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A Standard Study on the Effect of the World Trade on the Economic Growth in Algeria 1985-2015

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الملخص :

يشير النمو الاقتصادي إلى زيادة متزايدة في النشاط الاقتصادي لبلد معين. وتميل جميع البلدان إلى إدراك أهمية هذا النمو في اقتصاداتها، ولذلك فهي تحاول الجمع بين مجموعة من العوامل لتحقيق هذا الهدف، وهو مؤشر هام يدل على والترفيه وتنمية المجتمع. وفي السياق ذاته، تؤدي حرية التجارة دورا هاما في صعود الحركة الاقتصادية. وبما أن العلاقة بين التجارة الحرة العالمية والنمو قد أولت اهتماما متجددا بسبب تسارع الحساب التجاري ورؤوس الأموال، فقد تحقق هذا التسارع بسبب ضغوط العولمة الاقتصادية التي شجعت بدورها على الانضمام إلى منظمة التجارة العالمية وإبرام اتفاقات محلية.

الكلمات الدالة: : النمو الاقتصادي، التجارة الحرة ،العولمة ،الاتفاقيات.

Résumé:

La croissance économique signale une augmentation croissante de l'activité économique d'un certain pays. Tous les pays ont tendance à se rendre compte de l'importance de la croissance de la croissance de leur économie, de sorte qu'ils ont l'intention de rassembler un ensemble de facteurs afin de réaliser cet objectif qui représente un indicateur important pour les loisirs et le développement de la société. Dans le contexte actuel, la liberté du commerce des mots joue un rôle important dans la poussée du mouvement économique.

Comme la relation entre la liberté du commerce mondial et la croissance a généré le renouvellement d'intérêt en raison de l'accélération du compte commercial, du compte courant et du compte de capital, cette accélération a été réalisée en raison de l'accélération sous la pression de la mondialisation économique qui, à son tour, a encouragé à rejoindre l'Organisation mondiale du commerce et à conclure des accords locaux.

Mots Clés: croissance économique, politiques commerciales, commerce international.

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The economical growth signals a rising augmentation in the economical activity of a certain country. All the countries tend to realize the importance of the growth continuity of its economy as a result they intend to bring together a set of factors in order to realize this aim which represents an important indicator for the leisure and the development of the society. in the present context the freedom of the word trade plays an important role in pushing the economical movement. As the relationship between the freedom of the world trade and the growth have generated the renewal of interest as a result of the acceleration of the trade account, the current account and the equity capital account, this acceleration has been done due to the acceleration under the pressure of the economic globalization which in turn encouraged to join to the World Trade Organization and to make local deals. In front of this new situation, the countries which are in process of development have adopted a new strategy so they can be familiarized with the trade openness, this strategy is not focusing anymore on the fuel sector , but it is known by the variation of the economic activity and developing the inner construction as to execute different policies against the economic courses through which it supports the finance crisis.

Introduction

The economic growth represents a goal to which several countries with their ideology and culture try to accomplish, as they seek for the tools and factors which in turn can raise the individual living standard as well as the whole society. since the second world war and the end of the seventeenth of the twentieth century many developing countries tried to accelerate its development through limiting its importations from the manufactured goods and to adopt manufacturing strategy in service of the local service but this orientation has been changed in the beginning of the eightieths because of the failure of this policy which had no impact on the international integration and the economical growth as a result the change to the orientation towards relating the economical growth with the openness degree.

The relationship between freeing the international trade with the economical growth was a pure topic to several theoretical and empirical studies so that there are studies which proved that setting the trade free is one of the major reasons behind realizing the growth and the economical growth in the developing countries and the developed countries as well, in return the focus of the reverse literature on the on the disparity in the competitive capacity between the developing and the developed countries, and considering the large popularity that is freeing the trade rises the levels of the growth drove several developing countries under the protection of the international organizations to adopt the policy of freeing the trade in the context of the structural evaluation program in the beginning of the eightieth.

In order to cover all the aspects of this subject the following problematic is going to be tackled.

1- The Problematic of the Study:

In order to know the different views that whether encouraging the openness is beneficial to the developing countries or vice versa, it is a must to limit the direct relationship between the growth and the economic openness as to know the impact of this relationship on the developing countries. and the proposed question is :

What is the impact of the international trade freedom on the economical growth in the developing countries ?

In order to answer this question, the following sub-questions are going to be raised:

- what are the limitations of the economical growth and how it is measured ?
- what is the relationship between the world trade and the economical growth?
-How can the effect of the openness on the economic growth in Algeria be measured?

2- Hypotheses of the Study

In order to answer the aforementioned questions the following Hypotheses are going to b e set:

- The openness is considered as the only factor which affects the growth;
-Trade freedom affects on the economical growth positively on the developed and the developing countries but the impact differs when operated on both.
- The augmentation of the economical growth in Algeria has no relationship with the degree of the economical openness.

3- The Adopted Approach in the Study:

The descriptive analytical approach is used in this study through describing the different theories that explain the international trade and the economical growth and to find the relationship between them in addition to the standard study of Algeria during the period between 1985 to 2015.

4- Method of the Study:

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The study is divided into three chapters:
chapter One: General Descriptions about the Economical Growth
chapter Two: The Relationship Between the International Trade and the Economical Growth
chapter Three: A Standard Study about the Effect of the International Trade on the Economical Growth in Algeria

Section One: The Economical Growth, Concepts and Theories

First: General concepts on the economical growth

The economical growth is one of the important economical indicators, and the goal of any economical policy as it stands for a big importance for several countries from different areas of the world and that because it contributes in helping them in supporting their economy and the augmentation of the income as it contributes in the treatment of the unemployment problem.

1- Description of the Economical Growth

There exist a lot of descriptions for this concept, it can be described as " the continuous augmentation in the real personal income by time, and the average of the personal income equals the whole income divided on the number of inhabitants"[1] as it is also defined as" the continuous augmentation in the quantity of goods and services generated by the individual in an economical context[2]. The economist **S.Kuznets** defines the economical growth that it reflects the permanent capacity to introduce it to an elevated number of inhabitants . An augmentation in the quantity of goods and services for the individual[3], in other words it is the augmentation in the totality of the national income which realizes an augmentation in the real personal outcome average**.**

2- Growth and Development

Although the economical growth and the economical development could be seen to have the same meaning but they are not similar. The economical development is different from economical growth has the following table will clarify the difference between the two.

The Economical Growth	The Economical Development
-An intended (planned) operation which aims to change the the inner construction of the society so as to provide a better life for its inhabitants.	- It is accomplished without taking any decisions, which can make a structural change to the society.
- Concerned with the quality of goods and the services their selves.	- It focuses in the change of the quantity which the person gains from goods and

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	services.
- Has to do with the real personal income elevation, especially for the poor class.	- It does not take care with the way of distributing the real whole income between the individuals.
- Take care with the source of the national income augmentation and its variation.	It does not care about the source of the personal income augmentation.

Source: Jalal Khachib, Economic Growth Concepts and Theory, Alukah Network (http://www.alukah.net/library/0/74320/) seen on: 27/03/2014.

Second : The Theories of the Economical Growth Before "Solow"

The economical growth theory has known a huge development and that is done due to several economists with their different views , starting from the classical school then it was followed by some daring trials which largely used the mathematical models ,which was introduced by **"Shumpeter"** and **"Harrod Domar",** as the theories which came before "Solo" were the source of the ideas which the latter relied on in constructing his model that has to do with the economical growth.

1- The Classical School

A- Smith's Concept

Adam smith has significantly contributed in analysis of the economical growth through tackling the general principles which govern the composition of the wealth in his famous book " the nations' wealth "Smith clarifies that the specialization and the division of labor has to come true through the effect of the capitalist which results principally from saving as a result saving is going to be the principle of the economical growth, and with the presence of the gathering of the capitalist the growth operation becomes an automatically renewable operation where the labor division rises the productivity and gains and income rise and there will be more capitalist gathering and it will contribute in devising the labor with a more modern technology for more production and more gains and so on[4].

B- Ricardo's Concept

Ricardo sees the agriculture is one of the important economical sectors, for it contributes in providing food for inhabitants who are in augmentation, but the latter sees that it is under the decreasing yield control as he didn't give any importance to the technological development in decreasing the latter, affected by the capacity which England has seen at that time which implied a few use of the technological development in agriculture and using

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it in a large way in manufacturing[5] ,as the income distribution is considered as a deciding factor to the nature of the economical growth.

C- Critics Given to the Classical School

The classical school founders fail in estimating the power and the spread of the technological power, which has invaded the most developed parts of the world in at the end of the eightieth century and the beginning of the ninetieth century in a nutshell the technological development was more the enough in overcoming the traces of decreasing the yield which has occupied a large number of the classical and economical thinkers[6], as a result the classical theory is not logical in analyzing the growth in the developed countries.

2- Schumpeter's Theory

A- The Role of the Inventions

Schumpeter has given a large importance to the organizational technical factors in the economical wheel , as he focused on the organizer and he considered him among the important factors as growth has the capital amount of money and the natural sources and the organization and the art of production. The organizer is the inventor who brings something new to the world and the creativity includes several things such as[7] : introducing a new approach, introducing a new way to the production, entering to the new market, gaining a new source for the raw materials, establishing a new organization for industry which represent the state of invention.

B- The Destruction which Builds

As Schumpeter thought that the growth is a linear phenomenon but it follows the development of the technical inventions for it is realized through a chain of changement that is represented in the overstock in a specific period and that is in cyclic way that is to say it is due to pushing the activity of the contractor as the economy is deviates due to the balance and thus the prosperity is realized and on the contrary, when the inventions spread in the main sectors, it will make a form of non-balance to them. As a result, it will be difficult to expect exactly the costs and the incomes. In addition to that, the decreasing of the inventions percentage that leads to depression which leads, as a result, to approaching economy to a new position of equilibrium[8].

Third: **The New Classical Theory of the Economic Growth:**

The new classical theory of the economic growth comes directly from "Harrod-Domar" model due to the sharing of "Solow". This contribution carried the seeds of advance to the neoclassical theory.

1- "Solow" Model:

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Solow model, like the other theoretical and practical analysis, concentrates on a group of hypotheses and axioms which can be summed up in the following[9]:

The economy produces an exclusive and a homogeneous product and the productive process is accomplished under the auspices of the total consumption or the investment.

It is supposed at the beginning the absence of the technique advance and if it exists, it will be external variable and its value will determine outward of the model.

The most important hypothesis which distinguish "Solow" model from "Harrod-Domar" one is the possibility of discharging between the elements of production, especially the work and the capital. So, by the production technical treatments, i.e, the ratio ($\frac{k}{l}$). The passage of growth can be improved towards balance. He took the function of "Cobb Douglas" The stable size harvest function[10]:

$$Y=F\ (K, L) = K^{\alpha} L^{1-\alpha}$$

THE BASIC MODEL FOR "SOLOW":

Solow reached the following equation: $sK_t^{\alpha} - (\delta + n)K_t$

This equation is considered to be the most important result of "Solow" model. It illustrates that the individual capital changes are determined by three treatments. They are as follows: The extreme tendency of saving (s), the population increasing average or employment (n) and the capital destruction ratio (δ). The increasing of saving average impacts positively the individual capital account rising, whereas the increasing of both demographic growth average and capital destruction impact negatively the individual portion from the capital stock. We can analyze the equation into two partial equations[11]:

$$\begin{cases} sK^{\alpha} \\ (\delta + n)K \end{cases}$$

The following graph illustrates in details the situations and the steps in "Solow" model as it indicates in a special way, the individual portion in economy which can be counted by the subtraction between the two equations' graphic presentations.

$$(\delta + n)K, \quad sK^{\alpha}$$

Shape 1: Graph Clarifying "Solow" Model Curve

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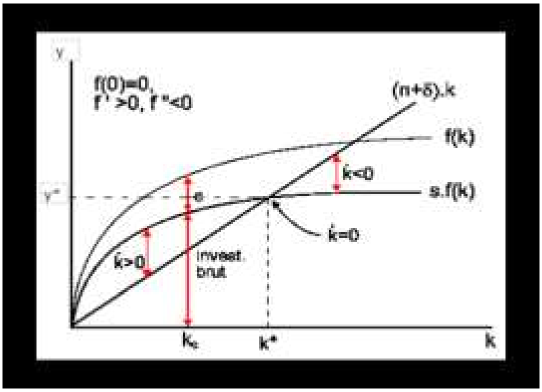

Source: Murat YILDIZOGLU, Theories of Economic Growth (http://www.vcharite.univ-mrs.fr/PP/yildi/croissance/croissanceweb/index.html), seen on 12-01-2014.

From the model we observe a point of intersection of the curves sf (k), (δ + n) k. It's the point from which the "Solow" model analysis starts off. This point represents the state of stability in economy in which the capital changing is absent (nonexistent) i.e, the saving account is similar to the capital destruction and the raising in population. We symbolize the individual account with k* and the individual resulting account with (rate) in a stable state where the economic growth average is nonexistent, with y*. The changing in the individual capital on the left k* is more than zero: $\dot{K} > 0$ whereas on the right of the point the changing account in the capital is negative[12]: $\dot{K} < 0$.

As a result, we can say that there are powers in the model. The first is sY which represents the current investment for each work unity. It reinforces and raises the individual capital portion. The second is (n + δ) k which represents the investment required in keeping up the individual portion from the capital stable. It's a power that whenever it rises, it makes the portion of the individual from the capital increases.

2- "Ramsey" Model:

Supposing considered group of similar companies that have the same production function of the form: Y = F (K, AL) and which have the same features of "Solow" production function. It produces one good, in addition to the existence of many similar families ,i.e, the size of each family grows

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with the same average (n) and a function with temporally endless benefit, is as follows[13]: $\int_0^T e^{-\rho t} u(c(t))dt$

So that, ρ: represents the average of the current priority and whenever it is high, the families prefer the current consumption rather than the future one.

Taking into consideration the capital destruction with the average δ, we can write the investment temporal changing as follows:

$$dk/dt = \dot{k} = f(k) - (\delta + n)k - c$$

So, the ideal growth, according to Ramsey is achieved by glorifying the following benefit function:

$$\text{Max} \quad \int_0^\infty e^{-pt} u(c)dt$$

Fourth: The Modern Growth Theory:

The main principal that motivates the modern growth theory is the explanation of both the difference of the growth average between countries and the observed increasing growth average. In brief, the theory of the internal growth seeks for an explanation for the factors that determine the size and the growth average of the GNP which is not explained and determined outward the “Solow” neoclassical growth equation and it is called “Solow residuals”[14].

1- The Internal Growth Model for One Sector:

The AK is considered to be one of the simplest models which allow the internal growth, i.e, which politics do impact the growth averages? This model can be derived easier than Solow’s without technological advance $\frac{\dot{A}}{A} = 0$ but with α=1

$$Y = AK$$

This equation gives the name to the model and it means that the result is adequate with the capital and the latter is accumulated according to the equation: $\dot{K} = sY - \delta K$

Supposing that: n=0, to simplify (k becomes the capital by unifying the inhabitants N=1). We can indicate with the following graph which is set up in the same way as in “Solow” model[15].

Shape 2: “Solow” graph in the AK model.

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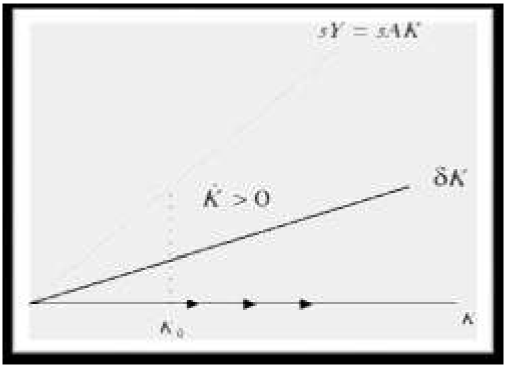

Source : Murat YILDIZOGLU, op cit

So, while operating the economy, we have: sY > δk, the capital stock grows and this growth lasts by time: the total investment is continuously higher than decreasing, so growth never stops.

The PIB growth average is a process of increasing the investment average; for that, the general politics which increase the investment average increase permanently the total local product growth average also. This result is explained in “Solow” model contest with ($\alpha < 1$). In this case, the straight sy is a curve and a tendency of the economic growth. It’s realized in K* when sY = δ (because n =0)

2- **The Internal Growth For Two Sectors:** “Lucas” realized a lot in his analysis to determine the economic growth on “Aizawa1965” model. The latter didn’t exit “Solow’s analysis framework. Despite that, he included the element of human capital in the production function. He considered the extreme production for this element decreasing. Lucas also depended on a group of hypothesis in his model[16]. We can sum up them as follows[17]:

- The economy is composed of two sectors only one is directed to produce goods and the other one to make up the human capital.
- According to “Lucas”, the human capital accumulation Kh is restricted by the following equation: $\dot{h} = \beta(1-\mu)\, h$; so that:

μ: is the period exploited for employment, and $(1-\mu)$: is the period to obtain the knowledge and β: is the amount of effectiveness. Therefore, we get: $\dot{h} = \beta.\,(1-\mu)$

On the other hand, the production function is a kind of “Cobb Douglas” function. It takes the following form:

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$$Y = K^{\beta} (hL)^{1-\beta} \quad \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

So that, h: represents the individual human capital.

Considering that the human capital is included in the function of production as a standing account, the same as in specie capital. For the growth objectives, there should be a determination of a formula by which the human capital accumulation is accomplished. This formula is as follows[18]:

$$\dot{H} = \delta H (1-u) \ldots\ldots\ldots\ldots\ldots\ldots (2)$$

In this model we notice that the cause of the difference poverty and prosper classes in different countries is due to the period exploited for knowledge and formation (1-u) by the individuals; whenever there is period exploitation, it will help more in increasing the human capital (kh) and thus, increasing the economic growth and the opposite happens in case of neglecting knowledge and formation.

The difference in life levels has great impacts on the human prosperity and this requires knowing the elements that determine this level of prosperity. The economic growth theory looks after these elements. We can observe that this theory passes two main stages; the classics depended on the theoretical analysis without relying on standard studies, however these theories had the grace in bringing out the main growth elements. But, they didn't try to explain the relation between these elements and growth precisely. However, after indicating the importance of the standard analysis in the economic analysis, a step started and some daring attempts in economic models occurred. The main one is that of "Solow", in addition to the modern models which were accomplished by a group of economists like: Romar, lucas... These models are still developing right now.

SECTION TWO: The Relationship between the International Trade and the Economic Growth:

The international trade is considered as one of the active sectors in each economy whether it is advanced or growing. Along with speeding up the disappearance of restriction on the movement of commercial account components (also the current account and the capital account). The interest of the relationship between the international trade and the economic growth increases. So, this exchanging relationship is not a place of agreement.
At the time that some people see that the international trade and its liberalization reinforce the growth average, some others see that this

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relationship is not determined and this is what will be discussed in this paper.

First: The International Trade Modern Theory:

Aplenty of modern theories have been occurred. They are less generalizing than "Heckscher Ohlin" such as the size economics[19], the incomplete competitions and the entrance to the technological world…

1- **The Similarity of Tastes Theory:** "Linder" supposes that the state will export the good which has bigger markets because the big size production will realize plentiful for the establishments and this leads to decreasing its costs and thus its prices in order to invade the foreign market. He supposed that similar states in incomes are similar in tastes concerning the various and the distinct goods while the main goods are submitted to "Heckscher Ohlin" theory. For example, the advanced societies are similar in incomes. For that, we find they have the same interest of goods in consumption (electronics, cars, electrical)[20]. Therefore, the similar exchange between two similar states is fulfilled according to the variety of goods that belong to the same kind. So, trade here is internal exchange of the sectors[21].

2- Goods Variety and the International Trade:

Goods differ in the basic or formal characteristic features either in quality, form, cover or color.

"Krugman" and "Lancaster" searched for the way of perfect kind number determination of goods which should be produced. So, supposing the following[22]:

a- The consumers enlarge their benefits through two kinds of goods: the first is identical and the second consists of non limited kinds.
b- Concerning the homogeneous good supposed to be produced by each state and that this good is concentrated in work whereas the second good (industrial) is concentrated in capital.
c- There is a technological identical in the production of similar goods internationally and their costs of production are stable, whereas the industrial good submitted to the increasing and the size surges circumstances. Therefore, the establishments produce a lot of kinds of it. However, each establishment produces one kind only. The big state, economically, will deviate to produce bigger number of industrial good categories and this is according to the demand which is controlled by the increasing in the incomes and the variety in tastes.

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Both of “Krugman” and “Lancaster” models lead to the same results which are as follows:

a- Decreasing the productions prices and increasing the size of consuming goods kinds, in addition to the possibility of the international exchange in case of similar states. It’s gainful for the consumer and monopolization competition model forms a basic analysis in explaining the international exchange of the intersecting goods[23];

b- Concerning the similar good, it will follow “Hechscher Ohlin’s model. It’s exported by the large employment state to the large capital state (because the good is large in work). However, the industrial goods which are distinct, suit some consumers’ tastes in both states, therefore, it will have two directions (trade of one industry) this means that the state will import and export the same good but with different categories and its exports will be more than its imports[24];

c- The trade is held on the relative abundance of production factors. If the relative abundance is identical in both countries, trade will stand only because of economies of economic size. Therefore, it will be restricted to the industrial goods, whereas if they differ in the abundance, each state will have relative characteristic in producing the dense bumper element[25].

Second : The International Trade as a Growth Motive:

Both classic and neoclassic agree that the international trade is a positive factor in the economical growth. The classic and the neoclassic theories on the relationship between trade and growth has developed by time and become” the general models of growth derived from exports” and this means that there are many indirect benefits that pour forth the economic growth. The main benefits of exports impact that leads to growth can be summed up in the following points[26]:

1- The trade extends the market extents. It encourages the creators to invent realization of best use of machine, facilitates the specialization and the division of employment and thus performing the economics of size;

2- The trade motivates the international competition. It pushes the adventurers to search for means of decreasing the costs and it is also one of the most efficient means in dimension of non-qualified monopolization from employment.

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On the practical standard, there are a lot of studies that tried to examine the relationship between trade liberalization and the economic growth and among them:

1- (Emery 1967) made the analysis on the relationship between the exports' growth and the individual incomes averages growth in 50 states during the period (1953- 1963), he found that there is a strong relationship between them and in another study on 16 states during time sequence consisting of 10 years (1953- 1962), (Maizels, 1968) found a strong relationship between the economic growth and the exports' growth[27] ;
2- In the seventeenth of the last decade, (Balassa, 1971) and other economists, clarified the relationship degree between trade and growth. Studies also show that exports' growth has a relationship with the total local product[28] and that the increasing in exports leads to a quick growth in economy;
3- The study of "Dan Ben-David" under the title (trade, growth and 2000, among nations disparity) and the general result that he comes to is that the international trade has a basic impact on the economic growth especially in the states that have a difference in the incomes comparing with their partners;
4- The study of "Freund", "Bolaky" shows that trade liberation does not manipulate the economic growth because the product characteristic movement will be limited. The economists "Krueger1998", "Baldwin 2003", ""Winters 2004"[29], "Chang", "Kaltani", "Loayza 2005" showed, from their point of view, that trade liberalization itself isn't sufficient to stimulate the economic growth with power. It must be followed with other politics like the investment graduation in the material and human capital and improving the companies quality. In addition to fighting the bribery and keeping the price of the exchange stable.

Moreover, the theory of the internal growth searches the relationship between the international trade and the long appointed time economic growth, and searches more precisely and less trade amount of obstacles of the real channels which motivate the economic growth in the long term.

Third: GROWTH AND TRADE:

In the classical and the neoclassical theories, the trade liberalization impacts directly on the economic growth. Considering that the freedom environment is the realization of their suppositions[30]. Whereas in the recent theories of the economic growth, trade liberalization activates the

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technological advance and the economical growth in some states and postpones them in others.

Depending on sources of production possibilities curve which is represented in production factors growth and the technique advance. The results and the impact of the economic advance will be analyzed in the production, consumption, commerce and society wealth by tackling two cases: the case of the small nation and the one of the big nation.

1- The State of the Small Nation:

a- The Impact of Growth on Trade: If the production of the export good of a nation grows relatively more than the production of its imported good and that at a stable relative prices of goods. This growth will broaden the trade size more than the one get used to. This is called the growth for trade. The growth can also be parallel or partial against trade and just the opposite, if the imported good consumption, at stable relative prices of goods, the consumption will broaden the size of trade more than get used to and this is called the partial growth for trade[31]. The consumption, therefore, can be parallel or partial against trade.

What happens to the trade size during growth procedure depends on pure results of both production and consumption. If the production and consumption are partial for trade, then the size of trade will expand relatively faster than the size of produced goods. And if both of production and consumption are partial against trade, the size of trade will expand relatively less than the size of produced goods and it will possibly decrease. But if the production is partial for trade and the consumption is partial against trade or vice versa, then what happens to trade size will depend on the net results of these two contradicting forces. In case that is unlikely to happen and in which the production and consumption are parallel, the trade will expand with the same average that the production does.

b- The Elements of Production, Trade and Prosperity: The upper part of shape 3 shows the work multiply in the state (1) and the conditions of its trade doesn't change by growth and trade. Before growth**,** nation 1 at the point B produces and exchanges the same quantity between **X** and **Y** at the price **P_B =1** and it reaches the same curve **I1**. And at the work multiple **L** in the state 1, the production possibility curve will move outside. If the state is too small to impact the goods relative prices, it will produce at the point **M** where the expanding of the production possibilities touches the price line

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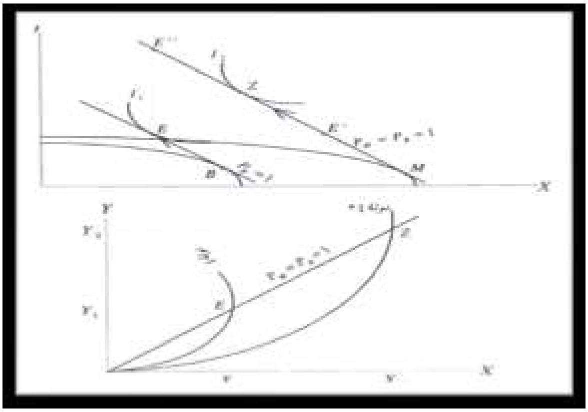
Pm = PB= 1 and at the point M, the state (1) produces a bigger quantity more twice in the good **X** than in the point **B** but less than the good **Y**[32].

Shape 3: Trade and Production Growth Factors: The State of the Small State



Source: Khalid Mohammed Al-Swaei, International Trade, op. Cit., P. 245

The lower part of the shape indicates the supply curve clarifying the same growth of the state (1) trade at a stable trade conditions in case of free trade before growth.

The state (1) exchanges a quantity of good x_1 with the quantity y_1 at the relative price **P_x /Py = PB = 1** whereas in case of free trade after growth, the state 1 exchanges the quantity of good x_2 with the quantity y_2 at the price **P_x / P = PB =P = 1**. The straight line shows the trade conditions stability and exposes also the curve of exposition of state (2) (or the rest of the world) and because state (1) is too small, so that the exposition curve before and after growth intersects with the straight line of state (2) (the bigger state) at the supply curve and a stable trade conditions[33].

Observe that state (1) is in a worse case after growth because the work power and inhabitants are doubled, whereas the total consumption is less than duplication (compare the point **Z** after growth with the point **E** before growth)[34] so, the decreasing of consumption and prosperity of state (1) exposes as a result of this kind of growth.

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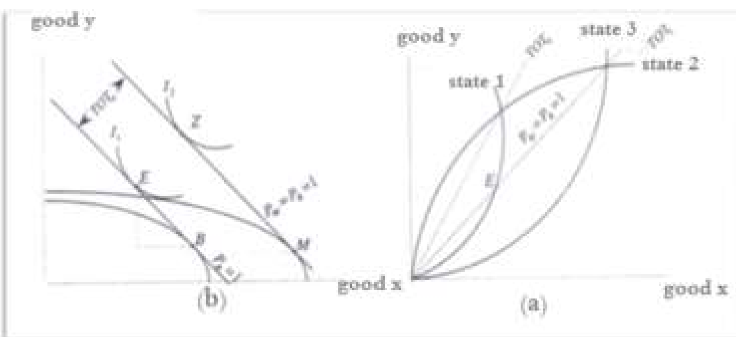
2- THE BIG STATE CASE:

a- Growth and Conditions of Trade and Prosperity:

The state can impact the international prices if it has a large number of consumers and producers. In this case we must take into consideration the possible impact of the economic growth on trade conditions. Supposing that we make a research on a big state that may impact the international prices and the increasing of the production factors. In this case, the capital causes production impact supporting trade and neutral impact consumption growth. The total impact on trade of this state will be additional demand on importation and the exports exposition will increase at the current group of the international prices as shown in part (a) of the figure .

Shape 4: The Big State Growth and Trade Conditions



Source: Khalid Mohammed Al-Swaei, International Trade, op. Cit., P. 250.

As a result of this state growth, the exposition changes at these prices group in the international market, the increasing of the exposition of goods exports (good X) and the increasing of the demand of goods imports (good A) will decrease international trade conditions as shown in part b of figure 4. The increasing of the proportional prices of the imports decreases the possible profits from growth and trade because less imports reaches the state in return for each unit of exports as shown in figure 4. The international trade conditions line (TOT_1) is more spread than it was before growth (TOT_0) and the similar curve touch $\mathbf{I}_1$ is less than it was before if prices

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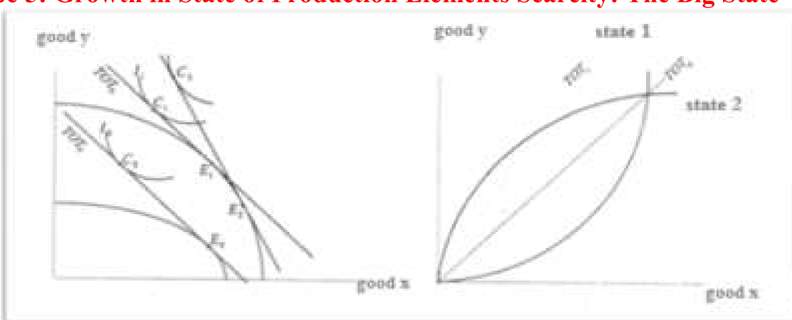
hadn't prices impact I_1. For that, some benefits of growth decreases because of trade conditions deterioration[35]. In order each state, that has a big trade, becomes qualified, it must totally decrease trade conditions impact disadvantages which decrease the growth advantages impacts.

a- The Growth and Trade Impact in Case of Production Factors Scarcity:

The theory of "Rybczynski" supposes that the growth of only one factor of production's factors leads to broadening good production which uses this developed factor a lot, whereas the good production that uses the production factor that didn't grow will decrease[36] as it is shown in the following figure.

Shape 5: Growth in State of Production Elements Scarcity: The Big State



Source: Khalid Mohammed Al-Swaei, International Trade, op. Cit., P 254.

According to Rybczynski's theory, the growth of the rare element K leads to the expansion of the imported goods result (good Y) and to the retreat of the exported good (good X). If the impact of trade alike production doesn't reduce in a very strong consumption impact as in trade increasing, the level desired of trade at the primary prices level TOT_0 will decrease. If this happens, the curve of state (1) exposition will move inside and will expose the decreasing of trade desire after growth. This leads to improving the state (1) trade conditions ($TOT_1 > TOT_0$), the production and the consumption accommodation.

After growth, the production moves from E_1 to E_2, the consumption from C_1 to C_2 and the needs level from I_1 to I_2. The change in trade conditions leads to more specializing in trade and additional benefits of growth comparing with what must be in order to have a position at the

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original trade conditions[37]. Therefore, the positive impacts of growth increase by the impact of trade conditions result the highest similar curve. This impact is clarified in part b of figure **5** such as the consumption prosperity rise from I_0 before growth to I_1 after growth and after taking trade conditions into consideration at last. If the work grows as a factor, the positive trade conditions impact can be improved and there will be some loss in necessities as a result of decreasing the individual portion from the incomes.

Throughout the theories that have been stated, we deduce that the classical and the neoclassical theories that allow interpreting a part of international exchange. So that permits giving a positive point of view on international trade on the economies which are carried out and it returns with the benefits on the countries that are interchangeable, whereas the modern theories interpret the international exchange between the advanced countries so that the exchange between these countries is due to similarity in tastes and to the incomplete competition.

The spread of globalization which coincided with the efforts of international organizations to solve the countries' economic obstacles and pushing them to open their borders towards the international markets leads the academics and the politics to raise the importance of trade policy again. So the aim of trade liberalization is clarifying the importance of commercial obstacles removal and reducing the state interference degree based on the state power allocation hypothesis to formulate an efficient trade policy. Supporting public opinion that trade liberalization increases the economic growth with varied hypothetical and practical studies, but it lacks the final part of its validity. There are a lot of trade reform cases that are successful and that include an interventionist policy by the state and do not totally rely on trade liberalization. For example South korea and Taiwan incorporate the free trade policy with a mixture of intimate policies. The full liberalization of their imports is not achieved only after they achieved high rates of their economic growth. The benefits of liberation were more valued than they were and this is because of great deal ratio. The trade openness is basic resource of growth whereas the experiments of a number of countries confirmed that trade liberalization is a tool and not a goal. The effect also varies from a state to another according to the politics and the economic characteristics of the states. Thus, the impact of trade

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liberalization on economic growth should be studied in a standard way on the developing countries in order to know whether the same positive impact is realized as it is in the advanced countries or not.

SECTION THREE: A Standard Study of the International Trade Liberalization Impact on the Economic Growth in Algeria:

After stating different theories clarifying the international trade and making different concepts concerning the economic growth, the relationship between them is examined. The theoretical studies do not totally state that trade liberalization increases the growth. However, some practical studies arrive at the existence of a positive impact between them. The big popularity that trade liberalization increases growth averages, leads different developing countries and under the care of international organizations to adopt the trade liberalization policy. The question raised is: what is the impact of trade liberalization policy on the economic growth on developing countries?

To answer this question, the impact will be examined in a standard way on Algeria through a general summary on the Algerian economy. Then, there will be a determination of economic variables and the model. After that, there will be an economic study and an assumed models statistics and finally a re-estimation of the applied models and an analysis of the reached results.

First: Determining the Economic Variables and the Model:

The process of choosing the economic variables which impact the relationship that is the impact of the international trade liberalization on the economic growth relies basically on the theoretical side of the study and on the availability of the statistics and the information about these variables during the period which will be studied. The model variables can be determined as the standard model that consists of dependent variables and interpreted variables as follows:

- **The dependent variable**: The individual portion from the total local production and it is symbolized with **GDP**;
- **The interpreted variables**: The exports outside fuels sector and the imports. It is symbolized with **M** and **X**.

1- Forming and Drafting the Model:

After knowing the variables that compose the standard model, the mathematical form of the model is determined. This model is considered as

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an essential step in building the standard model and the form of the function is:

$$GDP = f\,(X, M)$$

The downward multiple linear style is used on the linear model and its formula is:

$$GDP = B_0 + B_1 X + B_2 M + u_i$$

So that:

$_i$: represents time.

GDP: represents the individual portion from the total local production with dollar.

X, Y: represent respectively the imports by trillion dollar and the exports outside fuels sector by trillion dollar.

B_0, B_1, B_2: represent the model outlines.

We observe that the standard model has got a possible feature and for that the error limit u_i is inserted. It replaces some variables that can impact the economic growth and which is not inserted in the study such as the exports inside fuel sector or other variables.

2- The Results of the Model Drafting:

And according to this table, the results of the economic growth linear model appreciation are as follows:

$$GDP = 990.5271499 + 0.2569725035{*}X + 218.5565952{*}\,N$$

(4.776185)*	(116.5731)	(10.74512)
$R^2 = 0.999935$	N= 31	F=214419.8
$\overline{R^2}$=0.999930	Prob = 0.000000	

So that:

*: is a statistic value of T

R^2, R^2 represent the coefficient of the improved determination and the coefficient of the determination

F: “Ficher” statistic

Prob: the possibility of error

SECOND: The Economic Study and the Statistic of the Estimated Models:

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1- Test Parameters Economically:

Concerning the exports coefficient outside fuels sector (B_1= 0.02569725035), its signal is positive, i.e, the relationship is direct between the dependent variable (economic growth) and the interpreted variable (the exports outside fuel sector). This result agrees with the logic of the economical theory. So, the coefficient (B_1) has an economical morality.

Concerning the imports coefficient (B_2) = 218.5565952) its signal is positive, i.e, the relationship between the dependent variable (economic growth) and the interpreted variable (exports) is direct. So, B_2 has got an economic morality.

2- Test Parameters Statistically:

The outline morality is tested using the statistic of T Student and the total morality of the model is tested using the statistic of F Ficher and multiple determination outlines R^2.

a- Test Parameters Morality:

The statistic of Student T is used to evaluate the moral parameters of the model and thus, evaluating the impact of the interpreted variables on the dependent variable by testing the special hypothesis of the outlines valued as follows:

- The null hypothesis: H_0 : $B_0 = B_1 = B_2 = 0$
- The alternative hypothesis : H_1: $B_0 \neq B_1 \neq B_2 \neq 0$

The results of Student test of the first model can be identified through the following table which determines the calculated values T_{cal} of the outlines, the tissue values T_{tab} and the lowest moral level Prob at the level 5%.

We sort out the table value T_{tab} from Student table at the same moral level, i.e, 5% and with freedom degree (n- k) and it equals 31- 3 = 28 that is to say: $T_{n-k}^{\alpha} = T_{28}^{0.05} = 2.2281$

The values	Coefficients	calculated values T_{cal}	Chart values T_{tab}	Low moral level **Prob**
The stable	B_0	4.776185	2.048	0.0001
X	B_1	116.5731	2.048	0.0000
M	B_2	10.74512	2.048	0.0000

Concerning the stable variable coefficient ($\mathbf{B_0}$), we observe that the calculated value Tcal is more than the table value $\mathbf{T_{tab}}$, i.e, $\mathbf{T_{tab}} < \mathbf{T_{cal}}$ and thus the hypothesis of nonbeing H0 is refused. That is to say: $\mathbf{B_0}$ has got a morality at the lowest moral level Prob equals 0.0001. This means that the stable can be accepted with an error of about 0.01% at the moral level 5%.

Concerning the exports coefficient outside fuel sector ($\mathbf{B_1}$), we observe that $\mathbf{T_{tab}} < \mathbf{T_{cal}}$ and thus the hypothesis of nonbeing $\mathbf{H_0}$ is refused. That is to say: $\mathbf{B_1}$ has got a morality. It means that the exports outside fuels have got statistic morality at the level of morality of 5%, in the interpretation of the economic growth during the study period. And thus, the independent variable (exports outside fuels) will impact on the dependent variable (the economic growth average)

Concerning the imports coefficient ($\mathbf{B_2}$), we observe that $\mathbf{T_{tab}} < \mathbf{T_{cal}}$, and the lowest morality level of $\mathbf{B_2}$ equals 0.0000 less than 5 % and thus, we refuse the nonbeing hypothesis $\mathbf{H_0}$. That is to say: $\mathbf{B_2}$ has got a morality. And thus, we can say that the imports have a statistic morality at the level of morality of 5%, in the interpretation of the economic growth during the study period. And thus, the independent variable (imports) will impact on the dependent variable (the economic growth average)

b-

cher Test F:

This test aims at the downward morality in whole through the following hypothesis:

The null hypothesis: $H_0 : B_1 = B_2 = 0$

The alternative hypothesis: $H_1 : B_1 \neq B_2 \neq 0$

The calculated value $\mathbf{F_{cal}}$ is compared with the tissue value $\mathbf{F_{tab}}$. It's sorted out from Ficher table at the morality level of 5% and the freedom degree of the numerator and the denominator as it is clarified in the following relation:

$$F^{k}_{n-k-1} = F^{2}_{31-2-1} = F^{2}_{28} = 3.3404$$

We observe that the calculated value $\mathbf{F_{cal}}$ = 214419.8 is more than the table value $\mathbf{F_{tab}}$ and thus, we refuse the null hypothesis which states that all the independent variables equal zero except the stable. And we accept the alternative hypothesis which states that there is at least one variable equals zero and this means that there is a moral linear relationship between the

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dependent variable and the interpreted variables. Thus, the model is significant.

THIRD: Analysis of the Reached Results:

Throughout the economical and the statistical study, the standard model of the economic growth in Algeria has been estimated during the period 1998-2010. It is represented in the following downward equation:

GDP= 990.52714499+ 0.02569725035*X+ 218.5565952*M

On the delight of this model, the content (of the model) will be analyzed throughout the estimated landmarks and the following are the gained results:

During the period 1985- 2015, there were the most impacting factors on the economic growth in Algeria, the exports outside fuels with the average of 0.02569725035 and the imports with the average of 218.5565952. This means that the increasing in the exports outside fuels is about 1 trillion dollar will lead as well to in the individual portion from the total local production with 0.02569725035 dollar. And each increasing in the imports of 1 trillion dollar will lead to increasing the individual portion from the total local production with a percentage of 218.5565952.

CONCLUSION:

According to the foreign trade theories, the importance of trade and its relationship with growth varies. At the time of which the modern traditional theory looks at the importance of trade in a country as to be determined by the comparative advantages and how they affect the quantity of the factors available depending on their national and international prices, in addition to the impossibility of the technique transportation, the limited resources and the sovereignty of the total competition, trade is considered as it works under the monopoly of the competition, the possibility of the technique transportation and the possibility of creating new resources through the dynamic nature of the comparative advantages from the modern theories points of view.

Whereas concerning the relationship between trade and growth, the points of view vary. In the classical and neoclassical theories, trade liberalization affects indirectly on the economic growth, considering that their hypothesis are realized in freedom environment. So, each policy, such as trade liberalization, that increases the effectiveness of economy may lead to a quick growth. And the increasing of incomes is translated by the increasing of saving and investment, whereas in the modern hypothesis of the economic trade, the trade liberalization activates the technologic advance

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and the economic growth in some countries and postpones it in others. If some studies encourage the protection under some circumstances, none of them encourages the protection policy as a strategy of growth and development in the long term. So the results reached by the theoretical studies about trade liberalization effect on the economic trade are far to represent the agreement on a unique, explicit and sure opinion in addition to the differences in analysis.

Some experiments of a number of countries confirm that liberalization is not the ideal model in all cases and for all countries. If some developing countries realized prosperous growth through the free exchange, this will differ in the developing countries because of the economical, political, geographical and social privacies differences. In order to know whether this liberalization effects the economic growth in Algeria or not, it is necessary to make a standard study to examine this relationship, considering that the standard economy is an important tool in analysis. So that, the study included the period between 1985 and 2015and it was reached that there is a positive effect of international trade liberalization on the economic growth during this period.

RESEARCH RESULTS:

Throughout this study, it is reached to the following results:

Trade liberalization is not the only determinant for the economic growth. Many factors affect it. Moreover, the impacts of liberalization vary in the advanced and developing countries because each group has its economic privacies.

The effects of liberalization vary in the developing and the advanced countries because each has its privacies and in order to benefit from the openness, there must be an adequate economic policy in order not to be negative on economy. In addition to that, the effect of openness policy will not be valid for the developing countries. This is according to the products that it exports and its internal economy needs.

The benefits of openness concentrate in the imports side in: the ability of importing the ideas, the investment goods and the argument inputs, which motivate growth, from the advanced countries. In order to fulfill this openness, some internal conditions must be available such as the following:

Creating a positive environment leading to a special productive investment (clear investment strategy)

Creating special institutions in the area of crisis management

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Legal guarantee of civil and political liberties
So that developing countries can achieve the goal of stability and thus adapting to external shocks. And under the absence of these conditions and others, the policy of openness will not realize important achievements and will realize the worst cases: the instability the broadening in the gap of incomes distribution and social disputes.

Dependent Variable: GDP
Method: Least Squares
Date: 11/06/16 Time: 19:17
Sample: 1985 2015
Included observations: 31

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	990.5271	207.3888	4.776185	0.0001
X	0.025697	0.000220	116.5731	0.0000
M	218.5566	20.34008	10.74512	0.0000

R-squared	0.999935	Mean dependent var	16324.05
Adjusted R-squared	0.999930	S.D. dependent var	75043.55
S.E. of regression	627.6426	Akaike info criterion	15.81358
Sum squared resid	11030188	Schwarz criterion	15.95236
Log likelihood	-242.1106	F-statistic	214419.8
Durbin-Watson stat	0.147683	Prob(F-statistic)	0.000000

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