### **REPUBLIC OF AZERBAIJAN**

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### ABSTRACT

of the dissertation for the degree of Doctor of Science

### LIBERAL OR DIRIJIST DIRECTIONS OF FOREIGN ECONOMIC RELATIONS OF AZERBAIJAN IN THE GLOBALIZATION CONTEXT

Specialty: 5310.01 - World Economy 5308.01 - General economy Field of science: 53– Economic sciences

Applicant: Mayis Gulali oglu Gulaliyev

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The work was performed at the Institute of Economics of Azerbaijan National Academy of Sciences

The department of "Globalization and international economic relations"

Scientific consultant:

Doctor of economics, professor Isa Huseyn oglu Aliyev

Official opponents:

### Doctor of economics, professor Shamsaddin Hummat oglu Hajiyev

### Doctor of economics, professor Elshan Mahmud oglu Hajizade

Corr.member of ANAS, doctor of economics, professor Ali Khudu oglu Nuriyev

Doctor of economics, professor Shafa Tofiq kizi Quliyeva

Dissertation Council ED 1.10 of the Supreme Attestation Commission under the President of the Republic of Azerbaijan operating at the Institute of Economics of ANAS

Chairman of Dissertation Doctor of sciences on economics, professor Nazim Muzaffar oglu Imanov

Scientific secretary of the Dissertation Council:

Doctor of sciences on economics, professor Gulshan Zahid kızı Yuzbashiyeva

Chairman of the scientific seminar:

Doctor of sciences on economics, professor Rovshan Rasim oglu Guliyev

### INTRODUCTION

**Relevance and development of the topic**. One of the most discussed concepts in the scientific literature over the last 50 years is the concept of "globalization". The main reason for such discussions is the change in the nature, manifestations, and effects of the phenomenon of globalization from country to country. The relationship of globalization to global problems and its role in building a global governance system encourages countries to make the most of this process or to protect themselves from its negative effects.

Although globalization is a subjective process controlled by countries with greater economic, political, and military power, it is becoming more and more objective for most countries, national state institutions, as well as economic and political institutions. As the world economic system expands, as well as the economic interdependence of countries, grows, the economic conditions created by globalization become more objective."

There is no country in the world that does not engage in foreign economic activity, i.e. following the path of complete autarky. There is also no country that joins the challenges of globalization and makes its borders completely transparent for all kinds of goods and services, as well as for finance and migrants. There is no doubt about the need for foreign economic activity for any country. However, each country strives to make the most of the opportunities created by globalization, as well as to protect the domestic market. The contradiction between the process of globalization and autarky manifests itself as the contradiction between liberalization and dirigism on the scale of the national economy. Each country strives to ensure that the economy is as liberal as possible, along with the development of the business environment and as well as the protection of the domestic market.

The ratio between liberalness and dirigiste of the economy varies from country to country. This ratio may depend on the level of economic development of countries, regional specifics, the level of the historical development of society, national identity, and other

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determinants. For example, the level of liberality in the Japanese economy is not the same as the level of liberality in the German or Swedish economy. The level of liberalization of the Georgian and Iranian economies in the same region also differs significantly.

Globalization is a legal and political environment outside of national countries but is in constant contact with national countries. This environment is dynamic and constantly evolving. In this process, economic relations are formed between two types of elements that are qualitatively different from each other. The first is the relationship of the economic system of any country with the institutions that play a key role in the formation and development of globalization. The second is the economic relations between the countries that are part of the world economic system. This environment also encourages national countries to constantly improve their legislation and foreign economic activity. Such improvements are made in only two directions - increasing or decreasing state intervention in the economy. The constant change of economic policy in the direction of dirigisme or liberalism is an event inherent in the history of the economic development of any country. As globalization expands, no country can pursue an absolutely liberal or absolute dirigiste policy. However, each country determines the direction of development by choosing a "more dirigiste' or "more liberal" economic model than the other. Such economic models affect the efficiency of all areas of economic activity of the country, including foreign economic activity.

"Conditions of globalization" is a system of rules and norms that exists in the world economic system, the requirements of which have a force that must be met by all and is higher than national legislation. By adopting these rules, the "subjects of the globalization process" encourage the "objects of the globalization process", i.e. individual countries to harmonize their national legislation, including legislation on international economic relations for establishing bilateral or multilateral economic relations.

The contradictions between globalization and autarky manifest themselves in various areas, including the relationship between local governments and international financial institutions, as well as transnational corporations. The process of globalization implies large-scale cooperation between local governments and international organizations, while autarky, on the contrary, implies economic selfsufficiency and "isolation" of the country. The activities of transnational companies in other countries, especially in developing countries, allow these countries to join the process of globalization more rapidly. It is no coincidence that the cooperation of multinational companies with local countries is reflected in all methods of quantifying globalization. Transnational corporations, as well as International Financial Institutions, are the most important "actors" in the process of globalization. The essence of the mechanism of operation of these companies is related to the free inflow of direct investment into the territory of the local country and the free export of profits from the country.

The contradictions between globalization and autarky create a dilemma at the national level for the social protection of the population and the business environment. The states are trying to solve this dilemma by interfering in the economy at various levels. The ratio between state-owned and private enterprises, the ratio of state budget expenditures in GDP, levels of the tax burden, the level of price regulation, freedom of foreign trade, licensing of certain economic activities, the rate of the minimum wage, regulation of employment, and other issues at the national level, create a dilemma of ensuring the social protection of the population and the business environment is a "projection" of the dichotomy between globalization and autarky across the country.

One of the main "tools" for any country, including Azerbaijan, to join the process of globalization is the liberalization of its foreign economic relations. Full liberalization is not possible, as no country has removed all existing restrictions on foreign trade. Therefore, it is usually possible to talk about some degree of liberalization (or rather, the removal of restrictions). There are some goods and services for each country whose import or export is completely or partially restricted by government agencies.

Although every state's intervention in the economy is done as usual with "the good wishes", it does not always yield positive results. Increasing interference in some countries can have a negative impact on economic development, security, and the well-being of the population, and in some countries, it can have a positive impact. Even an increase in intervention in one country over a period of time can have negative and over time a positive macroeconomic and socio-economic impacts. Therefore, it is necessary to determine the "optimal" level of state intervention in the economy for each country, so that the level of such intervention provided both social protection of the population and a favorable business environment. Such an "optimal" level of government intervention in the economy requires measuring the level of intervention in various sectors of the economy and determining the "optimal" level of intervention. Of course, it is quite a difficult scientific and theoretical problem to determine a universal formula that allows determining the "optimal" degree of state intervention in the economy for each country. However, it is possible to solve this problem in some approaches by determining only the "optimal" degree of "model-creating" forms of state intervention in the economy.

In this dissertation, two important processes - globalization and autarky - are studied as two, as well as contradictory processes. "Liberalization" and "dirigiste" have been studied as a mechanism for the realization of these two processes in local countries. Particular attention was paid to the relationship of various aspects of foreign economic relations with the degree of state intervention in the economy.

Among the studies on globalization and its essence, effects, subjects, and other issues are T. Levitt, K. Ohmae, P. Ratland, C. Soros, J. Stiglitz, M. Castel, V.N. Shevchenko, etc. deserves special mention. The effects of globalization and its quantitative measurement are studied by A. Dreher, L. Figge, P. Martines, R. Kluver, P. Vujakovic, Noel Gaston, R. Barro, A. Harrison, and others. The policy of conduction with liberalization, which is especially important in this dissertation, has been studied by various scholars in various aspects. D. North, P. Greory, S. Djankov, D.

Acemoglu, P. Hall, M. Aoki, S. Mizobata, B. Porter, T. Geiger, Ji. Baocheng, as well as other researchers, have extensively studied the role of economic liberalization and government regulation in the development of economic systems.

Various aspects of globalization, as well as the development of foreign economic relations, have been widely studied by Azerbaijani scientists also.

aspects of the globalization Various process, including philosophical and political aspects have been studied by R.A. Mehdivev, A.M. Hasanov, A.M. Shukurov, S.S. Khalilov, and others, theoretical and economic aspects have been studied by Z.A. Samadzade, Sh.M. Muradov, H.B. Rustambeyov, Sh.S. Gafarov, S.H. Hajiyev, M.A. Ahmadov, A.B. Bayramov, R.B.Guliyev, M.X.Meybullayev, and others, issues of the impact of globalization on foreign economic relations have been studied by Sh. Hajiyev, I.A. Karimov, D.A. Valiyev, A.Shakaraliyev, E.Hajizade, E.Mammadov, M.Guliyev, S.Purhani, A. M. Maharramov, F. A. Ganbarov and others, the impact of globalization on various areas of economic activity have been studied by A.K.Nuriyev, M.A.Mammadov, T.N. Huseynov, I.H. Aliyev, Alivev. T.H. R.Sh. Muradov. E.Y.Mammadov, T.I.Imanov, Sh.T.Guliyeva, M.C. Atakishiyev, R.P.Sultanova, G.Z.Yuzbashiyeva, S.M.Mikayilova and others. The problems of balance between the liberalization of the economy and state regulation have been studied by N. Muzaffarli.

Despite numerous studies on various aspects of Azerbaijan's foreign economic relations in the context of globalization, the relationship of foreign economic relations with the level of liberalness degree in the country's economy has not been studied as a subject of research.

Aims and objectives of the dissertation. To ensure economic growth, food security, and human development in the context of globalization, it is necessary to determine the balance of development of different aspects of Azerbaijan's foreign economic activity in the direction of liberalization or dirigiste.

In order to achieve the set goal, the identified tasks were implemented by the following algorithm: 1. Analysis of the process of globalization and the mechanism of impact of its economic aspects on the national economy. In this block, there were implemented issues as

• an analysis of the differences between the essence, subjects, objects, manifestations, actors of globalization;

• Comparative analysis of the methods for measuring the level of globalization of national economies;

• An analysis of the impact of globalization on the national economy, liberalization rate, and economic policy.

2. Identify the relationship between liberal and conductor-oriented economic policy and model-based forms of intervention. In this block, there were investigated issues as

• model-created forms of state intervention in the economy;

interaction of national economic models with the economic system;

• Problems of measuring the level of model-created forms of state intervention in the economy.

3. Assessing the effects of globalization on foreign economic activity. In this block, there were assessed issues as

• foreign trade indicators, including export, import, trade balance, and trade turnover;

• International financial flows, including foreign direct investment flows;

• International flow and stock of labor migration;

• The impact of liberal or dirigist economic policies on the development of international service trade.

4. Study of the impact of liberal-dirigist economic policy in Azerbaijan on foreign economic factors. In this block, there were investigated issues as

• Optimal ratio between public and private entrepreneurship;

- Optimal fiscal policy;
- Optimal foreign trade regime;

• The possible impact of the optimal minimum wage level on external economic factors.

5. Increasing the role of the level of state intervention in foreign economic activity in the economic development of Azerbaijan. In this block, there were investigated issues as

- Azerbaijan's foreign trade activities;
- attracting foreign direct investment;
- participation in the international labor market;
- The potential for liberalization in international service trade

**Research methods.** Different methods were used during the research, depending on the research object and the purpose. In addition to systematic analysis and comparative analysis methods, some econometric methods were used, including single and multiple regression analyzes, OLS, 2SLS, ARDL models, gravity method of Tinbergen, as well as digerence-in-diferences method.

**Scientific novelty of the dissertation** – The main scientific novelties of the dissertation can be grouped as follows:

• Economic globalization is approached as a measurable category, the essence of which is the provision of one-way movement of goods and services, as well as financial capital;

• The link between globalization and economic growth has been explored;

• Economic liberalization has been approached as a nationwide instrument of economic globalization;

• liberalization and dirigist trends as directions of development of foreign economic activity were compared;

• Methods for measuring the level of liberalization in some aspects of foreign economic activity have been proposed;

• The relationship of the level of liberalization with macroeconomic indicators on some aspects of foreign economic activity was analyzed;

• The relationship of each country's foreign economic activity to the economic model specific to that country is substantiated;

• It is argued that the economic model specific to each country is measurable and that state intervention in the economy is associated with "model-creating" forms;

• The dependence of some aspects of foreign economic activity on "model-creating" forms of state intervention in the economy has been studied.

• The relationship between the level of liberalization of foreign trade and economic growth in Azerbaijan has been studied;

• The relationship between the level of financial liberalization and economic growth in Azerbaijan has been studied;

• The relationship between the level of price regulation and economic growth in Azerbaijan has been studied;

• The impact of the level of liberalization of foreign trade on food security in Azerbaijan has been studied;

• The impact of the level of liberalization of foreign trade on human development in Azerbaijan has been studied.

**Theoretical and practical significance of the dissertation**. The theoretical significance of the dissertation is to create a balance between state regulation of the economy and the level of liberalism and to improve foreign economic relations to achieve sustainable economic growth and economic security.

The methods and practical recommendations proposed in the dissertation can play an important role in protecting the domestic market with freedom of foreign trade, increasing the efficiency of foreign direct investment, reducing the share of "brain drain" in labor migration, positively changing Azerbaijan's trade balance in international trade.

The results of the dissertation work can be used on the implementation of the "Strategic Roadmap of the National Economy" of Azerbaijan, the diversification of the structure of foreign trade, the formation of foreign economic strategy, for defining of strategic priorities of economy, the development of state policy to increase the competitiveness of the national economy. It can be used in the teaching of "Macroeconomics", "General Economic Theory", "International Economic Relations" in the universities.

**Object of the research** is some aspects of Azerbaijan's foreign economic activity, including foreign trade, foreign direct investment, migration and service trade.

**Subject of the research** is to study of the effects of globalization and the level of state intervention on Azerbaijan's foreign economic activities.

**The main question of the research-** how we can determine the level of liberalness or dirigiste of the main aspects of Azerbaijan's foreign economic relations, i.e. 1) foreign trade; 2) FDI; 3) Migration; 4) international service trade to ensure economic growth, food security and high human development in the country?

**Theoretical and methodological basis of the research** are theories on globalization process, foreign economic activity, state regulation of the economy, competitive advantages in international trade, scientific researches and concepts of the economists on globalization and foreign economic relations, as well as decrees of the President of the Republic of Azerbaijan, Azerbaijan legislation and normative acts.

**Empirical database of the research** include informations on globalization, autarky, liberalization, economic growth, foreign direct investment, labor migration, international service trade, economic security and other issues, current trends in Azerbaijan's economy, state regulation in the field of industry and foreign economic policy works, expert assessments of researchers, information materials of scientific articles and periodicals, as well as official data of the State Statistics Committee of the Republic of Azerbaijan, Customs Committee and the Central Bank of the Republic of Azerbaijan, annual reports and statistical collections of international organizations (IMF, World Bank, UN).

The theoretical significance of the dissertation is to study a balance between state regulation level of the economy and the level of liberalness and to improve foreign economic relations to achieve sustainable economic growth and economic security.

**Practical significance of the research** is to preparation methods and practical recommendations that can play an important role in protecting the domestic market in case of foreign trade freedom, in increasing the efficiency of foreign direct investment, in reducing the share of "brain drain" flows in labor migration, as well as in positively changing Azerbaijan's trade balance in international service trade.

Approbation and utilization of research outcomes. The main provisions, theoretical generalizations, practical results and recommendations defined in the dissertation were presented at the Scientific-practical conference "Azerbaijan-China Economic Cooperation" organized by the Institute of Economics of ANAS and the Institute of Economics of CSEA, in the discussion club "Creative Economy" of the Institute of Economics of ANAS. It was presented at the International Congress in Poznan (Poland) and some scientificpractical conferences in Baku. The main results of the dissertation were used in the discussion of the "Strategic Road Map for the prospects of the national economy" of the Republic of Azerbaijan. Some parts of the dissertation research have been published as 75 articles in different scientific journals. Six of these papers are indexed in Web of Science and 10 of these papers are indexed in SCOPUS, and 35 of these papers are indexed in РИНЦ, as well as some of the papers have been published in prestigious journals included in the general list of Russian Federation and Ukrainian Higher Attestation Commissions. Some parts of the dissertation have been published as four monographies. One of them is without coauthors. Three of them are with coathors.

Name of the organization where the dissertation work is performed – The Institute of Economics of the Azerbaijan National Academy of Sciences.

**Structure and scope of the research work.** The dissertation consists of 308 pages with a total of 544,000 characters, including five chapters and 20 paragraphs, introduction, conclusions and suggestions, as well as two appendices. The first chapter is 48 pages, the second chapter is 36 pages, the third chapter is 52 pages, the fourth chapter is 52 pages, and the fifth chapter is 50 pages. The volume of the dissertation (excluding the list of 442 references, 23 tables, 3 figures, 72 graphs and 2 appendices) consists of 436 thousand characters.

#### MAIN PROVISIONS PROVIDED FOR DEFENSE:

Provision 1: There is a link between the level of globalization and economic growth. The existence of such a relationship is confirmed by panel analyzes on developed and developing countries, as well as by time series analyzes on different countries.

Globalization indices for 1970-2020, calculated on the basis of the KOF Globalization Index method, show that the process of globalization is growing in almost all countries of the world. However, the interesting point is that the growth rate of globalization has significantly slowed down since 2004. The sharp increase in globalization in the countries of the former Soviet Union occurred after 1991, i.e. after the collapse of the Soviet Union.

At the beginning of the 21st century, the process of "saturation" begins in the process of economic globalization for some countries, especially developed ones (**Graph** 1).



Graph 1. Dynamics of KOF globalization indeces on income level

It cannot be unequivocally claimed that globalization has a positive effect on economic growth. Thus, the effects of globalization on economic growth can be both positive and negative.

Nor does economic theory confirm the link between economic liberalness and economic growth. On the other hand, no one denies that the development of technology has a positive impact on economic growth.

Calculations confirm that for a group of low-income countries, the models on impact of the KOF index on GDP per capita and its logarithm can be expressed as follows:

$$GDPPC_{t} = -188.77 + 0.86 * GDPPC_{t-1} + 44.15 * KOF_{t} - (54.92) (8.5) - 37.88 * KOF_{t-1} (1)$$

$$\ln(\text{GDPPC}_{t}) = 1.49 + 0.4 * \ln(\text{GDPPC}_{t-1}) + 0.09 * (0.11) (0.005) * KOF_{t} -0.04 * KOF_{t-1} (2)$$

For a group of high-income countries, a model of the relationship between these indicators can be expressed as follows:

$$\begin{split} \text{GDPPC}_{t} &= -18406.17 + 0.81 * \text{GDPPC}_{t-1} + 1925.64 & * \\ & (4829.85) & (369.26) \\ & * \text{KOF}_{t} - 1559.77 & * \text{KOF}_{t-1} & (3) \\ & \ln(\text{GDPPC}_{t}) &= 1.518 + 0.77* & \ln(\text{GDPPC}_{t-1}) + 0.055 & * \\ & (0.139) & (0.009) \\ & * \text{KOF}_{t} & -0.04 & * \text{KOF}_{t-1} & (4) \end{split}$$

Azerbaijan belongs to the group of upper middle income countries. The character of effects of globalization on GDP and its logarithm, as well as on economic growth in Azerbaijan, are very close to those of a group of upper middle-income countries. Thus, the multiregression analysis of the effects of KOFGI and KOFEcGI, as well as changes in KOFEcGI relative to 1991 on GDP and its logarithm, as well as GDP growth relative to 1991, suggests that the relationship between GDP-KOFGI, LogGDP-KOFGI at first glance although strong, but the Durbin-Watson coefficient suggests that this relationship is inadequate.

The regression relationship between KOFEcGI -GDP p.c indicators proves that in the example of Azerbaijan there is a significant correlation between the level of economic globalization and GDP, and this relationship can be expressed in the following model:

$$GDPPC_{t} -0.893 * GDPPC_{t-1} = -1116.556 + 1782.158 * (561.948) (623.056) * (KOFEcGI_{t} - 0.893 * KOFEcGI_{t-1})$$
(5)

### Provision 2: "Model-shaping" forms of state intervention in the economy have two poles that have the dialectical contradiction between 1) development of business and social protection of the population; 2) state property and private property; 3) individualism and collectivism.

In the modern world, the economic systems of all countries are in fact "mixed" systems, and this "confusion" is characterized by different proportions of administrative regulation and market regulation, i.e. "more" administrative regulation in one country and market regulation in another. Therefore, the main issue in the classification of economic systems is to determine the degree to which the economic system of a country is liberal or administrative, or in accordance with the principles of liberalism (laissez-faire) or dirigisme. It is necessary to note that this ratio between liberalism and dirigisme is measurable.

This feature that distinguishes the economic system of any country from others determines its "economic model". The principle issue is that the features of the multifaceted system, which to some extent unites in one or another economic system, are determined by the forms and degree of state intervention in the economy. In the research, this type of intervention is called "model-shaping forms of state intervention" in the economy. One of the interesting points is that these model-shaping forms of intervention are the subject of continued discussion for groups, especially for political actors (parties, public leaders, NGOs, and even independent experts) that claim to formulate (or to influence) economic policy.

A comparison of the economic models established in developed and developing countries suggests that the essence of any economic model is the secret struggle of two opposing types of institutions the state and market institutions. Countries can base their choice of any economic model on a variety of priorities, including linking economic growth to social welfare.

Studies show that public spending affects annual GDP growth. A chronological study of the relationship between the share of public spending in GDP and annual GDP growth per capita in 19 countries for the period 2009-2018 suggests that this relationship is not universal and varies from country to country. For example, in the case of Azerbaijan, Bosnia and Herzegovina, Armenia, Estonia, and some countries, there is a negative but strong link between these indicators, while in Belarus, Slovenia, Slovakia, and some other countries there is no or very weak link. Among the countries studied, only in Poland, public spending has a positive impact on GDP growth. However, calculations using both PLS (panel least squares) and RLS (robust least squares) methods show that there is a significant regression relationship between annual GDP growth per capita and the share of public spending in GDP for these countries (Regression equations 6 and 7).)

$GDPG_{it} = (PLS)$	7.608 (1.300)	- 0.166 * (0.036)	PEXP <sub>it</sub>	(6)
$GDPG_{it} = (RLS)$	6.922 (0.951)	-0.121 * (0.026)	PEXP <sub>it</sub>	(7)

Provision 3: The essence of the foreign economic policy of any country is to determine the optimal ratio between liberalization and dirigisme. Such an optimal field is not universal for all countries and periods.

In order to make national economies "open" to the main actors of the world economic system, or rather to make it easier to export and import to these countries (free trade), to finance these countries more easily and safely, and to extract value-added (from foreign direct investments) there is a necessity to liberalize national economies in a wider range. It should be noted that "liberalization" in any area is ensured by "reduction or absence of state intervention" in this area. Thus, the process of globalization brings the country closer to the world economic system by reducing state intervention in the country's economy, i.e. by liberalizing the economy. Although almost all countries do not openly oppose the process of globalization, they do not try to liberalize completely. In other words, there is no country in the world that completely refuses to interfere in foreign trade.

The conditions of globalization open new opportunities for each country, as well as create certain problems. International competition in the world market is intensifying, the contradictions between the national currency and the dollar are intensifying. The depreciation of national currencies against the dollar often has a serious impact on social welfare. Foreign debt is growing in developing countries, and so on. Therefore, in most cases, the state regulation of international economic relations contradicts the process of globalization.

The predominance of either liberalism or protectionist policies in foreign economic relations is largely due to regional or global problems, especially military conflicts. For example, each country pursues a more protectionist policy in times of war. The recent expansion of globalization has made countries, especially developing countries, economically dependent on developed countries. As the ability of developed countries to impose economic and political sanctions against developing countries increases, the economic security of the latter gives rise to a shift from liberalism to protectionism. The same threats can be experienced during regional wars or domestic political crises. In this case, foreign economic relations based on the policy of liberalism can lead to a rapid decline in national wealth, deterioration of economic security, and rapid deterioration of the welfare of the population.

Contradictions between liberalization and dirigisme occur not only in foreign economic relations between any country and other countries but also between any group of countries with certain economic alliance relations and other countries not included in this group. State regulation of foreign economic relations covers various areas, including 1) foreign trade, 2) financial relations, and 3) migration. The main activity in which foreign economic relations take place is foreign trade.

Calculations show that in the group of low, low middle, middle, high middle, and high-income countries, there is a negative relationship between the volume of imports and its logarithm and weighted average tariff rates. However, due to the strong autocorrelation of residuals in these relationships, we will not consider the double regression models that express them adequately.

$$\dot{I}MP_{t} = b_{0} + b_{1} * AWTR_{t} + \varepsilon_{t}$$
(8)

or

$$LnIMP_{t} = b_{0} + b_{1} * AWTR_{t} + \varepsilon_{t}$$
(9)

Here  $MP_t$ - is the volume of imports in current US dollars in the year,  $AWTR_t$  is the weighted average tariff rate in the year. After the application of methods to eliminate autoregression, it becomes clear that only the models that express the relationship between the volume of imports (and its logarithm) and weighted average tariff rates for the average world are adequate, and this relationship is negative:

$$IMP_{t} = \begin{array}{ccc} 6.63^{*}10^{12} + & 0.70^{*} IMP_{t-1} & -1.84^{*}10^{12} & * \\ (8.4^{*}10^{11}) & (5.89^{*}10^{11}) \\ * & (AWTR_{t} - 0.70^{*} AWTR_{t-1}) & (10) \\ LnIMP_{t} = & 17.46^{+} & 0.59^{*} Ln IMP_{t-1} & -0.27^{*} \\ (0.09) & (0.036) \\ * & (AWTR_{t} - 0.59^{*} AWTR_{t-1}) & (11) \end{array}$$

The lack of an unambiguous relationship between the average weighted tariff rates for different income countries and the volume of imports (and its logarithm) proves once again that the application of non-tariff rates along with tariffs has a significant weight in the level of foreign trade freedom and continues to grow.

Provision 4: The problem of the inflow of foreign investment into the country's economy develops as two opposing approaches - the struggle between liberalization and protectionism in the field of foreign investment. Analysis of the relationship between economic growth and the volume of foreign investment and financial liberalization in different income countries by panel and time series methods proves that there is no universal relationship between these indicators.

One of the most important mechanisms of the impact of economic globalization on the country's economy is to ensure the flow of capital between countries. While state intervention in the country's economy is mainly through fiscal and monetary mechanisms, globalization's intervention in the country's economy is mainly through monetary policy and direct investment.

Over the past 30 years, there have been development trends related to the increase in the total volume of FDI in the world and its concentration in the regions. Over the past 20 years, the volume of FDI has increased sharply. Even in Sab-Saharan and the Middle East, the volume of FDI has increased more than 40-50 and 200-250 times, respectively, compared to the 70s and 80s of the last century, although it is less visible than in other regions. However, significant differences in the concentration of FDI between the regions have not only been maintained, but even intensified. Thus, Europe and Central Asia remain the main regions where FDI is concentrated. In the South Asian region, the volume of FDI in recent years has reached a level comparable to that of Europe and Central Asia.

Each country regulates the inflow of foreign capital in a unique way in accordance with the optimality between liberalization and state regulation in the country. The main criterion here is to increase the positive impact of foreign investment on the country's economy and minimize the negative effects. Therefore, it is important to assess the impact of foreign investment on the country's economy. For people who lived and worked in the closed Soviet economic system, the free movement of financial capital, the free purchase and sale of foreign currency, deposits in foreign currency, and so on were serious events. However, the removal of financial constraints, as well as the transition from "closed" economic systems to "open" economic systems as a whole, is usually accompanied by serious macroeconomic and socio-economic problems.

Although all economists acknowledge the serious link between the liberalization of financial markets and the growth of foreign investment in the country, there is no unequivocal opinion about the lasting positive impact of such liberalization on all sectors of the economy.

Since financial liberalization does not have the same economic effect in all countries, its importance is not unequivocally accepted. In particular, developing countries are more cautious about financial liberalization than developed countries. Some countries have moved to financial liberalization not gradually, but "suddenly" or through "shock therapy". Such a transition to financial liberalization has usually resulted in a serious devaluation of the country's currency.

Provision 5: Expansion of globalization increases migration from developing countries to developed countries. The study of migration processes by the gravity method proves that the volume of emigration has a negative relationship with the level of economic development.

The area most affected by migration is related to "human capital". In recent years, the study of the concept of "human capital" has become a priority. Globalization expands the opportunities for integration and scientific and technical cooperation, as well as intensifies the competitive environment. In order to increase their competitiveness, countries prefer innovative economies and science-based production. Such an economy involves not only the creation of high technologies, but also the training of people who are able to work with new techniques and technologies. There is a need to train personnel with extensive knowledge and skills to solve economic problems both globally and locally. The modern economy depends more on the development of human capital. In other words, human

capital is a key factor of production for any enterprise, region or country. This is capital that increases not only the salary (or wages) of an individual employee, but also the income of the enterprise and the country as a whole.

Along with the positive economic aspects of migration, there are also negative ones. For example, the vast majority of migrants live in difficult conditions and away from their families, which seriously harms their health. The vast majority of migrants are unable to undergo regular medical check-ups because they do not have access to social protection and do not have health insurance. In most cases, they are treated locally. This means that the country will incur additional health care costs.

The second important issue is that highly qualified and educated migrants are forced to work in "dirty jobs" in other countries.



Graph 2. Correlation between "Net Migration" rate (Y-axis) and GDP p.c. (\$) (X-axis)



between immigration rate (Yaxis) and GDP p.c (\$) (X-axis)

Another important issue is the departure of highly educated personnel from the country. As a result of this process, the country's economy has lost a lot of money. Currently, out of 243 million migrants in the world, 150 million are labor migrants. They occur for a variety of reasons, such as conflicts, income disparities, and climate change, and are expanding. Migrant workers bring economic benefits to both the country of destination and their home country. Thus, by working at a lower wages in the destination country, they help create value added. Studies show that there is a positive correlation between net migration or the immigration rate and GDP p.c. (Graph. 2 and 3).

## Provision 6: Globalization and liberalization of national economies stimulate the flow of human capital and the "brain drain".

Human capital depends on several economic factors, including real GDP and FDI, government spending on education and health, institutional development, and the level of economic freedom.

$$HC_{t} = F(Glob_{t}; GDP_{t}; FDI_{t}; EF_{t}; EE_{t}; HE_{t})$$
(12)

Where  $HC_t$  - is human capital index;  $Glob_t$  - is an index of globalization. Two different indices can be used as a globalization index. The first is the ratio of total trade to GDP, and the second is the KOF index;  $GDP_t$ -GDP,  $FDI_t$ - share of foreign direct investment in GDP (%);  $EF_t$ -economic freedom index;  $EE_t$ - education costs;  $HE_t$  - is health expenditures.

Just as human capital is one of the main factors that stimulate economic development and prosperity of the country, there are several factors that stimulate its formation and development, including education and health. The countries with the highest levels of education and health care in the world have the highest human capital index. Therefore, all countries are trying to prioritize the development of education and health, and thus, indirectly, the development of human capital. Therefore, Strategic Road Map covering national economic perspectives also focuses on the development of human capital as a priority area for the short, medium and long term.

Together with education the second important factor in the development of human capital is the provision of a health care system and a healthy lifestyle. The productivity of the existing labor force operating in the economy of any country depends not only on the knowledge and skills they have, but also on their health. Acquisition of knowledge and skills also depends on physical health. A healthy person has more opportunities and time to create value added by applying the knowledge and skills gained in real life. The longer a person lives a healthy life, the more he has the opportunity to create value added. It is not true to limit one's health with only physical health.



Graph 4. Dependence of "brain drain", i.e. the relative number of higher educated persons' emigration (Y axis) on the volume of GDP p.c. (X axis)

By increasing GDP p.c., the relative number of highly educated people leaving the country decreases (Figure 4). That is, there is a "brain drain" from an economically weak country to an economically strong country. Interesting facts are that 1) countries with a relative number of emigrants with higher education of more than 40% are the countries that have a GDP p.c. less than \$ 10,000; 2) most of countries with p.c. GDP less than \$ 3,000 have less emigration of highly educated personnel. This can be for two reasons. First, due to the lack of highly educated personnel in these countries, there are no serious problems with their employment, and their salaries (or wages) are higher than those of other workers. Second, despite the fact that these personnel has higher education, their knowledge and skills lag far behind world standards.

**Provision 7: Globalization and liberalization of the national economy have increased international trade in services.** 

Only two of the international services affected by globalization, i.e. tourism and education services were selected as the object of the research. As the level of welfare of the world's population increases and international movement becomes easier, international trade in services, especially tourism, expands. Due to the different nature and aspects of the international service, they have become the subject of different disciplines. Therefore, it is important to study these areas as separate operating systems. However, methodologically, the need for state regulation of all three areas is based on the same logic. Thus, in contrast to financial flows, in the state regulation of trade in services, both the "demand" and "supply" aspects can be the object of regulation. At the same time, the expansion of liberalization in the trade in services is associated with the liberalization of both the determinants of supply and demand. For example, in addition to measures to stimulate the "supply" of tourism such as the development of tourism infrastructure, visa facilitation, and so on, the promotion of the history and geography of tourist destinations or the culture, folklore, communication systems, etc. is important to increase "demand" for tourism services.

In each of the two types of services we have considered, government intervention can be direct or indirect. As direct interventions, 1) these areas are state-owned; 2) allocation of subsidies or any financial resources to these areas through public funding; 3) licensing of private entrepreneurship in these areas; 4) granting any tax benefits to these areas; 5) attraction of soft or state-guaranteed loans in these areas; 6) may have customs and visa regimes and etc. Indirect interventions include 1) the level of public finances; 2) the level of the total tax burden in the country; 2) regulation of prices in the country; 3) the level of the minimum wage; 4) regulation of employment and etc.

The state's policy of both direct and indirect regulation in the field of international service trade is, among other things, an attempt to maintain the trade balance in this area, and at least not to be negative. This creates a dilemma for government regulation. Thus, in any country, everyone has the right to rest, to have education, or treatment. A democratic state cannot prohibit or restrict this right to its citizens. On the other hand, the "import" of such services means a large outflow of foreign currency from the country and can pose a serious threat to economic stability if other foreign economic activities, such as trade in goods, do not bring in more funds. Thus, the solution to this dilemma requires the implementation of the optimal intervention in the field of service trade. The optimal government intervention in international service trade is one in which the "export" volume of international service trade exceeds the "import" volume without restricting human rights. Such an "optimal" level of government intervention should include both direct interventions (sectoral interventions) and indirect interventions (model shaping interventions).

The significant correlation between the number of tourists leaving the country and the country's GDP per capita shows that as the population's income increases, so does the number of tourists. However, it should be borne in mind that high incomes are not the only factor for tourist trips. As mentioned above, there are other factors for tourist trips. At the very least, it can be assumed that despite the high incomes of the population in some developed countries, more and more people are trying to take advantage of the tourism opportunities available in the country.

The number of tourists visiting the host country also depends on the income groups of the origin countries. Thus, the number of tourists visiting high-income countries is much higher than other groups. The study shows that the number of foreign tourists visiting middle-income countries is much higher than the number of tourists visiting upper-middle-income countries. Although the latter have high incomes, the number of tourists is small compared to the former. Empirical studies conducted in different countries also show that the number of tourists visiting the country and its share in the population does not depend on the amount of per capita income in the country. This allows us to conclude that the attraction of tourists to the country does not depend on the overall level of development of the country.

The rapid development of international tourism makes it necessary for the state to pay attention to this sector in every country. As mentioned above, in most countries, both the "demand" and "supply" components of tourism face active government intervention. The generalization of a large number of studies that investigated tourism issues allows us to distinguish the following as its main determinants: 1)determinants of the tourism demand function and 2) determinants of the tourism supply function.

The demand function for tourist trips can be expressed as follows:

$$D_{t} = F(P_{t}; S_{1,t}, S_{2,t} \dots S_{n,t}; C_{t}; \dot{I}_{t}; V_{t};)$$
(13)

Here  $P_t$  is the price parity index in the country.  $S_{1,t}$ - indicates the replacement of tourist trips to the country with tourist trips to other countries for one reason or another.  $C_t$  is the market price index.  $I_t$ -represents the amount of income.  $V_t$ - measurement of difficulties connected with visa issues.

When we say the supply of tourism, we mean the volume of GDP created in the country's tourism sector and tourism-related activities. The proposal for tourism activities can be expressed as the following function:

$$S_{t} = F(H_{t}; R_{t}; T_{t}; INV_{t}; EF_{t}; TB_{t})$$
(14)

Here,  $H_t$  is the number of hotels and similar enterprises in the country,  $R_t$  is the number of restaurants and similar enterprises,  $T_t$  is the number of travel agencies and tour operators,  $NV_t$  is the volume of investment in the tourism sector in the country,  $EF_t$  is the level of sectoral government intervention;  $TB_t$  tax exemptions. All these determinants are determinants that the state can directly influence. Since the first three variables are more dependent on the fourth, the supply function can only be characterized as an investment-dependent function.

Provision 8: The demand function of tourism in Azerbaijan depends on the level of price liberalization and GDP in the country of origin of tourists, and the supply function depends on the level of price liberalization in the country and the level of price liberalization in competing countries.

The demand and supply functions of tourism in Azerbaijan were found by applying the 2SLS method (Two stage least squares method) using the following simultaneous regression equations system:

$$\begin{cases} Q^{d} = D_{it} = \alpha_{0} + \alpha_{1} * AP\dot{I}_{t} + \alpha_{2} * RGDP_{it} + \varepsilon_{d} \\ Q^{s} = S_{t} = \beta_{0} + \beta_{1} * AP\dot{I}_{t} + \beta_{2} * GP\dot{I}_{t} + \varepsilon_{s} \end{cases}$$
(15)

Here  $API_t$  and  $GPI_t$  are the price index in Azerbaijan and Georgia, respectively,  $RGDP_{it}$  year real GDP per capita in the country of origin of the tourists. By the application of this method, it was determined that for tourists from Middle Eastern countries,  $D_{it}$  and  $API_t$  have following equations:

$$D_{it} = -12474.7 + 1.29 * RGDP_t + 3205.7 * GPI_t$$
(16)  
(1506.983) (0.118) (1156.674)  
$$API_t = 1.45 + 6.6*10^{-5} * RGDP_t + 1.45 * GPI_t$$
(17)  
(0.159) (1.6\*10^{-5}) (0.159)

And for the coefficients from (15) we have following values:

$$\begin{cases} \frac{\alpha_0 - \beta_0}{\beta_1 - \alpha_1} = 1.45; \frac{\alpha_2}{\beta_1 - \alpha_1} = 6.6 * 10^{-5}; \frac{\beta_2}{\beta_1 - \alpha_1} = 1.45\\ \frac{\alpha_0 * \beta_1 - \alpha_1 * \beta_0}{\beta_1 - \alpha_1} = -12474.7; \frac{\alpha_2 * \beta_1}{\beta_1 - \alpha_1} = 1.29; \frac{\alpha_1 * \beta_2}{\beta_1 - \alpha_1} = -3205.7 \end{cases}$$
(18)

If we solve the system of equations (18), we can model the functions of supply and demand for tourism in Azerbaijan as follows:

$$\begin{cases} Q^{d} = 69155.2 + 0.89 * AP\dot{I}_{t} + 1.29 * RGDP_{it} \\ Q^{s} = -40815.6 + 19545.45 * AP\dot{I}_{t} + 28339.61 * GP\dot{I}_{t} \end{cases}$$
(19)

### **Provision 9: Liberalization of foreign trade plays a positive role in ensuring food security.**

Panel and cross-country analysis, as well as time series analysis on different countries, including Azerbaijan, show that if the country's economy is liberal then the large-scale and sustained famine is unlikely. Even if there is no domestic production, the market will be provided with the necessary products in accordance with the price. In other words, in the globalized world, the food security of the population depends on its income and economic freedom of the country. The multi regression analyses between the Global Food Security Index  $(FS_{it})$ , the foreign trade sub-index  $(FT_{it})$  and the GDP per capita  $(GDPPC_{it})$  for 46 countries with different levels of income show that there is a strong relationship between the logarithms of  $(FS_{it})$ , and  $(GDPPC_{it})$  in 5% confidence interval and between  $(FS_{it})$ , and  $(FT_{it})$  in 10% confidence interval:

$$\begin{array}{cccc} \text{Log}(\text{FS})_t = 1,25 & - & 0,063 & *\text{Log}(\text{FT})_t + & 0,13* & \text{Log}(\text{GDPP})_t \\ (0,035) & (0,034) & (0.01) & (20) \end{array}$$

Given the dependence of food security on these indicators, it can be said that the level of economic development and liberalization indirectly affects the health of the population.

Provision 10: Countries differ in their foreign trade activities according to the degree of state interference in their foreign trade activities. These differences are measurable, and on the basis of these differences, it is possible to ponder the "freedom" of foreign trade activities of the countries.

While the need for each country's foreign trade activities is recognized, it is inevitable that it be limited to a certain extent. For example, imports should be such that 1) the country does not harm its producers and 2) the country does not import low-quality products. Export activities are especially supported by all countries. However, a certain framework must be expected in this activity as well. That is, export activity should be in such a way that it does not seriously affect prices in the domestic market.

There is no country in the world that does not engage in foreign trade or try to expand it. At the same time, there is no country in the world that does not try to protect its domestic market. Thus, "protectionism" and "free-trade" are to one degree or another specific to all countries. Therefore, discussions should not focus on which of these two approaches is "good" and which is "bad." The main problem for any country is to find the optimal situation between the degree of protectionist measures, or rather the expansion of foreign trade and the protection of the domestic market. That is, a country's foreign trade must be "free" until a degree to give the opportunity to protect the domestic market.

Thus, the key question for the economy of any country is not whether the state should "restrict" foreign trade, but "how much it should limit". Any interference of the state in any sector of the economy, including foreign trade, is its interference in the economy. The degree of state intervention in the economy can be measured, as well as assessed by various indicators.

Although the concepts of "state intervention in the economy" and "economic freedom" are contradictory, in reality, there are only laws, rules, regulations, and other restrictive or prohibitive legal frameworks that implement "state intervention in the economy". The absence or lack of such legal frameworks creates "economic freedom". Thus, it is possible to assess "economic freedom" as well as freedom of foreign trade by measuring economic indicators in each country related to restrictive or prohibitive legal frameworks.

A comparative analysis of the level of liberalization of foreign trade regimes in 95 countries in 2016 suggests that the most liberal economy in this area is Singapore (0.058), and the most dirigiste economy is Iran (0.553). Among the 95 countries, Azerbaijan is the 23rd country with the strictest state regulation of foreign trade operations (0.306). The median (i.e. Serbia with an index value of 0.222) is to the right of the relative center (0.244), which means that in most of the countries listed, foreign trade is more liberal than the relative center point.

Comparison of the level of state intervention in the economy of Azerbaijan with different countries, including countries with different or relatively similar levels of development and size of the economy, suggests that this indicator to some extent affects the level of economic growth and prosperity. For example, despite the fact that the economies of China and Azerbaijan have very different dimensions, the trend of economic development in both countries can be traced to the level of state intervention in the economy. Calculations show that in China, the level of state intervention in the economy has decreased rapidly over the past 30 years. At that time, the Chinese economy was growing steadily. However, calculations show that the level of government intervention in the economy is still high compared to Azerbaijan, although the IS (S) I composite index has been steadily declining in China. However, in China, modelshaped forms of state intervention in the economy have begun to have a negative impact on economic growth. In other words, in line with the self-regulatory nature of China's economy and society, liberalization in recent years has been marked by deviations from the optimal level.

Regression analysis between the level of state intervention in the economy (IS (S) I) in China and Azerbaijan and the economic growth with Lag = 1 confirm a statistically significant relationship between these indicators. Econometric calculations and statistical tests allow us to express the models of these relations as followed (21) and (22) regression equations

$$CGDPG_{t} = -21.94 + 78.84* \text{ is(s)}\dot{\textbf{i}}_{t-1}$$

$$(21)$$

$$(8.125) (20.69)$$

$$AGDPG_{t} - 0.44*AGDPG_{t-1} = 41.50 - 237 \text{ (is(s)}\dot{\textbf{i}}_{t-1} - \frac{10.93}{*} (66.87)$$

$$(0.44*\text{is(s)}\dot{\textbf{i}}_{t-2})$$

$$(22)$$

Based on models (21) and (22), we can argue that model-shaped reforms in recent years towards liberalization have had a negative impact on economic growth in China and a positive impact on Azerbaijan. This proves once again that the optimal size of modelshaped intervention varies from country to country, and therefore there is a need to further increase intervention in the Chinese economy and reduce it in Azerbaijan. In the most developed countries, government intervention in foreign trade is less than in some developing countries. This, of course, is understandable: the competitiveness of most products and services produced in developed countries is, as usual, higher, and those countries are more interested in the liberalization of international trade. Developing countries are trying to tighten their domestic markets. However, measures to protect the domestic market can stimulate economic development only under certain conditions.

Provision 11: Liberalization of foreign trade is a necessary condition for economic growth, but not sufficient.

Studies show that all countries with high GDP p.c. have more liberal foreign policies (Graph. 5 and Graph 6). Among 66 countries studied in 2018 and 95 countries studied in 2019, all countries with a GDP p.c. of more than \$ 20,000 have foreign trade sub-index less than 0.26. It is impossible to claim otherwise. Thus, the more liberal conditions of the country's foreign trade do not guarantee that its GDP p.c. will be high. For example, if the foreign trade sub-index is less than 0.26, it is no guarantee that GDP p.c. is more than \$ 20,000.



Graph 5. Relationship between FTSI (X axis) and GDP p.c. in USD (Y axis) (2018)

Graph 6. Relationship between FTSI (X axis) and GDP p.c. in USD (Y axis) (2019)

An analysis of the impact of the level of government intervention in foreign trade or the level of foreign trade freedom on aggregate demand and aggregate supply, as well as on economic growth and other macroeconomic indicators, can determine how are such interventions close to the optimal level. The economic literature confirms that the relationship between the openness or freedom of foreign trade and the rate of economic growth is not so simple. The different methods used for the assessment of the relationship give almost the same result. It is even confirmed that trade openness or freedom does not have a one-way effect on economic growth.

Studies show that the nature of the relationship between the foreign trade sub-index and the ratio of the FDI to GDP also depends on the level of liberalness of foreign trade and is sensitive to changes in this level. In countries with an FDI ratio of GDP of more than 20%, the foreign trade regime is relatively liberal and the foreign trade sub-index is less than 0.2

# Provision 12: The effects of government intervention in the economy through the minimum wage (MW) vary from country to country and are not universal. This conclusion is confirmed by the study of the relationship of the MW with macroeconomic indicators by the method of "difference-in-differences" and panel analysis.

The study of the economic and socio-economic impacts of the minimum wage as a measurable economic indicator can help to determine the optimal balance between the social protection of workers and enabling of the business environment in each country. In assessing the economic and socio-economic impacts of MW, the "absolute" value of MW or its "ratio" to GDP per capita is often used. Both assessment methods have certain advantages and disadvantages. Thus, the level of development of countries is more pronounced when using the absolute value of the MW. The comparative picture of the "absolute" value of the MW by country is adequate to the level of economic development of the countries. Of course, in some developed countries, the limit of MW is not defined by legislation or collective agreements. Using the "absolute" value of the MW as a method of assessment, it is not possible to achieve the above-mentioned dilemma - a balance between the social protection of employees and the enabling of the business environment.

In countries with different levels of development, the relationship of the MW sub-index (MWSI) with the volume of GDP is also very close to the empirical results obtained based on other methods. Thus, there is a certain relationship between these two indicators. Countries with a GDP p.c. more than \$ 20,000 and regulating the MW by different ways keep the MW sub-index at a moderate level (0.250-0.550), avoiding "too hard" or "too soft" regulation (Graph 7 and Graph 8).

Note that the MWSI of Azerbaijan is outside this range and is at the right. It can also be assumed that the level of the MWSI, which is in a certain range (0.250-0.550), is a necessary condition for the GDP growth, but not sufficient. Thus, there are a large number of countries with the MWSI located in this interval, which have GDP p.c. less than \$ 20,000. However, there is no one developed country with MW defined by law outside the specified interval.



Studies on the impact of the MWSI and its changes on the volume of migrant flows show that 1) in which countries the MWSI is in the above-mentioned interval (0.250-0.550), they have more migrant inflows; 2) Less changing of the MW in any direction attracts more migrants. This is due to the country's economic stability.

An empirical analysis of the relationship between unemployment and the MW sub-index in 2018 in 62 countries with different levels of economic development, in particular, the relationship between the MW sub-index and the unemployment rate by education level, suggests that there is a weak relationship between the MW sub-index and the unemployment rate of primary educated workers. Nevertheless, there is a connection between these two indicators. Thus, as the MW sub-index increases, the unemployment rate among this working group increases. Of course, in most countries, the unemployed from this group makes up only 1% of the working-age population. Therefore, although the increase in the minimum wage in some countries has some effect on the level of wages of this group of workers, it does not have a significant impact on the overall business environment.

Like other determinants that characterize state intervention in the economy, the impact of MW on economic growth is not universal. Panel analysis covering data for the 5-year in 97 countries belonging to different income groups shows that the Granger-based cause-and-effect relationship between the ratio of MW to GDP p.c. and GDP growth (GDPG) is weak. The panel analysis proves that the social nature of the MW is more important and its direct impact on economic development is weak.

Table 1

Relationship between share of MW in GDP p.c. (SMW) and GDP growth p.c. (GDPG) (%) (panel analyse)

<u> </u>	( )			
Variables	coefficient	SD	t-statistics	p-value
R-kvadrat=0.031515				
SMW	0.017	0.005	3.067	0.0024
С	1.495		6.202	0.0000

Provision 13: There is a significant correlation between the liberalization of Azerbaijan's foreign trade regime and economic growth. As the foreign trade regime is liberalized, GDP increases. However, a positive correlation between these indicators is possible when liberalization policy is moving towards optimality. Such regularity is inherent in both import and export activities.

Although some indicators are based on the Heritage Foundation's Freedom of Trade Index, the Global Economic Forum's International Trade Participation Index, and the Fraser Institute's Foreign Trade Freedom Index, these indices provide a quantitative measure of liberality in various aspects of foreign trade. On the other hand, the level of liberalization of foreign trade activity calculated through these indices is not entirely related to the state's model-shaping intervention in the economy. For example, in the Fraser Institute's Foreign Trade Freedom Index, "black market exchange rates" are not related to the form of the state intervention in the economy. There are aspects of state intervention in foreign trade that are related to modelshaped forms of intervention, and such forms of intervention aim to strike a balance between the protection of the domestic market and the liberalization of foreign trade.

Our research shows that over the past 15 years, Azerbaijan's foreign trade sub-index and all its components have been declining. In other words, over the past 15 years, Azerbaijan's foreign trade conditions have shifted to the "right". Azerbaijan's foreign trade conditions liberalized more rapidly in 2000-2003. Although the process of liberalization slowed down in the following years, it continued in 2005-2012. Starting in 2013, especially after the devaluation in 2015, protectionist tendencies in Azerbaijan's foreign trade increased (Graph 9). This is natural. Thus, in all countries of the world, when economic problems arise, the country has a practice of making "left" decisions. However, although the need to protect the domestic market in connection with the devaluation of the national currency in Azerbaijan over the past years required the adoption of protectionist decisions, such decisions were not so sharp and the "right" trend in Azerbaijan's foreign trade remains.



**Graph 9. Dynamics of foreign trade sub-index of Azerbaijan** (2000-2016)

The relationship between the Foreign Trade Sub-Index (FTI) and GDP p.c. expresses that the FTSI of developing countries with a GDP p.c. less than \$ 20,000 is distributed in the interval 0.1-0.7. For Azerbaijan, this figure is 0.34 and is in that interval. However, for none of the developed countries involved in the study, this figure does not exceed 0.26. This means that in order for GDP p.c. to be above \$ 20,000, the foreign trade sub-index must continue to decline and foreign trade policy must shift to the "right".

If we compare the relationship between GDP p.c. and the foreign trade sub-index for 66 countries with different income with the relationship of these variables in Azerbaijan, we can conclude that the liberalization of foreign trade is a necessary condition for GDP growth in Azerbaijan. There is no reason to pursue a protectionist foreign policy in the country to avoid the devaluation of the national currency, and the process of liberalization must continue. It is possible that the liberalization of foreign policy for a certain period of time will have a negative results, but the need for continuous "recovery" of foreign trade for the sustainable development of the country's economy is an undeniable fact.

The relationship of Azerbaijan's foreign trade flows with the foreign trade sub-index of partner countries proves the importance of the level of liberalization in Azerbaijan's foreign trade activities. Research also shows that Azerbaijan's main export partners are countries with a foreign trade sub-index of less than 0.28 (Graph 10). In other words, Azerbaijan cooperates with more liberal countries in the field of foreign trade.

It is also possible to analyze the volume of Azerbaijani imports from other countries. Azerbaijan's main import partners are also countries with a foreign trade sub-index of less than 0.37 (Graph 11). However, even in this case, most of the goods imported by Azerbaijan fall on the share of more liberal countries.





Graph 10. Relationship export of Azerbaijan (Y axes) with FTSI of partner countries (X axes)

Graph 11. Relationship import of Azerbaijan (Y axes) with FTSI of partner countries (X axes)

Reducing state intervention in foreign trade in Azerbaijan is necessary condition for economic development, but it is not sufficient condition. In other words, less state intervention in foreign trade is not always accompanied by economic development. In developed countries, there is state intervention in foreign trade, but this intervention does not exceed certain limits. Also, the increase in the level of foreign trade freedom in developing countries is not always accompanied by economic growth.

Regression of the effects of foreign trade openness  $(FTO_t)$  and foreign trade freedom  $(FTF_t)$  on household income level p.c.  $(HHRPC_t)$ , poverty rate  $(POV_t)$  and employment rate  $(EMP_t)$  in Azerbaijan, in the initial approach, leads to the conclusion that there is a serious relationship between these indicators. To avoid "spurious" of the regression of such relationships, it is necessary testing the stationarity of these time series with an augemented Dickey-Fuller (ADF) test. ADF tests show that the  $H_0$  hypothesis for the stationarity of foreign trade openness  $(FTO_t)$  and foreign trade freedom  $FTF_t$  is rejected, and in this case the series have a stationary with degree I (0). However, the  $H_0$  hypothesis is not rejected for household income, the poverty rate, and the employment rate. The hypothesis  $H_0$  is not rejected even for their first differences (Table 2).

### Table 2

socioeconomie vuriusies						
	P-	SD	$\tau -$	I(0)	I(1)	
	probability		statistics			
$FTF_t$ -foreign trade freedom	0.000876	0.059591	-3.77141	$H_1$	-	
$FTO_t$ - foreign trade openness	1.52E-06	0.152659	-6.06078	$H_1$	-	
$HHRPC_t$ - household income p.c.	0.008743	0.072448	-2.21679	$H_0$	$H_0$	
$\Delta HHRPC_t$ - annual change of household income p.c.	0.072464	0.236128	-2.50093	$H_0$	$H_0$	
<i>POV<sub>t</sub></i> -poverty rate according to the national poverty level	9.67E-07	0.026626	-2.50903	$H_0$	$H_0$	
$\Delta POV_t$ - annual change of poverty rate	0.696514	0.127586	-0.80759	$H_0$	$H_0$	
<i>EMP</i> <sub>t</sub> - employment rate	0.000121	0.038207	-1.56736	$H_0$	$H_0$	
$\Delta EMP_t$ -annual change of employment rate	0.17087	0.138953	-1.86839	$H_0$	$H_0$	

Stationarity of the time series on foreign trade and some socioeconomic variables

Econometric analyzes show that the positive relationship between the level of freedom of foreign trade calculated by various methods, and GDP, imports, exports, trade turnover and trade balance, is in fact related to the autocorrelation of reziduals. After taking the necessary steps to eliminate autocorrelation, it became clear that there was no significant cause-and-effect relationship between dependent variables and freedom of trade. The same result is obtained in the panel analysis and cross-sectoral analysis of the effects of annual changes of trade freedom with some Lags, for example, Lag = 1; 2; 3; 4; 5 years, on annual changes of GDP for those periods. The effects of free trade on macroeconomic indicators are not direct and are realized through various channels. This fact once again confirms that the impact of free trade on macroeconomic indicators, including GDP volume and growth, varies from country to country and does not have a universal trend. As in some developing countries, especially those rich in natural resources, any increase in the level of foreign trade freedom in Azerbaijan does not necessarily have a positive effect on macroeconomic indicators. Because in such countries, GDP and foreign trade depend more on the export of natural resources. On the other hand, these results show

that there is an optimal level of foreign trade freedom for each country, and beyond this level, its macroeconomic effects are either weak or negative.

Thus, time series analyses on Azerbaijan leads to the conclusion that there is no regression relationship between the openness of foreign trade -  $(FTO_t)$ , freedom of foreign trade  $(FTF_t)$  and other indicators related to foreign trade activities as independent variables, and household income level  $(HHRPC_t)$ , poverty level  $(POV_t)$  and the rate of employment  $(EMP_t)$  as dependent variables. On the other hand, there is no co-integration between them and there is no Granger cause-and-effect relationship.

**Provision 14: Economic liberalization increases the flow of foreign direct investment between countries.** 

One of the important mechanisms that realizes the impact of economic liberalization on economic growth is its impact on the volume of foreign investment. Thus, as reforms are carried out in the direction of liberalization and the business environment improves, the volume of foreign investment in the country increases.

Research proves that with the implementation of economic liberalization in Azerbaijan, large investments were attracted to the country's economy. This is natural. The foreign investor must first make sure that the investment is safe and that these funds can be returned if necessary. The country can guarantee such a financial liberalization.

"Financial liberalization", an important component of economic liberalization, has a significant impact on GDP, as it is important both in attracting foreign investment and in the functioning of the banking system. Studies show that a change in the "financial freedom" index leads to a significant change in GDP (Graph 12-13), as if the "financial freedom" index is a qualitative leap from one system to another. In any system, economic indicators continue to increase cumulatively, but after a certain period, growth weakens, leading to a transition to a higher system (i.e., a higher "financial freedom" index).



Graph 12. Correlation between "financial freedom" index (X axis) and GDP (mln.USD) (Y axis) in Azerbaijan



Graph 13. Correlation between "financial freedom" index (X axis) and GDP growth (Y axis) in Azerbaijan

Quantitative changes (changes in economic indicators) are replaced by qualitative changes (new indices). After the transition (or rather, after the implementation of the reform), economic indicators are growing again. Thus, qualitative changes (transition to a new index) are replaced by quantitative changes.

The process we describe also relates to the relationship between the 'financial freedom' index and the volume of foreign investment. On the other hand, calculations show that even in this case, changes in the indices of "financial freedom" and "investment freedom" have a positive effect on the volume of foreign investment (Graphs 14, 15). As the country's financial freedom increases, so does the amount of investment in the economy.

Liberalization of the economy and one of its component, i.e. financial sector is more widespread in developed countries than in developing countries. Economic liberalization and financial liberalization in Azerbaijan have been expanding over the past 20 years. The indices of "economic freedom" and "financial freedom" in Azerbaijan are not high compared to other countries in the region. Economic liberalization in Azerbaijan has had a positive impact on macroeconomic indicators and attracting foreign investment to the country.



Graph 14. Relationship between "financial freedom" (X axis) and FDI in mln.USD (Y axis) (1996-2019)

Relationship Graph 15. Relationship between freedom" (X "investment freedom" (X axis) mln.USD (Y and FDI in mln.USD (Y axis) (1996-2019)

Provision 15: The role of foreign direct investment in economic development in Azerbaijan is positive.

Given that the main channel of the impact of freedom of investment on economic development is directly related to foreign investment, we also assess the impact of freedom of investment by quantifying how such investments affect economic and socioeconomic development. Hypothesis  $H_0$ : foreign direct investment in the country's economy  $(FDI_t)$  does not impact on 1) Gross Domestic Product  $(GDP_t; 2)$  economic growth  $(GDPG_t); 3)$  level of employment  $(EMP_t); 4)$  households' per capita income  $HHRPC_t); 5)$  poverty rate in national poverty level  $(POV_t)$ . Hypothesis  $H_1$ : rejection of  $H_0$ .

Two indicators were used for the modelling dependence of the above-mentioned dependent variables on the FDI: the total volume of the FDI  $(FDI_t)$ ; and 2) the share of total foreign investment in GDP  $(FDI_t/(GDP_t) = SFDI_t$ . The model also includes the volume of GDP in (t-1) year  $(GDP_{t-1})$ . Thus, the calculations showed that the models of dependence of the above-mentioned dependent variables on the volume of foreign investment can be expressed by the following 6 equations:

$$GDP_{t} = a_{1} + a_{2} * GDP_{t-1} + a_{3} * OILINV_{t-1} + a_{4} * FDI_{t-1} + a_{4} * SFDI_{t-1} + \varepsilon_{t}$$
(23)

$$GDPG_{t} = a_{1} + a_{2} * GDP_{t-1} + a_{3} * OILINV_{t-1} + a_{4} * FDI_{t-1} + a_{4} * SFDI_{t-1} + \varepsilon_{t}$$
(24)  

$$EMP_{t} = a_{1} + a_{2} * GDP_{t-1} + a_{3} * OILINV_{t-1} + a_{4} * FDI_{t-1} + a_{4} * SFDI_{t-1} + \varepsilon_{t}$$
(25)  

$$HHRPC_{t} = a_{1} + a_{2} * GDP_{t-1} + a_{3} * OILINV_{t-1} + a_{4} * e_{t}$$
(26)  

$$POV_{t} = a_{1} + a_{2} * GDP_{t-1} + a_{3} * OILINV_{t-1} + a_{4} * FDI_{t-1} + a_{4} * SFDI_{t-1} + \varepsilon_{t}$$
(26)  

$$POV_{t} = a_{1} + a_{2} * GDP_{t-1} + a_{3} * OILINV_{t-1} + a_{4} * FDI_{t-1} + a_{4} * SFDI_{t-1} + \varepsilon_{t}$$
(27)

Calculations show that in regression analysis, the volume of GDP in t-year depends more on the volume of GDP in (t-1) year. However, it is also dependent on foreign investment in the oil sector and total foreign investment. Our calculations assume that the volume of GDP in t-year depends on the total investment in the year (t-1) and the investment in the oil sector. Calculations show that the dependence of the volume of GDP in Azerbaijan on the volume of investments in the country can be expressed as the following model in the 5% confidence interval:

0.529 *	$*(GDP_{t-1} -$
(0.238)	
5.628	$* (OILINV_{t-1} -$
(2.652)	
4.839 *	$(FD\dot{I}_{t-1} -$
(2.2369)	
	(28)
	0.529 * (0.238) 5.628 (2.652) 4.839 * (2.2369)

The model of dependence of annual per capita income of households in Azerbaijan on foreign direct investments in the country in the of 5% confidence interval can be expressed as follow:

$$HHRPC_{t} = \begin{array}{ccc} 0.0343 & * GDP_{t-1} & +13.7033 * SFD\dot{I}_{t-1} \\ (0.0072) & (5.6773) \end{array}$$
(29)

But in the of 10% confidence interval can be expressed as follow:

$$\begin{array}{rcl} \text{HHRPC}_{t} = & 0.0343 & * \text{GDP}_{t-1} & -0.2106 & * \text{OiLiNV}_{t-1} & + \\ & & (0.0072) & & (0.1012) \\ +0.1429 & * \text{FDI}_{t-1} & +13.7033 & * \text{SFDI}_{t-1} & & (30) \\ & & (0.0796) & & (5.6773) \end{array}$$

Foreign investment in Azerbaijan also affects the level of poverty in the country, which is determined by the national poverty line. The model of the total regression relationship between these indicators takes the following form after the elimination of autoregression:

$$POV_{t} - 0.665 * POV_{t-1} = 5.8526 - 0.0016 * (FD\dot{l}_{t-1} - 0.665 * (1.3071) (0.0007) * FD\dot{l}_{t-2}) = 0.1752 * (SFD\dot{l}_{t-1} - 0.665 * SFD\dot{l}_{t-2})$$
(31)  
(0.0617)

Provision 16: OLS calculations show that the flow of migration from Azerbaijan to other countries for permanent residence, as well as the volume of labor migration depends more on the level of globalization of the country of origin and destination.

The countries of destination chosen by migrants from Azerbaijan have several comparative advantages in terms of migration. First, most of these countries have a higher level of globalization. Migrants often prefer a more globalized destination country than their own. Second, in most destination countries, GDP is higher than in Azerbaijan. Third, in almost all destination countries, the share of waged (or salaried) workers in total employment is higher than in Azerbaijan. It should be noted that the differences between countries on the minimum wage sub-index do not create a comparative advantage for migration.

The study examines the relationship between the dynamics of migration in Azerbaijan over the past 20 years and several indicators including 1) the degree of globalization; 2) a.b. GDP volume; 3) level of economic liberalization; 3) the share of waged (or salaried) employees in the total number of employees; 4) the minimum wage sub-index by the gravitational method. The main result is that the relationship between the logarithm of the volume of emigration in Azerbaijan and some variables, including 1) the volume of GDP, 2) the distance between countries, 3) the level of minimum wage, 4) the share of waged (or salaried) employees in the total number of employees is very weak. But this indicator, i.e. logarithm of the volume of emigration is strongly influenced by the logarithm of the globalization index. If we take into account the economic, cultural, and political aspects of the globalization index, then it can be argued that the level of economic freedom of the destination countries has a crucial role in the volume of emigration from Azerbaijan.

The shortcomings in the applying of the gravity model in the assessment of migration processes can be grouped as follows: 1) The gravity model requires the acquisition of various data on the economies of the two countries, including migration flows. In many cases, obtaining such information is difficult; 2) The approximation of some variables in the gravity model casts doubt on the seriousness of the results. For example, taking the distance between the capitals of countries as the distance between countries, or the distance between the settlements closest to the border, significantly affects the results of the calculations. 3) It is important to use as many determinants as possible in estimating labor migration through the gravity model for any country. Otherwise, it is more difficult to use this model in forecasting labor migration.

The time series analysis shows that the volume of emigration from Azerbaijan in t-year  $(EMIG_t)$  does not depend on GDP per capita in t, t-1, t-2 and t-3 years and the level of economic growth.  $EMIG_t$  does not have a cause-and-effect relationship in the Granger sense with economic freedom, labor freedom, business freedom in t, t-1, t-2 and t-3 years. However, the strong relationship can be observed between  $EMIG_t$  and the level of globalization. Calculations by using

the OLS method allow to model the relationship between the globalization index  $KOF_t$  and  $EM\dot{I}G_t$  as follows:

or

$$\begin{split} EM\dot{I}G_t &= 4.8 + 1.353^* \quad EM\dot{I}G_{t-1} &- 0.454 &* EM\dot{I}G_{t-2} &- \\ & (1.7335) \\ &- 0.69^* & KOF_t &- 0.11^* & KOF_{t-1} &+ 0.454 & * KOF_{t-2} & (33) \\ & (0.2883) \end{split}$$

The results of calculations performed using cross-sectional or panel analysis methods are consistent with the results obtained by the time series method. In other words, the dependence of emigration and immigration flows in Azerbaijan on 1) GDP per capita in the country, 2) distance between origin and destination countries, 3) the minimum wage sub-index, 4) the share of waged (or salaried) workers in the total number of employees is weaker, but the dependence on globalization level is stronger.

### MAIN RESULTS

1."Globalization" does not mean that any event takes a global character on a local scale. This can only be a manifestation, not the essence of "globalization". On the other hand, globalization is not an objective process, but a process that serves the interests of major economic and military powers and is controlled by the institutions they create;

2. The main essence of globalization is to ensure the free movement of financial capital. This is done through international financial institutions;

3.It can be confirmed that there is a certain correlation between the globalization index and economic growth. On the other hand, it should be taken into account that the expansion of the process of globalization in any country leads to economic growth in this country after a certain period;

4. The process of globalization brings the country closer to the world economic system by reducing state regulation in the country's economy, i.e. by liberalizing the economy;

5. There are contradictions between the liberalization of foreign economic relations and the state regulation of these relations. The essence of any country's foreign economic policy is not whether liberalization or state regulation is necessary. The main task is to find the optimal area between liberalization and state regulation (dirigism) in foreign economic relations, in accordance with the economic characteristics of the country and the potential for selfregulation of society. However, this optimal field is not universal for all periods, as it is not the same for all countries. Thus, each country can determine different areas of optimality at different times, depending on its level of economic development;

6.Economic contradictions for each country, such as the expansion of foreign trade and the protection of the domestic market, make it necessary to find an optimal balance between them. Because the restriction of both foreign trade operations (import or export) in order to protect the domestic market can create its own economic consequences. Thus, the restriction of imports can have a negative

impact on the development of the country's economy and economic security, in particular on food security, the development of the competitiveness of goods produced in the country and create inflation. Restrictions on exports, on the other hand, can reduce the country's supply of foreign currency and lead to the devaluation of the national currency. Restrictions on exports can not only prevent additional investment in the country's economy and reduce production, but also have a negative impact on employment. Additional restrictions on import and export operations to protect the domestic market, on the other hand, can create more serious difficulties;

7.Establishing an optimal balance between free foreign trade and the protection of the domestic market is necessary for the effective development of the country's economy. Finding such a balance is carried out by the mechanism of state regulation. It should be borne in mind that there is no universal level of state regulation in this area, and each country may have its own optimal balance area;

8.In foreign trade, countries differ from each other in the degree of intervention in the foreign trade activity of the state. This difference is measurable, and on the basis of this difference it is possible to speculate which country is more "free" in foreign trade;

9. The problem of inflow of foreign investment into the country's economy develops as two opposing approaches - the struggle between liberalization and restriction in the field of foreign investment. When attracting foreign investment, each country tries to find the optimal area between the liberalization of foreign finance and government regulation (restriction), taking into account the possible impact of these investments on the country's economy;

10.Determining the optimal level of government intervention in the minimum wage is accompanied by a balance between improving the business environment and social protection measures in each country;

11.Determining the optimal area between liberalization and the level of state intervention in educational institutions is an important scientific and practical issue;

12. The deepening of globalization has a direct impact on the liberalization of the health care system. The increase in GDP per capita has a positive impact on the growth of per capita health expenditures in the country. Compared to neighboring countries, Azerbaijan and Georgia have the fewest government intervention in health care financing. The countries with the highest level of such intervention are Japan and Italy. Among Azerbaijan's neighbors, Turkey is the country with the most state intervention in the financing of the health care system. The reduction of state interference not only in the health care system, but in the economy as a whole, including foreign trade, has a positive impact on the health of the population;

13. The main purpose of international trade is to provide the country with the necessary goods and services, and exports are not the main goal. The purpose of exports is to obtain the amount of foreign exchange reserves necessary for the country to acquire goods and services that it cannot produce due to its own capabilities. Therefore, as the need for imports decreases, so does the need for exports;

14. The impact of the minimum wage on unemployment occurs only if the minimum wage is not formal and comparable to the average wage;

15.Increased state intervention in the labor market under the pretext of social protection of workers and protection of labor rights may have a negative impact on the economy;

16. The level of state intervention in the economy is, in most cases, related to the nature of the internal problems in each country, as well as the historical, cultural and socio-psychological conditions prevailing in the society. That is why the level of state intervention in the economy is not a fixed quantity, but varies depending on time, political, economic and military situation;

17.Model-shaped" forms of state intervention in the economy are related to the contradiction between 1) enabling of business development and social protection of the population; 2) state property and private property; 3) individualism and collectivism;

18. The "right" orientation of the country's foreign trade activities is necessary for economic development. However, it should be borne in mind that the "right" trend is not enough for economic development. An increasingly "right" trend in the foreign trade activities of developing countries means the creation of the potential conditions necessary for future economic development;

19. The relationship between state model-shaping intervention in the economy and the "self-regulatory potential of societies" can be important in determining the "optimal" level of state intervention in the economy in each country. Quantitative measurement of the selfregulatory potential of societies and the determination of the relationship of this indicator with the indicator of the state's modelshaping intervention in the economy is a serious scientific problem.

### RECOMMENDATIONS

1. Given that the process of globalization is inevitable for small countries, it is more expedient to use the opportunities created by it instead of resisting it. Therefore, it is important to integrate more widely into the world economic system and to give priority to liberalization in the country's economy;

2. As the liberalization of foreign trade in Azerbaijan has a positive impact on economic growth, food security, and human development, it is important to continue liberalization measures in this area;

3. Liberalization of Azerbaijan's foreign trade activities in the coming years may have a positive impact on economic development;

4. Since the "model-shaped" forms of state intervention in the economy have a positive effect on the foreign trade balance, each of them should be used in the future to liberalize the potential of the economy as a whole;

5. Since finding the optimal area between liberalization and dirigism in Azerbaijan's foreign economic relations depends on both time and the current situation in the world economic system, it is important to determine such an area of optimality for each period and take it into account in foreign economic policy. Research in this area should be ongoing;

6. In order to further integrate Azerbaijan into the world economic system, it is important for it to join the World Trade Organization. To this end, the acceleration of necessary reforms in the country should be encouraged as much as possible;

7. As the liberalization of migration increases the "brain drain", a mechanism should be developed to return the state's share in the development of human capital. However, this mechanism should not restrict the liberalization of migration and human rights;

8. Since government intervention in the revenue distribution and redistribution process has a negative impact on the business environment, there is a need to reduce such intervention. The weakening of the business environment has a negative impact on foreign economic activity. There is an opportunity to reduce the tax burden in Azerbaijan to 15-20%;

9. Instead of restricting imports, measures should be taken to stimulate production to protect the domestic market. One such measure could be to expand the public procurement mechanism;

10. Unemployment is one of the main causes of migration in Azerbaijan, and the impact of the minimum wage on unemployment is almost non-existent. Therefore, it is important to bring the minimum wage closer to the average wage (at least 80-90%) or not set by the state. The state can set a minimum wage for some jobs only close to the average wage;

11. The potential for liberalization of the Azerbaijani economy to stimulate economic growth and increase prosperity still remains high. There is a need for further liberalization of the Azerbaijani economy;

12. Given the potential impact of foreign investment on the country's economy, research should be ongoing to find the optimal area between the liberalization of foreign finance and government regulation;

13. Determining the optimal level of government intervention in the minimum wage is important to ensure a balance, as it is accompanied by a balance between improving the business environment and social protection measures in each country;

14. State regulation of migration should be such that the positive effects of migration increase and the negative effects decrease. Both legislative and administrative mechanisms for state regulation of migration must take these effects into account;

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Address: AZ.1143, H. Javid Ave. 115, Institute of Economics of ANAS, Baku.

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