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Гасимли В. А., д-р екон. наук, професор
Джафарова В. Д., аспірантка

РЕАЛЬНИЙ РІВНОВАЖНИЙ ОБМІННИЙ КУРС В ЕКСПОРТНО-СИРОВИННИЙ ЕКОНОМІЦІ: ДОСВІД АЗЕРБАЙДЖАНУ

Abstract. Приклад Азербайджану є цікавим для вивчення адекватності валютної політики в багатій ресурсами економіці. У статті проаналізовано зовнішньоторговельний баланс Азербайджану за останні двадцять років. Зниження цін на нафту зробило фіксацію обмінного курсу неспроможною, що призвело до значної девальвації національної валюти в 2015 році. Відтоді платіжний баланс покращився, однак менше, ніж очікувалося. Ми використовуємо метод оцінки зовнішньоторговельного балансу ЕВА-Lite для отримання заснованої на регресії оціночної величини реального рівноважного обмінного курсу та співвіднесення відхилень від рівноважного курсу з показниками «слабкостей (проломів) у політиці». Наші результати показують, що лише через декілька років після девальвації національна валюта Азербайджану знову стала переоціненою. Окрім того, реальний рівноважний обмінний курс нестабільний і навряд чи сумісний з довгостроковою прив'язкою до фіксованого курсу. Обмінна політика має прагнути до врахування змін у таких фундаментальних детермінантах обмінного курсу, як відносна продуктивність і реальні ціни на нафту.

Keywords: рівноважний реальний обмінний курс, розрив рахунку поточних операцій, розрив реального ефективного обмінного курсу, модель ЕВА-Lite, економіка Азербайджану.

INFORMATION ABOUT THE AUTHORS

Gasimli Vusal — D. Sc. in Economics, Professor, Executive Director, Center for Analysis of Economic Reforms and Communication, Professor of Economics at the Public Administration Academy under the President of Azerbaijan, Baku, Azerbaijan; +994503328466; qasimlivusal@yahoo.com; ORCID: 0000-0003-2345-6214

Jafarova Vusala — Postgraduate Student at the Institute for Scientific Research on Economic Reforms of Ministry of Economy of the Republic of Azerbaijan, Baku, Azerbaijan, +994503572276; vusala.jafarova@ereforms.gov.az; ORCID: 0000-0002-4711-4609

ІНФОРМАЦІЯ ПРО АВТОРІВ

Гасимли Вюсал Афрасович — д-р екон. наук, професор, виконавчий директор Центру аналізу економічних реформ та комунікацій, професор економіки Академії державного управління при Президентові Азербайджану, м. Баку, Азербайджан; +994503328466; qasimlivusal@yahoo.com; ORCID: 0000-0003-2345-6214

Джафарова Вюсала Джафаровна — аспірантка Інституту наукових досліджень економічних реформ Міністерства економіки Азербайджанської Республіки, м. Баку, Азербайджан; +994503572276; vusala.jafarova@ereforms.gov.az; ORCID: 0000-0002-4711-4609



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O. Z. SULEYMANLI, Postgraduate Student

STATISTICAL ANALYSIS OF THE FACTORS IMPEDING INNOVATIONS IN AZERBAIJANI INDUSTRY

Abstract. The main purpose of the study is the analysis of factors obstructing the implementation of the innovations in industrial sector of the Republic of Azerbaijan. The implementation of innovative approaches in production processes necessitates major costs and it creates the problem about their minimization. The paper deals with the analysis of the characteristics of various types of innovation and their acceptance by various industrial enterprises. Systematization of literary sources and approaches for the innovation implementation shows the deficiency of multifaceted solutions for this issue. In the study, various factors having effect on the innovation level of industrial companies were generalized. The paper summarized arguments and counterarguments on analysis of implementation of different types of innovation in industrial operations. The difficulties faced on the way of implementation of innovations, the reasons behind them and measures to deal with them have been analyzed.

Governmental, social, economic, and organizational incentives have been highlighted as the main motivator for the realization of various innovations in industrial sphere. The targets of this research are clarifying the relation between innovation types and features of industrial units and identifying the connection between obstacles for implementation of innovations in industrial sector. 95 % significance level for mean of factors obstructing the realization of industrial innovations being accepted as more effective or less effective, and hypothesis testing for comparison of the mean of these factors have been prepared

Key words: communication hub, correlation, economic development, industrial solutions, technology-intensive production, industrial park.

INTRODUCTION

Key features of the Azerbaijani innovation system. Among developing economies, Azerbaijan has accomplished one of the most remarkable economic development accounts in the past 3 decades since her political independence in 1991. The quick economic progress of Azerbaijan has been realized through constant industrial reformation and technological advance. Initially, the development was directed mainly by oil and gas sector, but later it was driven by the advance of progressively technology-intensive production. The improvement of Azerbaijan into progressively significant business, industrial, and communication hub in the Southern Caucasus region has provided extra devices of evolution. Within the Azerbaijani industry, the crucial industrial sectors are oil and gas, chemicals, pharmaceuticals, and mining. Azerbaijan has accomplished major technical proficiency growth together with its quick economic progression recently.

An innovation-based industrial development is one that develops important worth formation from progressive knowledge making and operation. These features are vital, needing the formation of innovative-intensive production. The establishment of both touchable and imperceptible know-how occurs in each element of the industrial innovation process. For instance, the growth of methodological abilities occurs within formal training institutions and Research & Development activities. In the initial phases of industrial park enlargement, principal operators may be found foreign rather than in the internal market, requiring the development of associations with companies and establishments. Besides, a significant amount of know-how innovating industrial entities are required for the parks to be sustainable enough. Then, industrial parks require supportive industries and services as well. Such funding contains productions that offer industry-specific support to companies in the parks. Lastly, the complete industrial park must be supported by a regulatory structure and commercial environment in which to run. To found innovative industrial parks, each of the subsequent elements must be placed:

- establishing of public information infrastructure, which are universities and Research Institutes. This includes both creation of new institutions, reformation of present institutions, and generating new programs;
- inviting private sector players to the industrial parks. It includes both technology intensive companies that consists the private sector of the industrial parks, as well as the supportive services that are around it;
- forming connections with leading markets. These will normally include associations to foreign markets, mainly for minor or late-entrant companies;
- enabling data transfers and networks amongst the key players within industrial parks. This will contain other systems, like universities, research institutes, and forming platforms and mechanisms for the private sector;
- founding a monitoring structure and appropriate commercial environment; – for information-based industrial parks, innovation, data establishment and knowledge transfer are specifically significant. This signifies an enlargement of the volume element of the flowchart approach, with importance on infrastructure for innovation and institutions for Research & Development.

The aim of the study

To analyze the factors which hinder the implementation of innovation activities in the industrial sector of Azerbaijan and offer recommendations on the modifications in order to improve the innovative conditions.

MAIN TEXT

Opinions on analysis of the implementation of different types of innovation. The difficulties encountered on the way of implementation of innovations, the causes behind them and actions to cope with them have been analyzed.

The basic aim of any industrial process is to achieve an effective productivity. Various mathematical models are utilized for productivity analysis throughout industries. Parameters like reliability of production and maintenance systems, technolo-

gies utilized, industrial design, are used for mathematical models for productivity. Contemporarily manufacturing systems have become more and more multifaceted in terms of design. Additionally, the productivity rate of manufacturing technology and systems has a straight correlation with the reliability of their components [3]. The theories involved in it are essential issues in production systems for describing primary industrial solutions.

Generally, digital innovations in industry are very encouraging in terms of decreasing manufacturing expenses and achieving distinctive competitive advantages. It presents absolutely different chances for commercial actions by adjusting the obligations for the production environment, products distribution networks, etc. [11]. There are various efficiency evaluation models for manufacturing units and choosing a suitable model among them is very significant. Production efficiency must be recognized in association with cost-effectiveness and then the quality of output goods. The examination of various widely used models for evaluation of the productivity of production processes shows that most of them understand productivity in terms of economic aspects. Prevalent models for the productivity of various manufacturing technology and systems are characterized by universal equations and tactics in terms of economics. Different entities produce various goods, and mathematical models of the manufacturing process should define them. Mathematical models must be founded according to sensible associations among various parameters that have a significant role in improvement and assessment of the manufacturing systems. Qualitative indices of produced goods are a topic for technology theory and are accepted by the productivity theory from the opinion to raise the efficiency rates of technology. Productivity theory with analytical methods allows resolving various issues mainly based on the condition of efficiency rate for manufacturing machinery. The productivity concept for industrial parks is an old issue and various researches about mathematical methodologies for different designs of industrial production facilities have been done [12].

The modern business necessitates from industrial organizations to produce goods or services with high quality as well low prices. As a result, rivalry is formed among industrial entities involved in the identical or analogous areas of manufacturing. Hult et al. (2004) makes correlation between innovativeness and the capacity of any organization to be involved in innovation, which is the introduction of new methods, goods, services, and operational approaches in the organization. This requirement for innovation has significance for contemporary industrial environment because it is categorized

by extreme commercial race. Innovation happens virtually in every point of the organization and it includes exterior and interior adaptations, tiny or huge alterations etc. There are some similar and diverse approaches to this terminology, to clarify “innovation” means real innovations accepted or applied whereas “innovativeness” is used for the openness of the culture within organization for improvements. The backgrounds to innovativeness are the ideas of market, learning, and entrepreneurial orientation. Mainly emphasize is given to the term “innovation” and its results, but often it is neglected to incorporate this concept with the term “innovativeness” [6].

Product, process, marketing, and organizational innovations are the main categories of innovation. Jassawalla and Sashittal indicates that organizational culture affects the company’s financial outcomes and realize its significant role in influencing product-innovation processes [7]. Process innovations result in reduced employment, while product innovations lead to higher employment. However, both types of innovations cause improved work efficiency with dissimilar methods [5]. Product innovation provides the redevelopment of the companies through dynamic and common connection with the companies’ know-how. Nowadays, product innovation developed to be more important for the industrial organizations due to extreme international competition, escalation of global demand, and continuously developing technologies [4]. The company’s abilities are additional functions of its formation, policy, and elements like the employees and its environment. Any company with very active innovation strategy tries very hard not to be late for launching new goods and consequently develops its competencies [2]. Executing its policies means creating proper administrative structure, systems, and work staff. Trainings are significant elements of innovative actions, and specifically management as well as executive staff is mainly required to be educated for innovation in the manufacturing sector [1]. Additionally, new practices like supporting the know-how within industrial organization, new management systems, and modifications in distribution of roles and responsibilities and decision-making process with new methods can also be part of an organizational innovation. Contrarily, mergers and acquisitions between various industrial organizations cannot be accepted as organizational innovations [9].

Generally, there are no specific boundaries to say only one title to an innovation in the industrial organization and innovation opportunities tend make alterations over time. Sometimes, introducing new process can be accepted as organizational innovation as well. The major issue to distinguish

process and organizational variations is the form of action. Organizational innovations are related to individuals and group structure, while process alterations are connected to production approaches, technology and specific machinery [9].

Administration of industrial organizations should take into account external assets by administrative process in industrial production segment of the economy. Besides, elasticity is one of the important external elements. A sample can be given as product innovations as they are not merely physical goods, but also set of services and supplementary products packaged together in the thoughts of clients. To achieve this, industrial enterprises must be in relationship with clients and also must be elastic enough to reply them straightforwardly and quickly. This is a method for generating demanding of examining new methods and what is happening in the industrial organization and in that segment of industry [8].

Absence of competent employees and corporate inelasticity are also recognized as obstacles for the achievement of innovation. Moreover, lack of information concerning clients and their technologies can be evaluated as difficulty since absence of these may avoid corresponding technical chances with client requirements. As a result, those difficulties may be reliant to and concern each other without difficulty. From financial point of view, innovation charges and deficiency of base for funding are shared obstacles for innovation and mainly small sized industrial organizations are affected by them. Governmental, social, economic, and organizational incentives are the main types of motivations for the implementation of innovation in industrial sphere. For governmental encouragements tax release for research and development implemented by industrial organizations, modification for decrease rates for the sake of supporting high technology investments, strengthening of government financing for innovation activities. Industrial organizations can start innovation activities for product reasons, market reasons, productivity, efficiency, and quality. Generally, three significant conceptions related to the innovation motivations are competition, demand and market structure. The significance of purposes for innovations is defined by these conceptions and variations in product lives that tend to decrease continuously urge the industrial organizations to improve new goods [9].

In this part, the information about innovation in Azerbaijani Industry and objectives of this study are given with details. The main purpose of this study is to evaluate the factors influencing innovation in Azerbaijani Industry with using various statistical tools. The targets of this research are given below:

- to evaluate the 95 % confidence interval of factors causing problems for the implementation of innovations in industrial organizations among enterprises accepting them as more effective or less effective using the data of the State Statistical Committee of the Republic of Azerbaijan from 2008 year to 2019 year. These factors are divided into 3 parts, namely economical, manufacturing, and other factors;
- to evaluate Null Hypothesis $H_0: \mu_1 \leq \mu_2$ to alternative Hypothesis $H_A: \mu_1 > \mu_2$ in order to determine whether the mean of the number for accepting these factors more effective is smaller than the mean of accepting less effective.

Initially, the information related to some parts of innovation is gathered from literature for this study. Then economic statistics of the State Statistical Committee of the Republic of Azerbaijan for innovative activities of industrial entities were utilized. The number of industrial enterprises accepting various economical, manufacturing, and other factors as obstructing significantly or insignificantly is used. Initially, Mean, standard deviation, and standard error are calculated for economic, manufacturing, and other factors that are accepted as more effective or less effective in obstructing innovations in industrial enterprises. These numbers are taken from the data of the factors impeded innovations at the industry enterprises of the State Statistical Committee of the Republic of Azerbaijan for years 2008–2019. Some of the industrial enterprises have assessed these factors as more effective, whereas some of them accepted as less effective.

From the **table 1** for more effective factors, it is easily seen that from the factors evaluated, deficiency of enterprises own funds, high innovation cost and low innovation potentials of industrial enterprises are the most prevalent. On the other hand, absence of co-ordination with other industrial enterprises and research-consulting organizations and deficiency of need for innovations after previous ones are the list voted factors as for obstructing innovations. Absence of innovation adoptings by industrial units and ambiguity in innovation process are factors accepted as more effective that have the least standard deviations. Besides, lower and upper bounds are calculated for 95 % confidence interval. For high innovation costs lower bound is 19.91 while upper bound is 27.09, for high economical risks lower bound is 14.84 and upper bound is 19.16, and long payback durations lower bound is 14 and upper bound is 17.66 etc.

From the **table 2** for less effective factors, it is easily seen that from the factors evaluated, long payback durations, lack of the highly skilled

Table 1

95 % confidence interval for number of the industrial enterprises accepting the factors that are obstructing innovations as more effective

Number of the industrial enterprises accepting the factors that are obstructing innovations as	No.	More effective				
		Mean	Standard deviation	Standard error	95 % Confidence Interval for Mean	
Economic factors						
Deficiency of enterprises own funds	12	29.75	10.38	3	23.15	36.35
Lack of governmental financial aid	12	18.92	6.93	2	14.52	23.32
Low demand for new goods	12	18.92	5.45	1.57	15.46	22.38
High innovation costs	12	23.5	5.63	1.63	19.91	27.09
High economical risks	12	17	3.41	0.98	14.84	19.16
Long payback durations	12	15.83	2.89	0.83	14	17.66
Manufacturing factors						
Low innovation potentials of industrial enterprises	12	26.33	7.92	2.29	21.29	31.37
Lack of the highly skilled employees	12	15	5.64	1.63	11.41	18.59
Absence of the information related to new technologies	12	18.17	4.34	1.25	15.42	20.92
Absence of innovation adoptings by industrial units	12	11.42	1.78	0.51	10.3	12.54
Deficiency of information related to market	12	12.83	3.64	1.05	10.52	15.14
Absence of co-ordination with other industrial enterprises and research-consulting organizations	12	8.67	3.7	1.07	6.31	11.03
Other factors						
Deficiency of need for innovations after previous ones	12	9.5	4.06	1.17	6.92	12.08
Absence of proper legislative and normative-legal documents regulating as well as promoting innovative operations.	12	17.75	5.63	1.63	14.16	21.34
Ambiguity in innovation process	12	10.25	2.3	0.66	8.8	11.7
Undeveloped infrastructure for innovation	12	17.5	5.16	1.49	14.22	20.78
Undeveloped of market technology	12	19.92	6.64	1.92	15.69	24.15

employees, and deficiency of need for innovations after previous ones are the most chosen answer. Contrarily, lack of governmental financial aid, absence of proper legislative and normative-legal documents regulating as well as promoting innovative operations and undeveloped infrastructure for innovation are the least chosen variants and have the smallest mean values. Deficiency of enterprises own funds, high innovation costs, and deficiency of need for innovations after previous ones have the highest standard deviation numbers. On the other hand, lack of governmental financial aid, absence of the information related to

new technologies, and absence of proper legislative and normative-legal documents regulating as well as promoting innovative operations have the smallest standard deviation numbers. Additionally, lower and upper bounds with 95 % confidence intervals are calculated for less effective factors obstructing innovations. For low innovation potentials of industrial enterprises lower bound is 15.34 and upper bound is 25.16, for lack of the highly skilled employees lower bound is 22.35, and upper bound 30.31, for deficiency of information related to market lower bound is 14.78, upper bound is 24.72 etc.

Table 2

95 % confidence interval for number of the industrial enterprises accepting the factors that are obstructing innovations as less effective

Number of the industrial enterprises accepting the factors that are obstructing innovations as	No.	Less effective				
		Mean	Standard deviation	Standard error	95 % Confidence Interval for Mean	
Economic factors						
Deficiency of enterprises own funds	12	22.83	12.53	3.62	14.86	30.8
Lack of governmental financial aid	12	17.92	3.29	0.95	15.83	20.01
Low demand for new goods	12	21.83	10.12	2.92	15.4	28.26
High innovation costs	12	20.75	11.99	3.46	13.13	28.37
High economical risks	12	21.92	8.82	2.55	16.31	27.53
Long payback durations	12	28.33	9.56	2.76	22.26	34.4
Manufacturing factors						
Low innovation potentials of industrial enterprises	12	20.25	7.72	2.23	15.34	25.16
Lack of the highly skilled employees	12	26.33	6.27	1.81	22.35	30.31
Absence of the information related to new technologies	12	19.33	4.42	1.28	16.51	22.15
Absence of innovation adoptings by industrial units	12	21.42	5.66	1.63	17.83	25.01
Deficiency of information related to market	12	19.75	7.82	2.26	14.78	24.72
Absence of co-ordination with other industrial enterprises and research-consulting organizations	12	23.33	5.26	1.52	19.98	26.68
Other factors						
Deficiency of need for innovations after previous ones	12	24.25	11.51	3.32	16.94	31.56
Absence of proper legislative and normative-legal documents regulating as well as promoting innovative operations.	12	18.25	4.11	1.19	15.63	20.87
Ambiguity in innovation process	12	20.08	6.43	1.86	15.99	24.17
Undeveloped infrastructure for innovation	12	18.92	6.1	1.76	15.05	22.79
Undeveloped of market technology	12	21.92	7.19	2.08	17.34	26.5

Then, t test has been done for these factors hindering innovative activities that have been accepted as more effective and less effective with various industrial enterprises.

Null Hypothesis $H_0: \mu_1 < \mu_2$ and Alternative Hypothesis $H_A: \mu_1 \geq \mu_2$ t value is calculated and compared to t_{α} where $\alpha = 0.05$, for $n_1 + n_2 - 2$ degrees of freedom. Calculated S_p values and t values are given in the table 3. Then, these values are compared with $t_{\alpha=0.05}$ for $12 + 12 - 2 = 22$ degrees of freedom, which is equal to 2.0739.

All the calculated results are given in the **table 3** t-test for evaluating the factors obstructing innovations in industrial enterprises. As calculated t val-

ues are smaller than $t_{\alpha=0.05}$ for 22 degrees of freedom, 2.0739, the null hypothesis is not rejected. Calculated t values for deficiency of enterprises own funds is equal to 1.4664, for lack of governmental financial aid equals 0.45, for the factor of low innovation potentials of industrial enterprises is equal to 1.8963, and for high innovation costs the number equals 0.7158 etc. All these values are smaller than 2.0739, so Null Hypothesis $H_0: \mu_1 < \mu_2$ is accepted.

CONCLUSIONS AND RECOMMENDATIONS

There is large quantity of goods and services in the world that it is becoming difficult to offer

Table 3

T-test for evaluating the factors obstructing innovations in industrial enterprises

Number of the industrial enterprises accepting the factors that are obstructing innovations as	No.	More effective		Less effective		S _p	calculated t value
		Mean	Standard deviation	Mean	Standard deviation		
Economic factors							
Deficiency of enterprises own funds	12	29.75	10.38	22.83	12.53	11.51	1.4664
Lack of governmental financial aid	12	18.92	6.93	17.92	3.29	5.42	0.45
Low demand for new goods	12	18.92	5.45	21.83	10.12	8.13	-0.873
High innovation costs	12	23.5	5.63	20.75	11.99	9.37	0.7158
High economical risks	12	17	3.41	21.92	8.82	6.69	-1.7937
Long payback durations	12	15.83	2.89	28.33	9.56	7.06	-4.3184
Manufacturing factors							
Low innovation potentials of industrial enterprises	12	26.33	7.92	20.25	7.72	7.82	1.8963
Lack of the highly skilled employees	12	15	5.64	26.33	6.27	5.96	-4.6366
Absence of the information related to new technologies	12	18.17	4.34	19.33	4.42	4.38	-0.646
Absence of innovation adoptings by industrial units	12	11.42	1.78	21.42	5.66	4.2	-5.8072
Deficiency of information related to market	12	12.83	3.64	19.75	7.82	6.1	-2.7669
Absence of co-ordination with other industrial enterprises and research-consulting organizations	12	8.67	3.7	23.33	5.26	4.55	-7.8585
Other factors							
Deficiency of need for innovations after previous ones	12	9.5	4.06	24.25	11.51	8.63	-4.1687
Absence of proper legislative and normative-legal documents regulating as well as promoting innovative operations.	12	17.75	5.63	18.25	4.11	4.93	-0.2474
Ambiguity in innovation process	12	10.25	2.3	20.08	6.43	4.83	-4.9639
Undeveloped infrastructure for innovation	12	17.5	5.16	18.92	6.1	5.65	-0.613
Undeveloped of market technology	12	19.92	6.64	21.92	7.19	6.92	-0.7049

products to markets with revenue. There are various studies on actions of industrial companies promoting innovations and difficulties forcing companies to build and introduce new products. In addition, in this work, success factors, motivations, objectives, impacts, difficulties, and funds for innovation are analyzed. The relation between these elements and the features of companies are expressed.

In product innovation types, industrial entities give more significance to introduce a product not

produced before with present methods and technology, to create new goods with new information technology, and a new usage area. The process type that industrial entities pay most attention is an innovation in production techniques. Industrial enterprises give more significance to realize alterations in design or structure of goods in marketing innovation. On the other hand, in organizational innovation, main attention is given to the implementation of new administrative approaches in external relations. Research and development,

industrial production, foreign market and clients, providers of service, apparatus and software, professional meetings, and demonstrations are the most essential sources to obtain information and technology for innovation for industrial enterprises.

The number of factors recognized as more effective or less effective by various industrial enterprises are categorized in 3 groups, specifically economic factors, manufacturing factors and other factors. These numbers are used from the records of the factors hindering innovations at the industry enterprises of the State Statistical Committee of the Republic of Azerbaijan for years 2008–2019.

Deficiency of enterprises own funds, high innovation costs, lack of governmental financial aid and low demand for new goods are the main factors seen more effective on hindering innovative activities. On the other hand, long payback durations, lack of the highly skilled employees, deficiency of need for innovations after previous ones and absence of co-ordination with other industrial enterprises and research-consulting organizations are the most important factors seen as less effective on causing difficulties for innovative activities in industrial enterprises. Additional aspects have been examined to identify the 95 % significance level of factors obstructing the realization of industrial innovations. Finally, hypothesis testing was done for comparison of mean of more effective and less effective factors and null hypothesis $H_0: \mu_1 < \mu_2$ is accepted.

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О. З. Сулейманлі, аспірант

СТАТИСТИЧНИЙ АНАЛІЗ ФАКТОРІВ, ЩО ПЕРЕШКОДЖАЮТЬ ВПРОВАДЖЕННЮ ІННОВАЦІЙ У ПРОМИСЛОВІСТЬ АЗЕРБАЙДЖАНУ

Резюме. Основною метою дослідження є аналіз факторів, які перешкоджають впровадженню інновацій у промисловий сектор Азербайджанської Республіки. Впровадження інноваційних підходів у виробничі процеси потребує значних витрат і створює проблему їх мінімізації. У статті здійснено аналіз характеристик різних видів інновацій та їх прийняття різними промисловими підприємствами. Систематизація літературних джерел і підходів до впровадження інновацій свідчить про дефіцит багатогранних рішень цього питання. У пропонуваній увазі статті були узагальнені різні фактори, що впливають на інноваційний рівень промислових компаній. Так, у дослідженні узагальнено аргументи та контраргументи щодо аналізу впровадження різних видів інновацій у промислові операції. Проаналізовано труднощі, що виникають на шляху впровадження інновацій, причини їх виникнення та заходи для боротьби з ними. Урядові, соціальні, економічні й організаційні стимули було виділено як головний мотиватор реалізації різноманітних інновацій у промисловій сфері. Завданнями цього дослідження постає виявлення зв'язку як між типами інновацій та особливостями промислових підрозділів, так і між перешкодами для впровадження інновацій у промисловий сектор. 95-відсотковий рівень значущості середніх факторів, що перешкоджають реалізації промислових інновацій, було визначено як більш ефективний або менш ефективний; гіпотези для порівняння середнього значення цих факторів були виокремлені для перевірки.

Ключові слова: комунікаційний центр, кореляція, економічний розвиток, промислові рішення, технологічне виробництво, індустріальний парк.

INFORMATION ABOUT THE AUTHOR

Suleymanli Orkhan Zahit oglu — Postgraduate Student of Institute for Scientific Research on Economic Reforms (ISRER) under the Ministry of Economy of the Republic of Azerbaijan, Azerbaijan, Baku, 88a, H. Zardabi Av., AZ1011; + (994) 124300215; o.suleymanli@gmail.com; ORCID: 0000-0001-9666-9056

ІНФОРМАЦІЯ ПРО АВТОРА

Сулейманлі Орхан Загіт оглу — аспірант Наукового дослідницького інституту економічних реформ при Міністерстві економіки Азербайджанської Республіки, Азербайджан, м. Баку, пр-т Г. Зардабі, 88а, AZ1011; + (994) 124300215; o.suleymanli@gmail.com; ORCID: 0000-0001-9666-9056



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В. Д. ПАРХОМЕНКО, д-р техн. наук, професор

С. СЕКІ, студент

Г. О. ПАРХОМЕНКО, студент

СПІВПРАЦЯ МАЛИХ І СЕРЕДНІХ ПІДПРИЄМСТВ З ТРАНСНАЦІОНАЛЬНИМИ КОРПОРАЦІЯМИ (ТНК) У СУЧАСНИХ УМОВАХ СОЦІАЛЬНО- ЕКОНОМІЧНОГО РОЗВИТКУ

Резюме. В умовах сучасного соціально-економічного світового господарства транснаціональні компанії (ТНК) є могутньою частиною корпоративного бізнесу. Вони відіграють провідну роль у посиленні та укріпленні світової господарської діяльності. Жоден процес на світовій арені не відбувається без участі ТНК, які виступають рушійною силою розвитку світової економіки. ТНК у сучасних умовах соціально-економічного розвитку стають ядром нової сфери світової постіндустріальної економіки, у якому постійно інтегруються численні підприємства малого й середнього бізнесу, товаропровідні та інформаційні мережі, що становлять периферію загальносвітового транскорпоративного ядра з багатомільйонною кількістю працівників. Нині, разом із процесом глобалізації, у контексті сучасного соціально-економічного розвитку впроваджується «економіка знань» зі зміною ролі людини, яка стає головним й визначальним ресурсом розвитку. Співпраця малих і середніх підприємств з ТНК постає важливим елементом прогресу. Авторами розглянуто зв'язок ТНК з процесом розвитком світової економіки та з малими підприємствами в ролі діалектичної або відкритої системи, яка стає ядром прогресу.

Ключові слова: транснаціональна корпорація (ТНК), людина, інформація знання, матерія, енергія, глобалізація, економіка.

ВСТУП

На зламі ХХ–ХХІ ст. розвиток світової економіки відбувається в умовах зміни багатьох складових розвитку. Однак, на нашу думку, найбільший вплив чинять такі напрями:

- *глобалізація*, яка стає одним із ключових процесів світової економіки. Зараз, мабуть, немає іншої проблеми суспільного розвитку, яка привертала б таку пильну увагу вчених

економістів, політологів, соціологів, культурологів, екологів — як проблема глобалізації, яка впливає на соціально-економічний розвиток усіх країн. З огляду на це, актуальною стає постановка питання про утворення нових видів транснаціональних корпорацій і тенденції їхнього розвитку, а також про їхню співпрацю з малим і середнім бізнесом;