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The role of the Foreign Direct Investment inflows on export in Azerbaijan: An ARDL approach

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Article Info

Abstract

Purpose — This study aims to investigate the impact of FDI inflows on Trade in Azerbaijan from 1993 to 2021.

Method — This study uses the datasets from the World Bank Database. It employs the Augmented Dickey and Fuller (ADF), Phillips and Perron (PP), Zivot and Andrews (ZA), ARDL bounds testing approach, and the Granger Causality tests for the empirical part of the study.

Findings — The bound test shows the presence of cointegration between FDI and Export. The estimated long-run equation suggests a positive and significant relationship, whereas the estimated short-run equation indicates a positive but insignificant relationship between FDI and export. Additionally, the results of Granger causality test show a unidirectional causality running from FDI to export.

Implications — Since the FDI inflows show a positive effect on the export of Azerbaijan, most foreign investments come into the oil and gas sector. Accordingly, oil and gas products and services account for a significant share of exports in Azerbaijan. Policymakers might need new regulations to attract more attention from foreign investors to non-oil sectors.

Originality/value — There were vast studies about FDI and trade relationships in different countries with different techniques. This study is unique because it employs a new methodology and the latest dataset in which Azerbaijan was a focused area for the first time.

Keywords — FDI, export, Azerbaijan, unit root tests, ARDL bounds testing approach, and Granger causality test

Introduction

After the II World War, with the globalization processes, the developed countries started to search for alternative spots for investments to increase their profit due to the potential advantages of those hosting countries in transportation costs, cheap labor, abundant raw materials, and weak state control over regulations. In general, foreign investments are considered an essential source of advanced management, new technologies, and cash flow for a hosting country (Karimov & Belkania, 2018). Besides those positive sides, there are undeniably also negative sides of foreign investments in developing countries. Statistics and written documents show that developed countries often transfer polluted industries to less developed countries due to the strict environmental regulations and harsh taxation policies in their home countries (Karimov, 2020).

Additionally, technological, cash, and management dependence occurs during FDI investments. In this case, if the government does not consider these issues and will not implement regulations towards this kind of problem, then monopolistic actions will occur in an economy. From our point of view, fruitful conditions for foreign investors should be organized by policymakers. However, after the foreign investment inflows, the state should take this process under control to not harm the competitive market in the economy.

As a developing country, Azerbaijan is also eager to attract foreign investments into its economy. The Investment Law issued on 22 June 2022 is proof of attempts to attract foreign investments into Azerbaijan's economy[1]. Additionally, there are several reasons why foreign investors are interested in Azerbaijan. One of the main advantages of Azerbaijan is its geographical location. Azerbaijan is in the hub of Europe and Asia and bridges those subcontinents. Another advantage of Azerbaijan is the richness of natural resources, including oil and non-oil resources, which makes Azerbaijan more attractive in comparison with neighboring countries. Moreover, the well-organized infrastructure in comparison with neighboring countries and cheap transportation costs are also crucial factors in the attraction of foreign investors to the country. From previous studies and real-life experience, the educated young cheap labor is one of the most important issues for foreign investors. As for the demography, 44 % of the active labor force of Azerbaijan[2] is between 15-24 ages, the literacy level of youth is 100% (between 15-24 ages)[3] and minimum wage is 345 AZN (approx. 203 USD)[4] which in turn makes this country even more attractive for foreign investments.

Additionally, the creation of political and economic stability, a favorable business and investment environment, and liberalization processes by giving equal rights to the investors started to attract the attention of foreign investors to Azerbaijan. The huge reserves of oil and gas made Azerbaijan very attractive to foreign investors who seek to invest in the energy sector. The East-West and North-South transportation pathways, the Baku-Tbilisi-Ceyhan oil pipeline, the Baku-Tbilisi-Erzurum gas pipeline, one of the European Union's important energy initiatives (Shah Deniz-2, the expansion of the South Caucasus pipeline), and the Southern Gas Corridor are the results of Azerbaijan's diligence in attracting and establishing foreign partnerships. According to the trade statistics of Azerbaijan, the biggest share of exports, 93.6%, belongs to the oil and gas industry. [5] The relationship between FDI, EXP, and GDP will be illustrated in Figure 1.
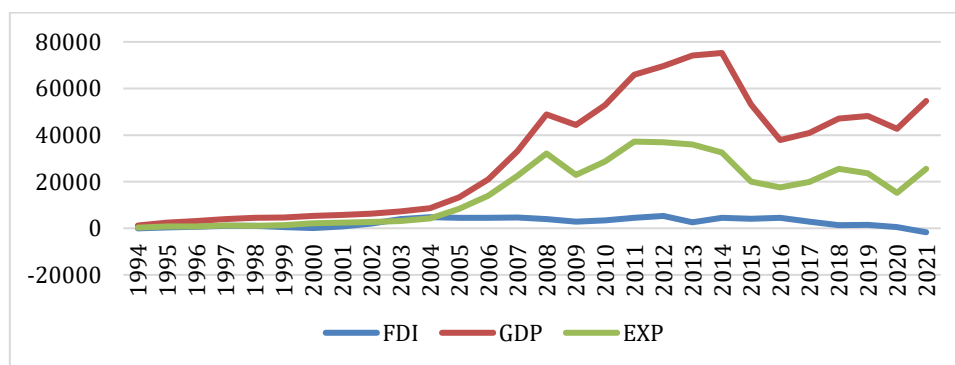

Figure 1. The relationship between FDI, EXP, and GDP (million USD)
Source: World Bank Database (https://data.worldbank.org/)

Figure 1 displays a similar trend between GDP and EXP for almost all the period except 2019-2020 due to the COVID-19 pandemic issue (exports decreased, and afterward, the GDP followed the export and it decreased until the end of the pandemic). When we look at the relationship between FDI and EXP, GDP, it can be seen that, mostly, there is no similar trend line between FDI and those series. Based on the practice, the relationship between analyzed series cannot be confirmed through graphical illustration; the exact results will be gained after further empirical estimations.

Based on the (UNCTAD 2022) report, the total stock of FDI was 31.6 billion AZN (approx. 18.5 billion USD), which was 57.9 % of the country`s GDP in 2021. This report also states that most of the investment was in the oil and gas industry. However, the new strategy of

the policymakers of Azerbaijan is to drive the attention of foreign investors from the oil sector to the non-oil sectors such as transportation, agriculture, and tourism. According to this report from the CIS Union, Russia was a leader in foreign investment in Azerbaijan. In addition, Russia assumes its leadership in the Azerbaijan economy due to the customs union between Russia, Belarus, Armenia, and Kazakhstan. Based on the statistics from the Central Bank of Azerbaijan, the total FDI inflows from foreign countries were 4.57 billion AZN (approx. 2.76 billion USD) in the first nine months of 2022. Additionally, the main partners of Azerbaijan with the share of FDI inflows are demonstrated below in Figure 2.
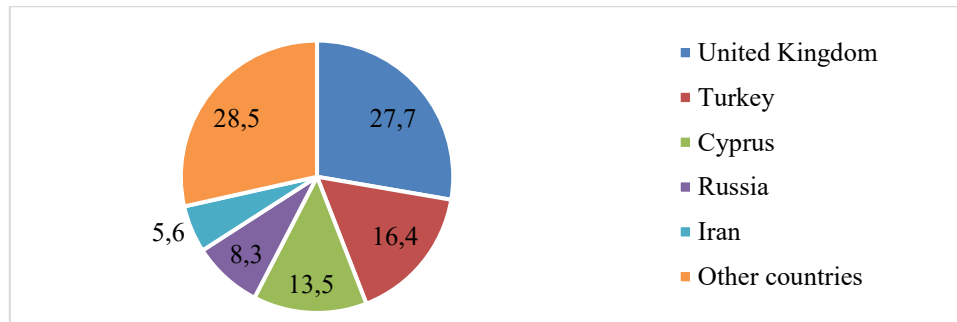

Figure 2. The total share of FDI inflows into Azerbaijan in the first 9 months of 2022
Source: (UNCTAD, 2022)

Furthermore, Figures 3 and 4 demonstrate the partner countries of Azerbaijan in Trade (Export, Import). Figure 3 shows the top 5 countries which export goods and services to Azerbaijan. The top 5 countries which import goods and services from Azerbaijan are demonstrated in Figure 4.
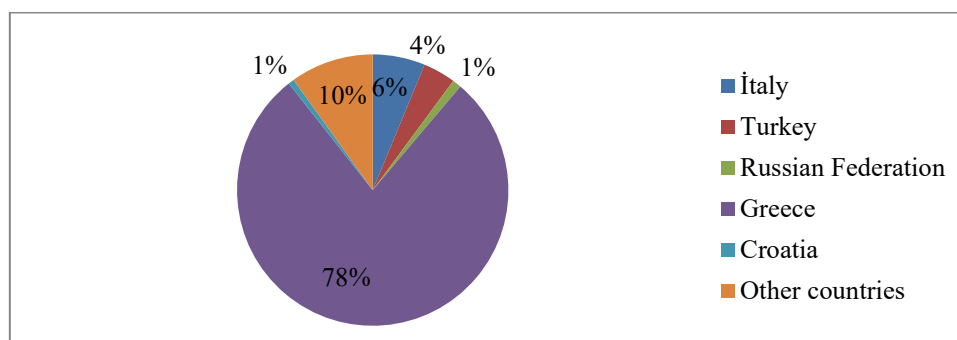

Figure 3. Top 5 export partners of Azerbaijan in 2021
Source: World Integrated Trade Solution (https://wits.worldbank.org/CountrySnapshot/en/AZE)
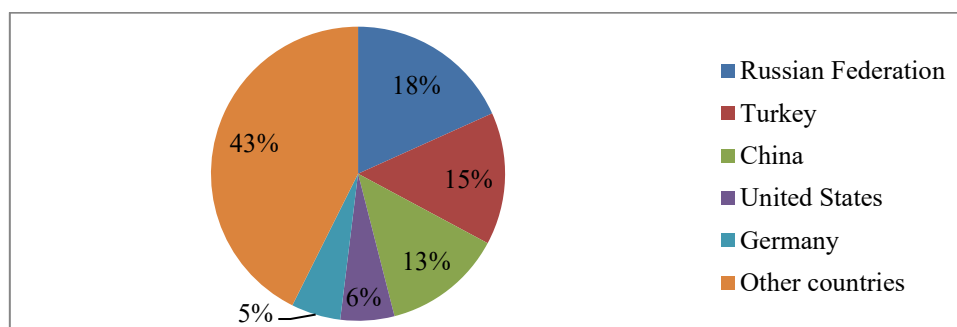
Figure 4. Top 5 import partners of Azerbaijan in 2021
Source: World Integrated Trade Solution (https://wits.worldbank.org/CountrySnapshot/en/AZE)

The authorities of Azerbaijan have emphasized the need to strengthen the business environment and impose minimal filtering on inward foreign investment. Azerbaijan launched a single virtual platform to provide company permits to boost FDI inflows into the economy despite

delayed systemic and curbing corruption adjustments. Despite this, the UNCTAD named the government one of the top 20 reformist states for its achievements in recording belongings, securing finance, safeguarding minority investors, and implementing agreements. Based on the (UNCTAD 2022) report, Russian companies invest in Azerbaijan`s construction, trade, services, banking, insurance, information technologies, transportation, and agriculture sectors. On the other hand, to secure the energy safety of European countries, the EU is interested in the safe transportation of gas and oil through a new corridor, which will be delivered in the following route: Azerbaijan – Georgia - Turkey – Europe. Moreover, after the Nagorno-Karabakh conflict between Azerbaijan and Armenia, the state allocated 2.2 billion AZN (approximately 1.3 billion USD) in 2021 and 2.7 billion AZN (approximately 1.6 billion USD) in 2022 for the restoration and reconstruction of Nagorno-Karabagh region and now actively seeks for the foreign investors who interest in investing those regions.[6]. Additionally, the state plans to increase the investment amount from 2.7 billion AZN to 3 billion AZN (approximately 1.8 billion USD) in 2023. Despite the strong sides of Azerbaijan, there are also the weak sides of this state. The policymakers should strengthen the liberalization processes without discriminating against local investors and must strict the anti-trust regulations to create a competitive market. It was mentioned that Azerbaijan has a well-organized infrastructure compared to neighboring countries, which are not considered a competitor for developed countries of the rest of the World. That is why the state should increase the quality of infrastructure in Azerbaijan to create a fruitful climate for foreign investors. Additionally, the level of CIT (corporate income tax) in Azerbaijan is adjusted to 20%[7]. Compared to other countries Azerbaijan's corporate income tax rate is not the highest and lowest but comparable with foreign investment-oriented countries, for instance, Hungary (9%), Qatar (10), Ireland (12,5), Georgia (15), Singapore (17), and Ukraine (18), the CIT of Azerbaijan is not competitive. From the previously mentioned information, the policymakers put some effort into attracting the attention of foreign investors towards non-oil sectors. However, from the export of products and services (93,6%), it should be confirmed that they failed with this mission. Furthermore, the Nagorno-Karabakh war, which occurred during the pandemic, harmed Azerbaijan`s economy very hard. After this occasion, the state started to focus on the liberated regions in Karabakh, which cost a lot of Azerbaijan. Moreover, Azerbaijan needs to use the potential in R & D development. There are plenty of universities and scientific centers in Azerbaijan that should be financed by state or foreign investors to discover and develop new high-tech. Unfortunately, the amount of finance invested in science is meager in Azerbaijan. That is why there is a technological dependence of Azerbaijan on other countries and companies.

Studies on the effect of FDI on the export of hosting countries are abundant. These studies provide different results due to different utilized data, methodologies, and considered countries. Basilgan and Akman (2019) analyzed the effect of foreign direct investment inflows on exports in Turkey from 2005 to 2018. The Autoregressive Distributed Lag Bounds Testing approach has been employed to analyze the impact of FDI on exports regarding Turkey. The results of the ARDL approach indicated a statistically significant and positive impact of foreign direct investment on exports in Turkey.

Moreover, Enimola (2011) investigated the relationship between FDI and exports in Nigeria from 1970 to 2008. The ADF and PP unit root tests, Johansen cointegration test, and Granger causality test were employed for the empirical part of the research. The findings of the Johansen cointegration test indicated at least 1 cointegration among the analyzed series. The results of the Granger causality test demonstrated a unidirectional causality from FDI to export. Karimov (2019) examined the effect of FDI on Trade in Turkey from 1974 to 2017. The Augmented Dickey-Fuller, Granger causality and Johansen cointegration tests were applied for the statistical part of the research. The findings indicated a unidirectional causality running from export to foreign direct investment and an existence of cointegration between examined variables. Gebremariam and Ying (2022) investigated the impact of FDI on exports in Ethiopia from 1992 to 2018. The ARDL approach was utilized to examine the effect of FDI on exports. The results of the ARDL test indicated an insignificant relationship between the analyzed series.

Selimi (2016) examined the relationship between FDI and exports in Western Balkan countries from 1996 to 2013. The panel and Least Square Dummy Variable regression tests were

employed for the statistical part of the paper. The findings of statistical tests confirmed that the foreign direct investment consequences are positive on exports regarding Western Balkan countries. Sultanuzzaman et al. (2018) analyzed the long-run and short-run linkage among FDI, economic growth, and exports in Sri Lanka from 1980 to 2016. The ARDL approach was utilized to accomplish an empirical part of the paper. The results which were gained from statistical tests presented a significant and positive relationship between FDI and economic growth. Thus, an increase in FDI inflows will lead to economic growth. Moreover, according to the findings of empirical analyses, the relationship between exports and economic growth was significant and negative. This means an increase in FDI inflows will back economic growth. The ARDL cointegration test confirmed a negative and significant relationship between FDI and exports. Hence an increase of FDI inflows will reduce the export of Sri Lanka. Sultan (2013) investigated the relationship between foreign direct investment and exports in India from 1980 to 2010. The Johansen cointegration and Granger causality tests were employed to fulfill the empirical part of the study. According to the findings of Johansen's cointegration test, there was a cointegration between the analyzed series. Moreover, according to the findings of the Granger causality test based on VECM, there was a unidirectional causality running from export to foreign direct investment. In contrary to previous results, there was no causality running between variables in the short run.

By reviewing the current literature, it can be observed that there is a shortage of empirical research in the case of FDI and export relationship. Additionally, when we take a look at previous literature, it can be observed that there is no implemented research regarding Azerbaijan. Hence, this study will fill that gap in the current literature. This study aims to examine the relationship between foreign direct investment and trade (export) in Azerbaijan. This study expects to provide recommendations for Azerbaijani policymakers to tackle prevailing difficulties in the Azerbaijan economy and boost the volume of FDI inflows into the economy. The remainder of this paper is organized as follows. The next section outlines the methodology and data. The section that follows presents empirical results and discussion. The final section concludes and provides policy suggestions.

Data and Methods

Data Source

An annual time-series dataset from 1993 to 2021 taken from the World Bank Database was utilized for the statistical part of the paper.[8] Table 1 presents the data set.

Table 1. Description of utilized series

Variables	Abbreviation	Measurement unit	Source
Export of goods and services (% of GDP) (dependent)	EXP	Percentage change	World Bank
Foreign Direct Investment inflow (% of GDP) (Independent)	FDI	Percentage change	World Bank
Gross Fixed Capital Formation (% of GDP) (explanatory)	GFCF	Percentage change	World Bank

Unit Root Tests

This study employs the Augmented Dickey and Fuller (ADF) (Dickey & Fuller, 1981), Phillips and Perron (PP) (Phillips & Perron, 1988), and Zivot and Andrews (ZA) (Zivot & Andrews, 1992) unit root tests to check the stationarity of series. Unlike the ADF and PP tests, the ZA test considers structural breaks. The use of the ZA test in this study serves as an improvement from the previous studies.

ARDL Bound Testing Approach

In time-series investigations, several cointegration analyses are employed to investigate long-term correlations between variables. As an example, the most widely employed cointegration analyses are the Johansen cointegration (Johansen, 1988), Engle and Granger cointegration (Engle & Granger, 1987), and the Johansen and Juselius cointegration (Johansen & Juselius, 1990) tests. The disadvantage of these tests is that all series should be stationary at level (I(1)). Moreover, this

complication has been figured out by (Pesaran et al., 2001; Pesaran & Shin, 1995; Pesaran & Smith, 1998) by developing the Autoregressive Distributed Lag Bounds Testing (ARDL) approach. The great advantage of the ARDL cointegration test over the other cointegration tests is that all series might be integrated of order 1 (I(1)), order 0 (I(0)), or might be of mixed order. The ARDL econometrical model is as follows.

$$(1): \Delta EXP_t = \alpha_0 + \sum_{i=1}^{m} \alpha_{1i}\Delta EXP_{t-i} + \sum_{i=0}^{m} \alpha_{2i}\Delta FDI_{t-i} + \sum_{i=0}^{m} \alpha_{3i}\Delta GFCF_{t-i} + \alpha_4 EXP_{t-1} + \alpha_5 FDI_{t-1} + \alpha_6 GFCF_{t-1} + \mu_t \tag{1}$$

where Δ is first difference operator; μ_t is the error term; m is the optimal lag length.

The long-run and short-run relationships can be investigated through the ARDL approach. The null hypothesis implies no cointegration between the analyzed series and the alternative hypothesis shows that there is a cointegration between examined variables. The value of F statistics should be taken into consideration in bound testing. To confirm the presence of cointegration between analyzed series the value of F statistics should be more than critical values of upper bounds to reject the null hypothesis. When the F statistic is less than the critical values of the upper bound, there is no cointegration between the analyzed series.

Granger Causality Test

The causality test was used to identify the causality link once the cointegration between the series in the research was confirmed. The Granger causality explores the causality between two variables in a time series to determine whether one series will be relevant in predicting another series (Granger, 1969). Null hypothesizes of the Granger causality are the following (2):

X does not granger cause Y; Y does not granger cause X   (2)

To accept or reject the null hypotheses (there is no Granger causality between analyzed series) probability value should be taken into consideration. If the p-value is more than 0.05 then the null hypothesis should be accepted (there is no Granger causality between analyzed series) and if the p-value is less than 0.05 then the null hypothesis should be rejected and the alternative hypothesis (there is a Granger causality between analyzed series) should be accepted. The causality between the analyzed series might be in two forms (unidirectional and bidirectional). As the name indicates if there is causality running from X to Y and vice versa then it is called bidirectional and if there is just one-way causality between analyzed series then it is named unidirectional causality.

Results and Discussion

This section presents the findings. Table 2 displays the descriptive statistics and correlation estimates for the series utilized in the research.

Table 2. The descriptive statistics and correlation matrix of the series

	EXP	FDI	GFCF
Mean	45.624	13.823	27.077
Median	46.661	7.626	23.817
Maximum	68.128	55.070	57.710
Minimum	22.699	-3.126	15.643
Std. Dev.	12.771	14.771	9.971
Skewness	-0.094	1.540	1.636
Kurtosis	2.249	4.792	5.374
Jarque-Bera	0.722	15.356	19.756
Correlation			
EXP	1		
FDI	-0.055	1	
GFCF	-0.169	0.911	1

The correlation matrix output indicates a negative and insignificant relationship between FDI, GFCF, and EXP and a positive and significant relationship between GFCF and FDI. The correlation matrix and descriptive statistics convey specific early details of the link among series. On the other hand, empirical techniques will be employed to acquire a more accurate understanding of the interactions between series.

The Results of ADF, PP, and ZA Unit Root Tests

Before continuing with the cointegration testing, the stationary property of the data must be examined. Misleading regression issues emerge in research with non-stationary time series. The ARDL approach requires the variables to be maximum of first-order stationary.

Table 3. The outputs of ADF and PP unit root tests

Variables	ADF (Intercept and trend)		PP (Intercept and trend)	
	At level	At 1st difference	At level	At 1st difference
EXP	[-2.597] (0.283)	[-7.195] *** (0.000)	[-2.804] (0.207)	[-7.212] *** (0.000)
FDI	[-4.384] *** (0.009)	-	[-1.936] (0.609)	[-4.375] *** (0.009)
GFCF	[-3.428] (0.068)	[-4.218]** (0.013)	-1.722 (0.714)	[-3.650]** (0.044)

Note: In the ADF and PP unit root tests, the parentheses indicate p-values, brackets indicate t-statistics, and asterisks (***, **) denote statistical significance at a 1%, and 5% level respectively. The critical values for this test at 1%, and 5% significance levels are -4.33, and -3.58, respectively

The ADF and PP unit root tests presume that series have a unit root at levels. To reject the null hypothesis t-statistics must be higher than critical values at levels and the probability value needs to be less than 0.05. According to the outputs of the ADF unit root test, FDI is stationary at level and EXP, and GFCF is stationary at the first difference. Outputs of the PP unit root test indicate that all series (FDI, EXP, and GFCF) are stationary at the first difference (See Table 3).

The Results of the Zivot-Andrews Unit Root Test (Structural Break)

Table 4. The findings of the ZA test

Variables	ZA unit root test					
	Model A (Intercept)		Model B (Trend)		Model C (Intercept and trend)	
	t-statistic	Break year	t-statistic	Break year	t-statistic	Break year
EXP	-4.869*	2016	-6.256***	2007	-6.482***	2009
FDI	-4.745*	2001	-5.875***	2004	-5.259**	2008
GFCF	-5.104**	2002	-4.359*	2004	-5.628***	2007

Note: The critical values for Model A at 1%, 5%, and 10% significance levels are -5.34, -4.93, and -4.58 respectively. The critical values for Model B at 1%, 5%, and 10% significance levels are -4.80, -4.42, and -4.11 respectively. The critical values for Model C at 1%, 5%, and 10% significance levels are -5.57, -5.08, and -4.82 respectively. The asterisks (***, **, *) denote statistical significance at a 1%, 5%, and 10% level respectively.

The disadvantage of the ADF and PP unit root tests is that these tests do not consider structural breaks. Accordingly, the ZA unit root test was developed to solve this weakness. The ZA unit root test considers the structural breaks in the time series dataset and analyzes the presence of unit root in the dataset. The ZA unit root test looks for structural breaks in a sequence of 3 distinct models. Model A shows solely a break in the intercept; Model B represents just a break in the trend; and Model C demonstrates both a break in the intercept and a break in the trend. The

ZA test`s H_0 is that the variables are nonstationary (include a unit root), whereas the H_A is that the variables are stationary (do not include a unit root). To reject the null hypothesis and accept the alternative hypothesis the value of t-statistics should be higher than critical values at significance levels. According to the findings of the ZA test, all variables are stationary with one structural break (t-statistics are higher than critical values 1%, 5%, and 10% respectively) (See Table 4).

The Results of the ARDL Approach

According to the findings of ARDL bounds testing the F statistic (5.156265) is higher than the upper bounds at 5% significance, which indicates that there is a cointegration between analyzed series (See Table 5).

Table 5. The findings of ARDL cointegration test

Estimated equation			$EXP_t = f(FDI_t, GFCF_t)$	
Autoselected lag structure			(1,1,1)	
Cointegration	F statistic	Significance	Critical values	
			lower bounds I(0)	upper bounds I(1)
Yes	5.156265	10%	3.17	4.14
		5%	3.79	4.85
		1%	5.15	6.36
R-squared			0.751	
Adjusted R-squared			0.695	
F-statistic			13.310	
Prob(F-statistic)			0.000	
Durbin-Watson stat			1.177	

The Results of Long-Run and Short Analysis

After confirming the presence of cointegration between the analyzed series, the long-run and short-run analysis will be run to check whether there is a long-run, short-run, or both relationship between the analyzed series. The findings of the long-run test indicated that there is a positive long-run relationship between FDI and EXP and a negative long-run relationship between GFCF and EXP. Thus, a 1 % increase in FDI will increase the EXP by 2.15 %, and a 1% increase in GFCF will decrease EXP by 2.3%. Based on the Error Correction Form test, there is no short-term relationship between FDI and EXP, but there is a negative short-term relationship between GFCF and EXP. Hence, a 1 % increase in GFCF will decrease EXP by 1.18 %. Also, the coefficient of the ECM, CointEq(-1), is negative and statistically significant, which demonstrates that the export of goods and services (EXP) adjusts towards its long-run equilibrium at the rate of 31% (Table 6).

Table 6. The long-run and short-run analysis

Long-run analysis			Short-run analysis		
Variable	Coefficient	T statistic and Prob.	Variable	Coefficient	T statistic and Prob.
FDI	2.152	[3.083]** (0.00)	D(FDI)	0.441478	[2.055] (0.05)
GFCF	-2.303	[-2.563]** (0.01)	D(GFCF)	-1.186711	[-4.361]** (0.00)
Constant	24.249	[2.159] (0.04)	CointEq(-1)	-0.318507	[-4.107]** (0.00)

Source: Author`s calculations

The Results of Diagnostic Tests

The next step would be to run a diagnostic test to test the functionality of the built model. Based on the outputs of the diagnostic test, there is no serial correlation and heteroscedasticity, and the residuals are normally distributed. We can conclude that the model is correctly specified (Table 7).

Table 7. The findings of diagnostic tests

Diagnostic test	χ^2	P-value	Conclusion
The Breusch-Godfrey Serial Correlation LM Test	4.796	0.09	Absence of serial correlation
The Breusch-Pagan-Godfrey`s heteroskedasticity test	4.244	0.51	Absence of heteroskedasticity
The Jarque-Bera Normality Test	5.646	0.05	Residual is normally distributed
The Ramsey RESET test	0.878	0.38	The model is stable (correctly specified)

Source: Author`s calculations

For the further step to check the structural stability in the model, the CUSUM and CUSUMSQ tests will be employed. The results of the CUSUM and CUSUMSQ stability tests indicated that the predicted model is steady during the relevant period (See Figure 5).
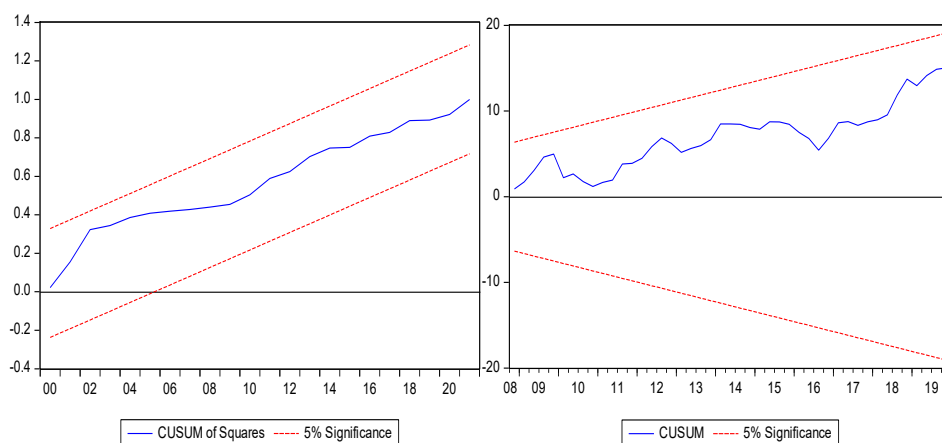
Figure 5. The findings of CUSUM and CUSUMQ tests

The Results of Granger Causality Test

The cointegration between analyzed series can be detected with the help of the ARDL bound testing approach, however, the direction of the relationship between analyzed series cannot be done through this test. Hence, the Granger Causality test needed to be performed to determine the direction of the relationship between the analyzed series.

Table 8. The findings of the Granger Causality test for FDI and EXP

Pairwise Granger causality test, Lags 2, Sample 1993-2021, Observations 27		
Null Hypothesis	F-statistic	Prob.
FDI does not Granger Cause EXP	5.152	0.014
EXP does not Granger Cause FDI	0.045	0.955

The Granger causality test results indicated that there is Granger causality running from FDI to EXP (the null hypothesis that FDI does not Granger cause EXP is rejected due to the probability value, which is below 0.05, and the alternative hypothesis that FDI Granger causes EXP is accepted). Moreover, when we take a look at the direction of the relationship from EXP to FDI, it can be observed that there is no Granger causality between the analyzed series (the null hypothesis that EXP does not Granger cause FDI is accepted due to the probability value which is higher than 0.05). In summary, the unidirectional relationship running from FDI to EXP was confirmed via the Granger Causality test (See Table 8).

Conclusion

This research aimed to investigate the effect of foreign direct investment inflows on trade (export) in Azerbaijan. Taking into consideration the theories about FDI and trade relationships and implemented empirical studies on this topic, it can be said that, foreign direct investment has a

positive effect on trade (export) in recipient countries. Therefore, to verify our claims, further statistical tests were required to be done. The results of the ARDL cointegration test revealed a positive and significant relationship between the analyzed series (EXP and FDI). Moreover, the results of the long-run test indicated a positive and significant relationship between FDI and EXP; however, the results of the short-run test demonstrated an insignificant relationship between analyzed series. Thus, based on the long-run and short-run analyses, the foreign direct investment inflows boost exports of Azerbaijan only in the long term. The findings of the Granger Causality test indicated a unidirectional causality from FDI to EXP in Azerbaijan. Overall, it is proved that the foreign direct investment inflows will positively contribute to the export of Azerbaijan. The thing is, when we take a look at the trade statistics.[9] it can be seen that 93.6 % of the export of Azerbaijan consists of crude oil, natural gas, and oil products, which means that the country's economy strongly depends on the oil and gas industry. However, Azerbaijan Republic has great potential in other sectors as well. To sum up, the Azerbaijan Republic has great potential not just in the oil and gas sector but also in manufacturing, agriculture, mining, transportation, tourism, and energy (renewable) sectors. Hence, the recommendation for the policymakers would be the following:

1. To liberalize the economy of Azerbaijan and make it more suitable for foreign investors but without taking the rights of domestic investors
2. To develop the infrastructure not just in the oil and gas sector but also in other sectors such as manufacturing, agriculture, mining, transportation, tourism, and energy (renewable)
3. To support the domestic and foreign investors in non-oil sectors by giving them incentives and subsidies
4. To decrease the corporate income tax (CIT) from 20%[10] up to 18% in order to attract more foreign investors to Azerbaijan
5. To strengthen the anti-trust activities against monopolistic actions of local and foreign companies in the Azerbaijan Republic with the help of new strict regulations
6. To stabilize the economic and political situation of the country after the COVID-19 pandemic, oil crisis, and Nagorno-Karabakh War with Armenia, which occurred during the pandemic.
7. To put scientific investments in R&D development at universities to develop high technologies. Thus, developing the new high-tech will decrease technological dependence on other countries and MNCs and, afterward, will profit by exporting them to other countries.

The research results indicated a positive and significant relationship between FDI and exports. Additionally, this research will fill the gap in scarce literature and serve as a guide for policymakers of Azerbaijan.

Acknowledgments

Disclosure Statement

The authors do not have any competing financial, professional, or personal interests from other parties.

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