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BASEL IV —THE NEW PARADIGM OF BANKING MANAGEMENT

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Abstract. *The purpose of international banking regulations is to provide bank management with guidance on ensuring financial stability. This can be achieved by increasing the bank's financial capacity and by forming the bank's financial reserve base. All of this is aimed at covering possible losses that may occur at the bank and avoiding damage to the banking clientele and the entire banking system. The research methods will be description, comparison, synthesis. As a result, we will elucidate the impact of Basel IV on banks.*

Keywords*:* banks, customers, regulation.

JEL Classification: D02; G21; G28.

INTRODUCTION

Banking crises are often systemic in nature caused by the interconnection of financial institutions and mechanisms, including banks, derivatives, counterparties, direct link to consumption, investment decisions, public spending, organizations and individuals.

Banking crises are usually associated with severe economic shocks and recessions. This is why the state regulates the amount of capital that banks are obligated to hold and maintain, and demands prudential requirements on bank corporate governance, including liquidity management, accounting, auditing and lending practices.

The global economic crisis of 2007-2009 bankrupted several major global banking players, suffice to remember the investment bank Bear Stearns or Lehman Brothers. Many world-renowned banks have needed recovery plans, we can mention just a few of them: Freddie Mac, AIG and Fannie Mae.

In response to the financial markets crisis, which began in 2007, the Basel Committee on Banking Supervision has substantially revised its existing regulatory, supervisory and risk management framework for the banking sector.

As a result, the crisis transformed and forced banks to rapidly restructure their business models, and changes and adjustments to the Basel Accords have become imperative.

The first stage of changes are significant modifications to legislation.

The second stage of transformation relates to the rapid development of technology. The gap between banks is widening as new technologies are introduced and staff are transformed to meet customer requirements.

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Banks, in recent years, have been focused on regulatory capital requirements based on the risks they take. This has strengthened banks' balance sheets as they have been forced to change the nature of their risk-taking and refocus on other activities.

Banks also need to have sufficient liquid assets to withstand longer periods of stress, i.e. a more stable funding base, new liquidity metrics - LCR and NFS - are introduced.

Banks are supposed to more rigorous monitoring by supervisors and must develop recovery plans (scenarios) for potential crises.

Banks emphasize and further separate the corporate and retail segments of their business models to protect the interests of depositors.

And customers can see the changes taking place in various areas. Banks are relying more on electronic channels, which are also being forced by the consequences of the COVID-19 pandemic crisis. There is a decline in the volume of transactions at the bank counter, which led several banks to close more branches. Thus, as a result of the changes it is attested that due to the reduction of bank counter operations, the number of bank front office staff has been reduced, instead the number of staff dealing with control, technology and compliance has increased.

Another change related to the activity of banks, especially those in the Republic of Moldova, is that banks, in their asset portfolio, focus not only on lending operations, but also invest in government bonds.

Start-ups - technologically advanced fintech companies - are emerging on the market, becoming strong competitors to banks and offering quality services at lower costs. Other fintechs are interested in partnering with banks where they come up with solutions to various narrow but pressing problems.

To face their competitors, banks will have to go through a significant transformation and develop new skills.

Banks will have to retrain their staff, including by improving technological skills, because all the attractive offers to customers will be online, and a good banking specialist will need to have not only sales and trading skills but also quite advanced technical skills.

Banks are automating tasks and processes to increase efficiency, will adopt cloud technologies and Big Data (including using artificial or augmented intelligence to meet customer needs).

Banks with inflexible organizational structures, a lack of strategic and coherent management, and limited technology budgets could face serious problems.

Crises are changing the banking industry, and technologies could bring even more fundamental changes. Considering these changes, either banks or their customers need to be prepared for them.

THE FACTORS WHICH DETERMINED THE EMERGENCE OF BASEL IV

In recent years, banks, especially those in the Republic of Moldova, have focused on complying with new regulatory requirements, in particular those related to convergence to risk provisioning and the exit from unprofitable activities.

The indicator that characterises how bank capital is restructured is ROE - return on equity, which characterises how much profit is provided by a unit of capital.

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Table 1 shows the ROE indicator by country, according to each country's position.

The latest data presented are for 2020, on a sample of 125 countries.

Analyzing Table 1 we see that the country with the highest ROE in 2020 was Syria and the country with the lowest indicator was Angola, with a negative value, out of the 125 countries analyzed.

The average return on equity of European banks is 12.96% at 31 March 2022 for UBS Group AC, in the top 15 banks in Europe, and 2.95% for Deutsche Bank, which ends the top 15. [Statista, 2022]. This indicator for the same period at Bank of America is 10.9% [Macrotrends, 2022].

The Republic of Moldova records a middle position with 8.52%, along with Switzerland and the USA, in March 2022, in the Republic of Moldova, the ROE was 15.97% for the entire banking system, the bank with the best result was BC „MOLDOVA-AGROINDBANK" S.A. with 18.75%, and the most modest result was recorded by BC „EuroCreditBank" S.A. with 7.62% [National Bank of Moldova, 2022].

In other words, the return on capital in the Republic of Moldova is higher than in many countries in the world.

Table 1. Bank return on equity, in percent, 2020 - Country rankings

Countries	Return on equity, 2020, %	Global rank	Available data
Syria	77,7	1	2005-2020
Guinea	42,21	2	2011-2020
Burundi	32,54	3	2000-2020
Ghana	29,23	4	2006-2020
Pakistan	28,52	5	2000-2020
Ukraine	13,02	30	2000-2020
China	11,73	36	2000-2020
Russia	9,43	48	2000-2020
Switzerland	8,68	58	2000-2020
Moldova	8,52	60	2000-2020
USA	8,38	61	2000-2020
Italy	7,87	67	2000-2020
France	7,84	68	2000-2020
Germany	7,66	70	2000-2020
Romania	3,31	106	2000-2020
UK	3,26	107	2000-2020
Netherlands	0,31	121	2000-2020
Bahmas	-0,1	122	2000-2020
Buthan	-4,48	123	2014-2020
DR Congo	-7,03	124	2001-2020
Angola	-16,61	125	2002-2020

Source: based on The global economy.com. Business and economic data for 200 countries (2021)

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Today, all banks have to operate in a changing market environment. The development of digital technologies and online platforms is driving the need to change the traditional banking business. The benefit of technologies will also be materialized by significant cost reduction as data processing will be automated. In other words, all banks face new challenges.

Over time, banks will find it increasingly difficult to retain customers as the sale of banking products, and even some banking services, shift to online services with the appearance of new products and services.

Online platforms aim to provide a single point of access to the market for financial products, especially in the area of lending.

The EU Payment Services Directive (PSD2) will further weaken banks' control over customer data by requiring financial institutions to allow third parties access to their customers' account and payment data (Payment services (PSD2) - Directive (EU) 2015/236).

Aggregator-providers allow customers to compare the terms offered and use products from different providers. Fintech companies are looking for profitable, low-investment niches, reducing the role of banks to that of a financier.

Opening accounts or analyzing a borrower's creditworthiness used to be painstaking and time-consuming to process, but thanks to technology they are automated and become virtually instantaneous. This also allows costs to be reduced.

The future of banking involves not only asset restructuring and rebranding, but also changing the banking business model.

Below we highlight some challenges for the banking sector.

BANKING MARKET CONCENTRATION

Most banks operate in a national market because their banking license is obtained within the geographical area of a country. This is also due to the prudential requirements put forward by supervisory authorities.

In addition, if we talk about the banking system in the Republic of Moldova, the National Bank of Moldova has introduced such a reporting position as "limits of dominant position in the banking market", where it presents two indicators: the first indicator "total bank assets/total assets by banking sector" and the second indicator - total deposits of individuals in banks/total deposits of individuals by banking sector". Each bank should not exceed 35% of the registered values for the banking system [National Bank of Moldova, 2022].

The banking system of the Republic of Moldova is highly concentrated, BC "MOLDOVA-AGROINDBANK" S.A. holds 32.5% after the first indicator and 34.45% after the second indicator, according to data for September 2022. The first four banks hold 80% of the total assets of the banking system and 84.69% of the total deposits of individuals.

DIGITAL TRANSFORMATION OF BANKS

Digital transformation has a positive impact on the quality of banking services for customers and a key cost optimisation tool. One impediment to cost reduction is outdated systems and infrastructure.

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Banks are adopting different solutions. Some banks are developing completely new proprietary IT and technology systems or purchasing them from third parties. Others are introducing cloud banking, which enables the digitisation of the bank. All these upgrades allow banks to achieve significant economies of scale over time, but considerable upfront investment.

Other banks cannot afford to renew their entire software system, but apply the changes modularly, gradually replacing parts of the system and then integrating them via an application-programming interface (API). This option is accessible to banks with smaller budgets.

The introduction of digital technologies allows the banking industry to become more flexible and reduce its costs.

RECONFIGURATION OF BANK STAFF

The banking industry is changing, and with it comes the need for new skills and for current and future banking staff.

The technologies and innovations implemented will affect not only the number of bank employees, but also their structure and skill requirements. Automation of processes will leave many employees out of work, because their efficiency is much lower than technology.

Nowadays, bank customers need personalised services. Requirements and skills towards bank staff are being reconfigured. There is now a growing emphasis on personal qualities, digital and data processing skills and teamwork. The customer-bank relationship is becoming more human.

The „shelf life of a banking product or service" is decreasing and banks feel the need for creative, resourceful and dedicated staff. Digital specialists do not prefer the banking industry, they are moving to other, better-paid fields.

In addition, many employees, especially younger ones, are demanding more flexible or home-based working hours, which makes the turnover of executives in banks quite high.

According to ISO 9001, banks must monitor not only customer satisfaction, but also employee satisfaction, taking into account their needs.

THE EMERGENCE OF PLATFORMS FOR AGGREGATING CUSTOMER AND SUPPLIER DATA

The banking industry needs to become modular.

Aggregation platforms are emerging, where customers can compare, buy and use banking products from different providers. This will over time bring considerable benefits both for aggregators (in terms of turnover) and for customers, who will get the service they want at the best quality, at the lowest price and virtually instantly.

Aggregators and aggregation platform providers are thus gradually taking over the distribution function, weakening the link between the consumer and the bank, which is the creator of the product or service.

The PSD2 Directive (Payment services (PSD2) - Directive (EU) 2015/236) and the General Data Protection Regulation (REGULATION (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, repeal the exclusive right of banks to access their customers' data.

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Banks are also building aggregators and platforms and/or creating new partnerships to resist change.

This transition is happening slowly, as many customers still prefer to use traditional banking services and submit their personal data, which they obtain from reputable banks, rather than from fintech companies that specialise in information technology or provide information.

SOCIAL INCLUSION

Digital technology is increasing the role of banks in society, more and more opportunities are emerging to achieve this.

However, over-automation of banks can also come with shortcomings, as the use of Big Data analytics to make some decisions can lead to discrimination against some customers.

Many banks have launched social responsibility programmes. Such programmes include fundraising for charities and employees dedicating their time to volunteer activities.

Banks are not only socially responsible companies, but also initiate various social projects, for example, free cards for certain socially vulnerable people.

Another segment of involvement is financial education for students and the elderly.

Attention is also paid to bank staff through various loyalty programmes and social packages.

Another segment of collaboration is the partnership with the local communities in various programmes, including environmental protection.

Implementing these programmes would not only improve a bank's reputation but also the banking industry as a whole.

THE NEED TO INTRODUCE BASEL IV

To address the crises and transformations that banks are currently undergoing, the Basel Committee has developed a new set of documents that provide a framework for banking regulatory and supervisory reform.

However, the implementation process of Basel III has identified serious problems in its application:

1) Basel III did not solve the fundamental problem of bank regulation as banks migrated to other sectors that were less regulated;

2) It increases non-transparent activity by banks;

3) low leverage ratios set by regulators as the main capital management tool and loan portfolio requirements force banks to hold more capital than the „maximum required";

4) Identified deficiencies in the credit risk-weighted asset (RWA) structure.

The solution to these problems is facilitated by the implementation of Basel IV.

Changes to international banking standards were agreed in 2016-2017. Basel IV complements and amends the banking standards - Basel III.

Basel IV introduces changes that limit the reduction of bank capital:

1) Setting a minimum of 72.5% of the capital requirement under the standardised approach. The implementation of Basel IV would require banks to build up additional capital, at the same time, there is a risk that the reality may differ completely from what the Committee proposes.

Basel IV compliance limits banks' ability to multiply their lending, which would reduce aggregate demand, primarily consumer demand, and thus have a negative impact on the economic

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situation. Small banks will most likely disappear from the market and an imbalance in the competitive environment will arise, credit volumes will shrink and interest rates will rise;

2) Reduction of risk weights for low-risk mortgages;

3) Leverage ratios for banks will increase;

4) Higher leverage ratios for systemically important banks. Systemically important banks are considered banks with the following characteristics: significant number of counterparties in the interbank market; significant share of interbank market transactions in a bank's balance sheet; other banking institutions among the main counterparties.

Particularly strict supervision will be imposed on systemically important banks, which carry out financial intermediation on the capital market, as they accumulate large amounts of funds held by natural and legal persons. The failure of such banks to meet their obligations inevitably causes serious problems for counterparties as well.

Systemically important banks have a direct impact on the situation of the banking system as a whole and are necessary for the development of any economy, and once they are in crisis, they have a hard time recovering, which is why the state should come up with measures to support them;

5) The establishment of a capital conservation buffer of at least 2.5% of risk-weighted assets,

6) Detailed presentation of reserves and other financial statistics.

The requirements of the Basel Accord will not enter into force until they are integrated into national and European legislation.

These proposed changes will take effect from 1 January 2023 [BIS, 2022].

BASEL IV PERSPECTIVES

A package of new Basel standards - Basel IV - is claimed to be the most comprehensive package of changes in the history of banking supervision.

The innovations in the Basel IV package are gradually being transposed into binding EU law. However, many economists believe the banking industry will face serious problems in implementing these new rules.

Initially, Basel IV implementation was to start on 1 January 2022, with a phasing-in of the minimum return threshold by 1 January 2027. In March 2020, due to COVID 19, BCBS postponed Basel IV by 12 months, from 1 January 2022 to 1 January 2023 [KPMG, 2021].

Although the implementation of Basel IV from 1 January 2023 is announced, EU, UK and US banks are waiting to find out what is required of them. Some banks question the timing. Implementation has been delayed once because of the pandemic and could be delayed further because of the regulatory process [KPMG, 2021].

While there is broad consensus among regulators and bankers on the implementation date for Basel IV, banks must now move forward with the final Basel 3 reforms, variously referred to as Basel 3.1 or Basel IV.

Here too, opinions were divided: regulators insist that implementation must proceed according to the BCBS timetable. Banks argue that additional stress, additional capital requirements, minimum performance levels and country specificity must be taken into account.

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EU and UK central banks have supported the remaining reforms and the BCBS timetable.

The US is targeting January 2023, although final capital requirements have not yet been set [KPMG, 2021].

It is possible that the implementation date will be extended again, but this will be more due to the regulatory process [KPMG, 2021].

It is also likely that the regulation will have different approaches in different countries. This will affect banks with international operations will have to consider different requirements in each country and adapt.

Whatever the final deadlines and proposals, banks must commit to and implement Basel IV requirements.

Banks during the COVID-19 pandemic demonstrated that they are better capitalised and have more liquidity than in other crises. Nevertheless, this was also due to support from governments, without which capital buffers probably could not have absorbed the shock. Hence the need for even tougher Basel reforms.

Basel IV provides for even stricter capital requirements for banks, increased risk management oversight, disclosure requirements, which should strengthen the stability of the financial system.

CONCLUSIONS

The main conclusions are presented below:

- Over the past decade, many changes have taken place as banks have struggled with the consequences of the financial crisis;
- The Basel standards on banking supervision were the international regulators' response to the global financial and economic crises;
- The Basel Committee on Banking Supervision is pursuing reform of the international regulatory system for capital adequacy and liquidity, and aims to strengthen the position of banks and improve the banking sector's ability to cope with financial and economic stress and crises;
- the global banking system is moving towards supervisory rigidity;
- recent crises have led to the formation of a position on the creation of new and modified standards - Basel IV;
- significant resources and time have been spent on restructuring and transforming businesses;
- however, the difficulties banks will face are likely to directly affect their business model;
- many banks are still in the process of restructuring, although it is time to change their business model;
- banks are facing new challenges - changes driven by customer needs, technology, innovation and ongoing crises are just some of them;
- banks that can fully focus on the transformation process will have a significant advantage over their competitors in the future;
- banks need to pay adequate attention to training and retraining their staff;

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– the ability of banks to develop new products and services, concepts and resources, as well as partnerships, must also consider social inclusion.

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