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IMPACT OF IMPLEMENTATION OF BASEL III STANDARDS ON CAPITAL AND RISK MANAGEMENT OF BANKS IN THE FEDERATION OF BOSNIA AND HERZEGOVINA

ABSTRACT

A healthy and stable financial system is very important for the development and growth of a country, and its key role is to provide conditions that will enable the unhindered flow of financial resources. Given that the stability of the banking system represents, both nationally and internationally, a matter of general public interest, banks in all countries are subject to supervision by supervisory authorities. The Basel Committee on Banking Supervision plays a key role in shaping international standards with the aim of preserving the stability of the financial system. This paper explores the impact of the implementation of Basel III standards on the operations of banks in the Federation of Bosnia and Herzegovina (FBiH), with an emphasis on capital adequacy, liquidity and risk management. The research was conducted using a quantitative method, using a structured questionnaire, and SPSS software was used for statistical analysis of the research results. The analysis was conducted using a one-sample t-test to assess the deviation of respondents' attitudes from the neutral value. The results indicate a significant perception of the impact of Basel III standards on capital and risk management in the banking sector of the FBiH and provide a basis for improving the regulatory framework and bank supervision.

Keywords: *Basel III standard, bank accounting, risk management in banks, capital, liquidity.*

JEL: *M41, M48.*

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1. INTRODUCTORY CONSIDERATIONS

The global economic crisis began with turbulence and developments in the real estate markets, further intensified by credit problems and high fuel prices. This crisis highlighted serious deficiencies that existed in the regulation and supervision of financial institutions, exposing numerous issues related to the structure, amount, and quality of bank capital. In addition to capital, a fundamental shortcoming is also related to the rules governing bank liquidity.

The application of Basel III standards essentially represents a general model for capital and risk management in banks. Basel III is considered to significantly contribute to the harmonization of international banking regulation and a more stable financial system. To ensure consistent application of Basel III, banks operating within the Federation of Bosnia and Herzegovina (FBiH) must adhere to the standards, regulations, and guidelines required by this framework, as outlined in legal and sub-legal acts. In addition to the Banking Law, which provides a relevant and significant legal basis for the implementation of Basel III, the Banking Agency of FBiH adopts a series of sub-legal acts for implementation purposes. Besides decisions, the Agency has also issued various guidelines, instructions, recommendations, and notices that serve as important tools during the implementation process.

This research aims to analyze the effects and consequences of applying Basel III standards in FBiH, with a focus on determining whether and how their implementation affects capital, liquidity, and risk management. This study contributes to the limited empirical research specifically focused on the implementation of Basel III in developing economies, particularly in the Western Balkans. Existing literature predominantly addresses Basel III impacts in developed countries or large emerging markets, leaving a significant gap in understanding its application within smaller, transitional banking sectors such as that of FBiH. Therefore, this research offers an original contribution by empirically examining the perceptions of banking professionals in FBiH on capital adequacy, liquidity, and risk management under Basel III—an area underexplored in both regional and broader developing economies' contexts.

2. LITERATURE REVIEW: BASEL ACCORD III

The structure of Basel III is reflected in three pillars (Basel Committee on Banking Supervision, 2010): capital and liquidity requirements, supervisory review, public disclosure and market discipline. The focus of the new Basel standard, the third in sequence, is primarily on the quantity and quality of a bank's own capital. According to available literature (Basel Committee for Banking Supervision, 2011), capital under Basel III is divided into: Core Capital (Tier 1) and Supplementary Capital

(Tier 2). It is important to emphasize that there are three new capital buffers that banks must maintain: the capital conservation buffer, the countercyclical buffer and the additional capital requirement for systemic risk.

Basel III introduced a new concept of liquidity risk management, which includes two minimum standards with specific indicators: the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR). Mazars (2012) highlights that the purpose of the LCR and NSFR is to measure a bank's resilience, with the former assessing resilience to market stress shocks, and the latter to internal crises. Basel III also introduces a minimum leverage ratio, which ensures that a bank holds at least a certain amount of capital to protect against unforeseen losses (Radman Peša, Zubak, and Mitrović, 2015).

The literature on Basel III implementation in developing countries, particularly in the Western Balkans and Central and Eastern Europe (CEE), remains relatively scarce. While previous studies predominantly focus on the structural design and expected benefits of Basel III in advanced economies, fewer contributions critically evaluate its practical implications in transitional banking sectors. Comparative evidence from CEE countries such as Croatia, Serbia, and Romania suggests that while Basel III has strengthened regulatory frameworks, its application faces notable constraints, including limited market diversification, underdeveloped risk management infrastructure, and the challenges of aligning local banking practices with international standards.

In this context, the banking sector of FBiH shares several commonalities with these markets, particularly in terms of capital adequacy enhancements and the gradual adaptation of liquidity management standards. However, FBiH also exhibits unique characteristics, such as a highly conservative banking approach, dominant foreign ownership of banks, and regulatory alignment pressures driven by EU approximation processes. By situating the findings of this study within these comparative insights, a more critical understanding emerges of how global standards like Basel III interact with the specific institutional and market dynamics of the FBiH banking sector.

2.1. Implementation of Basel III in FBiH

The banking system of BiH, along with its legal and sub-legal framework, required significant changes to fully implement Basel standards and principles, as well as the requirements of the European Union (EU). In 1997, entity-level banking laws were enacted and published in BiH, serving as the foundation for establishing the entity banking supervisory agencies: the Banking Agency of the FBiH and the Banking Agency of Republika Srpska. With their establishment, the implementation of Basel

I began in BiH, bringing with it the obligation for the BiH banking sector to manage risks and meet capital requirements. According to Demirović, Isaković-Kaplan, and Jahić (2019), the Basel II capital requirements framework was expanded in 2008 to include operational risk, in addition to the previously existing credit risk, and BiH was not lagging in implementing this standard.

The implementation of the Basel III framework began in 2014, when the banking agencies adopted the suggestions and guidelines provided by the World Bank and the International Monetary Fund related to the preparation of a new regulatory framework. The purpose of Basel III is to prepare the banking sector worldwide, in Europe, and in BiH for potential future crises, should they occur, and to ensure the system is resilient enough to prevent such crises from having a negative impact on the broader economic and financial landscape. With the goal of implementing Basel III and the EU Directives in FBiH, steps were taken in 2016 to build the regulatory framework by drafting new laws or amending existing ones, including the Law on Banks and the Law on the Banking Agency of FBiH. In addition to legislative changes, it was necessary to create or amend relevant sub-legal acts, primarily the Agency's decisions, in accordance with the adopted strategy and annual plan. In 2017, considering the year of the most substantial changes to legal and sub-legal regulations in the BiH banking sector, the adoption of the new Law on Banks and the Law on the Banking Agency of FBiH was a significant milestone.

3. RESEARCH METHODOLOGY

This research is focused on assessing whether and to what extent the implementation of the Basel III standard affects bank accounting and financial reporting. In this context, the following research questions were formulated:

- Has the implementation of the Basel III standard affected risk management in banks?
- Does the implementation of the Basel III standard influence the capital of banks?
- Does the implementation of the Basel III standard affect the liquidity of banks?

For the practical execution of the research, a survey questionnaire was used, containing two sets of questions: general and thematic. The general questions referred to the name of the bank, gender, age, and educational background of the respondents, as well as their work experience and current position within the bank. The thematic questions focused on the implementation of Basel III and are presented in Table 1.

Table 1. Overview of research hypotheses and thematic questions from the survey questionnaire

HYPOTHESIS	STATEMENTS / QUESTIONS
H1: The implementation of the Basel III standard has significantly influenced risk management in banks.	1. Risk coverage has been expanded and strengthened by the implementation of Basel III standards. 2. The implementation of Basel III standards has significantly strengthened the regulation and supervision of risk management. 3. The implementation of Basel III standards has influenced the improvement and strengthening of the risk management system. 4. The implementation of Basel III standards has influenced the better creation and development of the underwriting and risk management strategy.
H2: The implementation of the Basel III standard has significantly influenced bank capital.	1. The implementation of Basel III standards significantly increases the quality of capital. 2. The implementation of Basel III standards significantly increases the required level of capital. 3. The introduction of additional capital requirements under Basel III helps protect the banking sector. 4. Financial leverage as part of Pillar I of Basel III represents a credible additional measure to capital requirements, i.e. serves as a protective mechanism in addition to capital requirements.
H3: The implementation of the Basel III standard has significantly influenced bank liquidity.	1. The Basel III regulatory framework is more focused on liquidity risk than the previous Basel standards. 2. The implementation of Basel III standards has strengthened and tightened the liquidity management framework. 3. The liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR) introduced by the implementation of Basel III standards have increased the resilience and stability of the banking sector. 4. The introduction of a new global liquidity framework through two indicators (LCR and NSFR) requires the establishment of an internal liquidity assessment process.

Source: Author's survey

In the research, a five-point Likert scale was used to measure respondents' attitudes toward the presented statements. Given that the data is of a discrete nature and does not follow a normal distribution, the responses were evaluated using whole numbers from 1 to 5, where 1 means "strongly disagree" and 5 means "strongly agree." Based on the assigned values, average scores were calculated for each statement and for each hypothesis individually (H1, H2, and H3).

Hypothesis testing was conducted using a One-Sample t-test, where the value 3 was taken as the reference point (the "Test Value"). This value represents a neutral attitude, and values of 1, 2, and 3 were treated as negative or neutral, meaning that the implementation of the Basel III standard in those cases did not have a positive impact on the dependent variables (capital, liquidity, and risk management). The hypotheses defined in this research were tested using the following approach:

- Null hypothesis (H_0): The average value of the variable is not greater than 3.
- Alternative hypothesis (H_1): The average value of the variable is greater than 3.

The independent variable in this research is the implementation of the Basel III standard. The dependent variables are capital, liquidity, and risk management. The quantitative data collected were analyzed using the SPSS (Statistical Package for the Social Sciences) software.

4. RESEARCH RESULTS – STATISTICAL ANALYSIS

To achieve the objectives of the research, the results were analyzed using both descriptive and inferential statistics.

4.1. Descriptive Statistical Analysis

Descriptive statistics involve the analysis and presentation of collected data, including a summary using numerical and graphical representations. In this study, the population as the set from which statistical data were drawn, was comprised of bank employees in FBiH. The research was based on a statistical sample of 110 respondents employed in 12 commercial banks in FBiH, namely: Addiko Bank, SA Bank, BOSNA BANK INTERNATIONAL, INTESA SANPAOLO BANK, NLB Bank., ProCredit Bank, Privredna banka Sarajevo, Raiffeisen Bank, Sparkasse Bank, UniCredit Bank, UNION Bank and ZiraatBank BH. The empirical research was conducted using purposive sampling, targeting banking professionals actively engaged in risk management, capital, and liquidity oversight within their institutions. This approach ensured that the data was collected from respondents with direct operational knowledge and experience related to the implementation of Basel III standards.

To assess the reliability of the research instrument, a reliability analysis was conducted using Cronbach's alpha, which yielded a coefficient of 0.87. This result indicates a high level of internal consistency among the questionnaire items, confirming the robustness of the data collection tool. In addition, the survey gathered demographic and professional data of respondents to provide a comprehensive context for interpreting the results. The sample consisted of 110 participants, of whom 55% were male and 45% female, with an average age of 39 years. The majority of respondents occupied managerial or senior specialist positions, with an average of 12 years of professional experience in the banking sector. This diverse yet specialized respondent profile enhances the credibility of the findings and supports the validity of the conclusions drawn regarding the practical impacts of Basel III in FBiH.

4.1.1. Questionnaire Analysis: One-Sample Statistics

During the analysis of the questionnaire, the One-Sample t-test was applied using the SPSS program, which produced the results of the research and presented in Table 2 – One-Sample Statistics. The table displays results for the predefined statements/

questions labeled with serial numbers 1, 2, 3, and 4. These statements/questions are listed chronologically as presented in Table 1 and correspond to the stated hypotheses. Accordingly, for example, H1:1 indicates the first statement under Hypothesis 1, H1:2 refers to the second statement under the same hypothesis, and so on. The same principle applies to other hypotheses (e.g., H2:1, H2:2, etc.).

Table 2. One-Sample Statistics

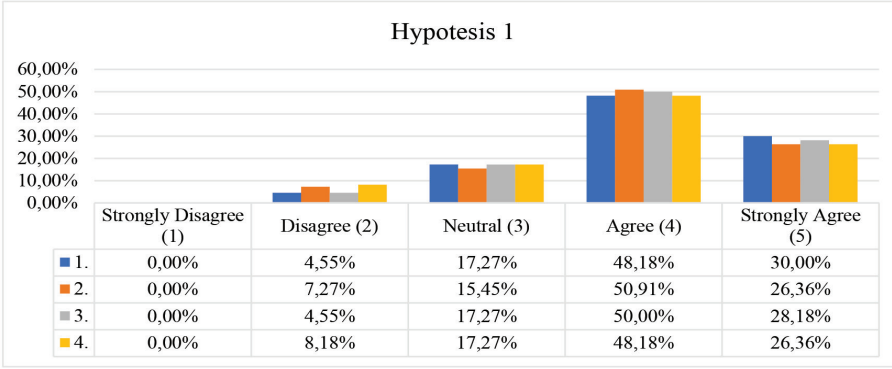
	N	Minimum	Maximum	Mean	Standard deviation
STATEMENTS					
H1:1.	110	2	5	4.04	.812
H1:2.	110	2	5	3.96	.845
H1:3.	110	2	5	4.02	.801
H1:4.	110	2	5	3.93	.875
H2:1.	110	1	5	3.84	1.054
H2:2.	110	1	5	3.95	1.044
H2:3.	110	2	5	3.84	.934
H2:4.	110	2	5	3.77	.905
H3:1.	110	1	5	3.91	.953
H3:2.	110	1	5	3.89	.912
H3:3.	110	1	5	3.78	.882
H3:4.	110	1	5	3.80	.975

Source: author's own work

The highest average response value recorded was 4.04, referring to the first statement under Hypothesis H1, which states that risk coverage has been expanded and strengthened through the implementation of the Basel III standard. The lowest average response value was 3.77, associated with the last statement under Hypothesis H2, which states that leverage, as part of Pillar I of Basel III, represents a credible supplementary measure to capital requirements—serving as a protective mechanism alongside capital buffers.

Graph 1 illustrates respondents' attitudes toward each statement within Hypothesis H1. As shown in the graph, many respondents agree or strongly agree with the statements under Hypothesis H1. For statements two and three, as many as 50% of respondents agreed, which is the highest percentage of positive agreement. Notably, none of the respondents selected "1 – strongly disagree" for any of the statements. The average score for each statement is above 3, as shown in Table 2.

Graph 1. Respondents' attitudes toward the statements related to H1



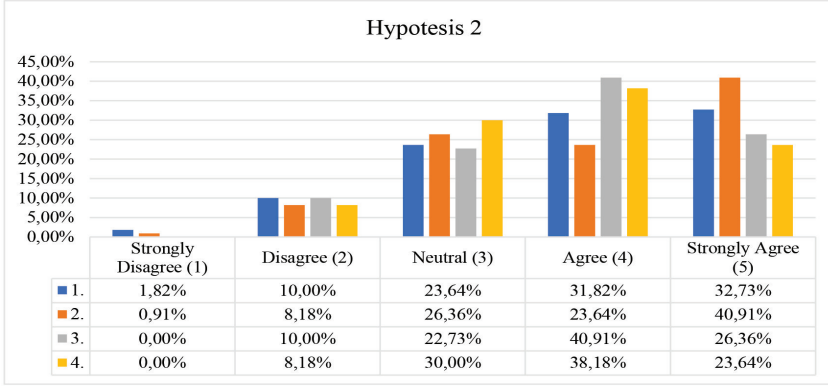
	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1.	0,00%	4,55%	17,27%	48,18%	30,00%
2.	0,00%	7,27%	15,45%	50,91%	26,36%
3.	0,00%	4,55%	17,27%	50,00%	28,18%
4.	0,00%	8,18%	17,27%	48,18%	26,36%

Source: author's own work

Additionally, it is useful to calculate the average of the means for each hypothesis. In this regard, the average score for the statements under Hypothesis H1 is 3.98, a result obtained by summing the mean values of each individual statement and then dividing by 4. The average score for all statements is consistently above 3, indicating a generally positive evaluation in all surveyed cases.

Graph 2 presents the respondents' attitudes toward the statements under Hypothesis H2. The graph shows that the highest percentage of respondents either agree or strongly agree with the statements within Hypothesis H2. Specifically, 40.91% of respondents strongly agree with statement two, and the same percentage agree with statement three. When observing the overall agreement with the statements, it is worth noting that the strongest consensus was regarding statement three, which asserts that the introduction of additional capital requirements under Basel III helps protect the banking sector.

Graph 2. Respondents' attitudes toward the statements related to H2



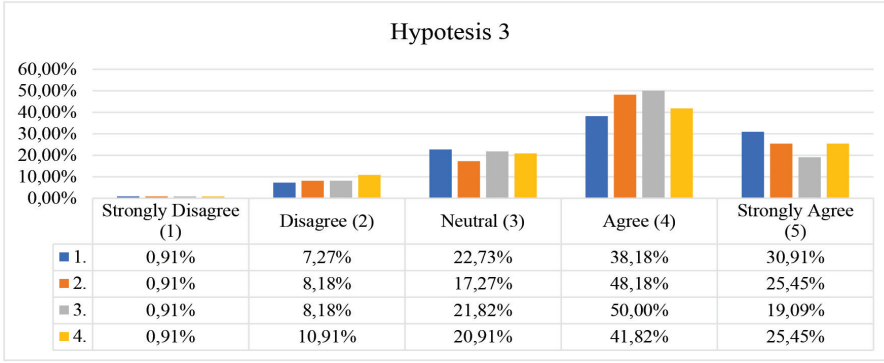
	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1.	1,82%	10,00%	23,64%	31,82%	32,73%
2.	0,91%	8,18%	26,36%	23,64%	40,91%
3.	0,00%	10,00%	22,73%	40,91%	26,36%
4.	0,00%	8,18%	30,00%	38,18%	23,64%

Source: author's own work

When it comes to a neutral stance, the highest percentage of respondents (30%) neither agreed nor disagreed with statement number four. For statements three and four, no respondents selected "1 – strongly disagree." The average value for the statements under Hypothesis H2 is 3.85. The mean score for each statement under this second hypothesis is above 3, indicating generally positive responses across the board.

Graph 3 illustrates respondents' attitudes toward the statements under Hypothesis H3. The surveyed bank employees mostly agreed or strongly agreed with the statements presented in this hypothesis.

Graph 3. Respondents' attitudes toward the statements related to H3



	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1.	0,91%	7,27%	22,73%	38,18%	30,91%
2.	0,91%	8,18%	17,27%	48,18%	25,45%
3.	0,91%	8,18%	21,82%	50,00%	19,09%
4.	0,91%	10,91%	20,91%	41,82%	25,45%

Source: author's own work

The highest number of respondents selected "4 – agree" for each of the listed statements. Following that, the next highest response was "5 – strongly agree", while a smaller percentage of respondents held a neutral position. For each statement, the same proportion of respondents, 0.91%, chose "1 – strongly disagree." The average score for the first statement was 3.91, for the second 3.89, for the third 3.78, and for the fourth 3.80, as presented in Table 2. These results enable the calculation of the average of means for statements under Hypothesis H3, which equals 3.845. Thus, the average score for Hypothesis H3 is also greater than 3, indicating positive agreement among respondents with the given statements.

4.2. Inferential Statistical Analysis

Inferential statistics involve statistical procedures that allow for the testing of research hypotheses and the drawing of relevant conclusions applicable to the entire population. Inferential statistics refer to comparing a hypothetical model with the collected data. Statistical models include: the t-test, regression analysis, path analysis, and others.

4.2.1. Questionnaire Analysis: One-Sample Test

Regarding statistical tests, it is important to note that several rely on the t-distribution, commonly referred to as t-tests. Among these is the Student's t-test, or One-Sample t-test, the most frequently used parametric test of significance for null hypotheses. This test determines whether a sample originates from a population with a specific means. To perform this test, the SPSS software was used, which generated two output tables containing all necessary information for interpreting the results of the One-Sample t-test. The first table—One-Sample Statistics—was explained in the previous section. The second table—One-Sample Test—is explained below. By default, SPSS assumes a 95% confidence level, which corresponds to a significance level below 0.05. Statistical significance is expressed as a p-value ranging from 0 to 1; the smaller the p-value, the stronger the evidence against the null hypothesis—thus, it should be rejected. Accordingly, if the p-value is less than the selected significance level, the null hypothesis is rejected, and vice versa.

Table 3. One-Sample Test

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
H1:1.	13.387	109	.000	1.036	.88	1.19
H1:2.	11.959	109	.000	.964	.80	1.12
H1:3.	13.329	109	.000	1.018	.87	1.17
H1:4.	11.117	109	.000	.927	.76	1.09
H2:1.	8.324	109	.000	.836	.64	1.04
H2:2.	9.591	109	.000	.955	.76	1.15
H2:3.	9.393	109	.000	.836	.66	1.01
H2:4.	8.953	109	.000	.773	.60	.94
H3:1.	10.000	109	.000	.909	.73	1.09
H3:2.	10.244	109	.000	.891	.72	1.06
H3:3.	9.298	109	.000	.782	.62	.95
H3:4.	8.606	109	.000	.800	.62	.98

Source: author's own work

To examine the validity of the first hypothesis, respondents were asked a series of questions related to risk management practices in banks. To interpret the results of the statistical tests, it is first necessary to formulate null and alternative hypotheses. Accordingly, for the first hypothetical question, the following hypotheses were defined:

- H_0: The implementation of the Basel III standard has not significantly influenced risk management in banks.

- H_1: The implementation of the Basel III standard has significantly influenced risk management in banks.

Given that the average score for each statement under Hypothesis H1 is greater than 3, and the group average for H1 is 3.98, combined with the results from the One-Sample t-test, all of which showed p-values of 0.000 (less than 0.05), we can conclude that there is less than a 5% probability that the null hypothesis is true. Therefore, the null hypothesis is rejected, and the alternative hypothesis is accepted, indicating that the implementation of Basel III has had a statistically significant effect on risk management in banks.

Table 3 shows that the first statement analysis confirmed that risk coverage was significantly expanded and strengthened with the implementation of Basel III. The second and third statements confirmed that the standard significantly strengthened regulation and oversight of risk management and led to the creation of a more robust risk management system. The fourth statement showed that Basel III contributed to the improvement and development of risk-taking and risk management strategies. These findings indicate that the introduction of rules, regulations, and the regulatory framework associated with Basel III led to improvements in risk management within FBiH. This is especially important, as effective risk management enhances the capacity to address risks across various segments of the Bosnian economy. It also represents a critical aspect of bank operations and contributes to the stability and sustainability of the banking system.

To test the second hypothesis, respondents were asked questions related to bank capital. As part of the hypothesis testing in this research, the second hypothetical question was formulated as follows: "The implementation of Basel III standards has had a significant impact on bank capital." For this hypothetical question as well, the null and alternative hypotheses were defined as follows:

- H_0: The implementation of the Basel III standard has not significantly influenced bank capital.
- H_1: The implementation of the Basel III standard has significantly influenced bank capital.

Based on the calculated averages, each statement under Hypothesis H2 scored above 3, and the group average was 3.85. The One-Sample Test results based on the four statements in Hypothesis H2, presented in Table 3, showed that all p-values were below the defined significance level of 0.05. Therefore, we conclude that there is sufficient evidence to reject the null hypothesis and accept the alternative hypothesis. This result is statistically significant.

The analysis confirms that Basel III implementation increased both the quality and quantity of bank capital. The data show that additional capital requirements under Basel III help protect the banking sector. These additional requirements are viewed as extra security layers beyond the basic requirements of Basel III. They can help banks in FBiH be more resilient to risks and better protect depositors. Furthermore, the findings confirm that leverage, as part of Pillar I of Basel III, is a credible supplementary capital requirement, serving as an additional protective mechanism. In the FBiH context, bank deposits are a primary source of leverage. Beyond client deposits, banks also use other sources of financing to increase leverage, including bond issuance, loans from other financial institutions, and capital raised from various investors. Leverage plays an important role in banking, and one of its key purposes is to support economic activity and development.

To test the third hypothesis, respondents were asked questions related to liquidity. For the third hypothesis, the following null and alternative hypotheses were defined:

- H_0: The implementation of the Basel III standard has not significantly influenced bank liquidity.
- H_1: The implementation of the Basel III standard has significantly influenced bank liquidity.

The analysis of the average values of all four statements under the testing of Hypothesis H3 showed that the mean score for each statement listed in Table 2 is greater than 3. By calculating the group average for the third hypothesis, it was also shown to be above 3, specifically 3.845. Taking this into account and based on the interpretation of the results obtained through the One-Sample t-test, derived from the four statements supporting Hypothesis H3, it can be concluded that all p-values as the indicators of significance were less than 0.05. Based on the results of the One-Sample Test, it is concluded that there is sufficient evidence to reject the null hypothesis and accept the alternative hypothesis, which states that the implementation of the Basel III standard has significantly influenced bank liquidity. The analysis of the relevant statements shows that, compared to previous Basel standards, Basel III places greater emphasis on liquidity risk. It introduces stricter requirements to ensure that banks maintain sufficient levels of liquid assets under various operating conditions. To achieve this, Basel III strengthens and tightens the framework for liquidity management. By introducing additional capital requirements, the framework also aims to cover liquidity risks. Banks are required to maintain a certain level of capital as a liquidity buffer to ensure they can meet all of their maturing obligations. The analysis also showed that Basel III's introduction of the LCR and the NSFR has contributed to increased resilience and stability in the banking sector.

It is certain that Basel III, through its stricter regulatory requirements, has improved liquidity in FBiH. The requirements for sustainable bank liquidity were improved following previous crises, and additional rapid support arrangements were developed and introduced, managed by leading central banks. Numerous bank analyses reports indicate that the liquidity of the banking sector in FBiH is satisfactory, considering basic liquidity indicators, quantitative and qualitative requirements, and other factors that affect bank liquidity. This implies that there are visible positive effects resulting from the application of Basel III requirements and regulations.

6. CONCLUSION

The new Basel III Accord represents an international regulatory framework aimed at improving stability and resilience in the banking sector. Basel III was designed to enhance stability by introducing stricter capital and liquidity requirements, ensuring that banks are better equipped to deal with losses and unforeseen risks. Ultimately, this enables banks to become more resilient to economic and financial shocks. Additionally, the importance of Basel III lies in its emphasis on increasing transparency and accountability in banking, encouraging adaptation to regulatory changes, and promoting international regulatory harmonization.

The focus of this research was on the impact of Basel III implementation on risk management, capital, and liquidity in banks. Data analysis based on the questionnaire showed that the implementation of Basel III influenced banking accounting and financial reporting. The research further confirmed that Basel III positively influenced risk management, capital, and liquidity. Given the significance and positive impact of Basel III, banks should strive to comply with its requirements as much as possible. The general conclusion is that Basel III represents a common global framework for the regulation and supervision of banks, aiming to create a level playing field for banks across different jurisdictions. Overall, it is a key step toward strengthening the stability and integrity of the financial system, providing a framework that protects banks, their clients, and the broader economy.

Based on the research findings, several policy recommendations can be made. Regulatory authorities in FBiH should continue harmonizing local regulations with EU banking directives, while also supporting capacity-building initiatives for both regulators and banks. Banks are advised to strengthen internal risk models and improve liquidity stress testing procedures. Future research could explore comparative analyses between FBiH and neighboring countries to identify best practices in Basel III adaptation. Additionally, longitudinal studies would be valuable to observe the dynamic impact of Basel III over time, complemented by qualitative interviews with key stakeholders to gain deeper insights into the regulatory and operational challenges encountered.

LITERATURE

1. Basel Committee on Banking Supervision (2010). *Basel III: International framework for liquidity risk measurement, standards and monitoring*. [online]. December 2010. Bank for International Settlements, Basel. Retrieved from: https://www.bis.org/publ/bcbs238.pdf [accessed 04.05.2025.]
2. Basel Committee on Banking Supervision (2011). *Basel III: A global regulatory framework for more resilient banks and banking systems*. [online]. December 2010 (rev. June 2011). Retrieved from: https://www.bis.org/publ/bcbs189.pdf [accessed 06.05.2025.]
3. Basel Committee on Banking Supervision (2017). *Basel III definition of capital – Frequently asked questions*. [online]. September 2017 (update of FAQs published in December 2011). Basel: Bank for International Settlements. Retrieved from: https://www.bis.org/bcbs/publ/d417.pdf [accessed 06.05.2025.]
4. Basel Committee on Banking Supervision (2017). *High-level summary of Basel III reforms*. [online]. Basel: Bank for International Settlements. Retrieved from: https://www.bis.org/bcbs/publ/d424_hlsummary.pdf [accessed 07.05.2025.]
5. Basel Committee on Banking Supervision (2019). *Liquidity Coverage Ratio (LCR): Cash inflows and outflows (LCR40)*. [online]. Version effective as of December 15, 2019. FAQ published on March 30, 2023, added.. Retrieved from: https://www.bis.org/basel_framework/chapter/LCR/40.htm [accessed 07.05.2025.]
6. Bank for International Settlements (2008). *Principles for Sound Liquidity Risk Management and Supervision*. [online]. Basel: BIS, September 2008. Retrieved from: https://www.bis.org/publ/bcbs144.pdf [accessed 07.05.2025.]
7. Caruana, J. (2010). *Basel III: Toward a safer financial system*. Speech by BIS General Manager Mr. Jaime Caruana at the third International Banking Conference, Santander Bank, Madrid, September 15, 2010, pp. 98–101.
8. Ćirović, M. (2008). *Bankarstvo*. Bridge Company, Belgrade.
9. Demirović, L., Isaković-Kaplan, Š., Jahić, H. (2019). Finansijski efekti računovodstvenog i regulatornog aspekta iskazivanja kapitala u bankarskom sektoru BiH. U: *Zbornik radova Univerziteta „Džemal Bijedić" u Mostaru, godina 17, broj 28, Mostar*. 2019, str 93-109
10. Douglas, J. E. (2014). *Bank Liquidity Requirements: An Introduction and Overview*. [online] Brookings, June 23, 2014. Retrieved from: https://www.brookings.edu/wp-content/uploads/2016/06/23_bank_liquidity_requirements_intro_overview_elliott.pdf [accessed 08.05.2025.]
11. Mazars. (2012). *What impact will the introduction of Basel III have on the liquidity of banks?* [online] Mazars Insight, January 2012. Forvis Mazars. Retrieved from:

12. https://www.forvismazars.com/pl/en/content/download/86475/file/cahier_bale_3_JANV2012_EN_bd.pdf [accessed 07.05.2025.]

13. Peša, A.R., Zubak, V., Mitrović, D. (2015). *Regulacija financijskog tržišta prije i nakon krize*. [online] Zadar: Sveučilište u Zadru. Oeconomica Jadertina 1/2015, str 94-109. Retrieved from:

14. https://morepress.unizd.hr/journals/index.php/oeconomicajadertina/article/view/295/468 [accessed 06.05.2025.]

15. Rose P.S., Hudgins S.C. (2015). *Upravljanje bankama i financijske usluge.* Osmo izdanje. Zagreb: Mate

16. Saunders, A., Allen, L. (2010). *Credit Risk Measurement: New Approaches to Value at Risk and Other Paradigms* (2nd ed.). New York: John Wiley & Sons, Inc.

17. Wellink, N. (2011). *Basel III and beyond*. In: Remarks at the High-Level Meeting on Better Supervision and Better Banking in the Post-Crisis Era. JBM 18, Kuala Lumpur, Malaysia, January 17, 2011. [online] Bank for International Settlements. Retrieved from:

18. https://www.bis.org/speeches/sp110118.pdf [accessed 08.05.2025.]

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UTICAJ IMPLEMENTACIJE BASEL III STANDARDA NA KAPITAL I UPRAVLJANJE RIZICIMA BANAKA U FEDERACIJI BOSNE I HERCEGOVINE

SAŽETAK

Zdrav i stabilan finansijski sistem je jako važan za razvoj i rast pojedine države, a ključna uloga mu je obezbijediti uslove koji će omogućavati nesmetani tok finansijskih sredstava. Obzirom da stabilnost bankarskog sistema predstavlja, kako u nacionalnim tako i u međunarodnim razmjerama, pitanje je od općeg interesa javnosti, banke u svim zemljama podliježu nadzoru supervizijskih tijela. Bazelski odbor za nadzor banaka igra ključnu ulogu u oblikovanju međunarodnih standarda s ciljem očuvanja stabilnosti finansijskog sistema. Ovaj rad istražuje utjecaj implementacije Basel III standarda na poslovanje banaka u Federaciji Bosne i Hercegovine (FBiH), s naglaskom na adekvatnost kapitala, likvidnost i upravljanje rizicima. Istraživanje je provedeno kvantitativnom metodom, korištenjem strukturiranog upitnika, a za statističku obradu rezultata istraživanja korišten je SPSS softver. Analiza je provedena korištenjem t-testa jednog uzorka kako bi se procijenilo odstupanje stavova ispitanika od neutralne vrijednosti. Rezultati ukazuju na značajnu percepciju uticaja Basel III standarda na kapital i upravljanje rizicima u bankarskom sektoru FBiH i pružaju osnovu za poboljšanje regulatornog okvira i nadzora banaka.

Ključne riječi: *Basel III standard, računovodstvo banaka, upravljanje rizicima u bankama, kapital, likvidnost.*

JEL: *M41, M48.*