

Does Export Diversification really Matters for Economic Growth?

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Summary: This article explores the relationship between economic diversity and growth by analyzing three key channels: export-led growth hypothesis, export composition, and export diversification. The first channel suggests that promoting exports can boost economic performance by generating foreign exchange, facilitating technology diffusion, and encouraging learning through international interactions. The second channel highlights how a country's export structure influences its economic outcomes, with nations exporting technologically advanced goods, like manufacturing products, achieving faster growth compared to those relying on less efficient sectors like natural resources. The third channel advocates for the benefits of export diversification, which can stabilize earnings and foster growth by reducing sector-specific risks. The findings emphasize that both domestic and international policymakers in developing countries should prioritize export diversity as a strategy for sustained economic growth.

Keywords: Export led- growth hypothesis; Export composition; export diversification; economic growth.

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I-Introduction:

The mechanism thought which an economy move from a single income source toward multiple sources of a growing range of industries and regions refers as economic diversification (United Nations Climate Change, 2022). This Economic diversification is vital to long-term economic growth. When the economy heavily depends on income originated in the agriculture and mining sectors, sustaining long-term economic growth is challenging because of volatility in commodity prices and allocative inefficiencies (Esanov, 2012). The productivity growth in these sectors is slow. Resource-dependent countries tend to hamper their macroeconomic stability because of their dependence to the extractive sector for generating foreign exchange and budget revenues. The presence of abundant natural resources also decreases the share of the manufacturing sector, increases the risk of civil instability, and damages institutional quality.

Economic diversification follows two major types: economic diversification and exports diversification. Both types are believed to drive economic growth, create an environment conducive to productive investment, and reduce short-term macroeconomic volatility. This study focuses on the second type of diversification. Exports diversification refers to deliberate policies intended to change the shares of commodities in the existing export basket, introduce new products in the export portfolio, and/or break into new geographical markets. The link between exports diversification and economic growth in developing countries has raised many debates recently in the economic field. The on-going debates are central on whether or not these exports diversification strategies can benefit their economic growth.

To address this issue one should answer the following questions:

Do exports promote economic growth in developing countries?

Does export structure in developing countries really matters for their economic growth?

How can exports diversification improve economic performance in developing countries

II- Methods and Materials:

After the 1990s, the topic of export diversification and its implications for economic growth began to gain momentum, and over time, a dedicated body of literature has developed. Recent economic literature widely agrees on the benefits of an economic development strategy focused on export diversification. Export diversification promotes structural transformation and supports development and economic growth by fostering cross-sectoral technology spillover effects (Mania and Rieber, 2019). This article provides a critical evaluation of the literature reviews regarding export diversification and economic growth, by exploring their geographic distribution and their main findings and recommendations. This investigation offers valuable perspectives for both scholars and policymakers. It helps other studies in implementing econometric models on this link and provides insight for government policymakers about the use of export diversification as a strategy for economic growth.

III- Results and discussion:

With respect of export diversification, the historical progress of different subjects will be investigated in this section. The first part presents the literature on the role of export promotion strategies in economic development. The second one focuses on the role of exports structure in economic growth. The pessimistic view about the natural resource curse will be investigated in the third subsection. And finally, the last section highlights how export diversification can be an effective strategy for boosting economic growth in different countries.

1- The export led hypothesis: are export promotion strategies important for economic development?

One of the most subjects that attracted much international attention among researchers and policy makers, around the globe over the past decades; is whether export are key factor to promote economic growth in developing countries, as stated by the export-led-growth hypothesis (Riezman et al. 1996). Using different methods, large number of empirical studies in the literature, has found strong evidence of the export-led-hypothesis, and considered the export promotion policies as an effective development strategy in developing countries (see: Michaely (1977), Balassa(1978), Ram(1987), Kavoussi (1989), Salvatore and Hatcher (1991), Khalifa (1997), Onafowaro and Owoye (1998), Taban and Aktar (2008), Husein (2010), Narain et al. (2017), Kumar et al. (2020). Accordingly to this studies export performance and export expansion, are supposed to make several major contributions to economic growth; because exports are one component of the Gross Internal Product of a country; therefore, an increase in exports is followed by increase in the GDP (Do Carmo et al., 2016).

There are some reasons given in support of export promotion. export oriented strategies may promote economic growth indirectly thought: increasing economies of scale, that can be induced by positive externalities from the export activities; the accumulation of foreign exchange, which permits importation of high-quality goods and services, that can be used to expand the nation's production possibilities; increasing demand for the country's output that serves to increase real output (Zang and Baimbridge, 2012); enhancing the diffusion of knowledge and technology, thought interaction with foreign buyers and learning by doing; and generating beneficial externalities from the competition in the world markets. All these effects together multiply the effect of an initial increase of exports on growth.

2- The export structure: does export structure really matters for economic growth?

In investigating the role of export in economic growth, most of previous cross-country and single country studies, focused on exports at the aggregate level, without including the impact of different types of exports. Only few studies have addressed the properties of sectoral exports in spite of its role in explaining economic growth (Juan Ramon, 1990, Greenaway Kylymnyuk, Maliar and Maliar, 2007...) accordingly to these studies, the understanding of exports structure is not only useful to explain differences between countries but also forecast the future economic growth of nations.

Juan Ramon ,1991 investigated how can economic growth of five newly industrialized countries(Korea, Taiwan) be linked to their export growth and structural change in exports .he found that higher share of manufacturing export has led to higher overall productivity growth, due to the large productivity in manufacturing sector ,and its connections the other parts of the economy. This increasing share of manufacturing sector is favorable not only for the development of Korea but also the other newly industrialized Asian countries.

Kylymnyuk et al. (2007) tried to develop a unified theory that explains the main characteristics of the postwar world development experience of poor, rich and growth-miracle countries. Three concluding remarks were found. First, Rich countries continued to expand their economic growth moderately and stayed rich for large degree of time because of their large industrial sector and a relatively small agricultural sector. Second, one of the reasons that explain why the poor countries remain poor and stayed in low income steady state equilibrium for a long time is the specialization of those countries in the production of primitive natural-resource-based goods (such as: agriculture, food, fuel, ore, etc.), and the importation of manufactured goods from international market. Third, some poor countries could change their international specialization by exporting large-scale manufactured goods of increasing sophistication and importing primitive goods, these countries succeeded in convergence into fast growing income countries.

In line with studies that investigated the link between exports structure and economic growth, more modern studies confirmed that, exports components are different in terms of technological advancement, returns to scale and knowledge spillover. And this explains why exports components impact economic growth in different ways (Balaguer and Cantavella-Jordá, 2002), (Cuaresma and Wörz, 2005), (Kurnosov, 2010), (Grancay et al., 2015). The most important message from this literature is that: the economic performance in countries depends on their capacity to change their types of specialization in exports, toward technologically well developed industries. Balaguer (2002), The author has drawn two lessons: first that exports are the engine of Spanish growth, and second that the allocation of resources from primary goods to manufactured and semi manufactured goods exports, was a key process for the prosperity of the Spanish economy during the period 1961-2000. This study concluded that the Spanish export promoting policy should support exports of more efficient sectors. Cuaresma and Wörz (2005) refined the export led growth hypothesis, by including various export sectors that differ in the technology intensity of their production processes. over the period 1981–1997,the authors has confirmed the validity of the hypothesis that states that exports in more technology intensive industries(manufacturing export sectors) have a greater potential for productivity gains than exports in less sophisticated activities(other non-manufacturing sectors such as: primary commodities , utilities, and services).they concluded the need of the developing countries for establishing supportive environment policies such as(training of the labor force, fostering investments),to promote high technology-intensive exports, and hence growth prospects in the long run . Kurnosov (2010) investigated the relationship between trade in sophisticated commodities and economic growth of 18 transition economies accordingly to him, these countries can export both primitive and sophisticated goods and experience moderate growth rate to switch into the rich world areas (range).author concluded the importance of adopting sound policies ,that create better education attainment ,and motivate R&D and the technological spill-over ,to stimulate higher economic growth in the future and strengthen the competitiveness of transition economies. Grancay et al. (2015) in their paper tested the hypothesis that specialization in exports with high sophistication in technology leads to higher economic growth. A positive and significant effect of exports technological intensity on the economic performance was found only in countries with high concentration on primary exports products. This effect was negative for the others non resource based low income countries. The author explained that the differences between this two sub-samples in terms of this effect, is due to differences in the economic environment that determines the concentration on different kinds of exports.

The demand approach can also be used to explain the role of the export composition in the economic growth. Countries that export products that are subject to high international demand may experience high economic growth; whereas those who export other inefficient products, which are inappropriate to the world demand, may suffer from low economic performance.

3- The natural resource curse: what explains the detrimental effect of natural resources?

There are a vast number of literatures that associated the poor economic performance of developing countries to their high dependence to natural resources (the share of natural resources (such as agriculture, minerals, fuels...) exports to GDP). For example: Sachs and Warner (1997) argued that the economic growth is weaker for the countries with high abundance in natural resources, in comparison to economies with little substantial natural resources. Their results showed that during the period of investigation (20 years) the intensiveness of natural resources exports had an adverse effect on the economic growth of those countries. the validity of natural resources curse is was also shown in the study of Sala-i-Martin and Subramanian (2003) in Nigeria and Jalloh (2013) for the case of West African countries (ECOWAS).

➤ Many theoretical and empirical studies tried to understand why the exports of natural resources are not effective to promote the economic performance of developing countries. Prebisch (1950) and Singer (1950) has found out that developing countries specializing in exports of primary sectors , characterized with low technical progress; may suffer from high deterioration in their terms of trade, this in turn will limit economic growth of this countries, and keep them behind industrialized countries (Bloch and Sapsford, 2001). Sachs and warners (2001) explained that the gains from natural resources exports will cause high demand for non-tradable goods, and hence raising their prices and also wages paid in the non tradable sectors. As result the profitability and the competitiveness of manufacturing activities, will be weakened, because non-tradable products are used by the manufacturing sector as an input. They added that manufacturing products are sold in the international market only with fixed price. The decline in the manufacturing activities will bring down the economic performance (EuroEconReview2001.pdf).

Sala-i-Martin, and Subramanian, 2003 explained this natural resource curse is due to weak institutional quality (such as: corruption, waste of resource income and weak government), that Nigeria and most of the natural resources exporters are experiencing.

Accordingly to Gylfason and Zoega (2001) different channels explain the detrimental effect of natural resources. First, when the prices of raw materials and supplies vibrate great transactions in world market, the exports earnings will fluctuate, causing high volatility in the exchange rate. This instability in exchange will in turn create uncertainty which can be detrimental to exports, foreign investment and other variables. In addition, high dependence on natural resources exports limits the opportunity to expand in other productive and high technological level types of exports (such as services and manufacturing products) which can be more effective to boost economic growth. Second, high intensity in natural resources may reduce the opportunities of countries to accumulate human capital, by decreasing the share of education expenditures in GDP and schooling levels at all levels .the low skill labor, low quality in capital included in primary production, and the little positive externalities of natural resources on others sectors, are one of the reasons that explain why exports of this kind of product have a bad effect on knowledge and economic growth. Third, the high focus on natural resources may lead governments to lose prospects of the need of more effective policies for economic growth, such as free trade, bureaucratic efficiency, and institutional quality... Sala-i-Martin, and Subramanian (2003) and Kronenberg (2004) and Jalloh (2013) stated that the high corruption in public sector and social dispute that prevails in natural resources exporting countries this mechanism is another fact that explains why primary production is not favorable for economic growth. Boos and Holm-Mueller (2012) argued that the high reliance of Zambia on cropper products in their exports, and the lack of re-investment of their natural resources rents into physical and human capital, is one of the reasons that explain the lateness of economic growth of this country.

4- The role of export diversification in economic growth

The importance of diversification of exports in the economic growth of a given country has increased much debate in the existing literature. The main focus in these ongoing debates was on whether export diversification is an effective strategy to boost the economic growth of countries. In examining the link between exports diversification and economic growth, most of studies used macro-economic models, into which they tested the relationship between growth of income and different indicators of export diversification.

Al Marhubi (2000) used three measures for export diversification in 91 developing countries over the period 1961-1988, the number of products in exports basket, the deviation of the commodity exports from the world structure, and the normalized Hirschman index. His results suggested that greater export diversification has accelerated the economic growth for developing countries. Funke and Ruhwedel (2001) argued that exports variety is one of the most important channels through which outward export promotion policies can generate economic growth for the OECD countries. Two indicators of exports variety were used; the number of OECD exported products to USA in overall, and the share of secondary manufacturing products in total exports. The study concluded that the diversification of exports matters for the export performance and the economic growth of these countries. Boccoardo and Osorio (2007) plotted a graph that demonstrates the interconnection between export diversification (on the vertical axis, measured by the Herfindahl concentration Index) and per capita income (on the horizontal axis).the authors have distinguished between two types of countries; The first group of countries is lined up to the vertical axis; these highlight countries with high concentration in exports (weak diversified exports). The author argued that export diversification is needed for them to raise their economic development. The second set of countries is situated along the horizontal axis, this category display low and middle income countries with larger export diversification, but with small marginal profit from it. On the authors' point of view, further diversification of these countries into non-traditional (modern) export products is required to achieve higher level of economic growth and to switch into rich countries. Khodayi, Darabi, Khodayi (2014) confirmed the validity of export diversification led- growth hypothesis for developing countries. Affendy et al. (2010) concluded that the diversification of the Malaysian export basket should be the main focus of both domestic and international trade policy makers. Tovonjatovo and Dong (2015) confirmed the same results for the case of Madagascar.

Other authors have made considerable efforts, to distinguish the transmission channels that explain the beneficial effect of export diversification on growth.

- Some authors argued that export diversification affect the economic growth indirectly, throughout the portfolio effect of export diversification structure on the vulnerability of growth (Acemoglu and Zilibotti (1997), al marhubi (2000), Boccoardo and Osorio (2007), Odularu (2009), Khodayi et al. (2014), Justinian Lugeiyamu (2016)). accordingly to this studies the uncertainty coming from some kinds of export sectors ,is detrimental for economic growth; Diversification not only in exports but also in overall economic activities is necessary to overcome these risks, and mitigate the instability of export proceeds and the growth of income (out(2).pdf).

-For Acemoglu and Zilibotti(1997) , diversification have an important role in spreading investment risks across larger portfolio of economic activities, and reducing the uncertainty in the growth process (Was Prometheus Unbound by Chance Risk, Diversifica). Al marhubi (2000) argued that the export instability, resulted from the high dependence of the developing countries on primary exports; has reduced their incentives for investment and increased the instability in domestic demand. This is one of the reasons that explain the delay of economic growth in those countries. In order to stabilize the exports revenues, and bring the economic growth back to these countries; the author claimed that export diversification is required as long run policy. Accordingly to Boccoardo and Osorio (2007), Export diversification can be an important source of income for developing countries, especially those with very limited domestic market size, and high focusing on inelastic demand products in the exports basket (Chandra,_Export_Diversification_and_Competitiveness_in_Developing_Countries.pdf). Odularu (2008) argued that the efforts of ECOWAS (the Economic community of West African states) in exploiting the economies of scale and improving their competitiveness in international trade are very weak, because the export diversification among these countries is very low. Accordingly to

him, the high dependency of these countries on commodity exports exposed them to external shocks by making their export earnings instable. This explains why these countries need to adopt export diversification strategies. The diversification of these countries into manufactured products, will not only generate higher and stable export revenues, but also create new jobs, skills and learning spillover. For Khodayi et al.(2014) , export diversification in developing countries, is an effective strategy to reduce the share of primary goods in the export baskets, to minimize the instability of exports revenues, as well as improving the future levels of economic growth. Justinian Lugeiyamu (2016) in his paper stated that export diversification is considered as an important determinant to explain the differences in between African economies performances. On his point of view, African countries must diversify their exports by reducing their dependence on primary commodities, and increasing their investments in high value added manufacturing sectors. This can help them for enhancing their future economic growth, and to improving their competitiveness in the world market.

- One of the most channels through which export diversification might positively influence economic growth is the knowledge spillover externalities generated by the production of new products. For Al Marhubi, 2000, the knowledge externalities described by the new methods of production, the encouragement of learning by doing, the attainment of new organizational and entrepreneurial skills, and the stimulation of capital accumulation in different sectors of the economy are the main channels which explain the effectiveness of export diversification strategy in improving the long run economic perspectives in a given county. Agosin (2007) in his attempt to show the causal relationship running from export diversification to economic growth of income , stated that countries whose comparative advantage is limited to close scope of low technological products , are growing slowly ; whereas those who had made considerable effort to widen their comparative advantages , has experienced faster economic growth. Accordingly to the author, there are two discovery mechanisms that can be specified, in the process of producing new goods; the cost discovery channel and the foreign demand discovery channel .first, when countries discover that the technological innovation of producing new goods is costless, they can easily imitate it, and increase the range of their comparative advantages, this in fact will have a positive externalities on their economic performance. Second: domestic producers, who produce for the home market, may discover that there is high demand for their products in the international markets; exporting new products with high external demand will have an additional growth enhancing benefits. One of the most advantageous of the export diversification, Accordingly to Misztal (2011) the integration of new commodity collection into the present structure of commodity exports can stimulate not only the creation of new sectors but also the expansion in the existing sectors of the economy. This in turn, will increase the economic performance of countries. Kehoe and Perri (2002) indicated that the enlargement of comparative advantage is seen to be one most important driving force behind economic growth. When entrepreneurs take into account consumer variety preferences, they will produce larger number of new high quality goods, the positive externalities and the increasing returns of such kinds of products, will generate sustained economic growth.

- Another process of illustrating the dynamic effect of export diversification on economic growth can be shown up in the improvement of total productivity. This process was explained by authors from the endogenous growth model. This model provided a lot of arguments that favor the beneficial role of export diversification. For example, Romer (1990) considered export diversification as an important factor that improves the efficiency of factors of production. He argued that diversification enable policy makers to design for the production of new goods. When these goods are used for the production of output, the stock knowledge will be increased; as a result the productivity of human capital will be improved. The extension of human capital in given country may accelerate its economic growth. The author added that international trade policies can play significant role to speed up this process. Matsuyama (1991) focused on the feed-back effect that some kinds of industries have on others, to explain the advantage of export diversification. Accordingly to him, the learning by doing and the technological advancement in the manufacturing sector; plays a major role in stimulating the productivity in the agriculture sector, by providing costless inputs (such as fertilizer , pesticide, drainage pipes, and other equipments) that the

agriculture sector needs for production. Mayer (1996) asserted that the policy makers efforts to foster structural diversification, has an important role in stimulating accumulation of human capital. The more diversified exports basket in given country, the higher is the accumulation of human capital, the more will the productivity and economic growth be enhanced. This positive effect can be explained, through the improvement of learning rates and the introduction of new technologies, motivated by the introduction of new activities. In Karingi et al. (2010), it was shown that: as countries switch their economies from high concentrated to more diversified exports, their total factor productivity improves. The authors used the least squares dummy variable estimation (LSDV) method, to estimate the contribution of both labor and capital to the growth of GDP in African countries, then they calculated the total factor productivity (measured by Solow residual or the technical progress. After that, they used another model , to see how their estimated total factor productivity is affected by export diversification (measured by the normalized Hirschman index of exports concentration), and other explanatory variables (such as : the level of secondary school enrolment, trade openness , a measure of financial development, the proportion of money supply to GDP, and conflicts). The authors have found that the total factor productivity contributed positively to the growth of GDP in African countries, but this contribution turned to be negative in 1990s. The results of this study have also shown that the total factor productivity was negatively related to exports concentration in these countries (or positively impacted by their exports diversification). This study concluded that African countries can reap their low level of total factor productivity by heightening diversification of their exports, and hence improving their future economic growth.

IV-Conclusion:

This article aimed to investigate the economic diversification -economic growth relationship by taking into account: 3 channels: export led growth hypothesis, export composition and export diversification.

The finding of the most studies with respect to the first channel suggested that exports promotion can be an effective strategy for economic growth. Exports generate foreign exchange to import high-quality goods and services and encourage interaction with foreign buyers and which stimulates knowledge and technology spillover and learning by doing. The theories of the second channel argued that the differences between the economic performances between countries are determined by their export structure. The poor countries can converge into fast growing income countries by exporting in high technology intensive sectors (such as manufacturing sectors) which have large potential for productivity gains. In contrast, poor countries recorded low economic performance because they export inefficient products with less sophisticated industries (such as, natural resources). With respect of the researchers of the third channel, developing countries can further accelerate their economic growth by exporting a large variety of exports. Different arguments are in favor of exports diversifications strategies. These strategies reduce uncertainty coming from some kinds of export sectors and stabilize export proceeds, and hence economic growth. The diversification of export baskets also influences positively economic growth by stimulating knowledge spillover externalities provided by the production of new items. The introduction of new products also increase the learning by doing and the adoption of new technologies; and hence, an improvement in total productivity. For this reasons, the diversification in developing countries should be the main focus of both domestic and international trade policy makers.

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