





#### Data Quality and Metadata for the Compilation of International Merchandise Trade Statistics Presented by Lorna Reid Director, Administrative Statistics Statistical Institute of Jamaica 2nd April, 2009

# **Outline of Presentation**

- Introduction
- Compilation and Dissemination of Metadata

> Data Quality



# Introduction

- The Statistical Institute of Jamaica (STATIN) is responsible for the collection, compilation and dissemination of Merchandise Trade Statistics.
- STATIN is responsible for the issuing of metadata used to produce Merchandise Trade Statistics.
- Quality checks and other consistency checks are done in the processing of the data



Four categories covered by the Metadata:

- DATA CHARACTERISTICS
- QUALITY
- PLANS FOR IMPROVEMENT
  - DISSEMINATION FORMATS



#### I. DATA CHARACTERISTICS – Data Coverage

- Based on the General System of Trade as defined by the United Nations International Merchandise Trade Statistics Manual (Series M, No.52 Rev.2).
- The Jamaica Free Zone activities are currently not included in the trade data with the exception of single entity companies with duty free status.
- Data on free zones are included in the BOP statistics which are compiled by the Central Bank of Jamaica and the National Accounts Statistics produced by STATIN.



Source of information

- Administrative records of the Customs Department-All declarations of goods imported and exported from Jamaica
- Major Importers (for example importers of petroleum and petroleum products )
- Major exporters (for example exporters of bananas, sugar, bauxite, alumina, gypsum, limestone, petroleum products by the state refinery)



Time of Recording

- The calendar month in which customs procedure have been completed (when the goods are cleared i.e. when the duties are paid and the goods are released).
- The exceptions are fuel and caustic soda the date of report is used i.e. the date when it lands. These items are usually cleared on letters which are not the final custom documents. The final documents are usually submitted late and these are large items therefore underreporting for the period would result if the report date was not used.



Classification

- The 2007 CARICOM version of the Harmonized Commodity Description and coding system (HS) is used.
- For purposes of analysis and dissemination data are converted to the Standard International Trade Classification (S.I.T.C.) rev 4



Unit of Measure

 The standard units of quantity set by the World Customs Organization (WCO) are used in the reporting of data.



#### Periodicity

 Trade data for Jamaica is disseminated monthly and annually

#### Timeliness

- Monthly Data 3 months after the end of the reference month
- Preliminary Annual Data 3 months after the reference year



## II. QUALITY

## **Documentation of methodology**

The methodology is included in the annual publications.



# Data to support cross checks and assurance of reasonableness

- Statistical reports (statements on the industry's trade in relationship with other countries) are cross checked against customs data
- E.g. Statements from Commodity boards (Coffee Industry Board), Bauxite and Alumina companies)



The Kind and Extent of detailed published data

- i) Imports and Export by SITC commodity/classifications (HS commodity classification is available on request)
- ii) Imports by country of origin (country of consignment is available but not published)
- iii) Exports by country of destination

iv) Imports by BEC



Statistical Frameworks including statistical relationships

- Reconciliation of IMTS concepts and definitions with systems such as the 1993 SNA, BPM manual 5
- Work is being undertaken to include, for example, the free zone in the trade. It is currently included in the National Accounts compiled by STATIN and the BOP compiled by the Bank of Jamaica



Statistical Frameworks including statistical relationships cont'd

 Imports of merchandise as supplied by STATIN are currently valued at C.I.F. – The System of National Accounts require these to be valued at F.O.B. – The Central Bank of Jamaica currently makes an estimate of imports FOB.



- Statistical Frameworks including statistical relationships cont'd
- Ensuring similar approaches with the computation of the exchange rate with for example National Accounts. The midpoint of the buying and selling (official/market) exchange rates is applied to convert Jamaican dollars to United states dollars



Comparisons & reconciliation undertaken

- Unit Cost Analysis
- Historic series are compiled and the trend analyzed



#### **III. PLANS FOR IMPROVEMENT**

#### **Recent improvements**

 A new database system was implemented to facilitate the processing of the electronic data being received from the Customs Department

#### **Short-Term Plan**

• To receive more of the data electronically from the Customs Authority which will enhance the timeliness of dissemination of the data.

#### **Medium-Term Plans**

 Producing free zone and transshipment port statistics and reintroducing the trade indices



### **IV. DISSEMINATION FORMATS**

- News Release
- Monthly "External Trade Bulletin"
- External Trade Annual Report
- Electronic (Internet)
- CD-Rom
- Diskette
- As requested by the customer



# Data Quality

## Editing

- Data edited to ensure that the regional and international statistical requirements are met.
- Editing includes checks to ensure:
- Correct customs procedures
- Proper coverage
- Validity & accuracy of country codes



# Data Quality cont'd

- Validity & accuracy of classification codes
- Correct units of measurements
- Correct conversions to required units of measurements
- Correct End-Use codes (BEC)
- Outliers-Unit values
- Completeness of data to ascertain if there is missing data



# Data Quality Cont'd

- Corrections are made to the problems detected and are incorporated into the database. This is done by retrieving the source documents (entry and invoice). Brokers or importers are also consulted if needed.
- Revisions are also applied to data once updates from agencies including Customs are received.

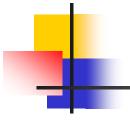


## Data Base Maintenance

Includes:

- Updating all classification systems and methodologies to reflect changes issued by the WCO/CARICOM, Jamaica Customs and the United Nations
- Updating all support codes, exchange rates files etc
- Validation checks
- Regular backups
- Safe keeping of the data.
- Checks for receipt of electronic data from Customs which will identify missing data
- Checks for data consistency to ensure continuity of series





# THANK YOU



Statistical Insitute of Jamaica