THEORETICAL AND EMPIRICAL ANALYSIS ON THE CONTRIBUTION OF GOODS AND SERVICES EXPORTS IN ECONOMIC GROWTH IN TOGO FROM 1970-2010

Komlan Ametowoyo ADEVE
University of Kara - **TOGO**

ABSTRACT

The research analyzes theoretically and empirically the relationship between exports of goods and services and economic growth in Togo. The objective of this study is to determine the impact of exports on economic growth in Togo. To achieve the objective, the methodology of the research will present the theoretical framework of the analysis model and the econometric analysis of the estimate of the contribution of exports to economic growth of the country. We collected data from Central Bank of West African Countries and the General Directorate of Statistics and National Accounts of Togo. Firstly the results of our analysis showed that exports of Togo are mainly composed of primary products which values steadily decreased during the 2000s because of the difficulties experienced by the major chains and degradation of equipment export of phosphates. Secondly exportation of goods and services has a positive and significant impact on the economic growth in Togo in the short and long run. This impact is more important in the long run than short run. Thus, to achieve the objectives of the Accelerated Growth Strategy for the Promotion of Employment, Togo should promote exportation of goods and services for the well-being of the population.

Keywords: Togo's Economy, Goods and Services Exports, Economic Growth.

INTRODUCTION

As a result of renewed investment and increased exports of goods and services, the Togolese industrial machine gradually goes back system, reinforcing the prospects for sustainable disaster recovery and a gradual decline in unemployment. The new perspective that carries government action as well as many other indicators such as increased exports are good reasons to have faith in the future of Togo. It is true, nervousness and impatience of the business community are great, but there are sufficient signs that Togo is succeeding in restoring its fundamental, starting with the consolidation of public finances severely undermined by the Growth slowed in recent years. The Togolese Hope to see cruising speed that seems to loop through projects and actions in all directions, keep to the delight of the Togolese people.

In view of the economic situation in Togo in recent years, the main factors contributing to the mitigation of effects recorded are, among others, the relatively high level of public investment and the increase in domestic credit. According to the Economic Outlook, Monthly Information and Economic Analysis No.000 of January 2014 in Togo, the real growth rate of gross domestic product (GDP) was 4.0% in 2010 against 3.4% in 2009 and 2.4% in 2008. This difference is mainly due to better performance of the agricultural sector; in this case food crops and cash crops including cocoa and coffee, cotton on one hand, and by improving transport, to storage and communication action participation in international trade on the other hand.

Most of the Togolese economy relies on agricultural production (primary sector) which has contributed an average of 41.5% to the creation of national wealth between 2008 and 2010. The share of agriculture in the production of this sector is 76%, against 16% of livestock and 8.3% of the forest and fishing in the same period. From 2008 to 2010, contrary to these percentages secondary and tertiary sectors represent an average, respectively, of 16.9% and 23% of gross domestic product. The harmonized index of consumer prices usually called the inflation rate in 2009 was 1.9% against 8.7% in 2008. This significant decrease in the inflation rate thus meets the convergence criterion of the UEMOA and is the immediate corollary of the fall in food prices. The inflation rate stood at 3.6% in 2011 against 1.4% in 2010 (Economic Outlook, Togo, 2014).

The incidence of poverty is estimated at 58.7% based on regional thresholds. These thresholds fluctuate between 154.863FCFA and 179.813FCFA per adult equivalent per year for the administrative regions, against 242.094FCFA in Lome and its surrounding. The incidence of rural poverty is 74.3% corresponding to 79.9% of the poor. The incidence of poverty is 36.8%, corresponding to 2.1% of the urban poor. Compared to the regions, poverty is more pronounced in the savannah regions (90.5%), Central (77.7%) and Kara (75.0%) (Second QUIBB survey, Togo, 2011). There was a slight increase in poverty in Lome with an estimated incidence of 25.1% in 2008 against 24.5% in 2006 through the CWIQ survey (Household Expenditure Survey in Lome, Togo, 2008). Nowadays, the integration of a country in the process of globalization depends on its participation in international trade through exports. International trade is a driver of economic growth and by extension economic development of most low-income countries (Emmanuel Nyahoho et al, 2006). The outstanding example of China, which recently became the world's largest economy into its development strategies that are oriented toward the world in export diversification.

Since the early 1950s, international trade has had a very significant growth through increased international trade and is stronger than that of world production which implies an increase in open rate of most countries. This increase has mainly benefited manufactured goods. Services exports also increased significantly. Industrialized countries are central in international trade since they account for about 70%.

Foreign trade is a source of growth through exports. Increased exports may increase production. The latter may result in increased revenues and thus an increase in domestic demand etc. Exports create interactions with the outside through large capital inflows and foreign direct investments that contribute to the formation of human capital. Exports allow a country to expand its market. The ability of a country to export is an indicator of its internal dynamism and openness to other countries.

After independence of African countries, many have been oriented in industrialization policy to promote exports given the aforementioned advantages of increased exports. However, the share of developing countries in international trade is still low. In 1950, the share of African exports was one-tenth of world exports. From 1960, its share fell from 1.9% to 1.4% of total world exports. This shows the marginalization of Africa in international trade. The share of Africa in international trade continues to decline. Between 1960 and 2005, it increased from 4.9% to 2.5%. One notices a decrease in the contribution of exports to GDP, the weak manufacturing export markets, the slow growth rate of productivity and innovation, competition increasingly fierce including trade in primary products. Some countries have not been able to benefit from rising commodity prices. The structure of exports has changed less than other developing countries and is dominated by mining products and cash crops (Bhalla, 1998).

Togo today with a population of 6,191,155 inhabitants has been away from this policy of industrialization of export promotion and trade liberalization. In West Africa, Togo exports coffee, cocoa, cotton, palm kernel, clinker, phosphate etc. The phosphate boom in the country, specifically in the 1970s enabled the country to register for the first time a trade surplus in 1974. The share of goods exports in GDP is around 31% over the period 1992 - 2002 slightly below the average for all the countries of the West African Economic and Monetary Union which, during the same period is 32% (UNCTAD, 1984/1991).

The main causes are discussed, among other things, the form of specialization of the economy which exports consist mainly of primary products and products of light industry. Long-term analysis reveals a production system characterized by specialization between sectors. This specialization is turned to the processing of primary products with low added value. Since the 1990s, the share of Togo's exports to other WAEMU countries is increasing from 5.7% in 1994, it increased to 33.0% in 2000 and 2001 (Africa Studies, UEMOA, Togo Interim Report 2003).

Togo's economic growth is relatively low with an annual average of 1.9% despite an improvement in the value of exports in recent decades following the policy of industrialization strategy over the period 2000-2010 for rates population growth of 2.8% in 2010 (Economic Outlook, Togo, 2011).

In view of all this, can there be a relationship that may exist between exports and economic growth in the short and long run in Togo face to new challenges such as competition from countries in the global markets and the important role that exports play in the construction of the national economic space?

Our research will focus on the analysis of the structure and evolution of exports in Togo and then study empirically the relationship between exports and economic growth in order to formulate, if possible, economic policy recommendations towards Togolese authorities.

LITERATURE REVIEW

Theoretical and empirical studies have shown the important role of exports as an engine of economic growth of several nations. As well as export growth determines the degree of integration of the national economy into the world economy.

Robert F. Emery (2007) in his article entitled « the relation of export and economic growth" stated that among economists there has generally been a lack of agreement as to the specific relation between exports and economic growth. The hypothesis in his research presented is that there is a causal relationship between the two, that this relationship is one of interdependence rather than of unilateral causation, but that it is mainly a rise in exports that stimulates an increase in aggregate economic growth rather than vice versa. There are strong logical and empirical grounds supporting the hypothesis. The hypothesis in his study was also tested statistically. Multiple correlations and simple least-squares regression equations were calculated for a group of 50 countries using data on average rates of growth of per capita real GNP of exports, and of earnings on current account during 1953-63. The results of his research showed: (1) that the most significant correlation was between exports and GNP, (2) that for every *2 ½* per cent increase in exports, per capita real GNP showed a rise of 1 per cent; and (3). that this last relationship had a high degree of statistical reliability.

Chien-hui Lee and Bwo-nung Huang (2002) in their paper "The relationship between exports and economic growth in East Asian countries: a multivariate threshold autoregressive approach**"** affirm that during the process of economic development, different economic policies are adopted in accordance with particular circumstances. Therefore, conventional methods of time-series analysis may give misleading results if the problems associated with regime switches are not considered. According to their study, the relationship between export growth and output growth is explored using a multivariate threshold model with regimes defined by the export-import ratio. In the cases of five countries that are recognized as being outward-oriented, they found that, except for Hong Kong, the relationship whereby exports lead output prevails in at least one regime for each of four countries being studied. The research concluded that the regime-based threshold autoregressive model thus appears to possess certain advantages over the more conventional linear autoregressive model.

Fouad Abou-Stai (2005) in his article "Are exports the engine of economic growth? an application of co-integration and causality analysis for Egypt, 1977-2003" examines the export-led growth (ELG) paradigm for Egypt, using historical data from 1977 to 2003. The study employs a variety of analytical tools, including co-integration analysis, Granger causality tests, and unit root tests, coupled with vector auto regression (VAR) and impulse response function (IRF) analyses. His research sets three hypotheses for testing the ELG paradigm for Egypt, (1) whether GDP, exports and imports are co-integrated, (2) whether exports Granger cause growth, (3) whether exports Granger cause investment. The study looks briefly also at the impact of the economic reform undertaken in 1991, and weather the ELG hypothesis still holds during the 1991-2003 sub-period and found that there is a strong relation between growth economic and exports.

Arshia Amiri and Ulf-G Gerdtham (2013) in their article " Relationship between exports, imports, and economic growth in France: evidence from co-integration analysis and Granger causality with using geo-statistical models" introduce a new way of investigating linear and nonlinear Granger causality between exports, imports and economic growth in France over the period 1961-2006 with using geo-statistical models . Geo-statistical models in this research investigate simultaneous linear and various nonlinear types of causality test, which cause to decrease the effects of choosing functional forms in autoregressive model. The approach imitates the Granger definition and structure but improves it to have better ability to investigate nonlinear causality. The Results in their study of both VEC and Improved-VEC (with geo-statistical methods) are the same and show the existence of long run unidirectional causality from exports and imports to economic growth, but F-statistic of Improved-VEC for this relationships is bigger than VEC. Analyzing the geo-statistical methods in this paper, it is shown that there are some Exponential and Spherical functions in VEC structure instead of linear form.

Muhammad S. Anwer and R.K. Sampath (1997) in their paper entitled "Exports and Economic growth" Utilizing unit root and co-integration techniques, found out of 96 countries only 8 show unidirectional or bidirectional causality from exports to GDP with positive relationship between the two variables. Causality from GDP to Exports with positive relationship between the two variables is found for only 9 countries.

Justin Yifu Lin and Yongjun Li (2011) in their paper “Export and Economic Growth in China: A Demand-Oriented Analysis” stated that many studies, based on the accounting identify of GDP, found that the contribution of foreign trade to China’s economic growth over the past 20 years was very small. So they re-examine the issue and found that those studies underestimate the contribution of exports to GDP growth by overlooking the indirect impacts of exports on domestic consumption, investment, government expenditures and imports. So they propose a new estimation method and found that a ten percent increase in exports resulted in a one percent increase in GDP in the 1990s in China, when both direct and indirect contributions are considered.

Faye Ensermu Chemeda (2001); in his article “The role of exports in economic growth with reference to the Ethiopian Country” applies the Cobb-Douglas function model to analyze the effects of exports on economic growth in the context of the Ethiopian economy. To determine the relation between export and economic growth, an attempt will be made to use econometrics techniques of analysis (co-integration system) by using the RATS software package for the time series data from 1950 to 1986. Their results of the findings support that the rate of growth of real exports has a positive effect on the rate of economic growth in the context of the Ethiopian economy. According to the research there is strong positive relationships between real export and real growth economic product per capita in long run rather than in short run when it is compared to real exports with that of (l/Y). He concluded in the research that, the contribution of real exports to economic growth in context of Ethiopian economy is greater in long run than in short run.

Rati Ram (1987); in his paper “Exports and Economic Growth in Developing Countries: Evidence from Time –Series and Cross-Section data” concluded through his analysis in this research that exports are probably good for economic growth.

Wong Hock Tsen (2006) in “Exports, Domestic Demand and Economic Growth in China : Granger Causality Analysis” concluded in this paper that sustained economic growth requires growth in both exports and domestic demand. A higher level of exports has a positive impact on economic growth.

For Akilou Amadou (2009)) in his paper entitled "Analysis of the effect of exports instability on economic growth in Togo", makes an empirical analysis of the effect of export instability on economic growth in Togo using a model based on a production function of neoclassical augmented exports and two indicators of export instability. He shows in his research that the increase in exports has a positive and significant effect on economic growth. Increased exports by 10% will result in additional economic growth rate of 0.68% or 0.72%. In addition, the estimative results indicate that export instability has a negative effect, but not significant on the economic growth in Togo. These results suggest that Togo will reduce the volatility of its exports and encourage their growth to stimulate economic growth.

Analysis of countries like Hong Kong, Singapore, South Korea and Taiwan, in 1995 led to the conclusion that the expansion of exports and economic growth are mutually reinforcing. The rise in exports favorably influences the growth, but economic growth also positively affects exports.

Several studies have examined the success of the East Asian countries through empirical analyzes showing the impact of exports on economic growth. However from this miraculous demonstration of economic growth derived from exports, we must be very careful in interpreting the results. The indeterminate direction of causality, exports and growth are mutually reinforcing, the specifics of the regional and international environment at the time of economic take-off, the initial characteristics of the countries, the importance of the investment effort and the dominant role of the state are all facts that are raised.

In the literature reviewed above, it is clear that the existing literature reports results where there is a fundamental relationship between the promotion of exports and economic growth. Many studies showed a positive relationship between economic growth and industrialization policy of export promotion. Studies on Togo are rare and almost non-existent in terms of causality between exports and economic growth. Even the existing studies have not considered all the indicators that can greatly influence the export sector leading to the likely increase in production that is linked to existing production capacity and therefore economic growth

Economic Context in Togo

Although the country has great economic potential, Togo remains among the poorest countries in sub-Saharan Africa. Togo is classified as a low income country with a GNP per capita estimated at U.S. $ 350 in 2006. The main source of wealth of the country lies in agriculture, particularly cotton. The agricultural sector employs about two thirds of the population and contributes about 43% of the GDP (Statistics Department of the ADB, ACA 2008). This sector remains weak and dependent on mechanical conditions which are often erratic. Besides agriculture, the country exports minerals, mainly phosphate, and takes advantage of sub-regional trade through its deep water port. Its geographical location and its port infrastructure have effectively allowed the country to build a true business platform for the hinterland countries like Burkina Faso, Mali and Niger. The long crisis that the country went through made it difficult for the country to take full advantage of all these assets to develop. The sharp deterioration in the national road network has also eroded the competitiveness of the port of Lome. The Togolese economy to this day remains much on diversified and evolves with climatic hazards. The country's high dependence on income from cotton and phosphate, and its total dependence on external energy supply, make it highly vulnerable to exogenous shocks.

Because of socio-political tensions, the country went through a long period of economic contraction. The growth rate of real per capita declined by an average of 1% per year between 1990 and 2005 (Ministry of Economy and Finance of Togo, 2008). The main vital sectors of the country have been profoundly dislocated, undermined by inadequate funding and by serious governance problems. Thus cotton production fell by about 60% between 2001 and 2005. With regard to the phosphate industry, outdated production facilities, lax management of the state-owned Togolese Phosphates Office (*OTP*), and load shedding of electricity resulted in a considerable drop in production. In 2005, export earnings from phosphate represented only a third of their value in 1998 *(*www.Republicoftogo.com, 2008).

RESEARCH METHODOLOGY

Firstly research methodology will present the theoretical framework of the analysis model and then the empirical part on estimates of the impact of exports on economic growth in Togo. Data from our study are drawn from the statistics of the Ministry of Economy and Finance, the Central Bank of West African Countries and also the General Directorate of Statistics and National Accounts (GDSNA).

Evolution of the main export products

Coffee, cocoa, cotton, etc. constituting commodities or primary products, cereals, flour, chilies, spices, vegetables and fruits that are plant-derived food products as well as mining products (phosphates and clinker) as well as other products such as cotton seed, wood and other oilseeds, constitute the basket of Togo's main export products. However, coffee, cocoa, cotton and phosphates, the main export products account for between 1970 and 1979 almost 87.4% of total exports. Remarkably, the share of exports phosphates alone accounts during this period more than 70% of total exports with $ 62,669,000 and 34,533,000 FCFA for the years 1973 and 1974 when Togo experienced its boom period in phosphate (Ministry of Commerce and Industries, Togo, 2010).

The shares of exports of the major above products mentioned in the years 1980s (1980-1989) are 78.6% to 82.1% of the total exports against 30.9% between 2000 and 2010 (Ministry of Commerce and Industries, Togo, 2010). This decrease of Togolese exports during this period can be justified as part in the problems known by coffee, cocoa and cotton sectors and the restructuring of the phosphate company and the other to the instability of receipts exports following the poor quality products or worsening terms of trade of these products for export.
The value of phosphate exports between 1995 and 2000 has averaged 42.658 million against 22.314 million FCFA for the period from 2001 to 2007. The value of exports of phosphates in 2009 was 38,807,000 FCFA against 48,877,000 in 2008. a decline in the value of exports of 20.6% in relation to the fall of 13.2% of the volume exported to the cumulative 8.6% of the average sale price of one note to this effect (Report of the Consultative Forum on Trade in Togo, Ministry of trade and Private Sector Promotion Togo, 5 to 6 June 2014).

The remarkable drop in the amount exported for more than six consecutive years can be attributed to the production decline in relation to the dilapidated nature of the facilities of the New Society Phosphates in Togo and non-motivation of the agents involved in this product's export.

India and New Zealand then remained the main customer countries of Togo in 2009 in terms of market division. Other Exported products (Shea nuts, almonds, etc.) accounted for only 9.6% of total exports in the 1970s, reflecting the gradual decline in production and exports of Togo's main products from this period. The share of other exports (other agricultural products (0.3%), textiles and clothing (5.9%), steel products (6.4%), chemical products (7.1%), machinery and transport equipment (7.2%), other manufactured goods (7.9%), petroleum products (4.5%), other miscellaneous products (25%) increased to 71% the value of total exports of goods in 2010, according to the Report of the Consultative Forum on Trade in June 2014.

The geographical position of Togo compared to countries in the hinterland with the facilities offered by the only free port in the sub-region named the Autonomous Port of Lomé and thanks to important equipment and investment in modernization and capacity expansion of storage, instead of the capital of Togo (Lome) strengthens its position as a hub for trade (growth factor) re-export to many countries of the world especially to the countries of the Sahel, such as Niger, Mali, Burkina Faso. The table below shows the development of exports of Togo from 2002 to 2010.

Years	2002	2003	2004	2005	2006	2007	2008	2009	2010
Export	295 686	347 389	317 509	348 227	329 605	324 413	381 802	426 396	483 470
General goods	291 589	342 192	312 169	341 215	320 818	314 991	374 589	420 491	470 605
Re-export	77 617	85 448	41 663	34 455	46 778	45 535	96 965	92 813	112 515
Other goods	4097	5197	5340	7012	8787	9422	7213	5905	12865
Volume (in ton)	…	…	83 157	128 262	74 624	69 346	71 985	64 920	90360
Volume (in millions of FCFA)	44 500	26500	14 497	32 704	22 386	21 702	27 676	20 306	21725
Average Price (FCFA/Kg)	…	…	174	255	300	313	384	313	240

Table 1: Summary of evolution in exports in Togo from 2002 to 2010; Source: Central Bank of West African States (CBWAS)) and the (GDSNA), *Togo*

Between 2002 and 2010, the average value of re-exports was of 70,421,000 FCFA of which 25,777,000 FCFA for petroleum products. In 2010, re-exports amounted to 112,515,000 FCFA against 92,813,000 FCFA in 2009 and 96,965,000 FCFA in 2008. Exports of petroleum products for its amount to 21,725,000 FCFA in 2010 against 20,306,000 FCFA in 2009 and 27,676,000 FCFA in 2008. The other re-exports of products are, among others, machinery and transport equipment, textiles and clothing, tobacco, liquor, chemicals, automobiles and parts, electronic circuits and its components, oils, offices and telecommunications etc. These non-exclusive sub-categories that appear in the exports are not actually produced by Togo (World Perspectives, Togo, 2013).

In Togo, the performance in terms of exports has strongly decreased in 2010 where the main export products account for barely 30% of the total value of exports. Togo's export contribution to economic growth is much stronger in the 70s and 80s than during the 2000s. This situation leads to a decrease in foreign exchange inflows. According to the IMF, the average over the phosphates encored 64.7% in 2009 stood at $ 122 / ton against $ 346 / ton in 2008. This trend reversal which occurs after the improvement observed since 2006 and especially in 2008 due partly to the high inventory levels for both crude phosphate and its derivatives and, secondly, to the contraction in global demand due to the global economic crisis.

In 2008, the price of phosphates remained almost stable at around $ 40 / ton for almost three decades, reaching record levels due to strong demand from countries like India and China. The rising cost of agricultural products, increasing and sustained increase in demand for fertilizers increased agricultural production especially of biofuels. This price surge has benefited African countries that have provided about 63% of world exports. Togo has not fully benefited from this situation because of a share of contracts concluded terms on one hand and difficulties related to the age of the production tool on the other. Exports are located at 699 thousand tons at an average price of 69,924 FCFA per ton, or about 40% of the world price. In 2009, the Togolese phosphate sold 63,933 FCFA per ton falling by 8.6% much lower than world prices in connection with the 2008 completion of the course and the appreciation of the US dollar against the CFA franc.

Years	2002	2003	2004	2005	2006	2007	2008	2009	2010
Volume (in million of ton)	12249	1074	1240	1020	878	765	699	681	896
Value (in million of FCFA)	28716	20315	25382	18427	16566	15030	48877	42527	33962
Unite price (in FCFA/Ton)	22996	18910	20470	18066	18872	19647	69924	22436	40139

Table 2: Evolution of exports of phosphates in Togo 2002 to 2010 Source: Central Bank of West African States (CBWAS) and (GDSNA), Togo

Regarding cocoa, its average value is 8,917,000 FCFA during the period 2005 to 2009. The biggest export was registered in 2009 with $ 16,021,000 FCFA against 7.536 million CFA francs in 2008, an increase of 112% .The increase in the value of cocoa exports is due to the increase in export volume (80.4% and average price (17.8%) in the international market. for coffee, the average value is 2,131,000 FCFA during the period 2005-2009. Apart from these main products, Togo also exports cement, clinker and other agricultural plant products like oilseeds, fruits, spices, etc.

Years	2002	2003	2004	2005	2006	2007	2008	2009	2010
Volume (in ton)	4698	8401	28662	29123	10454	4222	7999	14429	11791
Value(in million of FCFA)	4929	6142	13043	10617	7866	2544	7536	16021	17889
Unit Price (in FCFA /Ton)	1049	731	455	365	752	603	942	1110	1517

Table 3: Evolution of cocoa exports in Togo from 2002 to 2010 Source: Central Bank of West African States (CBWAS) and the General Directorate of Statistics and National Accounts (DGSNA), Togo

Export earnings from coffee in 2009 were slightly up 0.6% to settle at 2.483 billion against 2.469 million in 2008 due to the increase of 6.1% of the volume exported, the average disposal prices have declined 5.2% by establishing 533 FCFA per kg in 2009 against 562 FCFA in 2008 in accordance with the downward trend in coffee prices on the international market.

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Years	2002	2003	2004	2005	2006	2007	2008	2009	2010
Volume (in ton)	5067	2270	4695	6658	4354	3512	4396	9102	11886
Value in million of FCFA)	2200	1001	1697	2330	1620	1751	2469	6672	7629
Unit Price (in FCFA/Kg)	434	441	362	350	372	499	562	733	642

Table 4: Evolution of coffee exports in Togo from 2002 to 2010 Source: Central Bank of West African States (CBWAS) and (GDSNA), *Togo*

Among the major export products, Togo prominently exports cotton fiber. Exports of cotton fiber recorded a decline over the past five years, from 15.979 million FCFA in 2005 to 8890 million FCFA in 2010. This decrease was due to the decline in the average sale price and export volume decreased from 28,316 tons in 2005 to 12,962 tons in 2010. The downward trend in volume is due to the low production due to the accumulation of arrears payment by the Togolese Cotton Company from producers.

Years	2002	2003	2004	2005	2006	2007	2008	2009	2010
Volume (in ton)	44225	82151	56249	28316	25851	23129	22008	13254	12962
Value(in million of FCFA)	27619	52343	42129	15979	15806	12000	13584	7795	8890
Unit Price (in FCFA/Kg)	625	637	749	564	611	519	617	588	686

Table 5**:** *Evolution of cotton exports in Togo from 2002 to 2010 Source: Central Bank of West African States (CBWAS) and* (GDSNA), *Togo*

The cotton of Togo is sold primarily to Asia, including Vietnam, Thailand, China, Taiwan, Indonesia and Malaysia. Regarding clinker, the value of exports is set at 43,066,000 FCFA in 2009, an increase of 98.7% compared to 21 670 million CFA francs recorded in 2008 and 25,694,000 FCFA in 2007. This was mainly driven by 93.4% rise of the exported volume, average prices have increased by only 2.7% in standing at 40,771 FCFA 39,680 FCFA per ton against a year earlier. Cement export revenues increased by 8.5% in 2009 stood at 28,952,000 FCFA against 26,680 million FCFA in 2008, under the combined effect of the increase of 6.3% of the quantities and the 2.1% of the price means of disposal.

Years	2002	2003	2004	2005	2006	2007	2008	2009	2010
Volume (thousand tons)	153	1558	1071	1060	917	727	546	1056	1001
Value in million of FCFA)	8481	27897	26150	30955	30921	25694	21670	43063	41906
unit price (in FCFA by ton)	55394	17905	24419	29197	33704	35329	40771	41875	41875

Table 6: Evolution of clinker exports in Togo from 2002 to 2010 Source: Central Bank of West African States and the (GDSNA), *Togo.*

Compared to the major destinations of such major exports for 2009, Ghana and Burkina Faso are the only countries importing the Togolese clinker. The main buyers of Togo's cement are Niger, Mali, Burkina Faso and Benin. The cotton of Togo sold to Asia including Vietnam, Thailand, China, Taiwan, Indonesia and Malaysia.

Years	2002	2003	2004	2005	2006	2007	2008	2009	2010
Volume in thousand tons	834	770	597	434	711	922	427	454	497
Value(in million of FCFA)	38 687	42 618	35 546	21 164	28 156	39 305	26 680	28 332	31 542
unit Price (in FCFA/ton)	47696	55348	59499	48824	39604	42651	62482	62442	63433

Table 7: Evolution of exports of cement in Togo from 2002 to 2010, Source: Central Bank of West African States (CBWAS) *and the General Directorate of Statistics and National Accounts (GDSNA), Togo.*

Togo also exports other agricultural products like spices, Oilseeds, the peppers, etc. In 2009, exporters of these products were down 23.1% to settle at 1,802,000 FCFA against 2.243 million FCFA in 2006. Oilseeds were exported particularly to Senegal, Mali, Benin, Niger, Cote d'Ivoire, Ghana and Malaysia. Cereals and flour were sold mainly to Ghana, Burkina Faso, Niger, Gabon, the United States of America and France. For peppers and thorns, the main buyer countries were Morocco, Ghana, Gabon, Congo and Benin. As for vegetables and fruits, they are exported mainly to France, Germany, Swaziland, Canada, Switzerland and the Netherlands countries.

Evolution of other products

Outside the main products, Togo also exports steel products, beverages and tobacco, oil and grease, food, etc. Given its geographical position in relation to hinterland countries (Burkina Faso, Niger and Mali), certain products are re-exported. These are petroleum products, machinery, materials and equipment, etc. In 2007 exports of these products increased by 3% compared to 2006 standing at 42,674,000 FCFA 41,415,000 FCFA through exports of steel

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products and beverages and tobacco which amount respectively 19.697 million and 6.422 million FCFA against FCFA 14,562,000 and 4,197,000 FCFA in 2006. Overall, exports of these products account for 32% of the total exports in 2007 against 29.4% in 2006.

Particularly on oil products, re-exports amounted to 20,306,000 FCFA in 2009 against 27,676,000 FCFA in 2008, a decrease of 26.6%. By volume, they were down 9.8% to settle at 64,920 tons in 2009 against 71,985 tons in 2008. The decrease in volume is induced to re-exported by Tunisia including purchases of certain Malian oil companies which decided to carry now a part of their order directly from suppliers in the international market.

The rest of manufactured exports from Togo is mainly composed of the locks, bags, and other plastic items. Exports of some products increased by 61.7% to settle at 44,188,000 FCFA in 2009 against 27.333 million FCFA in 2008. This change is induced by 49% increase in export volumes, which rose from 81,447 tons in 2008 to 121 745 tons in 2009 coupled with an increase of 8.1% of the average price that amounts to 362 959 FCFA / ton in 2008. The main products that propelled this production include bags and other plastic products marketed by the companies of the “Zone Franche”
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ESTIMATION TECHNIQUE, PRESENTATION AND INTERPRETATION OF RESULTS

The linear econometric model we use is based on SHOW Model (1956). In this model the endogenous variable is the GDP growth rate in real terms. The explanatory variables are the gross fixed capital formation, labor force and export of goods and services. In the linear form this model can be written as follows:

(1) Log (GDP_CST) = ßo + $ß_1$ *log(K_CST + $ß_2$ *log(POP_ACT) + $ß_3$ *log EXP_CST) + 3_t

Where GDP_CST is the gross domestic product in real terms, K-CST is the gross fixed capital formation in constant POP_ACT, the active labor force representing labor and EXP_CST, export of goods and services in volume; ß1, ß2, ß3 ... are elasticities and 3t the error term.

Statistical tests

Descriptive Statistics Series

	GDP_CST	POP_ACT	K_CST	EXP_CST
Average	561 000	2,1	99 800	212 000
Median	688 000	2,0	92 600	185 000
Maximum	114 0000	3,5	26 9000	489 000
Minimum	133 000	1,1	30 000	36 500
Observations	41	41	41	41

Table 8: Descriptive statistics of variables Source: calculations on Eviews 5.0

Over the period 1970-2010, the average values of goods and services are respectively 561 000, 99 800 and 212 000 000 000 FCFA. The average workforce in Togo in this period is equal to 2.1 million.

Stationarity Series

The use of time series requires knowledge of the nature of the data. Usually one of the important tests is the stationarity of data. If the data are not stationary estimated the results may be biased. Analysis of Mickey Fuller stationarity tests on different sets led to the results in Table below.

Variable	LGDP_CST	LK_CST	LPOP_ACT	LEXP_CST
in Level	1,558692	1,212114	6,291546	1,565455
in first Difference	-6,014566	-6,896356	-5,614471	-8,325979
integration order	I(1)	I(1)	I(1)	I(1)

*Table 9: Stationarity Test of ADF, Source: calculations on Eviews 5.0 Note: The critical value at the 1%; 5% and 10% in the first difference (with constant without trend) are -2.63, respectively -1.95, -1.61 etc. The asterisk * indicates significant values at 1% for a delay equal to 0.*

From the results of Table 9, it is found that all the series are integrated in order 1 for their first differences give a negative value lower than that different threshold (1%, 5% and 10%). However, the analysis of cointegration indicates whether they have a synchronous dynamic evolution.

Cointegration Test

This test relates to the residue of the estimated long-term model, that is to say, on the residue of the model (1). For the cointegration relationship is accepted, it is necessary that this esidue is stationary in levels. The test results are as follow

Null Hypothesis: RESID1 has a unit root

Exogenous: None

Lag Length: 0(Automatic based on SIC, MAXLAG=9)

		t-Statistic	Prob *
Augmented Dickey-Fuller test statistic		-4.614204	0.0000
Test critical values:	1% level	-2.624057	
	5% level	-1.949319	
	10% level	-1.611711	

*Mackinnon (1996) one-sided p-values.

Table10: Cointegration Test Series

According to the results of Table 10, we see that the residue of the long-term model is stationary in levels. This means that the model variables are cointegrated. It is therefore possible to establish a relationship between variables.

Econometric analysis and presentation of results

When the variables are non-stationary and cointegrated, the estimation method used is the two-step or one-step Engel and Granger. In this case, we use the two-step method. It consists in first estimating the model 1. Then in the second stage, it is estimated by the following equation 2:

(1) Log(GDP_CST) = ßo +$ß_1$ * log(K_{CST}) + $ß_2$ * log(POP_{ACT}) +$ß_3$* log EXP_CST) + $ß_4$ EMC, 3_t

With EMC, the residue of the model (1). Before the co-integration model must be accepted, ß4, the coefficient reflecting the restoring force must be negative

Estimated Results of Long Run Model

Dependent Variable: LOG (GDP_CST)
Method: Least Squares
Date: 06/25/15 Time: 12:11
Sample: 1970 2010
Included observations: 41

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG (K_CST)	-0.136135	0.126895	-1.072816	0.2903
LOG (POP-ACT)	0.457294	0.278110	1.644294	0.1086
LOG (EXP-CST)	1.038074	0.162863	6.373894	0.0000
C	1.660477	1.593349	1.042130	0.3041

R-squared	0.942739	Mea dependent var	12.92462
Adjusted R-squared	0.938097	S.D; dependent var	0.847966
S.E. of regression	0.210977	Akaike info criterion	-0.181667
Sum squares resid	1.646919	Schwarz criterion	-0.01489
Log likelihood	7.724166	F-statistic	203.0565
Durbin-Watson	0.948845	Prob(F-statistic)	0.000000

Estimated Results of Short Run

Dependent Variable: LOG (PIB_CST)
Method: Least Squares
Date: 06/25/15 Time: 12 :41
Sample: 1970 2010
Includes observations: 41

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(K_CST)	-0.136135	9.87E-14	-1.38E+12	0.0000
LOG(POP_ACT)	0.457294	2.16E-13	2.11E+12	0.0000
LOG(EXP_CST)	0.038074	1.27E-13	8.19E+12	0.0000
RESID1	-1.000000	1.28E-13	7.82E+12	0.0000
C	1.660477	1.24E-12	1.34E+12	0.0000

R-squared	0.97000	Mean dependent var	12.92462
Adjusted R-squared	0.8610700	S.D. dependent var	0.847966
S.E. of regression	1.64E-13	Sum squared resod	9.69E-25
F-statistic	2.67E+26	Durbin-Watson stat	1.231639
Prob (F-statistic)	0.000000		

According to the results of the estimation of the error correction model, it appears from the determination coefficient R^2 that 97% of the gross domestic product fluctuations are explained by exogenous variables. Fisher statistic indicates that the error correction model is globally significant and that the exogenous variables have a significant effect on production. The coefficient of the restoring force is negative and significant. From the results, we find that the coefficients are highly significant. In the short run and long run, we see that exports have a significant impact on GDP growth. In the short run, a 1% increase in exports leads to an increase in the growth rate of 0.03%. However in the long run, this increase is reflected by an increase in the growth rate of 1.03%.

CONCLUSION

The internationalization of trade is characterized by the increase in international trade (goods, services, capital…..). Globalization is the process that leads to a growing interdependence of economies, due to increased international trade and liberalization. Since the 1950s, the process of globalization is mainly goods and services; the globalization of capital is accelerating from the 1980s. Trade is an overall productivity factor, expansion of markets and therefore growth. Generally we note a correlation between global economic growth and the growth of international trade especially during the “thirty Glorious”.

In the light of our analysis through this article, Togo exports consist mainly in primary products which values are steadily declining in the 2000s because of the difficulties that are known as key chains and outdated equipment of export phosphates. Coffee, cocoa, cotton and phosphates are the main export products and represent the period 1970 to 1979 almost 87.4% of total exports of Togo against 30.9% during the period 2000 -2010.

The results of our research clearly show that exports of goods and services in Togo have a significant positive effect on economic growth in the short and long run. The impact of exports on economic growth is more important in the long run than short run. Indeed, in the short run , an increase of 1% of exports of goods and services results in an increase of 0.03% of economic growth; whereas in the long run, a 1% increase in exports leads to an increase of 1, 03% of economic growth.

RECOMMENDATIONS

For best revival of economic activity in Togo and to achieve the objectives of the Accelerated Growth Strategy for the Promotion of Employment, Togo should adopt good exports policies of goods and services to increase the well -being of the Togolese people. Different mechanisms clearly show that the growth of trade especially the exports is a factor of economic growth that promotes development. Development actors in Togo should therefore incorporate in their priorities that the promotion of exports of goods and services guarantees the economic growth and development indirectly.

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