

Research on the Impact of International Trade in Burkina Faso's Economic Growth

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Abstract: The development of economic globalization is increasingly affecting the countries of the world, thus promoting the rapid increase in external trade that contributes to the construction and development of the National Economy. Foreign trade is an important element of a national economy, which is an important motive power for national economic growth. This is how the liberalization of external trade, the structural reforms, and the increased effects of macroeconomic stabilization have contributed to an improvement in the economic environment of Burkina Faso and has economic performance. Burkina Faso exports mainly cotton, it is currently the third African cotton producer after Benin and Ivory coast, gold, sesame, and cashew nut. The study establishes an economic model that offers a deeper understanding of the relationship between international exchange and the economic growth of the Burkinabe economy.

We will use the technique of simulation of co-integration and error correction to estimate the various results. Our study will be focused on the period from 2001 to 2020 with key variables GDP as an indicator of economic growth and commercial variables, including the export and import of cotton and gold and exchange rates and inflation rate. All estimation processes consist of five steps: first root unit test, second, co-integration test, third, causality of the Granger, and Fourth Stability Model, Var Stability.

The conclusions of the study indicate that there is a positive and meaningful relationship between cotton export as well as that of Gold on Burkina Economic Growth (GDP). There is also a positive and meaningful relationship between the exchange rate and economic growth. By lesson, we note that imports and the rate of inflation have a negative impact on the country's economic growth. In addition, it has been observed that cotton and gold have a long-term effect on global imports of GDP, unlike the exchange rate and inflation. It can be concluded that the export of commodities stimulates the country's overall economic growth. It is recommended to take steps to reduce imports to verify inflation and higher exchange rates. In addition, the government should adopt measures to improve local productions reducing deficits and therefore encouraging exporting other products.

Keywords: Impact, Import, Export, Economic Growth, Burkina Faso

1. Introduction

This chapter introduces the field of research of the study. It provides a relevant context for the study. It then presents the declaration of the problem that highlights motivation and gaps and extends on the objectives of the study, research, importance, scope and limitations and organization of The study.

1.1 Background of the study

International trade has been marking its existence for several millennia. This existence is more felt in the economic history of industrialized countries. These countries attach great importance to international trade because of the considerable contribution of which their economies have benefited over the last two centuries. Discussions on the role of international trade in promoting economic growth and productivity, in particular have occurred over several decades. A conclusion in the global literature shows that active countries in the field of international trade tend to be more productive than countries that produce only for the local market. From to liberalization and globalization, a country's economy is much more associated with external factors such as openness. Therefore, conducting a study on the impact of international trade on economic growth is a great importance in this globalized era. This helps decision-makers to develop appropriate policies by determining the source of productivity growth in relation to international trade.

The concept of international trade goes back to Smith (1776). International trade is the exchange of funds, goods and services between borders or international territories. It is also known as world trade, import and export trade or foreign trade in island countries such as Great Britain, Japan, etc. In most countries, this trade represents a large part of the gross domestic product (GDP). International trade is trade in goods and services between countries leading to a global economy. Global trade allows consumers and countries to have access to goods and services that are not available in their countries. The large part of the products are available on the

international market such as food, clothing, spare parts, oil, jewelry, wine, stocks, coins and water. Not to mention services such as: tourism, banks, advice and transport.

International trade consists mainly of importation, export and warehouse. The import trade refers to the purchase of goods by a country from another country or entry of foreign-country goods and services to the country of origin. For example, the main imports of Burkina are oil, medicine, rice, tourism car, electricity, while trade in exports refers to the sale of goods by a country to another country or exit of goods From countries abroad - for example, the best products exported from Burkina are: gold, cotton, seeds and oleaginous fruits, animals living for human consumption. However, trade between warehouse is also called re-export .It offers here for purchasing a country's property, and then sell them in another country after some treatment operations. All functions or concepts of international trade are based on the trade balance of a country.

International trade allows manufacturers and distributors to search for products, services and components produced in foreign countries. It also allows companies to acquire resources that are not available in their country of origin. In addition to providing consumers with a variety of goods and services, international trade also increases income and employment. In recent years, interdependence among world-wide countries has grown due to the popularity of globalization. Economic growth indicates greater production. However, economic growth reflects a change of GDP. This is the process by which the productivity capacity of an economy is greater overtime to bring increasing levels of national production. Economic growth is measured by an increase in total production of the gross national product of a gross gross domestic product. Economic growth is one of the most important variables for the determination of force and a determinant of the level of employment in a country. Trade and globalization are important means of economic development of any country.

The majority of literature focused on developed countries economy like the United States, the EU, Japan and China (Brunei, Manni & Afzal, 2012, Dritsakis, 2014, Jordan, Shihab, Soufan & Abdul-Khaliq , 2014, Sun & Heshmat, 2015).

In Africa, many studies have been conducted on international trade but in different ways (Bahmani-Oskooe & LtAifa, 1992, Fosu, 2001, Clarke & Kirkpatrick 1992, Shandey 1992, Dodaro 1993; Love 1994, Madi 2009, Valian 2011; Enu et al. 2013). There is little literature on international trade and economic growth focused on Burkina, taking into account the impact of export and import as the main variable on economic growth.

1.2 Statement of the problem

Adam Smith (1776) demonstrated that there were benefits on free international trade, economists have largely agreed that foreign trade has a positive action on the level of economic growth (Carbaugh, 2005). Balassa(1981) notes that the merits of foreign trade growth are mainly considered as increased use of the capacity, efficiency of productivity, economies of scale and competition that the industry is generated as demand foreign. Specifically, it is now eligible for a country that engages in foreign markets by promoting exports, opens its industries to foreign competition and increases its productivity. In addition, countries that import advanced capital and intermediate goods they do not produce themselves, increase their GDP levels over time (Lee 1995). Development economists agree that countries that engage in free international trade (open economies) are more than undergoing an increase in economic trade (open economies), undergoing increased economic growth rates than closed economies.

Despite the fact that there seems to be a broad theoretical consensus on the positive impact of international trade (exports and imports) on the level of economic growth, the empirical results of some countries show a lot of disagreement, and therefore the exact nature of the Relationship between the variables above, it is still in litigation (United Nations Industry and Development Organization-UNIDO, 2009: 2). Fosu (1990) conducted a survey of 64 developing countries, in sub-Saharan Africa, with the aim of establishing the relationship between exports and economic growth. The study showed that export-led growth, particularly motivated by commodities, not only negatively affects economic growth, but also aggravates the terms of country trade.

An examination of empirical literature on the relationship between international trade and economic growth reveals that there are few studies on Burkina. The majority of these studies focused on other countries gave various answers (Ali, Ali & Dalmar, 2017, Bakari & Tiba, 2019, Dil, Ahmad & Saeed, 2019, Fatemah & Qayyum, 2018, Kumar, 2020; Sayef , 2016). This study aims to help fill this empirical knowledge deficit by analyzing the impact of exports and imports on Burkina's economic growth. This study focuses on the existence of a long-term equilibrium relationship between exports and economic growth.

1.3 Objectives of the study

The general objective of this study is to determine and quantify the impacts of exports and imports on the economic growth of Burkina Faso from 2001 to 2020.

More specifically, the study sought to:

- Measure the percentage of economic growth change due to the change in exports.
- Measure the percentage of economic growth change due to import change.
- Identify the long-term relationship between exports, imports and economic growth.
- Analyze the mutual relationship between exports, imports, inflation and exchange rate to determine economic growth.

1.4 Research question

This study seeks to provide answers to the following questions:

- Have exports and imports contributed to increasing the level of economic growth in Burkina Faso?
- To what extent did exports, imports and other factors contribute to economic growth?
- What economic policies can be put in place by the government to improve the quality of Burkina exports and / or imports needed for economic growth?
- What correlation exists between exports, imports, inflation and exchange rate to determine economic growth in Burkina?

1.5 Scope and study limitations

The study was made on the impact of exports on economic growth in Burkina. To do so we used a series of annual data from the chronological series for the period from 2001 to 2020. The choice of the period was made following the availability of data. The study used as variables: exports, imports, exchange rates, inflation rates and gross domestic product as a proxy for production. The study anticipated the lack of contemporary articles, magazines and other literature documents to facilitate the exam. The reliability and consistency of the data can be compromised because the data classification and calculation process may vary depending on the institution and purpose for which it was intended.

1.6 Significant of the study

One of the main concerns raised by most of the intellectuals of the country is that the country focuses on an export of raw materials or goods in a gross or primary state that does not allow the country to participate at the high level of external trade by proposing Finished products. This study seeks to investigate the export sector contributed to economic growth in Burkina. He also seeks to know the impact of the import on the economy of Burkina. Research provides specific export and import products with information on the impact of export expansion on economic growth. It seeks to promote the expansion of exports to economic growth by analyzing the situation of international trade in Burkina Faso. The study draws the attention of policy makers and government policies on the need to strengthen the export sector and increase the export sector gains that will propel the economy to growth

2. Mercantilism trade theory

Mercantilism took part as a system in the nineteenth century to justify the birth of the classical theory based on free trade, decreasing returns and the overall balance and those well before the publication of "the wealth of nations" of Adam Smith. In the seventeenth century develops a more elaborate version of the mercantilism ideas, which rejects the simplistic vision of Bullionism (current of economic thought that consisted of raising riches and never get them out of the country). The authors, Sébastien le Prestre de Vauban broaden the definition of the main objective "(...) It is not the large amount of gold and silver that make the great and real riches of a state, since "There are very large pairs in the world that abound in gold and silver, and which are no more at ease, no happier [...]. The richness of a kingdom is in the abundance of commodities, whose use is so necessary to the skew of the lives of men, that they did not do to do without; Among the first writers Mercantile, we found Thomas Mun and Edward Miselden in 1620, while James Stewart's political economy (1767) was traditionally considered the latest great trade ". The majority of commercial writers were businessmen and government officials. Most of their writings are more focused on the economic impact of trade, maritime transport, rights and industrial protection. Mercantilism certainly is not a current of homogeneous thought, or even a unified economic theory. This idea was used to describe an economic policy regime identified by the direct intervention of the State aimed at protecting national enterprises and producers in accordance with the 7th century Colberism in France. According to Adam Smith, which is the main creator of the mercantile system, the core of the Mercantile system or the "commercial system" is the popular stupidity of money laundering resources.

Some mercantilists conceive the economic system as a zero-sum game, where the gain made by an agent translates into the loss of another agent. As Jean Bodin said, "There is no one who earns another loses it." As a result, any economic policy benefiting from a group of individuals, being by nefastic definition to another, the domestic economy has very little effect on the increase in general social well-being. And since domestic trade

does not increase or little national wealth, so it is justified and desirable to give priority to foreign trade to fill this lack.

At the beginning of the eighteenth century, the thesis of the mutual advantage is more generally accepted: it ensures that each country that takes part in international trade can claim to find advantage and profit. But it seems that mercantilist writings are generally produced to justify a posteriori political choices, rather than evaluating the impact a priori with a view to determining the best option to be implemented. The goal of an excess trade balance is still sought after but it can be profitable to import goods, and then resells them on another market by making significant profits. For Antonio Serra (1613), the surplus of the trade balance is only an "indicator" of the wealth of a country and not a finality. Other authors like Mun and Montchrestien shares the same point of view as it.

This new vision hencewith rejects the export of raw materials. Because these, transformed into the country into more elaborate final goods, can be an important source of wealth. The new generation of mercantilists supports the total ban on the export of raw materials to the contrary promote the development of domestic manufacturing industries. The consequences for domestic politics from mercantilist precepts are far from unified and remain fragmented. While Adam Smith and especially his subsequent interpreters, like Nassau Senior describe mercantilism as calling very strict controls of the economy, the recommendations of mercantilist thinkers are actually more diverse, if not sometimes divergent:

Some supported the creation of monopolies and other letters patent. But others criticized the risk of corruption and the inefficiency of such systems. Many mercantilists also recognized that the implementation of quotas and price caps was a source of black markets. On the other hand, most mercantilist theorists recommend a low level of compensation for workers and farmers, which are supposed to be able to live in income close to the living level, in order to maximize production. Income, additional free time or a better education of these populations could only create laziness and undermine the economy. Mercantilism is basically the product of its time. He also has his limies. But as Hany remarked, "it's far from a mass of nonsense". Therefore, the bargaining system of its own economic policy is low, and has no universal requirements. As a dogma, he could not provide appropriate recommendations at the time. In addition, seeking to increase the overall productivity of the country, they have seen wealth and work as the ultimate goal of human survival. Dr. Smith pointed out correctly: "They are mercantist instead of Smiths, which is the spiritual expedition of seniors in the modern economy. Elders are generally neglected. They have developed a macro-economic problem related to mercantilism that have decreased due to many reasons. The impact of Smith's doctrine has begun to replace the energy strategy. The development of banks, reducing the importance of ingots and parts. In addition, the development of the market economy has shown that real domain names, factories and machines, it is a more important object than wealth, that gold and silver. Economic growth arrives during the industrial revolution thus creating competition in society. The wealth of a country, develops through the use of natural resources and through the progress of technology.

3. Research design

The study adopted the positivist philosophy that is based on pure facts and explains objective research (Levin 1988). A positivist look allows the researcher to remain neutral and independent during the study. This implies that philosophy prevents human interference throughout the study process (Crotty, 1998). In addition, the results and analysis of research are observable and quantifiable. Philosophy uses a quantitative research approach, thus allowing objectivity through the use of quantitative instruments as well as different statistical procedures in the data analysis.

The quantitative approach mainly uses digital and statistical tools to test the theories and generalizations resulting from the answers to research questions. Compared with qualitative research, the results of the quantitative approach are reliable, valid, objectives, accurate and generalizable (Hammersley, 2008, Saunders, Lewis and Thornhill, 2012). More specifically, using the explanatory concept, the researcher identifies the cause-and-effect relationship and subsequently affects an explanation to the relationship. The explanatory approach is generally used to assess the impacts of specific changes on existing processes. The design offers the best approach to research because it offers a better overview of research and attracts a better conclusion.

3.1 Data sources

The study was made on the basis of the chronological data from 2001 to 2019. The information relating to GDP, exports, imports, exchange rate and inflation have been obtained from the Global Indicators for the Development of the Bank worldwide. The annual data of gold and cotton were obtained from the National Institute of Statistics and Demography of Burkina Faso (NISD). Obtaining data used to study our chronological series has been possible thanks to the fact that the data on the variables above are normally collected each year

in Burkina Faso. Given that the World Bank data as well as those in the NISD are free and available to the public, it would be much easier to have access to it that a prior authorization is not necessary.

3.2 Estimation procedure

The study used the Engle and Granger residual-based test of cointegration to estimate the equations in order to analyze the long run relationship between economic growth and international trade. The Augmented Dickey-Fuller (ADF) test was used to check the level of integration of the variables to avoid wrong results.

3.3 Unit root test

In estimating parameters of a time-series model, it is appropriate that all data must be tested in order to determine the integration of each variable specified in the model. Testing for stationarity before estimating is considered necessary as most time-series variables are non-stationary and estimations with these might produce wrong regression results. Testing stationarity helps the researcher to determine the order of integrating the variables to choose an appropriate estimator. For the implementation of the parking test the study used the increased dickey-fulker (ADF). The ADF Test Developed by Dickey and Fuller (1979) is an improved version of the Dickey Fuller test for more complicated and larger time series. ADF tests are an accumulation on DF tests to correct the auto-correlation taking into account delays. The Log length for the ADF Test was carried out using the Akaike Information Criterion (AIC). The ADF equation used is specified below:

$$\Delta Y_t = \alpha + \delta t + \rho Y_{t-1} + \sum_{i=1}^p \beta_i \Delta Y_{t-i} + \mu_{1t}$$

Where Y_t is the series at time t , Δ represents the difference operator, μ_t is the random disturbance term, ρ, δ, β and ρ are parameters to be estimated. The μ_{1t} variable was used as stationary random covariance error terms for the ADF test. The null hypothesis has tested the unit root (non-stationary) of the variable considered an alternative without unit root (stationary). If the ADF test statistics is lower than the critical value then the null hypothesis is rejected in conclusive as well as the series is stationary. If, on the contrary, the ADF test statistic is greater than the critical value, then the null hypothesis will not be rejected concluding that the series is non-stationary. The rejection of the null hypothesis for the study test was inspired by the critical values of Mackinnon (1991) and the probability values.

Table 1: Descriptive analysis of economic growth and international trade variables.

	Export	Import	Cotton	Gold	GDP	Ex. Rate	In. Rate
Min	123.4	404.4	110319.9	1182.8	3.19	0.0013	0.2
Max	2507.1	2450.7	281392.8	205080 0	17.37	0.0022	10.7
Mean	890.625	1335.68	185092.01	559436. 955	10.327 3	0.0018	1.96
Median	880.75	1149.25	185954.1	580548. 2	10.97	0.0019	1.63
Std. deviation	730.405 9	736.918 2	48472.553 2	582824. 003	4.3510	0.0003	1.6044
Skewness	0.5816	0.2267	0.2901	0.8546	-0.1542	-0.7508	1.1338
Kurtosis	-0.7079	-1.5691	-0.9041	0.4182	-1.1535	-0.0748	1.5451
Jarque-Bera	1.5452	2.2231	0.9629	2.5802	1.1880	1.8836	6.2718
Prob.	0.2309	0.1645	0.3089	0.1376	0.2761	0.1950	0.0217
Obs.	20	20	20	20	20	20	20

Source: Author's compilation from Eviews(2022)

In our table we can see that economic growth (GDP) has a means of 10.327%, it means that, on average, the annual growth rate of the economy is 10.327. Its standard deviation is 4.351, which means that the observations on the economic growth rate deviates from 4,351 from the mean. The maximum growth rate of the economy for the study period is 17.37 and the minimum growth rate of the economy is 3.19 in one year. The rate of economic growth (GDP) is almost skewed (-0,154) which implies that most of the observation is greater than the average value and the value of Kurtosis of the economic growth rate (-1,153) is less than the normal distribution involving a Platykurtic who has a circular peak. The Jarque-Bera normality test indicates that the economic growth rate is normally distributed because the value p (0.276) is significant at a level of meaning of 1%.

Exports had the average value of 890,625 which means that on average in exports of goods and services of the country are 890.625 million CFA franc and to the extent that value exports deviate from the average of 730.45. Goods exports and services are slightly asymmetrical (0.582) which indicate that most observations are below average. The Kurtose value when it is -0.708 is lower than the normal distribution of 0.292 indication of Platykurtic which means that export data is flatter compared to what a normal distribution would look like. The Jarque-Bera test for normality indicates that exports of goods and services are normally distributed because the value p (0.231) is significant to five percent (5%) level of importance. With the high standard deviation value and the variable's skewness, the natural log is applied to exports of goods and services.

Imports had the mean value of 1335.68 which implies that on average imports of goods and services of the country are 1335.68 million CFA franc and the measure by which value imports deviate from the average is 736.92 franc.

The imports of goods and services are pretty skewed (0.227) which indicate that most observations are below the average. The value of kurtosis is -1.569 which is less than the normal distribution which is called a Platykurtic involving the fact that Import data have a flat peak. The Jarque-Bera test for normality indicates that imports of goods and services are normally distributed because the value p (0,164) is significant to five percent (5%) level of importance. With the high standard deviation value and the variable skewness, the natural log is applied to imports of goods and services.

The mean value of gold is 559436.95 Which means that on average, the value of gold produced is 559436.95 million CFA franc and to extent that the imports value deviate from the average by 582824. The value of gold is a little symmetrical (0.855) which indicates that most observations are below average and the value of kurtosis is 0.418 which corresponds to a mesokurtic where the data of the value of the Gold is a little pointy than a perfect normal distribution. The Jarque-Bera test for normality indicates that the value of the gold is normally distributed because the value p (0,13) is significant to five percent (5%) of meaning. With the high deviation value and the skewness of the variable, the natural log is applied to imports of goods and services.

Cotton had the mean value of 185954 which implies that on average imports of goods and services of the country are 185954 million CFA franc and the measure by which value imports deviate from the average is 48472 franc.

The cotton are pretty skewed (0.290) which indicate that most observations are below the average. The value of kurtose is -0.905 which is less than the normal distribution which is called a Platykurtic involving the fact that Import data have a flat peak. The Jarque-Bera test for normality indicates that imports of goods and services are normally distributed because the value p (0,309) is significant to five percent (5%) level of importance. With the high standard deviation value and the variable skewness, the natural log is applied to import of goods and services.

On average, the exchange rate (ex_rate) of the economy is 0.00183 with a standard deviation of 0.00018, which means that the observations deviate from 1,353 of the average. The asymmetry of the exchange rate is positively asymmetric (1.325) which implies that most of the observation is lower than the average value and the Kurtose value of -0.071 is less than the normal distribution involving a Platykurtic which means that the Exchange rate Tariff data is more flattered in relation to what normal distribution would look like. The Jarque-Bera test for normality indicates that the exchange rate is not normally distributed because the value p (0,194) is significant at a level of meaning of (5%).

On average, the inflation rate (IN_RATE) of the economy is 1.65. It had a standard deviation of 1.604 which means that the observations deviate from 1,604 of the average. The lightness of the inflation rate is positively asymmetrical (1.134) which implies that most of the observation is lower than the average value and the Kurtose value of 1.544 is greater than the normal distribution of platykurtic which is higher and has Sharper Centry Peak. The Jarque-Bera test for normality indicates that the inflation rate is not normally distributed because the p value (0.021) is significant at a level of meaning of (5%).

3.1 ADF test

The stationary test is also called unit root test. A sequence is not stationary when there is a unit root in a chronological series. We usually make the difference for the chronological series to remove the root from the unit, so that the chronological series is stationary. First, the root test of the unit is performed on the chronological series of the model to check if it is stable. We used the ADF inspection system in our report by taking the normal logarithm to eliminate the effect of changing variables on units and patterns. The result of the unit root test for each variable of the chronological series is not stable. But after the second-order difference conversion, all variables have passed the ADF test, which indicates that the differences of all variables are stable and can be analyzed later.

As we can also remark in Table 4 that the ADF value corresponding to ΔLNGDP is -4.637 and the negative value is less than the critical value of -2.716 at the confidence level of 1%, resulting in the rejection of

the null hypothesis at the 1% confidence level, which means that the unit root is rejected and Δ LNGDP is a stationary series.

Table 2: ADF test result for second differencing

Variable	ADF Statistics	1% Critical value	5% Critical Value	10% Critical Value	Conclusion
Δ Lngdp	-4.637	-2.716	-1.964	-1.606	Stable
Δ Lncotton	-5.105	-2.717	-1.964	-1.606	Stable
Δ Lninf_rate	-5.864	-2.740	-1.968	-1.604	Stable
Δ Lnimport	-3.799	-2.741	-1.968	-1.604	Stable
Δ LnGold	-7.383	-2.708	-1.963	-1.606	Stable
Δ Ex_rate	-5.170	-2.728	-1.966	-1.605	Stable
Δ LnExport	-6.313	-2.708	-1.963	-1.606	Stable

Sources: Author’s compilation from Eviews(2022)

3.5 Co-integration results by OLS

By performing the co-integration test, we can also reveal if there is a long-term equilibrium relationship between these economic variables. In the foregoing, we adjusted all non-stationary variable data to the first order single integer time series.

The co-integration test is divided into two stages: firstly perform the regression of OLS on the independent variables of LNGDP and save regression residual; and then, perform the unit root test on the residual series of the chronological series.

This document selects the E-G test in the cointegration test to explore if there is a long-term equilibrium relationship between the banking sector and economic growth. Then we use e-view software for the E-G test to determine the equilibrium relationship between international trade and economic growth (GDP). We can remark that the relationship between GDP and the import is positive. An export change of 1% would increase GDP of 0.224 and is important and 1%. This argument is compliant with Nguyen (2016), who mentions that exports to the private sector with the labor force, investment and domestic credit are also important in the short and long-term economic development of Pakistan. At 1% of importance, a change of gold unit will increase GDP by 0.080 which means that there is a direct relationship between GDP and gold. Indeed, through foreign investment, people can invest in gold and this will increase the country's GDP. This justification is consistent with Thomas (2018), who declare that Gold has a direct relationship with GDP.

The export is significant to 1%, which implies that a change of one unit export will also increase GDP. Which means there is a positive relationship between export and GDP. This is true in the sense that if a country exports more of its goods and services, the higher capital inflow will increase the GDP. This statement is compliant with Fatemah and Qayyum (2018), who said there is a positive relationship between export and GDP in Canada.

Cotton is also significant to 1%, indicating that a modification of the cotton unit will increase GDP of 0.199. Showing that there is a positive relationship between cotton and GDP. Basically, cotton is an international commodity that always has strong demand; Therefore, it goes without saying that any country that produces more cotton will be likely to increase its GDP, as its demand is always high. There is a positive relationship between the exchange rate and GDP, at a significant level of 1%, a change in exchange rate dollar will increase the country's GDP by 429.420. This assertion is consistent with soy (2016), which states that there is a positive relationship between the exchange rate and GDP.

On the other hand, at a level of 1%, a change of inflation rate unit will decrease the GDP of -0,030. This implies that there is a negative relationship between the rate of inflation and GDP. This justification includes with Fischer (1993), which indicated that inflation has a negative relationship with GDP.

The results on the unit root test on the residual sequences obtained are as follows in the table below

Table 3 Unit root residual's test

Variable	ADF Statistics	1% Critical value	5% Critical Value	10% Critical Value	Conclusion
e_GDP	-4.548	-2.741	-1.968	-1.604	Stable
e_Cotton	-5.239	-2.718	-1.964	-1.606	Stable
e_Inf_rate	-5.864	-2.741	-1.968	-1.604	Stable
e_Import	-4.772	-2.741	-1.968	-1.604	Stable
e_Gold	-3.131	-2.708	-1.963	-1.606	Stable
e_Ex_rate	-3.992	-2.755	-1.971	-1.604	Stable
e_Export	-4.217	-2.718	-1.964	-1.606	Stable

Sources: Author's compilation from Eviews(2022)

Table 4 Granger causality results

Granger's causality test will be used to analyze the causal relationship between in order to further explore the possible causal relationship between two variable, we use Granger's causality test to analyze the causal relationship between Burkina Faso's economic growth and international trade. For this we ensured that the timed series tested are stationary.

Burkina Faso's international trade in a long-term equilibrium relationship with economic growth responding to the conditions of the barn test as against the results of the cointegration test. Then, to study the relationship between variables such as international trade and economic growth we first construct binary variable autoregressive model and the test results are as follows:

We can note that the causality test between GDP and the import is carried out, the P value is 0.175, which means that at a level of confidence of 10%, the original hypothesis that "import is not the Granger cause of LNG "can not be rejected; Secondly, the P value in the line is 0.492 and the original hypothesis that " LNG is not a Granger cause of Import "can not be rejected.

Thus there is no long-term causal relationship between GDP and import. Gold has an impact on GDP in the long-term and the same thing is also true for GDP and gold, which are important to 10% at 1 per cent respectively. This means that people will invest in gold by long-term international investments. This result is compatible with Marabou (2017).

There is a causal combination between export and GDP in the long-term. The null hypothesis is thus rejected at a level of importance of 1%, while GDP has no effect on export. We do not reject the null hypothesis. This argument is compliant with Nyasa (2013). It can be seen on the test results only when the causality test between GDP and cotton is carried out, the p-value is 0.626, which means that at the level of confidence of 10%, the original hypothesis that " Cotton is not Granger cause of LNGDP "is rejected; Second, the P value in the line is 0.993 and the original hypothesis that "LNG is not Granger cause of LnCotton" can not be rejected. Exchange rates have no long-term causality with GDP, but we reject the null hypothesis that GDP has long-term causality on 5% level. This statement is conformal with Bakari (2017). The inflation rate does not have long-term causality with GDP; However, at 10% GDP has long-term causality with inflation. This assertion complies with Phillips (1998).

Table 4: Granger's causality test

Null hypothesis	Lag period	Chi -sq value	P-value
Lngdp does not granger cause of lnimport	4	2.167	0.175
Lnimport does not granger cause of lngdp	4	0.943	0.492
Lngdp does not granger cause of lngold	4	2.505	0.137
Lngold does not granger cause of lngdp	4	0.914	0.505
Lngdp does not granger cause of lncotton	4	0.056	0.993
Lncotton does not granger cause of lngdp	4	0.681	0.626
Lngdp does not granger cause of lnexport	4	2.347	0.153
Lnexport does not granger cause of lngdp	4	0.527	0.721
Lngdp does not granger cause of inf.rate	4	2.229	0.167
Inf.rate does not granger cause of lngdp	4	0.516	0.728
Lngdp does not granger cause of ex.rate	4	3.044	0.095
Ex.rate does not granger cause of lngdp	4	0.202	0.930

Sources: Author's compilation from Eviews (2022)

Conclusion:

The findings of the study have serious consequences for the country's socioeconomic development policy. In this study, the resulting political implications of the results were classified on the basis of the determination variable such as exports, imports, inflation and the exchange rate. Of these implications, important political recommendations have also been drawn as shown below. As demonstrated in our study, export outcomes has important political implications for the country's economic growth and development. Therefore Burkina to avoid a deficit of the balance of payment, it is necessary to relieve exports and improve the quality of exports. In addition, Burkina Faso must explore markets and diversified products to achieve a stable amount of exports. Export infrastructures should also be increased, skills and labor's productivity should also be increased by investing in research and development activities. The Government of Burkina Faso should initiate export-led growth and economic development strategies such as the Economic System "one factory one district and promote the planting of foodstuffs. This also contributes to the creation of jobs because it is there are strong empirical evidence in support of the development program directed towards export.

Reference:

- [1]. The Economist (2005), « Steering by a faulty compass: Are central banks watching the wrong measure of inflation? », February 25th.
- [2]. Abiodun, K. (2017). Contribution of international trade to economic growth in Nigeria. Unpublished doctoral thesis, Eastern Illinois University.
- [3]. Adewuyi, A. O. (2002). Balance of Payments Constraints and Growth Rate Differences under Alternative Policy Regimes. Nigerian Institute of Social and
- [4]. Economic Research (NISER) Monograph Series No. 10 Ibadan, Nigeria.
- [5]. Adewuyi, A. O. (2002). Balance of Payments Constraints and Growth Rate
- [6]. BRASSEUL, JACQUES Histoires et faits économiques de l'antiquité à la révolution industrielle. Tome 1 Paris Armand 2001
- [7]. BRASSEUL, JACQUES Histoires et faits économiques de la révolution industrielle à la seconde guerre mondiale Tome 2 Armand 2004
- [8]. HUGON, Philippe l'économie de l'Afrique 5^{ème} édition -Paris, la Découverte 1993
- [9]. MONTOUSSE, MARC, AGOSTINO, SERGE- 14 fiches pour comprendre l'histoire économique contemporaine, Paris, Bréal: 2000
- [10]. MARC MONTOUSSE, Théories économiques Paris-Bréal, 1999
- [11]. ALAIN BEITONE, ANTOINE CA ZORLA, CHRISTINE DOLLO, ANNE -MARY DRAI: Dictionnaires des sciences économiques- Paris Armand 2007
- [12]. Differences under Alternative Policy Regimes. Nigerian Institute of Social and Economic Research (NISER) Monograph Series No. 10 Ibadan, Nigeria. . Adu, J. (2011). "Non-Traditional Exports and Economic growth .
- [13]. Afonso, O. (2017). The impact of international trade on economic growth.
- [14]. Kundu, A. (2013). Bi-directional relationships between exports and growth: A panel data approach. *Journal of Economics and Development Studies*, 1(1), 10-23.
- [15]. Love, J. (1994). Engines of Growth. The Exports and Government Sectors", *World Economy*, April, 203-218, 203-218.

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