

## THE IMPACT OF FINANCIAL STABILITY AND ECONOMIC FREEDOMS ON ECONOMIC GROWTH: EVIDENCE FROM DEVELOPING COUNTRIES WITH NEW QUANTITATIVE MODELS<sup>1</sup>

Lec. Nazlı TEKMAN (Ph.D.)<sup>\*</sup> 

### ABSTRACT

*This study examines the effect of financial stability and economic freedom levels of developing countries on economic growth. A financial stability index was calculated in this study to represent the financial stability of developing countries, whereby the Heritage Foundation "Economic Freedom Index" was used to represent their economic freedom. Econometric analyzes were conducted within the framework of the 2000-2020 period in 16 developing countries of the upper-middle income bracket. As a result of the models estimated utilizing the Moment Quantile Regression Method (MM-QR), it was observed that the effect of economic freedom and financial stability on economic growth is positive and statistically significant for the country group. These research findings hold significant implications for policy makers, economists and researchers.*

**Keywords:** *Economic Growth, Financial Stability, Economic Freedom, Moment Quantile Regression Method (MM-QR).*

**JEL Codes:** *A19, B40, C40.*

### 1. INTRODUCTION

There is a strong relationship between financial stability and economic growth. Financial stability is an important factor that supports economic growth. Ensuring financial stability encourages investment and consumption activities in the economy by increasing the effective functioning of financial markets and the confidence of investors. Financial stability has many economic effects, such as increasing entrepreneurial activities, ensuring economic growth and development, reducing poverty and improving income inequality. On the other hand, economic growth can also support financial stability. Economic growth can reduce the credit risk of banks by increasing the profitability of businesses and thus boost the integrity of the financial system. Moreover, increasing income levels along with economic growth can provide more resources to the financial system by boosting individual savings. Therefore, the relationship between financial stability and economic growth is reciprocal and both are important for sustainable development (Dienillah, Anggraeni, and Sahara, 2018). Sound, effectively functioning

<sup>1</sup> This article is derived from the author's doctoral thesis.

<sup>\*</sup> Osmaniye Korkutata University, Osmaniye Vocational School, Osmaniye/ Türkiye, E-mail: nazlitekman@osmaniye.edu.tr.

#### **Makale Geçmiři/Article History**

Başvuru Tarihi / Date of Application : 26 Eylül / September 2023

Düzeltilme Tarihi / Revision Date : 18 Kasım / November 2023

Kabul Tarihi / Acceptance Date : 5 Aralık / December 2023

financial systems contribute to economic growth by ensuring the transfer of funds to productive investment projects. It is emphasized that when the economy has healthy financial activities, it will create capital inflows to develop its industries and reduce external dependencies, thus contributing to economic growth. Financial stability can affect economic growth through three different channels. The first channel, stability, reduces uncertainty about the underlying value of an asset. This makes investors more prone to higher investment levels when financial stability is present. The second channel is that whenever there is stability, asset prices become less volatile, leading companies to invest more during these periods. The third channel is that, whenever financial stability occurs, it improves credit conditions, facilitating people's access to credit and positively affecting economic growth. Similarly, when financing is stable, financing costs are lower, which means lower financing expenses for households and companies, but this lower financial cost causes households and companies to spend more, leading to greater economic growth (Carbó-Valverde and Sánchez, 2013).

In their studies, Bauducco, Bulir and Cihák (2008), and Hakkio and Keeton (2009) examined the effects of financial stress on economic performance. They pointed out that financial instability can also affect economic growth through three different channels. The first is the increased uncertainty regarding the value of assets and the behavior of investors in periods of increased fundamental and financial instability. With these two uncertainties, the volatility in asset prices increases and pushes companies to be more cautious in their investment decisions until the uncertainty disappears. Furthermore, households tend to reduce spending in times of financial instability, as uncertainty also affects the expected value of their future wealth. As a result, the reactions of these two agents cause a decrease in economic output. The second channel through which financial instability can affect economic activity is through worsening borrowing conditions due to tightening credit standards. When financial institutions raise minimum credit standards, it becomes difficult for borrowers to obtain funds and, as a result, there is a negative impact on economic growth (Carbó-Valverde and Sánchez, 2013).

One way to deal with the effects of financial instability on growth is to assume a non-linear relationship between economic growth and financial stability. In this regard, Acemoglu and Zilibotti (1997) offer a theoretical framework that relates the degree of imperfection in the market to capital accumulation and growth. Similarly, Deidda and Fattouh (2002) present a theoretical model establishing a non-linear relationship between economic growth and financial development and support their hypotheses by applying a threshold regression model.

Since the beginning of the development of economics, freedom has been regarded the fundamental feature of an economic entity. Since Adam Smith, one of the pioneers of economics, it has been stated that one of the most important factors determining the wealth of nations and economic welfare of countries is “economic freedom.” Economic freedom is an essential element of social justice and prosperity. Exercised in democracy and protected by the rule of law, individual free will is a fundamental element necessary for productive economic and social development. Freedom is deemed

necessary in order to develop a market economy for sustained economic growth, prosperity, social justice, increased employment and efficient use of economic resources. Economically freer countries are richer than others. A number of recent empirical studies have found that economic freedom plays an important role in explaining cross-country differences in economic performance (de Vanssay and Spindler, 1994; Nelson and Singh, 1998; de Haan and Siermann, 1998).

Economic freedom forms the basis of growth and income distribution (Berggren, 2003). Economic freedom activates the dynamics of economic growth and development, leading the economy to reach a natural balance without any external intervention; It directs the free market mechanism by allowing individuals in society to make and implement economic decisions freely. A country with more economic freedom intervenes less in the system and maximizes individual welfare. Thus, the dynamics of economic growth direct the economy to a natural balance; It enables individuals to make economic decisions in line with their wishes. Economic freedom is also important in terms of ensuring macroeconomic stability, balance of payments, long-term capital accumulation increases and national welfare level (Taş 2018).

Another mechanism that stimulates the process of economic freedom and economic growth is financing. The main focus is on ensuring that both domestic and foreign investors can operate freely; As a result, it accelerates economic growth by facilitating savings and simplifying investments in developed financial markets. The liberal financial system accelerates the increase in the volume of savings and encourages more efficient use of physical capital by increasing both its volume and efficiency, thus contributing to economic growth (Luintel and Khan, 1999).

Emphasized as an important factor in ensuring macroeconomic stability, economic freedom brings with it a stable economy, with inflation rates being low and predictable, interest rates being set to meet the country's needs, and exchange rates being at high levels. In parallel with this economic structuring, the volume of savings increases, long-term capital accumulation increases and the welfare of the country is maintained, investments for the future increase, capital accumulation increases and efficiency in resource distribution is achieved. Depending on the combination of the aforementioned factors, the growth process accelerates and gains sustainable momentum.

This study aims to determine the direction of the relationship between economic growth, economic freedom and financial stability in developing countries and to present it to policy makers for observation. A financial stability index was obtained by including certain indicators in the indicator sets developed by international organizations. While the financial stability index provides the opportunity to make comparisons both between different financial systems and periods, it also provides the opportunity to observe the direction of the stability level. In the study, a financial stability index was calculated to represent the financial stability of developing countries, whereas the Heritage Foundation's "Economic Freedom Index" was incorporated to represent their economic freedom. Econometric analyzes were

conducted within the scope of the 2000-2020 period of 16 developing countries belonging to the upper-middle income group.

## **2. SCANNING LITERATURE**

Empirical studies that test the impact of financial stability often involve the use of cross-country studies in order to comprehend the relationship between financial stability and growth. The main findings of these studies show that cross-country differences in financial stability levels account for a significant portion of cross-country differences in growth rates (Khan and Senhadji, 2003). Studies examining the relationship between economic growth and financial stability are found in Table 1.

There is much literature available regarding the impact of economic freedom on growth. When the empirical literature is examined, many studies try to estimate the impact of economic freedom on economic growth and income distribution. Although it is widely believed economic freedom has a positive effect on economic growth (Easton and Walker, 1997; de Haan and Siermann, 1998; Dawson, 2003), there are different results when it comes to the effect of economic freedom on income distribution (Gruebel, 1998; Berggren, 1999; Scully, 2002). Additionally, the effect of economic freedom on other indicators was examined, whereby it was revealed that as economic freedom expands, all indicators such as quality of life, education levels, average life expectancy, human development and environmental protection improve (Esposito and Zaleski, 1999). Generally speaking, it is believed that more economic freedom has a positive effect on economic performance (de Haan and Sturm 2000; Adkins et al. 2002; Bengoa and Sanchez-Robles 2003; Farhadi et al. 2015). Studies regarding the interdependence between economic freedom and economic growth are provided in Table 2.

**Table 1. Studies Examining the Relationship Between Economic Growth and Financial Stability**

Author (Year)	Period, Country/Region/ Organization	Financial Stability Indicator	Economic Growth Indicator	Method	Result
Cardarelli, Elekdag, Lall (2009)	1980-2009 17 developed nations	Indicators selected from the banking sector, stock market and foreign exchange market	Growth Indicators	Graphical analysis	Financial stress is one of the important indicators of economic contraction.
Hakkio and Keeton (2009)	1990-2009 Kansas	11 indicators representing key characteristics of financial stress	GDP	OLS	The created index determines the financial stress periods of the index and provides a prediction in terms of future economic growth.
Dhal, Kumar and Ansari (2011)	1996-2013 India	(CAMEL) indicators	GDP	Vector Auto Regression (VAR)	As a result of the study, it was determined that there was a positive relationship between financial stability and economic growth.
Albulescu (2012)	1999-2011 Euro zone Countries	Financial stability indices (Financial soundness, fragility and development index)	Growth rate in GDP Inflation rate Interest rate budget deficit	Regression Analysis	In this study where the financial stability index for the Euro zone was calculated, one of two variables with the most impact on financial stability is the growth rate in GDP (positively), with the other being the interest rate (negatively).
Enowbi and Mlambo (2012)	1985-2010 41 African countries	Domestic credit provided by banks, credit and liquidity obligations provided to the private sector, money supply, interest rate	GDP per capita and GDP per capita growth	Dynamic Panel Regression Model	Financial instability has been found to have a negative impact on economic growth.
Enowbi and Kupukile (2012)	1985-2010 41 African countries	Financial instability, financial development, financial liberalization	Real GDP	Dynamic Panel Data Analysis	Financial openness increases financial development; However, they concluded that financial instability negatively affects economic growth.
Carbó-Valverde and Sánchez (2013)	1980-2009 Germany, Norway and Spain	Z- score	GDP	VAR Model	It was concluded that the production level increased in Germany and Spain in periods when the z score was high, whereby no significant result was obtained for Norway.
Narayan (2013)	1995-2011 65 countries: Asia, Europe, Middle East, Central and South America, African countries	Gross fixed capital formation, inflation, trade deficit, market value of publicly traded companies, stocks.	GDP growth rate	GMM	At the regional level, evidence for Middle East countries shows that neither the financial sector nor the banking sector contributes to growth. Outside Asia, the role of financial sector development on economic growth is relatively weak. Except for Middle Eastern countries, evidence has been found that bank loans have a statistically significant and negative impact on economic growth.

Çevik, Diboğlu, Kenç (2013)	1997:01-2010:03 Turkey	Nine indicators representing financial stress	Growth rates of industrial production index, foreign trade and gross fixed capital	VAR Analysis, Granger Causality Analysis	The financial stress index has an impact on economic activities, and there is a one-way causality relationship from the financial stress index to economic activity indicators.
Creel, Hubert and Labondance (2014)	1998-2011 European Union member countries	Private sector loans, bank z score, volatility of stock price index, ratio of non-performing loans to gross loans,	GDP, per capita real disposable income growth rate, per capita household consumption growth rate	Dynamic Panel Regression Model	Financial instability was found to have a negative impact on economic growth.
Karamelikli and Bayar (2016)	2005-2015 Turkey	Loans given to the private sector and receivables to be liquidated by banks	Industrial production index	ARDL Boundary Test	It was determined macroeconomic stability and financial stability must be ensured in order for economic growth to be sustainable in the long term.
Kaya and Kılınç (2016)	2002:08-2015:09, Turkey	CDS, stock market returns, interbank borrowing cost, EMPI	Industrial production index, foreign trade and domestic credit utilization rate	VAR Analysis, Action-Response Functions, Granger Causality Analysis	The financial stress index is successful in reflecting crises and there is a significant relationship between financial stress and economic activity.
Younsi and Nafla (2017)	1993-2015, 40 industrial and developing countries	Trade deficit, capital account deficit, foreign direct investment, financial crises, bank liquid reserves, non-bank loans	GDP	Panel Data Analysis	It was determined trade deficits, capital account deficits and FDI have positive effects on economic growth in developed countries, while financial crises, bank liquid reserves and non-bank loans negatively affect financial stability, financial development and economic growth. No significant results were obtained for developing countries.
Aksu (2017)	2007Q2-2015Q4 Turkey	Financial Stability index (Financial fragility, resilience, development, flexibility, macroeconomic flexibility and global risk)	Growth Rate	ARDL Boundary Test	It was determined the financial stability index moves positively with the growth rate and negatively with the inflation rate over the long term.
Çalışkan (2018)	2002-2014 Turkey	External debt stability, Exchange rate stability, Debt service stability, Current account balance stability, International liquidity stability,	GDP	Johansen Cointegration and Vector	It is concluded that the financial stability achieved in the relevant period supports economic growth in the long term.

				Error Corr. Mod	
Nasreen and Anwar (2018)	1980-2012 Five South Asian economies	Financial stability index (Financial sector development, fragility and banking soundness)	Human Development Index	Panel Data Analysis	It was determined is a positive and statistically significant relationship exists between economic development and financial stability.
Sönmez and Uysal (2018)	2000-2016 BRICT countries	Financial instability index	% change of Gross Domestic Product (GDP) at constant prices	Generalized Method of Moments (GMM)	As a result of the study, it was determined financial instability negatively affects economic growth.
Tevkür (2020)	2000-2017 37 developing countries	Bank Z-Score, Stock Price Volatility, Banking Crisis Model	GDP per capita	Panel Data Analysis	An increase in the banking Z-Score increases economic growth, while an increase in stock price volatility reduces economic growth.
Ozili, Iorember (2023)	2011-2018 26 countries	Financial Stability Index	Sustainable Development Index and four development indicators	System GMM Method	The findings of the sustainable development index analysis show that financial stability has a significant impact on the level of sustainable development in Asian countries and the impact is negative. European and Asian countries have a high sustainable development index compared to African countries.

**Table 2. Studies Examining the Relationship Between Economic Growth and Economic Freedoms**

Author (Year)	Period, Country/Region/ Organization	Economic Freedom Indicator	Economic Growth Indicator	Method	Result
De Vanssay and Spindler (1994)	1985-1988 100 countries	Index of Economic Freedom	GDP per capita	Panel Data Analysis	There is a positive relationship between economic freedom and economic growth. They defended the view that the economically libertarian system was the source of economic growth.
Barro (1994)	1960-1990 100 countries	Rule of law, market freedom, size of government	GDP	Panel Data Analysis	Positive impacts on growth include maintaining the rule of law, free markets, small government consumption and high human capital.
Torstensson (1994)	1976-1985 68 countries	Property rights	GDP	Nedensellik Testi	He finds that the degree of state ownership does not appear to affect growth rates. However, arbitrary confiscation of property negatively affects growth.
Nelson and Singh (1998)	1970-1989 67 developing countries	Price stability, government size, discriminatory taxation and trade restrictions	GDP GNP	Panel Data Analysis	The authors conclude that economic freedom has a significantly positive impact on economic growth.
de Haan and Sturm (2000)	1975 - 1990 80 countries	GDP per capita	GDP per capita	Regression Analysis	More economic freedom promotes economic growth, but the level of freedom is not associated with growth.
Carlsson and Lundström (2002)	1975 -1995 74 countries	Economic Freedom Index and 6 different freedom variables	GDP per capita	Panel Data Analysis	There is a positive and significant relationship between economic freedom and GDP growth. Six important economic freedom variables were identified, four of which were positively related to growth and two were negatively related to growth.
Karabegovic et al. (2003)	1993-1999 Canada and USA	North American Economic Freedom index	GDP per capita	Regression Analysis	It shows that growth in economic freedom and the level of economic freedom have a significant impact on the growth in GDP per capita and the level of GDP per capita.
Vega-Gordillo and Alvarez-Arce (2003)	2000-2009 EU members	Index of Economic Freedom	GDP per capita	Panel Granger Causality Test	It has been concluded that economic freedom promotes economic growth.



Onur (2005)	1980-2003 Turkey	Capital Movements	GNP	Granger Causality Test	It explains that long-term financial liberalization and financial growth sustain economic growth.
Swaleheen and Stansel (2007)	1995-2004 85 countries	Index of Economic Freedoms	GDP	Panel Data Analysis	There is a positive relationship between economic freedom and economic growth. However, as the level of corruption increases, this relationship weakens.
Azman-Saini, Baharumshah, and Law (2010)	1975 -2004 85 countries	Index of Economic Freedom	GDP per capita	System GMM	Economic freedom has been found to be an important impetus of long-term growth for the countries considered.
Gurgul and Lach (2011)	2000-2009 10 European Union countries	Index of Economic Freedom	GDP per capita	Granger Causality Test	It has shown that although economic freedom is one of the factors affecting growth, economic growth has little impact on economic freedom.
Piatek et al. (2013)	1990-2008 Developing countries	Index of Economic Freedom	Annual rate of change in real GDP per capita	Causality Test	The level of economic freedom, which has an impact on economic growth in developed countries, has had a positive impact on the pace of economic growth.
Panahi et al. (2014)	2000-2009 13 MENA countries	23 different components were used.	GDP	Panel Data Analysis	It was ascertained that the economic freedom index has a positive effect on growth. However, it was also stated that some categories were ineffective and some important variables had negative effects.
Farhadi, İslam and Moslehi (2015)	1970–2010 99 countries	Index of Economic Freedom	Total factor productivity	System GMM Estimates	It was concluded that economic freedom promotes economic growth in resource-rich countries.
Foley and Clark (2016)	2003-2010 OECD countries	Index of Economic Freedom	Taxes as a percentage of GDP	Panel fixed effects model	A high level of economic freedom increases economic growth.
Góes (2016)	2000-2012 119 developed and developing countries	Index of World Economic Freedom	GDP per capita	Panel Structural Vector Autoregression (SVAR)	Improvements in institutional quality have a positive and statistically significant impact on GDP per capita.

Coetzee and Kleynhans (2017)	1995-2016 South Africa	Index of Economic Freedom, Index of World Economic Freedom Index of World Freedom	GDP	Granger Causality, Regression Analysis Vector Auto-regression Model (VAR)	Research findings from South Africa support the literature by suggesting that higher levels of economic freedom in a country support higher rates of economic growth.
Taş (2018)	2000–2013 30 natural resource rich countries and 34 OECD countries	Economic freedom and its determinants	Total factor productivity	Panel Regression Method	There is a positive relationship between economic freedom and its determinants and total factor productivity growth.
	1980-2014 20 natural resource rich countries and 34 OECD countries	Economic Freedom, Human Capital, Intra-Industry Trade and Foreign Direct Investment	Total Factor Productivity growth	Panel Data Analysis	A significant relationship was seen between Total Factor Productivity and the independent variables, but in natural resource rich countries, the foreign direct investment variable is insignificant. Economic
	1995-2014 OECD, EU and D7 countries	Economic Freedom	Savings Rate and Labor	Panel Data Analysis	It shows there is a significant relationship between economic freedom and per capita growth.
Mavrakana and Psillaki (2019)	2004–2016 18 European countries	Fraser index of economic freedom credit, labor and labor market regulation	ROA ROE Z-Score	Panel Data Analysis GMM Estimates	It was concluded that economic freedom increases bank performance and contributes to financial stability and soundness.
Kouton (2019)	1996–2016 30 sub-Saharan African countries	Index of Economic Freedom	GDP per employed person at Purchasing Power Parity	System GMM Estimate Panel Causality Test	The results reveal that the level of economic freedom and change in the level of economic freedom have a positive and significant effect on inclusive growth.
Ahmed and Ahmad (2020)	1995-2018 34 Asian countries	Political rights and civil liberties	GDP	Fixed Effects Model and GMM	Economic freedom has a positive and significant effect on economic growth. Political rights and civil liberties have an optimistic and significant impact on economic growth.

Brkić, Gradojević and Ignjatijević (2020)	1995-2014 43 developing and developed European countries	Index of Economic Freedom	GDP per capita	Least Squares Dummy Variable (LSDV) Model	They concluded economic freedom has a positive effect on economic growth.
Göçen (2021)	1996-2019 8 countries (D8 countries)	Index of Economic Freedom	GDP per capita	Granger Causality Test	It was concluded that economic freedom was the Granger cause of economic growth for seven countries and that there was a causality relationship from economic growth to economic freedom for one country.
Akinbo (2021)	1960-2020 Africa	Index of Economic Freedom	GDP per capita	Multiple Regression Analysis	Economic growth increases with economic freedom and there is a positive relationship between them.
Taş and Ulusoy (2021)	1995-2014 159 countries	Index of Economic Freedom	GDP	Least Squares Method	They concluded that there is a significant relationship between economic freedom and per capita growth.
Mohammedi, Shayanmehr and Borrero (2023)	2000-2019 European countries	Total Index of Freedom	GDP per capita	Panel Data Analysis	While civil liberties, economic and press freedom, and collective freedom increase economic growth, political rights do not have a significant impact on economic growth.

### 3. DATA SET, MODEL AND EMPIRICAL METHOD

The GDP Per Capita indicator is frequently used whenever examining economic growth in the literature with the objective of examining the impact of financial stability and economic freedom indicators of developing countries upon economic growth in developing countries. A financial stability index with financial fragility, financial soundness and financial development sub-indices was used to represent financial stability, and an economic freedom index was used to represent economic freedom. Moreover, included in the model were fixed capital investments, which are frequently used as control variables when examining the impact of financial stability and economic freedom levels on economic growth, and health expenditures to represent labor and human capital variables.

Variables used to determine the financial stability level of each country within the scope of the study are based on studies in the literature (Dienillah, Anggraeni and Sahara, 2018; Karanovic and Karanovic, 2015; Nasreen, Anwar and Shahzadi, 2015; Aktaş, 2011; Nasreen, Anwar and Öztürk, 2017; Albulescu, 2010; Albulescu, 2012) and take into account the availability of data on these variables for the countries within the scope of the study.

The analysis was conducted within the scope of a double logarithmic model in order to see the effects of financial stability and economic freedoms. A quantile regression model developed to examine the impact of economic freedom, financial stability and other explanatory variables on economic growth is shown in equation 1:

$$QLNGDP_{it}(\tau|\alpha_i, X_{it}) = \alpha_i + \beta_1\tau LNOZG_{it} + \beta_2\tau LNFIST_{it} + \beta_3\tau LNSERM_{it} + \beta_4\tau LNSHARC_{it} + \beta_5\tau LNISGL_{it} + \mu_{it} \quad (1)$$

In the equation,  $i$  and  $t$  denote the country and year respectively,  $\alpha$  denotes the fixed effect in the  $\tau$  quantile for individual  $i$ , and  $\mu$  denotes the error term. While  $LNGDP_{it}$  represents the dependent variable economic growth,  $LNOZG_{it}$  and  $LNFIST_{it}$  represent the key independent variables representing economic freedom and financial stability,  $LNSERM_{it}$  represents capital investments;  $LNSHARC_{it}$ , health expenditures;  $LNISGL_{it}$  shows the labor control variables.

The panel quantile regression method renders it possible to detect distributional heterogeneity in the relationship between variables. Although this method also takes into account unobservable individual heterogeneity, it provides effective results in terms of eliminating random parameters of the estimate. It was also preferred because it gives results that are resistant to heteroscedasticity, outliers and non-normal distributions. Thus, it is possible to investigate the conditional heterogeneous covariance effects of the determinants of economic growth in different quantities of the distribution.

The variables used and their theoretically expected effects are shown in Table 3.

**Table 3. Variables Used and Their Theoretically Expected Effects**

Variables of the Model			
Variable	Definition	Data Source	Theoretically Expected Effect
Economic Growth	GDP per capita, 2010 at constant prices (in US dollars) (GDP)	World Bank	
Financial Stability Index	Financial Stability Index (FIST)	Calculated by the author.	+
Index of Economic Freedoms	Index of Economic Freedom (OZG)	Heritage Foundation	+
Capital (Fixed Capital Investments)	Gross capital formation to GDP (% of GDP) (SERM)	World Bank	+
Labor	Total Workforce (ISG)	World Bank	+
Human Capital	Health expenditure per capita (% of GDP) (SHARC)	World Bank	+

### 3.1. Descriptive Statistics

Descriptive statistics of the variables are presented in Table 4. Table 4 shows the minimum and maximum values for the series along with the means and standard deviations.

**Table 4. Descriptive Statistics**

Variable	LNGDP	LNOZG	LNFIST	LNSERM	LNISGL	LNSHARC
No. of Observations	336	336	336	336	336	336
Average	8.539	4.090	-1.032	3.126	16.355	1.749
St Deviation	0.589	0.117	0.238	0.264	1.775	0.244
Minimum	6.866	3.638	-1.791	2.603	13.269	1.107
Q1(.25)	8.183	4.023	-1.206	2.948	15.025	1.600
Q3(.75)	8.795	4.176	-0.872	3.274	17.485	1.913
Maximum	9.679	4.277	-0.424	3.796	20.500	2.261
Skewness	-0.605	-0.970	-0.222	0.515	0.449	-0.213
Kurtosis	2.801	3.801	3.252	3.012	2.720	2.813
Jarque-Bera				31.35*** (0.000)		
VIF (ort)				1.44		
VIF	-	1.14	1.77	1.30	1.14	1.30

**Note:** The value in parentheses shows the probability value. \*\*\* indicates significance at the 1% significance level.

According to the statistics presented in Table 4, it is observed the share of economic growth in 16 developing countries in the period 2000 - 2020 was at the highest level of 9.67 and the lowest at 6.86. The proportional difference between the highest and lowest values for economic growth indicates there is no homogeneous distribution amongst countries.

Similarly, the Jarque-Bera Test indicates that the unconditional distribution is not normal, rejecting the normality hypothesis for all variables at the 1% significance level. Furthermore, the average value of the variance inflation factor (VIF) applied to test the existence of multi-collinearity is 1.44, and the fact VIF values are less than five for all variables confirms there is no multi-collinearity problem between the independent variables. It was assumed that there was no multi-collinearity between the variables concurrent to the findings.

### 3.2. Cross Section Dependency Test

Another basic assumption in panel quantile regression analysis is cross-sectional dependence. There is cross-section dependence if a shock occurring in one of the variables constituting the panel data also affects the other variables. Findings obtained from analyzes without taking cross-sectional dependency into account may contain spurious relationships. Since the time dimension of the study was greater than the cross-sectional dimension, the cross-sectional dependency of the variables was investigated with Breusch-Pagan LM tests. Analysis results are shown in Table 5.

**Table 5. Cross-Section Dependency Test Results (Breusch Pagan, N<T)**

Variable	Breusch Pagan Test	Probability Value
LNGDP	2042.025***	0.000
LNOZG	627.838***	0.000
LNFIŞT	360.302***	0.000
LNSERM	581.394***	0.000
LNİŞG	1734.422***	0.000
LNSHAR	700.124***	0.000

**Note:** \*\*\* indicates significance at the 1% significance level.

Findings obtained from Table 5 indicate that the basic hypothesis established with the assumption there is no cross-sectional dependence in line with the Breusch Pagan Test is rejected. Therefore, it is understood there is cross-sectional dependence in both the variables and the models created. These results show unit tests that take cross-sectional dependency into account should be used in unit root analyses. Based on the existence of strong cross-sectional dependence, unit root analysis is performed cross-sectionally.

### 3.3. Panel Unit Root Test

Panel unit root tests are examined under two headings; ‘First Generation’ and ‘Second Generation.’ This distinction is made as per whether the tests take cross-sectional dependency into account; while First Generation tests do not take cross-sectional dependency into consideration, Second Generation tests make predictions by accounting for cross-sectional dependency. In the study, unit root analysis was conducted using one of the Second Generation unit root tests, the Cross-sectionally Augmented Dickey-Fuller (CADF) test developed by Pesaran (2007). CIPS statistics calculated by taking the average of the statistics calculated for cross-section units in the CADF test are provided in Table 6.

**Table 6. CADF Unit Root Test Results (CIPS Test)**

Variable	CIPS Statistics	Critical Values	
LNGDP	-2.441***		
LNOZG	-2.116*		
LNFIŞT	-2.711***	1%	-2.380
LNSERM	-2.406***	5%	-2.200
LNİŞG	-2.856***	10%	-2.110
LNSHAR	-2.145*		

**Note:** \*\*\* and \* indicate significance at the 1% and 10% significance level, respectively.

The CIPS statistics in Table 6 show that all variables included in the models created within the upper-middle income group are stationary at their level values. Concurrently, said variables were included in the models created within the scope of the upper-middle income group. It was estimated using long-term coefficients, and since all variables were stationary at level, there was no need to perform a cointegration test.

As a result of the basic assumption tests, it was observed that the model had normal distribution, heteroskedasticity and cross-sectional dependency problems for both country groups. As a result of the applied preliminary tests, it was determined there was a normal distribution problem, and the model estimation allowed the analysis of the conditional distribution of the explanatory variables of the estimates in accordance with the panel data structure which provides robust estimates in order to take the normal distribution problem into consideration and examine the effect of the freedom index and financial stability index in particular at different development levels, whereas an effective panel quantile regression estimator (MM-QR) was used. Thus, non-normal distribution and possible unit effects were taken into account.

### **3.4. MM-QR Fixed Effects Panel Quantile Regression Results**

Although the study aims to examine the heterogeneous effects of capital investments, labor force and human capital, along with explanatory variables, on economic growth in different quantiles, findings regarding the MM-QR method, Least Squares (LS) and Fixed Effects Model (FEM) methods used in order to present the comparative results of the preferred analysis method as a result of preliminary examinations are also included.

Table 7 presents the regression estimation findings of the Least Squares (EKK), Fixed Effects Model (SE) and Moment Quantile Regression Method (MM-QR) pertaining to the model. While findings obtained from LCM and SE estimations provide important information, as previously stated, traditional LCM estimators can only provide a partial view of the empirical relationship between variables because they focus on average effects by their nature Least Squares (LSM) and Fixed Effects Model (SE) are overly simple because they do not assume changes in the level of the dependent variable. To overcome this methodological shortcoming, the current study contributes to the application of the MM-QR approach with fixed effects introduced by Machado and Silva (2019), determining the impact of the selected economic growth variable on its changing level over a large number of quantiles, while also taking the presence of constants into account. The MM-QR method can provide detailed findings across the conditional distribution, especially in countries with the highest and lowest economic growth levels. Results are shown for the 10<sup>th</sup>, 20<sup>th</sup>, 30<sup>th</sup>, 40<sup>th</sup>, 50<sup>th</sup>, 60<sup>th</sup>, 70<sup>th</sup>, 80<sup>th</sup> and 90<sup>th</sup> percentiles of the economic growth distribution in order to provide information about the conditional distribution.

**Table 7. Moment Quantile Regression Method (MM-QR) Estimation Results**

Variable	Quantile Levels										
	EKK	SE	10	20	30	40	50	60	70	80	90
LNOZG	1.431*** (0.000)	1.872*** (0.000)	2.458*** (0.003)	2.323*** (0.001)	2.130*** (0.000)	1.931*** (0.000)	1.802*** (0.000)	1.668*** (0.000)	1.590*** (0.000)	1.495*** (0.001)	1.370*** (0.009)
LNFIŞT	0.558*** (0.001)	0.587*** (0.000)	0.655* (0.060)	0.640** (0.030)	0.617*** (0.006)	0.593*** (0.000)	0.578*** (0.000)	0.563*** (0.000)	0.553*** (0.001)	0.542*** (0.003)	0.527** (0.018)
LNSERM	0.380*** (0.002)	1.143*** (0.000)	1.337*** (0.001)	1.293*** (0.000)	1.229*** (0.000)	1.163*** (0.000)	1.120*** (0.000)	1.076*** (0.000)	1.050*** (0.000)	1.019*** (0.000)	0.977*** (0.000)
LNİŞG	0.052** (0.014)	2.171*** (0.000)	2.163*** (0.000)	2.165*** (0.000)	2.167*** (0.000)	2.170*** (0.000)	2.172*** (0.000)	2.174*** (0.000)	2.175*** (0.000)	2.177*** (0.000)	2.179*** (0.000)
LNSHAR	0.900*** (0.000)	0.329 (0.105)	0.252 (0.584)	0.270 (0.489)	0.296 (0.321)	0.322 (0.149)	0.339* (0.086)	0.356* (0.075)	0.366* (0.088)	0.379 (0.120)	0.395*** (0.179)

**Note:** The value in parentheses shows the probability value. \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% significance level, respectively.

The quantile regression findings for 16 upper-middle-income developing countries in Table 7 show that the effects of explanatory variables on economic growth (GDP) are clearly heterogeneous, with a number of significant differences in the conditional distribution of economic growth at different percentiles. As a result of comparing all estimated models with each other, the most appropriate model was the fixed-effect panel quantile regression model was ascertained, whereby the coefficient interpretations of the fixed-effect panel quantile regression model were made below.

To better understand the panel quantile results and facilitate comparison, the models were first estimated using Pooled Least Squares (PPM) and Fixed Effects Model (SE) methods.

When the effect of economic freedom on economic growth is examined, it is observed that economic freedom plays an increasing role in economic growth and has different marginal effects along the conditional distribution of economic growth. According to the EKK and SE results, a 1% increase in the LNOZG variable provides an increase of 1.43% and 1.87% in the LNGDP variable, respectively, while according to the MM-QR results, a 1% increase in the LNOZG variable results in a 2.45% increase in the LNGDP variable in the 10<sup>th</sup> quantile, causing an increase of 1.37% in the 90<sup>th</sup> quantile. Moreover, the LNOZG variable continues its positive effect on LNGDP decreasingly from the 10<sup>th</sup> through the 90<sup>th</sup> quantiles. It was concluded that the positive impact of the LNOZG variable decreased from the 10<sup>th</sup>



through the 90<sup>th</sup> quantiles. This result indicated that the level of freedom affects economic growth greater in countries with low growth levels than in countries with medium- and high-growth levels.

Upon examining the effect of financial stability on economic growth, it is seen that financial stability plays an increasing role in economic growth and has different marginal effects along the conditional distribution of economic growth. Similarly, according to the EKK and SE results, a 1% increase in the LNFIST variable provides an increase of 0.55% and 0.58%, respectively, in the LNGDP variable, while according to the MM-QR results, a 1% increase in the LNFIST variable provides a 0.65% increase at the 10<sup>th</sup> quantile in the LNGDP variable and an increase of 0.52% in the 90<sup>th</sup> quantile. Moreover, the LNFIST variable continues to have a decreasingly positive effect on LNGDP from the 10<sup>th</sup> through to the 90<sup>th</sup> quantiles. It was concluded that the positive effect of the LNFIST variable decreased from the 10<sup>th</sup> through to the 90<sup>th</sup> quantiles. This result showed that financial stability affects economic growth more in countries with low-growth levels than those with medium- and high-growth levels.

Estimation results showed that LNOZG and LNFIST variables and control variables affected the LNGDP variable positively and statistically significantly for the 10<sup>th</sup> through the 90<sup>th</sup> quantiles of the LNGDP variable. It was concluded that the increase in the level of economic freedom and financial stability results in an increase in the volume of economic growth at all quantile levels.

The results obtained for other explanatory variables we included in the model as control variables are as follows. It was observed there is a positive and statistically significant relationship between capital investments, labor force and human capital, as well as economic freedom and financial stability, and economic growth. An examination of coefficients shows that capital investments in developing upper-middle income countries affect economic growth more in countries with low-growth levels than in countries with medium- and high-growth levels. When the relationship between the other two variables, labor force and human capital, and economic growth is investigated and when coefficients are examined, it is observed that despite the positive relationship between them, both labor force and human capital affect economic growth differently, while those with low-growth levels in developing upper-middle income countries had less impact than other countries with medium- and high-growth levels.

Findings regarding the effect of financial stability on economic growth are Albuлесcu (2012), who examined the effect of financial stability on economic growth for the Euro zone, and Dhal, Kumar and Ansari (2011), who examined the effect of financial stability on economic growth for India, and Gezer (2019), who examined the findings of financial stability on economic growth in Turkey show stability in the expected direction. Accordingly, it is possible to say that the supportive effects of financial stability on economic growth are higher.

Findings regarding the impact of economic freedoms on economic growth are de Haan and Sturm (2000), who examined the effect of economic freedoms on economic growth for 80 countries, Akinbo

(2021), who examined the effect of economic freedoms on economic growth for Africa, and the findings of Taş and Ulusoy (2021) who examined the impact of economic freedoms upon economic growth in 159 countries, show consistency in the expected direction. Accordingly, it is possible to say that the supportive impact of economic freedoms upon economic growth are higher. Furthermore, findings from control variables also provide noteworthy information.

#### **4. CONCLUSION**

Financial stability has many economic effects such as increasing entrepreneurial activities, ensuring economic growth and development, reducing poverty and improving income inequality. The economic consequences of financial stability have led researchers to investigate the determinants of financial stability. Financial stability impacts the real sector directly or indirectly through various channels. Whether it is direct or indirect, the direction and magnitude of the impact varies depending on the strength, fragility and development of the financial system, the type and structure of the macroeconomic variable and the general economic conditions of the country. These studies generally focused on the effects of financial development, financial soundness, financial fragility, income level, size of the economy, economic growth, investment, inflation, trade and financial liberalization on financial stability.

Increasing the level of economic freedom provides services that increase economic activities, especially by ensuring the consolidation of funds through financial freedom, increasing the fluidity of funds, and ensuring that relations between economic units are carried out quickly and effectively. In this context, we can say financial freedom has a positive impact upon the economic performance of the country in the long term, especially by improving human capital by bringing new production technologies, knowledge and education to developing countries. According to said findings, it was observed there was a positive and statistically significant relationship between financial stability and economic growth in the relevant country group. When the coefficients are examined, it is observed the positive effect of financial stability on economic growth in developing upper-middle income countries is greater in countries with low-growth levels than in countries with medium- and high-growth levels. Similarly, it was observed there is a positive and statistically significant relationship between economic freedom and economic growth in the relevant country group. When the coefficients are examined, it is seen the positive effect of economic freedom on economic growth in developing upper-middle income countries is greater in countries with low-growth levels than in countries with medium- and high-growth levels. For the purpose of empirical analyzes and theoretical framework of this study, the relationship between both financial stability and economic freedoms and economic growth has been confirmed, and the level of financial stability in developing countries and the level of economic freedom affect economic growth, while medium and high growth in countries with low growth levels have shown to have a greater impact than countries with higher levels between the years 2000-2020. Therefore, all

kinds of political, social and economic institutional arrangements that will ensure and maintain financial stability are mandatory for the country's economies. Given the large and visible costs of financial instability, it is natural for policymakers to make avoiding financial crises a high priority. Moreover, any political, social and economic institutional regulations imposed to expand economic freedoms are mandatory for the country's economies.

The financial stability index calculated for developing countries differs from existing studies in terms of the way the index is calculated and the variables used. The findings obtained differ in terms of the period, units, variables and method used. For this reason, studies to be developed within the scope of different periods, countries and variables are bound to contribute to the creation of a theoretical and empirical approach on the subject. Evaluating new methods for different countries or groups of countries and using different indicators on the axis of both financial stability and economic freedom criteria will contribute to considering the effects on economic growth from different perspectives in future studies.

## REFERENCES

- Acemoglu, D. and Zilibotti, F. (1997) "Was Prometheus Unbound by Chance? Risk, Diversification, and Growth", *Journal of Political Economy*, 105(4): 709-751.
- Adkins, L. C., Moomaw, R. L. and Savvides, A. (2002) "Institutions, freedom, and technical efficiency", *Southern Economic Journal*, 69(1): 92-108.
- Ahmed, S. and Ahmad, H. K. (2020) "Impact of economic and political freedom on economic growth in Asian economies", *European Online Journal of Natural and Social Sciences*, 9(1): 219-231.
- Akinbo, O. S. (2021) "Natural Resource Curse, Economic Freedom, Economic Growth and Development: Case of Africa", *Doctoral Dissertation, Michigan Technological University*.
- Aksu, S. (2017) "Finansal İstikrar Göstergeleri ve Türkiye Ekonomisi İçin Finansal İstikrar Endeksi Önerisi", *Doktora Tezi, Balıkesir Üniversitesi, Sosyal Bilimler Enstitüsü, Balıkesir*.
- Aktaş, C. (2010) "Finansal İstikrar Analizi Bağlamında Türkiye İçin Finansal İstikrar Endeksi Önerisi", *Doktora Tezi, Ankara Üniversitesi, Sosyal Bilimler Enstitüsü, Ankara*.
- Albulescu, C. T. (2010) "Forecasting the Romanian Financial System Stability Using a Stochastic Simulation Model", *Romanian Journal of Economic Forecasting*, 13(1): 81-98.
- Albulescu, C.T. (2012) "Financial Stability, Monetary Policy and Budgetary Coordination in EMU", *Theoretical and Applied Economics*, 8(573): 85-96.
- Azman-Saini, W. N. W., Baharumshah, A. Z. and Law, S. H. (2010) "Foreign Direct Investment, Economic Freedom and Economic Growth: International Evidence", *Economic Modelling*, 27(5): 1079-1089.
- Barro, R. J. (1996) "Democracy and growth", *Journal of Economic Growth*, 1(1): 1-27.

- Bauducco, S., Bulř, A. and Čihák, M. (2011) “Monetary Policy Rules with Financial Instability”, *The Czech Journal of Economics and Finance*, 61(6): 545-565.
- Bengoa, M. and Sanchez-Robles, B. (2003) “Foreign Direct Investment, Economic Freedom and Growth: New Evidence from Latin America”, *European Journal of Political Economy*, 19(3): 529-545.
- Berggren, N. (1999) “Economic Freedom and Equality: Friends or Foes?”, *Public Choice*, 100(3-4): 203–223.
- Berggren, N. (2003) “The Benefits of Economic Freedom: A Survey” *The Independent Review*, 8(2): 193–211.
- Brkić, I., Gradojević, N. and Ignjatijević, S. (2020) “The Impact of Economic Freedom on Economic Growth? New European Dynamic Panel Evidence” *Journal of Risk and Financial Management*.; 13(2): 1-13.
- Carbó-Valverde, S. and Sánchez, L. P., (2013) "Financial Stability and Economic Growth in Crisis, Risk and Stability in Financial Markets", Palgrave Macmillan, London.
- Cardarelli, R., Elekdağ, S. and Lall, S. (2009) “Financial Stress, Downturns, and Recoveries”, IMF Working Paper Series, (No:09/100).
- Carlsson, F. ve Lundström, S. (2002) “Economic freedom and growth: Decomposing the effects”, *Public choice*, 112(3-4): 335-344.
- Coetzee, C. E. and Kleynhans, E. P. (2017) “Economic Freedom and Economic Growth in South Africa0,” *Managing Global Transitions*, 15(2): 169-185.
- Creel, J., Hubert, P. and Labondance, F., (2015) "Financial Stability and Economic Performance", *Economic Modelling*, 48: 25-40.
- Çalışkan, Z. D. (2018) “Türkiye Ekonomisinde Finansal İstikrar ve Ekonomik Büyüme İlişkisi”, *Social Science Development Journal*, 3(12): 414- 423.
- Çevik, E. İ., Diboğlu, S. and Kenç, T. (2013) "Measuring Financial Stress in Turkey", *Journal of Policy Modeling*, 35(2): 370-383.
- Dawson, J. W. (2003) “Causality in the freedom–growth relationship”, *European Journal of Political Economy*, 19(3): 479-495.
- De Haan, J. and Siermann, C. L. (1998) “Further Evidence on The Relationship Between Economic Freedom and Economic Growth”, *Public Choice*, 95(3): 363-380.
- De Haan, J. and Sturm, J. E. (2000) “On the Relationship Between Economic Freedom and Economic Growth”, *European Journal of Political Economy*, 16(2): 215-241.

- De Vanssay, X. and Spindler, Z. A. (1994) "Freedom and Growth: Do Constitutions Matter?" *Public Choice*, 78(3): 359-372.
- Deidda, L. and Fattouh, B. (2002) "Non-Linearity Between Finance and Growth.", *Economics Letters*, 74(3): 339-345.
- Dienillah, A. A., Anggraeni, L. and Sahara, S. (2018) "Impact of Financial Inclusion on Financial Stability Based on Income Group Countries", *Buletin Ekonomi Moneter Dan Perbankan*, 20(4): 429-442.
- Dhal, S., Kumar, P. and Ansari, J. (2011) "Financial Stability, Economic Growth, Inflation and Monetary Policy Linkages in India: An Empirical Reflection", *Reserve Bank of India Occasional Papers*, 32(3): 1-35.
- Easton, S. T. and Walker, M. A. (1997) "Income, Growth, And Economic Freedom", *The American Economic Review*, 87(2): 328-332.
- Enowbi Batuo, M. and Kupukile, M. (2012) "Financial Instability, Financial Openness and Economic Growth in African Countries", *University Library of Munich, Germany*.
- Enowbi Batuo, M. and Mlambo, K. (2012) "Financial liberalization, Banking Crises and Economic Growth in African Countries", *University Library of Munich, Germany*.
- Esposito, A. G. and Zaleski, P. A. (1999) "Economic Freedom and The Quality of Life: An Empirical Analysis", *Constitutional Political Economy*, 10(2): 185-197.
- Farhadi, M., Islam, M. R. and Moslehi, S. (2015) "Economic Freedom and Productivity Growth In Resource-Rich Economies", *World Development*, 72: 109-126.
- Foley, M. and Clark, J. R. (2016) "Economic freedom and real income", *Journal of Regional Analysis and Policy*, 46(1): 52-59.
- Góes, C. (2016) "Institutions and Growth: A GMM/IV Panel VAR Approach", *Economics Letters*, 138: 85-91.
- Göcen, S. (2021) "Gelişen Ülkelerde Ekonomik Özgürlük ve Ekonomik Büyüme İlişkisi: Bootstrap Panel Granger Nedensellik Testi" *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 35(3): 865-878.
- Grubel, H. G. (1998) "Economic Freedom and Human Welfare: Some Empirical Findings", *Cato J.*, 18: 287.
- Gurgul, H. and Lach, L. (2011) "The Nexus Between Improvements in Economic Freedom and Growth: Evidence from CEE Countries in Transition", *Central European Journal of Economic Modelling and Econometrics*, 3(3): 133-168.

- Hakkio, C. S. and Keeton, W. R. (2009) “Financial Stress: What Is It, How Can It Be Measured, And Why Does It Matter”, *Economic Review*, 94(2): 5-50.
- Islam, S. (1996) “Economic Freedom, Per Capita Income and Economic Growth”, *Applied Economics Letters*, 3(9): 595-597.
- Karabegovic, A., Samida, D., Schlegel, C. M. and McMahon, F. (2003) “North American Economic Freedom: An Index Of 10 Canadian Provinces And 50 US States”, *European Journal of Political Economy*, 19(3): 431-452.
- Karamelikli, H. and Bayar, Y. (2016) “Makroekonomik ve Finansal İstikrarın Ekonomik Büyüme Üzerindeki Etkisi: Türkiye Örneği”, *Uluslararası Yönetim İktisat ve İşletme Dergisi*, (ICAFR 16 Özel Sayısı): 225-236.
- Karanovic, G. and Karanovic, B. (2015) “Developing an Aggregate Index for Measuring Financial Stability in The Balkans”, *Procedia Economics and Finance*, 33: 3-17.
- Kaya, E. and Kılınç, A. (2016) “Türkiye için Finansal Sıkıntı Endeksinin Ölçümü ve Finansal Sıkıntı Endeksinin Reel Ekonomik Faaliyetler ile İlişkisi”, *Uluslararası Yönetim İktisat ve İşletme Dergisi*, (ICAFR 16 Özel Sayısı): 402-413.
- Khan, M. S. and Senhadji, A. S. (2003) “Financial Development and Economic Growth: A Review and New Evidence”, *Journal of African Economies*, 12(2): 89-110.
- Kouton, J. (2019) “Relationship Between Economic Freedom and Inclusive Growth: A Dynamic Panel Analysis for Sub-Saharan African Countries”, *Journal of Social and Economic Development*, 21(1): 143-165.
- Luintel, K. B. and Khan, M. (1999) “A Quantitative Reassessment of The Finance–Growth Nexus: Evidence from A Multivariate VAR”, *Journal of development economics*, 60(2): 381-405.
- Mavrakana, C. and Psillaki, M. (2019) “Do Board Structure and Compensation Matter for Bank Stability and Bank Performance? Evidence from European banks”.
- Mohammadi, H., Shayanmehr, S. and Borrero, J. D. (2022) “Does Freedom Matter for Sustainable Economic Development? New Evidence from Spatial Econometric Analysis”, *Mathematics*, 11(1): 145.
- Narayan, P. K. and Narayan, S. (2013) “The Short-Run Relationship Between the Financial System and Economic Growth: New Evidence from Regional Panels”, *International Review of Financial Analysis*, 29: 70-78.
- Nasreen, S., Anwar, S. and Shahzadi, H. (2015) “Financial Stability and Macroeconomic Environment: Evidence from Panel Data Analysis of South Asian Countries”, *Pakistan Journal of Social Sciences*, 35(1): 145-160.

- Nasreen, S., Anwar, S. and Ozturk, I. (2017) “Financial Stability, Energy Consumption and Environmental Quality: Evidence from South Asian Economies”, *Renewable and Sustainable Energy Reviews*, 67: 1105-1122.
- Nasreen, S. and Anwar, S. (2018) “How Financial Stability Affects Economic Development in South Asia: A Panel Data Analysis”, *European Online Journal of Natural and Social Sciences*, 7(1): 54.
- Nelson, M. A. and Singh, R. D. (1998) “Democracy, Economic Freedom, Fiscal Policy, and Growth in Ldc: A Fresh Look”, *Economic Development and Cultural Change*, 46(4): 677-696.
- Onur, S. (2005) “Finansal Liberalizasyon ve GSMH Büyümesi Arasındaki İlişki”, *Uluslararası Yönetim İktisat ve İşletme Dergisi*, 1(1): 127-152.
- Ozili, P.K. and Iorember, P.T. (2023) “Financial stability and sustainable development”, *International Journal of Finance & Economics*.
- Panahi, H., Assadzadeh, A. and Refaei, R. (2014) “Economic Freedom and Economic Growth in MENA Countries”, *Asian Economic and Financial Review*, 4(1): 105-116.
- Piatek, D., Szarzec, K. and Pilc, M. (2013) “Economic Freedom, Democracy and Economic Growth: A Causal Investigation in Transition Countries”, *Post- Communist Economies*, 25(3): 267–288.
- Scully, G. W. (2002) “Economic Freedom, Government Policy and The Trade-Off Between Equity and Economic Growth.”, *Public choice*, 113(1-2): 77-96.
- Sönmez, F.E. and Uysal, D. (2018) “Finansal İstikrarsızlığın Ekonomik Büyüme Üzerindeki Etkisi: BRICT Ekonomileri”, *İşletme ve Ekonomi Araştırmaları Dergisi*, 9 (1):25-48.
- Swaleheen, M. and Stansel, D. (2007) “Economic Freedom, Corruption, and Growth”, *Cato Journal*, 27(3): 18-25.
- Taş, C. 2018 “Three Essays on Economic Growth: Economic Freedom, Intra-Industry Trade, Foreign Direct Investment”, *Doktora Tezi, Yeditepe Üniversitesi. Social Sciences Institute Department of Financial Economics, İstanbul.*
- Taş, C. and Ulusoy, V. (2021) “Ekonomik Özgürlük ve İçsel Ekonomik Büyüme”, *TESAM Akademi Dergisi*, 8(2): 265-296.
- Tevkür, H. (2020) “Gelişmekte Olan Ülkeler İçin Finansal İstikrar Ekonomik Büyüme İlişkisi: Panel Veri Analizi”, *Doktora Tezi, Marmara Üniversitesi. Sosyal Bilimler Enstitüsü, İstanbul.*
- Torstensson, J. (1994) “Property rights and economic growth: an empirical study”, *Kyklos*, 47(2): 231-247.
- Vega-Gordillo, M. and Alvarez-Arce, J. L. (2003) “Economic Growth and Freedom: A Causality Study”, *Cato Journal*, 23(2): 199-215.

Younsi, M. and Nafla, A. (2019) “Financial Stability, Monetary Policy and Economic Growth: Panel Data Evidence from Developed and Developing Countries”, *Journal of the Knowledge Economy*, 10(1): 238-260.

---

**Hakem Değerlendirmesi:** Dış bağımsız.

**Çıkar Çatışması:** Yazar çıkar çatışması bildirmemiştir.

**Finansal Destek:** Yazar bu çalışma için finansal destek almadığını beyan etmiştir.

**Teşekkür:** -

**Peer-review:** Externally peer-reviewed.

**Conflict of Interest:** The author has no conflict of interest to declare.

**Grant Support:** The author declared that this study has received no financial support.

**Acknowledgement:** -

---