

**MECHANISMS USED TO ENSURE FINANCIAL STABILITY
МЕХАНИЗМЫ, ИСПОЛЬЗУЕМЫЕ ДЛЯ ОБЕСПЕЧЕНИЯ ФИНАНСОВОЙ
СТАБИЛЬНОСТИ**

**Maqsud Musa ALIYEV¹, master student,
Baku Business University, Azerbaijan**

A stable financial system is capable of allocating resources efficiently, assessing and managing financial risks, maintaining employment close to the natural rate of the economy, and eliminating relative price movements of real or financial assets that will affect monetary stability or employment. The financial system is in a state of stability when it eliminates financial imbalances caused by endogenous or significant adverse and unforeseen events. At stability, the system will absorb shocks primarily through self-correcting mechanisms, preventing adverse events from having a disruptive effect on the real economy or other financial systems. Financial stability is most important for economic growth, because in the real economy, most operations are carried out through the financial system.

Key words: financial system, resources, financial risks, stability, economic growth

Стабильная финансовая система способна эффективно распределять ресурсы, оценивать финансовые риски и управлять ими, поддерживать занятость, близкую к естественному уровню экономики, и устранять относительные колебания цен на реальные или финансовые активы, которые могут повлиять на денежно-кредитную стабильность или уровни занятости. Финансовая система находится в состоянии стабильности, когда она устраняет финансовые дисбалансы, вызванные эндогенными или значительными неблагоприятными и непредвиденными событиями. В условиях стабильности система будет поглощать шоки в первую очередь за счет самокорректирующихся механизмов, предотвращая пагубное воздействие неблагоприятных событий на реальную экономику или другие финансовые системы. Финансовая стабильность наиболее важна для экономического роста, потому что в реальной экономике большинство операций осуществляется через финансовую систему.

Ключевые слова: финансовая система, ресурсы, финансовые риски, стабильность, экономический рост

JEL: G2, G3

Introduction

The true value of financial stability is best expressed in times of financial instability. During these periods, banks are reluctant to finance lucrative projects, asset prices differ significantly from domestic values, and payments may not arrive on time. Major instability can lead to banking operations, hyperinflation or stock market crashes. Confidence in the financial and economic system can be severely undermined.

Stability measures at the firm level

The overall measure of stability at the level of individual institutions is the z-point. To measure a bank's solvency risk, it clearly compares the buffers (capitalization and income) with the risk (income volatility). The Z-score is defined as $z \equiv (k + \mu) / \sigma$, where k represents equity as a percentage of assets, μ returns as interest on assets, and σ represents the standard deviation of return on assets as a representative of the return variability. The popularity of the Z-score stems from the fact that a financial institution has an open (negative) relationship with the probability of bankruptcy, ie the probability that the value of its assets is lower than the value of debt [1]. Therefore, a higher z score indicates a lower probability of bankruptcy. Among the documents that use the z-score for bank stability analysis are Boyd and Runkle (1993); Beck, Demirgüç-Kunt, Levine (2007); Iron-Kunt, Detragiache and Tressel (2008); Laeven and Levine (2009); Čihák and Hesse (2010).

The Z-score has several limitations as a measure of financial stability. Perhaps the most important limitation is that z-scores are based solely on accounting data. So they are only as good as the basic accounting and auditing framework. If financial institutions are able to smooth the information, the z-account can give an extremely positive assessment of the stability of financial institutions. In addition, the z-account looks at each financial institution separately and potentially ignores the risk that a default in one

¹ © Maqsud Musa ALIYEV, maqsudaliyev021@gmail.com

financial institution could harm other financial institutions in the system. The advantage of the Z-score is that it can be used for more complex, non-market-based organizations. In addition, z scores allow you to compare the risk of default in different groups of organizations that may differ in terms of ownership or purpose, but are at risk of bankruptcy.

Other approaches to measuring stability at the organizational level are based on the Merton model. It is routinely used to test a company's ability to meet its financial obligations and to measure the probability of total default. The Merton model (also called the asset value model) views an organization's capital as a call to action for retained assets, given the variability of those assets. Call parity is used to determine the price of a "deposit" represented by the firm's credit risk. Thus, the model measures the value (weight for volatility) of a firm's assets when debtors "make their choices" while waiting for repayment. The model is defined as default when the value of a firm's liabilities exceeds its liabilities (in different iterations of the model, the level of assets / liabilities required to reach default is set to a different extent). The Merton model can calculate the probability of credit loss for a firm [2].

Merton's model was modified in subsequent studies to capture broader financial activity using credit default exchange data. For example, it is part of the KMV model that Moody's uses both to calculate the probability of credit loss and as part of its credit risk management system. The default distance (DD) is another market-based measure of corporate default risk based on the Merton model. Measures both solvency risk and liquidity risk at the firm level.

System stability measures

To measure systemic stability, a number of studies attempt to aggregate firm-level stability measures (z-score and default distance) for system-level stability assessments, with or without averaging each measure relative to the relative size of the organization. The disadvantage of these cumulative measures is that financial institutions do not take into account the interconnectedness of each other; that is, the failure of an institution can be contagious.

The probability of the first default or the probability of a single default between multiple organizations has been proposed as a systemic risk measure for large financial institutions. Credit default swap spreads use risk-neutral default probabilities. Contrary to the default distance measurements, it is likely that standards between a number of organizations can be combined. However, research on the probability of default ignores the fact that the failure of a large institution causes larger fluctuations than small ones.

Another assessment of the resilience of the financial system is the Systemic Expected Reduction (SES), which measures the individual contribution of each institution to systemic risk. HPPs take into account the impact and risks of individuals, and measure the externalities from the banking sector to the real economy when these organizations fail. The model is good at determining which institutions are systematically connected and, if they fail, will have the greatest impact on the wider economy. One drawback of the SES method is that it is difficult to determine when systemically important institutions will fail [3].

Another indicator of financial stability is the distribution of systemic losses, trying to fill some of the gaps in the previously discussed measures. It combines three key elements: the probability of delay in each individual organization, the size of the default loss, and the "contagious" nature of defaults in all organizations due to their interrelationships.

References

1. Bağırov. M, Bank işi. Bakı 2003.
2. Bəşirov. R, Pul və Banklar. Bakı 2012.
3. A.Ş. Şəkərliyev. Dövlətin iqtisadi siyasəti: Reallıqlar və Perspektivlər, Bakı, 2009, 414 səh.
4. Sadıqov K.F., "Milli iqtisadiyyatın dövlət tənzimlənməsinin konseptual əsasları" "Azərnəşr" Bakı, 1999, 72 s.
5. Hüseynov T., "Azərbaycanda bazar iqtisadi sisteminin iqtisadi problemləri" "Elm", Bakı, 2004, 225 s.
6. Məmmədov S.M., "Maliyyə", "Azərnəşr", Bakı, 1997, 426 s.
7. Zeynalov V.Z., "Maliyyənin əsasları" Bakı, "Apostol", 2008, 272 s.