Problems of ensuring financial stability of enterprises in non-stationary conditions

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In the modern dynamic context of the global economy, the issue of ensuring the financial sustainability of enterprises is a topical one. Previous conceptions of economic stability, which were traditionally based on the assumption of stationary and predictable conditions, are now facing enormous challenges due to the continuous non-stationarity and turbulence of the modern environment. This paradigm shift, characterised by rapid technological progress, geopolitical influences, and unprecedented global events, requires a systematic reassessment of approaches to financial stability. That is why financial stability is a critical aspect of economic growth and development, as it ensures the smooth functioning of the financial system and supports economic growth.

Non-stationary conditions of the present refer to changes in the statistical properties of time series data over time, which may affect the reliability, accuracy and interpretation of the analysis of financial indicators of an individual entity. In addition, non-stationarity can result from factors such as seasonality, cycles, shocks and structural changes. Examples of non-stationary conditions that directly affect the activities of an enterprise are economic, political and financial crises, technological or innovative changes, changes in consumer preferences and behaviour, changes in production conditions, environmental factors, external crises: pandemics, natural disasters, terrorist attacks or epidemics, etc. Thus, non-stationary conditions are situations where the business environment, external or internal conditions of influence change over time, are characterised by volatility and can be unpredictable.

Table 1 below summarises the differences between stationary and non-stationary conditions for ensuring the financial sustainability of enterprises, grouped by the selected aspects, which clearly demonstrate the significant differences between them, allowing for more informed decision-making.

Table 1 – Difference between stationary and non-stationary exposure conditions

Difference	Stationary conditions	Non-stationary conditions
Definition	Statistical properties of data remain unchanged over time.	Statistical properties of data change over time.
Time series analysis	Useful for analysing time series data with a stable mean, variance and autocorrelation structure.	Difficult to analyse time series data with changing mean, variance and autocorrelation structures.
Financial stability analysis	Provides reliable and consistent results for financial stability analysis.	Provides unreliable and misleading results for financial stability analysis.
Forecasting	Allows for accurate forecasting based on historical data.	Makes forecasting more difficult due to unpredictable and changing data.
Transformation	Does not require data transformation for analysis.	Requires data transformation to make it suitable for analysis.

Source: compiled by the authors based on [1].

With the rapid development of technology in today's world, it is important to consider the impact of technological progress, which extends to financial systems, where the development of digital currencies and algorithmic trading is creating new dynamics. The integration of digital technologies into various sectors is certainly driving efficiency, offering potential benefits in terms of speed and accessibility, but it also introduces uncertainty that could disrupt established financial stability frameworks. In turn, the rapid adoption of new financial technologies is increasing the non-stationary environment in which economic actors must navigate.

Technologies, such as artificial intelligence and data analytics, can play an important role in strengthening financial systems in the face of non-stationary challenges. By improving risk assessment, decision-making, and overall financial stability, technology can help financial institutions and companies meet evolving needs. Fintech solutions that incorporate financial technology into existing systems and processes can streamline processes and foster business innovation. They cover various aspects of finance, including payment solutions, financial planning services, investment platforms, analytics, risk management solutions, blockchain solutions and smart contracts.

The integration of fintech (financial technology) offers numerous benefits, such as increased efficiency, improved customer experience and greater flexibility in financial management. Studies indicate that FinTech plays a pivotal role in enhancing corporate environmental, social, and governance (ESG) performance.

By mitigating financing constraints, fostering sustainable development, and contributing to the establishment of green financial systems, FinTech is seen as a catalyst for positive change. FinTech platforms, by connecting investors with projects and businesses aligned with sustainability goals, also play a pivotal role in promoting ethical and impact investing. This connection between investors and sustainable initiatives further solidifies FinTech's contribution to fostering a financial environment that prioritizes ethical considerations and impactful investments.

One noteworthy finding is that FinTech, particularly when addressing internal financing constraints and leveraging external fiscal incentives, can assist enterprises in striking a balance between economic prosperity and social well-being. This dual-path approach suggests that FinTech contributes to the creation of a sustainable economic environment within a country.

The research indicates that FinTech is a transformative force in enhancing the financial sustainability of enterprises. Its ability to address financing constraints, contribute to sustainable development, embrace global sustainability goals, and fortify financial resilience makes FinTech a key player in shaping a more sustainable and ethically conscious financial landscape.

However, this type of integration is not without its challenges, such as regulatory issues, so choosing the right integration solution is crucial for businesses seeking to improve their financial operations and optimise processes, while increasing financial stability or formulating a strategic plan to ensure the company's stability in the absence of it [2].

In addition to technological factors, geopolitical dynamics have a significant impact on economic stability, contributing to the development of the non-stationary nature of the modern economic environment.

Geopolitical considerations, encompassing factors such as trade policy, international relations, and regional conflicts, have a significant impact on economic stability.

The interconnectedness of the world's economies means that geopolitical uncertainty in one region can have a reverberating effect on the entire economic environment, introducing instability and unpredictability. It is the study of the role of trade tensions in geopolitical dynamics that is crucial, as escalating trade disputes and protectionist measures disrupt established trade patterns, leading to uncertainty for business and financial markets [3].

Non-stationary conditions, namely political and deep economic crisis, developed in Ukraine in 2022 with the beginning of the full-scale invasion, which caused a crisis in the operations of most Ukrainian enterprises.

The war has led to a deterioration in global financial conditions and increased risks of a deterioration in economic prospects, which has affected the financial stability of Ukrainian enterprises, resulting in new challenges for business entities, namely:

1. Weakening demand for loans from households and businesses and risk aversion on the part of banks when granting new loans;

2. Operational stability of banks and losses from operational risks due to war-related events;

3. Capital and liquidity risks, namely the loss by Ukrainian banks of a significant portion of their loan portfolio as a result of the crisis;

4. Risks to global financial stability as a result of hostilities on the territory of Ukraine, which have worsened global financial conditions and economic prospects [4];

5. Administrative restrictions and control over capital flows by the National Bank of Ukraine, which introduced administrative restrictions, including restrictions on capital flows, shortening of settlement terms for export-import transactions, and restrictions on certain foreign exchange transactions [3].

It should be noted that, in contrast to the challenges posed by the volatile environment, the Ukrainian government has taken a number of measures to support the financial stability of companies in Ukraine, including, above all, the reform of the National Bank of Ukraine (NBU). According to the Financial Stability Report [3], banks have successfully withstood the challenges of the war thanks to their significant margin of safety, timely response and reforms.

The NBU played a crucial role in maintaining financial stability and ensuring the operational resilience of banks and businesses in general during the war. In addition, the support of the IMF (International Monetary Fund) was important for Ukraine to stabilise the economy and implement reforms in the wartime.

The IMF's four-year financial programme for Ukraine is aimed at supporting the government's policy of stabilising the economy and implementing broader reforms to accelerate recovery after the war [4].

However, the key priority for Ukraine is to maintain sustainable disinflation and exchange rate stability, including by maintaining an adequate level of foreign exchange reserves, which indicates the government's focus on maintaining macroeconomic stability.

Thus, based on the study, it can be argued that the problems of ensuring the financial stability of enterprises in non-stationary conditions are an urgent issue of today, which is being studied in detail by scientists around the world.

The definition of non-stationary conditions, characterised by fluctuations in statistical properties and influenced by various factors, emphasises the need to reassess the traditional stability framework in the pursuit of long-term financial stability.

In addition, technological progress, geopolitical dynamics, and financial innovation all play a key role in shaping the volatility of the modern economic environment.

Of course, the hostilities in the country have created a volatile environment for all business entities, which has led to significant challenges in maintaining financial stability. However, the long-term impact of the political crisis on the financial sustainability of individual companies in Ukraine remains uncertain. That is why it is necessary to monitor market changes on a regular basis and conduct ongoing analysis and research to develop appropriate response measures, including strategic planning in the short and long term.

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