

## **4. Is the albanian economic growth influenced by importing countries growth?**

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### **Abstract**

International trade, as a major factor of openness, has a significant contribution to economic growth, especially nowadays when globalization is becoming a widespread phenomenon. Country's trade openness can be analyzed from one side by the impact of our revenue growth, which will influence the growth of domestic demand for imported goods and from the other side the revenue growth of other countries which will affect the growth of imported goods and thus in the growth of exports of analyzing country. Exports impact is very important to be treated combined with exchange rate, as another indicator of international competitiveness of countries goods.

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This paper will analyze the impact of economic growth of importing countries and effective exchange rate to the domestic economy growth, in our case to the Albanian economy. The increase demand for imported goods from Albanian trade exchange countries means an increase in our exports, thus an increase in aggregated demand and so in a higher economic growth. The exchange rate makes our goods more or less comparable in international market, as a result it will take a significant part on analyze. The goal of the paper is to investigate the impact of exports, other counties economic growth and exchange rate to economic growth of Albania. In the model are included a weighted index of other countries economic growth based on the imports that they make from Albania and the effective exchange rates as a variable of competitiveness. The results are based on annual data collected from 2000 to 2013. The empirical results indicate that exist a positive correlation of importing countries from Albania and effective exchange rate in Albania's economic growth.

## Introduction

Economic growth is the main focus of economic study by most researchers and economists, where they have tried to find and analyze the main factors and determinants of growth. There are many studies concerning the role of consumption, investments, government expenditures, inflation, public deficit, remittances and other macroeconomic variables that are crucial in spurring the economic growth of a country. There has been paid a special attention in last years to the impact of international trade on the growth level. An extensive theoretical and empirical literature exists on the impact of exports on economic growth but the relationship between imports and growth is more complicated and there is a lack on the literature theory. The findings and results in the current economic literature show that the level of international trade in an economy may be one of the main sources of its growth. In the literature, the main findings are on the positive impact of exports in economic growth because being part of GDP it will increase it.

Exports of goods and services represent one of the most important sources of foreign exchange income that ease the pressure on the balance of payments and create employment opportunities. Exports help countries to raise their productivity, investment and enhance efficiency, but countries such as Albania from the other part faces with a lack of production factors so they raise their imports level. The demand for imports is determined by both economic and noneconomic factors, such as exchange

rates, economic activity, domestic and external economic conditions, production and political conditions. According to Rivera Batiz there is a direct relationship between imports and economic growth, because a rise in economic activity or high real income will increase consumption and induce an increase in imports. In order to finance imports, an economy must rely on exports, foreign credit, foreign direct investment and foreign aid. They are usually classified according to economic destination and the classification of a product. They contribute to the main components of GDP (investment, consumption, government expenditure, exports), they should grow when consumers disposal income increases.

An export led growth strategy aims to provide producers with incentives to export their goods through various economic and governmental policies. It also aims to increase the capability of producing goods and services that are able to compete in the world market, to use advanced technology, and to provide foreign exchange needed to import capital goods. Exports can increase intra-industry trade, help the country to integrate in the world economy and reduce the impact of external shocks on the domestic economy.

## 4.1. Review of related literature

### 4.1.1. Theoretical review

The literature on international trade which suggests that exports have a positive impact on economic growth is known as the Export-led-growth (Giles and Williams, 2000). Different reasons have been proposed for explaining the evidence found in previous studies dealing with this issue on export-led growth. The simplest explanation is that, as international the contribution to growth made by domestic consumption is limited to the size of regional (or national) markets, sales to foreign markets represents an additional consumption demand which increases the amount of real output produced in the economy (Giles and Williams, 2000). Another more elaborated explanation is that exporting is associated with more productive firms (Bernard and Jensen, 1999; Bernard and Wagner, 1997), and thus export-led growth at aggregate level may be the result of both the accumulation of within-firm productivity gains from export participation, or the reallocation of resources from comparatively less productive non-exporters to more productive exporters (Bernard and Jensen, 2004; Roberts and Tybout, 1991).

According to Uche (2009), the relevance of exports in boosting economic growth and prosperity is captured in the theoretical justification

for international trade. In the mercantilist economic thought, for instance, foreign trade is seen as an indispensable engine of economic growth and prosperity (Roll, 1953; Bhatia, 1978). Indeed, foreign trade under mercantilism is considered to be profitable only when there is positive balance of trade thus implying that exports are the most crucial aspect of international trade. But as pointed out by Ozughalu and Ajayi (2004), if every country ensures that it gets a surplus in international trade, there will be high degree of protectionism and many barriers to the flow of foreign trade; and these are incompatible with the essence of globalization. A highly robust theoretical underpinning for international trade lies in the classical economic theory of comparative cost advantage.

The theory of comparative cost advantage states that global output will reach its optimum level if every country specializes in the production of the commodity (or commodities) in which it has comparative cost advantage over others; this is seen as the basis for profitable trade (Ozughalu and Ajayi, 2004). In contemporary economics, the dominant model of comparative cost advantage is known as Heckscher-Ohlin model. As pointed out by Sodersten and Reed (1994), this is a theory of long-term general equilibrium in which two factors of production – labor and capital – are both mobile between sectors. The Heckscher-Ohlin theory postulates that international trade – of which exports are expected to constitute the major component – will significantly reduce the gap between the rich and poor countries.

The theory contends that inter-country differences in factor endowments are the basis for foreign trade. Comparative cost advantage comes as a result of different factor intensities in the production of various commodities (Sodersten and Reed, 1994). The Heckscher-Ohlin theory also implies that free trade specialization in production based on relative factor endowments will tend to bring about factor price equalization and thus will increase the returns to labor in poor countries to the levels in rich countries; this suggests that international trade in general and exports in particular have the ability to mitigate inequality in income and wealth distribution between and within nations as well as the ability to bring about a convergence in absolute poverty incidence between the rich and poor countries (Ozughalu and Ajayi, 2004). The relationship between exports and economic growth has always been a hot issue and has often generated heated debate among economists and policy makers. As observed by Lin and Li (2007), there are basically two approaches used in addressing the issue. The first approach has to do with studying the contribution of exports to the economic growth of an economy through analysis of the supply side of the economy. This approach emanates from the neoclassical economic growth theory/model. The

approach states that the major source of economic growth lies in two major areas namely: increases in factor input(s) and improvements in efficiency. Following the above statement, analysis from the approach often regards exports as a factor that can affect technological progress or to be among factors that are related to economic efficiency. In practical terms, the contribution of exports is thought to be included in the residuals of growth accounting. It is noteworthy that the new growth theory/model endogenises the mechanism through which exports impact on economic growth. In line with this theory/model, Grossman and Helpman (1990) proposed a two-nation growth model with endogenous technological progress. As shown in their model, exports help to promote technology and knowledge and thus accelerate economic growth. It is instructive to state here that how to introduce exports into the production function is the major problem involved in the econometric analysis that follows the neo-classical approach. Some analysts directly include exports in the production function as the third variable while others use more sophisticated methods.

The second approach is to study the contributions of exports to a country's economic growth through analysis of the demand side of the country's economy. The demand side approach is also called demand oriented analysis or post-Keynesian analysis. According to the traditional Keynesian theory, an increase in exports is one of the factors that can cause increases in demand and thus will surely bring about increases in outputs, all other things being equal (Lin and Li, 2007). It is important to note that though this approach is highly sophisticated and robust, it has not been widely used. This is partly because of the remnant of Say's law in people's mind (McCombie and Thirlwall, 1994). Indeed most people believe that the major constraints of modern economic growth lie on the supply side instead of on the demand side. In other words, they believe that only increases in factor inputs and improvements in economic efficiency can stimulate economic growth (Lin and Li, 2007). However, proponents of the demand-oriented analysis disagree with the above view and argue persuasively that it is growth in exports that is the major stimulant of aggregate economic activity and economic growth. Thirlwall (1987), McCombie (1985), McCombie and Thirlwall (1994, 1997 and 1999) and others later developed the argument of the proponents of the demand-oriented analysis into a powerful theoretical framework that analyses the relationship between exports and economic growth. Put briefly, the theoretical framework has the following characteristics:

- contrary to popular belief, the Keynesian theory/model can be used to analyze long-term phenomena such as economic growth,

- exports are an autonomous component of demand,
- the role that exports play in an open economy model is as important as investment in a closed economy model,
- the role of the balance of payments as a constraint on economic growth is important.

There are several studies that have analyzed the impact of exchange rate on economic growth and the economic literatures on this issue have evolved in the last few decades. An increase in exchange rate volatility would result in lower international trade is that there are risks and transaction costs associated with variability in the exchange rate, and these reduce the incentives to trade. While early studies found adverse effects of exchange rate volatility on trade (Ethier, 1973; Clark, 1973; Baron, 1976; Cushman, 1983; Peree and Steinherr, 1989) subsequent studies report very small impacts (Franke, 1991; Sercu and Vanhulle, 1992). In addition, any relation between volatility and international trade could be driven by reverse causality, in which trade flows help stabilize real exchange rate fluctuations, thus reducing exchange rate volatility (Broda and Romalis, 2010).

#### 4.1.2. Empirical review

It is important to note that a large number of studies on the importance of exports in economic performance and the relationship between exports and aggregate economic activity/economic growth have been conducted over the years, particularly in recent years. It is gratifying to observe that in recent times, there has been great and increasing interest in the study of exports and economic growth within the context of developing countries; a great number of research works have captured this interest. The research works may be said to be of two main categories. The first category concentrates on individual countries and assesses the implications of export promotion versus import substitution strategies for economic growth (Bhagwati, 1978; Krueger, 1978). As observed by Fosu (1990), such analyses may provide useful country specific information on the success or failure of various development mechanisms, at least as they relate to the period of analyses. However, the long gestation periods associated with economic projects, in conjunction with the usual lack of adequately detailed data for individual countries, may prevent the proper evaluation of the importance of exports in any general fashion. The second category of studies examines the extent to which export performance differences may explain inter-country economic growth differentials. Studies in this category include Balassa (1978 and 1985), Ram (1985), Feder (1982) and Michaely (1977).

Most of these studies employed a production function framework that included exports as an additional argument of the production function. As shown by Fosu (1990) in Uche (2009), the standard justification for such a treatment is based on the fact that the development of exports allows the home country to concentrate investment in those sectors where it enjoys a comparative advantage and the resulting specialization is likely to augment overall productivity. In the same way worldwide competitive pressures are likely to reduce inefficiencies in the export area and result in the adoption of more efficient techniques in the overall traded goods sector. A larger export sector would make available more of the resources necessary to import in a more timely fashion both physical and human capital, including advanced technologies in production and management, and for training higher quality labor. The numerous studies on exports and economic growth as found in the literature were conducted along various methodological lines. The early studies examined the simple correlation coefficient between export growth and economic growth (Michaely, 1977; Balassa, 1978).

These studies in general concluded that there is strong evidence in favor of the export-led growth hypothesis based on the fact that export growth and economic growth were found to be highly correlated. The principal weakness of this group of studies is that they used a high degree of correlation between the two variables as evidence supporting the export-led growth hypothesis. But high degree of correlation between the two variables is not a sufficient condition to validate the export-led growth hypothesis. It is well known in econometrics and statistics that correlation does not necessarily imply causality. Following the early group of studies on exports and economic growth, we have the next group, which may be called the second generation of studies on the issue. This group examined whether or not exports are driving output by estimating output growth regression equations based on the neoclassical growth accounting technique of production function analysis, including exports or export growth as an explanatory variable (Feder, 1982; Balassa, 1985; Ram, 1987).

This second generation of studies used a highly significant positive value of the coefficient of export growth variable in the growth accounting equation and a significant improvement in the coefficient of determination with the inclusion of the export growth variable in the regression equation as evidence for the export-led growth hypothesis. This group of studies has been severely criticized based mainly on a methodological issue (Ekanayake, 1999). The studies in general made a priori assumption that export growth causes output growth and they did not consider the direction of causal relationship between the two variables.

There is a third generation of studies, which is relatively recent. This group of studies laid emphasis on causality between export growth and economic growth. This approach has been taken in a large number of recent studies designed to assess whether or not individual countries exhibit evidence for export-led growth hypothesis using Granger (1969) or Sims (1972) causality test (Ahmad and Kwan, 1991; Serletis, 1992; Jin and Yu, 1995; Holman and Graves, 1995). The major weakness of this generation of studies (that are based on causality tests) is that the traditional Granger and Sims causality tests used in the studies are only valid if, among other things, the original time series are not co-integrated; the tests are invalid and misleading when the original time series are integrated of order one and are co-integrated (Granger, 1980, 1986 and 1988; Engel and Granger, 1987; Ahmad and Harnhirun, 1996).

Therefore, there is need for one to check for stationary and co-integration properties of original exports and output time series before using Granger or Sims causality test. Despite the weaknesses associated with the techniques adopted by the foregoing generations of studies they are still very relevant for they can provide useful insights on the relationship between exports and economic growth. Indeed the techniques serve as simple and handy analytical methods of testing the validity of the export-led growth hypothesis and other related hypotheses. It is interesting to point out here that there have been relatively new studies on exports and economic growth that have used modern econometric techniques of co-integration and error-correction models (Oxley, 1993; Ghatak, Milner and Utkulu, 1997; Islam, 1998).

As observed by Ekanayake (1999), this new generation of studies does not suffer from the shortcomings found in the methodologies adopted in the previous studies. In fact, the new group of studies has produced highly robust and reliable results; this is largely because they used modern econometric techniques that are not only highly sophisticated but also highly efficient. There is a dearth of studies on exports and economic growth based on modern econometric techniques. The few studies on exports and economic growth in Albania that used modern econometric methods that is within our reach include Ekpo and Egwaikhide (1994), Odusola and Akinlo (1995), Idowu (2005) and Uche (2009). These studies suffer from some methodological defects. Ekpo and Egwaikhide (1994) analyzed the relationship between exports and economic growth within the framework of a general production function. The study employed modern econometric techniques of co-integration and error correction model in its analysis.

## 4.2. Country export and import profile

Albania is a potential imported country. Exports in the recent years have been characterized by a slight increase but still negligible. Compared to its small territorial surface, Albania is in fact rich in natural resources. The south – western part of the country is rich in oil and natural gas, while in the north – east part are found considerable reserves of minerals among which the following: chromium, copper, iron, nickel. Albania is also rich in torrential rivers which are also the best potential for hydropower stations. In the period 1945–1991, the communist government's policy of rapid industrialization intended to make the country as much independent as possible, which led to the creation of many industrial branches relatively modern. The industry now generates only a small part of the national income. Since early 1990's, Albania had a trade deficit, where the exports of its goods have represented no more than 25% of its imports. A big part of exports result on behalf of the corporations that work as subcontractors for European corporations which have used the low cost of labor in Albania.

Albanian exports to Europe are still low from quotas given as grant under preferential trade agreement. Albania's main trading partners in Europe are Italy, Greece and Germany. Lack of competition of Albanian products, low level of production, poor infrastructure, inadequate procedures for crossing the border, lack of promotional activities and a weak institutional capacity have been the factors that have caused the increase of trade deficit. Year after year this deficit has begun to decrease although at a slower pace, due to the growth of exports and the greater efforts of Albanian companies to compete in the domestic market, especially against European import products. The production of goods for export has gone through a considerable increase, being a positive sign that was accompanied by an increase in investment as well as a revival and strengthening of the Albanian economy.

The facts emphasize once more that liberalization policies and the several economic reforms undertaken can change the pace from negative to positive, which indicate the progress of our country's economy but also its influence from external factors. Since 1994, foreign trade development in Albania, in general, is characterized primarily by increased trade flows, which indicates an opening and intensification of economic and trade exchanges with the Albanian market economies and global markets. Increasing the opening levels of small countries, such as Albania, was considered a way to eliminate obstacles encountered in market restrictions. Although Albania's opening levels have

consistently followed a positive trend, they still remain low compared with other countries in the region. The growth of trade flows has been occasionally irregular, thus reflecting the main developments in the Albanian economy and the impact of various factors such as the international and regional levels. Although exports have improved their contribution to trade flows, they again stay away from the value of imports.

The impact of exports in trade volume is still very small, although in some periods, it is noted that export growth is bigger than the increase in imports. Albania exports are focused on local agricultural products, electricity, oil and its by-products. Apart from heavy industry (oil exploitation and electricity) and manufacture industry for goods send abroad for processing (known as *façon* industry), Albania's industry is somewhat stagnant. The causes of the collapse of the industry and the slowdown in the use of natural resources are the lack of proper organization, outdated machinery and equipments. Also, due to wrong investments in the economy (supported by Western experts) by the government after the fall of communism, Albania's industry is not able to meet the economic demands of the local population and as a result it imports.

However, some Albanian products are uncompetitive in the domestic market as well as in the external one, and the first aspect of a trade promotion policy should be to increase the level of competitiveness of Albanian companies. Currently, if Albania would only work towards the growth of exports, it would not be able to produce enough to satisfy the domestic market. Therefore, based on its competitive advantages the biggest need is to increase the Albanian agricultural production with quality and quantity, and the sectors of mining and processing. The Albanian companies need technical assistance to enhance the competitiveness of their products in the domestic market as well as in the external one. Their main weaknesses are the small size, machinery and old equipment, lack of own capital and foreign capital, lack of managerial and marketing knowledge, lack of information on the conditions of international markets for procurement and sales, as well as the lack of contacts with international markets.

In this situation, measures taken by the government and businesses to promote exports have functioned as a catalyst to enhance competitiveness, by helping to introduce modern production methods of management and marketing, increasing quality of products and introducing new methods of marketing and distribution. Albania is trying to compete with a number of European countries in domestic markets, as well as in those of export, by offering similar or better products, a general

economic framework that enhances trade and investment as well as resources or advantages in competitiveness. In addition, fast and necessary measures are being taken in order to improve the competitiveness of Albanian companies, because in a globalized economy the time factor is critical in order to have economic success.

In the case of exporting Albanian goods, import markets in the EU are characterized by a quite high competitiveness in terms of quality, price, packaging and services. Other factors that have great influence on the level of competitiveness are market rules, administrative constraints, lack of financial and business services and quality of infrastructure. As a result, Albania needs an effective and comprehensive system to promote together with export, the competitiveness of its industry. As the market matures, competition increases, the consumer wants more and more quality, the markets open, products' life cycles change and companies, especially large and medium, cannot remain indifferent to these developments. Modern management practices, commitment to quality, improvement of relations with employees, are becoming more and more evident and indispensable for the successful progress of a business. This proves that the number of companies that implement ISO standard has increased: currently it is approaching the number 200 from 7 that were several years ago.

Practices such as Corporate Governance or Corporate Social Responsibility are not unknown, but they are increasingly being embraced by pioneer businesses. The use of advanced technology systems in the management is continuously becoming more applicable. A number of companies are seeking to expand current markets and there is evidence of successful cases of investments in neighboring countries, especially in Kosovo and Macedonia, while expansion plans of Albanian entrepreneurs are becoming more ambitious, targeting also other countries. The efforts to export in the European Union markets fall in the same line. On the other hand, of course, it is understandable that one cannot speak of such standards in small businesses, which still continue to sell without the bill and where the level of fiscal evasion remains very high. There is no doubt that the level of informal economy is very high and this constitutes a major problem. What is evident however is the level of maturity that is reaching a large proportion of domestic companies that in the future is expected to be even higher. However, the state administration does not seem to respond similarly with the same pace to this new phase of business development in Albania. Indeed the former has shown a willingness to formalize the economy and create a sustainable business environment, but the most visible action in this direction has been especially the methodology

used by setting references in almost all areas: wages, profit rates, up to the prices that businesses can buy and sell.

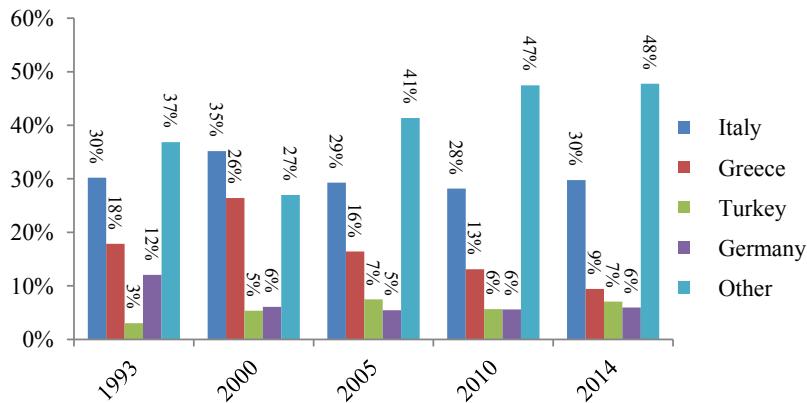
#### 4.2.1. The main foreign trade partners of Albania

The commercial partner countries of Albania are mostly neighbor countries. For imported goods Italy and Greece are the biggest importer with 30% and 9% respectively. In table one are shown data from 1993 to 2014 for main partner countries of Albania for imports and exports. From the table can be seen that Italy is the main partner country for imports and exports too. This mostly related with façon industry focused in Albania because of different wages level or labor cost.

	1993	1995	2000	2005	2010	2011	2012	2013	2014
<b>Main Importing Countries</b>									
Italy	17,630	24,438	55,244	76,770	134,569	166,045	168,370	170,445	164,408
Greece	10,420	16,335	41,498	43,070	62,617	57,796	50,117	45,699	52,058
Turkey	1,760	2,786	8,401	19,624	27,046	30,200	30,376	32,890	39,011
Germany	7,030	3,379	9,567	14,312	26,768	31,163	31,936	30,002	32,963
<b>Total</b>	<b>58,336</b>	<b>66,147</b>	<b>157,109</b>	<b>262,191</b>	<b>477,768</b>	<b>544,004</b>	<b>528,490</b>	<b>517,378</b>	<b>552,263</b>
<b>Main Exporting Countries</b>									
Italy	5,125	9,641	26,423	47,675	82,114	104,998	108,847	114,153	133,046
Kosovo				2,710	10,008	14,657	17,369	16,292	18,774
Spain	64	20	22	60	5,589	7,010	19,693	24,088	16,684
Malta	4	29	-	-	1,226	4,684	3,835	16,540	15,906
Turkey	170	1,161	245	1,133	9,573	14,484	13,464	9,223	10,094
<b>Total</b>	<b>12,499</b>	<b>18,710</b>	<b>37,037</b>	<b>65,818</b>	<b>161,548</b>	<b>196,897</b>	<b>213,030</b>	<b>246,391</b>	<b>255,759</b>

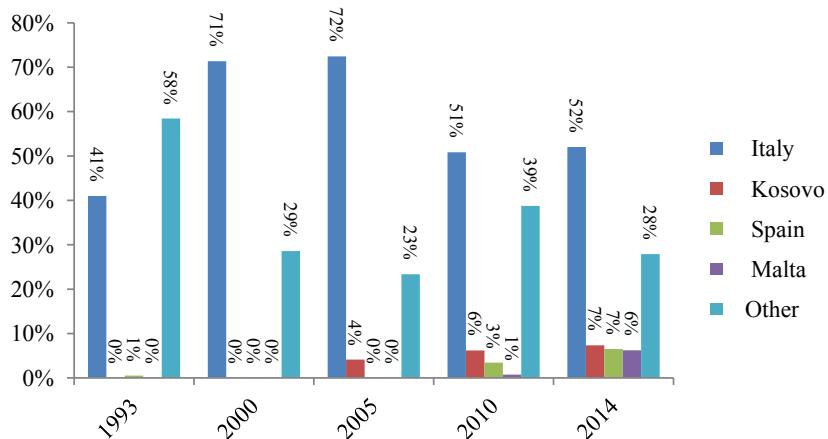
**Table 4.1.** Main partner countries  
 Source: INSTAT (Institute of Statistics of Albania).

More concretely the percentages by main partners are shown in graph one and two where easily can be seen that there are only a small group of countries that have more than 50% of total imports and exports.



**Graph 4.1.** Key Partners in imports for Albania  
Source: INSTAT (Institute of Statistics of Albania).

Related with exports the picture is different because except Italy which still is a very important countries at international trade the other countries are present only in the latest years.



**Graph 4.2.** Key Partners in exports for Albania  
Source: INSTAT (Institute of Statistics of Albania).

It is important to be mention that most of international trade is done with European countries, more concretely in 2014 exports in EU countries were 94% of total Albania's exports and imports from EU countries were 82%. In table two are shown imports and exports by continents.

	1993	1995	2000	2005	2010	2011	2012	2013	2014
<b>Imports by continents</b>									
Europe	54,496	63,939	148,233	226,546	401,551	456,938	440,974	424,680	453,227
Africa	74	200	421	1,816	2,906	3,078	3,272	14,335	9,247
America	1,442	1,232	3,155	7,673	15,415	20,015	23,791	24,065	28,566
Asia	652	464	4,472	25,181	56,607	62,725	58,638	51,383	59,985
Australia -Oceania	-	3	125	138	230	594	304	261	252
Others	1,671	309	702	839	1,059	655	1,512	2,654	986
<b>Total</b>	<b>58,336</b>	<b>66,147</b>	<b>157,109</b>	<b>262,191</b>	<b>477,768</b>	<b>544,004</b>	<b>528,490</b>	<b>517,378</b>	<b>552,263</b>
<b>Exports by continents</b>									
Europe	11,413	17,618	36,648	64,517	146,115	187,685	201,880	229,474	240,303
Africa	-	14	9	70	1,747	983	1,668	1,841	3,107
America	522	656	333	755	2,755	2,312	1,238	1,375	1,701
Asia	549	418	30	458	10,489	5,834	7,675	13,692	10,192
Australia -Oceania	8	-	3	-	0	6	12	-	11
Others	7	3	14	18	442	77	557	10	445
<b>Total</b>	<b>12,499</b>	<b>18,710</b>	<b>37,037</b>	<b>65,818</b>	<b>161,548</b>	<b>196,897</b>	<b>213,030</b>	<b>246,391</b>	<b>255,759</b>

**Table 4.2.** International trade by continents

Source: INSTAT (Institute of Statistics of Albania).

Trade flows in the region remain at a higher level compared to European economies. Cultural similarities, geographic proximity, which affect costs and competitiveness of products in the relevant markets, but also similarities in the demand side factors, are some of the causes that may have influenced the high level of commercial flows.

In terms of an opening of the Albanian economy, according to Albania's Progress Report for 2014, it is shown that this process has continued to progress during last year's. The volume of Albanian imports and exports of goods and services for 2013 were 60.7% of GDP for imports and 40.2% of GDP for exports. In this process, the EU is the main trading partner of Albania with about three quarters of exports and imports taken together. In general, the EU is the main trading partner of Albania in the field of investment, while trade with CEFTA countries is growing. However, the

base of Albanian production is focused only on certain sectors and export markets with low added value, leaving the economy vulnerable and exposed to specific shocks.

#### 4.3. Empirical model

The macroeconomic model that is treated in the paper is based on the impact of income growth of foreign countries ( $Y_f$ ) to the economic growth of the home country ( $Y$ ), in our case to Albania. In this model are taken all economic growth rates of countries where Albania exports. The impact of exported countries growth has been implemented in a weighted way to have a better impact of each respective country in the Albanian economy. This index has been named trade index and has been estimated as:

$$I = w_i * g_i \quad (\text{eg.4.1})$$

where:

$w_i$  – is the weight of exports of country  $i$  to the total exports of Albania,

$g_i$  – is the economic growth of country  $i$ .

In the international trade an important part is even the impact of exchange rate as an indicator of competitiveness. This variable becomes more important in the cases of big changes like the world financial crises of 2008, when the exchange rate between lek and euro becomes from 122.8 l/€ in 132.1 l/€ in 2009. As has been shown in the previous paragraph EU is the main trade partner, and mostly from euro zone. In the model the impact of exchange rate is measured by estimating effective exchange rate, so all currencies are involved in the model with their respective weights. The effective exchange rate is estimated as:

$$E_{ex} = w_i * Ex_i \quad (\text{eg.4.2})$$

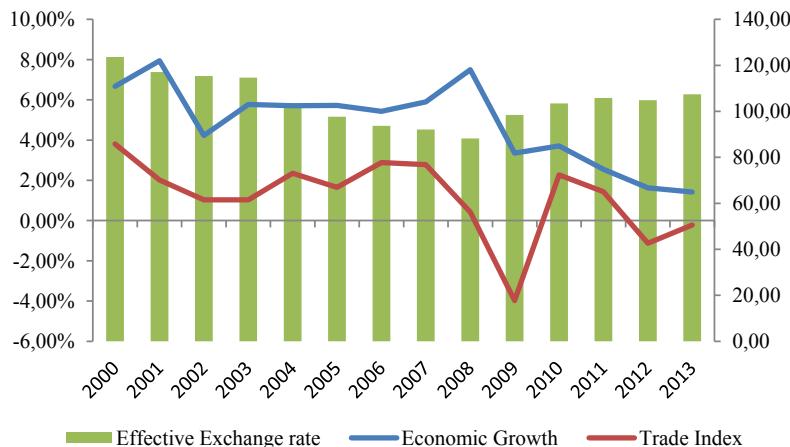
where:

$w_i$  – is the weight of imports of country  $i$  to the total imports of Albania,

$Ex_i$  – is the exchange rate lek/foreign currency of country  $i$ .

In the graph below are shown three series that are taken in the model, the Albanian economic growth, estimated trade index and effective

exchange rate. From the graph it can be seen that economic growth in years 2008 and 2009 are in contrary with two other variables.



**Graph 4.3.** Main indicators of the model

**Source:** Author work.

These two variables are included in the model to see their influence in Albanian economy growth. Except those two variables in the model is included even a dummy variable for years 2008 and 2009, because of the different situation of Albanian economy in these years. To see this relation between variables is used an ordinary least square (OLS) technique. Theoretical equation of the model is shown in equation 4.3.

$$Alb_{gr_t} = b_0 + b_1 I_t + b_2 E_{ex_t} + b_3 Dum \quad (\text{eq.4.3})$$

The series are treated from 2000–2013 because the social riots of 1997 in Albania doesn't allow to make analyze between growth and international trade. Also another reasons starting from year 2000 is related with Euro currency which has been lunched for the first time in 1999. Albania imports most of its goods from euro zone, approximately 80% of total imports. So to have a better analyze of the relation that exist between imported countries growth and Albanian growth the focus has been to the period 2000–2013. Year 2008 has been treated as a dummy variable because the impact of world financial crises hasn't been field in Albania in that period, furthermore in this year the Albanian economy has been in one of the highest economic growth, with 7.5%. In 2008 in Albania start a lot of public constructions influencing in a contradictory way with world

economic picture. In 2009 the Albanian economy started to fill the impact of crises but the economy performance was much better than other countries. This situation was the result of public investments started in 2008 and continuing even in this year.

Based on this analyzes in the table three are shown the results of the model. The economic growth, as dependent variable has 65% explanation by independent variables.

Variable	Coefficients	Standard. Error	t-Statistic	Probability
Trade index	1.064821	0.236843	4.495894	0.0009
Effective exchange rate	0.027870	0.005080	5.486279	0.0002
Dummy	4.719718	1.249685	3.776727	0.0031
R-squared	0.650255		Mean dependent var	4.823100
Adjusted R-squared	0.586665		S.D. dependent var	2.058092
S.E. of regression	1.323171		Akaike info criterion	3.585349
Sum squared residuals	19.25861		Schwarz criterion	3.722290
Log likelihood	-22.09745		Hannan-Quinn criter.	3.572673
Durbin-Watson stat	1.745337			

**Table 4.3.** Model Results

Source: own elaboration.

From the table our regress can be written as:

$$Alb_{gr_t} = 1.65I_t + 0.03E_{ex_t} + 4.7Dum \quad (\text{eq.4.4})$$

From the results it can be seen that exist a positive relationship between dependent and independent variables. The increase of trade index means that if importing countries have a positive economic growth they will influence positively in Albanian economic growth. As was shown in the previous parts of the paper, if they have a positive growth they will need more goods to import, or otherwise more export for Albania.

If effective exchange rate is grown it means that Albanian goods are more competitive than foreign goods so the demand for Albanian products will be grown, which means more production exported and as a results more economic growth.

Positive impact of dummy variable in the model means that there are other factors influencing Albanian economic growth, like public investments, which for sure have a positive impact.

## Conclusions

This study examined the impact of economic growth of importing countries and their exchange rate to the Albanian economy growth, considering the coefficients the variables used, exports are positively related to the real GDP while other variables such exchange rate, exert a negative influence on the real GDP.

The positive coefficient of the net export ratio implies higher productivity. The positive coefficient ratio of the exports also helped to stimulate the economy thereby increasing capital inflow into the economy. In the light of this research, the conclusion that foreign trade exerts positive effects upon Albania's economic growth could be drawn. Therefore to achieve sustainable economic growth, Albania should pay more attention to proper and appropriate trade strategies and policies.

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