



Analysis of Export Performances of Newly Industrialized Countries (NICs): A Lesson for Developing Countries

Adedina Lawrence Olusoga¹, Yusuf Sulaimon Aremu² and Salako, M.A.³

^{1&3}Department of Business Administration, Moshood Abiola Polytechnic, Abeokuta, Ogun-State, Nigeria

²Department of General Studies, Moshood Abiola Polytechnic, Abeokuta, Ogun-State, Nigeria

Abstract: *This paper used quantitative analysis with the help of pure descriptive statistics to examine the export performance of Newly Industrialized Countries; the lesson for Developing Countries. The researchers selected Four NICs and four African countries based on the data available from the World Bank Development Index (2013). The NICs considered for the study are; China, India, Brazil and South Africa. While Ivory Coast, Gabon, Egypt and Kenya were selected in Africa based on data availability and geographical representation. The study reveals that the same peculiar hindrance factors that are obstacles to African countries' export performance and economic success in the long run also applies to NICs, but they were able to overcome it and drag themselves out of the poverty net. The necessary policy prescriptions were recommended by the researchers to facilitate the economic progress of developing countries towards the end of "catch-up" phase in order to achieve the impressive export performances that will lead to sustainable economic growth and development.*

Key words: *Export Performance, Newly Industrialized Countries, Economic Growth*

1. Introduction

Newly Industrializing Countries (NICs) are developing nations that are among the most dynamic and economically robust nations in the world today. These economies are not without the various macroeconomic constraints witnessed by other developing countries around the world. But, with their giant stride measures in pursuing economic objectives led to the success story by fully employing their economic potential in the international market to stimulate and sustained their growth. Export is the main factor for the growth of economic size (Yurtkurf and Bayramo, 2012). The neoclassical theory argues that there is a strong relationship between export expansion and economic growth. Export expansion is one of the main determinants of growth

(Fashola, 1998).

Export growth is often considered to be one of the determinants of the production and employment growth of an economy. As documented by Ademola (1999) and Maizels (1968), the most appropriate export promotion is likely to be that in which export of manufactured goods is expanded, this is because the income elasticity of demand for the main agricultural exports of the developing countries has been estimated to be less than unity. This is further reinforced by Michael and Stephen (2006) relying on primary products for most of the LDCs export earnings, with the notable exception of petroleum exports and a few needed minerals, primary product exports have grown more slowly than total world trade. Can this be the main hindrance of economic fortune from international trade (export) by the African economies? This forms one of the questions that this paper will answer having recognized the need for the African countries to learn a lesson from these NICs.

It is noteworthy that after World War II, China assumed an economic strategy that included intentional insulation from the world economy and industrialization. As the country was falling far behind Western countries, however, it began reforming its closed and centrally planned economy in 1978. Since reforms, growth has accelerated and in the 1980s and 1990s GDP growth rates were the highest in the world, 9.9 percent, and 10.3 percent respectively, up from 6 percent in the 1970s (World Bank, 2004). According to Acemoglu, China would never be able to achieve the current economic miracle with a closed economy, relying mostly on its own domestic market as documented by Carlosand (2011).

In addition, up to the early 90s, Brazil was a closed economy. Economic liberalization in the early 1990s considerably reduced Brazilian import tariffs and exposed the economy to global competition. The liberalization of the trade system combined with a tight monetary policy and a fixed exchange rate adopted in 1994 to lower inflation had harsh impacts on Brazil's trade balance. It was after 1999 when successive international shocks and pressure upon the country's international reserves led Brazil to abandon its fixed exchange rate for a flexible one that the economy started to pick up. In the light of this, more Brazilian firms began looking at external markets and developing international business strategies. In 2002, a new monetary crisis depreciated the exchange rate by 53% over a 12-month period, giving even more incentive to Brazilian exports. In 2003, Brazil accomplished its first trade surplus since 1992 and export records have been successively broken ever since and contributing significantly to the global export.

Furthermore, it's worth mentioning that, due to the occurrence of two major oil shocks in the seventies, India's overall trade, however, experienced a setback between 1979 and 1981, as the import cost of crude oil increased more than double, following the oil-price shocks. The Indian rupee steadily appreciated by almost 20 percent between 1979 and 1986 and had an adverse impact on its export competitiveness. However, the situation reversed in 1987 with a gradual decline in the value of the rupee, though it remained overvalued till 1991 (in terms of the real effective exchange rate). The liberalization of the Indian economy following the balance of payment crisis resulted in major policy and exchange rate changes, which had a favorable impact on Indians trade. The Share of exports in Indian GDP increased from 7.13 percent to 23.48 percent in 1990 and 2008. Even though, the export sector plays a significant role in the

domestic economy by contributing close to 25 percent to India GDP (in 2009).

This paper takes a fresh look at the export performance of the NICs nations with respect to their world export performance. It will also point out why the various economic reforms pursued by the African countries especially Nigeria has not yielded the expected result, considering, in particular, the power sector that has the capability of moving the economy and stimulating the export performance in particular. However, to what extent the African countries can learn from the economic strategy employed by NICs to achieve their sterling export performance to lift their economy to the enviable position shall be unraveled by this paper. Additionally, our investigation aims at drawing conclusions that could be useful for the analysis and serves as lessons to African countries. The paper will also be useful for policy makers by serving as the reference from where they can adopt the ideas. The study is conducted with the employment of purely quantitative analysis using the descriptive statistics and considered data spanning 1986 and 2012.

The rest of this paper is structured as follows: In Section 2, the paper presents a brief theoretical argument and review of empirical literature followed by a discussion of the brief methodology used in section 3. The empirical evidence is presented in section 4 while the summary and concluding remarks are outlined in section 5.

2. Review of Literature

2.1. Theoretical Argument

Trade optimism tends to underplay the role of international demand in determining the gain from trade. Instead, they focus on the relationship between LDCs trade policy, export performance, and economic growth. They argue that trade liberalization (including export promotion, currency devaluation, removal of trade restrictions and generally getting the price right) generate rapid export and economic growth because free trade provides a number of benefits (Michael & Stephen, 2006). The following are the economic benefit from the argument:

It promotes competition, improved resources allocation, and economies of scale in areas where LDCs have a comparative advantage.

It generates pressure from increase efficiencies, product improvement, and technical change, thus raising factor productivity and further lowering costs of production.

It accelerates overall economic growth, which raises profit and promotes greater saving and investment and thus further growth.

It attracts foreign capital and expertise, which are in scarce supply in LDCs.

It generates needed foreign exchange that can be used to import food if the agriculture sector lags behind or suffers droughts and other natural catastrophes.

It eliminates costly economic distortions caused by government interventions in both the export and foreign- exchange markets and substitutes market allocation for the corruption and rent-seeking activities that usually result from an overactive government sector.

It enables LDCs to take full advantage of reforms under the WTO.

Trade optimism argue, finally, that even though export promotion may at first be difficult with limited gains especially in comparison with the easy gains of first-stage import substitution- over the long run, the economic benefits tend to gain momentum.

2.2. Empirical Review

The export successes of recent decades, most especially among the Asian Tigers and other NICs have provided the primary impetus for empirical investigation. Carlos P. and Joao A. (2011) documented the positive correlation between the qualities of institutional safeguards and FDI. In other words, foreign investors would prefer to allocate their money in countries with higher governance quality. China has attracted more FDI in gross terms. It is important to bear in mind that these three important governance indicators voice and accountability, political stability and control of corruption are the important aspects in assuring a safer environment for investors who play the significant roles in promoting export. It is also assumed that good institutions and quality of governance are crucial aspects in helping developing countries attract foreign direct investment (FDI) conducive to growth. Although the literature has suggested that it is difficult to establish a robust causal relationship between the degrees of FDI and output growth performance, several developing countries with greater financial integration have also experienced higher rates of economic growth. In the particular case of China, foreign-invested firms have contributed significantly to China's impressive export expansion and to China's overall economic growth. Carlos and Joao (2011) in *Brazil and China: South- South Partnership or North-South Competition* documented that there are advantageous trade relation and a pattern of growth imbalances and asymmetries in international trade flows that are more favourable to China than Brazil.

Renato and Maurico (2000) in the study titled *Exports and Trade Finance: Brazil's Recent Experience* pointed out that trade liberation- by removing the distortions of the old regime, allowed the exports to play a critical role in Brazil's economic development, it stressed further that it created the necessary conditions for building a market-friendly trade finance system, addressing the terms in long-term finance and insurance.

Michael and Funke (2001), their research study titled *empirically investigated the role of product variety in export performance*. The study calculated direct measures of export variety and estimate pooled annual export equations for 10 East Asian countries. The study revealed that producing highly differentiated export goods give a competitive advantage which allows one to earn more from the trade.

The study conducted by Uzochukwu (2012) revealed that exports improvement in the manufacturing sector, especially through the learning process, is a necessary condition for growth and real development of less developed and developing economies in Sub-Saharan Africa. The study suggested further investment in human and physical resources as well as Research and Development (R&D) to increase Total Factor Productivity (TFP), which will

increase efficiency and hence exports.

Bilge (2010) in its study titled *Industrial Upgrading and Export Diversification: A Comparative Analysis of Economic Policies in Turkey and Malaysia*, it put forward that the flow of international trade influences the patterns of growth divergence among countries through differences in the types of goods and services countries produce and in the potential for export growth in international markets for these goods and services. Those specializing in innovation-intensive commodities with higher technological content tend to experience dynamic gains from trade—benefiting from Schumpeterian rents retained in a rising trend of terms of trade as well as higher rates of growth in their export volumes and per capita income levels.

Martin (2005) reveals the relevance of the taxonomies that classify exports by the technological intensity in this context. It is shown that specialization in high-tech exports typically does not appear in tandem with indigenous technological capabilities in developing countries. It is further confirmed in an econometric framework that while domestic technological capabilities have some influence on export performance in electronics, it is the propensity to import electronics components that account for by far the largest proportion of cross-country differences in specialization in electronics exports.

Robert and Arslan (2009) in the paper titled *Export-led growth, real exchange rates and the fallacy of composition* opined that for most developing nations the path toward sustainable long-run development must be inward looking more than the previous period during the reign of export-led strategies- the strategies produced notable success stories among the Asian-tigers, it further concluded that it is not practicable for all developing countries to emulate their success.

Niels (1997) stressed in his work, the role of government by contributing positively and significantly to growth through the means of comprehensive intervention and promotion of export-oriented policy as part of industrial policies which largely contributed to economic success of East-Asian as a against the earlier notion of the neoclassical model that argued that growth in East Asia was the result mainly of the market mechanism and the emphasis on export promotion.

Rodrik (2000) concludes that China is an outlier in terms of the overall sophistication of its exports; its export bundle is that of a country with an income per capita level three times higher than that of China. China has been able to export high-productivity goods much at divergence from what a developing labour-abundant economy would normally be expected to achieve. There is a crucial difference between how much a country exports and what it exports. The extent to which Chinas sophisticated export basket has been influenced by its liberal policy regime is not apparent. China has, indeed, been adopting the policies of promotion and protection similar to what the other newly industrialized East Asian countries had done. China, in fact, has experienced extremely rapid growth in sophistication of its export basket since the early 1990s.

Miranda (2001) posited that Brazil positioned itself among the world leaders in some sector. Agribusiness in Brazil makes up to half of total exports, corresponding to approximately 30% of the Gross National Product, and employs 37% of the economically active population in the country. Brazil is the world leader in the sugar industry and the largest coffee and orange

juice producer; it is also the main exporter of tobacco, soybean, and beef; and one of the leading exporters of shrimp.

Thirlwell (2006) documented that India has followed a different trajectory. Following the economic reform in 1991, the Indian economy made a transition from being agriculture-driven to being considerably service oriented. The manufacturing sector, which had been the prime engine of growth for countries such as China or South Korea, was not as strengthened in India and its development was constrained by a combination of factors. As a consequence of this, the Indian economy was not able to fully exploit its potential comparative advantage in the sector.

However, merchandise exports comprise a major portion of India's exports to the world, Additionally, India was able to seize the opportunities offered by the growth in foreign demand, arising from the Y2K-related requirement for IT skilled professionals and later followed by large-scale off-shoring of business processes. For India, services have grown to be a major contributor to its world exports, some of its key competitors like China, Brazil and South Africa continue to earn close to 90 percent of their export revenue through merchandise exports alone. The above review reveals that any country irrespective of its output nature can gain substantially from the export as long as the country is not hesitating to diversify and involve in export manufacturing product as this is evidence in the case of Brazil. The services sector has registered remarkable growth and contributed significantly to Indian's GDP, the manufacturing sector has grown at a comparatively slower pace while IT services and electronics devices production happened to be the strength of India in the global market. The opportunity of the large labour force has been the major promoter of China's export. The diversification of trade; good governance practice and successful reforms play a prominent role in achieving export and growth objectives. Brazil Agribusiness specialization in the world market is contrary to the notion that Agric product (soybean complex, beef, chicken) is not competitive at the international trade due to nature of its elasticity. The aircraft, automobiles and auto parts are prominent components of the Brazil export which indicated a form of diversification, not relying wholly on agricultural product.

3. Methodology

The study employed the quantitative analysis dimension with the help of pure descriptive statistics to analyze the export performance of NICs. The paper used annual export data (Export @ constant 2000 US) of the NICs to measure their performances to the world export. At the same time, the NICs export contribution to their various GDP (Export as a percentage of GDP) was also considered. The contributions of selected African countries to the world export and to their respective GDP are also examined. The data were sourced from World Bank Development Index (WDI). This study examines the NICs which comprise China, India, Brazil and South Africa.

These countries were selected based on data availability and their similar socio-economic characteristics with the African countries from which any policy recommendation and export strategy that are workable to them can be prescribed to African countries. Four African countries were selected for the study on the basis of data availability and geographical representation; the African Countries are Ivory Coast, Gabon, Egypt and Kenya.

4. Analysis Export Performance of NICs

4.1. Performance of NICs Export in the World Export

Frankly speaking, the export performance of South African is not significantly different to other African countries. The reason for classifying South African as one the NICs might be due to its economic performances in other sectors as its capacity, contribution or performance to the world export is not spectacular. It is obvious that before 1994 the country was experiencing the gradual growth rate in its export performance to the world. Starting from the late 90s, South Africa started experiencing the reduction in its world export performance (0.53% in 1998 to 0.32% in the year 2013). The nonperformance of the export sector might be due to other factors not resulting from the apartheid crises experienced in the early 90s. The reason for the poor performance might not be unconnected to the setback experienced between 1979 and 1981 due to the oil price shock. The South African economy was the least robust economy among the NICs considered under the study.

Indian is another growing economy that made use of the advantage of its IT and potential to accumulate resources from the world. It was documented that the kind of reform that Indian pursued was not really impressive to the world but has the significant effect in its Economic growth (Michael, 2000). Indian designed economic reform was basically services oriented unlike the one pursued by other Asian Tigers which are manufacturing in focus. The country in addition to the IT and other services-oriented nature of its export; it also diversified to the agriculture product, textile product in its export. India export performance at the world level is not so impressive like China, but it's a bit better than the Brazil and South Africa. Its export performance at the global level was below 1% from 1986 and 2003. Not until 2004 that the country started recording impressive growth contributing almost 2% to the world export as at 2000.

In the world market, Brazil export performance has not been so impressive despite the diversified nature of the export. This problem may be due to the aforementioned challenges; it was only in 1993 that the country contributed 1% to the world market in term of export while its contribution to the world trade was between 0.79% and 0.95% in the subsequent years. It is not encouraging to find out that the world export performance of Brazil has been diminishing.

Share of NICs Export in the GDP

Despite the unimpressive performance of Brazil in the world export, the contribution to its GDP is of significant proportion. Surprisingly, the contribution of South Africa export to its GDP is even greater than the contribution of other NICs like Brazil and Indian. It is revealed that over the 2 decades ago South African Export doesn't contribute less than 21% to its GDP till 2013. Not until recently that China export turned out to be an outlier among the countries considered under this study. Exports contribution of China to its GDP is the most impressive.

Indeed, it is an outlier. China's economic performance at home is impressive and cannot be over emphasized. Having examined the magnitude of China GDP, it is glaring that the export of the diversified products is the brain behind the viable China's economy. Since 1994, the export performance of China to the GDP is between the range of 20% and 25%. The export performance of China between the year 2000 and year 2008 ranges from 25% to 38 % as the

proportion of such huge GDP value.

The Brazil's export contribution to its economy cannot be ignored. It has been increasing its contribution to the GDP at consistently increasing rate. In 1989, Brazil exported 4,897 types of products, while in 2010 this number had increased to 7,242, representing a growth of 2.5% per year and thereby suggesting the existence of numerous discoveries. A careful analysis of Brazilian export data shows that the country exports a significantly diversified range of products. Brazil sells agricultural products (soybeans, fruit, sugar, coffee etc.), chemical products, pharmaceutical products, aircraft, automobiles, home appliances, etc. Though, its contribution to GDP increased from 8% to 10% between the period 1986 and 2003. It also picked up again from 1999 to 2005 to contribute to the GDP as high as 15% and 16%.

The Indian export performance to its GDP was between 5% and 12% between 1986 and 2000. Ever since then it has been contributing significantly to the GDP of such huge magnitude. The consistent contribution from 2001 to 2011 of between 12% and approximately 25 % was an impressive performance.

In fact, this paper serves as eyes opener to discover that countries might be generating the larger percentage of its GDP from the exportation of only one to two products and be recording higher performance of the export to GDP meanwhile the GDP itself is not impressive and robust. This has two economic implications to countries in Africa especially those that depend on oil as the main source of generating revenue; when the GDP itself is small and the export is contributing larger percentage to its value, this implies that the economy is not diversified and depends substantially on revenue from the outside world which can cause the country to be strangled in case there is an external shock.

Growth Rate of NICs Exports

The growth rate of export is another export measure indicator that can be used to measure the export performance. In the year 1986, 1990 and 1991 South Africa experienced negative export growth rate, this might be traced to the political problems experienced in the period as it has been established that bad political climate and bad governance can directly and indirectly affect negatively the export performance through poor performance of real sectors, cease in the flow of FDI etc. It is observed that the growth rate doesn't exhibit any consistent pattern of direction, it is random in nature. It was only twice both in the year 1993 and 1995 that the growth rate attained 10 percent. In fact, this might be the cause for its poor performance in the world export.

The China export growth rate has been very robust, besides the year 1986, 1989 and 2009 when the country experienced negative growth. In the year 1994, 2000, 2002 and 2003, the country's growth rate is impressive as it recorded the growth rate of 28% percent. The export growth rate of India has been impressive apart from the two years that it recorded negative growth which were the year 1997 and 2009. Another impressive one also came up in the year 2010 when the country recorded approximately 23% growth rate. Brazil experienced the negative growth rate in the following years 1986, 1990, 1995, 1996 and in the year 2009. All the NICs considered under this study experienced the negative growth rate in the year 2009. The reason for this might not be unconnected with the economic meltdown crisis. Brazil's highest

growth rate of its export was recorded in the year 1992 which was 16% growth rate. In the year 1989, 1994, 1998, 1999, 2002 and the remaining years apart from 2010 the country recorded less than 10% growth rate.

Conclusively, the performance of the NICs both in global export contribution and performance as the proportion of GDP i.e. their contributions to the GDP and their respective growth rate are impressive that any ambitious economy can emulate.

4.2. Overview of Selected African Countries Export Performance

Performance of African Export in the World

The performance of African export in the world is not impressive at all. It was recorded from our research that during the year considered for the study it was only Egypt that recorded consistent performance between 0.2% and 0.3% from the year 1986 to 2005, the country export performance in the world from the year 2005 till the present period as been approaching 0.5% of the world export.

All the other countries considered for the study contribute less than 0.1% to the world export. The highest contribution to the world export by the Ivory Coast was 0.1% in 1986. The highest export contribution of the Kenya to the world export was 0.067% which was last recorded in 1993 and the latest performance at the world level are around 0.04 %. Likewise, Gabon highest export performance in the world export was 0.78% recorded in 1991, ever since then their contribution at the world export performance has been falling.

The African countries performances in the world export are not impressive. This conforms to the a priori expectations that African cannot compete in the international market due to the fact that their agricultural export which they depend on have inelastic foreign demand. Moreover, the developed countries that demand these primary products are making provision for the alternatives. The export contributions of African countries to their GDP are very high relative to the NICs, this is as a result of monoculture pattern of African economy where they rely solely on their generating of the revenue on natural resources like crude Oil. For instance, Gabon recorded as high as approximately 60% of its GDP which was contributed by the export.

5. Conclusion and Recommendation

In the course of examining the true performance of NICs export, it was revealed that the so called NICs are sharing the same economic characteristics with the African nations. But, the study unraveled the fact that these countries at their earlier stage of development were also depending on Agricultural products as the means of their export supply in international trade.

The study revealed that these so called NICs eventually embarked on different developmental strategies both Agricultural and industrial reforms were implemented to circumvent the poverty characteristics of the developing nations. Consequentially, it is now glaring that African monoculture is not an excuse for their poor economic status relative to other emerging economies. Inability of African countries to compete in the world market in order to boost their economic growth through export expansion is due to their failure to implement successful reforms and economic policies which rather remain on paper; the institutional framework that the NICs were able to put in place has been lacking in most African countries; corruption has become the way of life to the point of institutionalizing it and even

incorporating it to developmental models; inability to develop the human resources through sound and vibrant educational system to make them competitive at the global level; inability to attract the require FDI to augment the limited domestic resources available in order to promote export performance that will lead to sustainable growth and development of African countries.

5.1. Lesson for Developing African Countries

It is worthwhile to emphasize that the challenges bedeviling African countries export performance and economic success were also peculiar to the NICs. But, these obstacles were effectively overcome by the NICs. As a result of this fact, the lesson for Africa is to embark on the measures to overcome these challenges by strictly adopting the policy measures prescribe by the researchers below:

Good institutions and quality of governance are crucial aspects which should enthrone transparency, responsibility, participation and Accountability

Attract foreign direct investment (FDI) and channeling them towards achieving greater productivity, impressive export performance, and ultimately achieving sustainable development

Rapid industrialization, increased trade openness and exports, and gradual liberalization of financial markets should be pursued enthusiastically.

Embrace measures to bring about a drastic reduction in corruption at every level.

Human Capital Development through sound, vibrant and productive (technical & vocational) educational system ensures deregulated labour markets to enhance labour mobility.

Ensure successful reform in the agricultural sector to contribute substantially to the reform and expansion of the manufacturing sector

Diversification of economy base of the country.

References

- Carlos, P. and João, A.C. (2011). Brazil and China: South-South Partnership or North-South Competition? Foreign Policy at Brooklyn.
- Renato and Maurico (2000). in the study titled Exports and Trade Finance: Brazil's Recent Experience.
- Michael, F. and Ralf, R. (2000). Export Variety and Export Performance: Empirical Evidence from East Asia. *Journal of Asian Economics*, 12 (2001): 493–505.
- Uzochukwu A. (2012). Manufactured Exports in Sub-Saharan African Economies: Econometric Tests for the Learning by Exporting Hypothesis. *American International Journal of Contemporary Research*, 2(4), April 2012.
- Bilge E. (2010). Industrial Upgrading and Export Diversification: A Comparative Analysis of Economic Policies in Turkey and Malaysia. Bread Working Paper No. 266 June, 2010.
- Martin Srholec (2005). High-Tech Exports from Developing Countries: A Symptom of Technology

Analysis of Export Performances of Newly Industrialized Countries (NICs): A Lesson for Developing

Spurts or Statistical Illusion? Centre for Technology, Innovation and Culture (TIK), University of Oslo.

Todaro P. & Stephen C. (2006). *Economic Development* (9th Ed.). England: Pearson.

Robert A. B. and Arslan Razmi(2009). Export-led growth, real exchange rates and the fallacy of composition: Forthcoming in Mark Setterfield (Ed.), *Handbook of Alternative Theories of Economic Growth*, Northampton, MA: Edward Elgar.

Niels Hermes (1997). *New Explanations of the Economic Success of East Asia: Lessons for Developing and Eastern European Countries*: CDS Research Report No. 3.

Bela Balassa (1984). *Trade between Developed and Developing Countries'*: The Decade Ahead