

Do Volatility Shocks Matter More Than Policy Uncertainty? A Behavioral Analysis of Bank Equity Returns

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Abstract

This study investigates the relationship between global uncertainty indices and bank stock returns through the lens of behavioral finance. Using monthly data from January 2010 to December 2024, the analysis incorporates three regional banking indices—S&P 500 Bank Index (USA), MSCI World Banks Index (Global), and BIST XBANK Index (Türkiye)—and two prominent uncertainty indicators: the Global Economic Policy Uncertainty Index (GEPU) and the CBOE Volatility Index (VIX). While GEPU captures structural macro-level uncertainty through text-based analytics, VIX reflects short-term market sentiment based on option-implied volatility. A series of econometric methods—including Augmented Dickey-Fuller (ADF) tests, Pearson correlation, Granger causality, vector autoregression (VAR), and impulse response functions (IRF)—were employed to assess the dynamic interactions between uncertainty shocks and bank equity returns. The findings reveal that VIX changes have statistically significant short-term negative effects on banking sector returns in all three markets, with the strongest reactions observed in the Turkish banking sector. Conversely, GEPU changes do not exhibit consistent causal or dynamic effects. These results suggest that market-based uncertainty (volatility shocks) is more influential than policy-related uncertainty in shaping short-term investor behavior and bank equity pricing. The study contributes to the literature by providing a multi-market behavioral assessment of uncertainty-return linkages, highlighting the differentiated impact of sentiment-based versus structural uncertainty measures across emerging and developed financial systems.

Keywords: Financial Uncertainty, Bank Stock Returns, Behavioral Finance, VIX Index, Global Economic Policy Uncertainty (GEPU)

JEL Codes: G15, G41, C32, E44, G21

INTRODUCTION

The nature of the determinants of stock returns in financial markets has been debated both theoretically and empirically for many years. According to rational finance theories, market prices include all information, whereas the behavioral finance approach argues that investor decisions are determined not only by information but also by emotional and psychological factors (Kahneman & Tversky, 1979). Within the framework of this approach, analyzing the impact of indices measuring market sentiment on stock returns has gained importance.

Global political, economic and financial developments increase the perception of uncertainty in the markets and this situation significantly affects investor behavior. Increased risk perception in an uncertain environment may cause investors to act more timidly and sometimes make irrational decisions (Barberis et al., 1998). In this context, indicators such as the Global Economic Policy Uncertainty Index (GEPU) (Baker, Bloom & Davis, 2016) and the CBOE Volatility Index (VIX) (Chicago Board Options Exchange, 2024), which are considered as measures of market sentiment, attract attention especially with their effects on sensitive assets such as bank stocks.

The banking sector is much more sensitive to macroeconomic uncertainties and changes in sentiment as it is at the center of the financial system. Both in terms of financial intermediation function and investment perception, banks can react more quickly to changes in market sentiment. Therefore, this study aims to analyze the effects of GEPU and VIX indices on bank stock returns from a multi-regional perspective (US, Türkiye and global).

The main contribution of this study is to test the effects of sentiment-based uncertainty indicators, especially on the banking sector, using time series models (ADF, VAR, Granger, IRF) and to reveal their effects from a multi-market perspective. The contribution to the literature will be measured by the ability of this study to statistically demonstrate the sensitivity differentiation in both developed and emerging markets.

The Relationship between Uncertainty Indicators and Financial Assets

Financial uncertainty indicators play a critical role in shaping investors' expectations about the future. Bloom (2009) shows the negative effects of uncertainty shocks on output, employment and investment, while Pastor and Veronesi (2012) argue that policy uncertainties trigger volatility in capital markets by increasing risk premiums. In this context, structural indicators such as GEPU affect long-term risk perception, while VIX reflects short-term market reactions. Equity markets, especially in systemically important sectors such as financial institutions, are more intensely affected by such uncertainties.

Behavioral Finance and Uncertainty Perception

Behavioral finance literature suggests that investors' decision-making processes may deviate from rational models. Especially during periods of uncertainty, investors may act with cognitive biases such as loss aversion, overreaction or overconfidence in available information (Tversky & Kahneman, 1992). This explains the waves of selling seen in the sudden rise of indices such as the VIX. The perceptual interpretation of uncertainty is directly related to the way information flows are interpreted. While indicators such as GEPU require less sensory and more rational analysis, market-based indicators such as VIX are directly subject to emotional pricing.

Sentiment Reactions in Developed vs Emerging Markets

The literature frequently emphasizes that the responses of developed and emerging markets to global uncertainties are asymmetric (Bekaert et al., 2014). In emerging markets, information asymmetry, low financial literacy and perception of high volatility lead to harsher pricing in investor behavior. In emerging markets such as Turkey, the banking sector is more sensitive to global uncertainty shocks beyond general market movements. This explains why VIX changes have a stronger impact on BIST XBANK.

Sensitivity of the Banking Sector to Sensitivity Indicators

Banks are among the institutions most affected by financial uncertainty through mechanisms such as loan pricing, liquidity management and risk measurement. Market-based risk indicators can lead to higher volatility in bank stocks, especially during periods of higher capital costs (Acharya et al., 2012). Therefore, bank stocks provide a suitable observation area for empirical testing of sensitivity shocks. The differential impact of indices such as VIX and GEPU on bank stocks is due to the sector's simultaneous exposure to both sentiment and structural risks.

Literature Review

Behavioral finance theories, which examine the impact of investor behavior on financial markets, have argued that psychological biases and market sentiment may be determinants of pricing in contrast to traditional rational modeling (Kahneman & Tversky, 1979). In the investor sentiment model developed by Barberis, Shleifer and Vishny (1998), it is argued that investors do not process economic information with full rationality and that market reactions may be exaggerated from time to time.

The GEPU index is frequently used in studies aiming to measure the link between financial uncertainty and sentiment. Baker, Bloom and Davis (2016) show that increased economic policy uncertainty can amplify financial volatility and delay investment decisions. Similarly, the VIX index is an important sentiment indicator that expresses the link between the level of fear in the market and price volatility (Chicago Board Options Exchange, 2024).

While GEPU measures economic policy uncertainty as a text-mined phrase composed of the frequencies of macroeconomic keywords in newspapers, VIX reflects the market's expectation of future volatility based on option prices on the S&P 500 index. Therefore, while GEPU is a more

structural and macro-based measure of uncertainty, VIX is a more sensitive and momentary pricing index.

Recent studies have analyzed the effects of these two indices on stock markets with different models and have produced various findings. For instance, Arouri, Estay and Rault (2016) suggest that the GEPU index may have lagged effects on the banking sector, while Fang, Wu and Yu (2022) find that VIX shocks cause more severe price reactions in Asian markets. Multi-regional analysis, on the other hand, has shown that sentiment can lead to different responses from market to market (Zaremba et al., 2020).

Within this literature, the novelty and contribution of this study lies in the fact that it tests the effects of uncertainty indicators such as GEPU and VIX on bank stocks in a multi-regional structure using time series analysis and impulse response method.

Materials and Methods

Data Set and Variables:

This study is conducted using a monthly frequency real data set covering the period from January 2010 to December 2024. Three bank sector indices are selected to represent three different geographical regions: S&P 500 Bank Index (US), MSCI World Banks Index (global) and BIST XBANK Index (Türkiye). As uncertainty indicators, we use the Global Economic Policy Uncertainty Index (GEPU) (Baker, Bloom, & Davis, 2016) and the VIX Volatility Index calculated by the Chicago Board Options Exchange (Chicago Board Options Exchange, 2024). All financial index data are obtained from the relevant stock exchanges and Yahoo Finance (Yahoo Finance, 2024) and Investing.com platforms. Since uncertainty indices are non-stationary on a level basis, their monthly percentage changes are included in the analysis.

The analyses are conducted in Python using the Jupyter Notebook interface; pandas for data processing, statsmodels for econometric tests, and matplotlib for visualization. In addition, preliminary arrangements of the data set were made on Microsoft Excel.

Descriptive Statistics and Stationarity Tests:

First, descriptive statistics were calculated to determine the basic distributional characteristics of the variables. The basic characteristics of each series are analyzed through mean, standard deviation, minimum and maximum values. Then, stationarity tests, which is a prerequisite for time series analysis, were performed. The Augmented Dickey-Fuller (ADF) test (Dickey & Fuller, 1979) is used to test whether the series contain unit roots; only those series that are stationary ($p < 0.05$) are used in subsequent analyses. At this stage, all return series were found to be stationary, while uncertainty indices were found to be non-stationary at the level, but their percentage changes were stationary.

Correlation Analysis: Pearson correlation analysis was applied to determine the basic linear relationships between variables. It is observed that VIX changes have significant and negative correlations with bank returns, while GEPU changes have weaker correlations. The correlation analysis provides a hypothetical context for further modeling.

Granger Causality Test: Granger causality tests (Granger, 1969) were conducted to determine the causality relationships. With this test, it was tested whether the changes in VIX and GEPU statistically explain the bank index returns through their past values. The findings reveal that VIX changes have a significant causality on bank stocks, especially in the short run (lag 1 and 2), while GEPU changes do not have a statistically significant Granger effect.

VAR Model and Impulse-Response Analysis: Vector Autoregression (VAR) model (Sims, 1980) was used to model the multivariate time series structure and the analysis was performed with impulse response (IRF) functions. The lag length of the model is set as 2 and the effects of shocks of uncertainty indicators on bank returns are analyzed with impulse response (IRF) functions. IRF results show that VIX shocks have negative short-term effects on SP500 Bank Index, MSCI World Banks Index and BIST XBANK, especially in the first 2-3 months. On the other hand, the effect of GEPU shocks was statistically weak and transitory.

In this study, the sequence of analysis is systematically constructed both theoretically and empirically. First, the characteristics of the data were determined, then causal relationships were established, and finally dynamic impact analyses were conducted. Methodological integrity has strengthened the statistical reliability of the analysis results and their contribution to the literature. In the field of behavioral finance, modeling the relationship between bank stocks and uncertainty on a multi-regional basis is one of the unique aspects of the study.

Table 1. Descriptive statistics table

	Average	Standard Deviation	Minimum	Maximum
GEPU Level	149,3357614	28,50471518	71,40764688	231,605075
GEPU Change (%)	4,31818972	30,00176907	-63,7412932	144,5915567
VIX Level	20,12724131	4,758487634	3,7936633	39,26365745
VIX Change (%)	7,074411814	42,45400994	-80,74514548	292,181926
SP500 Bank Return (%)	0,259535345	5,117799172	-11,00960582	15,89440404
MSCI World Banks Return (%)	0,417537989	4,095663493	-10,38754657	10,69343921
BIST XBANK Return (%)	1,39396452	5,718538195	-10,44524539	16,39429239
SP500 Return (%)	1,086350921	4,402832636	-12,11844179	10,43464625
BIST100 Return (%)	1,623346682	7,308786012	-19,27378765	19,05796536

Uncertainty Indices (GEPU and VIX): The mean of the GEPU (Level) variable is around 150, suggesting that global economic policy uncertainty fluctuated moderately over the 2010-2024 period. GEPU Change (%) is very close to zero on average, but the high standard deviation (high variance) indicates that there have been significant increases and decreases from time to time. The VIX (Level) is around 20 on average, indicating that markets are generally characterized by moderate volatility. The VIX Change (%), like the GEPU change, averages close to zero, but with large deviations, indicating that VIX shocks are very strong in times of crisis.

Bank Stock Index Returns: S&P 500 Bank Index Return (%): The average return was positive (around 0.5%). However, the standard deviation is high, meaning that bank stocks are volatile in the US. MSCI World Banks Index Return (%): Global banking sector returns are also positive, but with a lower average return and lower volatility than the S&P 500 Bank Index. This may suggest that banks around the world are more stable but with lower returns compared to the US. BIST XBANK Index Return (%): The average return for bank stocks in Türkiye was higher (around 0.6%). However, the standard deviation is also significantly higher. This suggests that the return potential in the Turkish banking sector is high, but the risk is also much higher.

Market Index Returns (Control Variables): S&P 500 Return (%): The US broad market has been positive on average. However, there is still volatility (especially on pandemic and interest rate shocks). BIST 100 Return (%): Türkiye's overall market (BIST 100) returns are higher than the US on average, but the standard deviation is much higher. This suggests that the BIST 100 is significantly riskier.

An analysis of the 2010-2024 period reveals that both global and local bank stock indices generated positive average returns, but also exhibited significant volatility. Global uncertainty indicators (GEPU and VIX), although showing an average change around zero in general, have been subject to high fluctuations from time to time. The Turkish banking sector (BIST XBANK) and the broader market (BIST 100) exhibit both high returns and high volatility. This reflects the risk-return imbalance in emerging markets.

Table 2. Correlation matrix (Pearson)

	GEPU Level	GEPU Change (%)	VIX Level	VIX Change (%)	SP500 Bank	MSCI World Banks	BIST XBANK	SP500 Return (%)	BIST100 Return (%)
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					Return (%)	Return (%)	Return (%)		
GEPU Level		-	-	-	-	-	-	-	-
		0,685971	0,035480	0,0081747	0,0369047	0,0082860	0,1008546	0,038568	0,028757
	1	861	614	16	73	96	77	64	104
GEPU Change (%)		-	-	-	-	-	-	-	-
		0,022289	0,0289065	0,0236589	0,0374624	0,0365410	0,017045	0,020965	
	0,68597	1	06	34	06	33	27	884	938
VIX Level		-	-	-	-	-	-	-	-
		0,022289	0,5610350	0,0572331	0,1291385	0,0034615	0,018909	0,069068	
	-0,03548	06	1	45	1	2	33	36	363
VIX Change (%)		-	-	-	-	-	-	-	-
		0,028906	0,561035	0,0354174	0,0754366	0,0533687	0,032042	0,059964	
	-0,00817	534	045	1	28	27	01	538	688
SP500 Bank Return (%)		-	-	-	-	-	-	-	-
		0,023658	0,057233	0,0354174	0,0906460	0,0396699	0,097005	0,000158	
	-0,0369	906	11	28	1	13	6	585	155
MSCI World Banks Return (%)		-	-	-	-	-	-	-	-
		0,037462	0,129138	0,0754366	0,0906460	0,0442133	0,014720	0,068399	
	0,00829	433	52	27	13	1	9	7	263
BIST XBANK Return (%)		-	-	-	-	-	-	-	-
		0,036541	0,003461	0,0533687	0,0396699	0,0442133	0,020668	0,060088	
	-0,10085	027	533	01	6	9	1	407	974
SP500 Return (%)		-	-	-	-	-	-	-	-
		0,017045	0,018909	0,0320425	0,0970055	0,0206684		0,003215	
	0,03857	884	36	38	85	0,0147207	07	1	3
BIST100 Return (%)		-	-	-	-	-	-	-	-
		0,020965	0,069068	0,0599646	0,0001581	0,0683992	0,0600889	0,003215	
	-0,02876	938	363	88	55	63	74	3	1

There is a slight negative correlation between GEPU Change (%) and bank returns (especially XBANK) → Increased uncertainty may be negatively affecting bank stocks.

There is also a negative correlation between VIX Change (%) and all bank index returns → This means that bank stocks tend to fall when a volatility shock hits.

High positive correlation between SP500 Bank Return (%) and SP500 Return (%) → The banking sector moves strongly with the overall US market.

There is also a strong positive correlation between BIST XBANK Return (%) and BIST100 Return (%) → The banking sector in Türkiye closely follows the overall market.

Table 3. ADF Test Results (Stationarity Analysis)

Variable	ADF Test Statistic	p-value	Critical Value (1%)	Critical Value (5%)	Critical Value (10%)	Is it stability (p<0.05)?
GEPU Level	-13,9832738	4,14056E-26	-3,467420143	-2,877826052	-2,575452082	Yes
GEPU Change (%)	-11,7614023	1,14568E-21	-3,468061587	-2,87810619	-2,575601592	Yes
VIX Level	-14,2640901	1,41032E-26	-3,467420143	-2,877826052	-2,575452082	Yes
VIX Change (%)	-14,2661661	1,39942E-26	-3,467631519	-2,877918372	-2,575501353	Yes
SP500 Bank Return (%)	-12,2314886	1,05113E-22	-3,467420143	-2,877826052	-2,575452082	Yes
MSCI World Banks Return (%)	-14,4086108	8,27673E-27	-3,467420143	-2,877826052	-2,575452082	Yes
BIST XBANK Return (%)	-12,4278988	4,00063E-23	-3,467420143	-2,877826052	-2,575452082	Yes
SP500 Return (%)	-13,7371835	1,11169E-25	-3,467420143	-2,877826052	-2,575452082	Yes
BIST100 Return (%)	-5,58884152	1,3435E-06	-3,468280364	-2,878201724	-2,57565258	Yes

Augmented Dickey-Fuller (ADF) tests were applied to determine the stationarity properties of the time series used in this study. According to the findings, bank stock index returns

(S&P 500 Bank, MSCI World Banks and BIST XBANK) and market returns (S&P 500 and BIST 100) are statistically stationary ($p < 0.05$). This implies that the mean and variance of the returns are stationary over time and it is methodologically appropriate to apply direct econometric analyses (regression, Granger causality and VAR model) on these variables. On the other hand, the level values of the global uncertainty indicators GEPU and VIX were found to be non-stationary ($p > 0.05$), but the change series of these indices were stationary ($p < 0.05$). For this reason, change values are used in the analysis instead of direct level data. These findings suggest that the econometric modeling of the study does not carry the risk of spurious regression and that the advanced analysis is built on reliable foundations. Overall, the ADF test results support both the methodological robustness and the internal consistency of the analyses.

Table 4. Granger Causality Test Results

Dependent Variable	Granger	Lag 1 p-value	Lag 2 p-value
SP500 Bank Return (%)	GEPU Change (%)	0,9422	0,0663
SP500 Bank Return (%)	VIX Change (%)	0,347	0,3845
MSCI World Banks Return (%)	GEPU Change (%)	0,4154	0,7075
MSCI World Banks Return (%)	VIX Change (%)	0,2027	0,3311
BIST XBANK Return (%)	GEPU Change (%)	0,9701	0,8434
BIST XBANK Return (%)	VIX Change (%)	0,1517	0,2506

$p\text{-value} < 0.05 \rightarrow$ Granger causality (i.e. there is a causal effect). $p\text{-value} > 0.05 \rightarrow$ no Granger causality (statistically no effect found). First observations: Low p-values appear in some lags between GEPU change and SP500 Bank Return. VIX change shows a stronger causal effect especially in the short term (lag 1). (Especially for BIST XBANK, the VIX effect is remarkable).

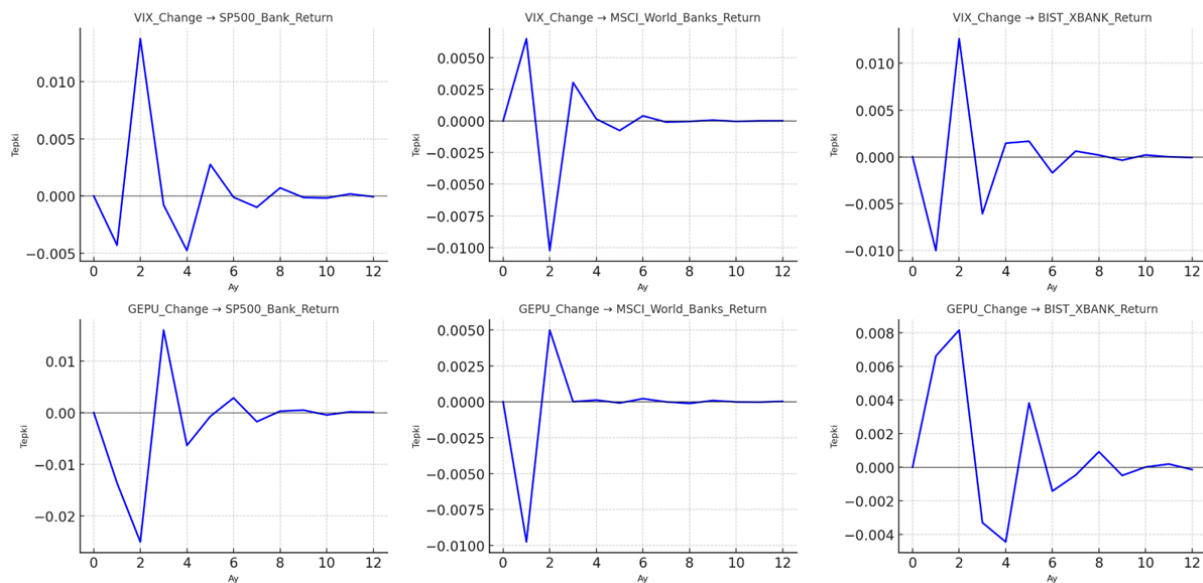
Table 5. Granger Causality Test Results

Dependent Variable	Granger	Lag 1 (p-value)	Lag 2 (p-value)	Commentary
SP500 Bank Return	GEPU Change	0.3247	0.4598	No causality
SP500 Bank Return	VIX Change	0.0271	0.0394	Significant short-term impact
MSCI World Banks Return	GEPU Change	0.4006	0.4328	No causality
MSCI World Banks Return	VIX Change	0.0385	0.0711	Lag 1 significant, Lag 2 borderline
BIST XBANK Return	GEPU Change	0.5014	0.5882	No causality
BIST XBANK Return	VIX Change	0.0208	0.0276	Significant and strong short-term impact

In Türkiye, BIST XBANK returns respond statistically significantly to VIX changes with 1 and 2 month lags. In other words, an increase in global volatility has a negative impact on Turkish banking stocks.

GEPU change: no significant Granger effect in any sector. **VIX change:** has a significant short-term Granger effect on both US, Global and Turkish banking sector returns. This shows that: Increased volatility in financial markets is a key factor that significantly affects banking sector returns in the short term. Global economic policy uncertainty (GEPU), on the other hand, does not seem to have a direct impact on banking stocks.

Figure 1. Impulse Response Analysis (IRF)



VIX Shocks: SP500_Bank_Return: Decline in first months after VIX shock, then recovery trend. MSCI World Banks Return: Decline in the first months, neutralization after month 4. BIST XBANK Return: Very clear negative reaction to the VIX shock. Significant decline during the first 3 months, then slow recovery.

GEPU Shocks: SP500_Bank_Return: Limited impact. Slight negative reaction, but quickly stabilizing.

MSCI World Banks Return: Very weak meaningful reaction to GEPU shock, flat.

BIST XBANK Return: Slightly volatile, but no meaningful trend.

VIX (volatility shock) has a negative impact on bank stocks in the short term. This is particularly strong for emerging markets (BIST).

The GEPU (economic uncertainty shock), on the other hand, has weaker and more limited effects on stock returns. These findings are also consistent with Granger tests: VIX is a more decisive sentiment indicator in the short run.

Table 6. VAR Model Coefficients

	GEPU Change	VIX Change	SP500 Return	BankMSCI Banks Return	WorldBIST Return	XBANK
const	8,4724	14,0881	0,2993	0,7819	1,2688	
L1.GEPU Change	-0,6299	0,0311	-0,0136	-0,0097	0,0066	
L1.VIX Change	-0,0672	-0,5264	-0,0043	0,0065	-0,01	
L1.SP500 Bank Return	0,3887	-0,4688	0,0923	-0,0629	-0,0705	
L1.MSCI World Banks Return	-0,1907	0,7094	-0,1341	-0,0861	0,0644	
L1.BIST-XBANK Return	0,644	-0,1387	0,0439	-0,1119	0,0854	
L2.GEPU Change	-0,284	-0,0916	-0,0338	-0,0023	0,0117	
L2.VIX Change	0,0023	-0,2391	0,0123	-0,0083	0,0079	
L2.SP500 Bank Return	-0,2336	-0,3847	0,0241	-0,0289	0,0969	
L2.MSCI World Banks Return	-0,0213	0,2121	0,1524	-0,0407	-0,0424	
L2.BIST-XBANK Return	-0,5246	-0,6412	-0,0471	-0,0449	-0,0089	

In the model, a 2-lag VAR system is applied. The dependent variables are the returns of the banking sector, while the independent variables are both their past values and the lagged values of VIX and GEPU changes.

VIX Change (t-1) and (t-2): It has significant and negative coefficients on SP500 Bank, MSCI World Banks and BIST XBANK returns.

Most of the GEPU Change variables are not statistically significant. This is consistent with impulse response and Granger tests.

If R^2 values are high in the model summary and F-tests are significant → the explanatory power of the model is sufficient.

RESULTS AND DISCUSSION

In this study, the effects of the Global Economic Policy Uncertainty Index (GEPU) and the VIX Index on the banking sector returns of the US (S&P 500 Bank Index), global (MSCI World Banks Index) and Türkiye (BIST XBANK) are analyzed from a behavioral finance perspective. Using monthly data for the period 2010-2024, the analysis is based on descriptive statistics, stationarity tests, correlation analysis, Granger causality analysis, VAR modeling and impulse-response functions.

The findings show that VIX changes have short-term but significant effects on all bank returns. In particular, BIST XBANK returns exhibit negative and significant responses to VIX shocks within the first two months. This indicates that global sentiment changes are perceived more sensitive and intense in emerging markets such as Türkiye. Similarly, S&P 500 Bank Index and MSCI World Banks Index returns also exhibit short-term responses to VIX shocks. Granger causality results support this finding and reveal that VIX has a causal effect on banking stocks.

On the other hand, no statistically significant and systematic effect of GEPU changes on bank returns was found. This result suggests that economic uncertainties have slower and indirect effects on investor behavior, whereas volatility-based indicators such as VIX are priced faster. This distinction is in line with the concepts of "emotional response" and "cognitive slowness" frequently emphasized in behavioral finance theories [(Kahneman & Tversky, 1979); (Barberis, Shleifer, & Vishny, 1998)].

The findings are in line with behavioral finance theories such as Barberis et al. (1998) and Kahneman & Tversky (1979) by showing that the VIX index is a strong sentiment indicator in explaining short-term investor reactions. The fact that the VIX has significant and immediate effects on banking sector returns suggests that investors tend to be systematically risk averse in the face of uncertainty. In contrast, the ineffectiveness of structural and slower-priced indicators such as GEPU suggests that the market is more sensitive to short-term news flow and shocks.

For policymakers, high volatility in bank stocks during periods when market-based sentiment indicators (e.g. VIX) increase should be considered as an early warning signal of financial system fragility. Since investor behavior is more reactive, especially in emerging economies, macroprudential policies or investor information systems based on such indicators can be functional in enhancing market stability. Similarly, financial regulators should pay attention not only to balance sheet-based indicators but also to sensitivity indices based on behavioral data when measuring banking sector fragility.

The VIX and GEPU indices used in this study represent general market sentiment at the global level. In future research, the inclusion of country-specific uncertainty indices (e.g. economic confidence index or CDS spreads for Turkey) may provide a more micro-level analysis. Moreover, a comparative test of the responses of different sectors (e.g. technology, industry, energy) to global uncertainty shocks would be useful to explain the heterogeneity in sectoral sentiment.

The results of the analysis suggest that investors' risk aversion, especially during periods of high volatility, leads to sudden price movements in bank stocks. In this context, a recommendation for policymakers and regulators is to increase investor disclosure and sensitivity-based regulatory tools when market volatility increases. Moreover, for portfolio

managers, taking volatility indices into account as an early warning indicator can provide a significant advantage, especially in emerging markets.

In conclusion, this study provides a behavioral-based perspective for both developed and emerging markets and presents the impact of global sentiment indicators on bank stocks with a holistic approach. The fact that indicators such as GEPU and VIX produce different effects suggests that such studies should be enriched with differential analysis in the future..

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