

MERCHANDISE TRADE

TRANSPORTATION TIME LAG: ITS IMPACT ON THE SYMMETRY BETWEEN WORLD EXPORTS AND IMPORTS

Goods shipped from one country to another are recorded in one's exports and the other's imports. The statistical value of these bilateral trade flows, however, virtually never match. One of the main reasons for asymmetries in merchandise trade statistics lies in the treatment of freight transportation and insurance included in the value of imports (c.i.f valuation) and excluded from exports (f.o.b. valuation). Other causes stem from practical difficulties in geographical attribution, "double counting" in triangular trade schemes, different collection and compilation practices, reporting errors and differ-

ent times of recording, among others.

Despite the existence of asymmetries, mirror exports and imports generally follow similar patterns in their changes over time which trade statisticians often use in validating data and producing estimates. Mirror statistics, however, happen to be misleading and need to be used with sound judgment. The example below illustrates the discrepancies between actual and mirror trade developments due to transportation time lags.

An example: The time lag impact illustrated using Mauritania's oil exports

Mauritania started exporting petroleum in 2006, on a relatively small scale, yet significant for its economy. Its oil exports stagnated in 2008. Its partner countries' oil imports from Mauritania, on the other hand, show to have increased by 33 per cent. Which data then reflect the real change of its oil exports? Despite this apparent contradiction, both developments are true – the difference lies simply in the transportation time lag which leads to different times of recording in the sending and receiving country. Monthly statistics shown in the first two rows of table 1 below track the country's sporadic oil shipments to their final destination which is reflected in mirror statistics only one to two months later. Annualised values of reported exports and unadjusted mirror imports display the high above-mentioned asymmetry, mainly because of the November 2007 shipment which was recorded as an import only in January 2008.

Table 1. Mauritania oil exports and mirror imports, 2006-08

(million dollars and percentage change)

	monthly statistics														
	Dec06	Jan07	Feb07	Mar07	Apr07	May07	Jun07	Jul07	Aug07	Sep07	Oct07	Nov07	Dec07	Jan08	Feb08
Exports	57		52		58		65		73		81		86		
Mirror imports (raw)	58	55			57		64		69		75		87		
Mirror, adjusted for time lag		55		57		64		69		75		87		91	

Continued

	monthly statistics										Annual value		% change
	Mar08	Apr08	May08	Jun08	Jul08	Aug08	Sep08	Oct08	Nov08	Dec08	2007	2008	2008
Exports			108				91		44		330	330	0
Mirror imports (raw)		91			113		91		44		320	426	33
Mirror, adjusted for time lag			113			91		44			352	339	-4

Source: Mauritania, Comité National de Suivi des Revenus des Hydrocarbures (CNSRH), and Global Trade Information Service, GTA

The third row of Table 1 includes "corrected" mirror data by allocating mirror oil imports to the respective months when they left Mauritania. The 2008 annual change indicated by "adjusted" mirror data is a 4 per cent decrease, which is much more consistent with the reported stagnation in exports.

This example is an exceptional case where annual trade statistics and their mirror flows reflect contradictory developments. In general annual changes in actual and mirror trade flows are identical: "supplementary" imports in the first months are usually balanced by "supplementary" year-end exports.

The time-lag effect was, however, not so neutral on asymmetries in 2008 since a five year-long increasing trend was suddenly disrupted in the fourth quarter. The discrepancy induced by "supplementary" imports (i.e. corresponding to high exports of late 2007) could not be completely balanced by the "supplementary" exports of late 2008, which were at a considerably lower level. Although the global symmetry of merchandise trade was not affected (exports and imports grew at a similar rate), the transportation lag did impact on some specific commodities and countries typically trading over long distances. This had to be factored in for the compilation of 2008 trade values, especially for oil-exporting countries: asymmetries were high not only because of the transportation time but also because of the price of crude oil which had fallen more sharply than that of other products at the end of 2008. (YM)

EVENTS

A DAY FOR STATISTICS - THE DATA, THE USERS, THE PRODUCERS

"Data Day" was a two-day inter-agency programme that took place from 18-19 May 2009 at the WTO in Geneva in order to raise awareness on a range of data-related issues. It aimed to familiarize users with multiple data applications, draw attention to continuing needs for data, and to promote coherence and cooperation among international agencies that manage data. The event was a huge success and is definitely one to be repeated.

A COMPENDIUM OF
VARIOUS TRADE-RELATED DATA:
**DATA DAY AT THE WTO:
TRADE AND MARKET ACCESS DATA
FOR POLICY MAKERS**



FINALLY!

CLICK [HERE](#) TO DOWNLOAD THE BROCHURE

Inter-Agency meetings, Technical Assistance and Trade Policy Courses, June - December 2009

Inter-Agency and Academic Cooperation meetings

Geneva, Switzerland 8-11 June	Conference of European Statisticians and OECD Committee on Statistics
Durban, South Africa 15-17 June	WB Workshop on Statistics of International Trade in Services Statistics for the BRIC and other countries
Pfäffikon, Switzerland 17-19 June	Statistical Aspects on the Conference on Valuing International Trade Rules
Geneva, Switzerland 25 June	WB Seminar on Services Trade and Policy
Aix en Provence, France 8-9 July	International Workshop on Firm Productivity Trade and Development Université de la Méditerranée
Sto. Dom., Dom. Rep. 23 July	XV Encuentro Institucional sobre Estadísticas
Bangkok, Thailand 9-11 September	14 th Session of the Committee for the Coordination of Statistical Activities
Bressanone, Italy 18-19 September	Brixen Workshop on International Trade and Finance
Geneva, Switzerland 28-30 September	WTO Public Forum Globalized Supply Chains and Trade in Value Added
Paris, France 28 October	Roundtable on Impact of the Economic Crisis on Globalisation and Global Value Chains
New York, United States 3-6 November	Expert Group on International Merchandise Trade Statistics
Paris, France 16-18 November	2nd Meeting of the Working Party on International Trade in Goods and Trade in Services Statistics
Paris, France 19-20 November	Inter-Agency Task Force on Statistics of International Trade in Services
Rio de Janeiro, Brazil 1-4 December	UNSD/ECLAC/IBGE/BCB Workshop on Statistics of International Trade in Services Statistics for LA countries
Paris, France 3-4 December	OECD World Input-Output Database Project Data Construction Meeting
Plovdiv, Bulgaria 13 December	ITTC Academic Cooperation Programme

Participation in Regional Trade Policy Courses covering tariff data and scheduling

Singapore , 8 June	Asian economies
Mbabane, Swaziland, 23-25 June	English-speaking African countries
Accra, Ghana, 15 October	Short course for African countries
Cotonou, Benin, 27 October	French-speaking African countries

Technical Assistance Activities

Kuala Lumpur, Malaysia 2-5 June	Regional Workshop on NAMA for Asian countries
Kingston, Jamaica 30 June-2 July	WTO-IDB/INTAL Regional Workshop on NAMA for Caribbean countries
Geneva, Switzerland 13-17 July	Workshop on Scheduling for WTO Members
Abu Dhabi, UAE 20-22 July	Regional Workshop on NAMA for Arab and Middle East countries
Bogotá, Colombia 28-31 July	WTO-IDB/INTAL Regional Workshop on NAMA for Latin American countries
Apia, Samoa 24-26 August	National Workshop on Accessions
Nairobi, Kenya 7 September	ECA Regional Seminar (Scheduling)
Dhaka, Bangladesh 4 November	National Workshop on NAMA
Ouagadougou, Burkina Faso 7-10 December	Regional Workshop on NAMA for French-speaking African countries
Lusaka, Zambia 26-27 November	National Seminar on Statistics of International Trade in Services
Tunis, Tunisia 14-15 December	WTO-AFDB Seminar on Accessions for African countries
Taipei, Chinese Taipei 14-15 December	National Workshop on Scheduling

Participation in Geneva Trade Policy Courses

18 June	Measuring Trade in Services
---------	-----------------------------

The **Statistics Group** supports WTO Members and the Secretariat with quantitative information in relation to economic and trade policy issues. The group is the principal supplier of WTO trade statistics and information on tariffs.

Comments regarding this issue can be forwarded to:

Ninez Piezas-Jerbi, Editor
(statistics@wto.org)

Contributor: Yann Marcus (WTO)



We are on the Web!

[International Trade and Tariff Data](#)

**Statistics Group,
Economic Research and
Statistics Division (ERSD)**
World Trade Organization
154, rue de Lausanne
CH-1211 Geneva 21,
Switzerland
Phone: +4122 7395111
Fax: +4122 7395763

For data inquiries, contact :

Trade flows: statistics@wto.org
Tariffs: idb@wto.org

[Send us feedback on ITS 2009!](#)