

# Trade Policy and Instability Growth Rates: The Case of Algeria

BOUZIDI Souad, TALEB Dalila

**Abstract—** The importance of the macroeconomic context is related to the centrality of the relationship to the world in the political growth of the Algerian economy, considering the importance of the hydrocarbon sector (oil and gas) in terms of GDP, export incomes and of taxation. Based on the literature of protectionism, the article develops a reading grid for the evolution of Algeria's open policy for the period 1963-2012 in relation to growth, it can distinguish three characteristic periods of the Algerian trade policy: the delegitimization protection (1963-1974); open obliged under the stress of international institutions (1974-1994) and looking for a Master of the opening (1995-2012)

**Index Terms—** trade openness, economic growth, PVD, protection

**JEL Classification:** F10, O40, F13, F41

## I. INTRODUCTION

After the outbreak of the debt crisis in the early 80s and the failure of development strategies based on import substitution, most of the Southern and Eastern Mediterranean countries (SEMC<sup>1</sup>); like many developing countries, started under the leadership of international financial institutions like the IMF and the World Bank, a process of economic liberalization in the context of structural adjustment programs (SAP); This trade liberalization but also financial, also accompanied by a strengthening of regional agreement (in addition to GATT and WTO agreement

Thus the Barcelona Declaration of November 1995 is primarily increased trade between countries on both sides of the Mediterranean for the eventual establishment of a vast free trade area in goods and services; in this context, the main question is what is the impact of trade liberalization on the Economic Growth of these countries?

Indeed, until recently, the work that has studied for PVD, this relationship were virtually unanimous about the positive effects of trade liberalization on growth and economic development.

The opening to the outside should ensure better allocation of resources and promote investment towards the export sector,

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<sup>1</sup> SEMC or TMC (or third Mediterranean countries) in our work are the nine countries of the southern and eastern shores of the Mediterranean ie: Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Syria, Tunisia and Turkey.

they had been until then disadvantaged introverted development strategy that is oriented towards the domestic market.

However, consensus on the relationship between trade openness and growth began, since ten years, to be the subject of considerable debate and controversy in the field of development economics. This controversy follows the publication of the article by Francisco Rodriguez and Dani Rodrik (1999), the latter openly criticize the main work which stipulate the existence of a strong positive correlation between openness to the outside and economic growth in developing country.

## II. OPENNESS AND GROWTH: A REVIEW OF THE THEORETICAL AND EMPIRICAL LITERATURE

### Theoretical Literature :

David Ricardo in the 19th century by his theory of comparative advantages, demonstrated that more a country was open, it allowed him to redirect its scarce resources to more efficient sectors and improve well-being, theories that followed have confirmed these gains, in addition to adding those related to the remuneration of production factors. It is in the theory of growth which can then come and pick the dynamic gains, the neo-classical growth models, derived from the Solow model (1957), assume that technological change is exogenous. In such a framework, trade policies of a country can not therefore be regarded as an element affecting its growth.

Since the early 1990s, new growth theories consider technological change as being endogenous. It becomes possible to combine the new theory of international trade and that of endogenous growth.

In this context, an abundant theoretical literature has developed studying the relationship of economic openness-growth however, this question has received different answers depending on the structure of the models, driving the growth, endowments, and the initial conditions of the country or according to the technological knowledge are common to all countries or are purely national.

Indeed, in growth models with learning through practice, authors like Kugman (1987), Lucas (1988), Young (1991) ... etc, have shown that the initial situation of a country determines the nature of its specialization in the long term and therefore its growth rate after opening, This latter then leads to poor specialization of a small economy and can sink into underdevelopment, the authors advocate protectionist trade policies at least temporarily to protect infant industries .

Contrary to these works that encourage protectionist policies, other work such as Rivera-Batiz and Romer (1991a), (1991b),

Grossman and Helpman (1990), (1991a), (1991b), (1991c), (1991d) (1991st) Feenstra (1990) ... etc, which consider innovation as a source of growth promoting a policy of openness.

Indeed, these authors showed that the full integration of two identical countries can double their growth rates relative to those of autarky. Furthermore, reciprocal tariffs negatively affect growth insofar as they only encourage imitation activity. It occupies part of the human capital that should have been devoted to R & D, and therefore reduces the rate of economic growth.

Grossman and Helpman (1991) show that openness increases domestic imports of goods and services that include new technology through learning by practice and technology transfer, the country is experiencing a technological progress, its production becomes more efficient and its productivity increases, it is then expected that more open economies are growing at a faster pace than most protectionist, however, the authors add that these gains depend on several factors, including the initial situation. It determines the nature of the specialization of the country in the long term and thus its growth rate.

The opening of a small economy may lead it to specialize in a low-growth sector rather contributing to leave the country in underdevelopment, in this case, the country should adopt protectionist policies during the early stages of its development, and then choose the appropriate opening policies.

The study by Levine and Renelt (1992), the causal relationship between openness and growth is done through investment if trade openness allows access to investment property, this will lead a long-term growth, a country liberalizing its trade is attract foreign investment flows, however, they may cause a decline in domestic investment due to stronger international competition and the net effect then remains ambiguous.

Grossman and Helpman (1992) also argue that a country protecting its economy can stimulate growth. It is possible If accommodation government intervention encourages domestic investment according to comparative advantages of the country.

For Batra (1992) and Leamer (1995), trade liberalization reduces tariffs, and therefore reduces the relative price of manufactured household goods, these goods become less attractive than foreign goods, and domestic economy can then undergo a loss.

Other works, like those of Grossman and Helpman (1991), Romer (1990) and Rivera-Batiz and Romer (1991), turn their attention to the long-term implications of government intervention in trade; they consider innovation as a source of growth and thus encourage open policies; In their models, free-trade gains are primarily from scale effects mediated through research and development. Innovation generated helps to increase the stock of knowledge and technology transfer. In addition, international trade avoids the land of

redundant R & D that could divert resources from more productive activities.

Aubin (1994) extends the work of Rivera-Batiz and Romer (1991a) and (1991b) shows that the gains from openness in terms of growth are much more important when there is a coordination of economic policies between countries, ie, public intervention striving for the best, not in the context of economies taken separately but as part of the union of these economies.

Theoretical studies have not been able to decide whether or not trade openness contributes to economic growth, various empirical work on the subject, for against, leads to similar results where the effect of the opening is generally favorable to growth

### **Empirical literature :**

During the 70s, most empirical studies using cross-sectional regression on a set of countries, the correlation coefficients were either between export growth and GDP or between indexes representing the opening or trade policies and long-term growth.

Most of these studies have found a positive relationship between openness and growth; Subsequently, through the merger of the theory of endogenous growth and new international trade theory.

In this context, a good way to assess impact (indirect) of the opening on growth is to establish a simultaneous equations model Until today, this model was never realized; However, some authors as Baldwin and Seghezza (1996) found, by making an estimate in three stages (3SLS) on cross-sectional data and estimating separate <sup>2</sup>equations, growth driven by investment and induced opening this result was confirmed by that of Lee (1993) and (1994) in two steps (2SLS).

Dollar (1992), Barro and Sala-Martin (1995), Sachs and Warner (1995), Edwards (1998) and Greenaway et al. (1998), using cross-sectional regressions, found that distortions due to the intervention of the trade level state led to low growth rates, Ben-David (1993) and Sachs and Warner (1995) have also shown that it is only in open economies that we could observe an unconditional convergence, Sachs and Warner (1995) found that countries with open political thought at a rate of 4.5% year in the 1970s and 1980s, and in contrast, the relatively closed countries had a growth rate of only 0.7%; However, they note that a strong relationship is difficult to find and to justify

Other work was carried out using cointegration techniques and showed growth driven by technology and driven by the opening. Indeed, Coe and Moghadam (1993) find that trade and capital at large are responsible for almost all of the growth in the French economy for twenty years. In the same sense, and D.Coe E.Helpman (1995) found, in a sample of 22 industrial countries, the TFP of a country depends not only on its own capital stock in R & D but also that of its business

<sup>2</sup> First, he considers the investment as an exogenous variable next to a variable representing the opening and he indigenized, secondly, to explain the opening

partners. Furthermore, they showed that the positive effect of foreign R & D on TFP of a country depends on its degree of openness. R. Brecher, C. Ehsan and S. Lawrence (1996) sought to show the link between the externality of R & D and TFP growth sectors in Canada and the United States. It showed that between 1961 and 1991, R & D effect developed in the United States on Canadian productivity tends to be at least as strong as the effect on the productivity of the United States.

Frankel and Romer (1991) use an instrumental variable approach including geographical features, confirm that the international trade an important and significant impact on growth

Harrison (1996) reaches similar conclusions using a variety of indicators of openness by making different estimation methods (cross-section fixed effects, five-year average, first differences), the results suggest a positive relationship between openness and growth. However it is not all measures of openings which were significant, despite the fact that they were mostly positive sign.

The article by Rodriguez and Rodrik (2000) came to criticize and question the results of four major studies. The authors found that the positive correlation between openness and growth found in the work of Dollars (1992), Ben-David (1993).

Jin (2004) analyzed the co-movement between openness and growth for 17 provinces and 3 municipalities in China; The author wanted to check if the relationship was growing openness also valid at the provincial level, and if we could detect a difference between the coastal provinces (7 in number) and those isolated (numbering 13); He built his model on the usual production function, including technological change, which itself depends on the degree of openness of the country. The results obtained are those expected: the effect for the coastal provinces is positive and significant sign for them four, and negative for the majority of landlocked provinces (three of them have a negative and significant effect).

In summary, the empirical studies come to show a positive impact of openness on growth, but their strength is in question; They face several econometric limitations, including the appropriateness of the opening flag.

### III. TRADE OPENNESS AND ECONOMIC GROWTH: CONTRIBUTION AND LIMITS

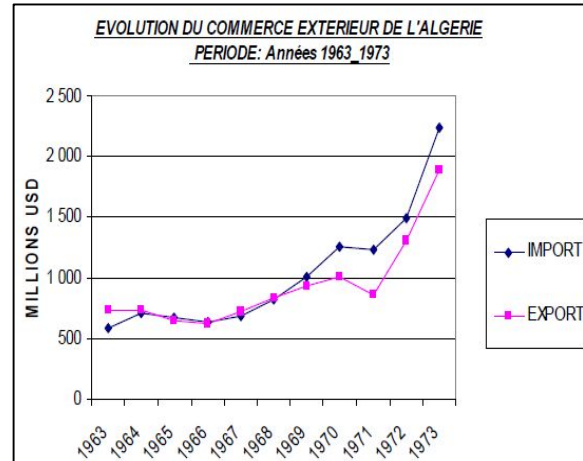
Reforms affecting foreign trade in Algeria are an important part of the transformation process by the country from the second half of the 1980s, the object of this contribution is to provide an analytical framework for the development of the Algeria's policy of openness by relying on problematizations and conceptualizations of political economy of protectionism (EPP) and its relationship with economic growth.

#### ➤ Evolution of foreign trade of Algeria

From 1963 to today, the achievements of import and export operations have evolved in three major periods: The first is spread over eleven years (1963-1973), where the operations of foreign trade of Algeria (Imports and Exports)

had a relatively slow annual change sometimes accusing insignificant declines. (See Figure 01)

Figure 01: evolution of foreign trade of Algeria (1963-1973)



Source: Les réalisations des échanges extérieurs de l'Algérie

Période : 1963–2010, Rapport du Centre national de l'informatique et des statistiques 2

The second period (1974-1994), or the volume of trade is much larger than the first period saw an evolution up between (1974- 1981), followed by an annual decrease between (1982-1989) and a recovery on the rise since 1992. (See Figure 02)

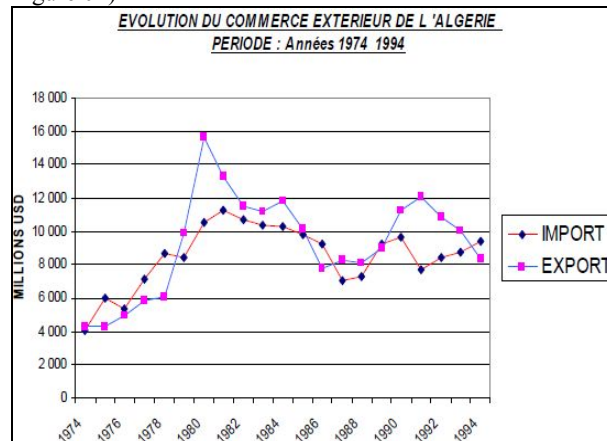


Figure 02: evolution of foreign trade of Algeria (1974-1994)

Source: Les réalisations des échanges extérieurs de l'Algérie Période : 1963–2010, op cit

The protectionist orientation of the 1965-1988 period is the development strategy of the Algérie<sup>3</sup>, foreign trade monopoly accompanying the central planning and state control of economic activity. The foreign trade policy of reform had to first de-legitimize the protectionist orientation

<sup>3</sup> Export policy and exploitation of hydrocarbons should allow the expansion of internal accumulation bases for greater economic and political autonomy. However, this strategy does not reduce dependence on imports of food products, semi-finished products and equipment (Ecrement 1986; Benbitour, 1992). This problem is still present as the ever-increasing dependence on imports, especially since 2004, is posited as the central issue of the international integration of the country that 70% of the funding of the plan (2006-2014) were devoted to imports.

of the previous period. Thus, during the first half of the 1980s, as part of "enriching the national charter," a new rhetoric developed, calling for a "modernization of the economy" based on "defined standards world "and obeying the" universal laws of economic logic "(Brahimi, 1991; Henni 1991).

The new national charter, adopted on 16 January 1986 is a significant step in the doctrinal shift in the strategy of openness. All the more so that it falls within the systemic transformations at work in the international economy. Thus, under the guise of "crisis of foreign trade" (Goumeziene 1994), Algeria engages in free trade wave of the second half of the 1980s highlighted by Rodrik (1995b) and driven by international Financial institutions.

The third and last period (1995-2010) was marked by a strong increase in import and export operations particularly from 2004. This was due in part to the effective liberalization of foreign trade from the year 1995 and by implementing economic stimulus programs and support economic recovery incurred from 2004. (See Figure 03).

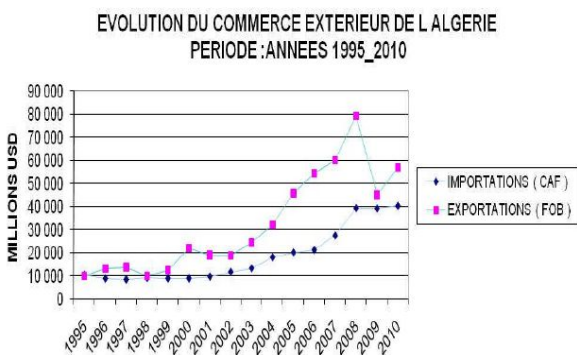


Figure 03: evolution of foreign trade of Algeria (1995-2010)

Source: Les réalisations des échanges extérieurs de l'Algérie Période : 1963-2010, op cit

Thus the period 1986-2010 is not so much determined by the free trade issue vs. Protection, by a contradictory movement between nationalization and denationalization of foreign trade policy. This leads to relativize trade liberalization whose opening rate (Figure 04), in a structurally high oil economy, do not capture the truescope<sup>4</sup>.

This movement is contradictory because the decision of state apparatus, which is the main initiator simultaneously constitutes the main source of neutralizing or blocking the main reason lies in the conflict structure of socio-economic interests articulated to state power; But understanding the "black box" of the Algerian state oil remains intact and exceeds the object of this contribution. The analysis of the opening should take into account the ability of some actors to access economic and political resources (aid, protection, information) in order to minimize their exposure to international competition.

The adaptation strategies in public decisions generate new networks, facing the path of reform, not in terms of decision

<sup>4</sup> Moreover it for information or the quality of the institutional environment, or the nature of imported and exported goods, consider opening indicator without his attention on quota measures, import licensing, administrative permits, grants, etc., can lead to a skewed view of the process.

making, but unanticipated restructuring effects or improvised, induced by their adaptation to new challenges Production and redistribution of wealth.

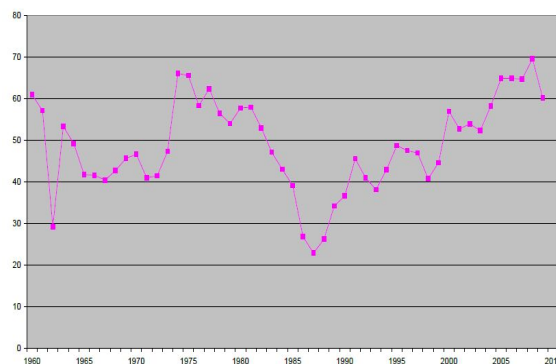


Figure 04: Opening rate in historical perspective

Source: Mehdi Abbas, Article portant sur l'ouverture internationale de l'Algérie. Apports et limites d'une approche en termes d'économie politique du protectionnisme, Septembre 2011 Revue Tiers Monde, 210 (2012) 51-68", p06.

After slowing under the impact of the global recession and the fall in prices of oil and gas, growth picked up again in 2010. Driven by the recovery in demand in the hydrocarbon sector and the dynamism of service sector and construction, supported by the public investment program (PIP), growth amounted to 3.8% in 2010 (against 2.4% in 2009) and is expected to strengthen in 2011.

In order to promote the growth of the domestic market, the Algerian government has embarked on a policy of public works, especially in the transport infrastructure sector. This policy is now criticized for two reasons. The first is that when the program was initiated, the prices of oil were very high. Current global market conditions have changed and some observers question the viability of this policy. Moreover, Algeria works with a "negative multiplier" that is to say that the resources injected into the economy are much more important than the wealth generated. The new 2010-2014 five-year plan, in line with the previous one, emphasizes modernization of infrastructure and privatization of the economy. (Record countries Algeria 2011).

**Algeria - against Economic -LIGHTING PERFORMANCE (The central role of hydrocarbons)**

Algeria is heavily dependent on hydrocarbons despite an official political discourse of economic diversification developed by the end of the 1970s, a few years after the oil has exceeded 95% of merchandise exports, and since 1977 for each year, hydrocarbons have consistently exceeded the threshold of 95% of exports; for the last five years the rate was 97% in average, however hydrocarbon production generates very substantial revenues for the country. Indeed, in 2002, oil exports totaled \$ 18 billion while imports related to sector operations are a 2 to 3 billion dollars<sup>5</sup>.

But this highly addictive has identified three negative consequences that have structured the Algerian economy.

<sup>5</sup> The contribution of international oil companies operating in Algeria poorly reproduced by the official statistical systems.



Few job creation in the area where is the main comparative advantage of Algeria; because of the low labor intensity in the production of hydrocarbons

- Oil prices fluctuate which induces significant volatility of the balance of payments; budgetary revenues and the money supply are also volatile.

The rent of this hyper-profitable sector allowed the creation and reproduction of a patronage system that hinders the development of productive economic activities and limited social base of power for the privileged alone.

Indeed, the closing sector 2012 with a performance against 3.4% against 3.3% growth in 2011 and -2, 2% in 2010. remember that during the seven-year period 2006-2012, the the largest underperformance was recorded in 2009 with a growth rate of -8.0%. (See Figure 05).

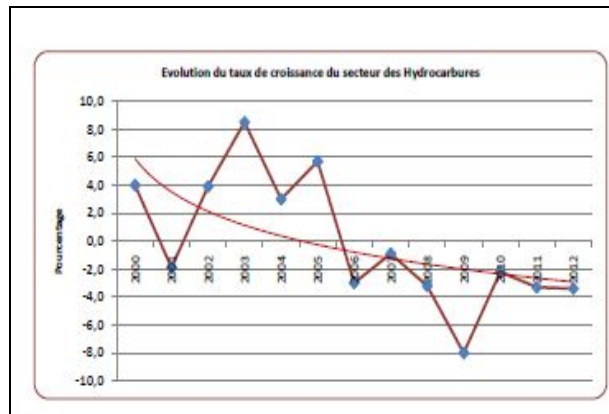


Figure 05: Evolution of hydrocarbon sector growth

Source: les comptes économiques en volume de 2000 à 2012, publication de l’office national des statistiques 2013.

It should be noted that the Algerian economy realized in 2012 a real growth of around 3.3% against 2.8% in 2011.

In current value, the 2012 GDP is estimated at 15 billion dinars against 843.0 14 519.8 billion in 2011, representing a nominal growth rate of 9.1% and an implicit deflator of 5.6%. It is interesting to note that the GDP deflator has experienced a slowdown in 2012 after being in the order of 16.1% in 2010 and 17.8% in 2011. This downward trend in the level of GDP deflator was mainly due to the level of export prices of hydrocarbon products were down from 112.9 US dollars per barrel in 2011 to 110.74 US dollars in 2012 (crude oil)

The following summary table shows the evolution of the growth rate (%) GDP in volume over the period from 2000 to 2013

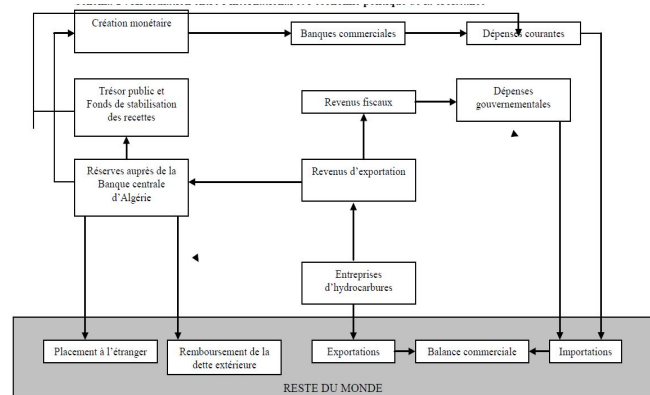
Table 01: Evolution of the GDP growth rate

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Growth rate of GDP%	3.8	3.0	5.6	7.2	4.3	5.9	1.7	3.4	2.0	1.7	3.6	2.6	2.5	3.4
GDP growth rate excluding hydrocarbons	3.8	6.2	6.5	6.6	5.0	6.0	5.4	7.0	6.1	9.6	6.3	5.7	5.0	4.8

Source : Les comptes économiques en volume de 2000 à 2011, Publication de l’office national des statistiques 2012, Rapport du FMI Janvier 2013

The importance of the macroeconomic context is related to the centrality of the relationship to the world in the political economy of the Algerian growth, given the importance of the hydrocarbon sector (oil and gas) in terms of GDP, of export revenues of taxation (98% of export earnings, 48% of value added, 28% of the national wealth and 80% of tax revenue) (IMF, 2009), Algeria has the characteristics of an oil economy (Seers, 1964)

Therefore, the national-international joint is one of the main "places" where the annuity valuation materializes; it is at the heart of the structuring distributional conflicts SNEP (Scheme 1).



Scheme 01: relationship between the international and political economy of growth

Source: Mehdi Abbas, Article portant sur l’ouverture internationale de l’Algérie, op cit, p08

Therefore, as shown Rogowski (1989), a change in the terms of trade, specialization and composition of international trade alters "domestic political alignments." Similarly, Garret nappy (1996) estimate that the internationalization of the economy changes the nature of distributive conflict. But unlike Rogowski, they insist on the fact that one of the functions of domestic institutions is to reduce the intensity of this change, and reintroducing the role of SNEP.

Thus the opening led - ongoing process - a restructuring and repositioning of economic and political interests by expanding the private sphere and allowing the presence of non-resident actors. It leads to a redefinition of the procedures for access to state resources and formal and informal arrangements that are their underlying.

#### CONCLUSION

International exchange is a factor of structural and institutional change provided that it is an extension of a domestic dynamics, and report to the global market is all the more profitable it is based on a dynamic domestic market. In this way, it is national policies that are key variables for growth and development, and not measures of liberalization of international trade.

Obviously, it is clear that for Algeria's hydrocarbon sector offers him a historic window of two or three decade more to finance its development and the emergence of a diversified and competitive economy, as the economy continues to suffer political interference of powers, formal and informal, that prevent the operation and development of the institutions critical to creating the right environment for growth outside the hydrocarbon sector to reduce unemployment and to meet the increasing delays with neighboring countries.

Furthermore, Algeria has interesting and substantial opportunities for sustained economic growth, the country has abundant natural resources, an educated population and a savings accumulation capacity by the hydrocarbon sector that can be invested in productive sectors, Algeria also has good access to the European market, this in particular through the Association Agreement with the European union, yet the Algeria will not be able to achieve its potential without structural reforms of its institutions and the economy.

#### BIBLIOGRAPHY

- [1] AUBIN, C. (1994), «Croissance endogène et coopération internationale», *Revue d'Economie politique*, 104 (1), Janvier-Février.
- [2] BALASSA, B. (1985), « Exports, Policy Choices, and Economic Growth in Developing Countries after the 1973 Oil Shock », *Journal of Development Economics*, Volume 18, Issue 1, May-June, Pages 23-35.
- [3] BALDWIN, R. E. and SEGHEZZA, E., (1996), «Growth and European Integration: Towards an Empirical Assessment », *Centre for Economic Policy Research, Discussion Paper: 1393*, , P 36.
- [4] BARRO, R. et SALA-I-MARTIN X. (1996), « La croissance économique », *Mc Graw Hill, Edi science*.
- [5] BATRA, R. (1992), « The Fallacy of Free Trade», *Review of International Economics*, vol. 1, P19-31.
- [6] BEN-DAVID, D (1996), « Trade and Convergence among Countries », *Journal of International Economics*, vol. 40, P279-298.
- [7] BRAHIMI A., 1991, *L'économie Algérienne*, OPU, Alger. P10.

- [8] BRECHER, R. A., CHOUDHRI, E. U. & SCHEMBRI, L. L., (1996), « International Spillovers of Knowledge and Sectoral Productivity Growth: Some Evidence for Canada and the United States », *Journal of International Economics*, Volume 40, Issue 3-4, P 299-321.
- [9] CASSING, J. (1991), « A Theory of Changes in Trade Policy Regimes », in Hillman A., *Markets and Politicians: Politicized Economic Choice*, Boston, Kluwer Academic.
- [10] CNIS,(2012), "Les réalisations des échanges extérieurs de l'Algérie Période : 1963–2010".
- [11] COE, D. T. & HELPMAN E. (1995), « International R&D Spillovers », *European Economic Review*, Volume 39, Issue 5, P 859-887.
- [12] COE, D. T., HELPMAN, E. &HOFFMAISTER, A. W. (1995), «North-South Research and Development Spillovers », *National Bureau of Economic Research, Working Paper: 5048*.
- [13] DOLLAR, D., « Outward-Oriented Developing Economies Really Do Grow More Rapidly: Evidence from 95 LDCs, 1976-85 », *Economic development and cultural Change*, Vol. 40 (3), 1992, P523-544.
- [14] DRAZEN. A, GRILLI. V, (1993), « The Benefit of Crisis for Economic Reforms », *American Economic Review*, vol. 83, n° 3, P598-607.
- [15] EDWARDS, S. (1998), «Openness, Productivity and Growth: What do we Really Know? » *Economic Journal*, Volume 108, Issue 447, March 1998, P383-398.
- [16] EDWARDS, S. (1993), «Openness, Trade Liberalization and Growth in Developing Countries», *Journal of Economic Literature*, Volume XXXI, P 1358-1393.
- [17] EDWARDS, S. (1992), « Trade Orientation, Distortions and Growth in Developing Countries », *Journal of Development Economics*, Volume 39, Issue 1, July, P 31-57.
- [19] FEENSTRA, R. (1990), «Trade and Uneven Growth », *National Bureau of Economic Research Working Paper: 3276*, March, P 30.
- [20] FERNANDEZ. R& RODRIK. D, (1991), « Resistance to Reform: Status Quo Bias in the Presence of Individual-Specific Uncertainty », *American Economic Review*, vol. 81, n° 5, P 1146-1155.
- [21] Fiche pays de l'Algérie (2011), *Service des Statistiques Commerciales*
- [22] GOUMEZIANE. S, (1994), « L'incontournable Libéralisation », *Confluences Méditerranée*, n° 11, P 41-54.
- [23] GREENAWAY, D. & al., « Trade Reform, adjustment and Growth: What does the Evidence Tell Us », *The Economic Journal*, vol. 108, 1998, 1547-1561.
- [24] GROSSMAN, G. M. & HELPMAN, E. (1990a), « Trade, Innovation, and Growth », *American Economic Review* », Volume 80, Issue 2, P 86-91.
- [25] GROSSMAN, G. M. & HELPMAN, E. (1990b), «Comparative Advantage and Long-run Growth », *American Economic Review*, Volume 80, Issue 4, P796-815.
- [26] GROSSMAN, G. M. & HELPMAN, E. (1991a), « Quality Ladders in the Theory of Growth », *Review of Economic Studies*, Volume 58, Issue 1, P43-61.
- [27] GROSSMAN, G. M. & HELPMAN, E. (1991b), «Quality Ladders and Product Cycles », *Quarterly Journal of Economics*, Volume 106, Issue 2, P557-586.
- [28] GROSSMAN, G. M. & HELPMAN, E. (1991c), « Trade, Knowledge Spillovers, and Growth », *European Economic Review* », Volume 35, Issue 2-3, P517-526.
- [29] GROSSMAN, G. M. & HELPMAN, E. (1991d), «endogenous Product Cycles », *The Economic journal*, Volume 101, P1214-1229.

- [30] GROSSMAN, G. M. & HELPMAN, E. (1991e), «Innovation and growth in the global economy », P.xiv, 359.
- [31] HARRISSON (1996) « Openness and Growth, A Times-series, Cross-Country Analysis for Developing Countries », Journal of Developpement Economics, Vol 48, N°2, P419–447.
- [32] HENNI .A (1991)" Economie de l'Algérie indépendante", Alger, Enag éditions. P22.
- [33] IMF (2009-2013), Algeria Country Report, Washington, IMF. Consultable à l'adresse suivante: <http://www.imf.org/external/country/dza/index.htm>
- [34] JIN, C. JANG, (2004)« On the Relationship Between Openness and Growth in China: Evidence from Provincial Time Series Data », The World Economy Volume 27, Issue 10, P.157-182
- [35] KRUEGER A.O, (1993), "The Political Economy of Policy Reform in Developing Countries", Cambridge, MIT.
- [36] KRUGMAN, P. R. (1987), «A model of Innovation, Technology Transfer, and the World Distribution of Income», Journal of Political Economy, 87, P253-266.
- [37] LEE, j. W. (1993), « International Trade, Distortions, and Long-Run Economic Growth », International Monetary Fund Staff Papers, Volume 40, Issue 2, June, P299-328.
- [38] LEE, j. W. (1994), «Capital Goods Imports and Long-Run Growth », National Bureau of Economic Research Working Paper: 4725, April, P 20.
- [39] LEAMER.E, (1985),« Vector Autoregressions for Causal Inference? », Carnegie-Rochester Conference Series on Public Policy, Vol 22,P 255-303.
- [40] LEVINE, R. & RENELT, D. (1991), « Cross-Country Studies of Growth and Policy, Methodological, Conceptual and Statistical Problems », World Bank Working Papers Series, N°608.
- [41] LUCAS, R. E. (1988), «On the Mechanics of Economic Development », Journal of Monetary Economics, Volume 22, Issue 1, P3-42.
- [42] MEHDI. A (2011), "L'ouverture Internationale de l'Algérie. Apports et Limites d'une approche en termes d'économie politique du protectionnisme", Revue Tiers Monde, 210, P 51-68
- [43] ONS, (2012), "Les comptes économiques en volume de 2000 à 2011".
- [44] ONS, (2013), "Les comptes économiques en volume de 2000 à 2012".
- [45] PRITCHETT, L. (1996), «Measuring Outward Orientation in LDCs: Can It Be Done? », Journal of Development Economics, Volume 49, Issue 2, P 307-335.
- [46] RIVERA-BATIZ, L. A. & ROMER, P. M. (1991a), « International Trade with Endogenous Technological Change », European Economic Review, Volume 35, Issue 4, P 971-1001.
- [47] RIVERA-BATIZ, L. A. & ROMER, P. M. (1991b), « Economic Integration and Endogenous Growth », Quarterly Journal of Economics, Volume 106, Issue 2, P 531-555.
- [48] RODRIGUEZ .F & D. RODRIK, (1999), "Trade policy and economic growth: A skeptic's guide to the cross-national evidence", NBER Working Paper no. 7081, April.
- [49] RODRIK .D (1995b), « The Rush to Free Trade in the Developing World : Why So Late ? Why Now? Will It Last? », in Haggard S., Webb S. B. (eds.), Voting for Reform: Democracy, Political Liberalization, and Economic Adjustment, New York, Oxford University Press.
- [50] ROGOWSKI. R, (1989), "Commerce and Coalitions: How Trade Affects Domestic Political Alignments", Princeton, Princeton University Press.
- [51] ROMER, P. M. (1990), «Endogenous Technological Change », Journal of Political Economy, Volume 98, Issue 5, Part 2, Pages S71-102.
- [52] ROMER, P. M. (1986), «Increasing Returns and Long-run Growth », Journal of Political Economy, Volume 94, Issue 5, P 1002-1037.
- [53] SACHS, JD. & WARNER. A, (1995) « Economic Reform and the Process of Global Integration », Brookings Papers on Economic Activities, Vol. 1, P1-118.
- [54] SEERS. D (1964), « The Mechanism of an Open Petroleum Economy », Social and Economic Studies, vol. 13, n° 14.
- [55] SOLOW.R (1956), « Technical Change and the Aggregate Production Function », Review of Economics and Statistics, Vol 39, N°3, august, P. 312-320.
- [56] YOUNG.A (1991), «Learning by Doing and the Dynamic Effects of International Trade, Quarterly Journal of Economics, Volume 106, Issue 2, P 369-405.