

# **INTERNATIONAL TRADE AND BALANCE OF PAYMENTS STATISTICS**

## **1. Introduction**

Virtually all countries of the world are engaged in trade with one another. Apart from the flow of goods and services between countries, there is also the flow of income and capital. As a result, there is need for every country to keep records of its trade and financial transactions with the rest of the world.

International or external trade is the flow of goods and services across international boundaries. Exports refer to the movement of goods and services outside the country, while imports refer to the movement of goods and services into the country. Visible exports and imports refer to tangible goods such as crude oil, cocoa, machinery and textiles that are traded, while invisible exports and imports refer to intangible services such as banking, insurance and shipping services which accompany merchandise trade.

Historically, external trade statistics were the second set of administrative statistics to be developed in Nigeria, after population statistics which were first compiled in 1866. The compilation of external trade statistics started in Nigeria in the early 1930s. The Crown Agent, London was then responsible for the publication of Nigeria's external trade statistics while the Department of Customs and Excise compile the relevant data from customs bills of lading.

In 1947, a full-fledged Department of Statistics was carved out of the Department of Customs and Excise. The major pre-occupations of the Department during its formative years included the compilation and publication of external trade statistics from custom bills of lading. In 1949, the Department was expanded and re-organised under a Government Statistician appointed to head it. In 1950, the Department published the first issue of **Summary of Nigerian Overseas Trade**. In 1960, the Department was placed under the Federal Ministry of Economic Development and its name changed to the Federal Office of Statistics (FOS). Since then, the compilation of external trade data from customs bills of entry has been one of the major activities of the FOS, now known as the National Bureau of Statistics (NBS).

With the establishment of the Central Bank of Nigeria in 1959, all official financial flows between Nigeria and the rest of the world have been passing through it. Consequently, the CBN has been compiling and publishing Nigeria's Balance of Payments Statistics. And between the NBS and CBN all major transactions dealing with international trade and balance of payments are recorded for use by planners and decision makers.

## **2. Coverage, Scope, Uses and Users of International Trade and Balance of Payments Statistics in Nigeria**

The Balance of Payments of a country is a systematic record of all economic transactions between residents of the reporting country and residents of the rest of the world. In other words, it is a record of all the receipts and payments in respect of merchandise trade, invisible

(service) trade, transfer payments, short-term and long-term capital movements and movement of international reserves between the reporting country and other countries.

Nigeria's International Trade and Balance of Payments (BOP) Statistics can be divided into two sub-sets: Merchandise Trade Statistics and Balance of Payments Statistics. Merchandise trade statistics are data on imports and exports of goods according to broad categories as well as the direction of trade. Balance of Payments statistics are data on financial payments to and receipts from the rest of the world. They consist of merchandise trade (visible trade), non-factor services (individual trade) and capital transfers.

International trade and BOP statistics are very useful for national economic planning and management. In view of the important role of the external sector in economic development, the need for timely and reliable statistical data on this sub-sector cannot be over-emphasised. Without reliable data on the external sub-sector, it is difficult to formulate appropriate policies aimed at promoting external trade. For instance, errors in external trade data can adversely influence Government policies regarding investment, trade liberalisation, exchange rates and a host of other factors that affect a nation's economic development programme. In an era in which an increasing number of countries are opting for economic integration, the design and evaluation of relevant economic activities require accurate and up-to-date information on participating countries' trade.

The major users of external trade and BOP statistics in Nigeria are the policy makers in the Federal Ministries of Finance, Commerce,

Foreign Affairs and Tourism as well as the National Planning Commission, Central Bank of Nigeria, research institutes, individual researchers and international agencies.

### **3. Sources and Methods of Compiling International Trade and Balance of Payments Statistics**

The major producers of external trade and BOP statistics in Nigeria are:

- (i) The National Bureau of Statistics (NBS).
- (ii) The Central Bank of Nigeria (CBN).
- (iii) The Nigerian Ports Authority (NPA).
- (iv) The Nigerian National Petroleum Corporation (NNPC).

The activities of the first three are discussed below.

#### **The National Bureau of Statistics**

The External Trade Statistics Unit of the NBS is the major producer of merchandise trade statistics in the country. The statistics are compiled according to the general system principle. This means that general imports comprise total imports for direct domestic consumption and imports into customs bonded warehouses or free zones while general exports are the combined totals of domestic exports and re-exports. Re-exports consist of goods which, after importation, move outward from custom bonded warehouses or free zones without having been transformed.

The principal source of the raw data for the compilation of external trade statistics by the NBS is the Customs Bills of Entry which

importers and exporters or their agents are required to complete. Three copies of the completed bills are always submitted to the Department of Customs and Excise from where the triplicate copies are sent to the NBS for processing.

The Customs Bills of Entry are used to obtain data on non-oil merchandise trade only. The Nigerian National Petroleum Corporation (NNPC) supplies the NBS with data on crude oil exports as well as imports and exports of refined petroleum products which are then combined with non-oil data to give total merchandise trade statistics. Unfortunately, the monthly returns from the NNPC in respect of petroleum trade statistics are often released very late, with a time lag of about five months. This is undesirable because crude oil accounts for over 95% of total value of merchandise exports. The imports of equipment used in oil exploration are hardly recorded since most of them do not pass through customs.

The National Bureau of Statistics obtains data on the quantum of imports from the Nigerian Ports Authority which compiles data on ports and shipping statistics. The Federal Airports Authority of Nigeria (FAAN) supplies information on imports of aircraft to the NBS.

The Customs Bills of Entry received from the Department of Customs and Excise, are recorded in a register to ensure that the numbers agree with the batch records attached to the bills from the Department. They are then batched by groups or types of bills. After batching, they are coded, using attributes such as importer/exporter, commodity, country of origin/destination. The coding facilitates undergoes further processing by computer. Before entry into the

computer, the information on the bills is checked to ensure that items are correctly classified and coded. If quantities of some items are not declared on the bills, as often happens, the missing quantities are estimated by using the average unit values already computed for the same item for the same country. After checking, the coded bills are sent to the Data Processing Division (DPD) of the NBS where they are entered into the computer to produce listings of trade items. The listings are amended and trade tabulations generated for the analysis of external trade statistics.

At present, the NBS uses the Standard International Trade Classification (S.I.T.C.) for the compilation of trade statistics. The SITC has ten sections as follows:

Section 0: Food and Live Animals.

Section 1: Beverages and Tobacco.

Section 2: Crude Materials Inedible, except Fuels.

Section 3: Mineral Fuel, Lubricants and Related Materials.

Section 4: Animals and Vegetable Oils and Fats.

Section 5: Chemicals.

Section 6: Manufactured Goods Classified Chiefly by Materials.

Section 7: Machines and Transport Equipment.

Section 8: Miscellaneous Manufactured Articles.

Section 9: Commodities and Transactions not Classified according to Kind.

Before 1988, Nigeria's trade was classified according to SITC, revision 1, but in 1988, the then FOS (now NBS) adopted the SITC, revision 2. Plans are currently underway to change from the SITC revision 2 to the Harmonised System (HS) which has 21 sections. The

HS is a revised version of the Customs Cooperations Council Nomenclature (CCCN) which is in harmony with the SITC, revision 3. In January 1990, the Department of Customs and Excise adopted the HS codes.

Apart from classification of trade data as Stated above, the NBS also compiles data on exports of major commodities and imports of selected commodities. In addition, it compiles data on exports by country of destination and imports by country of origin.

The data on imports are valued c.i.f. (cost, insurance and freight), that is, the value at which the goods were purchased plus cost of insurance and transport as well as charges made for packing and shipments. Exports are valued f.o.b. (free on board), that is, the value at which goods were sold by the exporter, including insurance and transportation to bring the goods (in the transporting vehicle) to the frontier of the country. The export value of crude oil is computed using the realised price of the commodity.

### **Macro Indicators Generated**

The following are the major items for which external trade data are generated by the NBS:

- [i] Total trade (imports, domestic exports and exports of foreign produce).
- [ii] Trade by commodity (SITC) sections (imports, domestic exports and exports of foreign produce).
- [iii] Direction of trade (analysis of imports, domestic exports and exports of foreign produce by countries).
- [iv] Origin of total imports by commodity (SITC) sections.

[v] Destination of domestic exports by commodity sections.

[vi] Destination of exports of foreign produce by commodity sections.

[vii] Imports (analysis of commodities imported by country of origin).

[viii] Exports of domestic produce (analysis of commodities exported by country of destination).

Data on the above items are compiled on a monthly basis and then aggregated to quarterly and annual data.

### **The Central Bank of Nigeria (CBN)**

The Central Bank of Nigeria (CBN) is the sole producer of balance of payments statistics in Nigeria. This is because all legal financial flows between Nigeria and the rest of the world pass through it. The CBN also produces external trade statistics based on data compiled from foreign exchange payments made and received by the apex bank in respect of merchandise trade.

The Balance of Payments statistics are prepared by the General Economic Statistics Office of the Research Department of the CBN, on the basis of the following seven returns and datasets received from its other departments, the National Bureau of Statistics and Oil Companies operating in the country:

- (i) Trade Summary from the NBS.
- (ii) Cash Flow Returns from the Foreign Operations Department of the CBN.
- (iii) Sectoral Allocation Returns from the Trade and Exchange Department of the CBN.



- (iv) Foreign Exchange Market (FEM) Operations Returns from the Computer Services Department of the CBN.
- (v) The Consolidation Accounts System (CAS) Returns from the Operations Department of the CBN.
- (vi) CAS 402 Returns from the Finance and Accounts Department of the CBN.
- (vii) Schedule 2 and 3 Oil Companies Returns.

The data from the above sources are compiled to generate BOP as well as invisible and visible trade statistics.

From the information compiled from these sources, the CBN produces data on the following items:

- [i] Detailed Statement of Nigeria's Balance of Payments.
- [ii] Summary Statement of Nigeria's Balance of Payments.
- [iii] Nigeria's Visible Trade.
- [iv] Imports by Major Commodity Groups (By End-Use).
- [v] Import by SITC Sections.
- [vi] Exports of Major Commodities.
- [vii] Direction of Trade (Import and Exports).
- [viii] Services Account.
- [ix] Total External Assets.
- [x] Summary of Transactions under FEM.

### **The Nigerian Ports Authority (NPA)**

The Statistics Unit of the Marketing and Corporate Planning Department of the NPA is charged with the responsibility of compiling and publishing Port Statistics in the country. The Unit obtains raw data in the form of unprocessed completed questionnaires and worksheets from other units within the Authority. The Unit has field

officers in all the ports in the country which collect the required information. The following are the major items of data obtained for all ports, except where otherwise stated:

- (i) Operative Data.
- (ii) Inward/Outward Cargo Flows Classified by Commodities and Type of Packaging.
- (iii) Inward/Outward Container Traffic.
- (iv) Returns on Inward RORO and Mixed Vehicle/General Cargo-carrying Vessels.
- (v) Nationality of Vessels Entered/Cleared.
- (vi) Cargo Handled by Type of Trade.
- (vii) Origin and Destination of Cargo Discharged/Loaded.
- (viii) Geographical Spread of Container Traffic.
- (ix) Data on Ship Traffic
- (x) Returns on Outward RORO and Mixed Vehicle/General Cargo Vessels Carrying Vehicles.
- (xi) Cargo-Handling Plants and Equipment.
- (xii) Transit Traffic.
- (xiii) Monthly Ship/Labour Productivity Data.
- (xiv) Quantity of Cement Discharged during the month.
- (xv) Data on Fertilizer-carrying Vessels.
- (xvi) Tanker Traffic Returns.
- (xvii) Vessels requesting for Supply of Fresh Water.
- (xviii) Monthly Returns of Fish Handled.
- (xix) Cargo/Ship Traffic at Ikorodu Lighter Terminal and Tin Can Island Port.
- (xx) Commodity Analysis of Cargo Handled at Aladja Jetty, Warri.
- (xxi) Berth Throughput/Port Traffic.

- (xxii) Primary Indicator Returns.
- (xxiii) Gang Idle Time Analysis.
- (xxiv) Berth Occupancy in Hours.
- (xxv)

These items of data are supplied on weekly and monthly bases by the field officers. Generally the returns are “fairly satisfactory” in terms of their completeness.

The Statistical Unit of the NPA generates a lot of information from the raw data identified above. These include:

- (i) Number and net registered tonnage of vessels entered and cleared at Nigerian ports (Exclusive of crude oil terminals).
- (ii) Number and net registered tonnage of tankers entered and cleared at Nigerian crude petroleum oil terminals.
- (iii) Cargo throughput (Exclusive of crude petroleum oil terminals) at enumerated Nigerian ports.
- (iv) Cargo traffic by type handled at all Nigerian ports.
- (v) Tonnage of crude petroleum oil handled at enumerated terminals.
- (vi) Cargo throughput at enumerated Nigerian ports by type of traffic.
- (vii) Cargo discharged at enumerated Nigerian ports classified by SITC.
- (viii) Cargo loaded at enumerated Nigerian ports classified by SITC.
- (ix) Major commodity analysis of export cargo loaded at enumerated Nigerian ports (Excluding crude oil).
- (x) Economic analysis of cargo discharged at all Nigerian ports.

- (xi) Economic analysis of cargo discharged at all Nigerian ports (Exclusive of crude oil).
- (xii) Container traffic statistics for enumerated Nigerian ports.
- (xiii) Berth occupancy (in days) at enumerated Nigerian ports.
- (xiv) Ships awaiting berth and turn-round time of general cargo ships at enumerated Nigerian ports.
- (xv) Import cargo delivered at enumerated Nigerian ports.
- (xvi) Export cargo receipt at enumerated Nigerian ports.
- (xvii) Export cargo loaded at enumerated Nigerian ports.
- (xviii) Labour productivity for all enumerated Nigerian ports.

#### **4. Current Methods of Data Storage and Dissemination**

The NBS data on Nigeria's merchandise trade are first published in a summary form in the **Statistical News -- Merchandise Trade**; later the details are published in the **Nigeria Trade Summary**. Summary data and detailed comments on merchandise trade are published in the **Review of External Trade**. Summary data on Nigeria's merchandise trade are also published in the **Annual Abstract of Statistics** and the **Digest of Statistics**.

The **Statistical News** is supposed to be published monthly. It contains monthly, quarterly and half-yearly summary data on Nigeria's merchandise trade. The **Nigeria Trade Summary** is also supposed to be published monthly. It contains more detailed data on the items listed under 'Macro Indicators Generated' above. The **Review of External Trade** and **Annual Abstract of Statistics** are published annually and contain summary data on Nigeria's external trade for the year. The **Digest of Statistics** (published quarterly) also contains annual and monthly external trade data. These publications

were published with considerable time-lag, but significant improvements are expected with the upgrading of the NBS production facilities.

All the above publications are available at the NBS on sale to the general public, mainly in hard copies.

Nigeri's BOP and External Trade Statistics compiled by the CBN are published in the regular publications of the bank, namely the **Annual Report and Statement of Accounts, Financial and Economic Review, Half-Year Economic Report, Monthly Report and Nigeria's Principal Economic and Financial Indicators**. These publications are available free-of-charge to all subscribers and public institutions, in hard copies. The external trade and BOP Statistics required by the NBS are easily extracted from the above publications.

The data compiled by the Statistics Unit of the NPA are summarised in the following publications of the organisation:

- [i] NPA Bilingual Magazine.
- [ii] NPA Annual Report.
- [iii] Quarterly Digest of Port Statistics
- [iv] Monthly Progress Report.
- [v] Port Performance Report.
- [vi] Excerpts of Ship/Cargo Traffic.
- [vii] Bi-Annual Report of Port Operational Activities.

The most important publication for the purpose of external trade statistics is the **Quarterly Digest of Port Statistics** (QDPS), which contains tables on the items listed above. The QDPS, which is published with a time-lag of six months, is fairly current.

The compilation of data by the Statistics Unit of the NPA is being fully computerised. Hence, the required data cannot be obtained in machine-readable form. The data are extracted from the above publications or from the NPA's worksheets if such data have not been published.

## **5. NBS Data Base Coding System for International Trade and Balance of Payments Statistics**

International Trade and Balance of Payments Statistics are data on Nigeria's external trade as well as data on Nigeria's financial transactions with the rest of the world. This data set is composed of two sub-sets:

(a) Balance of Payments (BOP) statistics comprising data on financial payments to and receipts from the rest of the world relating to merchandise trade, (visible trade), non-factor services (invisible trade) and capital transfers.

(b) Merchandise trade statistics comprising data on imports and exports of goods according to broad categories (by the SITC and type of commodity).

The Data Base Coding System for International Trade and Balance of Payments Statistics shows the structure of data as contained in the NBS's TSDB. The ISIC Divisional Code for International Trade and Balance of Payments Statistics is 54. Two other division codes which have been assigned arbitrarily are **51** for **Imports** and **53** for **Exports**; the third one, **52**, may still be assigned which will show much of the details in the **direction of trade**. There are (14) Data items codes 5401-5414 as indicated below. The figures in parenthesis indicate the number of data details on which values are recorded.

## **6. CONCLUDING REMARKS**

Nigeria's BOP and external trade statistics are not comprehensive. For instance, the following items are excluded from the statistics:

- (a) Military goods for the nation's armed forces.
- (b) Goods intended for foreign Military Forces stationed in Nigeria or for Nigerian Forces stationed abroad.
- (c) Securities, bank notes and coins, whether or not intended for circulation.
- (d) Monetary gold.
- (e) Goods consigned by the Government to diplomatic missions.
- (f) Goods intended for exhibition, commercial sample.
- (g) Goods in transit.

Furthermore, a number of items which should normally be included in statistics are omitted because they do not pass through customs. Such goods include:

- (i) Marine vessels and aircraft imported and which are engaged in international traffic.
- (ii) Drilling rigs used for off-shore drilling.
- (iii) Smuggled goods.
- (iv) Postal packages (parcels) weighing less than 10kg.

Indeed, the NBS has estimated that about 20% of Nigeria's foreign trade is not recorded. The incidence of smuggling of goods into and outside the country is alarmingly high.

Apart from the foregoing, the source documents for data compilation (the Customs Bills of Entry) are not usually well completed and often received very late.

There are wide disparities between the NBS's external trade statistics (based on data from the Customs and Excise Department via Bills of

Entry) and the CBN's statistics (compiled from foreign exchange payments data made by the bank). Efforts are being made to reconcile figures from the two agencies.

International Trade data from both the CBN and the NBS also suffer from bias due to under-invoicing and over-invoicing of exports and imports respectively. It is common practice for importers in Nigeria and many other countries to over-invoice imports and under-invoice exports. When the domestic currency is over-valued and exporters must turn in foreign exchange at the official (low) rate, there is an inclination for exporters to "under-invoice" and sell the unreported currency balance in the black market.

Similarly, when the importing country has an over-valued exchange rate and foreign exchange controls, importers tend to over-invoice to obtain excess foreign currency and sell the balance in the black market. In this case, reported export values and quantities may be much smaller than reported imports. This has been the trend in Nigeria until recently.

The phenomenon of capital flight (a characteristic of the Nigerian economy, has also affected the quality of trade data in Nigeria. For instance, after making necessary arrangements overseas, some exporters under-report their foreign exchange earnings to the Nigerian authorities and place the "excess" in accounts or assets abroad. In the same vein, some importers connive with foreign suppliers and over-invoice their imports so that the excess "paid" to the suppliers is deposited in the importers' accounts abroad.

In an attempt to verify the quality of trade data published by the NBS, efforts are on to compare these data with those of partner-countries after applying the appropriate exchange rates. This exercise has recently started and positive results are expected. Similar exercises have been conducted elsewhere to verify the accuracy of external trade statistics. In 1990, Yeasts assessed the quality of trade statistics of some sub-Saharan African countries by comparing their reported (declared) export data, plus a transport and insurance cost factor, with corresponding partner -import statistics. The study applies the trade reconciliation and evaluation procedures used in statistics from the Organisation for Economic Co-operation and Development (OECD). The results of the study reveal that:



*“major discrepancies often exist between the two (declared value of African exports versus partner countries’ reported import values), with false invoicing and smuggling apparently responsible for much of the difference ... Although major disparities exist in data on trade with developed countries, the average differences in intra-African trade statistics are substantially larger. Statistical tests show that these data cannot be relied on to indicate the level of composition, or even direction and trends in African trade”.*

It should, however, be pointed out that all inconsistencies in trade data (that is, discrepancies between observed trade data of the reporting country and matched partner countries’ trade data) are not due to the illicit activities alone. Other legitimate factors can also account for the differences. For example, shipping costs, diversion en route, re-export of goods, differential time lag in reporting, multiple exchange rates, and differences between countries in commodity classification and valuation procedures may cause discrepancies between matched data. A problem that is particularly prevalent in African countries is reporting discrepancies for trans-shipment in which goods are routed through countries bordering the exporter or importer.

In these cases, the country of origin may inaccurately list a routing country as the importer, or the country of final destination may report the routing country as the exporter. Furthermore, the export of such commodities as petroleum, coffee and cocoa may be under-reported in an attempt to circumvent international commodity agreement quotas.

In a further move to improve the quality of its external trade data, the NBS has also requested the Department of Customs to submit their estimates of smuggled goods for processing. It is, however, very difficult to estimate the magnitude of smuggling in African trade from data drawn from partner countries because there is no way to determine quantities and values that are not reported by either the exporter or importer as opposed to (smuggled) trade that is recorded by one of the countries involved. The very high import tariffs in many African countries provide a strong basis for smuggling.

Furthermore, the NBS is seeking data on the quantum of imports and exports from the Nigerian Ports Authority, while the Aviation and Shipping Authorities are requested to supply information on imports of aircraft and ships.

Finally, the NBS is in liaison with the NNPC to supply information on the imports of equipment used in oil exploration, which are currently not recorded because they do not pass through customs.

While the above measures aimed at improving Nigeria's external trade statistics are commendable, there is need to take additional actions. For instance, the incidence of smuggling should be curtailed or ways of obtaining fairly reliable estimates of smuggled goods should be devised. In addition, efforts should be made to ensure that all the customs bills of entry are well completed and submitted promptly to the NBS. The Customs & Excise Department should work out appropriate sanctions for exporters and importers responsible for poorly completed bills.