Asymmetry and consistency of trade statistics

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Preamble

- The discrepancy indicators have been calculated to enhance the transparency on trade statistics and to help trade analysts in their studies.

- For a good interpretation of these indicators, trade analysts should bear in mind the many factors that could explain discrepancies between direct statistics and mirror statistics.

Methodology

For each reporting country and each year, the export and import data are compared against the same information reported by partner countries (mirror data).

The discrepancy indicators are calculated at the HS 4 and 2-digit level based on bilateral data aggregated from the HS 6-digit level.

$$Discrepancy = \frac{\sum_{i=1}^{n}(|B_i - C_i|)}{\sum_{i=1}^{n}(B_i + C_i)}$$

B_i represents the exports reported by the country under review B to the partner country C_i
C_i represents the imports reported by the partner country C_i from the country under review B
n represents the number of partner countries that have reported their trade data

For each product, the global discrepancy is a weigthed average of discrepancies by partner country.

Discrepancy indicators are calculated on export and import data.

Consistency of Argentina's exports by product sector

Consistency of Trade Statistics : Exports of Argentina (2013, in USD thousands)

Industry	Export value reported by country	Number of partner countries	Exports to the reporting partners	Number of reporting partners	Non reported exports as %	Mirror estimates - Value	Mirror estimates - Number of partners	Measure of discrepancy - from detail (0-100 %)	Scoring of discrepancy Exports
00 All industries	76,632,787	178	66,114,284	107	13.7	72,624,771	114	11.7	Low
23 Residues, wastes of food industry, animal fodder	12,027,237	85	9,876,002	61	17.9	11,190,203	80	13.7	Low
87 Vehicles other than railway, tramway	10,085,533	90	9,992,210	65	0.9	9,925,910	93	1.5	Very Low
10 Cereals	8,302,099	122	6,489,083	84	21.8	7,992,865	89	10.7	Low
15 Animal, vegetable fats and oils, cleavage products, etc	5,181,910	89	3,941,471	60	23.9	4,287,185	73	7.0	Very Low

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Consistency of Argentina's exports by partner country

Consistency of Statistics : Exports of Argentina - 00 All industries (2013, in USD thousands)

Partners	Export value reported by country	Exports to the reporting partners	Non reported exports as %	Mirror estimates - Value	Measure of discrepancy - from detail (0-100 %)	Scoring of discrepancy Exports
World	76,632,787	66,114,284	13.7	72,624,771	11.7	Low
Brazil	16,216,104	16,216,104	0.0	16,462,929	3.4	Very Low
China	5,510,616	5,510,616	0.0	6,095,031	8.6	Very Low
United States of America	4,289,581	4,289,581	0.0	4,877,234	15.8	Low
Chile	3,906,655	3,906,655	0.0	3,933,787	14.0	Low
Venezuela	2,155,623	2,155,623	0.0	1,970,965	11.8	Low
Netherlands	1,912,578	1,912,578	0.0	2,233,171	20.4	Average
Uruguay	1,781,838	1,781,838	0.0	1,656,192	7.5	Very Low
Spain	1,717,616	1,717,616	0.0	1,917,514	14.4	Low
Canada	1,702,840	1,702,840	0.0	1,797,812	3.9	Very Low
Germany	1,637,347	1,637,347	0.0	2,222,097	19.5	Low

Consistency of exports by product sector

Consistency of Trade Statistics : Exports of 09 Coffee, tea, mate and spices (2013, in USD thousands)

Country	Export value reported by country	Number of partner countries	Exports to the reporting partners	Number of reporting partners	Non reported exports as %	Mirror estimates - Value	Mirror estimates - Number of partners	Measure of discrepancy - from detail (0-100 %)	Scoring of discrepancy Exports
Brazil	4,954,269	110	4,834,764	80	2.4	5,643,651	95	12.9	Low
Germany	2,919,294	142	2,901,618	94	0.6	2,075,998	99	19.0	Low
India	2,680,024	161	1,853,760	102	30.8	1,849,157	110	11.2	Low
China	2,245,882	144	1,624,697	91	27.7	1,725,524	114	20.0	Low
Switzerland	2,239,730	101	2,209,492	78	1.4	2,202,211	84	29.6	Average
Indonesia	1,948,665	114	1,778,368	79	8.7	2,155,559	89	14.6	Low
Colombia	1,933,995	83	1,926,569	62	0.4	2,100,995	81	10.1	Low
Italy	1,463,404	155	1,430,422	105	2.3	1,357,096	106	9.1	Very Low

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Next step

To know more about discrepancy indicators, please visit the ITC Trade Competitiveness Map web site: http://legacy.intracen.org/appli1/tradecom/RS_EP_CI.aspx?RP=032&YR=2013

For any additional information please write to delachenal@intracen.org

Thank you

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