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THE IMPACT OF GEOPOLITICAL RISK INDEX ON THE PROFITABILITY PERFORMANCE OF THE BANKING SECTOR

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ABSTRACT: This study aimed to investigate the impacts of the geopolitical risks of the countries on the profitability performance of the banking sector using the quarterly data of the G-7 countries over the period 2012: Q2- 2021: Q4. For this purpose, two panel models were established, namely, bank-specific variables and macroeconomic variables. Panel models were analyzed with the Driscoll-Kraay fixed effects estimator. According to the analysis results, the increase in the geopolitical risk index negatively affects the profitability performance of banks. Besides, it was concluded that the increase in the inflation rate had a negative impact on the profitability of the banking sector. Nonetheless, it was concluded that the capital adequacy ratio of the banks, the credit growth rate in the sector, and the increases in the interest rate had positive impacts on the profitability performance of the banks. The obtained estimation results indicated that risk management and the establishment of a strong economic system that could help stabilize the market are quite important in order to combat the increasing risk perception in countries.

Keywords: Geopolitical Risks, Banking Sector, Profitability, Driscoll-Kraay Estimator
Jel Codes: G21, G32, G33.

JEOPOLİTİK RİSK ENDEKSİNİN BANKACILIK SEKTÖRÜNÜN KARLILIK PERFORMANSINA ETKİSİ

ÖZ: Bu çalışma, G-7 ülkelerinin 2012: Q2- 2021: Q4 dönemine ait çeyreklik veriler ile ülkelerin jeopolitik risklerinin bankacılık sektörü karlılık performansına olan etkisini araştırmayı amaçlamaktadır. Bu amaç doğrultusunda bankalara özgü değişkenler ve makro ekonomik değişkenler olmak üzere iki panel model oluşturulmuştur. Panel modeller Driscoll-Kraay sabit etkiler tahmincisi ile analiz edilmiştir. Analiz sonuçlarına göre, jeopolitik risk endeksindeki artış bankaların karlılık performansını negatif yönde etkilemektedir. Ayrıca enflasyon oranındaki artışların da bankacılık sektörünün karlılığı üzerinde negatif etkisi olduğu sonucuna ulaşılmıştır. Ancak bankaların sermaye yeterlilik oranı, sektördeki kredi büyüme oranı ve faiz oranındaki artışlar bankaların karlılık performansı üzerinde pozitif etki yarattığı sonucuna ulaşılmıştır. Elde edilen tahmin sonuçları, ülkelerde artan risk algısıyla mücadele edebilmek için risk yönetiminin ve piyasayı istikrarlı hale getirmeye yardımcı olabilecek güçlü bir ekonomik sistemin oluşturulmasının oldukça önemli olduğunu göstermektedir.
Anahtar Kelimeler: Jeopolitik Risk, Bankacılık Sektörü, Karlılık, Driscoll-Kraay Tahmincisi
JEL Kodu: G21, G32, G33.

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1. INTRODUCTION

Since the 1990s, while investigating the sources of development differences between developed and developing countries, attention has been increasingly focused on political and institutional factors. In the studies to investigate the impacts of political variables on the development differences among countries, the first variable to be considered was the type of political regime. In a sense, the most important reason why democracy is used as a variable or criterion in explaining the development gap is that strong institutions are effective in economic development and that strong institutions are seen as identical with democracy. Generally, the presence of democratic regimes in developed countries, the presence of non-democratic regimes in developing countries or the lack of institutionalization of democracy have brought along the fact that political regime type differences are seen as the most important variable explaining developmental differences. However, upon examining the literature, a definite judgment has not been reached on the relationship between the type of political regime and economic performance. This situation has revealed the pursuit of other political variables that may be effective on economic variables. As a result, the variable of political instability has begun to be used in the literature. Therefore, the stability of the said regime type has come to the forefront rather than the current political regime type. Because political stability can be achieved in democratic administrations as well as in autocratic administrations. Therefore, political instability can occur in both regime types. Economic units do not only take their economic decisions according to the current situation, but also take into account future conditions and expectations. Therefore, the continuity of the economic development process depends on the long-term horizons of the entrepreneurs to see the future and the high probability of realization of their predictions. One of the main factors determining this is the stability in the political variables that determine the economic activity and form the institutional framework. The existence of political stability in an economy enables entrepreneurs to enhance their capabilities of predicting the future. So, the continuity of economic stability emerges depending on political stability. From this point of view, political instability is closely related to the whole economy and therefore the banking sector. Before moving on to the relationship between them, it would be appropriate to touch on the concept of political instability. There is no agreed definition of the concept of political instability. Perhaps the most important reason for this is that political instability is fed from different sources in different countries. However, two important points draw attention to the phenomenon of political instability.

In the former, forcing to change the existing constitutional system, in the latter, political polarization, coalition governments, and the high rate of change in governments come to the fore despite being within the constitutional order. One of the main studies on political instability belongs to Alesina and Perotti (1996). Political instability: - Government changes (constitutional or not), - Social unrest, and political violence. Researchers referred to the second item rather than political instability. In the study, the cause of political violence and social unrest, thus political instability, was seen as income inequality. In democratic regime types, the indicators of political instability are mostly collected under the following headings (Bildirici, 2004): - Polarization of the parliament, - Coalition governments, - Indecisiveness of the voters, - Administration and timing of elections, - Frequency of government changes. Political instability increases the political uncertainty in the country, which increases the political risk. This situation affects the country's economies by being effective on both financial and real economic variables. In this context, the banking sector is also exposed to effects from the supply side and the demand side. Because the rise in the risk increases the interest rates, which increases the costs of the banks, however, the rise in the interest rates increases the credit costs and decreases the credit demands of the economic units. On the other hand, in countries such as Turkey, where the equity capital of the private sector is not very strong, companies use loans to finance their investments in normal periods, while they prefer to use loans in order to maintain or provide their cash flow balances during crisis periods.

By creating political instability, political uncertainty, and risk, it has an impact on the economies of countries by limiting the future horizons of economic units. Therefore, the relationship between political stability or instability and economic variables manifests itself in macro-, meso-, and microeconomic fields. In this context, in this study, the impacts of political instability, which is frequently experienced in Turkey, on the banking system along with other internal and external variables are tried to be revealed. Thus, the impacts of the variables discussed on the banking system are examined and the conditions for the banking

system to operate more effectively would be determined. Nonetheless, as well-known, the main purpose of the financial sector is to provide the funds needed by the real sector. Therefore, the financial sector, which will operate more effectively, will provide the funds needed by the real sector under more favorable conditions. The study ends with conclusions and suggestions.

2. LITERATURE REVIEW

The literature review consisting of previous research studies conducted on the research subject is presented in Table 1.

Table 1. Related Research Studies in the Literature

Author(s)	Country & Period	Variables & Methodology	Results
Yalçınkaya et al. (2016)	Turkey (2002- 2015)	ROA, capital adequacy ratio, growth rate, interest rate, exchange rate volatility, and political risk index. Panel Data Analysis	Banks are adversely affected by political risk
Ghosh (2016)	12 MENA Countries (2000–2012)	ROA, NIM, Loan Rate, Funding Cost, Size, Equity, Liquidity, Political Conflict. Regression Analysis	The adverse impact of political uncertainty on bank performance
Şanlısoy et al. (2017)	Turkey (2002–2015)	ROA, Political Risk Index, Exchange Rate Volatility, GDP Growth Rate Panel ARDL	The negative impact of the political risk on the bank profitability
Bouri et al. (2019)	The Gulf Arab countries (2005–2017)	GRP Index, Islamic stock,and Islamic bond price indexes. Non-parametric causality-in-quantiles test	The impact of GPR on return volatility in Islamic equities, in compliance with the findings for other stock markets.
Lee & Lee (2020)	BRICS Countries (1985 –2017)	Insurance Premiums, Real Output, and GPR Granger-Causality in Quantile Analysis	Causality runs from the economic condition of the markets and risk exposure to GPRs to insurance activities at different quantiles in Brazil and South Africa. However, insurance activities and geopolitical events or uncertainty provide insufficient incentives to affect economic activities.
Alsagr et al. (2020)	19 Emerging Countries (1998 – 2017)	ROA, GPR index, Oil Rents, GDP, inflation, exchange rate, non-performing loans, and bank deposits.	An adverse impact of GPR on banking sector profitability

		Panel Data Regression Analysis	
Demir & Danışman (2021)	19 Emerging Countries (2010–2019)	GPR Index, WUI, Index, Credit Growth, Consumer Loan Growth, Corporate Loan Growth, ROA	Economic uncertainty leads to a significant decline in overall bank credit growth, whereas no significant impact of GPR is found.

3. DATASET AND METHODOLOGY

3.1. Dataset

In the study, the impacts of the geopolitical risk of the G-7 countries on the profitability of the banking sector are investigated. For this purpose, the quarterly data of seven variables for the G-7 countries covering the period 2012: Q2 – 2021: Q4 are utilized. Variables used in the study are return on assets (ROA) ratio, geopolitical risk (GPR) index, capital adequacy ratio (CAR), asset quality ratio (ASQ), credit growth rate (CGDP), inflation rate (INF), and interest rate (INT). The GPR index is obtained from the Matteo Iacoviello database. Other variables are obtained from the IMF's database. Brief explanations of the variables and their expected relationships with the dependent variables are presented in Table 2.

Table 2. Abbreviations and Explanations of the Variables

Variables	**Abbreviation**	**Explanation**	**Expected Relationship**
Return on Assets	ROA	Net Profit/ Total Assets	
Geopolitical Risk	GPR	Geopolitical Risk Index	–
Capital Adequacy	CAR	Eligible Capital / Risk-Weighted Assets	+
Asset Quality	ASQ	Non-Performing Credits / Total Credits	–
Credit Growth	CGDP	Total Credits / GDP	+/–
Inflation	INF	Consumer Price Index	+/–
Interest Rate	INT	Overnight Interest Rate	+/–

3.2. Methodology and Model

A panel regression model is established to detect the impacts of GPR on the profitability of the banking sector. Panel data models can be categorized into two main groups, namely, static and dynamic models. Although the past values of the variables are not included in the model upon conducting a static panel data analysis, they may be included in the model upon conducting a dynamic panel data analysis. A static panel data analysis is conducted.

In panel data analysis, the variables should be stationary. The regression model established with a non-stationary dataset leads to the problem of spurious regression (Sevüktekin and Nargeleçekenler, 2010). Therefore, in panel data analysis, firstly, it should be determined whether or not the series is stationary by performing the panel unit root tests. Panel unit root tests can be categorized into two main groups such as

the 1st-generation and 2nd-generation tests. The 1st-generation tests assume that no cross-sectional dependence exists among the units (Korkmaz and Karacan, 2013). The 2nd-generation tests, however, take the cross-sectional dependence between the series of units into account (Tatoğlu, 2012). Therefore, diagnostic tests are required to select the appropriate estimator for both stationarity and regression analyses.

Among these tests, the Lagrange Multiplier-LM test developed by Breusch Pagan (1980) and CD test developed by Pesaran (2004) do not have cross-section dependence, the Modified Wald (Green, 2000) test does not contain heteroscedasticity problem, and Wooldrige (2002) test does not contain autocorrelation problem. These are diagnostic tests that are frequently used in the literature to test the hypotheses. They are also performed in this study to test these assumptions.

Following the stationarity analysis, regression analysis is conducted using the panel data. Fixed effect models (FEM) and random effect models (REM) are used in model estimation to predict unobservable effects in the panel data models. The Hausman Test, which is the most widely employed method in the literature, is performed to determine which of the FEM and REM would be selected. In the Hausman Test, H_0 hypothesis implies that the REM is effective, whereas H_1 hypothesis suggests that the FEM is more efficient. Accordingly, if the test result is significant, H_0 hypothesis is rejected and the FEM is chosen.

Regression model 1 is established to investigate the impacts of GPR on the profitability of the banking sector.

$$ROA_{jt} = \alpha_{jt} + \beta_1 GPR_{jt} + \sum_{k=1}^{K} \delta_{k,} Y_{jt}^{k} + \sum_{l=1}^{L} \theta_{i,} Y_{jt}^{l} + \epsilon_{jt} \quad (1)$$

In the model, ROA_{jt}_denotes the profitability of the banking sector of country *j* at the end of year *t*; α_{jt} stands for the constant term; GPR_{jt} represents the GPR index of country *j* at the end of year *t*, Y_{jt}^{k} denotes K control variables related to the banking sector in country *j* at the end of year *t*; Y_{jt}^{l} represents L control variables related to macroeconomic variables in country *j* at the end of year *t*; and ϵ_{jt} denotes the error term. Panel data consider cross-sections and time dimensions simultaneously. In this model, the sub-index "*j*" represents the cross-sections (banking sector of the countries), whereas the sub-index "*t*" represents time. The detailed explanations of the variables used are as follows;

ROA, which is used as a dependent variable in the model of the study, was calculated as the ratio of net profit/total assets. A bank that has applied a high margin in the past is expected to continue to do so in the next period. The GPR index, which is used as an independent variable in the model, was first coined by Caldara and Iacoviello (2018). The index is formed from the number of words related to GPR published in 11 leading international newspapers of the USA, UK and Canada.

The GPR index reflects the text search results of electronic archives of newspapers. In periods, during which countries' GPR increase, it is expected that the profit margin of the banking sectors would decline. The capital adequacy ratio indicates a bank's degree of risk aversion. The higher the ratio, the more prudently a bank follows a financing policy. The ASQ of the banks is measured by the ratio of non-performing loans/total loans. The high level of non-performing loans, which cannot be collected at maturity, may be due to cyclical reasons as well as the fact that the bank follows a relatively flexible loan policy. Regardless of the reason, these non-performing loans would cause loss of income for the bank. In order to compensate for this loss, it is expected that banks would wish to operate at higher margins. Credit growth is measured by the ratio of total loans/GDP. It is expected that the increase in the credit volumes of the banks would generate higher profit margins in the sector. The consumer price index, which is used to represent the inflation variable, is a measure that indicates the average changes in the prices of a certain product and service group purchased by the consumer. The interest rate is the average of the Central Bank's

overnight borrowing and lending rates. Although banks are free to determine the interest rates to be applied to credits and deposits, the Central Bank interest rates constitute a reference for bank interest rates. During the periods of high interest rates, high profit margins may occur in the sector.

4. FINDINGS

4.1. Testing the Assumptions of the Model

Within the scope of the analysis, firstly, the descriptive statistics of the series presented in Table 3 are examined.

Table 3. Descriptive Statistics of the Variables

Variables	Mean	Median	Std.Dev.	Skewness	Kurtosis
ROA	0.352850	0.469238	0.612736	-2.940720	3.163161
GPR	4.605338	4.679923	0.402575	-0.824826	3.752637
CAR	2.783865	2.798190	0.167492	0.202030	2.604729
ASQ	1.046074	1.065601	0.778055	-0.489801	3.034295
CGDP	4.303223	4.320805	0.533714	0.222451	2.360795
INF	4.929275	4.906521	0.193698	0.878051	3.880325
INT	1.604395	1.871802	0.868554	-1.457905	4.690069

According to the descriptive statistics in Table 3, the mean and median values of the variables are, in general, likely to converge. Upon considering the standard deviation values, it is seen that the highest value belongs to INT variable. This indicates that INT variable has the ratio of the furthest distribution. The kurtosis of the distribution ranges between 2.36 and 4.69, indicating that the distribution has an asymmetrical feature. It is observed that the skewness values of the variables are generally negative, meaning, skewness to the right.

Correlation analysis is performed to comprehend whether a multicollinearity exists among the variables. Gujarati (2004) stated that multicollinearity was not a significant problem in multivariate regression analysis as long as the correlation coefficients among independent variables did not exceed 0.80. Another method employed to detect multicollinearity is the variance inflation factor (VIF). VIF is calculated to determine the degree at which an independent variable is associated with other independent variables. Curto and Pinto (2011) stated that a multicollinearity problem exists among the variables when the VIF value exceeds or is equal to 10. The correlation matrix and VIF values are presented in Table 4.

Table 4. Correlation Matrix and VIF Values

	ROA	GPR	CAR	ASQ	CGDP	INF	INT
ROA	1.0000						
GPR	-0.1093	1.0000					
CAR	0.3291	-0.2196	1.0000				
ASQ	-0.1072	-0.0383	-0.5870	1.0000			
CGDP	0.4950	0.2235	-0.2779	0.0805	1.0000		
INF	-0.1805	0.1163	-0.1005	0.5169	0.2769	1.0000	
INT	0.1453	-0.0400	-0.2934	0.5486	-0.1033	0.2527	1.0000
VIF		1.0752	1.2579	1.5499	1.5497	2.2274	1.1335

According to Table 4, the highest value observed in the correlation matrix is -0.5870 and it is between the values of ASQ and CAR variables. The absence of high correlation coefficients indicates that no possibility of multicollinearity exists. Moreover, the low VIF values support this view. In this context, all selected variables are included in the analysis.

Hausman test and diagnostic tests are performed to select the appropriate estimator in the regression analysis. There are three basic assumptions required for validity of the analysis results. These assumptions involve cross-section dependence, heteroscedasticity problem, and autocorrelation problem. Breusch Pagan (1980) LM and Pesaran (2004) CD tests are performed to determine whether cross-section dependence exists in the model. Modified Wald (2000) test is performed to determine whether a heteroscedasticity problem occurs. Wooldrige's (2002) autocorrelation test is performed to determine whether an autocorrelation problem exists. Hausman test and diagnostic test results are shown in Table 5.

Table 5. Testing the Assumptions

Fixed and Random Effects Model Preference			
Tests	**Hypotheses**	**Chi-Square/Statistic Value**	**Prob.**
Hausman Test Statistic	H_0: The REM is appropriate. H_1: The FEM is appropriate.	196.47	0.000*
Diagnostic Tests			
Breusch Pagan (1980) LM Test	H_0: No cross-sectional dependence exists. H_1: Cross-sectional dependence exists.	2418.542	0.000*
Pesaran (2004) CD Test	H_0: No cross-sectional dependence. H_1: Cross-sectional dependence exists.	20.402	0.000*
Wooldrige (2002) Autocorrelation Test	H_0: No autocorrelation exists.	62.108	0.000*

	H_1: Autocorrelation exists.		
Modified Wald Test	H_0: No heteroscedasticity exists. H_1: Heteroscedasticity exists.	38.96	0.000*

Note: * indicates that the hypotheses are rejected at 1% significance level.

Upon examining Table 5, it is seen that the Hausman test statistics probability values are (0.000). In this case, for all significance levels, H_0 implying that the REM being appropriate is rejected at the 1% significance level, and it is decided that the FEM is appropriate as suggested by H_1. Moreover, the existence of both auto-correlation and heteroscedasticity problems are detected by the test results based on the FEM.

According to the cross-sectional dependence results, H_0 implying that no cross-sectional dependency occurs is rejected since the probability values are lower than 0.05, and it is determined that a cross-section dependence exists across countries. In this case, a shock toward one of the countries may also affect the others. Therefore, these countries should closely monitor the developments in other countries included in the analysis upon developing policies. Besides, in the following stages of the study, it is decided that the 2nd-generation panel data analysis methods, which takes into consideration the cross-sectional dependence, such as Pesaran's Cross-Sectionally Augmented Dickey-Fuller (CADF), should be employed.

4.2. Panel Unit Root Test

Since the analyses with panel data are performed under the stationarity assumption, unit root testing is performed for all variables. Nevertheless, the stationarity testing by performing conventional unit root tests (ADF, PP, KPSS) may yield erroneous results in case of cross-sectional dependence in the panel data. Since cross-sectional dependence is detected in the dataset, the CADF-CIPS test developed by Pesaran (2007), one of the 2nd-generation unit root tests that consider cross-sectional dependence, is performed instead of conventional tests in the stationarity testing. The H_0 hypothesis of the CADF-CIPS test implies that "the series contains a unit root", and if the probability values are lower than 0.05, H_0 would be rejected and no unit root would be detected in the series. Statistical values and probabilities obtained from unit root tests are presented in Table 6.

Table 6. Panel Unit Root Test Results

Variables	**Level Values Zt-bar (Prob.)**	**1st Differences Zt-bar (Prob.)**
ROA	-12.104 (0.000) *	-9.082 (0.000) *
GPR	-9.150 (0.000) *	-5.971 (0.000) *
CAR	-4.908 (0.000) *	-3.457 (0.000) *
ASQ	-4.446 (0.000) *	-3.878 (0.000) *
CGDP	-6.780 (0.000) *	-4.648 (0.000) *
INF	-4.196 (0.000) *	-3.228 (0.001) *
INT	-11.506 (0.000) *	-4.705 (0.000) *

Note: * indicates the significance of the variables at a 1% level.

The CADF test is performed for models with and without a trend, taking into account the lag lengths of "0" and "1". The high levels of statistical values (Z t–bar) seen in Table 6 necessitate the rejection of H_0 implying nonstationarity of the series. In other words, the level values of the variables are determined as stationary.

4.3. Fixed Effects Panel Analysis Results

In the study, the FEM is decided to be the most appropriate model for the G-7 country group. Besides, the heteroscedasticity, autocorrelation and cross-sectional dependence problems are detected in the models established for the country group. In this case, the FEM estimator of Driscoll-Kraay (1998), which makes efficient and consistent estimations with resistant standard errors even in the presence of heteroscedasticity, autocorrelation, and cross-sectional dependence problems, is employed for model estimations investigating the relationships among the variables (Tatoğlu, 2012). To test the consistency of the regression analysis results, two different panels are established. Panel A involves the models in which only bank-scale variables are taken into account in determining the impact of GPR on the profitability of the banking sector. Panel B is established by including macroeconomic variables in this model. The estimation results of the models established to investigate the impacts of the GPR of the G-7 countries on the profitability of the banking sector are shown in Table 7.

Table 7. Driscoll-Kraay Standard Errors Model with Fixed Effects

Dependent Variable	**ROA**	**Panel A**		
Independent Variables	**Coefficients**	**Std. Error**	**t-Statistic Value**	**Prob.**
GPR	-0.0481	0.3745	-4.76	0.0032*
CAR	0.0674	0.1405	4.61	0.0087*
ASQ	-0.1814	0.1872	-3.99	0.0198**
CGDP	0.0343	0.2279	4.85	0.0012*
Constant	-1.4277	0.4225	-6.82	0.0000*
F-Statistic	104.78			
Prob>F	0.000			
Within R^2	0.6208			
Durbin-Watson	1.3204			
Modified Wald	3264.16 [0.000]			
Dependent Variable	**ROA**	**Panel B**		
Independent Variables	**Coefficient**	**Std. Error**	**t-Statistic Value**	**Prob.**
GPR	-0.0463	0.2302	-4.81	0.0014*
CAR	0.0912	0.1890	4.12	0.0098*
ASQ	-0.2237	0.2024	-3.78	0.0232**
CGDP	0.0516	0.2288	4.72	0.0046*
INF	-0.0862	0.1920	-4.25	0.0092*
INT	0.1229	0.2008	4.09	0.0168**
Constant	-1.6402	0.4317	6.82	0.0000*
F-Statistic	102.64			
Prob>F	0.000			
Within R^2	0.6248			
Durbin-Watson	1.3227			
Modified Wald	3156.16 [0.000]			

Note: * and ** indicate significance at 1% and 5% levels, respectively.

Upon considering the Driscoll-Kraay (DK) estimation results in Table 7, it is concluded that the GPR index variable in Panel A and Panel B has a negative relationship with the ROA of banks at a

significance level of 1%. This indicates that the increase in the GPR of the countries negatively affects the profitability performance of the banking sector of the countries. In Panel A and Panel B, it is concluded that the CAR variable is positively related to the ROA of the banks at the 1% significance level. In other words, the increase in the CAR of banks positively affects the profitability performance. It is concluded that the non-performing loans/total loans ratio, which expresses the ASQ of the banks, is negatively associated with the ROA of the banks at a 5% significance level. When the ratio of non-performing loans increases in the banking sector, profitability performances are adversely affected. It is concluded that the CGDP variable has a positive relationship with the ROA of the banks at the 1% significance level. Profitability performance increases as credit diversification increases in the banking sector. In Panel B, a negative relationship at the 1% significance level between the inflation variable, which expresses macroeconomic variables, and the ROA of the banks; and a positive relationship at the 5% significance level between the interest rate variable and the ROA of the banks are determined. In other words, the rise in the inflation rate negatively affects the profitability performance of the banking sector; whereas the rise in the interest rate positively affects the profitability performance.

It is seen that the F statistics of all established models are significant. Durbin Watson (DW) statistics (Bhargava et al., 1982) tests the hypothesis implying that autocorrelation is equal to zero, and indicates the existence of autocorrelation when the statistical value is below 2 (Tatoğlu, 2016). In this case, it is seen that the models have autocorrelation problems according to the Durbin Watson test and heteroscedasticity problems according to the Modified Wald test. The Driscoll-Kraay estimator, along with its cross-sectional dependence, also takes into account such diagnostic problems.

CONCLUSION AND DISCUSSIONS

The existence of a strong banking system for countries is one of the basic pillars of sustainable economic growth and development. Tensions and terrorist incidents across countries increase the GPR of countries and this situation elevates the concerns about inflation and economic growth. With the increasing risk perception, banks are reviewing their credit policies not only abroad, but also at home, and this situation manifests itself mostly in the form of credit slowdown. Increasing GPR are reducing the willingness of international commercial banks to provide cross-border financing for large-scale projects. Also, the increase in GPR reduces the potential of countries and banks to attract international direct investments. Therefore, the economic power of the countries is extremely crucial in terms of being a deterrent to the threat to the security of the countries and reacting when necessary. In the light of this information, this study seeks to respond to the question of whether GPR have an impact on the profitability performances of banks. Upon considering the relevant literature, variables that may affect the profitability performances of banks over the period 2012: Q2 - 2021: Q4 are determined. Panel models established in this regard are analyzed by using the Driscoll-Kraay's (DK) FEM estimator. In both models established according to the obtained estimation results, it is concluded that GPR negatively affect the profitability performance of the banking sector. This situation can be interpreted as the credit slowdown in credit policies with the enhanced risk perception of banks. In other words, increases in GPR lead to credit shrinkage of banks, which reduces the profitability performance of banks. Another obtained result suggests that the increase in non-performing loans negatively affects the profitability of the banking sector. Nevertheless, increases in banks' capital adequacy and credit growth positively affect the profitability performance of banks. In other words, banks' strong equity structures and credit diversification enhance their profitability performances. According to the findings obtained from the model established by using macroeconomic variables, it is concluded that the profitability performances of banks are negatively affected by inflation; whereas positively affected by the interest rate. Inflation leads to a rise in banks' resource costs and operating costs. This has a negative impact on banks.

The results obtained from the study are compared with that of previous studies that have developed models regarding GPR and banking sector profitability; the findings of some studies such as Ghosh (2016),

Şanlısoy et al. (2017), Bouri et al. (2019), and Lee et al. (2020) are found to be consistent with the findings of this study. Studies, in general, indicate that GPR have a detrimental impact on the profitability performance of the banking sector. Furthermore, studies state that banks with bad credit risk have low profitability levels. The policy recommendations, the close relationship of global capital markets with each other, and the news of GPR such as terrorist incidents, wars, and nuclear threats increase the concerns of countries regarding inflation and economic growth. For this reason, it is quite essential for countries to establish a strong financial structure that may provide market stabilization and an economic system that would diversify country-specific risks. Limitations of the study involve the fact that the data starts out in the second quarter of 2012. Therefore, it can be claimed that a time constraint on the variables exists. Since the variables are used merely for G-7 countries, it can be claimed that a country-specific limitation exists. In future studies, it may be recommended to make comparisons by conducting studies on the risk factors that may affect the banking sector profitability performance in different country groups.

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