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ECONOMIC INSTABILITY AND DIGITAL INNOVATION

ЕКОНОМІЧНА НЕСТАБІЛЬНІСТЬ ТА ЦИФРОВІ ІННОВАЦІЇ

Instability is one of the systemic features of the movements of global economy along with inflation, debt, digitalization, geoeconomic fragmentation, inequality.

Instability in recent years is a result of the global shocks and risks, market volatility, world flows of trade, data, investments. The interaction of global instability and digitalization, radical changes in information processing, digital technologies and data flows have created additional drivers of instability and simultaneously an opportunities for resilience.

Instability in a general sense is a characteristic of deviations from predicted trends, variability, uncontrollability, a significant amplitude of changes in markets and economic systems under the influence of systemic factors, risks, variable, random and unpredictable factors.

Economic instability depends on significant changes of the conditions of global markets, trade and investments. Structural changes may be initiated by imbalances, disruptions, cycles, shocks, crises. In a near time such processes have been ignited by the COVID-19 pandemic, Russia's war in Ukraine, global warming, economic and technological cycles, trade and political conflicts.

Thus, the main factors of global instability could be: economic, political and social shocks; imbalances and economic, financial, currency crises; cyclical fluctuations in the economy; extreme natural events like floods, earthquakes and others; technological shocks due to innovations and digitalization; economic and trade regulatory reforms.

Economic instability affects global processes, markets and supply chains, international competition and investments. Instability leads to uncertainty of economic processes, volatility, risks. These processes affect the international competition, supply chains disruptions, especially in dynamic sectors of digitalization, innovation and high technologies.

Innovations and digital transformation of business may support structural changes in the international economy and instability. Digital innovations and technologies application will be desirable for keeping resilience of the economy and business, risk management and volatility mitigating.

Aggressive trade policy and tariffs acceleration by the US administration since February 2025 becomes a key factor of market and economic instability globally. The origins and purpose of such a policy are reflected in its official title: "Regulating Imports with a Reciprocal Tariff to Rectify Trade Practices that Contribute to Large and Persistent Annual United States Goods Trade Deficits". [1]. Within the framework of such a policy, increasing import tariffs is considered a universal and effective method of restricting imports, relocating production of goods to the United States, increasing investments and employment, boosting budget revenues and lowering its deficit.

Import tariffs have different effects on importing and exporting countries. Tariffs are paid by importers, who incur additional costs, most of which are passed on on the expense of final consumption. Accordingly, consumption may decrease, prices may impose an inflationary effect. Import tariffs may have a positive impact on fiscal policy.

For exporters, there may be a reduction in demand from countries with high import tariffs, which necessitates reorientation to other markets or cost and output reduction. A decrease in export revenues and an increase in costs may negatively affect the exchange rate of the national currency.

The announced import tariffs of the American administration have affected international markets being applicable to:

1) the largest trading partners of the United States – China, Canada and Mexico;

2) surcharges on US partners in the free trade zone – Canada and Mexico;

3) are aimed at the main product groups – steel, aluminum, cars;

4) universal tariff of 10 % is applicable to most trade partners;

5) reciprocal tariffs are differentiated for each country depend on the trade deficit with the US;

6) the largest tariffs are intended for developing countries, where branches of American corporations that supply products to the US.

The announced US tariffs will have an impact on the global and national economies: the world economy is facing increasing global risks and a possible slowdown and fragmentation; the European economy can expect moderate inflation, slowing down and increased competition [2]; the US economy has experienced a significant volatility on financial markets and capital outflows, increased inflationary pressures, weakening of the US dollar against the euro and other reserve currencies[3]; major trading partners have introduced or are preparing measures in response to US tariffs, which increases the risk of a trade war; American businesses are forced to bear additional costs for imported raw materials and components; consumers are preparing for a reduction of real incomes and consumption.

According to the OECD, digitalization will play a crucial role in supply chains adaptation under conditions of trade and tariffs uncertainty: "Digital tools facilitate traceability and improve preparedness and responsiveness in supply chains. Governments can enhance resilience by lowering tariffs on ICT goods, enabling data flows, and co-operating on digital regulation" [4]. Such complex positive impact could be attributed to major directions of digital innovation:

1. Innovative digital products.
2. Innovative digital processes.
3. Innovative digital business models. For example, digital platforms based on innovative digital model, are rapidly developing globally. The world leaders are Temu and Shein, in April 2025 have 10,7 billion USD revenues and grew up for 360% during last 3 years [5].
4. Innovative digital data management and marketing.

Digital innovations have significant differences from traditional goods and services – accessibility, multifunctionality, adaptability, security, integration with other digital technologies. They could be used for enhancement of adaptability and resilience under economic instability.

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