



GLOBALIZATION IN THE BANKING SECTOR OF THE WESTERN BALKANS: A PANEL DATA REVIEW

Mateo Spaho¹
Aelita Mani²

ABSTRACT

Introduction: The current paper will provide an overview of the influence of economic globalization and the transnational structure of the banking sector in the Western Balkans (WB), a region where banks play a crucial economic and social role.

Method: The methodology employed incorporates regressive panel data derived from secondary data acquired between 2019 and 2024.

Results: The findings revealed that of the five commercial banks (n=5) experiencing a cross-border profile, the most powerful in terms of total assets, loans, and financial credibility were those with European Union (EU) investments rather than domestic institutions.

Conclusions: Given the current outcomes, it is recommended that policy and monetary practices prioritize enhancing attempts to attract foreign investment while simultaneously strengthening domestic banking capacities to become increasingly competitive and interconnected.

Keywords: Globalization, Western Balkans, Banking Sector, Cross-border Profile, Investment.

GLOBALIZAÇÃO NO SETOR BANCÁRIO DOS BALCÃS OCIDENTAIS: ANÁLISE DE DADOS POR PAINEL

RESUMO

Introdução: O presente artigo fornecerá uma visão geral da influência da globalização económica e da estrutura transnacional do sector bancário nos Balcãs Ocidentais (BM), uma região onde os bancos desempenham um papel económico e social crucial.

Método: A metodologia empregada incorpora dados em painel regressivo derivados de dados secundários adquiridos entre 2019 e 2024.

Resultados: As conclusões revelaram que dos cinco bancos comerciais (n=5) com um perfil transfronteiriço, os mais poderosos em termos de activos totais, empréstimos e credibilidade financeira eram aqueles com investimentos na União Europeia (UE) e não instituições nacionais.

Conclusões: Tendo em conta os resultados actuais, recomenda-se que as práticas políticas e monetárias dêem prioridade ao reforço das tentativas de atrair investimento estrangeiro, reforçando simultaneamente as capacidades bancárias nacionais para se tornarem cada vez mais competitivas e interligadas.

Palavras-chave: Globalização, Balcãs Ocidentais, Setor Bancário, Perfil Transfronteiriço, Investimento.

GLOBALIZACIÓN EN EL SECTOR BANCARIO DE LOS BALKANES OCCIDENTALES: EXAMEN DE DATOS POR UN GRUPO ESPECIAL

¹ Barleti University, Tirana, Albania. E-mail: m.spaho@umb.edu.al

Orcid: <https://orcid.org/0009-0008-4750-2194>

² Barleti University, Tirana, Albania. E-mail: mani_alb@yahoo.com

Orcid: <https://orcid.org/0009-0007-1153-5958>



RESUMEN

Introducción: El presente documento proporcionará una visión general de la influencia de la globalización económica y la estructura transnacional del sector bancario en los Balcanes Occidentales (BM), una región donde los bancos desempeñan un papel económico y social crucial.

Método: La metodología empleada incorpora datos de panel regresivos derivados de datos secundarios adquiridos entre 2019 y 2024.

Resultados: Los hallazgos revelaron que de los cinco bancos comerciales (n=5) que experimentaron un perfil transfronterizo, los más poderosos en términos de activos totales, préstamos y credibilidad financiera fueron aquellos con inversiones de la Unión Europea (UE) en lugar de instituciones nacionales.

Conclusiones: Teniendo en cuenta los resultados actuales, se recomienda que las prácticas de política y monetarias prioricen la intensificación de los intentos de atraer inversión extranjera, al tiempo que se fortalecen las capacidades bancarias nacionales para volverse cada vez más competitivas e interconectadas.

Palabras clave: Globalización, Balcanes Occidentales, Sector Bancario, Perfil Transfronterizo, Inversión.

RGSA adota a Licença de Atribuição CC BY do Creative Commons (<https://creativecommons.org/licenses/by/4.0/>).



1 INTRODUCTION

Financial globalization, as defined by Berger et al. (2000) refers to the growing interdependence of countries due to increased cross-border capital flows. Financial globalization relies on interactive systems and advanced technology. This global interdependence of financial markets allows transactions of millions within seconds. Markets are globally integrated, operate in real-time, and swiftly transfer capital between economies, connecting banks, funds, and markets worldwide (Lee & Bowdler, 2020). Notably, this leads to increased volume, speed, and complexity of global financial flows, intensifying speculative capital movements and market trends. Stock and currency markets' interdependence has led to intertwined monetary policies globally, creating coordination challenges. Information technology advancements, deregulation, and financial instrument adoption play pivotal roles in financial globalization (Lee et al., 2019). Growth is essential for sustainable banking, which needs viable projects and regulatory frameworks (Navaretti et al., 2010). The changed financial landscape brings both benefits and drawbacks. Countries now enjoy new investing opportunities globally, unlike in the past when most exchanges were confined within national borders to specific industries. Today, financial markets are expanding internationally and consolidating globally. The integration process benefits global companies and shareholders by offering diverse investment opportunities worldwide, enhanced efficiency, lower resource-



raising costs, and improved risk-return profiles. The globalization of financial markets is characterized by financial institutionalization. Institutional investors dominate markets over individual investors, increasing cross-border fund transfers (Obstfeld & Taylor,2004). Financial transactions outweigh commercial ones in foreign exchange markets. Risks arise from the contagion effect, where market interconnections propagate crisis aftershocks. Contagion leads to increased asset price variability and the rapid spread of systemic events globally especially after a high-impact crisis. For instance, the North American mortgage crisis led to worldwide uncertainty and a halt in the money cycle (Nistor et al.,2010). As Gygli et al. (2019) argue in their article, globalization can be differentiated into economic, social, and political dimensions: economic globalization involves goods, capital, services, and information; social globalization spreads ideas, know-how, images, and people; and political globalization diffuses government policies (Gygli et al.,2019). This integration of social and political changes with domestic markets toward a single international financial market has transformed the economic landscape through liberalization, new financial tools, and technological advancements. New technological advancements enable global capital mobility, the latter being a key aspect of the current economic system (Rey,2015). A strong financial system requires stable macroeconomics, supportive regulations for internal financial management, and market discipline (Čihák et al.2013). A solid banking and finance system relies on stable prices, economic growth and macroeconomic prosperity (Garicano & Lastra, 2010). Developing countries face challenges due to fragile production structures, thus, economic stability is crucial for banking restructuring in transitioning economies. The adverse impact on financial stability in developing nations has been further exacerbated by their debt, ongoing conflicts in Ukraine and the Middle East, and advancements in technology (Azmeah,2019; Ahmed & Zlate,2014; Acharya,2000). International financial institutions like the International Monetary Fund (IMF), the World Bank (WB), and the World Trade Organization (WTO) play a significant role in the opening of financial markets and globalization. Nonetheless, their role should not neglect the genuine developmental requirements of the nation (Buiru,2004). The current paper highlights how globalization influenced new financial advances and their economic and social repercussions with a particular emphasis on the impact of internationalization on the banking sector in the Western Balkans as countries in the process of advancement toward the EU single market. Its objective is to examine the status of multinationalization in the banking industry in the Western Balkans following the pandemic. The methodology employed is mixed with statistical analysis based on secondary data collected by the ECB consolidated dataset from 2019 to February 2024.



1.1 THE FINANCIAL SYSTEM IN THE WESTERN BALKANS

Except for Kosovo, domestically owned banks hold only 25% of assets in the Western Balkans (European Investment Bank (EIB),2024). Regional financial systems lack diverse products, restricting financial choices. The focus of this paper is on the banking sector, particularly credit risk, funding, liquidity, profitability, solvency, and banking system structure. More data is needed for a comprehensive analysis, emphasizing the importance of improving data coverage and quality. Historically, financial markets in the Western Balkans lack development of expansion and foreign investment (Morina,2019; Cull & Peria,2010; McCauley et al.,2010). Credit to non-financial corporations is only around 23% of the Gross Domestic Product (GDP), much lower than the EU's 40% (EIB & EBRD, 2022). Evidence shows that 45% of firms can't secure loans - 2% are rejected, while 43% are discouraged from applying. Unfavorable interest rates, limited collateral, and large loan sizes contribute to this. Access to finance is challenging, especially for SMEs, despite their vital role in economic growth and employment. Banks in the Western Balkans rely on traditional business models with low financial intermediation where the main revenue source is local loan extensions, funded by deposits (Morina,2019). Despite declining lending rates, the lending-deposit rate spread remains adequate. Financial intermediation is generally low, except for Kosovo. EIB lending equals 0.35% of GDP on average as indicated in the latest 2023 Report data. Serbia and Bosnia Herzegovina show steady allocations, while North Macedonia and Montenegro receive more, though with fluctuation. Montenegro's average GDP share is 0.6%, the highest among the four nations considered. The range is from 0.1% to over 1%. Loans to European Central Bank (ECB)-funded SMEs are typically below 1 million EUR from 2009 to 2023. In the Western Balkans, loan sizes are usually larger compared to similar ECB lending to SMEs in the EU (Sinnott et al., 2023). Foreign investment beneficiaries see a 40% increase in fixed assets when they receive loans through 2023. This is tied to improved employment and fixed asset investments with the European funding in the region., but, yet far from the European market.

2 METHOD

The current study will rely on reduced forms of multivariate regression on panel data since the primary resources are secondary data panels (Washington et al.,2003). Given the current economic context and reduced growth rates in cross-border investments, the present



research will focus on the choice of banks to internationalize and the effectiveness of cross-border subsidiaries.

2.1 RESEARCH QUESTIONS

The research questions that the current paper aims to answer include: *What is the stance on globalization and cross-border multinationalization of the Banking sector in the Western Balkans?* In terms of assets, the weight of credit intermediation activities relative to the overall operation is considered into account, as is the size of the intermediary.

Regarding the company's economic structure, the following profiles are taken into consideration:

- Income diversification;
- Incidence of people and other operating costs;
- Impact on credit management.

Macroeconomic indicators, such as the performance of the economies to which they belong, the trade balance, and the growth rate of exports, are considered external factors.

The goal is to quantify the benefit, if any, of increased or decreased levels of multinationalisation. If a bank's aim for internationalization was to seek economies of scale or scope, the relationship between intensification and Return on assets (ROA) or Return on Equity (ROE) must be positive, at least in the first few years after entering the international market. During the paper's definition phase, it appeared difficult to develop an overall risk indicator capable of summarizing all bank activities (market, operational, interest rate, and liquidity risk). Because these expanded analyses are beyond the scope of this work, they were performed as background research questions for the paper. Yet an important issue arises about the use of Natural Language Processing (NPLs) as risk indicators during the years analyzed, given their classification by the central banks of the selected nations was not unambiguous. After an initial factor analysis based on the weighting factors, a degree of 0.4 was considered significant.

2.2 HYPOTHESIS

After the initial evaluation of the weighting factors, the following hypotheses were raised:



H₀: Globalization and cross-border multinationalization did not affect the growth assets of the Banking sector in the Western Balkans after the pandemic.

H₁: Globalization and cross-border multinationalization affected the growth assets of the Banking sector in the Western Balkans after the pandemic.

2.3 RESEARCH DESIGN

The current study employs a correlational-predictive approach to predict the effect of the constant variable (globalization) on the independent variable (growth of the banking sector) based on panel data examinations.

2.4 STATISTICAL ANALYSIS

SPSS version 29 software was employed to conduct the statistical analysis of the current study. A regression panel analysis was applied to determine the influence of globalization on the increase of total banking assets in the Western Balkans. The statistical software MAXQDA for mixed research and content analysis was also employed to collect data from progress reports in the present study.

2.5 PROCEDURE

The initial goal of the paper was to examine globalization and the cross-bordering process for all the 97 commercial banks in the Western Balkans, 26 were those with cross-border subsidiaries (refer to Table 3). Out of the 26 cross-border subsidiaries, it was shown that 5 major banks had a cross-border profile. The next phase involved examining subsidiaries with different Country Iso Codes, with a focus on the subsidiary's size in terms of total assets about the parent company's total assets. The aggregate of the total asset ratios of subsidiaries with various ISO codes relative to the parent company's total assets indicates the degree of multinationalization and the percentage of group assets held by investee firms operating abroad. In addition to the database covering cross-border activities carried out through subsidiaries, another database has been constructed to include activities carried out abroad via branches and representative offices. As a result, secondary sources included records from central banks and public budgets. The macroeconomic variables employed in the computations were obtained from the ECB's online database. Bank concentration was evaluated using the banks' total assets



on an annual schedule. Multinationalization here was computed, using models and panel data, by the following equation: $\sum (I)$ where i represents the cross-sectional dimension of the study (the banks), t the temporal dimension (time), y the number of explanatory variables included in the model, presented by the degree of multinationalization at time t , and the value of variable X at time $t-1$. Since the present calculation is a regression with panel data, and it is handled as stacked variables, considering both the temporal and cross-sectional dimensions, the intensity of multinationalization is an independent variable that, along with other variables, determines the banking dynamics. The paper examines models where profitability and risk are the dependent variables with the following equation:

$$ROA_{i,t} = \alpha + \sum \beta_i X_{i,t-1+u} \quad \text{and} \quad ROE_{i,t} = \alpha + \sum \beta_i X_{i,t-1+u}$$

The dependent variables are further divided into two categories: bank-specific factors and context variables. While the former refers to the unique bank's capital, financial, and economic structure, the latter represents the macroeconomic and institutional framework that shaped the bank's operations. In the current research, the bank's unique financial profile is examined through the indices of cross-border capability and the macroeconomic framework by the total assets and the capital to the GDP that each country contributes to the financial solidity.

The banking variables were selected based on the accounting nature of the information and can be classified as *i) economic ROA = Return on Asset; ROE = Return on Equity; netintmarg = the ratio of Net Interest Income to Total Earning Asset* for each bank as shown in the National Central Banks of each country.

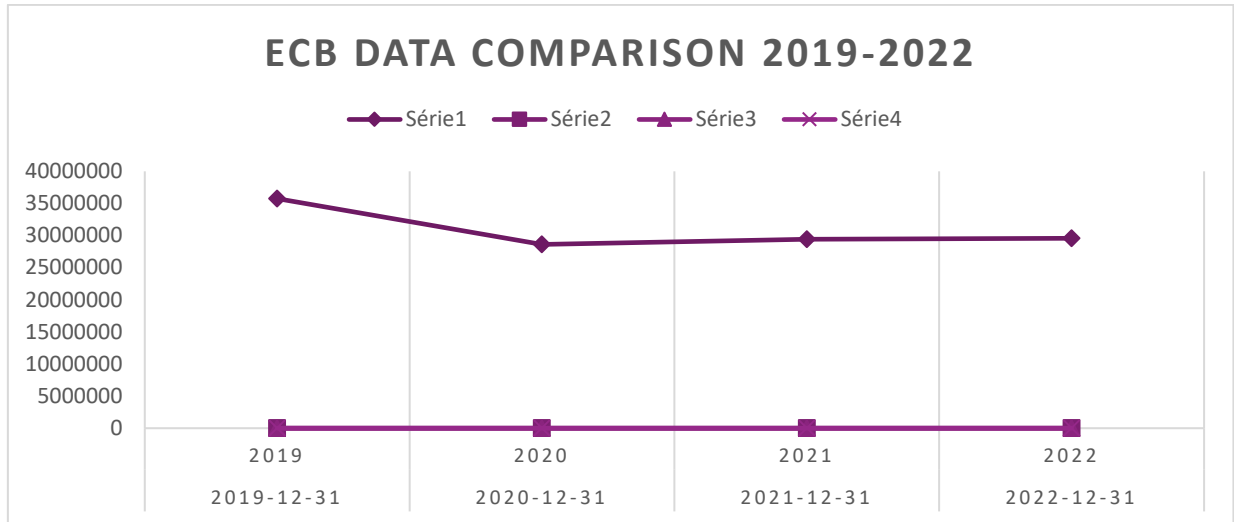
3 RESULTS

The outcomes from the secondary data analysis are provided below.



Figure 1

ECB Data Comparison for the Eurozone Banking Sector 2019-2022



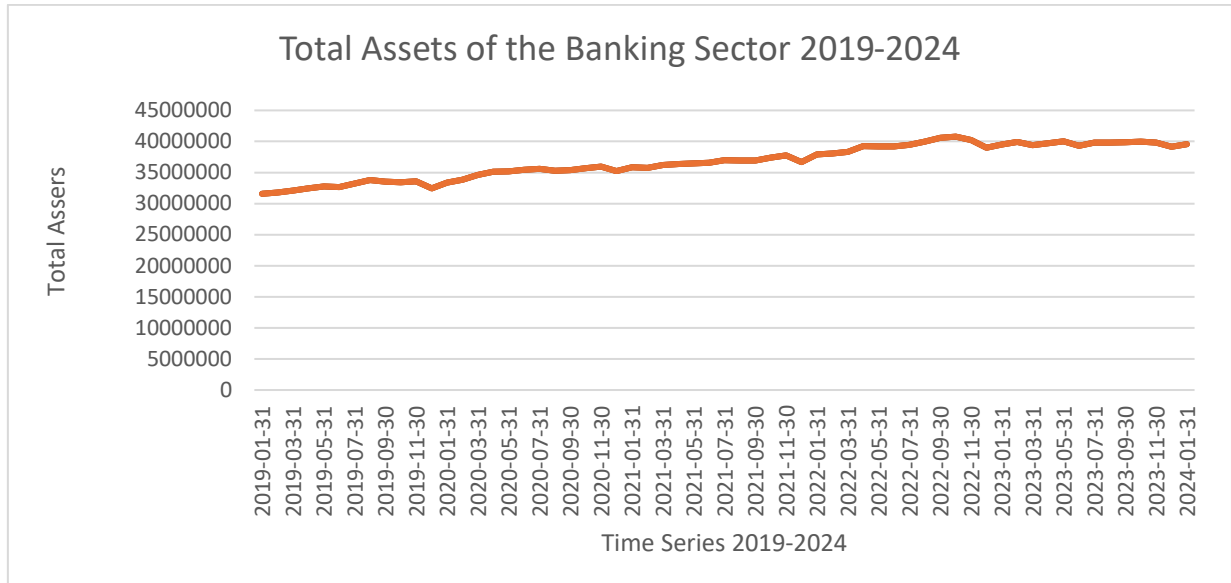
Source: Author elaboration on ECB data

According to the graph, eurozone economies have displayed a trend of consistency following the pandemic, yet they are still below 2019 norms. The Eurozone's financial sector is far more attractive and competitive than that of the Western Balkans and non-EU nations. In terms of Total Assets evaluation, Eurozone countries are still consistent with the resilience and recovery strategies of the ECB. Moreover, there is a clear tendency to increase from the second quarter of 2020, a fact that is certainly related to the financial policies of the Central Bank for the recovery fund. The same was not applied to the non-EU members, which provided a gap between the buying power of the Eurozone members and those in the non-EU members including the Western Balkans. The following is a graph that illustrates the findings.



Figure 2

Total Assets of the Eurozone Banking Sector 2019-2024



Source: Author elaboration on ECB data

The ratio of foreign-controlled banks' total assets to domestic banks tended to stabilize between 20 and 25% after 2020. This suggests that foreign banks' investment activity was not significantly affected by the pandemics in the Eurozone area in comparison to the Western Balkans.

When addressing the topic of multinationalization intensity in a broad narrow examination, an analysis was performed to classify the various multinationalization processes as dummy variables, based on the type of activity performed by the banking sector in the Western Balkans. The following tables present an overview of the banks with foreign investment and the trend of Globalization (Social and Political) and Economic Globalization in the Western Balkans.

The following Table 1 summarizes the main data of the Globalization Index in terms of economic, social, political, and overall index of Albania in comparison to 4 Western Countries.



Table 1

*Globalization Albania vis-à-vis to WB region**

Country	Globalization Index Overall	Rank	Economic Globalization Overall	De jure Index	De facto Index	Social Globalization Overall Index	Political Globalization Overall Index
Albania	66	73	69	73 (rank 46)	65 (rank 84)	66 (rank 105)	63 (rank 112)
Bosnia and Herzegovina	67	69	58	56(rank 85)	60 (rank 103)	68 (rank 96)	74 (rank 70)
Kosovo	---	---	---	-	-	--	---
Montenegro	71	52	78	72 (rank 47)	82 (rank 21)	78 (rank 56)	58 (rank 127)
North Macedonia	69	62	69	66 (rank 58)	71 (rank 57)	65 (rank 106)	71(rank 83)
Serbia	78	35	72	69(rank 53)	73 (rank 48)	60 (rank 77)	85 (rank 38)

Source: Author elaboration on the KOF Swiss Economic Institute Globalization Index * Overall Globalization Index data refer to the 2021 figures while Economic, Social, and Political Index refers to the 2020 figures

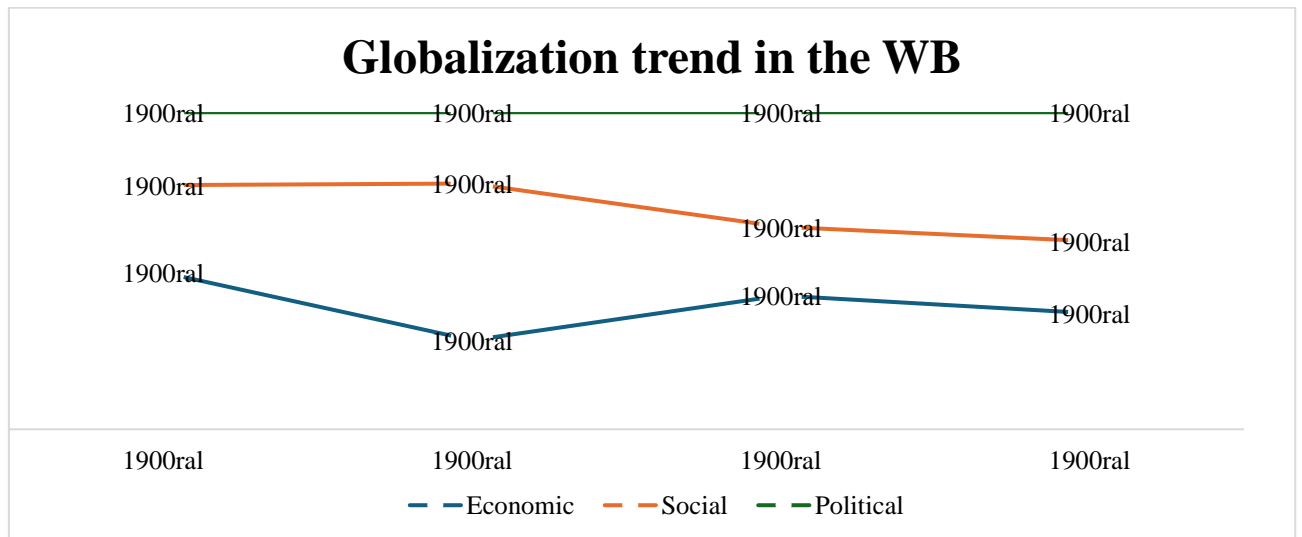
Except for Kosovo, globalization data are provided for all the WB countries. As indicated by the table above, Serbia (78/100) and Montenegro (71/100) have the highest overall index of globalization performance, while Albania (66/100) has the lowest score. In terms of economic globalization, Montenegro (78/100) and Serbia (72/100) possess the highest overall indexes, while Bosnia and Herzegovina possess the lowest. A particularly intriguing observation here is the disparity between de jure and de facto variations in economic globalization. While Albania maintains the highest de jure ranking (73/100), its de facto performance remains weak (65/100). According to Gygli et al. (2019), the KOF Globalization Index update differentiates between de facto and de jure globalization: de facto measures actual international activity, whereas de jure assesses laws that enable and support these activities. Although Albania may have enacted major legal reforms to align with the international market, it still suffers from implementing these legal improvements in macroeconomic and microeconomic stability, resulting in decreased competitiveness and opportunities for the financial sector (banking). The country's long-term shift and the hybrid democracy grade it currently suggests (63/100) have rendered it challenging to develop a stable, international, innovative, and competitive banking sector. This view is practically universal throughout the region, rendering it susceptible to external variables (such as wars and political or armed conflicts) in providing stable economic growth and opportunities for the banking



sector in the single market. The same results are shown in the following Graph 4 where the region’s macro change in political and social terms influenced the trend in the economic and financial capabilities of the region.

Figure 3

Globalization Trend in Western Balkans Amid Pandemics



Source: Author elaboration on KOF Swiss Economic Institute Globalization Index and National Banks Data

To test the validity of the raised hypothesis a linear regression between the variables was computed.

H₁. Globalization and cross-border multinationalization affected the growth assets of the Banking sector in the Western Balkans after the pandemic.

Table 2

Regression results for H₁

Variable	Coefficient regression (β)	of t	Sig.	Remark
Constant	90,1	15	,089	Significant
St. Coefficient	.301			
R square	,756			

Source: Author elaboration on data

As can be inferred from the above table, the scores of the coefficients are known to have a value of Sig $0.001 < 0.05$. So, there is an influence of globalization on the economic growth in the region. The R-value of the square produced in the model summary is 0,756, which means that the influence of globalization on the total assets and ability of economic growth was 75%.



Table 3

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method			
1	Globalization	.	Enter			
a. Dependent Variable: Financial structure and investment						
b. All requested variables entered.						
Model Summary						
Model	R	R Square	Adjusted Square	R	Std. The error in the Estimate	
1	.768 ^a	.756	.700		416	
a. Predictors: (Constant): Globalization and Banking sector economic growth						
ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,987	1	8.00	10.002	.00056 ^b
	Residual	7,000	7	.694		
	Total	8,987	8			
a. Dependent Variable: Globalization						
b. Predictors: (Constant): Globalization and Banking sector economic growth						

*** p<0.1, ** p<.05* p<.1. Source: Author elaboration on data

As can be inferred by the Regressive indices, these results estimate a Sig2. $p = 0.00056 < 0.05$ which confirms the impact that Globalization has on the economic sector growth of the Banking system in the Western Balkans. Further confirmatory data are provided in the following table.

Table 3

Financial and Banking Sector Indicators in the Western Balkans

Country	Commercial Banks	Bank Capitals to Total Assets (%)	Deposits to GDP*	Real GDP Growth (%)
Albania	11	8.6	60.5	3.3
Bosnia and Herzegovina	19	9.9	51,5	3
Kosovo	12	8,9	58,25	4
Montenegro	14	7,9	---	3.7
North Macedonia	14	11,2	74,3	3.2
Serbia	27	---	---	3

Source: Author elaboration on National Banks, The World Bank, and FRED Economic Research data,2024

As indicated by the table above, the number of commercial banks in the Western Balkans Area has remained relatively stable, with an average of 16 per nation. Serbia has the highest figure, despite a lack of data on total asset investments and GDP deposits. In a macro-view of the indices, it can be stated that North Macedonia possesses the largest percentage of GDP and capital deposits, even though the country fails to hold a higher forecast for real GDP growth. Kosovo, on the other hand, shows the highest real GDP growth (4%) while owning a moderate banking sector deposit-to-GDP ratio (58%) when compared to other countries. As it is beyond the scope of the present paper, additional research should be conducted to identify



other potential factors, such as informal economy flow, that may have an impact on the Western Balkans' financial system, notwithstanding the banking sector.

Following is a table summarizing the multi-national banks with their branches in the Western Balkans

Table 4

Summary of Cross-border banks with foreign capital in the Western Balkans

County	Commercial Bank Branches	Country of establishment
Albania	1.Banka Kombëtare Tregtare (BKT) 2.Intesa San Paolo Bank 3.ProCredit Bank 4.OTP Bank 5.Raiffeisen Bank	1.Albania 2.Italy 3.Germany 4.Hungary 5.Austria
Bosnia and Herzegovina	1.Intesa San Paolo Bank 2. NLB Bank 3.ProCredit Bank 4. Raiffeisen Bank 5. Ziraat Bank	1. Italy 2. Montenegro 3. Germany 4. Austria 5. Turkey
Kosovo	1.Banka Kombëtare Tregtare (BKT) 2.NLB Bank 3.ProCredit Bank 4.Raiffeisen Bank 5.Ziraat Bank	1. Albania 2. Montenegro 3. Germany 4. Austria 5. Turkey
Montenegro	1. NLP Bank 2. OTP Bank Podgorica 3. Ziraat Bank	1. Montenegro 2. Hungary 3. Turkey
North Macedonia	1. Hallbank 2. NLB Bank 3.ProCredit Bank	1. Turkey 2. Montenegro 3. Germany
Serbia	1.Hallbank 2.Intesa San Paolo Bank 3.NLB Bank 4.ProCredit Bank 5.Raiffeisen Bank	1. Turkey 2. Italy 3. Montenegro 4. Germany 5. Austria

Source: Author elaboration on 6WB Central Banks data

As can be inferred by the above table Germany, Turkey, Austria, and Montenegro are the most cross-border investment banks in the Western Balkans region. Montenegro is the only country within the region that has cross-border chain branches (n=4) whilst Albania counters only 2 cross-border branches (n=2). The most Eurozone banking investor is Germany while Turkey stands as a strategic partner within the region. For a detailed statistical analysis, a regression panel data analysis was conducted. Table 5 introduces the results of this examination in which the dependent variable is limited (0-1) referring to the three different globalization/multinationalization processes and bank classifications (probability model linear). In the probability linear model presented in Table 5, the fundamental kind of estimate



corresponds to a broader multinationalization process, such as through subsidiaries, branches, or representative offices (Generic in Table 5). The correlation was examined for both the complete sample of banks and those designated as commercial. The same bank sample was used for globalization/multinationalization via overseas subsidiaries (Table 5 Subsidiaries) or branches/representative offices (Table 5 Branches and offices).



Table 5

Regression Panel on Dummy Variables 2019-2024

	Generic		Subsidiaries		Branches or offices	
	All sample	Commercial Banks	All sample	Commercial Banks	All sample	Commercial Banks
α	2.44**	3.6 ***	4.02***	4.92***	-1.002***	-1.3***
ROA $t-1$	0.0067*	-0.01	0.025***	0.006	-0.015***	-0.020
loans/totass $i, t-1$	-0,14***	-0,07	0,110***	-0,112*	-0,03	0.05
dep / totass $i, t-1$	-0,61***	0,41***	-0,76***	-1,051***	0,201***	0,65***
netintmar $g i, t-1$	-0,056**	-0,013**	-0,23	-0,26***	-0,10	0,05
tier 1 $i, t-1$	-0,051**	-0,015**	-0,015**	-0,013	-0,02***	-0,056
pretax/persexp $i, t-1$	0,01**	-0,17**	-0,042**	0,03*	-0,013	-0,14
Netinmargin/pretaxperc $i, t-1$	0,005***	0,003***	-0,007***	0,00081***	-0,00020**	-0,00045
ROA $t-1$ - ROE $i, t-1$	-0,008**	-0,034**	-0,024	-0,0056**	-0,0073**	-0,0010
exp/gdp $i, t-1$	0,72***	0,40***	0,76***	0,30	-0,06	0,112
Δexp $i, t-1$	-1,92***	-2,09***	-2,9817***	-2,2	1,34***	-0,82
HH $i, t-1$	-23,01***	-42,876***	-60,761***	-79,4511***	38,981***	44,35***
R squared	0.15	0.281	0.1718	0.334	0.061	0.212

*The table exhibits the regression coefficients for the linear probability model with panel data. Each column indicates both the approach of cross-border expansion and the sample of banks considered. The symbol *** indicates that the parameter is more than 99% significant; ** indicates that the parameter is at least 95% significant; and * indicates that the parameter is at least 90% significant. Pooled Least Squares using Covariance Method for White Cross Section. Period: 2019–2024



The estimations suggest that the rate of multinationalization is significantly affected by the bank's collection process, operational style, and financing variety. For the bank's collection structure, the ratio between deposits and total assets, which defines a retail-type form of collection, has negative scores for the sample that includes all banks and for the panel of commercial banks, whereas cooperative banks have a positive coefficient. The negative sign shows a low intensity of multinationalization for banks with retail-type gatherings as if the high intensity of multinationalization was limited to banks with a collection structure that differs from that of deposits. However, for cooperative banks, a spike in the percentage of deposits is a positive factor compared to the intensity of internationalization; namely, cooperative banks with an elevated spike in the ratio of deposits to total assets tend to have a greater degree of multinationalisation. In the second feature, the organizational pattern, commercial banks, and cooperative banks show comparable signs, except for the relationship between deposits and Total Assets, even though the severity of the determinants on the degree of multinationalization differs. On the third component, employment types, the loan-to-total asset ratio has a negative influence on the full sample of banks and cooperatives, but not on commercial banks. The negative correlation suggests that the banks that provide loans have a less international outlook than others, which in our work are represented by the Montenegro and Albanian subsidiaries. In a comprehensive look, this implies that financial institutions with foreign direct investment, including Germany and Turkey, provide significantly more prospects for solid economic globalization than those with local investment.

4 DISCUSSION

Globalization is one of the most widespread facets of our current economic and social landscape. However, a challenge in examining this aspect in depth is that the financial and banking sectors have received little attention in globalization research, owing to the difficulty of objectively evaluating data as well as the shifting and influential external influences. The Western Balkans are always in the spotlight of the EU's financial and economic policies, although they are still far from being comparable and competitive with Eurozone countries in terms of financial production (regional banks). Another key challenge in investigating is the scarcity of source data and literature for this specific region, which has about 20 million homeowners. This article aimed to provide an overview of the impact of economic globalization and the multinational structure of the banking sector in the Western Balkans. The analysis of the banking expansion trend between banks with foreign investment and those with regional



investment in the post-pandemic period 2019–2024 was conducted using a mixed approach and secondary data from Central Banks and Economic Institutes. To assess the raised hypothesis, regression statistics were employed. This study investigated 6 countries, with 5 banks ($n=5$) experiencing transnational solvency out of a total of 97. In a general comparison between the Eurozone countries and the Western Balkans region's banking sector resilience after the pandemic, findings suggest that although eurozone economies are still below pre-2019 levels, they outshine those of the Western Balkans. Total assets in the Eurozone align with ECB strategies, showing improvement since the second quarter of 2020, likely due to the Central Bank's recovery fund. This disparity in financial strength extends to non-EU nations, creating a gap in purchasing power. These findings are in line with the various research that argues the ability of the banking sector of Eurozone economies to resilience and recovery strategies (Anani & Owusu, 2023; Barbier-Gauchard et al., 2021; Feyen et al.,2020; Allen et al.,2011; Schoemaker,2011). The ratio of foreign-controlled banks' total assets in comparison to domestic banks stabilized at 20–25% post-2020 in Eurozone economies. This stability indicates that the investment activity of foreign banks was not significantly impacted by pandemics in comparison to the Western Balkans. An analysis was conducted on multinationalization intensity in the Western Balkans banking sector using dummy variables. Results showed that within the region, Serbia and Montenegro excel in overall globalization performance, with Albania ranking the lowest. Montenegro and Serbia lead in economic globalization, while Bosnia and Herzegovina show the most difficulties. Notably, Albania's strong de jure standing contrasts with its weak de facto performance due to challenges in implementation. Difficulty in translating legal reforms into economic stability hampers the country's growth. The region's struggles with stable economic development stem from external factors, impacting its banking sector. These trends are evident due to regional changes in political, social, economic, and financial capabilities, as supported by various research studies (Gómez et al., 2023; Ziberi et al.,2021; De Haas et al.,2006). A linear regression confirmed a significant impact of globalization and multinationalization on banking sector growth in the Western Balkans post-pandemic. Globalization and the capacity to internalize were confirmed to have an impact on banking sector growth (Sig. 2, $p = 0.00056 < 0.05$; Sig. 0.001 < 0.05). Regressive indices show globalization's impact on banking sector growth. The region has an average of 16 commercial banks per nation. North Macedonia leads in GDP and capital deposits but lacks high GDP growth forecasts. Kosovo outstrips real GDP growth (4%) with moderate banking deposits. Present findings reveal that Germany, Turkey, Austria, and Montenegro dominate cross-border investments in the Western Balkans. Montenegro leads with four cross-border branches, while



Albania has just two. Among Eurozone investors, Germany leads, and Turkey is a strategic partner. Multinationalization rates depend on factors like bank structure and financing. Retail-oriented banks as those in the Western Balkans, show low multinationalization intensity. Cooperative banks with a high deposit ratio tend to have more multinationalization. Overall, banks with foreign direct investment offer better economic globalization prospects compared to locally invested institutions. These results are in line with other research that supports the impact of foreign direct investment on the capacity for internationalizing and expanding the banking sector in non-EU members and the Western Balkans (Khan et al.2023; Vulovic,2023; Krasniqi et al.,2022).

5 CONCLUSIONS

The current research focused on the globalization impact in the banking sector in Western Balkans as a region with transitions and a unique economic profile, where banks play a crucial role. The rapid changes in financial markets, driven by deregulation, capital movement, and technological advancements, have led to globalization, new products, and financial innovation. The changes have expanded foreign exchange, bond, and stock markets significantly. Derivatives markets, once insignificant, now have exponential growth. New financial technologies have greatly reshaped market structures. Increased financial market integration boosts market efficiency and risk-return options for investors, especially in neighboring countries. Globalization expedites resource allocation for optimal risk-return ratios, benefiting economies with growth potential. However, this integration reduces political autonomy, enhances financial transactions, and introduces new hedging instruments for volatility. The risk lies in contagion effects, where crises in one area reverberate across markets. Pandemics and the ongoing War crisis underscore the significant impact of financial globalization on economic variables worldwide, including growth, productivity, wages, unemployment, public debt, and interest rates. Although significant efforts have been made to support the increase of competitiveness and expansion of banks, both in political and economic standards, the Western Balkans stand below the EU norm of expansion and yet far from being competitive in the single market arena. Results confirmed that out of 5 banks with a cross-border profile, the most powerful in terms of total assets, loans, and financial credibility were those with an EU investment base (Germany) in comparison to other strategic partners and domestic institutions. Further research may be conducted into potential factors that influence the low competitiveness of the region in boosting domestic banks in cross-border expansion



and the potential influence of shadow flows and the informal economy in them. Although the serious effort to address the impact of globalization and the banking system, two major limitations were identified in the current study that need to be addressed to perform a more thorough assessment in the future. *First*, since the study focused on the Western Balkans as a region, it did not provide an in-depth examination of the banking sector profiles for each country independently. *Second*, the research is limited to the most recent data indices, especially those after 2024, since crucial databases (WDI, EIB, FRED, KOF) share values from 2022. As a result, a more recent database will add additional significance to the impact of the War in Ukraine, the War in the Middle East, massive demographic shifts, and Artificial Intelligence on the capacity of WB banks to internalize.

REFERENCES

- Acharya, V. V. (2013). Understanding Financial Crises: Theory and Evidence from the Crisis of 2007-8. *NBER Reporter*, 2013(1), 5–9. <https://www.econstor.eu/bitstream/10419/103238/1/745845401.pdf>
- Ahmed, S., & Zlate, A. (2014). Capital flows to emerging market economies: A brave new world? *Journal of International Money and Finance*, 48, 221–248. <https://doi.org/10.1016/j.jimonfin.2014.05.015>
- Allen, F., Beck, T. H. L., Carletti, E., Lane, P. R., Schoenmaker, D., & Wagner, W. (2011). *Cross-Border banking in Europe: implications for financial stability and macroeconomic policies*. Cadmus EUI. <https://hdl.handle.net/1814/20202>
- Anani, M., & Owusu, F. (2023). Regulatory capital and bank risk-resilience amid the Covid-19 pandemic: How are the Basel reforms faring? *Finance Research Letters*, 52, 103591. <https://doi.org/10.1016/j.frl.2022.103591>
- Azmeh, C. (2019). Does the speed of adjustment in regulation and supervision affect financial stability in developing countries? *Journal of Financial Regulation and Compliance*, 27(4), 453–463. <https://doi.org/10.1108/jfrc-08-2018-0111>
- Barbier-Gauchard, A., Dai, M., Mainguy, C., Saadaoui, J., Sidiropoulos, M., Terraz, I., & Trabelsi, J. (2021). Towards a more resilient European Union after the COVID-19 crisis. *Euroasian Economic Review*, 11(2), 321–348. <https://doi.org/10.1007/s40822-021-00167-4>
- Berger, A. N., DeYoung, R., Genay, H., & Udell, G. F. (2000). Globalization of Financial Institutions: Evidence from Cross-Border Banking Performance. *Brookings-Wharton Papers on Financial Services*, 2000(1), 23–120. <https://doi.org/10.1353/pfs.2000.0001>
- Buira, A. (2004). Challenges to the World Bank and IMF: developing country perspectives. *Choice Reviews Online*, 41(11), 41–6638. <https://doi.org/10.5860/choice.41-6638>



- Čihák, M., Demirgüç-Kunt, A., Pería, M. S. M., & Mohseni-Cheraghloou, A. (2013). Bank regulation and supervision in the context of the global crisis. *Journal of Financial Stability*, 9(4), 733–746. <https://doi.org/10.1016/j.jfs.2013.10.002>
- Cull, R., & Pería, M. S. M. (2010). Foreign bank participation in developing countries : What do we know about the drivers and consequences of this phenomenon? In *World Bank policy research working paper*. <https://doi.org/10.1596/1813-9450-5398>
- De Haas, R., & Van Lelyveld, I. (2006). Foreign banks and credit stability in Central and Eastern Europe. A panel data analysis. *Journal of Banking and Finance*, 30(7), 1927–1952. <https://doi.org/10.1016/j.jbankfin.2005.07.007>
- European Investment Bank (EIB). (2023). *The impact of the EIB's intermediated lending to businesses in the Western Balkans*. EIB Economics Department.
- Feyen, E., Fiess, N., Bertay, A. C., & Huertas, I. E. Z. (2020). Cross-Border Banking in EMDEs : Trends, scale, and policy implications. In *World Bank, Washington, DC eBooks*. <https://doi.org/10.1596/1813-9450-9393>
- Garicano, L., & Lastra, R. M. (2010). Towards a New Architecture for Financial Stability: Seven Principles. *Journal of International Economic Law*, 13(3), 597–621. <https://doi.org/10.1093/jiel/jgq041>
- Gómez, M. I. S., Zárate, R. D., & Taglioni, D. (2023). The economic effects of market integration in the Western Balkans. In *World Bank policy research working paper*. <https://doi.org/10.1596/1813-9450-10491>
- Gygli, S., Haelg, F., Potrafke, N., & Sturm, J. (2019). The KOF Globalisation Index – revisited. *The Review of International Organizations*, 14(3), 543–574. <https://doi.org/10.1007/s11558-019-09344-2>
- Khan, S., Aslan, H., & Omer, A. (2023). THE IMPACT OF FOREIGN DIRECT INVESTMENT ON FINANCIAL INCLUSION: AN EMPIRICAL INVESTIGATION. *Dicle University Social Sciences Institute Journal*, 32, 479–494. <https://dergipark.org.tr/tr/download/article-file/2775869>
- Kleimeier, S., Sander, H., & Heuchemer, S. (2013). Financial crises and cross-border banking: New evidence. *Journal of International Money and Finance*, 32, 884–915. <https://doi.org/10.1016/j.jimonfin.2012.07.007>
- KOF Globalisation Index*. (2023, June 12). KOF Globalisation Index – KOF Swiss Economic Institute | ETH Zurich. <https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html>
- Krasniqi, B. A., Ahmetbašić, J., & Bartlett, W. (2022). Foreign direct investment and backward spillovers in the Western Balkans. *Southeastern Europe*, 46(1), 1–22. <https://doi.org/10.30965/18763332-46010001>
- Kubiszewska, K. (2019). Banking stability during the economic transformation process in selected countries of the Western Balkans. *Ekonomika Istrazivanja-economic Research*, 32(1), 2532–2553. <https://doi.org/10.1080/1331677x.2019.1645714>



- Lee, S., & Bowdler, C. (2020). US monetary policy and global banking flows. *Journal of International Money and Finance*, 103, 102118. <https://doi.org/10.1016/j.jimonfin.2019.102118>
- Lee, T. K., Cho, J. H., Kwon, D. S., & Sohn, S. Y. (2019). Global stock market investment strategies based on financial network indicators using machine learning techniques. *Expert Systems With Applications*, 117, 228–242. <https://doi.org/10.1016/j.eswa.2018.09.005>
- McCauley, R. N., McGuire, P., & Von Peter, G. (2010). The architecture of global banking: from international to multinational? *BIS Quarterly Review*. https://ddd.bis.org/publ/qtrpdf/r_qt1003e.htm
- Morina, F. (2019). The impact of macroeconomic factors on the level of deposits in the banking sector, an empirical analysis in the Western Balkan countries. *Journal of Accounting, Finance and Auditing Studies*, 5(3), 16–29. <https://doi.org/10.32602/jafas.2019.28>
- Navaretti, G. B., Calzolari, G., Pozzolo, A. F., & Levi, M. (2010). Multinational banking in Europe - financial stability and regulatory implications: lessons from the financial crisis. *Economic Policy*, 25(64), 703–753. <https://doi.org/10.1111/j.1468-0327.2010.00254.x>
- Nistor, C., Panico, P., Nistor, R., & Muntean, M. (2010). The American mortgage crisis implications on the international economics evolutions. *MPRA Paper*. <https://ideas.repec.org/p/pramprapa/25368.html>
- Obstfeld, M., & Taylor, A. M. (2004). *Global Capital Markets: Integration, crisis, and growth*. <http://dx.doi.org/10.1017/cbo9780511616525>
- Rey, H. (2015). *Dilemma not Trilemma: The Global Financial Cycle and Monetary Policy Independence*. <https://doi.org/10.3386/w21162>
- Schoenmaker, D., Allen, F., Beck, T., Carletti, E., Lane, P., & Wagner, W. (2011). *Cross-Border banking in Europe: implications for financial stability and macroeconomic policies*.
- Vulovic, M. (2023). *Economic relations between the Western Balkans and Non-EU countries*. https://www.swp-berlin.org/publications/products/comments/2023C36_WesternBalkans.pdf
- Washington, S., Karlaftis, M. G., & Mannering, F. (2003). Statistical and econometric methods for transportation data analysis. In *Chapman and Hall/CRC eBooks*. <https://doi.org/10.1201/9780203497111>
- World Bank, Bank Deposits to GDP for Albania [DDOI02ALA156NWDB], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/DDOI02ALA156NWDB>
- Ziberi, B., & Alili, M. Z. (2021). Economic Growth in the Western Balkans: A panel analysis. *South East European Journal of Economics and Business*, 16(2), 68–81. <https://doi.org/10.2478/jeb-2021-0015>