Full Length Research Paper

# Nigerian foreign trade policy: Its impact on non-oil exports

### John E. Ezike\* and Samson Ogege

Department of Finance, University of Lagos, Lagos State, Nigeria.

Accepted 19 April, 2012

The paper sets out to examine the impact of trade policy on Nigeria non-oil exports. It specifically seeks to ascertain the effect of trade policies on non-oil exports in Nigeria as well as the performance of the non-oil export sector over the period 1970 to 2010. Nigeria's data set from the CBN statistical bulletin volume 18, (2009) and the American reserve bank during the period 1970 to 2010 were used. It employed both correlation analysis and least squares techniques to test the effect of trade policies on non-oil exports in Nigeria. The findings show that there is a negative relationship between trade policies and the non-oil sector in Nigeria. Based on the findings, it was recommended that the nation should diversify rather than concentrating on the oil sector.

Key words: Trade policy, non-oil exports, import substitution.

### INTRODUCTION

Nigeria is endowed with various kinds of resources needed to place her amongst the top emerging economies of the world. Unfortunately, the nation has not adequately benefitted from the economic prosperity expected of a nation so richly blessed.

Ironically, global economic indices from reputable international organisation have consistently categorized Nigeria as an economically backward state. For instance, in 1995, the UNDP human development Index ranked Nigeria as 164<sup>th</sup> and 141<sup>st</sup> amongst 197 nations with low per capital income and "low quality of life" respectively (World Bank Development Report, 1997)

Through export promotion for instance, Nigeria can manage her resources to create enough wealth and improve the quality of the economy *vis-a-vis* standard of living and also enhance her global economic rating. An appraisal of Nigeria 's export promotion policy indicates that there is the need to review aspects relating to non-oil exports so as to harness the vast potential hithertolargely underutilised in that critical sector. The discovery of oil and the realisation that foreign exchange could comparatively be easily derived therefrom relegated attention to the non oil sector to the background. As at 1996, crude oil constituted about 97.4% of total export earnings while non oil exports accounted for only 2.6% (Yesufu, 1996).

It could be said that consideration was not given to the volatility of the oil market, its diminishing nature, the security implication of a monolithic economy and the instability in the oil producing region, the over reliance on oil as the major revenue earner for the economy. Recent trends in the international markets and the restive activities in the oil producing areas encouraged this study with a view to highlighting the weak links in Nigeria's nonoil export policy.

The growth of Nigeria's non-oil exports has been sluggish in the post independence period. It averaged about 2.3% during 1960 to 1990 but in relative terms, declined systematically as the proportion of total exports fell from about 40% in 1970 to about 2% in 2006. In addition, the spread of the non-oil export items experienced considerable decline in the period under study. Although many factors may have combined to

<sup>\*</sup>Corresponding author. E-mail: john\_ezike@yahoo.com

explain the general adverse development, the trade policy of the country has frequently been identified as a major contributor.

Nigeria adopted import substitution trade strategy immediately after independence and export promotion strategy was later ushered in as part of the structural adjustment programme. Over the years, Nigeria has applied several measures of trade protections as a means of consolidating her trading position. These trade policies have to some extent impacted on the performance of the Nigeria non-oil export (Appendix 2).

The aim of this study therefore, is to critically analyze the effect of trade policies on non-oil exports in Nigeria over the period 1970 to 2008. The study intends to provide answers to questions such as; how government trade policies affect non-oil export, what are other important determinants of the performance of non-oil export amongst other questions.

The scope of the study is limited to the financial years between 1970 and 2010. It is concerned mainly with the trade policies and the determinants of non-export and various factors affecting import in Nigeria within those periods. The study is organised into five parts. Following the introduction part is the literature review and theoretical framework. It also discusses the methodology and other relevant issues while results presentation and analysis as well as concluding remarks are addressed in the concluding part respectively.

# LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Over the years, nations have articulated various policies on important matters of state such as defence, health, economy and education for the advancement of their countries. Recent developments around the world have also proved that a country's standing in the committee of nations largely depends on the country's level of economic development.

It is in realization of this fact, amongst other factors that Nigeria has over the years formulated a number of policies to enhance the nation's development. One of such policies is trade policy which was exposed in a number of studies (Oyejide, 2002; Kruger, 1992; Oyinlola, 2005).

Dornbusch (1980) in his study of a small open economy showed that trade policy directly affects the domestic price of each tradable good in relation to the other through general equilibrium interactions and the domestic prices of importable and exportable in relation to home goods. Because of these general equilibrium interactions, the real effects of trade policy may differ from those intended by policy makers when viewed from the perspective of their impact on relative rather than nominal prices.

In particular, it can be shown analytically, that protecting anyone sector through trade policy penalizes other sectors and that the degree of damage imposed on these other sectors depends on the substitution relationships in production and consumption. Thus, an attempt to protect an import-competing sector through import tariffs and other import restrictions may generate significant and unintended negative incentive effects on the unprotected sectors (Oyejide, 2007).

Tokarick (2006) and Oyejide (2007) argued that import restrictions act as tax on exports through at least two key channels. First, import restrictions create a disincentive to exporting activities by directly raising the domestic price of imports relative to that of exports. Second, import restrictions discourage exports by raising the price of imported inputs and domestic intermediate inputs that are used in the productions of export products. This second channel may be further elaborated as follows. Tariffs on imports result in negative rates of protection for exports since the nominal rate of protection for their output is typically zero while the protection applicable to imported intermediate inputs is usually positive. Thus, for a given domestic export price, tariffs on imported intermediate inputs increase the cost of producing export goods and, therefore, will reduce their profitability and tend to decrease the output of exportable.

Rajapatirana (1995) found empirically that the negative impact of import restrictions on manufactured exports was much more significant through the second channel. In particular, import restrictions negatively affected the availability of imports that were often critical to the production of manufactured export products. Hence; in general, it was found that import restrictions had a significant negative effect on manufactured exports while their liberalisation had a positive effect.

The assertion of a strong influence of trade policy reform on export performance in developing countries has remained largely unresolved in the literature. The argument is based on whether trade liberalization has led to positive or negative export performance. While some studies have found a positive association between trade liberalization and export performance, some other studies have also found little empirical evidence to support a link between trade liberalization and export performance.

# TRENDS IN NIGERIA'S NON-OIL EXPORT POLICIES: PRE-INDEPENDENCE ERA TO 1992

In the pre-independence years, the marketing board

system was adopted by the colonial administration to ensure regular supplies of raw materials to factories in metropolitan Britain in particular and Western Europe in general.

The system was adequate, as machinery for the effective and efficient marketing of Nigerian farm produce to the outside world, (Itegbe, 1989). It indeed helped to boost farm incomes, improved the livelihood of the peasant farmers and above all, assured and enhanced government revenues especially needed for acquiring the country's essential import needs.

The marketing board grew into a formidable platform for the negotiation of profitable deals on a comparable term with the more experienced and more efficient foreign firms and multi-nationals with whom the Boards had to invariably conclude substantial export sales contract and also ensure prompt repatriation of proceeds. However, inspite of the positive contributions of the export trading system, Itegbe (1989) noted that the system was bedevilled by numerous export constraints such as export licensing.

Fagbenro (1996) are however of the view that the marketing board policy was meant to serve the British interest exclusively in that its articles provided for the supply of raw materials to British factories and check diversion of such produce to other European countries. With the attainment of independence, such a policy was bound to collapse, he stated.

The shortcomings of the marketing board system gave rise to the establishment of the commodity boards in 1977, Itegbe (1989). The commodity board was to foster uniformity and stability in prices for all export commodities throughout the country. The measure however did not stop the downward trend in the volume of Nigeria's export of agricultural commodities.

According to Igbani (1981), this downward trend in agricultural export was because the root problem, being diminishing returns from agricultural productions, remained untackled.

However, Itegbe (1989) was of the view that the monopoly enjoyed by the Commodity Boards constituted some degree of disincentive to export-oriented investments. He further stated that the system did not allow for the rapid expansion of the processing industry to allow for the exportation of value added products and therefore higher export earnings. Consequently, by the end of the seventies, export of non-oil commodities declined to an insignificant figure of about 4.4% of Nigeria's total export value.

Between 1976 and 1983 two policies on agriculture were launched to encourage massive participation in agriculture for self sufficiency and exports, Abimboye (2009).These are the operation feed the nation (OFN), initiated in 1976 to1979 and the green revolution programme that operated between 1979 and 1983. He observed that except in name, there was no difference in the aims or contents of these two agricultural policies.

The twin objectives were to boost local crop and fibre production through introduction of high yield varieties of grains and improved management techniques. The improved outputs envisaged were to cater for domestic needs and provide enough for exports. The impacts of these programmes on Nigerian non-oil exports were however never felt. Abimboye posited that politicians cornered the bank loans given for agricultural development purposes for their fake companies and nonexistent firms. By the time the schemes were suspended, over <del>N</del>200 billion had been expended.

In furtherance of Nigeria's quest for a sustainable diverse exports base, the Nigeria export promotion council (NEPC) was enacted through the promulgation of the NEPC act No. 26 of 1976 which according to Ezike (2009) gave legal backing to adhoc incentives already in place.

The decree created the Nigeria's export promotion council and charged it with the promotion of Nigeria's non-oil exports and the diversification of the export base.

The primary objectives of the NEPC are to promote the development and diversification of Nigeria's export trade and assist in promoting the development of export related industries in Nigeria. It is also to spearhead the creation of appropriate export incentive and articulate the implementation of export policies and programmes of the Federal government, Isiekwenu (1985). He stated that since its creation, the agency has adopted various strategies to enhance Nigeria's non-oil export base. These include the exports expansion grant (EEG) designed to induce non-oil exporters whose minimum annual export turnover is H5, 000,000. This scheme is aimed at assisting exporters, diversify export markets and to make them more competitive in the international markets.

The NEPC has also made some progress in product development. It has made inroads in the development of solid minerals export, even though this is being constrained by the absence of mechanized mining. The council is also into capacity building and entrepreneurship in export trade through training of existing and potential exporters. The NEPC has established a human capital development centre in Ikovi and the common facility centre in collaboration with United Nations industrial development organisation (UNIDO) in Aba.

The human capital development centre would train exporters in the production of garments and apparels while the common facility centre carters for over 11,000 small and medium scale enterprises involved in the production of leather products such as shoes, belts and bags. Notwithstanding, these seeming achievements by the NEPC, the desired result for a sustainable non-oil export base is yet to be achieved.

Touted lack of strong political will to diversify our nonoil export base by the policy-makers as one of the major problems of NEPC. According to him, even though the NEPC act was promulgated in 1976, the powers, authority and functions of the council were not more than advisory and besides, it has little or no autonomy in practical terms. He argued that despite the Act, Nigeria continued her over-reliance on crude oil export until some unexpected and undesirable phenomenal development occurred between 1977 and 1979 in the world oil market. This was marked by the sharp decline in oil price in 1978 which sent a ripple of shocks through the economy. It soon became clear to the government that the foreign exchange being generated mainly by crude oil could not be adequate for the development needs of the country.

Fagbenro (1999) noted that by 1984, Nigeria faced a situation of economic recession and austerity characterised by serious balance of payments deficits, escalating external debts and an unbearable debt servicing burden. He affirmed that the structural adjustment programme was introduced in 1986 as a last ditch attempt to resolve this economic crisis and assure the nation's economic survival.

# STRUCTURAL ADJUSTMENT PROGRAM (SAP) AND NON-OIL EXPORTS IN NIGERIA

According to Itegbe (1989), between 1984 or thereabout to September 1986, successive military administrations started giving serious consideration to the need to urgently find or develop other methods or avenues of sourcing foreign exchange, in addition to measures adopted to conserve what was already earned.

This situation arose as a result of mounting obligation on the country to settle trade arrears and for debts servicing as well as to meet current trade bills. He further stated that by 1984, Nigeria had found herself in huge foreign debts in addition to being in serious arrears in settlement of foreign trade bills mainly on irrevocable letters of credit. Thus, it became clear to policy makers in Nigeria that additional effort had to be made by the nation to earn foreign exchange. It was for this reason that the 1986 government in adopted export-oriented development strategy as a major cornerstone of the structural adjustment programme (SAP).

SAP involved the formulation and adoption of a comprehensive export incentive legislation known as the

export incentives and miscellaneous provision decree No.18 of 1986. The provisions of this decree were subsequently strengthened by the provision of the second tier foreign exchange market (SFEM) decree No. 26 of September, 1986. The introduction of the export decree and SFEM decree could be described as "Watershed" in the history of non oil export policy development in Nigeria, according to Itegbe (1989), pointing out that for the first time, in the history of the country, export expansion and diversification strategy became a national policy objective. The removal of all bureaucracies and additional incentives through SAP did not however make any significant impact on the volume of non-oil exports. Experts and academicians in the area of export promotion have tried to figure out why after over 20 years of this export policy regime there has yet been little significant positive results.

Fagbenro (1999) identified some major defects in the policy environment. These include constraints in infrastructural development e.g. electricity, water, communication, transport and inefficient implementation of incentives. He further cited difficulties in managing the transition from import substitution to export oriented and various industrialization strategy policy inconsistencies among other factors. In their view, Farugee and Husain (1994) said the SAP policy virtually had everything sorted out but only on paper including plans for diversification, foreign exchange earnings and retention through domiciliary accounting, incentives, institutional frameworks, laws, decrees etc.

However, a fresh dimension into export policy expectation which might not have been provided for is the increased protectionism in most developed countries especially those of developed markets that the country trade ties with. They further stated that the inability of SAP to secure against this protectionism, is indicative of the fact that the global trade competition is more formidable and less friendly than reflected by our acceptances (as in the law of contract) and by the competitions themselves. This assertion goes to show that there may have been some fundamental defects in policies regarding non-oil exports in Nigeria in the period under study.

#### METHODOLOGY AND DATA

The data set for this study is mainly secondary data. The secondary data comprises annual time series spanning 1970 through 2010 (Appendix 1). The variables of interest are: oil and non-oil exports, a measure of foreign demand for Nigerian export, effective exchange rate, US real gross domestic product, domestic consumer price index, foreign wholesale price index (US wholesale price index), trade policy represented by trade openness (ratio of sum of export and import to GDP).

Variable	Non-oil
NON-OIL	1.000000
EXCR	0.876500
OILEXP	0.954219
OPEN	-0.034524
RGDP	0.804247
RPRICE	-0.500501

Table 1. Correlation analysis.

Source: Authors computation.

Oil and non-oil export, domestic consumer price index are sourced from the central bank of Nigeria's statistical bulletin and from CBN's economic and financial review.US real GDP was sourced from www.bls.com, while wholesale price index was sourced from www.economagic.com.Bls/ppi/htm.

#### Model specification

The model used in this study can be presented as;

NON-OIL = F (EXC, OILEXP, OPEN, RGDP\*, PRICE) Regression form of the model specification is thus,

NON-OIL =  $\beta_0 + \beta_1 EXCR + \beta_2 OILEXP + \beta_3 OPEN + \beta_4 PGDP^* + \beta_5 PRICE + \mu t$ 

Where: NON-OIL = non-oil export, EXCR = effective nominal exchange rate (H/\$), OPEN = degree of economic openness (ratio of sum of export and import to RGDP), RGDP\* = foreign income (US), PRICE = relative price (US wholesale price index divided by domestic consumer price index) µt represents the stochastic error term  $\beta_0$ ,  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$ , and  $\beta_5$  are coefficients.

#### Definition and justification of variables

#### Trade policy

Trade policy encompasses all measures taken to guide exports and imports. Accordingly, trade policy can be considered as liberal or restrictive. Trade policy is liberal when an economy is open to international trade and export promotion. Whereas, trade policy is restrictive when an economy is closed to international trade or when international trade is prohibited or restricted. The effect of trade policy can be examined through the level of trade openness. This is captured by ratio of sum of export and import to GDP.

According to Olaniyi (2005) the trade openness implemented in the post to1986 structural adjustment period contributed to Nigeria's export performance. Thus, it is expected that openness relates positively with economic growth in Nigeria.

#### Exchange rate

Exchange rate refers to the rate the Naira is exchange with other currencies. The study used the nominal exchange rate of Naira per

dollar to capture the effect of exchange rate on the performance of the agricultural sector.

The theoretical literature is ambiguous about the direction of the effect of real exchange rate on the rate of investment. On the one hand, a real depreciation raises the cost of imported capital goods and since a large chunk of investment goods in developing countries is imported, domestic investment would be expected to fall on account of significant depreciation.

On the other hand, a significant depreciation by raising the profitability of activity in the tradable goods sector would be expected to stimulate private investment in this sector but it depresses investment in the non-tradable goods sector. For low-income African countries, therefore, the relationship between exchange rate and the performance of the economy is inconclusive.

#### Other variables for economic activity

There are many variables that can be used to measure economic activities in a country. These include; gross domestic product, net national product, amount of import and export, index of industrial production. Following Oyejide (2002), this study uses US real gross domestic product as a measure of foreign demand for Nigeria's export. Also following Oyejide, (2002), relative price is captured by dividing US wholesale or producer index with Nigerian consumer price index.

Also oil export is introduced to test the 'Dutch disease hypothesis'. This is due to the fact that increases in demand for Nigeria's oil have contributed to the neglect of the non-oil export. By introducing oil export in the export function, we are able to verify the 'Dutch disease' function.

#### Data analysis

In this part, we present the results of empirical analysis of the failure of trade policies to impact positively on non-oil exports. Correlation between non-oil export, trade policy (liberalisation or degree of economic openness) and other explanatory variables are shown in Table 1. In the Table, the coefficients of correlation between non-oil export and degree of economic openness (Trade liberalization) is negative but very weak (-0.034). This shows that there exists a negative relationship between the two variables. This result shows that trade liberalization policies have not helped in enhancing the performance of the non oil export.

From the correlation analysis, non oil export has a positive

Table 2	Regression	result.

	Dependent va	riable: LOG (No	n-oil)	
	Method	: Least squares		
	Sample	e: 1970 – 2010		
	Included	observations : 4	1	
Variable	Coefficient	Std. error	T-statistic	Prob.
С	21.74230	9.356495	2.323765	0.0266
LOG (EXCR)	0.432841	0.162883	2.657371	0.0122
LOG(OILEXP)	0.459990	0.151786	3.030527	0.0048
LOG(OPEN)	-0.110534	0.068708	-1.608768	0.1175
LOG(RGDP)	2.275732	1.103565	2.197394	0.0473
LOG(RPRICE)	0.522266	0.265570	1.966585	0.0580
R-squared	0.964788	Mean dep	endent variable	8.116502
Adjusted R-squared	0.959287	S.D. dependent variable 2.2330		2.233011
S. E. of regression	0.450567	Akaike info criterion 1.3873		1.387320
Sum squared resid	6.496342	Schwarz criterion 1.645		1.645886
Log likelihood	-20.35907	F	-statistic	175.3585
Durbin-Watson stat	1.885748	Prob	(F-statistic)	0.000000

Source: Authors' computation (2012).

relationship with exchange rate, oil export and foreign income. The coefficients of their association are 0.87, 0.95 and 0.80, respectively. These results imply that exchange rate, oil export and foreign income move in the same direction as non oil export. However, since correlation does not imply causation, it is necessary to conduct regression analysis.

Here, significances of all explanatory variables are tested. This implies the test of hypotheses. Null hypothesis to be tested for the significance of each explanatory variable is that the coefficient of each explanatory variable is zero.

#### That is, $\beta_1 \beta_2 = \beta_3 = \beta_4 = \beta_5 \beta_6 = 0$

The table t-statistic with 32 as degree of freedom is 2.04. Comparing the table t-statistic value with calculated t-statistic value of each independent variable, it can be seen that only three explanatory variables are significantly different from zero. Coefficients of exchange rate, oil export and foreign income or foreign demand for local commodities are significant at 5% significant level, while the coefficient of relative price and trade liberalisation are insignificant at 5% critical level.

Therefore, it can be concluded that exchange rate, oil export and foreign income or foreign demand for local commodities are major determinants of non oil export in Nigeria, while trade liberalization and relative price are not significant determinants of the performance of non oil export in Nigeria.

#### **DISCUSSION OF RESULTS**

From the results in Table 2, the coefficient of exchange rate is positive and significant at 5% level. This suggests that exchange rate has a positive impact on the

performance of the non-oil export. 1% increase in exchange rate will, on the average, lead to about 0.43% decrease in the performance of non-oil export. This result indicates that exchange rate has been well managed by the monetary authorities. High and unstable exchange rate creates uncertainty and increases cost of production which can invariably reduce the competitiveness of local commodities.

In the result, degree of economic openness, a measure of trade liberalization has an insignificant negative relationship with non-oil export. The implication of this result is that trade liberalization adopted in the country has not promoted the performance of the Nigeria non-oilexport. It reduces cost of production and accelerates the rate of economic growth. This result finding contradicts the work of Olaniyi (2005). He found that the trade liberalization contributed to performance of Nigeria's nonoil export.

US real gross domestic product, a measure of foreign demand for local output, has a positive and insignificant relationship with non-oil export. 1% in US real GDP will, on the average, lead to about 2.27% increase in non-oil export. With the significance of coefficient of US RGDP, US income remains significant determinant of non-oil export in Nigeria. Also, it was discovered that the performance of the non-oil sector was very poor for the period under study as revealed by the correlation analysis

The result also suggests that relative price (ratio of US

#### 198 J. Econ. Int. Finance

to Nigeria's price) has a positive and insignificant relationship with non-oil export. This result conforms to economic expectation. 1% increase in relative price leads to about 0.522 increases in non-oil export. The implication of this result is that cheaper domestic price relative to foreign goods price promotes the performance of the non-oil export, and that economy which produces efficiently will perform well in international trade.

#### **CONCLUSION AND RECOMMENDATIONS**

This study undertook to investigate the effect of trade policies on Nigeria's non-oil exports for the period 1970 to 2010. The study showed that exportation of non-oil goods has positive effect on economic growth of Nigeria.

This indicates that a country that diversifies its exports base stands a better chance of achieving economic growth. Thus a trade policy that focuses mainly on a mono-product in this case crude petroleum is flawed and exposes the country to instability and external shocks incidental to the global oil market. Nigeria would therefore be better-off if it makes effort to diversify its economy by encouraging production and exportation of non-oil products.

#### REFERENCES

- Abimboye D (2009). A Revolution Abandoned. Newswatch, Tuesday, 28 July 2009.
- Dornbusch R (1980). Real Exchange rates and macroeconomics: A selected survey, Scandinavian. J. Econ., 81(2): 401-432.
- Ezike JE (2009). International Business Finance and Management", Lagos, Concept Publications
- Fagbenro AA (1999). A Strategic Appraisal of Nigeria's Export Promotion Policy", A Research Report for Development Policy Centre, Ibadan. p. 49-50.
- Fagbenro AA (1996). Strategies for Executive Sectoral Policy Design and Management in Nigeria". A report of the Sectoral

Policy Training Workshop, edited by Ibadan Mike, Ibadan: NCEMA.

- Faruqee R, Husain I (1994). Adjustment in Africa: Lessons from Country Case Studies. Contributors: Ishrat Husain - editor, Rashid Faruqee editor. Publisher: World Bank. Place of Publication: Washington, DC. Publication Year: 1994. P.436.
- Igbani IJ (1981). New Trends in Export Policy for Nigeria; Financial Punch.
- Isiekwenu P (1985). New Laws may ease Export Trade, Guardian Newspaper dated, p. 12.
- Kruger AO (1992). Export Policy Reforms in Developing Countries: The Kuzuets Memorial Lectures at the Economic Growth Centre, Yale University, Cambridge: Blackwell.
- Olaniyi O (2005). Nigeria's Trade Policy from 1960-2004: A Critical Review. Paper presented at the Workshop on Capacity Building on International Trade. National Assembly in Collaboration with Friedrich Ebert Stiftung (Nigeria), Jos. pp. 25-27,
- Oyejide TA (2002). External Sector Policies in the 2002 Federal Budget: An Assessment. NCEMA Policy Analysis Series,. 8(1): 63-78.
- Oyejide TA (2007). African Trade, Investment and Exchange Rate Regimes and Incentives for Exporting. Framework Paper for the AERC Collaborative Research Project on, "Export Supply Response Capacity Constraints in Africa. pp. 1-36
- Rajapatirana S (1995). Trade Policies, Macroeconomic Adjustment and Manufactured Exports: The Latin American Experience, Policy Research Working World Bank, Washington, D.C. p 1492,
- Tokarick BS (2006). Does Import Protection Discourage Exports? IMF Working Paper WP/06/20, IMF Washington, D.C. pp. 1-25
- Yesufu TM (1996). The Nigerian Economy: Growth Without Development", Benin City; University of Benin Press. pp. 1-400.

Year	Log nonoil	Log EXCR	Log oil EXP	Log OPEN	Log RGDP	Log PRICE
1970	375.4	0.7143	509.6	903.9	4269.9	4.723863
1971	340.4	0.6955	953.0	997.2	4413.3	4.425692
1972	258	0.6579	1,176.2	1463.6	4647.7	3.175526
1973	384.9	0.6579	1,893.5	1529.2	4917	3.215407
1974	429.1	0.6299	5,365.7	2740.6	4889.9	1.784244
1975	362.4429	0.6159	4,563.1	5942.6	4879.5	0.821105
1976	429.5	0.6265	6,321.6	7856.7	5141.3	0.654384
1977	557.9	0.6466	7,072.8	8823.8	5377.7	0.609454
1978	662.8	0.606	5,401.6	8000	5677.6	0.7097
1979	670	0.5957	10,166.8	7406.7	5855	0.7905
1980	554.4	0.5464	13,632.3	14968.56	5839	0.390084
1981	342.8	0.61	10,680.5	11413.7	5987.2	0.524563
1982	203.2	0.6729	8,003.2	11923.2	5870.9	0.492393
1983	301.3	0.7241	7,201.2	9927.6	6136.2	0.618095
1984	247.4	0.7649	8,840.6	9927.6	6577.1	0.662507
1985	497.1	0.8938	11,223.7	13041.1	6849.3	0.525209
1986	552.1	2.0206	8,368.5	16223.7	7086.5	0.436799
1987	2152	4.0179	28,208.6	22018.7	7313.3	0.33214
1988	2757.4	4.5367	28,435.4	27749.5	7613.9	0.27438
1989	2954.4	7.3916	55,016.8	41028.3	7885.9	0.192206
1990	3259.6	8.0378	106,626.5	60268.2	8033.9	0.133302
1991	4677.3	9.9095	116,858.1	66584.4	8015.1	0.120375
1992	4227.8	17.2984	201,383.9	92797.4	8287.1	0.089303
1993	4991.3	22.0511	213,778.8	233806.5	8523.4	0.036455
1994	5349	21.8861	200,710.2	160893.2	8870.7	0.055134
1995	301.3	21.8861	927,565.3	248768.1	9093.7	0.036555
1996	247.4	21.8861	1,286,215.9	337217.6	9433.9	0.027976
1997	497.1	21.8861	1,212,499.4	428215.2	9847.07	0.022996
1998	552.1	21.886	717,786.5	487113.4	10275.9	0.021095
1999	2152	81.0228	1,169,476.9	947690	10767.5	0.011362
2000	2757.4	81.2528	1,920,900.4	701059.4	11223.1	0.016009
2001	2954.4	81.6494	1,839,945.3	1018026	11364.2	0.011163
2002	3259.6	83.8072	1,649,445.8	1018156	11560.3	0.011354
2003	4677.3	92.3428	2,993,110.0	1225966	11807.8	0.009631
2004	4227.8	100.8016	4,489,472.2	1384100	12212.6	0.008823
2005	4991.3	111.701	7,140,578.9	1743200	12554.5	0.007202
2006	5349	126.2577	7,191,085.6	1842588	12895.9	0.006999
2007	5455.9	134.0378	8,110,500.4	2348597	13143.7	0.005596
2008	5692.1	132.3704	9,659,772.6	3240819	13100	0.004042
2009	5788.5	130.6016	8,543,261.2	3456925	12773.9	0.003695
2010	5798.9	128.2796	8,653,234.90	3567211	13847.2	0.003882

Appendix 1. Secondary data of annual time series spanning 1970 through 2010.

Source: Central Bank of Nigeria: Statistical bulletin and annual reports for the period 1970 to 2010.

### 200 J. Econ. Int. Finance

Year	Non oil	Growth rate of non-oil export	Non-oil export as % of total export
1970	375.4000	0.267094	42.4
1971	340.4000	-9.323388	26.3
1972	258.0000	-24.20682	17.9
1973	384.9000	49.18605	16.9
1974	429.1000	11.48350	7.4
1975	362.4429	-15.53416	7.3
1976	429.5000	18.50142	6.3
1977	557.9000	29.89523	7.3
1978	662.8000	18.80265	10.9
1979	670.0000	1.086301	6.2
1980	554.4000	-17.25373	3.9
1981	342.8000	-38.16739	3.1
1982	203.2000	-40.72345	2.5
1983	301.3000	48.27756	4.0
1984	247.4000	-17.88915	2.7
1985	497.1000	100.9297	4.2
1986	552.1000	11.06417	6.2
1987	2152.000	289.7845	7.1
1988	2757.400	28.13197	8.8
1989	2954.400	7.144411	5.1
1990	3259.600	10.33035	2.9
1991	4677.300	43.49307	3.8
1992	4227.800	-9.610245	2.1
1993	4991.300	18.05904	2.3
1994	5349.000	7.166470	2.6
1995	23096.10	331.7835	2.4
1996	23327.50	1.001901	1.9
1997	29163.60	25.01811	2.3
1998	34070.20	16.82440	4.5
1999	19492.90	-42.78607	1.6
2000	24822.90	27.34329	1.3
2001	28008.60	12.83371	1.5
2002	94731.80	238.2240	5.4
2003	94776.40	0.047080	3.1
2004	113309.4	19.55445	2.5
2005	105955.8	-6.489841	1.7
2006	133594.9	26.08550	2.3
2007	169709.7	27.03307	2.1
2008	0	0	0

Appendix 2. Performance of non-oil export.
--

Source: Central bank of Nigeria: statistical bulletin and annual reports and accounts: 1970 to 2008.