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# The effects of Economic blocs on Foreign Direct Investment: Referring to the economic bloc of countries UEMOA, CEMAC

**Fadwa Ali Hussein Alabd**

Assistant professor, Northern Technical University, Iraq  
fadwaalabd@ntu.edu.iq

**Mohammed Najeeb Albana**

Teacher, Northern Technical University, Iraq  
muhammed.ns@ntu.edu.iq

## Abstract

The aim of this study is to measure the effects of Economic blocs on Foreign Direct Investment for the group UEMOA and CEMAC, to achieve this goal we study the long-term relationship among Foreign Direct Investment inflows as a dependent variable and Intra- trade as an independent variable using econometric methods such as the var model during the period 2000-2021, the experimental results indicate there is a high degree of co-movement between variables, which confirms that Economic blocs have a positive impact on Foreign Direct Investment in the long term only.

**Keywords:** Economic Blocs, Foreign Direct Investment, Regional Blocs in Africa, Var Test.

## 1. Introduction

Economic blocs between countries have played a vital role in the past decade. Especially at the regional level, as according to of regional blocs Agreements, these developing countries have renewed interest in the economics of regional blocs.

In recent years, the global economy has witnessed an increasing and accelerating trend towards integration and the building of strong regional economic blocs that

increase the competitive capabilities of member states. Developing countries no longer have the right to remain isolated, hence, to take steps. Concrete ways to strengthen coordination in economic policies among them, in order to achieve several goals, including increasing job opportunities and raising income, economic growth rates in member states, in addition to creating conditions for the flow of investments and attracting them to various economic sectors. Therefore, in this paper the main concern for this study seeks to answer the question

**What is the impact of the economic bloc, UEMOA and CEMAC, on foreign direct investment in African countries? Is economic integration more beneficial to FDI?**

Based on this, our study is based on the following hypothesis: **“There is a positive impact of intra-regional trade on foreign direct investment in each of the UEMOA and CEMAC countries”**

To ensure the validity of the study hypothesis, we will rely on both the descriptive and analytical approach in order to review the theoretical framework of economic integration, and the inductive approach, where the reality of incoming foreign direct investment is extrapolated, from during the collection of data and information related to them, as well as research related to the topic. The study, in addition to the standard quantitative approach, in order to obtain the results of the study. Standard analysis of the impact of economic bloc on investment.

**The Study Seeks to Achieve the Following Goals:**

- Identifying the reality of the economic integration of both the West African Monetary Union and the Central African Monetary Union.
- Statement of the volume of inward foreign direct investment for each of UEMOA and CEMAC.
- Explaining the impact of intra-regional trade on foreign direct investment in

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UEMOA and CEMAC.

Many studies have shown a positive relationship between economic blocs And direct foreign investment, the most important of which is a study (Linh et al. 2019) This study aimed to find a relationship between foreign direct investment and economic growth in a country Vietnam during the period 1990 - 2017 using the ARDL model, and its experimental results found that There is a strong relationship between foreign direct investment and growth, as the first variable is considered a main driver For economic growth in Vietnam.

A study of (Bilas Vlatka, 2020) This study attempted to find out the relationship between foreign direct investment and gross domestic product In thirteen countries belonging to the European Union, this is by focusing on a standard analytical study that includes Annual time series during the period extending from 2002 to this day using the ARDL and causal approach Granger, the study concluded that there is only weak evidence that FDI on GDP It had a statistically significant effect, as it indicated that there is a long-term balance between Variables used in the study model, which causality testing showed an indirect relationship between GDP growth rate and foreign direct investment growth rate.

A study (Nilofer and Abdul Qayyum, 2018) This study sought to measure the impact of foreign direct investments on economic growth in a country Pakistan during the period extending from 1970 - 2015, using the ARDL model, and I found that there were traces It is positive for both public and private investment on economic growth, while it also found an effect Negative impact of both FDI and public consumption on economic growth in Pakistan where This effect is due to the fact that foreign direct investment flows are relatively low for several decades compared to developing countries Others, as well as the fact that these flows are in the form of loans, the cost of which is greater than the returns on foreign investment Direct.

A study (Amany Fakher, 2012) has indicated There is a positive and significant relationship between foreign investment Direct and regional integration in the Association of Southeast Asian Nations, known by its abbreviation In ASEAN, during the period 1995-2008, therefore, regional integration plays an essential role in supporting the economic determinants of foreign direct investment.

This study distinguishes from other previous studies is that it deals with an important sample of regional economic blocs in Africa that have worked to deepen economic integration among themselves since 1994.

## 2. The Nature of Economic Integration

Interest in the issue of economic integration began with Viner, Meade, Myrdal, Tinbergen, Lipsey Scitovsky, However, the full formulation of the theory of economic integration was at hand Bella Balassa 1962.

### 2.1 The Economic Importance of Economic Blocs:

According to what economic theory says economic blocs there is a set of characteristics:

That characterize countries that enter into establishing an economic bloc, A state's status today is determined by its advantages in achieving good living standards, developing international trade, and establishing a unified market. (Al-Banna, 2023, 173), and they can be stylized as follows:

1. Benefiting from the expansion of market size resulting from the removal of customs barriers between Member States, which leads to increased production and lower costs; The thing that It results in increasing the welfare of consumers.
2. Redistribution of production factors between economically integrated countries, including it helps absorb excess pressure, alleviate deficiency, and Increase employment opportunities.

3. Improving the negotiating position of member states vis-à-vis the outside world.
4. Increasing the rate of economic growth in member countries by encouraging it for investment, especially in the long term.
5. Increasing the volume and opportunities of investment resulting from reducing uncertainty in both investors or producers, as well as improving opportunities for foreign investments.
6. Supporting the political center of integrated countries due to the similarity of their theoretical orientations and political positions.

The study Smith (1987) aimed to identify the impact of trade policy on foreign direct investment by studying the relationship between investment and the volume of exports exported from the country hosting the investment. The study concluded that changes in trade policy may affect investment.

The study Blonigen and Feenstra (1996) aimed to identify the impact of the protectionist trade policy on establishing a regional economic bloc by studying the relationship between the protectionist trade policy imposed by the state in the bloc on non-member states. The study concluded that the changes that occur in the adopted trade policy affect investment by countries that are not members of the economic bloc.

The study as highlighted by Motta and Norman (1996), aimed to identify the impact of establishing a regional economic bloc on economic growth by studying the relationship between reducing internal restrictions by the state in the bloc on the member states. The study concluded that the changes that occur in the adopted trade policy affect investment by member states in the economic bloc and thus increase economic growth rates and the availability of job opportunities.

### 3. The Theoretical of FDI

The issue of foreign direct investment has attracted the attention of many economists and academics who worked hard to define clear and precise concepts for this the type of investments, in addition to identifying its various forms and effects. Foreign direct investment can be defined as an establishment or company investing in projects located outside the borders of its home country, with the aim of exercising a degree of influence on the operations of those projects.

In another definition of foreign direct investment, we find that it represents every investment that includes a long-term relationship it reflects the continuing interests of a party residing in one country in an entity located in another country, including varying degrees of management and ownership of that entity.

In 1996, the International Monetary Fund restricted foreign direct investment It is the national investor owning at least 10% of the capital shares of one of the business institutions existing within the borders of his home country, for the benefit of a foreign investor, provided that this ownership is linked to the ability of this other person to influence the management of this company.

In general, the pioneers of modern theory believe that foreign direct investment is considered one of the most successful means of promoting comprehensive development Due to the benefits and positive effects that may result from it on the host countries, which are as follows:

- Financing and achieving economic development.
- Creating new job opportunities.
- Improving the balance of payments.
- Transfer of technology and technical and administrative skills.

Foreign direct investments take four different forms, allowing multiple paths and choices for both the foreign investor and his host country. Overall, these categories are as follows:

**1. Joint Foreign Direct Investments:**

This form represents a long-term investment concluded between two parties, one national and the other foreign. However, participation in this type of investment does not require each party to enter into a partner with a share of the capital. Only one party may provide information, experience, or technological work on the condition of its participation with the other party. In project management

**2. Investments Wholly Owned by A Foreign Investor:**

This type of investment represents the most preferred by the foreign investor, as it gives him absolute ownership of the project and complete freedom in management.

**3. Assembly Projects or Operations:**

These are agreements under which a foreign investor supplies a national investor with the components of a specific product with the aim of assembling them to become a final product.

**4. Multinational Companies:**

They are companies whose ownership and management are subject to the control of multiple nationalities and carry out their economic activities in multiple foreign countries. However, their business plans and policies are designed in their main center, which is located in a specific country called the home country, but their activity exceeds the borders of the national state of this country to other countries, which is the host country.

The study of Brenton et al. (1999) aimed to identify the impact of entering into an economic bloc on foreign direct investment through application to some European countries. The study concluded that establishing an economic bloc

contributed to attracting more investments and improving the economic situation. The study of Waldkirch (2003) aimed to identify the impact of entering an economic bloc on foreign direct investment through application to the state of Mexico. The study concluded that Mexico's accession to the NAFTA bloc contributed to attracting more investments and improving the economic situation. Yeyati et al. (2003) The study aimed to identify the impact of entering into an economic bloc on foreign direct investment through application to 20 OECD Countries to 60 host countries from 1982 to 1998, and the study concluded that the joining of these countries into an economic bloc contributed to attracting more investments and improving the economic situation, unlike a country that did not join an economic bloc.

#### **4. Brief Overview of the Regional Economic Blocs in Africa**

Below a brief overview of the selected economic blocs will be given:

##### **4.1. West African Monetary Union (UEMOA):**

The historical origins of the West African Monetary Union go back to the year 1955 AD. When the right to issue banknotes was transferred to the West African Publishing Corporation French and Togolese, and in 1959, the Central Bank of West Africa was established To replace the institution However, the actual beginning was in May 1962 AD, after this happened States on their independence Where the treaty called the Cooperation Agreement was signed Cash, among the member states at the time: Ivory Coast, Benin (formerly called Daumi, Burkina Faso (formerly called Upper Volta), Mali, Mauritania, Niger and Senegal, which entered It entered into force on November 2, 1962, and the treaty was signed the second in 1973 AD -with a financial withdrawal from it before it entered into force -which stipulates: Provides for the establishment of a unified currency A unified exchange rate was chosen, linked to the franc Formerly French, the Central Bank

was moved from Paris to Dakar, the capital of Senegal, in 1978. It was completed Establishment of the Economic and Monetary Union of Western Europe Africa according to a treaty signed in Dakar that entered into force in 1994 after its ratification The West African Economic and Monetary Union aims to:

1. Enhancing the competitiveness of the financial and economic activities of member countries, in an open and competitive economic framework and an appropriate legal environment.
2. Ensuring convergence in the performance and economic policies of member states by conducting multilateral monitoring.
3. Coordination of national sectoral policies through the implementation of joint actions, in particular In the field of human resources development, land use, agriculture, energy, Industry, mining, transportation, infrastructure and communications.
4. Establishing a common market among member states based on the free movement of people, goods, services and capital, as well as determining external customs tariffs. Common and common trade policy.

**4.2.1. Trends in the Development of Foreign Trade in (UEMOA):** The direction of development of foreign trade indicators in UEMOA, and during the period of the study, will be addressed. As follows:

The value of total UEMOA exports was clearly characterized by development during the period under study, as it rose its value increased from \$1,610 million in 2004 to approximately \$2,892 million in 2012. And still rise years until it became \$6,113 million in 2022.

The value of total UEMOA IMPORTS was clearly characterized by development during the period under study, as it rose its value increased from \$1,400 million in 2004 to approximately \$3,129 million in 2012. And still rise years until it became \$5,254 million in 2022.

The value of total UEMOA Total commerce External was clearly characterized by development during the period under study, as it rose its value increased from \$3,010 million in 2004 to approximately \$6,021 million in 2012. And still rise years until it became \$11,367 million in 2022.

The value of total UEMOA TRADE BALANCE was clearly characterized by development during the period under study; the trade balance of the volume of intra-trade between the countries of the bloc witnessed a trade surplus in 2004 amounting to \$210 million. Then it witnessed a deficit of 2012 amounting to \$-237million and then achieved a surplus of 2022 amounting to \$858 million.

Table (1): Trends in the development of UEMOA foreign trade indicators for the period (2004-2022)  
(Source: Prepared by the researcher based on World Bank data) - Value: million

index Year	EXPORT	IMPORT	Total commerce External	Status The scale Commercial
2004	1610	1400	3010	210
2005	1598	1430	3028	168
2006	1560	1686	3446	-126
2007	1930	1909	3839	21
2008	2535	2347	4882	188
2009	2051	1103	3454	947
2010	2108	2711	4819	-602
2011	2582	2667	5249	-85
2012	2892	3129	6021	-237
2013	2864	1866	4730	997
2014	3264	1793	5157	1,470
2015	2712	1348	4060	1,364
2016	3213	2587	5800	625
2017	3641	3232	6863	408
2018	4097	3608	7705	488
2019	4513	3521	8054	992
2020	4226	4012	8234	213
2021	5085	3640	8725	1,444
2022	6113	5254	11367	858

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**1- Burkina Faso:** The direction of development of foreign trade indicators in - Burkina Faso, and during the period of the study, will be addressed. As follows:

The value of total -Burkina Faso exports was clearly characterized by development during the period under study, as it rose Its value increased from \$392,0 thousand in 2004 to approximately \$2,105,6thousand in 2012. And still increasing it became \$ 4,548,7 thousand in 2022.

The value of total -Burkina Faso IMPORTS was clearly characterized by development during the period under study, as it rose Its value increased from \$995,3 thousand in 2004 to approximately \$3,227,7 thousand in 2012. And still increasing it became \$5,631,8 thousand in 2022.

The value of total Cameroon -Burkina Faso Total commerce External was clearly characterized by development during the period under study, as it rose Its value increased from \$1,387 thousand in 2004 to approximately \$5,333,3 thousand in 2012. And still increasing until it became \$10,180,5 thousand in 2022.

The value of total -**Burkina Faso** TRADE BALANCE was clearly characterized by development during the period under study, The trade balance of the volume of a trade deficit in 2004 amounting to \$-603,2 thousand . Then it witnessed a deficit of 2012 amounting to \$-1,122,0 thousand and then achieved a decrease deficit of 2022 amounting to \$-1,083,0 thousand.

Table (2): Trends in the development of **Burkina Faso** foreign trade indicators for the period (2004-2022)

(Source: Prepared by the researcher based on World Bank data) - Value thousand

index Year	EXPORT	IMPRT	Total commerce External	Status The scale Commercial
2004	392,0	995,3	1,387	-603,2
2005	349,2	1,166,3	1,515,5	-817,1
2006	507,0	1,502,2	2,009,2	-995,1
2007	453,3	1,558,6	2,011,9	-1,105,2
2008	473,9	1,889,5	2,363,4	-1,415,5
2009	794,0	1,861,9	2,655,9	-1,067,9
2010	1,290,5	2,048,5	3,339,0	-758,0
2011	2,317,8	2,410,4	4,728,2	-92,6
2012	2,105,6	3,227,7	5,333,3	-1,122,0
2013	2,374,4	4,152,1	6,526,5	-1,777,6
2014	2,604,1	3,586,7	6,190,8	-982,5
2015	2,220,5	3,081,6	5,302,1	-861,0
2016	2,529,1	3,346,8	5,875,9	-817,6
2017	2,820,7	3,714,8	6,535,5	-894,1
2018	3,269,7	4,307,5	7,529,0	-1,037,8
2019	3,261,1	4,259,3	7,520,4	-998,2
2020	4,381,0	4,185,5	8,566,5	195,5
2021	5,062,8	4,713,6	9,776,4	349,2
2022	4,548,7	5,631,8	10,180,5	-1,083,0

#### 4.2. Economic and Monetary Community of Central Africa:

The idea of establishing a monetary union between Central African countries dates back to April 1959 when it was established, the unified central bank. To replace the Issuing Institution for French Equatorial Africa and Cameroon, and to establish the Equatorial Customs Union 1959. In 1994, it signed a treaty establishing the Central Economic and Monetary Community in N'Djamena, Chad Africa (CEMAC) .In 1994, it signed a treaty establishing the Central Economic and Monetary Community in N'Djamena, Chad Africa (CEMAC) replaced the monetary union in 1998 Which aims to:

1. Establishing a common market based on the free movement of people, goods,

services and capital.

2. Establishing a unified financial administration within the Union.
3. Achieving a safe environment for conducting economic and commercial activities in general.
4. Unifying policies and legislation within member states.

**4.2.1. Trends in the Development of Foreign Trade in (CEMAC):** The direction of development of foreign trade indicators in CEMAC, and during the period of the study, will be addressed. As follows

The value of total CEMAC exports was clearly characterized by development during the period under study, as it rose its value increased from \$3,165 million in 2004 to approximately \$32,906 million in 2012. And decreased it became \$20,664 million in 2022.

The value of total CEMAC IMPORTS was clearly characterized by development during the period under study, as it rose its value increased from \$7,064 million in 2004 to approximately \$40,917 million in 2012. And decreased it became \$18,526 million in 2022.

The value of total CEMAC Total commerce External was clearly characterized by development during the period under study, as it rose its value increased from \$10,229 million in 2004 to approximately \$73,823 million in 2012. And decreased until it became \$39,190 million in 2022.

The value of total CEMAC TRADE BALANCE was clearly characterized by development during the period under study, the trade balance of the volume of intra-trade between the countries of the bloc witnessed a trade deficit in 2004 amounting to \$-3898 million. Then it witnessed a deficit of 2012 amounting to \$-8011 million and then achieved a surplus of 2022 amounting to \$2137 million.

Table (3): Trends in the development of CEMAC foreign trade indicators for the period (2004-2022)

(Source: Prepared by the researcher based on World Bank data) - Value: million

index Year	EXPORT	IMPRT	Total commerce External	Status The scale Commercial
2004	3165	7064	10229	-3898
2005	3695	3816	7511	-121
2006	4796	5811	10607	-1015
2007	12773	18994	31767	-6220
2008	12922	18408	31330	-5486
2009	21829	18405	40234	3423
2010	26357	23592	49949	2764
2011	29151	32962	62113	-3810
2012	32906	40917	73823	-8011
2013	51166	41884	93050	9282
2014	50187	13964	64151	36222
2015	50390	22689	73079	27700
2016	56177	8650	64827	47526
2017	28645	10928	39573	17717
2018	3,033,7	1,075,0	41087	19586
2019	24747	9429	34176	15318
2020	23016	7333	30349	15683
2021	30190	10771	40961	19419
2022	20664	18526	39190	2137

**1- Cameroon:** The direction of development of foreign trade indicators in **Cameroon**, and during the period of the study, will be addressed. As follows:

The value of total **Cameroon** exports was clearly characterized by development during the period under study, as it rose its value increased from \$2,476 thousand in 2004 to approximately \$4,274 thousand in 2012. And decreased it became \$7,871 thousand in 2022.

The value of total **Cameroon** IMPORTS was clearly characterized by development during the period under study, as it rose its value increased from \$2,406 thousand in 2004 to approximately \$6,515 thousand in 2012. And still increasing it became \$8,634 thousand in 2022.

The value of total **Cameroon** Total commerce External was clearly characterized by development during the period under study, as it rose its value increased from \$4,882 thousand in 2004 to approximately \$10,789 thousand in 2012. And still increasing until it became \$16,505 thousand in 2022.

The value of total **Cameroon** TRADE BALANCE was clearly characterized by development during the period under study, The trade balance of the volume of a trade deficit in 2004 amounting to \$70,4 thousand . Then it witnessed a deficit of 2012 amounting to \$-2,240 thousand and then achieved a decrease deficit of 2022 amounting to \$-763,2 thousand.

Table (4): Trends in the development of **Cameroon** foreign trade indicators for the period (2004-2022)

(Source: Prepared by the researcher based on World Bank data) - Value thousand

index Year	EXPORT	IMPRT	Total commerce External	Status The scale Commercial
2004	2,476	2,406	4,882	70,4
2005	2,848	2,800	5,648	48,5
2006	3,576	3,149	6,725	427
2007	4,230	3,265	7,495	964,4
2008	2,126	4,137	6,263	-2,011,1
2009	1,732	3,788	5,520	-2,056,1
2010	3,878	5,133	8,950	-1,254,8
2011	2,147	5,074	7,221	-2,927,0
2012	4,274	6,515	10,789	-2,240,0
2013	4,520	6,657	11,177	-2,136,2
2014	5,159	7,561	12,720	-2,401,6
2015	4,052	6,036	10,088	-1,984,1
2016	2,130	4,898	8,028	-2,768,4
2017	3,264	5,183	8,447	-1,919,4
2018	3,804	6,133	9,937	-2,328,7
2019	4,083	6,582	10,665	-2,498,9
2020	3,155	5,605	8,760	-2,450,8
2021	4,319	6,984	11,303	-2,665,8
2022	7,871	8,634	16,505	-763,2

## 5. Standard Study

In order to know the impact of economic bloc on foreign direct investment, The Angle-Granger cointegration method was used using an annual basis of one year during the period 2000 to 2021 which were extracted from the database UNCTADSTAT, by estimating the following equation:

$$FDI = C_0 + C_1 INTR + e$$

Knowing that:

- FDI: It represents foreign direct investment coming into the integrated region.
- INTR: It represents intra-trade between member countries.
- $c_0, C_1$ : Model parameters.
- E: for a random variable.

### 5.1. Unit Root Test:

The unit root test allows us to know the stability of the time series under study. Determine the degree of integration, and it is considered the expanded Dickey-Fuller test is one of the most important methods used in this; where It includes three different regression equations, the first contains: on the fixed limit, the second is on the fixed limit and the general trend, As for the third, it has no fixed limit and no general trend, two hypotheses are tested, the first hypothesis is the null hypothesis,  $B=0 :H_0$  Which means the presence of a unit root or unstable variable, if the value is The absolute value of the calculated t is smaller than the absolute value of the tabulated t, This requires repeating the test again, But after taking into account the differences, the second hypothesis is the alternative hypothesis,  $B \neq 1: H_0$

Which indicates the stability of the series, if it is the absolute value of the calculated  $t$  is greater than the absolute value of the tabulated  $t$ , and if the original series is found to be stationary at the level, this means that it is integral. From zero degree  $I(0)$ , but if necessary take the differences (1, 2,  $d \dots$ ) To make it stable, we say that it is an integral of degree ( $d$ )  $I$ . The following table shows the results obtained:

Table (5): Results Dickey-Fuller Expanded Test A (Source: Prepared by the researcher based on the 9 Eviews program)

		FDI		INTR	
		T calculated at the level	T calculated at level one	T calculated at the level	T calculated at level one
UEMOA	INTERCEPT	-0.79	-3.00	-0.39	-4.21
	INTERCEPT AND TREND	-2.26	-4.05	-2.15	-4.50
	WITHOUT	0.28	-2.17	1.38	-4.88
CEMAC	INTERCEPT	-1.79	-4.36	-1.14	-5.13
	INTERCEPT AND TREND	-1.19	-4.67	-1.82	-5.00
	WITHOUT	-0.52	-4.29	0.02	-5.05

Note that the tabular value of ( $t$ ) is as follows:

Table No (6) :tabular  $t$  at 1%, 5% and 10% (Source: Prepared by the researcher based on the 9 Eviews program)

	INTERCEPT	INTERCEPT AND TREND	WITHOUT
1%	-3.808546	-4.467895	-2.679735
5%	-3.020686	-3.644963	-1.958088
10%	-2.650413	-3.261452	-1.607830

We note from the two tables that the null hypothesis is accepted. Because the absolute value of the calculated  $t$  is smaller than the absolute value of  $t$  Tabulation of all study variables, Which means there is a root unit, and thus the instability of the time series at the level, so we next By testing the first difference, it becomes clear to us that the null hypothesis is rejected because the calculated  $t$  value is greater From the tabular value of  $t$ , which means that the time series is free of a unit root, and therefore Its stability at the first difference, from which we say that the

study variables are stable after taking the first difference, and therefore they are integrated of the first order.

## 5.2. Estimating the Cointegration Regression Equation:

After ensuring that the time series of the study variables are stable and that they are integrated from the same point The first degree is 1 (I), so the relationship between the variables will be estimated in time Long using the least squares method:

Table (7): Cointegration regression equation (Source: Prepared by the researcher based on the 9 Eviews program)

	Dependent variable:fdi			ADJUSTED R <sup>2</sup>
		PARAMETERS	possibility	
<b>UEMOA</b>	INTR	0.423226	0.0000	0.785446
	C <sub>0</sub>	-178.9782	0.3963	
<b>CEMAC</b>	INTR	1.280651	0.0001	0.584734
	C <sub>0</sub>	619.7666	0.1936	

**It is evident from the above table that:** The explanatory power of the model is indicated by the adjusted coefficient of determination of 0.78 For the **UEMOA** and 0.58 for the SEMAK, therefore The explanatory variable, which is intra-trade, explains about 78% and 58% Among the changes that occur in the dependent variable, which is foreign investment direct;

- Intra-trade has a positive and significant impact on foreign direct investment in all blocs, which indicates that they have made great progress in integrating their economies. And thus benefit from its advantages.
- Every increase in intra-trade by 1% leads to an increase in foreign direct investment by 42.3% in **UEMOA**, which is significant because the probability value of 0.0000 is less than 5%.
- Every increase in intra-trade by 1% leads to an increase in foreign direct investment. By 128.06% for **CEMAC**, which is significant because the probability value of 0.0001 is less than 5%.

### 5.3. Testing the Stability of the Residual:

In order to accept the cointegration relationship, the residuals ( $e_t$ ) must be stable at the level, which is the linear combination generated by the long-run regression relationship: The results of the ADF test showed the following results:

Table (7): ADF TEST for residual (Source: Prepared by the researcher based on the 9 Eviews program)

		T calculated at the level
UEMOA	INTERCEPT	-3.67
	INTERCEPT AND TREND	-3.63
	WITHOUT	-3.76
CEMAC	INTERCEPT	-3.76
	INTERCEPT AND TREND	-3.83
	WITHOUT	-3.99

The table above shows that the series of residuals is stable at the level, because the calculated value of t is greater than the value of tabulated t, which indicates the existence of cointegration between intra-regional trade and foreign direct investment.

### 5.4. Error Correction MODEL:

After ensuring that the time series of the study variables are stable at the same degree, which is the first degree 1 (I), and the existence of a cointegration relationship, the error correction model will be estimated.

Which works to adjust any unbalanced state towards equilibrium in the long run, and this is done by entering the estimated residuals into the regression equation as an explanatory variable lagged by one period, in addition to introducing the differences for the other variables, as follows:

Table (8): results of var model (Source: Prepared by the researcher based on the 9 Eviews program)

	Dependent variable D(FDI)		
	Independent variable	C1	probability
UEMOA	D(INTR)	0.062582	0.6460
	RESID02(-1)	-0.426784	0.0469
CEMAC	D(INTR)	0.366660	0.5478
	RESID02(-1)	-0.470591	0.0333

The above table shows the significance of the error correction coefficient with a negative sign which indicates the existence of a long-term equilibrium relationship between the study variables in the clusters The economy under study, which means that foreign direct investment adjusts towards its value The equilibrium balance in each time period was 42.6% for **UEMOA** and 47.05% for **CEMAC**. We also note that intra-regional trade is insignificant because the probability value is greater than 5%, which means that there is no relationship between foreign direct investment and trade. Interoperability in the short term.

## 6. Conclusion and Recommendations

Through this study, we found that economic integration plays an important role in encouraging foreign direct investment in the long term, in both **UEMOA**, **CEMAC** during the period 2000-2021 The standard study showed the following results:

- All variables are stable at the first differences, which means that they are integrated at the same degree, and this means at the same time the possibility of a relationship between them in the long run.
- By estimating the cointegration equation, we found that there is a direct and significant relationship between inward foreign direct investment and intra-regional trade. Which means that deepening economic integration among member states has a positive impact on foreign direct investment.
- Estimation of the error correction model showed that the treatment was significant and negative, which confirms once again the existence of a long-term balanced relationship between the study variables.

There is no relationship between the study variables in the short term, which is consistent with what economic theory says which confirms the existence of a long-term relationship between foreign direct investment and the establishment of economic blocs only, and thus fulfills the study hypothesis. Which confirms the existence of a long-term relationship between foreign direct investment and the

establishment of economic blocs only, and thus verifies the hypothesis of the study, which gives a stronger impetus to the member states concerned with this study towards achieving greater coordination and integration among themselves to maximize the benefit of foreign investment

Through this study, the following **recommendations** were reached:

Paying more attention to economic integration or direct foreign investment, and reducing the multiplicity of memberships and their overlap in regional economic blocs. In Africa; introducing the investment opportunities that characterize African countries, especially African countries.

## Reference

- Amany Fakher “The impact of economic integration on FDI: applied study on ASEAN” International Journal of Trade and Global Markets, 2012, vol. 5n and the Multinational Enterprise, George Allen and Unwin, London.
- Al-Banna, Muhammad Najib, 2023, Food Security and the Current Situation in Iraq, NTU Journal of Administrative and Human Sciences, (2023), 3(4).
- Blonigen B.A. and Feenstra R.C. (1996) “Protectionist Threats and Foreign Direct Investment” NBER Working Paper Series, N. 5475, March.
- Blomström and Ari Kokko “Regional Integration and Foreign Direct Investment”, Working Paper Series in Economics and Finance No. 172 May 1997.
- Brenton, P. F. D. Mauro, and M. Lucke, 1999, “Economic Integration and FDI: An Empirical Analysis of Foreign Investment in the EU and in Central and Eastern Europe.” *Empirica*, vol. 26, issue 2, pp. 95-121.
- Dunning J. (1977) “Trade, Location of Economic Activity and MNE: A Search for an Eclectic Approach” in Ohlin B., Hesselborn P. And Wijkman P/M/ eds. The

- 
- International Allocation of Economic Activity, Macmillan, London. Dunning (1981) International Productio (1) Magnus.
- De Grauwe P. and Bellefroid B. (1986) “Long-run exchange rate variability and international trade” International Economics Research Paper N. 50, KUL.
  - Dell'Aricecia G. (1998) “Exchange Rate Fluctuations and Trade Flows: Evidence from the European Union” IMF Working Paper, WP/98/107, August.
  - Francesca Di Mauro “The Impact of Economic Integration on Fdi and Exports: A Gravity Approach” Centre for European policy studies, 2000.
  - Florence Jaumotte “Foreign Direct Investment and Regional Trade Agreements: The Market Size Effect” Revisited, IMF Working Paper WP/04/206, 2004.
  - Linh et al., “The Effect of FDI on Economic Growth in Vietnam”, SocioEconomic and Environmental Issues in Development, Vol.57, 2019.
  - -Perée E. and Steinherr A. (1989) “Exchange rate uncertainty and foreign trade” European Economic Review Vol. 33, pp. 1241-1264.
  - Motta M. and Norman G. (1996) “Does economic integration cause foreign direct investment?” International Economic Review Vol. 37, N. 4, November.
  - Nilofer, N., & Qayyum, A., Impact of Foreign Direct Investment on Growth in Pakistan: The ARDL Approach. University Library of Munich, 2018.
  - Ting Gao "Foreign Direct Investment And Growth Under Economic Integration" Journal of International Economics, 2005.
  - Smith A. (1987) “Strategic Investment, Multinational Corporations and Trade Policy” European Economic Review Vol. 31, pp. 89-96.
  - Yeyati, E. L., E. Stein, and C. Daude. 2003. “Regional Integration and the Location of FDI.” Working Paper no. 492, Inter-American Development Bank.
-

- 
- Waldkirch, A. 2003. "The 'New Regionalism' and Foreign Direct Investment: The Case of Mexico." Journal of International Trade and Economic Development, vol. 12, no. 2, pp. 151-184.