

The Impact of Participation Bank Credits on Imports and Exports: Evidence from Türkiye

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ABSTRACT: This study aims to determine the impact of participation bank credits on imports and exports in Türkiye. The research employs Generalized Linear model (GLM-logit) for identifying the effect of participation bank loans on foreign trade (export-import) by using quarterly data including the period from 2013Q1 to 2024Q2. Kolmogorov-Smirnov test is used for normality of parameters. Spearman's rho and year controlled partial correlation analysis are applied for correlations. Analysis results indicate that participation bank credits have a significant and positive effect on both export and import for the analyzed period. International trade contributes to the growth of economies by providing new market opportunities. Research findings reveal the importance of participation bank financing in Türkiye in terms of increasing the potential of foreign trade markets.

Keywords: Participation banks, Foreign trade, Bank credits, Trade finance
JEL Code: G20, G21, E44

Katılım Bankalarının Verilen Kredilerin İthalat ve İhracat Üzerine Etkisi: Türkiye Örneği

ÖZ: Bu çalışmanın amacı, Türkiye'de katılım bankalarının verilen kredilerin ithalat ve ihracat üzerindeki etkisini belirlemektir. Katılım banka kredilerinin dış ticarete (ihracat-ithalat) etkisini belirlemek için 2013Q1-2024Q2 dönemini içeren üç aylık veriler kullanılarak yapılan araştırmada Genelleştirilmiş Doğrusal Model (GLM-logit) kullanılmaktadır. Parametrelerin normalliği için Kolmogorov-Smirnov testi kullanılmıştır. Korelasyonlar için Spearman'ın rho ve yıl kontrollü kısmi korelasyon analizi uygulanmıştır. Analiz sonuçları, katılım bankası kredilerinin analiz edilen dönemde hem ihracat hem de ithalat üzerinde anlamlı ve pozitif bir etkiye sahip olduğunu göstermektedir. Uluslararası ticaret, yeni pazar fırsatları sağlayarak ekonomilerin büyümesine katkıda bulunmaktadır. Araştırma bulguları, Türkiye'de katılım bankası finansmanının dış ticaret pazarlarının potansiyelini artırmak açısından önemini ortaya koymaktadır.

Anahtar Sözcükler: Katılım bankaları, Dış ticaret, Banka kredileri, Ticari finansman
JEL Code: G20, G21, E44

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1. Introduction

The most important impact of globalization has been on commercial activities. Developments in digitalization, communication and transportation technologies have accelerated international commercial activities all over the world. The economic power and wealth of nations in today's world economy are measured by their efficiency and competition in international markets. Financial services provided by participation banks, as well as other financial institutions, play a crucial role in the development and strengthening of foreign trade. Participation banks operate in line with Islamic banking principles, focusing on a profit-sharing model instead of interest. Apart from the interest rate practices with a specific focus on Islamic finance, their role in trade finance is quite similar to conventional banks.

Foreign trade increases a country's production volume and supports its economic growth, contributing to increased employment, attracting investments and accelerating technological developments. It should be noted that the finance function that supports export and import activities contributing to economic growth and development also play a critical role in economies. Trade finance provided by participation banks is essential for facilitating international trade in a secure and efficient manner. Banks have two important functions in trade finance: providing working capital and/or providing means to reduce payment risk (BIS, 2014, p.1). Besides, export and import financing often help to reduce trade deficits resulting from payment terms and extended shipping times. The facilities also help to reduce transportation and financial risks. Since every importer can also be an exporter (and vice versa), the ability to sell and purchase goods is expanded, along with the ability to offer credit terms.

Although there are many studies on the relationship between foreign trade (export-import) and economic growth or credit expansion in Türkiye, limited research has been found the impact of participation bank credits on imports and exports. It is thought that this research makes a useful contribution to the participation banks literature. The aim of this study is to evaluate the impact of participation bank credits to the Turkish export and import industries. To this end, the study will analyze the economic benefits of participation banking from the Turkish perspective for the analyzed period. This study provides valuable insights into the impact of Turkish participation bank credits on trade finance. The originality of the article lies in its in-depth exploration of the intersection of participation banking and foreign trade in Türkiye, and its contribution to filling a research gap in the literature regarding the specific impact of participation banks on international trade activities. While studies on foreign trade and economic growth are common, the article explores a relatively under-researched area as the impact of participation banks, which follow Islamic banking principles, on trade finance. The content of the study aims at considering the following aspects of participation banking finance. After the introduction provided above, developments in Turkish import and export sector are discussed in the second section. Main features of the Turkish participation banks are discussed in Section three. Literature review is explained in Section four. Data and methodological framework are situated in Section five. The findings of empirical relationship between participation bank credits and Turkish foreign trade is investigated in Section six. Finally, the conclusion and recommendations are presented.

2. Developments in Turkish Export and Import Sector

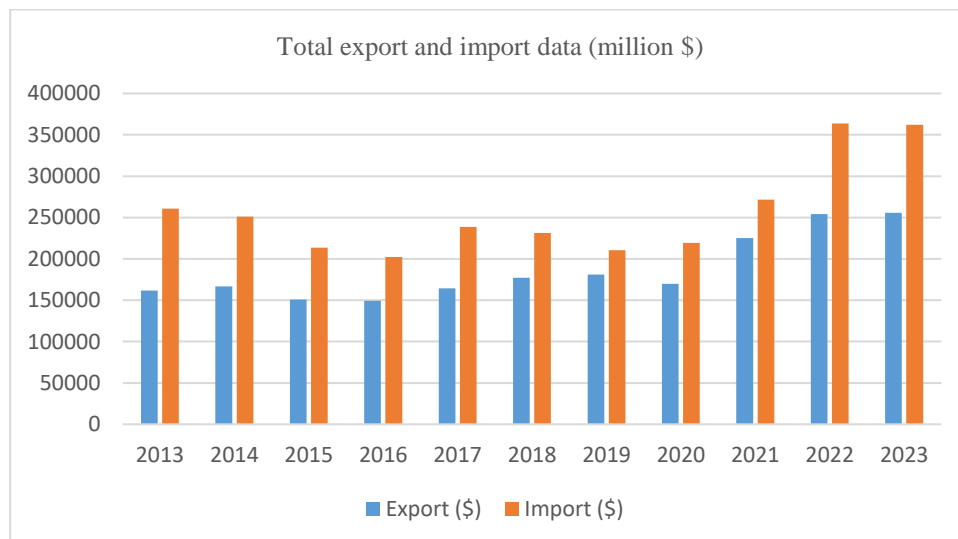
Türkiye's foreign trade sector has been undergoing significant changes and developments in recent years, in response to global economic fluctuations, trade policies and local economic dynamics. Exports and imports are key drivers of Turkish economic growth, and changes in these sectors have direct effects on the country's external debt, foreign exchange reserves, employment rates and general well-being of the economy. By facilitating international trade and financing, participation banks contribute to the growth of economies, particularly in countries that emphasize Islamic finance principles.

If a country's exports exceed its imports, the country is said to have a favorable balance of trade, or a trade surplus. Conversely, if the imports exceed exports, an unfavorable balance of trade, or a trade deficit, exists. Total export and import data by year are presented in Figure 1. As shown in Figure 1, Türkiye has a persistent foreign trade deficit, despite an increase in exports. Political stability, changes in government policies, global economic shifts, and Türkiye's integration into international trade organizations have influenced trade flows.

Due to the slowdown in economic activities, exports decreased by 10.6% to 18 billion 569 million dollars and imports decreased by 4.1% to 25 billion 4 million dollars in June 2024 compared to the same month of the previous year. Thus, foreign trade volume decreased by 6.9%, totaling 43 billion 574 million dollars (Ministry of Trade, 2024). The decrease in foreign trade volume can be attributed to increasing global risks, economic slowdown and foreign exchange rate fluctuations.

Foreign trade plays a crucial role in Türkiye's economic development, employment creation and GDP growth. According to data from TUIK (2023), 56.0% of exports and 46.8% of imports were handled by enterprises in the industrial sector in Türkiye. Enterprises whose main activity is trade accounted for 39.4% of exports and 39.3% in imports in 2023.

Figure 1. Total export and import data over the years



Source: TUIK (2023) data

Foreign trade has evolved from the period of heavy dependence on textiles and agricultural products to the more diversified export portfolio of recent decades. There has been a significant diversification in Türkiye's exports in recent years. In addition to traditional export products such as automotive, ready-made clothing and textiles, food, iron and steel, Türkiye is also seen to be stepping into high value-added sectors such as technology and software. The increase in exports, especially in the defense industry and electronic products, has enhanced its competitiveness in the world market.

Besides, export markets are also increasingly diversifying. Although EU countries are Türkiye's largest trading partners, it is remarkable that exports to the Middle East, Asia, Africa, and Latin America have increased in recent years. This diversification has been a factor that has strengthened Türkiye's foreign trade strategies. According to TUIK (2023) data, manufacturing enterprises made 46.7% of their exports to EU countries, 14.3% to Near and Middle East countries and 14.0% to non-EU European countries. 64.0% of exports to EU countries were in industry, 32.9% in trade and 3.1% in other sectors.

Türkiye’s import sector continues to be dominated by energy products, particularly natural gas, crude oil, and coal. Manufacturing enterprises made 32.7% of their imports from EU countries, 25.9% from other Asian countries and 16.5% from non-EU European countries. The largest import shares for commercial enterprises came from EU countries (30.2%). Other Asian countries with 27.9% and non-EU European countries with 23.5%, respectively (TUIK, 2023).

Energy accounted for the largest share of Türkiye's imports (26.17%), semiconductor raw material imports (8.95%) and high-tech products (6.24%) in 2023. As we mention before, Türkiye’s import sector continues to be dominated by energy products, particularly natural gas, crude oil, and coal. Energy needs have been rising due to growing industrialization and population increases. This situation supports Türkiye's industrial and production capacity, but leads to an increase in the foreign trade deficit. Although Türkiye has made progress in diversifying its energy sources, including investments in renewable energy and nuclear power, it still remains heavily reliant on foreign energy imports. That’s why fluctuations in energy prices increase Türkiye's import costs and put pressure on the current foreign trade balance and deficit (Table 1).

Financing the working capital requirements of businesses’ trading activities is a critical element. Many factors such as geopolitical risks play a decisive role in financing Turkish foreign trade performance, inflationary conditions, financial tightening, high debt ratio, protectionist measures, regional sanctions, technological innovations, digitalization etc. Supporting exports is a phenomenon accepted by all countries. However, planned incentives demonstrate differences in practice due to the internal dynamics of the countries and the restrictions of the international organizations or countries to which they are subject.

Table 1. Foreign trade data over the years

Year	Export (USD)	Import (USD)	Foreign trade balance (USD)	Foreign trade volume (USD)	Foreign trade volume/GDP (%)	Export/Import (%)
2013	260.822.803,00	119.618.958,56	(141.203.844,44)	380441761,6	39,77	45,86
2014	251.142.429,21	166.504.861,80	(84.637.567,41)	417647291	44,46	66,3
2015	213.619.211,46	150.982.113,77	(62.637.097,69)	364601325,2	42,26	70,68
2016	202.189.241,86	149.246.999,26	(52.942.242,60)	351436241,1	40,46	73,82
2017	238.715.127,91	164.494.619,32	(74.220.508,60)	403209747,2	46,89	68,91
2018	231.152.482,65	177.168.756,29	(53.983.726,36)	408321238,9	51,88	76,65
2019	210.346.889,61	180.870.840,95	(29.476.048,66)	391217730,6	51,45	85,99
2020	219.509.836,97	169.669.410,31	(49.840.426,66)	389179247,3	54,25	77,29
2021	271.423.093,00	225.214.456,00	(46.208.637,00)	496637549	60,90	82,98
2022	363.710.574,00	254.169.748,00	(109.540.826,00)	617880322	69,10	69,88
2023	361.966.913,00	255.627.431,00	(106.339.482,00)	617594344	55,75	70,62

Source: The Central Bank of Türkiye (TCMB) and TUIK statistical data (EVDS)

Türkiye's exports, foreign trade balance, and foreign trade volume decreased in 2023 compared to the previous year due to the slowdown in economic activity in target markets, especially in Europe. This decrease also reduced the share of foreign trade in gross national product (Foreign trade volume/GDP). The foreign trade deficit decreased by 2.9% to 106.3 billion US dollars in 2023. Türkiye has had a chronic foreign trade deficit for years, as shown in Table 1. The decrease in the foreign trade deficit in 2023, compared to the previous year, is due to the decline in exports. However, the export coverage ratio (exports/imports) has changed over the years but has generally increased. However, the export/import coverage ratio is not

sufficient to close the foreign trade deficit. While the export/import coverage ratio was 69.88% in 2022, it was 70.62% this year (Table 1).

3. Main Features of Participation Banking in Türkiye

The activities of participation banks and all other banks (deposit, development and investment banks) in Türkiye are regulated by the Banking Law No. 5411. Participation banks, also defined as Islamic banking or interest-free banking, refer to “institutions that operate primarily through collecting funds and providing loans through private current and participation accounts” in the Banking Law No. 5411. The Participation Banks Association of Türkiye (TKBB) defines a participation bank as a type of bank that is established based on the principle of interest-free banking, carries out all kinds of banking transactions without interest, and provides funds through partnership and leasing methods. The word “participation” indicates that the type of banking is based on the principle of participation in profit and loss.

Participation banks use the funds they collect from saving owners in industrial and trade sectors according to the interest free finance principles and share the profit or loss with account owners. The most important difference between participation banks and conventional banks is that they are not permitted to accept deposits or participation funds. Conventional banks provide loans (loan on interest) to their customers. However, participation banks provide funds through the trade method by purchasing the goods, services or rights that the customer needs from the seller in advance, adding profit to it and selling it to the customer on credit.

Participation banks do not involve interest in any of their transactions. In addition to the prohibition of interest, there is also a prohibition of uncertainty, excessive risk and speculation. Interest-bearing and risky projects are not implemented in participation accounts. In addition, investments are not made in projects that harms society. In the purchase of goods and services, money is paid to the seller in return for an invoice instead of the customer. Participation banks prevent the informal economy by offering options to those who are sensitive to interest rates. When the account loses, the bank and the participant pay the resulting loss together. In summary, the funding system in Islamic banking is based on the principle of interest-free, partnership and risk sharing rather than providing loans.

The banking system consists of deposit banks, participation banks, development and investment banks in Türkiye. They are complementary banks by meeting the demands of interest sensitive segments, not alternatives to the system, alongside deposit banks, development and investment banks. The total assets share of participation banks in the financial sector is 8.2% in 2023. The market share of participation banks in the sector, which was 5% in 2017, reached 8.7% by the end of 2023. The share of participation banks in the banking sector has been increasing over the years (TKBB, 2023).

There are 8 participation banks operating in the financial system. Three of these are public capital, three are foreign capital, and two are private participation banks. The shares of foreign and public banks in the system, from total assets are 56.07% and 43.67%, respectively. That is, foreign-owned banks have a predominant share in the system. While foreign and public banks play a critical role in participation financing, the share of private banks is quite limited. It can be said that private banking activities are not mature enough in participation banking in Türkiye (Table 1).

Kuveyt Türk continued to be the participation bank with the largest total assets in Türkiye, with 668.1 billion TL, followed by Ziraat Participation with 384.2 billion TL and Vakıf Participation with 315.1 billion TL in 2023. The asset sizes of Türkiye Finans, Albaraka Türk and Emlak Participation were 240.2 billion TL, 232.1 billion TL and 188.8 billion TL, respectively (Table 1).

Table 1. Share of total assets by ownership structure of participation banks

Participation Banks (2023)	Total Assets (000 TL)	Total assets share in percent (%)
Public owned banks (3)	888 262 396	43.67
Ziraat	384 256 605	18.89
Vakıf	315 123 265	15.49
Türkiye Emlak	188 882 526	9.29
Private owned banks (2)	5 333 664	0.26
Hayat Finans	2 976 493	0,15
T.Ö.M.	2 357 171	0,11
Foreign owned banks (3)	1 140 550 651	56.07
Kuveyt Türk	668 168 215	32.85
Türkiye Finans	240 212 941	11.81
Albaraka Türk	232 169 495	11.41
Toplam	2 034 146 711	100.00

Source: TKBB (2023) data

As of the end of 2023, the participation banking sector, which operates with 9 banks, increased the number of domestic and international branches by 5.8% compared to the previous year, reaching 1,459 branches. The number of employees employed in the sector increased by 10.4% compared to the previous year, reaching 19,728. The proportion of branches and employees in total Turkish banking are 13.3% and 9.5%, respectively. The sector's share in total banking assets increased from 8.3% in the previous year to 8.7% (TKBB, 2023).

Table 2 presents the capital adequacy, return on equity, return on assets and nonperforming loans ratio of participation banks over the years. It is evident that the ratio of capital adequacy, return on equity and return on assets has generally increased over the years. However, the equity adequacy ratio decreased in 2020. Return on assets decreased significantly in 2020 and the following year. It is believed to have decreased in 2020 due to the pandemic and the subsequent economic developments. It is positive that the ratio has decreased over the last 4 years, although it varies year by year. One of the most important reasons for the decrease in the non-performing loans ratio is the tight credit policy followed.

Table 2. Some selected ratios of participation banks over the years

Year	Capital adequacy (%)	Return on equity (%)	Return on assets (%)	Nonperforming loans ratio (%)
2013	15.30	13.80	1.60	3.40
2014	16.30	0.99	0,40	4.50
2015	15.57	3.80	1.48	3.23
2016	16.20	18.94	1.89	3.34
2017	16.87	13.70	1.51	3.05
2018	17.27	14.67	1.39	4.05
2019	18.05	11.20	3.21	5.13
2020	17.83	13.46	0.85	3.59
2021	18.91	15.06	0.76	3.02
2022	20.55	35.26	2.50	1.43
2023	21.38	37.01	2.61	0.96

Source: TKBB (2023) data

International commercial activities (export-import) have also carried the activities of banks to the international arena. Participation bank ensures that international trade is carried out more securely and functionally for both parties with the guarantees and sureties it provides. It mediates international capital movements, financial leasing, crediting, receivables collection, goods price and fund transfers.

According to IFSB (2023) report, Türkiye ranks seventh after Saudi Arabia, Iran, Malaysia, UAE, Kuwait and Qatar in the share of global Islamic banking assets. Islamic banks are mostly found in the Middle East and South Asia regions. Saudi Arabia is a leader in Islamic bank financing in the region. The main markets for Islamic finance are Iran and Sudan, where the entire financial system is only compliant with Islamic rules, as well as the Gulf States and Malaysia. Moreover, the potential of participation banking has begun to attract attention not only in Muslim countries but also in non-Muslim countries such as France, Germany, UK, Hong Kong, Luxembourg, and South Africa.

4. Literature Review

Studies on participation banks can be grouped under three headings in the literature review. The first group of academic studies on participation banks mainly focus on their contribution to economic growth (Yılmaz & Işık, 2022; Emek & Düşünceli, 2021; Yücel & Köseoğlu, 2020; Kutlu & Karamustafa, 2019; Kandemir et al., 2018). Most of these findings suggest that participation banks have a statistically significant impact on the economic growth of Türkiye. The interaction between the financial and real sectors has been studied over time. When we look at the literature review, the studies that examine the relationship between foreign trade (exports and imports), financial development and economic growth in Türkiye in the context of causality are predominant in general. Moreover, studies that prove the existence of a strong relationship between the financial sector and the real sector indicate conflicting results regarding the direction of this relationship.

Secondly, numerous studies have been performed to comparatively evaluate the performance of participation banks and conventional banks. Some research findings demonstrate that conventional banks' performances are generally better than participation banks (Hamarat, 2024; Haddad et al., 2019; Cevik & Charap, 2015; Gökalp, 2014). Inversely, some other studies have confirmed the effective performance of Islamic banks (Şireci & Kayadibi, 2023; Canbaz & Duran, 2019; Batir et al., 2017; Tekin et al., 2017; Khan et al., 2017; Erol et al., 2014). However, several studies found no major difference in financial performance between Islamic banks and conventional banks (Bayram et al., 2023; Sghaier & Guizani, 2023; Rozzani & Rahman, 2013; Ika & Abdullah, 2011).

Third, some studies conducted in the literature focused on the participation banks' performance across countries or their performance across Islamic banks (Widarjono et al., 2023; Mukhibad et al., 2023; Hamamcı & Karkacier, 2022; Le et al., 2022; Rehman et al., 2022; Amba & Almukharreq, 2013; Rashwan, 2012; Siraj & Pillai, 2012) or individual countries' banking systems. However, academic studies on determining the impact of participation bank's credits on import and export in Türkiye is quite scarce.

Even the limited literature on foreign trade-participation banks interaction is mainly aimed at economic growth or comparative evaluation of the performance of participation banks with conventional banks and is expressed in the following paragraph.

Aydemir and Zeren (2022) studied the impact of Islamic finance on economic growth and foreign trade for 20 countries that have the highest participation bank share in the financial system over the period 2012-2020. The analysis findings indicate that the percentage share of participation banks in the entire country's banking system has a significant and positive effect on the annual percentage change in GDP and the percentage share of foreign trade in GDP. The research findings indicate a cointegration relationship between the percentage share of participation banks in the country's banking system and the annual percentage change in GDP and the percentage share of foreign trade in GDP.

Ergeç and Kaytancı (2021) analyzed the causal relationship between both total loans and medium-long term loans and exports in Turkey over a period of 2006-2019 by Toda and Yamamoto causality method. They comparatively examined the conventional banks and

participation banks impact on the economic activity and exports. Their results concluded that Islamic banks have a stronger causal greater impact on exports than conventional banks.

İçellioğlu and Öztürk (2019) try to identify the effects of Islamic banks on real sector and international trade in Turkey by using quarterly data over the period between 2008 and 2018. Panel regression findings reveal that a 1 unit increase in the amount of resources used by participation banks causes a 0.15 unit increase in the amount of exports. This means that participation banks in Turkey contribute to exports.

Even the limited literature on foreign trade-participation banks interaction is mainly about economic growth or comparative evaluation of the performance of participation banks with conventional banks. As we mention before, academic studies on the contribution of participation banks to international trade are quite limited. It is thought that the study will contribute to the participation bank literature on this subject.

5. Data and Methodology

This study tries to demonstrate the impact of participation bank credits on imports and exports in Türkiye. The research employs Generalized Linear model (GLM-logit) for analyzing the effect of foreign trade in Türkiye by using quarterly data including the period from 2013Q1 to 2024Q2. Key financial indicators data were employed from the website of Central Bank of Türkiye (TCMB) and the Turkish Statistical Institute (TÜİK).

In the conversion of GDP and credit data obtained from the EVDS system into USD, in order to prevent nominal data from having a higher trend due to price effect, nominal GDP and credit data were divided by the price index deflator and nominal series were converted to real series. Import and export series were obtained from EVDS and TÜİK systems in USD based on real prices.

There were pandemic-related and minor shocks in 2019 in the change of credit values in USD over the years. Since this situation could cause deviation from normality and linearization errors in the data set (Yılmaz & Turanlı, 2023; Yılmaz & Turanlı, 2022), Generalized Linear Model analysis was performed via logarithmic transformation using the logit link function, which is a nonparametric approach

Ranges, standard deviations, and means were used to define research series. The parameters were checked for normality by using the Kolmogorov-Smirnov test. Year controlled partial correlation analysis and Spearman's rho were employed for correlations. The Generalized Linear Model (Logit) was employed due to linearization deviations (Yılmaz & Turanlı, 2023; Yılmaz & Turanlı, 2022). All analyses was carried out using SPSS 25.0 for windows with a 95% confidence interval and a significance threshold of 0.05.

6. Empirical Findings

Descriptive statistics help us to describe the central tendency (mean), dispersion (range and standard deviation), and shape of the distribution of the dataset in the analysis. Table 3 presents descriptive statistics of variables including the mean, standard deviation, minimum and maximum values. Descriptive statistics helps us to describe the central tendency (mean), dispersion (range and standard deviation), and shape of the distribution of a dataset. Export mean was 47.427.991,36±10.322.664,74 USD and ranged 32.396.129,16 to 68.763.322,00. Mean import was 65.075.728,28±14.647.956,98 USD. Import mean was higher than export mean for 2013-2024 time period. Mean credits given by participation banks was 27.907.999,49±3.597.570,12 USD. GDP mean was 220.976.111,46±35.098.771,38 USD (Table 3).

Table 3. Import, Export, Credits and GDP for Türkiye for 2013Q1 to 2024Q2

	Mean	Standard Deviation	Minimum	Maximum
Export	47.427.991,36	10.322.664,74	32.396.129,16	68.763.322,00
Import	65.075.728,28	14.647.956,98	43.271.204,33	96.256.500,00
Credit	27.907.999,49	3.597.570,12	21.285.452,75	37.470.451,77
GDP	220.976.111,46	35.098.771,38	151.403.886,36	308.071.827,17

Note: Values were converted to USD, due to export and import values are in USD.

Although participation bank credits in TL have increased over the years, the situation changes when we look at in dollar terms. Credits given by participation banks continuously decreased from 2013 to 2019 and increased until 2023. In 2024, the mean value for the two quartiles was in a decreasing trend (Figure 2). This means that the exchange rate policies followed can be said to affect the volume of credits provided. One of the key challenges faced by Turkish exporters is currency volatility. The increase in Türkiye's imports increases the demand for foreign exchange and causes fluctuations in exchange rates. The currency crisis experienced since 2018 has increased import costs and caused inflation to rise. This situation has led to various measures such as foreign exchange policies and import restrictions to balance imports. These policies have also been positively reflected in participation bank loans given in dollars after 2019 (Figure 2).

Figure 2. Change in credits given by participation banks according to year

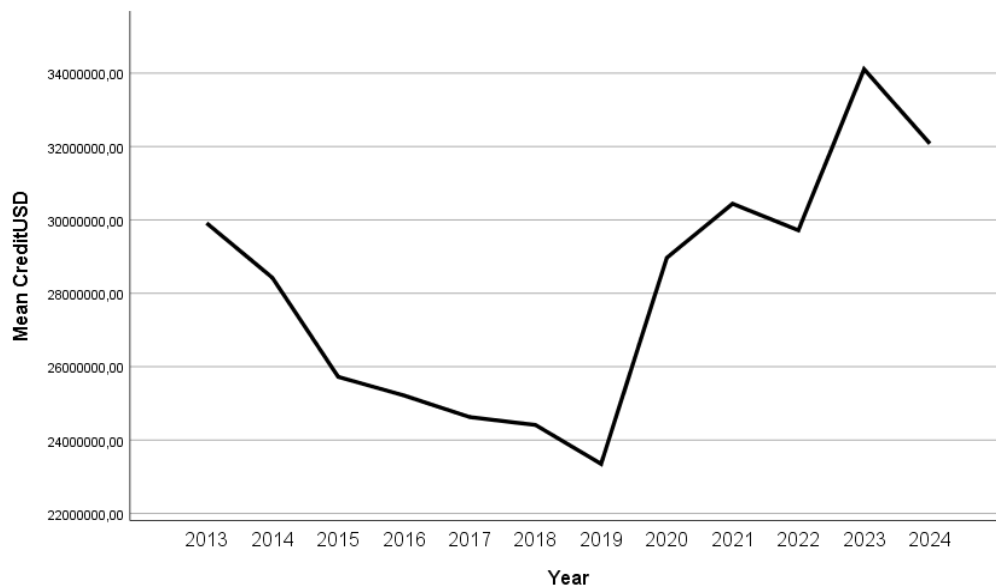


Table 4 displays a Spearman's rho and year controlled partial correlation analysis results for the research variables. Spearman's rho correlation analysis results showed that credits by participation banks were significantly correlated with export ($r=0.534$; $p<0.01$), import ($r=0.796$; $p<0.01$) and GDP ($r=0.569$; $p<0.01$). Year controlled partial correlation analysis results also showed that credits by participation banks were significantly correlated with export ($r=0.470$; $p<0.01$), import ($r=0.673$; $p<0.01$) and GDP ($r=0.558$; $p<0.01$) (Table 3).

Table 4. Spearman’s rho and year controlled partial correlation analysis results for credits, import and export values

	Spearman’s rho		Year controlled partial correlation	
	r	p	r	p
Export	0.534**	0.000	0.470**	0.001
Import	0.796**	0.000	0.673**	0.000
GDP	0.569**	0.000	0.558**	0.000

**p<0.01

Table 5 presents the Generalized Linear Model (Logit) for the effect of credits variable on export and import for Türkiye. Generalized linear model results showed that effect of credits on both import (B=2,269; p<0.01) and export (B=1,381; p<0.01) significant and positive (Table 4).

Table 5. Generalized Linear Model (Logit) for effect of credits on export and import

Parameter	B	Std. Error	95% Wald Confidence Interval		Hypothesis Test		
			Lower	Upper	Wald X ²	df	p
Export							
(Intercept)	-28.436.877,633	10.742.620,0479	-49.492.026,026	-7.381.729,239	7,007	1	0.008
Credit	2,269	,4474	1,392	3,145	25,706	1	0.000
GDP	,137	,0459	,047	,227	8,882	1	0.003
(Scale)	78.364.972.983.322,800	16.340.226.424.216,0410	52075589.773.295,520	117.926.057.437.107,810			
Import							
(Intercept)	-4.261.674,087	9.723.539,1800	-23.319.460,682	14.796.112,508	,192	1	0.661
Credit	1,381	,4050	,587	2,175	11,628	1	0.001
GDP	,060	,0415	-,022	,141	2,055	1	0.152
(Scale)	64.202.256.740.154,750	13.387.095.945.315,2460	42.664.091.586.321,520	96.613.559.958.001,600			

7. Conclusion

It is widely accepted that trade finance can expand access to global markets, create employment opportunities, and enhance the economic growth potential of businesses and nations alike. The most important factors that negatively affect international trade are generally cited as sudden drops in demand and supply, blockages in the global value chain and credit constraints. That is, financing of international transactions is one of the three important determinants of international trade. Participation banks provide finance and expertise for foreign trading activities. Export promotion tools of banks are established to increase foreign trade and support the entrepreneurs in accessing new foreign markets.

As stated in the literature section, according to some research findings, participation bank loans provide a cost advantage compared to the export loans of private deposit banks. That is, they demonstrate that it is an advantageous option rather than an alternative to the traditional debt-based financing system. There is a growing literature on the importance and performance of deposit banks in the financial sector. However, studies on participation banking, defined as Islamic banking, are relatively less. Studies on the impact of participation bank loans on foreign trade are even more limited.

Academic studies on participation banks mainly focus on their contribution to economic growth and comparative analysis of bank performance of conventional with participation banks.

However, there is a scarce number of studies on the impact of participation bank credits on foreign trade. The study aims to contribute to the literature on Islamic banking finance within this context. Generalized linear model results reveal that there is a significant and positive effect of credits on foreign trade (both import and export). These findings indicate that the growth of participation bank finance function also has a critical role in increasing foreign trade financing capacity in terms of economic growth. The research indicates that a well-functioning credit mechanism or increasing the credit opportunities of participation banks have a positive affect on the foreign trade potential in Türkiye.

Participation banks fill an important gap by preventing funds from remaining idle the funds that are not deposited in conventional banks due to interest sensitivity. Finally, the increase in sector shares and bank performances of participation banks over the years shows that they have significant potential for development. Further research is needed in their critical role of unique approach to risk-sharing and financing offers an option to traditional debt-based financing system.

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Araştırmacıların Katkı Oranı Beyanı

Yazarlar çalışmaya eşit oranda katkı sağlamıştır.

Çıkar Çatışması Beyanı

Bu çalışmada herhangi bir potansiyel çıkar çatışması bulunmamaktadır.

EXTENDED ABSTRACT

Literatür Taraması: Bu literatür taramasının amacı, katılım bankalarının kredi hizmetlerinin dış ticaret üzerindeki etkilerine ilişkin yapılan araştırmaları belirlemektir. Literatür taraması, katılım bankaları ile ilgili çalışmalarını üç temel başlıkta incelemektedir. Birinci grup, katılım bankalarının ekonomik büyümeye katkısını ele almakta olup, bulgular genellikle katılım bankalarının Türkiye'nin ekonomik büyümesi üzerinde önemli düzeyde ve pozitif bir etkiye sahip olduğunu göstermektedir. Finansal gelişim, dış ticaret ve ekonomik büyüme arasındaki ilişkiyi inceleyen çalışmalar da yapılmış olup, finansal ve reel sektör etkileşiminin yönü konusunda farklı sonuçlara ulaşılmıştır. İkinci grup, katılım bankaları ile geleneksel bankalar arasındaki performans karşılaştırmalarını içermektedir. Bu alandaki bulgular karışıktır; bazı çalışmalar geleneksel bankaların katılım bankalarına kıyasla daha iyi performans sergilediğini belirtirken, diğer çalışmalar katılım bankalarının güçlü performansını vurgulamaktadır. Üçüncü grup çalışmalar ise katılım bankalarının farklı ülkelerdeki performansını incelemektedir. Ancak, katılım bankalarının Türkiye'deki dış ticaret üzerindeki spesifik etkisi konusunda yapılan araştırmalar sınırlıdır. Literatür taraması, katılım bankalarının özellikle Türkiye'de uluslararası ticareti kolaylaştırmadaki rolünü araştırmaya yönelik daha fazla çalışmaya ihtiyaç duyulduğunu vurgulamaktadır. Katılım bankalarının kredileri ile dış ticaret arasındaki ilişkiyi ele alan çalışmalar ise oldukça sınırlıdır. Bu çalışma, katılım bankaları ile uluslararası ticaret arasındaki etkileşim hakkında yeni perspektifler sunarak, Türkiye bağlamında az araştırılmış bu alana katkı sağlamayı hedeflemektedir.

Yöntem: Çalışma, katılım bankalarının kredi hizmetlerinin Türkiye'deki dış ticaret (ithalat ve ihracat) üzerindeki etkisini araştırmaktadır. 2013'ün birinci çeyreğinden 2024'ün ikinci çeyreğine kadar olan üçer aylık veriler kullanılarak, kredilerin ticaret akışları üzerindeki etkisini analiz etmek için Genelleştirilmiş Doğrusal Model (GLM-logit) uygulanmıştır. Temel finansal göstergelere ilişkin veriler, Türkiye Cumhuriyet Merkez Bankası (TCMB) ve Türkiye İstatistik Kurumu'ndan (TÜİK) elde edilmiştir. Araştırma serilerini tanımlamak için aralıklar, ortalamalar ve standart sapmalar gibi tanımlayıcı istatistikler kullanılmıştır. Verilerin normalliği Kolmogorov-Smirnov testiyle değerlendirilmiş, korelasyonlar yıl kontrollü kısmi korelasyon ve Spearman rho korelasyon analizi yöntemiyle incelenmiştir. Doğrusal sapmaları ele alma özelliği nedeniyle GLM-logit modeli tercih edilmiştir. Tüm istatistiksel analizler, %95 güven aralığı ve 0.05 anlamlılık düzeyi ile SPSS 25.0 kullanılarak gerçekleştirilmiştir. Bu yöntem, katılım bankalarının Türk dış ticareti üzerindeki etkisinin sağlam bir şekilde değerlendirilmesini sağlamaktadır.

Bulgular ve Tartışma: Bu çalışma, 2013 ile 2024 yılları arasında Türkiye'deki ihracat, ithalat, katılım bankası kredileri ve GSYİH gibi temel ekonomik göstergeleri analiz etmek için tanımlayıcı istatistikler kullanmaktadır. Tanımlayıcı istatistikler, Spearman rho korelasyonu, yıl kontrollü kısmi korelasyon ve Genelleştirilmiş Doğrusal Model (Logit) ile ekonomik değişkenlerin dinamikleri değerlendirilmiştir. Spearman rho ve yıl kontrollü kısmi korelasyon analizleri, katılım bankası kredileri ile ihracat, ithalat ve GSYİH arasında güçlü ve pozitif korelasyonlar olduğunu ve bunların istatistiksel olarak anlamlı olduğunu ($p < 0.01$) ortaya koymuştur. Genelleştirilmiş Doğrusal Model (Logit), katılım bankası kredilerinin ihracat ve ithalat üzerindeki nedensel etkisini daha ayrıntılı olarak incelemiştir. Araştırmacılar, kredilerin dış ticaret üzerinde anlamlı ve pozitif etkisi olduğunu tespit etmiştir. Genel olarak model sonuçları, katılım bankası kredilerinin ithalat ve ihracat üzerindeki pozitif etkisini doğrulamaktadır. Ayrıca, Spearman rho ve yıl kontrollü kısmi korelasyon analizleri de kredilerin ihracat, ithalat ve GSYİH ile anlamlı bir şekilde ilişkili olduğunu göstermiştir.

Tanımlayıcı istatistikler, korelasyon analizi ve Genelleştirilmiş Doğrusal Model sonuçları, 2013-2024 yılları arasında Türkiye ekonomisinin dinamiklerine dair önemli içgörüler

sağlamaktadır. Katılım bankası kredileri ile uluslararası ticaret (ihracat ve ithalat) arasındaki pozitif ve anlamlı ilişki, finansmanın ekonomik faaliyetleri kolaylaştırmadaki kritik rolünü vurgulamaktadır. Sonuç olarak, analiz, döviz kuru dalgalanmalarından etkilenmesine rağmen katılım bankası kredilerinin hem ihracat hem de ithalatı destekleyen önemli bir faktör olduğunu ortaya koymaktadır. Krediler, ticaret ve GSYİH arasındaki ilişki, Türkiye'nin ekonomik manzarasını şekillendiren iç ekonomik politikalar, küresel piyasa güçleri ve finansal araçların karmaşık etkileşimini göstermektedir.

Sonuçlar ve Öneriler: Çalışma, katılım bankalarının finansman işlevindeki büyümenin, ekonomik büyüme bağlamında dış ticaret finansmanı kapasitesinin artırılmasında da önemli bir rol oynadığını göstermektedir. Katılım bankalarının uzmanlaşmış finansman araçları ve uzmanlıkları aracılığıyla dış ticareti kolaylaştırmadaki önemli rolü vurgulanmaktadır. Bulgular, katılım bankası kredilerinin Türkiye'deki ihracat ve ithalat üzerinde pozitif ve anlamlı bir etkiye sahip olduğunu ve geleneksel banka kredilerine kıyasla maliyet avantajı sağladığını doğrulamaktadır. Bu durum, katılım bankalarının dış ticaret finansmanını artırma ve ekonomik büyümeye katkı sağlama potansiyelini ortaya koymaktadır. Araştırma, katılım bankalarının kredi mekanizmalarının genişletilmesinin dış ticaret kapasitesini daha da artırabileceğini önermektedir. Ayrıca katılım bankaları, faiz hassasiyeti nedeniyle geleneksel bankalar tarafından finanse edilemeyen fon açığını kapatmada önemli bir köprü görevi görmektedir. Sektörün büyüyen payı ve performansı göz önüne alındığında, katılım bankalarının gelecekteki gelişimi konusunda önemli fırsatlar sunmaktadır. Geleneksel borca dayalı sistemlere alternatif olarak risk paylaşımı ve finansman konularındaki özgün yaklaşımlarını araştırmak için daha fazla çalışma yapılması önerilmektedir. Bu bağlamda çalışma, gelecekteki araştırmaları teşvik edici bir çerçeve sunmayı hedeflemektedir.