ABSTRACTS OF THE ARTICLES

QUANTITY ADJUSTMENT ON THE MARKET OF UNSECURED INTERBANK FORINT DEPOSITS

Zoltán Pollák – Erika Jáki

On the unsecured interbank market, if a bank perceives that a counterparty has an increased default risk, it can respond by raising the interest rate (price adjustment) or reducing the amount of loan available (quantity adjustment). On the interbank deposit market, quantity adjustment clearly overrides price adjustment as the most important factor. For a thorough explanation of quantity adjustment, we examined the concentration of lending and borrowing in a database covering all interbank transactions between 2012 and 2015. Both the Gini and Herfindahl-Hirschman indices showed that borrowing was more concentrated than lending in terms of both volume and number of transactions. On average, loans were provided by 10-15 active banks typically to no more than 5-8 borrowers in the period examined. We tested this observation by using a two-sample z-test to compare expected values and found a significant difference in concentration between the borrowing and lending sides of the interbank market. The more balanced distribution of lending transactions can be explained by the fact that the Hungarian interbank market typically had a structural liquidity surplus. The high concentration of borrowing transactions derives from partner limits.

JEL codes: G15, G21

Keywords: unsecured interbank deposit market, quantity adjustment, partner limits, concentration analysis

DO WE NEED TO RETHINK BANKING REGULATION?
Some lessons from the Silicon Valley Bank and Credit Suisse cases

Katalin Mérő

The article analyses the lessons for banking regulation drawn from the two banking crises of March 2023, the failures of Silicon Valley Bank and Credit Suisse. The two failures questioned the ability of the regulatory regime established after the 2008 crisis to ensure the stability of the banking sector. The article analyses four areas of regulation that were brought to the fore in the two cases: the application of the „too big to fail" principle, and the regulation of capital structure, banking book interest rate risk and liquidity risk. All four issues show that the rules of the

past do not sufficiently ensure the stability of banking systems and adequate crisis resolution when banks face new stress. Banking regulation to ensure financial stability should not be based on another round of tightening current rules, but on developing a new approach. Such a new approach could be a radical reduction in leverage or the introduction of central bank digital currency.

JEL codes: G21, G28

Keywords: banking regulation, banking resolution, Silicon Valley Bank, Credit Suisse

ROLE OF FUNDAMENTAL UNCERTAINTY IN ECONOMICS AND DECISION MAKING

Iván Bélyácz

The paper discusses uncertainty directly influencing economic decisions. The first part describes the pre-history of applying uncertainty as a means of decision making. It is followed by the second part examining the relationship between Keynes's economics and uncertainty. Following the presentation of cognitive and existential uncertainty, the content of fundamental uncertainty is dealt with. A separate chapter deals with animal spirits, conventions and the phenomenon of „black swan". The closing part of the study considers the atomic and organic connections of economic materials, the relationship of complexity and uncertainty and the triad of probability, uncertainty and econometrics.

JEL codes: B26, D81, E12, G00, G11

Keywords: fundamental uncertainty, Keynes, decision making, probability, economics

ETHICAL AI: PROPOSAL TO BRIDGE THE GAPS IN RELIABLE AI REGULATION IN THE EU AND TO SUPPORT PRACTICAL IMPLEMENTATION

Alexandra Prisznyák

In 2020, GPT-3 defined itself as a thinking robot. The history of AI development is identified with machines becoming increasingly intelligent, but behind it lies the human factor, the soaring of the human mind. However, the question of machine ethics is also a question of cultural ethics. Based on in-depth interviews conducted in seven industries, the author reveals that ethical considerations are not yet taken into account in the development of AI systems. To support practical

implementation, the author identifies two shortcomings based on a comparative analysis of the EU's AI Act and Ethical guidelines for trustworthy AI: (1) missing ethical sensitisation and training of AI system developers and supervisors; (2) suggested approaches to handling harmful feedback loops and decision-making biases. The author uses the philosophical and ethical heritage of 21 philosophers as a compass to propose solutions for the identified gaps and deficiencies of organisational integration.

JEL codes: G20, G21, O33

Keywords: trustworthy artificial intelligence, machine ethics, ethical guideline, European Union, AI Act

CYBER SECURITY AND ARTIFICIAL INTELLIGENCE

Péter Bagó

Cyber security is one of the most important challenges in the age of information technology. It is particularly important in the finance sector where security is key both for clients and institutions alike. Data protection, anti-fraud measures and blocking cyber attacks are areas where AI and automatic systems can provide significant assistance. The application of AI and machine learning in cyber security allows that system recovery following a cyber attack can be fast and effective. The parties involved can immediately survey the measure of damage using AI algorithms and provide a prompt response to cyber incidents. The following paper discusses how cyber security can be supported with AI in the finance sector. There are major overlaps with infrastructutal protection, individual security levels and appropriate data protection.

JEL codes: G00, O33, Q55

Keywords: artifical intelligence, cyber security, finance sector, fintech