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## GLOBAL COUNTRY'S RESILIENCE AS A CONDITION OF ITS ATTRACTIVENESS FOR INTERNATIONAL BUSINESS

*The data of the Global Resilience Index of Ukraine in 2019 are analyzed. The factors of resilience of business environment are considered. Business environment resilience tools are offered.*

**Keywords:** *international business, global resilience, global resilience index, risks, shocks.*

**Бойко Аліна, Шкуропадська Діана.** *Глобальна стійкість країни як умова її привабливості для міжнародного бізнесу.*

*Проаналізовано дані глобального індексу стійкості України у 2019 році. Розглянуто фактори забезпечення стійкості бізнес-середовища. Запропоновано інструменти забезпечення стійкості бізнес-середовища.*

**Ключові слова:** *міжнародний бізнес, глобальна стійкість, глобальний індекс стійкості, ризики, шоків впливи.*

**Relevance of the research topic.** International business entities are looking for the best options for pursuing their business interests globally. They seek for maintaining a share of the national markets and increasing profits by conquering new markets. At the same time, international business is fraught with significant risks due to the peculiarities of the socio-economic development of countries and the dynamic changes in the global environment. In today's changing business environment conditions, when unforeseen events occur, which N. Taleb calls the Black Swans (Taleb, 2010), it is relevant to study the global country resilience as a condition of attractiveness of the country's business environment for the subjects of international economic activity.

**Formulation of the problem.** Socio-economic, climatic, political and other factors shape the country's attractiveness for international business. In each country there are specific conditions and features of doing business. Scientific approaches to assessing and benchmarking the factors that shape a country's global resilience are only emerging. Global resilience means a country's ability to adapt to exogenous shocks, counteract shocks that come outside, and quickly restore own potential. Currently, the international insurance company FM Global has developed and calculated a global index of country resilience. The problem is the lack of scientific interpretation of Ukraine's global resilience as a condition of its attractiveness for international business.

**Analysis of recent research and publications.** The European Commission (2017) has been researching key areas of economic resilience. N. Hughes's publication (2018) is devoted to the study of business resilience measures. The publication of T. Teixeira and I. Kemp (2018) is devoted to the study of key risks that affect the resilience of the business environment. A. Boiko's publication (2017) is devoted to the study of factors for ensuring the economy's resilience to negative external influences. Approaches to ensuring the resilience of the economic system are explored by S. Kozlovsky (2017).

**Presenting main material.** The decision to invest or start a business abroad is justified by taking into account the results of the study of cause and effect relationships and features of the development of local and global markets. The international insurance company FM Global makes a rating of the countries on the calculation results of the global resilience index. The company rates 130 countries on 12 factors, which are grouped into three categories: economic potential, risk quality, supply chain. The business environment in each country is shaped by factors (economic, political, social, environmental), the totality of which creates the conditions for doing business. Using the example of Ukraine, we consider the rating data of the Global Resilience Index in 2019 (Table 1). According to this rating factors, measured by index, had been remained relatively stable and has not been changing dramatically during 2016-2019 (2016 – 38.3 points; 2017 – 38.7 points; 2018 – 40.3 points; 2019 – 38.7 points).

*Table 1*

**Global Resilience Index of Ukraine in 2019**

Place (130 countries)	Points (100 points)	Categories	Factors	Place (130 countries)	Points (100 points)	Level
80	38,7	Global Resilience Index				
98	25,4	economic potential	Productivity	94	6,3	low
			Political risk	127	12,9	low
			Oil intensity	52	76,8	sufficient
			Urbanization rate	35	89,3	sufficient

Place (130 countries)	Points (100 points)	Categories	Factors	Place (130 countries)	Points (100 points)	Level
52	44,7	risk quality	Exposure to natural hazard	66	37,2	moderate
			Natural risk	39	45,4	medium
			Fire risk quality	67	38,4	moderate
			Inherent cyber risk	52	61	medium
80	45,6	supply chain	Control of corruption	107	17,7	low
			Quality of infrastructure	61	61,9	medium
			Corporate governance	101	48,1	medium
			Supply chain visibility	56	48,2	medium

*Note: low level (1–29 points), moderate level (30–44 points), medium level (45–69 points), sufficient level (70–100 points).*

*Source: Global Resilience Index (2019).*

Economic potential is the aggregate ability of the country's economy, its enterprises and organizations to produce goods, provide services, meet social needs, and ensure the development of production and consumption. FM Global identifies 4 factors that influence on economic potential growth: productivity, political risk, oil intensity, urbanization rate. Let us consider in more detail the role of these factors.

Among the socio-economic features that distinguish Ukraine from most European countries is low productivity. Labor productivity is a measure of the efficiency and effectiveness of human labor. Comparison of GDP, length of working day and number of employed population reveals that an average Ukrainian worker produces goods and services at \$3.7 USA per hour. If we take into account not current-price GDP but real GDP, the figure goes down to \$2.8 USA (Vikhrov, 2018). Estimating productivity in 2019 FM Global gave Ukraine 6.3 points out of 100. Such a result testifies to the low level of labor productivity of Ukrainians. Increasing labor productivity is a major way of achieving intense economic growth as it determines the competitiveness of Ukrainian goods and services in foreign markets.

The factor of political risk determines the likelihood of destabilization or overthrow of the government in an unconstitutional, violent manner, including politically motivated violence and terrorism. Political risk is characterized by the possibility of loss occurrence or decline of profits as a result of public policy. In Ukraine 2% politically related firms control over 20% of total turnover and over 25% of assets of all Ukrainian companies. Sizing up a political risk, FM Global gave Ukraine 12.9 points out of 100. Such a result indicates a low level of resilience of the country to the influence of political risks. Political instability has a negative impact on investors' motivation to invest in the real sector of the Ukrainian economy.

Further we consider the factor of oil intensity, which is influenced by international relations, demand and oil prices in the world market. The oil factor permanently influence on international trade, since there is a link between oil prices and the state of the economy. In 2019, Ukraine ranks 57th in the world (among 97 countries) in terms of oil production with an indicator of 32,000 barrels per day. The

oil industry of Ukraine is characterized by a high level of monopolization, lack of transparency of management, poor organizational structure of management and low level of competition. Almost 95% of the oil, which is produced on the territory of Ukraine, comes from Naftogaz of Ukraine. This company creates a strategy for the development of the industry, carries out structural restructuring of the industry in accordance with market conditions, provides for the needs of industrial consumers and the population, and provides for the transit of oil and gas to European countries. In recent years, this company has shown poor performance and overstaffing (Lobanova, 2014). Estimating the oil intensity, FM Global gave Ukraine 76.8 points out of 100. This result indicates a sufficient oil resource base in Ukraine.

The factor of country urbanization characterizes increasing the proportion of urban population, as well as increasing the economic, political and cultural significance of cities compared to rural areas. The urbanization level of Ukraine is about 70%. The result of the urbanization was the formation of urban agglomerations of Kyiv, Kharkiv, Odesa and Dnipro. Evaluating the urbanization rate, FM Global gave Ukraine 89.3 points out of 100. This result indicates a sufficient country's urbanization level. Increasing the urbanization level has a positive effect on the amount of investment in the economy.

Further we consider the factors that characterize a country's resilience level to the emergence of different inherent risks. Countries' inclination to take risks has increased significantly in recent decades. This is explained by the accumulation of risks in the global economy that can reduce economic activity and cause serious damage to its long-term development. FM Global identifies 4 factors that affect countries risks inclination: exposure to natural hazard, natural risk, and risk of fires starting, cyber risk.

Natural hazards for international business are manifested in the form of abnormal climatic phenomena (earthquakes, floods), raising or lowering the temperature of material bodies that surround a person, collapse of rocks, the occurrence of natural ionizing and ultraviolet radiation, atmospheric pathogens and toxins). Assessing the level of impact of natural hazards, FM Global gave Ukraine 37.2 points out of 100. This result indicates a moderate country's level of resilience to the effects of natural hazards, which can create dangerous consequences for the global economy development.

Further we consider such a factor as natural risk. Such type of risk means the possibility of socio-economic losses from the manifestation of a dangerous natural process or phenomenon. This risk is measured in terms of the number of casualties, injuries, value of damaged private property and economic activity. According to the international risk index rating, in 2019 Ukraine is in the group of countries with high level of vulnerability to natural risks. In May 2019, about 2,000 homes were flooded in the territory of Transcarpathian, Ivano-Frankivsk, Lviv, Rivne, Ternopil, Khmelnytskyi and Chernivtsi oblasts, over 7300 households, 8800 hectares of agricultural land in 162 settlements, blurry of about 100 kilometers of road coverage, 197 settlements were

de-energized. The most difficult situation was in the Transcarpathian region, where as a result of floods the amount of losses amounted to UAH 150 million (Bratyuk, 2019). That is how much money is needed to repair damaged hydraulic structures, embankments and dams. Assessing the level of natural risk, FM Global gave Ukraine 45.4 points out of 100. This result indicates the country's medium level of resilience to natural hazards that pose a real threat to the population, businesses and infrastructure.

The risk factor for fires characterizes the likelihood of fires at different establishments, in private houses and structures, outdoor installations, equipment. The International Fire Rescue Association estimates the average death toll per 100 fires. The figure for Ukraine is 2.82 casualties per 100 fires. The allowed value should not exceed 0.7. Assessing the risk of fires starting, FM Global gave Ukraine 38.4 points out of 100. Such a result indicates a moderate of country's resilience level to the risk of fires starting, which may adversely affect the activities of investment objects (buildings).

Further we consider the cyber risk factor. This type of risk means a likelihood of physical, functional, reputational disruption to structures and systems through network technologies. The International Telecommunication Union, a specialized UN agency in the field of information and communication technologies, annually calculates a global cyber-security index. Cyber-security applies to most sectors of the economy and life spheres. The level of cyber-security is assessed by five criteria: legal measures, technical measures, organizational measures, capacity building, and cooperation. The results for each criterion are combined into a total score. In 2018 Ukraine ranked 54th out of 175 countries, scoring 0.661 points out of 10. Ukraine is in a group of countries that participate in cyber-security programs and initiatives. Rating cyber risk, FM Global gave Ukraine 61 points out of 100. This result indicates the country's medium level of resilience to cyber risks. It is worth noting that cyber risks associated with massive data leakage heighten concerns about the potential impact of cyber-attacks on the global economy (Rosenbush, 2017).

Further we consider the category of resilience assessment as a supply chain, that means a network of related but independent organizations that work together and in a coordinated manner to organize, manage, improve material and information flows from supplier to end consumer. The supply chain includes resellers, industrial enterprises, logistics centers, in-house distribution centers, distributors, wholesalers and other legal entities leading to the end user. FM Global identifies 4 factors that influence on the supply chain development: the level of government corruption, the quality of infrastructure, the level of corporate governance, the supply chain visibility. Let's take a closer look at the role of these factors.

The impact of corruption is a serious and urgent problem in almost all countries. The preamble to the UN Convention against Corruption states that it is a threat to the stability and security of society, which undermines the role of democratic institutions, ethical values, damages sustainable development and the rule of law. Corruption is no longer a local problem; it has become a transnational phenomenon

that has a negative impact on the development of society and the economies of all countries. Corruption is a crime that involves the direct exercise by an official of the rights conferred on him or her for the purpose of personal enrichment. Assessing the level of government corruption, FM Global gave Ukraine 17.7 points out of 100. This result indicates a low level of country's resilience to the manifestations of corruption that distorts competitive market mechanisms.

Next, we consider the factor of infrastructure quality, which is a set of industries, facilities, structures that provide the general conditions of production necessary for the effective economic development as a whole and the life of people in all territory. These include electricity, transport, communications, utilities, education, health care, and social security. Assessing the quality of the infrastructure, FM Global gave Ukraine 61.9 points out of 100. This result indicates a medium level of infrastructure quality. It is worth noting that infrastructure development contributes to economic growth, affecting marginal productivity of private capital and the inflow of investment into the country.

The factor of corporate governance is related to the development of global communications, the growth of global business, which unifies the norms of business conduct and brings different business cultures closer. In April 1999, the Organization for Economic Co-operation and Development formulated the definition of corporate governance: Corporate governance refers to the internal means of ensuring the activities of corporations and controlling them. One of the key elements for improving economic efficiency is corporate governance, which includes a complex of relationships between the board (management, administration) of the company, its directors (supervisory board), shareholders and other stakeholders. Assessing the level of corporate governance, FM Global gave Ukraine 48.1 points out of 100. This result indicates the medium level of corporate governance development.

The transparency of supply chains is revealed through information transparency, which enables the distribution of critical data needed to manage the flow of products, services, and real-time information between suppliers and consumers. Information transparency implies the distribution, exchange, availability of critical, in terms of a supply chain, information between the entities in the logistics chain. Estimating the level of transparency of supply chains, FM Global gave Ukraine 48.2 points out of 100. This result indicates the medium level of information transparency of the supply chain. It is worth noting that increasing the transparency of national economic entities contributes to the intensive development of the global information space.

Thus, in the study we considered the key factors that characterize the state of the Ukrainian business environment. An analysis of these factors allows us to determine the resilience of the business environment, as the ability of economic entities (enterprises, organizations, and institutions, households) to quickly adapt to shock impacts, maintaining the continuity of business operations and ensuring the protection of their assets. In our opinion, for increasing the level of the resilience of business environment there is a need in effectively implement the tools shown in Figure 1.

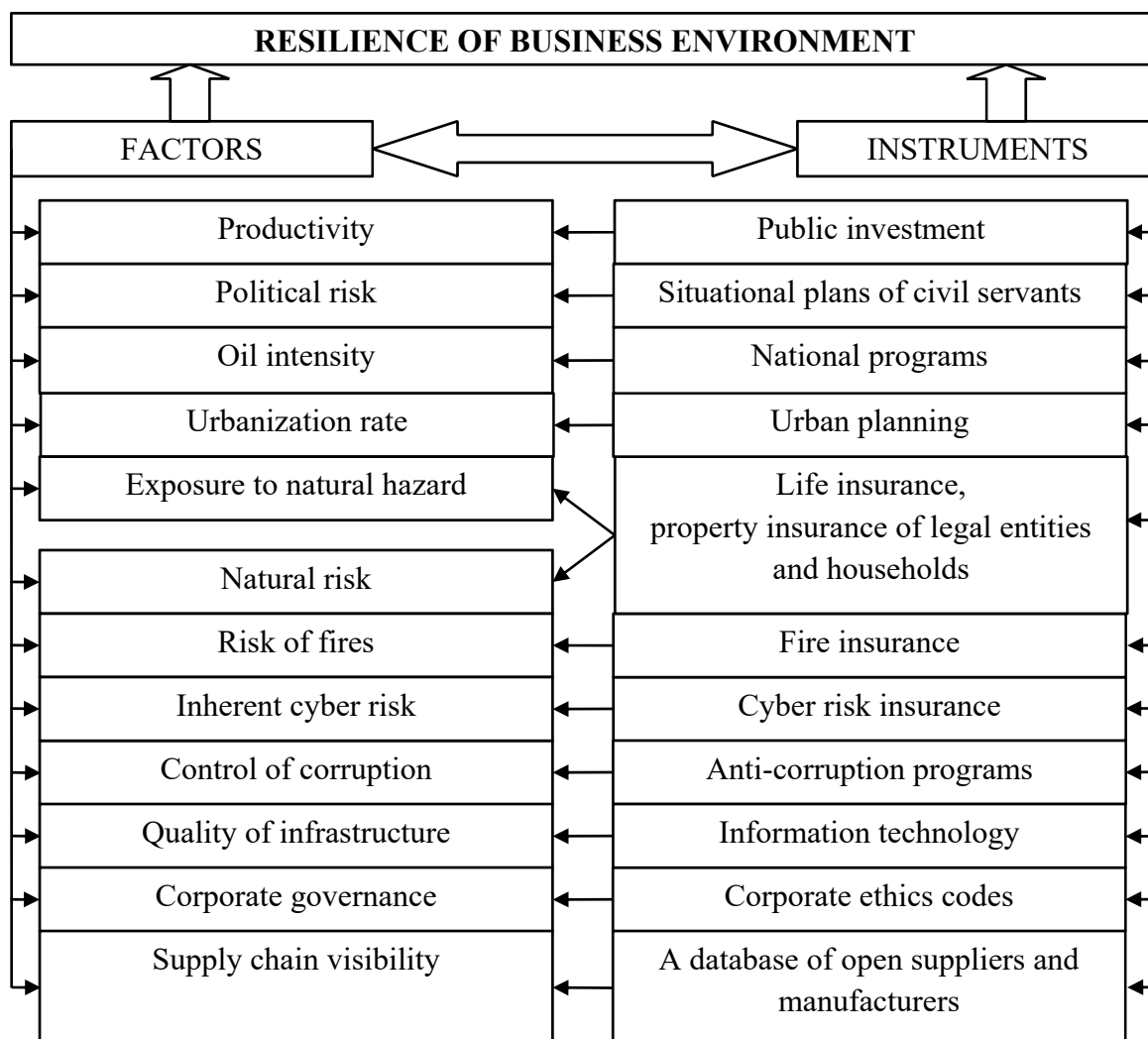


Figure 1. Business environment resilience tools

**Conclusion.** Resilience is a modern criterion for choosing a country for international business. In 2019, Ukraine ranked 80th out of 130 countries in the Global Resilience Index. Ukraine has a low resilience level that negatively impacts on business environment attractiveness for international businesses. Ukraine's economic development keeps back by poor labor productivity, inefficient use of labor resources and a significant impact of political risks. Forming a country's attractiveness for international business also requires its environmental resilience. This means developing an effective preventive climate change response system. The priority of state policy and development of Ukrainian society is to reduce manifestations of government corruption and to build effective mechanisms for improving business practices.

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