document/?doc_id=30615043#pos=0;0)
- Pignatell, I., & Tchuigoua, H. T. (2020). Microfinance institutions and International Financial Reporting Standards: An exploratory analysis. *Research in International Business and Finance*, 54, 101309.  
<https://doi.org/10.1016/j.ribaf.2020.101309>
- Poudel, G., Hellmann, A., & Perera, H. (2014). The adoption of International Financial Reporting Standards in a non-colonized developing country: The case of Nepal. *Advances in Accounting*, 30, 1, 209-216.  
<https://doi.org/10.1016/j.adiac.2014.03.004>
- Shapran, V., & Britchenko, I. (2021). The establishment of the inflation target and the corridor of fluctuations of the target: analysis of world trends and practice in Ukraine. *VUZF Review*, 6 (3), 13-20.  
<https://doi.org/10.38188/2534-9228.21.3.02>
- Silva, A.P., Fontes, A., & Martins, A. (2021). Perceptions regarding the implementation of International Financial Reporting Standards in Portugal and Brazil. *Journal of International Accounting, Auditing, and Taxation*, 44, 100416.  
<https://doi.org/10.1016/j.intaccaudtax.2021.100416>
- Taherdoost, H. (2017). Determining Sample Size; How to Calculate Survey Sample Size. *International Journal of Economics and Management Systems*, 2, 237-239.
- Trading Economics. (2021). Crude oil. <https://tradingeconomics.com/commodity/crude-oil>
- UN Sustainable Development Solutions Network. (2020). Europe Sustainable Development Report 2020. <https://www.unsdsn.org/europe-sustainable-development-report-2020>
- Yasmin, T., El Refae, G. A., & Eletter, S. (2020). Oil price and urgency towards economic diversification through effective reforms and policies in Caspian Basin. *Journal of Eastern European and Central Asian Research (JEECAR)*, 7(3), 305-315.  
<https://doi.org/10.15549/jeecar.v7i3.326>
- Zolkover, A.O., Rusina, Y.O., Bielialov, T.E., & Nesenjuk, E.S. (2020). The Influence of Innovative Potential on Gross Production and Economic Security: Regional Analysis. *International Journal of Management*, 11(4), 439-452.

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