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# The reality of trade openness in the Algerian economy: An analytical study for the period (2000-2023)

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**Abstract**—This research paper aims to identify the causal relationship between trade openness in the Algerian economy and its impact on growth rates and employment during the period 2000 to 2023. The results of the study indicate that the Algerian economy remains trapped by oil revenues and consequently by global dollar prices. The Algerian economy is still stagnating and has failed to take off, despite attempts, due to the lack of a clear and progressive development policy.

**Keywords**---Foreign trade, trade openness, economic growth, employment.

JEL classification codes: F2, F23

#### Introduction

Trade openness is regarded as one of the most important objectives of countries. Many developing countries have moved towards liberalising their economies and implementing economic reform policies, joining South/North or even South/South blocs to increase their trade exchanges. Algeria has followed this path, moving towards economic liberalisation. The real challenge for the national economy was to find sources of hard currency in other productive sectors, such as agriculture or industry, other than hydrocarbons. It has liberalised its foreign

trade and encouraged the private sector to help change the structure of its trade balance by diversifying exports and reducing dependence on oil revenues.

To continue its transformation of management methods, the Algerian authorities have been diligently negotiating membership of the World Trade Organisation (WTO). However, these negotiations have been described as the longest of their kind, stretching from 1985 to the present day, without success. Nevertheless, in 2005, Algeria formally entered into a partnership with the European Union in order to boost nonhydrocarbon exports.

As Algeria is one of the largest oil-exporting countries, with oil revenues accounting for about two-thirds of the budget, this dependence has had a negative impact on the structure of the national economy. As a result, the creation of new jobs has been financed by hydrocarbon revenues rather than by productivity gains, which appear to be weak.

The aim of this paper is to examine the impact of trade openness on growth in Algeria. In other words, has Algeria managed to increase its exports in agriculture, industry or even services? On the other hand, we have tried to highlight the composition of both exports and imports because of their impact on the labour market, whether by improving it or not. So the central research question is: has trade openness contributed to rising growth rates? And is the Algerian economy truly open?

### 1. The degree of openness of the economy to the outside world:

The best known study in this area was conducted by Sachs and Warner (1995), who estimated growth rates for 122 countries between 1970 and 1989. According to this study, a country is considered closed if it meets at least one of the following criteria

- Non-tariff barriers covering 40 per cent or more of total trade.
- Average tariff rates of 40 per cent or more.
- An exchange rate in the parallel market that is 20 per cent or more above the official market rate.
- A planned (socialist) economic system.
- A state monopoly on major exports.

A country is considered open if none of these criteria are met. We can therefore conclude that Algeria is a closed country before going into further detail, as it meets most of these criteria. Both Krugman and Venables (1995) and Puga and Venables (1998-1999) used econometric studies to demonstrate the necessity of foreign trade as a tool for development and its effectiveness in this regard. Trade policy has always been considered central to development policy, and the liberalisation of foreign trade is seen as the third principle to be relied upon, after the achievement of macroeconomic stability and the liberalisation of the domestic economy (Williamson, 1990). The International Monetary Fund also emphasises that trade policy is a fundamental factor in achieving economic growth convergence in developing countries (Jean-Pierre Cling, 2006).

Given that the foreign trade sector is a sensitive area, the Algerian state has long been reluctant to announce the privatisation of this sector, which some associate with national sovereignty and others with the protection of national production. Thus, Law No. 88/29 was seen as a modest first step towards restructuring the commercial sector (Ajja Djilali, 2007). It explicitly stated the separation of the commercial state from the sovereign state and criticised the state's commercial regulations during the monopoly phase, which were based on the concept of administrative quotas for hard currencies and bureaucratic procedures for currency exchange and the allocation of goods. Such an approach reduced the professionalism of local commercial agents, turning them into passive buyers of materials and equipment.

As a result of these negative effects, it has been considered necessary to adopt a new approach based on the concept of manufacturing trade, which is defined as an organisation that integrates authorised agents and wholesalers into the national production process for productive investment. Thus, the new concept of foreign trade does not mean attracting operators to liquidate their stocks in the national territory and then leave without adding value, transferring technology or creating jobs. Rather, it is about establishing trade that produces goods and services and introduces competition into the national economy.

### 2. The Algerian economy as a commercially open economy:

Rodriguez and Rodrik (2000) argue that the true openness of a country is measured by the exchange rate (exports + imports) / gross domestic product (GDP). Contrary to the common belief that the Algerian economy is open, the following results indicate otherwise after calculating the rate of external openness. The following table shows indicators of foreign trade and, in general, these rates appear weak.

The external openness rate = (Imports + Exports) / Gross Domestic Product (GDP) should have exceeded 40 per cent during the period under study, according to economic theories. However, if this rate is calculated in relation to the nonhydrocarbon GDP, it appears weak and shows the extent of its link with oil revenues.

The coverage rate = exports / imports. As shown in the table below, it is above 1%, but it decreases between 2015 and 2021. This decline is due, on the one hand, to the fall in the dollar and, consequently, in oil prices and, on the other, to the COVID-19 crisis, which led to a significant reduction in trade exchanges.

Non-hydrocarbon coverage = Non-hydrocarbon exports / Imports. This reflects the extent to which the Algerian economy is tied to oil revenues, with the importance of oil revenues overshadowing all other resources.

The rate of independence = imports / gross domestic product (GDP). It did not exceed 30 per cent throughout the period, indicating the degree of dependence on the outside world.

Table 01: Foreign trade indicators 2011-2023

Years	Openness rate outside	Openness rate outside	Export rate outside the	Openness rate	Independence rate	Export strength	Coverage rate
	the	the	hydrocarbon			rate	
	hydrocarbon	hydrocarbon	sector				
	sector	sector					
2011	0,05	0,25	0,01	0,60	0,24	0,37	1,56
2012	0,04	0,25	0,01	0,58	0,24	0,34	1,43
2013	0,04	0,27	0,01	0,58	0,26	0,31	1,20
2014	0,05	0,29	0,01	0,57	0,27	0,29	1,07
2015	0,04	0,33	0,01	0,52	0,31	0,21	0,67
2016	0,04	0,30	0,01	0,47	0,29	0,18	0,63
2017	0,04	0,30	0,01	0,49	0,29	0,20	0,71
2018	0,06	0,30	0,02	0,51	0,28	0,24	0,85
2019	0,05	0,28	0,01	0,47	0,26	0,21	0,79
2020	0,05	0,26	0,01	0,39	0,24	0,15	0,62
2021	0,13	0,27	0,03	0,45	0,23	0,21	0,93
2022	0,18	0,24	0,04	0,52	0,20	0,32	1,62
2023	0,11	0,23	0,02	0,44	0,20	0,24	1,24

Source: These calculations are based on data from the National Statistics Institute, the Ministry of Foreign Trade and the International Monetary Fund.

The results so far show that the Algerian economy has always remained on the margins of international trade. The economy remains entirely dependent on hydrocarbon exports, while nonhydrocarbon exports do not cover imports. It is therefore necessary to understand what constitutes Algeria's imports and exports in order to better understand these low figures.

#### 1.2. External links:

Most oil-producing countries are dependent on imports of capital and consumer goods. Locally produced goods cannot substitute for imported goods, so these countries make considerable efforts to produce goods that can substitute for imports, in addition to developing exports. In this context, the exchange rate, pricing and export subsidies are tools to diversify the national economy.

During the colonial period, agriculture was Algeria's main export. After independence, Algeria became indebted to the outside world for food imports, importing wheat for a population characterised by its broad base, which is more concentrated in urban areas due to internal migration. At the beginning of the last decade, Algeria was the world's largest importer of wheat, and imported 100% of its oil and sugar and 60% of its dairy products (Kassim Bouhou, 2009).

Between 2004 and 2005, Algeria's imports increased from \$27.51 billion to \$29.27 billion. This was attributed to the rise in oil prices and increased domestic demand for imported goods.

From the above and the following table, it is clear that Algeria's imports have long been dependent on food products, which accounted for almost 30 per cent throughout the study period from 1994 to 2021. According to data from the Ministry of Foreign Trade, this share continued to rise in 2011 and reached its highest level due to the increase in oil prices, which reached \$107 per barrel in 2011, \$109 per barrel in 2012 and \$105 per barrel in 2013.

However, the COVID-19 pandemic and its aftermath, including reduced trade and falling oil prices, led to a decline in food imports to a share of 16.88 per cent. This remains high despite government incentives to farmers, such as loans and loan waivers.

Conversely, capital goods did not grow significantly despite incentives for the private sector to import these goods. This suggests a weakness in attracting technology from abroad. As a result, the low level of integration into global trade has reduced the opportunities to benefit from technology transfer to the national economy, which is seen as one of the positive aspects of joining global trade and liberalising foreign trade restrictions, focusing on means of transport for people and goods, public works equipment and pipelines.

On the other hand, according to the Bank of Algeria statistics for 2022, agricultural equipment accounted for 0.69 percent in the first quarter of 2021 and 0.82 percent in the second quarter of the same year. Meanwhile, industrial equipment reached 25.71 percent in the first quarter of 2021 and 26.76 percent in the second quarter of the same year.

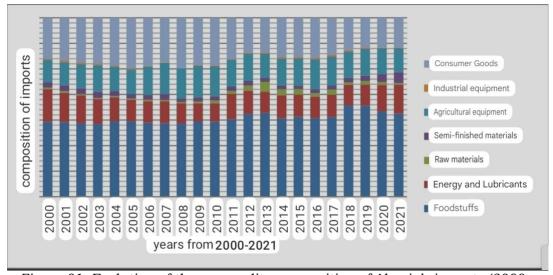


Figure 01: Evolution of the commodity composition of Algeria's imports (2000-2021)

Source: Prepared by the researcher on the basis of data from the Bank of Algeria, the National Statistical Office (ONS) and the report of the Directorate of Studies and Forecasts of the Algerian Customs.

The previous graph confirms the idea that the national economy is strongly linked to the outside world. This strong link can be explained by several factors:

- 1. The absence of a strong private sector capable of producing high-quality competitive goods, which in turn is due to the absence or weakness of imports of capital goods that could bring technology.
- 2. The low level of domestic savings, which necessitates continued openness to foreign capital.
- 3. Weak attraction of foreign investors who could bring advanced technology.
- 4. The absence of a clear policy to seek sectors that could create a comparative advantage over global commodities and thereby generate hard currency.

#### 1.3. Exports:

Table 2: Evolution of the non hydrocarbon export rate from 2004 to 2020

Years	2004	2005	2006	2007	2008	2009	2010	2011	2012
Hydrocarbons	97.64	98.03	97.88	97.79	97.56	97.64	97.33	96.68	97.14
Outside the	2.36	1.97	2.12	2.21	2.44	2.36	2.67	3.32	2.86
Hydrocarbon									
Sector									
Years	2013	2014	2015	2016	2017	2018	2019	2020	2023*
Hydrocarbons	96.72	95.9	94.33	93.83	93.39	93.11	92.69	89.71	59.50
Outside the	3.28	4.1	5.67	6.17	6.61	6.89	7.31	10.29	5.69
Hydrocarbon									
Sector									

Source: Table based on data from the Ministry of Foreign Trade and the Bank of Algeria.

#### Only quarters 1, 2 and 3.

Table 03: Evolution of the structure of Algeria's exports (%) for 2004, 2010 and 2019

	2004	2010	2019	2022	2023*
Food Products	0.18	0.55	1.99	0.41	0.37
Energy Products	97.64	97.33	91.29	91.15	59.50
Raw materials	0.29	0.16	0.32	0.40	0.33
Semi-finished goods	1.71	1.85	5.87	7.74	4.85
Agricultural equipment	0	0.002	0	0	0
Industrial equipment	0.15	0.05/	0.35	0.13	0.06
Non-food consumer	0.04	0.05	0.17	0.17	0.08
goods					
Outside industry	/	/	/	/	/
Total	100	100	100	100	100

Source: Table based on data from the quarterly publication for the third quarter of 2023. a

#### Only quarters 1, 2 and 3.

The previous table shows that the structure of exports has not changed over the 19 years from 2004 to 2023. Despite the government's efforts to diversify exports away from hydrocarbons, they still account for the lion's share, more than 90%. It is as if the Algerian economy has not yet taken off. This is, of course, due to the lack of a clear policy to stimulate the economy and the obvious lack of productivity in the private sector, which has been left out of the development process.

This confirms the Finger Index's conclusion about the fragility of the economy. Despite the increase in the Krugman<sup>1</sup> index, Algeria's specialisation rate reached 1.862 between 1987 and 1999, which is due to its oil exports and does not represent real openness to the outside world. Oil exports play an important role in increasing the trade openness index.

#### 1.4. Tariffs:

The problematic situation resulting from the lack of openness to the outside world is not only due to the dependence on hydrocarbon exports and the lack of diversity in local sectors that could find global markets, but also to the high level of customs duties, which have remained high in Algeria despite repeated attempts to reduce them. Customs tariffs reached 27.40% in 2003 and, as a result of the signing of the partnership with the European Union, some tariffs were gradually eliminated, reaching 14.5% in 2011 and 11.4% in 2022 (according to the Bank of Algeria's 2022 annual report).

Table 4: Evolution of the structure of budget revenue (as a percentage of total tax revenue)

	2018	2019	2020	2021	2022*
Customs duties	12.0	12.7	12.5	12.0	11.4

Source: Annual report of the Bank of Algeria (Economic and monetary development 2022).

According to the results obtained so far, the accession to the Arab Free Trade Area and to the European Union has not significantly contributed to the diversification of national exports, but has only increased imports. Therefore, it is necessary to consider effective policies and improve the business climate to create a private sector capable of generating diversity and specialisation that can open foreign markets. In addition, institutions need to be rehabilitated to improve their competitiveness, as European goods have become fierce competitors to national products.

Conversely, the state has undertaken this measure because of its positive impact on national production, but in the long term, as capital goods will contribute to increasing production and improving its quality. However, the short-term effect is seen in the reduction of customs revenues, which will later be compensated by revenues from export diversification as the performance of the private sector improves.

#### 2. The impact of trade liberalisation on the Algerian economy

Recent studies on world trade indicate that integration into world trade, together with specialisation in a particular commodity, creates dynamism in the economy and brings benefits, including technology transfer and the profitability of sectors that attract labour and can absorb unemployment. In conclusion, we have shown that the Algerian economy is only open to imports and relies on import cover to finance the economy, with weak openness rates. Moreover, it is a fragile economy, totally dependent on oil revenues.

## 2.1. The relationship between openness rates, growth rates and employment trends

In this section, we will examine the relationship between the openness rates of the national economy and the growth rates, which are considered to be high in the period from 2011 to 2023.

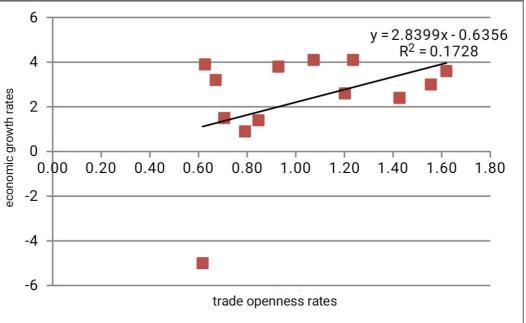


Figure 02: The relationship between trade openness rates and economic growth rates from 2011-2023.

Source: Researcher, based on World Bank data for growth rates and the previous table for trade openness rates.

The previous table clearly shows the weak relationship between trade openness rates and economic growth rates, with almost no correlation between the two. Economic growth rates have an impact on job creation, which is supported by all economic studies and policy analyses used to assess the state of the economy. However, in this study we will try to highlight the effect of external openness on employment dynamics.

The measurement of openness is done by looking at the number of jobs created as a result. Leontief argued in his study that each import is a job loss, while each

export is a job creation. Exports are merely an increase in production, while imports represent a decrease in domestic production; this analysis does not rely on labour productivity.

Given the Algerian economy's dependence on oil exports, it was crucial to study the structure of imports. In other words, to understand whether foreign trade requires diversification of production and thus contributes to the overall improvement of employment.

In studying the structure of imports, we distinguish between what is allocated to consumption needs and what is allocated to production, which allows us to study its impact on employment. In reality, imports of consumer goods reduce domestic production, while imports of intermediate goods improve it. In addition, the significance of the level of employment in relation to the volume of intermediate goods imports indicates a relationship between intermediate imports, the level of production and employment.

Table No. 05: Employment Structure in All Sectors for the Year 2019 (Percentage)

	2012	2019
Agricultural	9	9.60
Industrial	13.1	12.85
Construction and public works	16.3	16.76
Trade, services and	61.6	60.79
administration		
Total	100	100

Source: https://www.ons.dz/IMG/pdf/CH2-EMPLOI\_Arabe.pdf

Employment in the agricultural sector decreased by 16% between 1994 and 2000, and by about 4% between 2000 and 2010, reaching 12% in 2010 (Didouh Chakria, 2013). It continued to decline, reaching 9.60% in 2019, according to the table above. This decrease occurred despite the incentives provided by the state to both the private and public sectors, such as interest-free loans and other facilities. This suggests that borrowed funds may have been directed to activities outside this sector.

The industrial sector also experienced a decline in employment of 6%, followed by an increase of 169% over the same period. The years 2000-2010 were characterised by the encouragement of the private sector and the creation of many small and medium-sized enterprises (Didouh Chakria, 2013). However, after reaching 14% in 2010, employment declined again to 13.1% in 2012 and 12.85% in 2019. This decline is attributed to the failure and closure of many small and medium enterprises. Meanwhile, the public administration and trade sector continues to dominate employment, accounting for 60.79% in 2019, which explains the low productivity of the national economy.

The previous results explain the resurgence of the unemployment rate, which will reach 12.6% in 2020 and 12.7% in 2021 and 2022 respectively. This situation also shows that the Algerian economy remains dependent on oil revenues, which in turn are linked to world dollar prices. As a result of the decline in marginal

productivity rates in various sectors, the economy remains far from its desired objectives in terms of export openness and attracting foreign investment due to its lack of competitive advantages.

#### Conclusion

Throughout this study, we have tried to highlight that the Algerian economy is still in a state of stagnation, with oil revenues accounting for two-thirds of the budget. Other sectors remain outside the development cycle, mainly due to a lack of competitive advantages. Trade openness remains very low, with an influx of foreign goods into local markets due to the lack of a clear openness policy and the absence of a strong private sector. Algeria has not yet managed to diversify its exports beyond the hydrocarbon sector, mainly due to the lack of competitive products, whether in the private or public sector. This situation has led to rising unemployment, which is expected to reach around 12% by 2022. As a result, Algeria has not been able to achieve the desired goals of openness.

#### References

- Ajja Djilali, The Algerian Experience in Organising Foreign Trade from State Monopoly to Private Monopoly\*, Dar Khledonia for Publishing and Distribution, 2007, p. 209.
- Didouh Chakria, Prospects for Regulating the Labour Market in Transforming Economies The Case Study of Algeria, Doctoral thesis in Economics, specialising in Development Economics, 2013.
- Jean-Pierre CLING, "Trade, growth, poverty and inequality in developing countries: A Literature Review", Working Paper, DIAL, DT/2006-07.
- Krugman, P. & Venables, A.J. (1995), "Globalisation and the Inequality of Nations", Quarterly Journal of Economics.
- Puga, D. & Venables, A.J. (1998), "Trading Arrangements and Industrial Development", World Bank Economic Review, 12(2), pp. 221-249.
- Rodriguez, F. & Rodrik, D. (2000), "Trade Policy and Economic Growth: A Skeptic's Guide to the Gross-National Evidence", Working Paper No. 7081, Washington, DC, National Bureau of Economic Research, May.
- Sachs, J.D. & Warner, A. (1995), "Economic Reform and the Process of Integration", Brookings Papers on Economic Activity, 1995, 1.
- Williamson, J. (1990), "What Washington Means by Policy Reform", in J. Williamson (ed.), Latin American Adjustment: How Much Has Happened?, Washington, D.C.: Institute for International Economics.

https://www.ons.dz/IMG/pdf/CH2-EMPLOI\_Arabe.pdf

https://www.bank-of-algeria.dz/arannual reports

https://douane.gov.dz/spip.php?rubrique165

https://www.mf.gov.dz/index.php/ar/activites-ar/759-