Analysis of Algerian Trade Performance: From 1970 To 2014

Said BRIKA^{1,*}, Lemya MEKARSSI²

¹Department of Economics, Oum El Bouaghi University, Oum El Bouaghi, Algeria ²Department of Management, Oum El Bouaghi University, Oum El Bouaghi, Algeria *Corresponding author: saidbrika@yahoo.fr

Abstract This paper helps to clarify the performance of Algerian foreign trade that may help the policy makers to set foreign trade policy correctly to stimulate the economic development. The study adopts a main methodological approach including the analysis of foreign trade performance during the period of 1970-2014 by using some indicators in order to observe how foreign trade of Algeria changed in forty four years.

Keywords: trade performance, Algerian foreign trade, economic development

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1. Introduction

Foreign trade has been an area of interest to decision makers, policy maker as well as economists. It enables nations to sell their domestically produced goods to other countries of the world. Foreign trade means exchange of goods and services across international boarders. The working of an economy in terms of growth rate and per capita income has been based on the domestic production, consumption activities and in conjunction with foreign transaction of goods and services [1].

Trade indicators are used in the analysis of international or foreign trade, at the national, regional or global level. A broad definition of a trade indicator is that it is an index or a ratio that can be used to describe and assess the state of trade flows and trade patterns of a particular economy or economies and can be used to monitor these flows and patterns over time or across economies/regions. Indicators are the result of using statistical data and as such are the most available, or often the only available, input for the so-called evidence-based policy making [2].

1.1. Statement of the Problem

What is the performance of Algerian foreign trade, since 1970?

1.2. Research Questions

The study shall be guided by the following research question:

- How far is Algeria dependent on regional trade?
- Analyze how the value of trade changes over time?

1.3. Significance of Study

This paper helps to clarify the performance of Algerian foreign trade that may help the policy makers to set

foreign trade policy correctly to stimulate the economic development.

1.4. Literature Reviews

Mia Mikic and John Gilbert (2007), used indices that have already been constructed in the literature, they group them with respect to the type of information provided, and demonstrate their calculation and interpretation in a way that is applicable to any of the ESCAP economies. They, contributed to the existing body of empirical literature as it systematizes the available trade indices in terms of the information content they best provide, they clarified their interpretations from the perspective of a single economy or more economies linked by a preferential trade agreement, they provided precise formulae for calculation, and it offers some policy applications.

1.5. Methodology of Study

The study adopts a main methodological approach includes the analysis foreign trade performance during the period of 1970-2014 by using some indicators in order to observe how foreign trade of Algeria changed in forty years.

2. Analysis of Algerian Trade Performance

For evaluating the performance of Algerian foreign trade, some indicators were used.

2.1. Export/import Coverage

Figure 1 shows the coverage ratio in Algeria over the period of 1970-2014. During the seventies, the value of the coverage index, it was less than one which means that the exports value was less than the imports value [13], which means in turn that the imports are not fully paid by

exports. That is mainly due to the continuing increase in the investments rate and the needs of the equipping goods, the raw materials and consumption goods imported. As for 1974 and 1979, the coverage index recorded an improvement where it increased to 1.06 and 1.17 respectively, that is due to the increase in the export revenues due to the first and the second adjustments in the oil prices [5].

During the eighties, the export/import coverage was higher comparing to the previous period. From 1.48 in 1980 the coverage index decreased to 1.07 in 1982, this decrease is due to the drop in the exports revenues. During 1983 and 1984, the export/import coverage increased again to 1.07 and 1.15 due to the increase in exports. In 1986, the coverage index decreased from 1.03 in 1985 to 0.85 in 1986, the reason of that is due to the steep decline in the oil prices where it dropped almost to the half when compared to 1985, which led to the dramatic decrease in exports. After this crisis, the coverage index increased to 1.17 in 1987 and 1.11 in 1988. This improvement is due to the increase in oil prices on one hand, and to the improvement in the value of the non-oil exports on the other hand. In 1989, the export/import coverage decreased to 0.97, due the rise in the value of imports especially foodstuffs.

Concerning the period of 1990-2014, the coverage index fell from 1.58 in 1991 to 0.89 in 1993 this drop is due to the decrease in the oil exports. During 1994 and 1995, the coverage index dropped to 0.89 and 0.95 respectively [11]. The reasons of this decreasing recorded

in these two years are due to the drop in the revenue of oil exports resulting from the decrease in the oil prices, and due to the increase in the volume of imports especially those related to the industrial equipping goods. After 1995, the export/import coverage index recorded a significant improvement, where its value increased above one, even though the decline registered in 1998 was obvious where the coverage index decreased from 1.47 in 1996 to 1.09 in 1998 and this is due to the significant drop in the oil prices that reached USD16.74 per barrel after it was USD 25.52 per barrel in 1997 and that's why the exports dropped by USD 3676 million compared to 1997 i.e. by 26.46%.

However this decrease recorded in the coverage index had been quickly overtaken when the oil prices increased especially in 2000 (They reached USD 35.5 dollars per barrel) and that led to the realization of a very significant surplus in the balance of trade that reached about USD12858 million and the coverage index reached a very high value 2.40. Then, the export/import coverage index had decreased to 1.62 in 2001 and 1.57 in 2002 due to the fluctuations registered in the oil prices and the drop in the volume of oil exports. From 2003 till 2008, the coverage index improved considerably to reach 2.1 in average. In 2009, the export/import coverage index decreased to 1.15 due to the decrease in exports; however, in 2010 the coverage index rose again to 1.41.

However, the value of the index dropped from 1.56 in 2011 to 1.01 in 2014. This decline is explained by higher imports and lower exports recorded during the period.

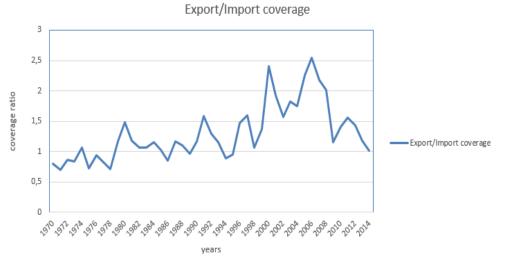


Figure 1. Export/Import coverage in Algeria (1970-2014)

Source: calculated by the author's based on the data of:

- 1. The National Centre for Informatics and Statistics in the period of 1963-2010 [3]
- 2. Statistiques Du Commerce Extérieur De L'ALGERIE, Période: Année 2011-2012-2013-2014, Centre National de l'Informatique et des Statistiques [4].

2.2. Import Penetration Index

Table 1 shows the import penetration index in Algeria during the period of 1970-2014.

During the monopoly phase, the import penetration index averaged 23.4% that means imports satisfied 23.4% of aggregate demand in Algeria during this period, with the remaining 76.6% satisfied by domestic production.

During the period of 1970-1977, the economic development system adopted in Algeria was centered on strong industrialization, seen as the way that other sectors

of Algeria's economy would be developed. Consequently, large investments had to be granted to this sector, which led to increase the domestic demand for semi-finished products and industrial equipment, which led in turn to increase in imports. In this period, the imports penetration index averaged 27.5% and it recorded the highest rate 34.7% in 1975, which means imports satisfies 34.7% of domestic demand in Algeria, while 65.3% satisfied by domestic production. In the 1980s, the Index recorded successive declines where decreased from 28.3% in 1980 to 10.2 % in 1987, this decline was mainly due to the fall in the

value of oil exports that pay for nearly 80% of imports of goods and service [7]. Thus, the decrease in exports revenues led to a decrease in imports.

Table 1. Algeria's import penetration index, Unit: %

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Years	Import penetration	years	Import penetration
1970	24.6	1993	18.1
1971	22.5	1994	21.5
1972	21.5	1995	25.4
1973	24.7	1996	21.3
1974	31	1997	20.2
1975	34.7	1998	19.8
1976	29.4	1999	20.2
1977	31.9	2000	21.9
1978	30	2001	21.6
1979	26.5	2002	23.9
1980	28.3	2003	23.8
1981	26.6	2004	25.7
1982	24.2	2005	26.5
1983	21.7	2006	25.5
1984	19.7	2007	26.8
1985	17.1	2008	30.1
1986	14.2	2009	29.7
1987	10.8	2010	27.8
1988	12.6	2011	27.2
1989	16.5	2012	26.9
1990	16	2013	27.5
1991	18.6	2014	2.6
1992	18.4		

Source: compiled and calculated by the author's based on:

1-The National Centre for Informatics and Statistics, achievements of foreign exchange of Algeria in the period of 1963-2010 [3]

2-Statistiques Du Commerce Extérieur De L'ALGERIE, Période : Année 2011-2012-2013-2014, Centre National de l'Informatique et des Statistiques [5]

3-World Bank data: http://data.worldbank.org/indicator [6]

During the liberalization period, the import penetration index [12] was fluctuating between increase and decrease where the index registered 22.7% in average, which means that imports satisfied 22.7% of aggregate demand in Algeria during this period, with the remaining 77.3% satisfied by domestic production. In the 2000s, the index

improved on average relative to the previous decade where it increased from 20% in the 1990s to 25.8% in the 2000s and it reached the highest rate 30% in 2008. The improvement in the import penetration index is due to the increase in the domestic demand for imported goods to cover the needs of economic recovery program on one hand and due the rise of import to satisfy the increasing demands of the population on the other one. Note that the Algerian domestic demand for the foreign goods is mainly centered on the industrial equipment, semi-finished products and food.

In 2014, the import penetration index recorded the lowest rate 2.6%, which means imports satisfies just 2.6% of domestic demand in Algeria [10], while 97.4% satisfied by domestic production. This decline was mainly due to the fall in the value of imports from USD 55028 in 2013 to USD 5541 in 2014.

2.3. Growth Rate of Exports (imports)

Figure 2 shows the growth rate of exports and imports in Algeria during the period of 1970-2014.

During the period of 1970-1989, the Algerian exports' growth rate was fluctuating between rising and decline. In 1971, the exports recorded a negative growth rate 15.15% due to the decrease of oil prices due to nationalization of hydrocarbons. During the period of 1972-1980, the exports recorded a positive growth rate 42.31% in average due to the increase in the oil prices from USD 12.72 per barrel in 1972 to USD 95.89 per barrel in 1980. After that, the exports recorded a negative growth rate averaged 5.34% during the period 1981-1989. That is mainly due to the fall in the oil prices from USD 95.89 per barrel in 1980 to USD 27.06 per barrel in 1988 where the oil exports also recorded a negative growth rate 5.64% in average, while the non-oil exports recorded a positive growth rate 12.14% in average. In 1990, the exports' growth rose to 26.05% due to the increase in oil prices on one hand where the oil exports recorded a positive growth 26.75% and the improvement in the non-oil exports on the other hand where they recorded a positive growth 10.86%.

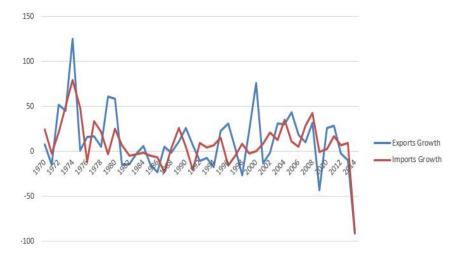


Figure 2. Exports growth and Imports growth in Algeria from 1970 till 2014

Source: calculated by the author's based on:

¹⁻The National Centre for Informatics and Statistics in the period of 1963-2010 [3]

²⁻Statistiques Du Commerce Extérieur De L'ALGERIE, Période : Année 2011-2012-2013-2014, Centre National de l'Informatique et des Statistiques [5]

From 1991 until 1994, the exports recorded a negative growth averaged 6.91% due to the same reason which is the decline in oil prices from USD 38.94 in 1990 per barrel to USD 22.9 per barrel in 1994. Where the oil exports registered a negative growth rate 6.79% in average, as for the non-oil exports also it registered a negative growth 7.06%. From 1995 till 1997, the exports' growth rate increased to 19.08% in average due to the improvement in oil prices. We note that despite the decrease in non-oil exports by 42% in 1997 but the total exports and the oil exports recorded a positive growth rate 3.84% and 7.08% respectively and that because the non-oil exports represent a very small proportion of total exports [9]. In 1998, the exports recorded again a negative growth rate 26.47%.

During the period of 2000-2011, the exports' growth rate averaged 21.67% due to the improvement in oil exports on one hand and the slight improvement in non-oil exports on the other hand where they achieved a positive growth rate.

In the period 2012-2014, the exports' growth rate recorded successive declines where registered a negative growth rate 34.39% in average, this declined is explained mainly by the fall in global demand for crude.

From the above analysis, we conclude that the Algerian exports growth depends heavily on the oil prices since the oil exports represent 97% of total exports, so the increase in oil prices will lead to increase the oil exports which led in turn to increase in total exports. As for the non-oil exports, despite the improvement recorded in their growth rate [13] especially in the last years but they still represent a small proportion of the total exports.

As for the imports, they recorded significant growth rate during the period of application the quadrennial programs where the growth rate of imports increased from 23.48% in average during the first quadrennial plan (1970-1973) to reach 37.69% in average during the second quadrennial plan (1974-1977) and they reached their maximum growth 79.56% in 1974. Imports had maintained the same growth rate level during 1978 and 1979 where they recorded a positive growth rate averaged 9.55% despite the decline recorded in the last year. The high growth rate of imports recorded during the seventies reflects the development strategy followed during this period, which is import substitution strategy, and building a strong industrial base. From 1982 till 1988, the imports recorded a continuous decreases where they recorded a negative growth rate averaged 11.39% between 1985 and 1987, and that because of the constraints imposed on the import operations because of the oil crisis that led to the drop of total exports which finance the imports.

During the nineties, the imports recorded a fluctuation between rise and fall where they increased on average by 0.56%. Since the 2000 the imports had recorded successive increases where they recorded a positive growth rate (except in 2009) averaged 15.28%. The improvement registered in imports growth is due to the increase of the local demand for the imported goods and to cover the needs of the program of the national economy revival that was launched by the Algerian government in 2001, besides the rise in the imported foodstuffs bill especially the cereals [8].

As for the period 2011-2013, the imports had continued their upward trend, with an increase of 16.47 % compared

to 2011, from 55028 million USD in 2011 to 55028 million USD in 2013. Their upward trend is explained by the strong domestic demand, sustained by public spending.

3. Conclusion

The analysis of the indicators showed that over the past four decades the evolution of the trade performance of Algeria has been largely determined by the evolution of its oil export revenues, which in turn depend on the oil prices and its fluctuations in the international market. High oil prices led to a strong improvement in Algerian trade performance. On the contrary, a reduction in oil prices led to a negative impact on Algerian trade performance. The collapse of oil prices in 1978, 1986, 1994 and 2008 revealed the vulnerability of the Algerian economy.

Since the Algerian economy, and the rent economy depend on hydrocarbons, explains the deep weakness in the Algerian trade balance structure, and shows the full link oil returns.

The weakness of the Algerian machinery production, explains the delay recorded in the banking sector, and then, it must focus on the reforms of the banking system, which represents a weak point in the Algerian economy. Algerian economists stress on the need to stop the bleeding tires and brain drain towards the foreign countries. Algeria losses, as estimated, more than 8 billions of dollars as a result of this bleeding, as well as the weakness of the attractive business environment for foreign investment. It is possible that many of the Algerian productive sectors are necessary to correct the imbalances recorded and encourage transparency and modernize the structures and installations disappearance.

In light of these developments, Algeria seeks to establish an economic and social strategy and a regional bloc, both in the framework of the Arab Maghreb Union and the Arab common market, in order to configure the economic and political balance of power in the future.

We recommend the need to develop the scheme in the medium term to support economic growth and revitalize the major workshops, public works and implement reforms so as not to miss the dynamic generated by the agricultural support program of the economic recovery program, and this is what will lead to the achievement of sustainable development through access and maintain high economic growth in the long ratio by relying on scientific and technical knowledge, or the so-called: Intelligentsia.

It is possible to achieve lasting stability of the Algerian economy and development of export diversification and more interest in alternative sectors, which are productive and important to achieve positive economic growth sectors such as tourism and agriculture which are also essential.

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