Linking Customs/Trade Data & Business Register: The Case of Zambia

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Presented at the Regional Seminar on International Trade Statistics, African Union HQs. Addis Ababa, Ethiopia. 12 – 16 May, 2014



Presentation Outline

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Introduction

This presentation explains, in brief, efforts that have been made by Central Statistical Office (CSO) Zambia in linking Customs/Trader Databases with the Main Business Register.

Process necessitated by demand for more information linking trade and business with other statistical dimensions like:

(economic, social, environmental and financial dimensions).

Comply with IMTS 2010 requirements (Para. 11.5: Need for linking trade and business statistics) to allow for further Analysis of traders by their specific characteristics



Why Linking Trade and Business Registers?

Facilitate a more detailed analysis of companies engaged in International Trade:

- For policy purposes, as well as gather information about traders and their specific characteristics, such as size (*it is also important to know the contribution of the small, medium and large establishments, within each industry),* sector of economic activity, output, employment and level of concentration.
- Able to provide information about specific trade transactions such goods for processing, also transport statistics etc.
- Allow for a cheaper way of gathering statistical information.
 Comply with IMTS 2010 recommendations (paras 11.5 and 11.6...)



Main Business Register Attributes

The Central Statistical Office (CSO) maintains the National Business Register (Labour Statistics Branch):

- This Register is the main sampling frame for all economic surveys.
 Currently, the Register has 69,000 establishments.
- The original establishment register did not have a TPIN number as a unique identifier for each establishment. It was therefore a challenge to use administrative data from the Zambia Revenue Authority to compile statistics.
- CSO decided to include the TPIN number as one of the variables in the register update questionnaire in 2011/2012. Once data on this variable was collected, the Business Register now had a common numerical variable, which is used to link it to the administrative data at ZRA.

Business Register Attributes Con'td....

Some of the key variables on the Register include;

- Trader Identification Number (TPIN)
- Details of location, from region to physical
- Postal address
- Contact details
- Employment
- Turnover
- Establishment size
- Description and classification of the principal economic activity based on the International Standard Industrial Classification (ISIC) Revision 4.



Trade Database Attributes

The External Trade Statistics Branch of the CSO maintains a Trader Database of establishments that are engaged in international trade.

- Despite having all the variables related to international trade, the Database does not have variables such as employment, turnover, establishment size and ISIC Revision 4(Traders/ISIC)
- These variables are important if a detailed analysis has to be done on the characteristics of the traders.



Linking Process and Data Sources

- The Updating of the Main Business Register was made possible by Consolidating various registers some:
 - **1.** PACRA, CONSTRUCTION COUNCIL, VAT REGISTER, NAPSA, PENSION etc
 - 2. CUSTOMS/TRADER DATABASE
- After integrating, the Trader Database had 6,926 establishments of which;
 4,307 (*importers/exporters*) were successfully linked to the main Business
 Register using the TPIN.
- Most establishments are not exporters: Less than 10% of establishments are exporters

SPSS was used during this linking exercise

Linking Process

In Zambia, trade statistics by establishment characteristics are developed by linking Estabs/firms identified in Trade Registers to the same ones In Business Registers using the TPIN.

In Zambia, the establishment/firm is used as the statistical unit.

After successful linking, the establishments are classified by size using Turnover broken down in categories (Bands) as follows:

≻Small:	K250, 000 and below		
≻Medium:	K250, 000.001 to K800, 000		
≻Large:	More than K800, 000		



Sample Outputs from Linking -2010

INDUSTRY	SIZE	IMPORTS	EXPORTS	EMP	TURNOVER
Agriculture, Forestry &	S				
Fishing		11,024,385,676.3	6,657,430,866.5	474	1,463,563,944.0
	М				
		1,258,673,964.6	905,071,376.9	346	4,439,647,422.0
	L				
		135,069,997,594.6	112,695,147,118.5	19,652	1,907,690,255,143.0
Mining and quarrying	S				
		84,292,439.0		90	355,000,000.0
	М	074 054 400 0	04.044.040.4	00	
		674,351,189.3	84,644,316.1	69	4,660,094,253.0
	L	2 220 001 052 622 6	0 000 710 276 404 0	20.966	16 004 767 407 010 0
Manufacturing	S	2,238,891,052,622.6	0,900,710,370,404.0	20,866	16,094,767,427,012.0
	0	223,889,836,948.9	116,703,494,889.2	1,600	5,257,074,444.6
	М	220,000,000,01010	110,700,101,000.2	1,000	0,201,011,1110
		25,194,068,234.0	2,896,124,842.6	1,285	20,304,121,548.5
	L				
		1,391,246,945,407.3	2,279,195,998,316.5	22,262	7,223,716,535,368.0
Electricity	S				
				-	
	М				
		314,814,094.0		17	789,056,650.0
	L				
		24,770,874,318.9	240,063,802.0	469	856,977,960,088.0

Observed Outputs from Linking

- The Initial results of the linking exercise based on 2010 data are very positive and showed that exporting firms are the larger firms in Zambia and account for a larger share of employment and economic growth (Turnover).
- More than 50 Percent of total exports are accounted for by large establishments (mostly Agric, Mining and Manufacturing).
- The average value of export per establishment increases with enterprise size



Other Expected Outputs from Linking

In the near future, efforts will be made to engage other stakeholders to try and Link trade information and integrating it with other *economic, social, environmental and financial dimensions*.



Challenges in Linking

- Initially, there was no "numeric identifier" to separate enterprises and individuals involved in international trade. Therefore, individual names are mostly used, which poses a big challenge.
- Maintaining a business register costs money and with resource constraints, the register may not be updated very frequently. Therefore, some information on the register may not be up to date.
- Huge efforts required in integrating the various databases/statistics.



Immediate Next Steps.....

- Link FDI, FATS databases maintained at BOZ to the Trade/Business Register using TPIN.
- Endeavour to produce back series outputs based on Linked databases
- Engage users to get feed back on outputs expected from the linked Databases
- Continue updating the Register Regularly (admin records preferred) and surveys resources allowing.
- Since during the 2011/2012 register update (economic census), coordinates for establishments were collected, try to present a spatial distribution with help from GIS section at CSO to show regional concentration by industry etc

Conclusion & Way Forward

- CSO to ensure that ZRA officers who are involved in the compilation of data are trained in classifying companies by ISIC (Rev.4). The first round of training for ZRA senior staff was recently conducted.
- CSO to continue discussions with a number of Regulatory Bodies on how to use their company registers to update the Main Business Register.
- Since the (NSDS) National Strategy for the Development of Statistics has now been approved by Cabinet; this will strengthen the Statistical System and make it easier to update the Business Register.
- The production of various routine tables of trade by establishment characteristics can easily be done now!



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