

**Twenty-Fifth Meeting of the
IMF Committee on Balance of Payments Statistics
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Cross-Sector Data Consistency

**Prepared by the Statistics Department
International Monetary Fund**

I. INTRODUCTION

1. The paper informs the Committee of work undertaken by the Cross-Sector Consistency Group (CSCG) of the IMF Statistics Department (STA). The CSCG was established by STA in early 2012 in response to a recommendation made by the Cross-Sectoral Data Consistency Working Group.¹
2. Considerable progress has been made since the last Committee meeting in organizing the work in STA and approaching an initial group of member countries where inconsistencies have been identified. The response from member countries has been very positive.
3. The paper presents the background of this work, progress achieved by the CSCG since its establishment, and the work going forward.

II. BACKGROUND

4. As noted, in response to a recommendation made by the Cross-Sectoral Data Consistency Working Group in its final report of July 2011, STA management established the CSCG in March 2012 in recognition of the importance of addressing inconsistencies in data that are reported to STA for different economic sectors (real sector, external sector, government sector, and financial institutions sector), and of the fact that data inconsistencies exist for most countries, regardless of their size and level of development.
5. The objective of the CSCG is to enhance the consistency of macroeconomic datasets, to facilitate economic analysis and support IMF surveillance of member countries. The CSCG provides a forum for identifying and discussing data inconsistencies, and developing plans and taking actions to address inconsistencies in collaboration with reporting countries.
6. The CSCG's work is supported by all STA divisions, given that addressing data inconsistencies may involve two/three/four divisions, and by regional managers and country coordinators. As per its Terms of Reference, the CSCG meets regularly (monthly), with meetings being documented in detailed minutes that are shared within STA, and prepares a written report every six months.

III. PROGRESS ACHIEVED

7. Following its establishment, the CSCG undertook the following main activities:
 - Set up the CSCG email group and website;
 - Prepared an “easy-to-read” template showing inconsistencies to be shared with member countries (see Attachment I, which is a sample template for Botswana);

¹ The Committee members were informed of the project undertaken by the Cross-Sectoral Data Consistency Working Group during the 2011 Committee meeting (see BOPCOM-11/25).

- Developed a model/standard message to be used by STA topical divisions in their correspondence to countries;²
- Prepared a standard template to be used by missions undertaking cross-sector consistency work to report back their main outcomes/findings (see Attachment II);
- Prepared a memorandum from the STA Director to heads of the IMF area departments and of other relevant departments (May 2012), informing them of the establishment of the CSCG and seeking inputs for CSCG work. In response to the memorandum, the CSCG received strong support and useful suggestions; some suggestions have been already incorporated in the CSCG work;
- Met with some countries during the 2012 IMF/World Bank Spring Meetings to discuss matters related to inconsistencies;
- Discussed the coordination of work on addressing inconsistencies with the ECB and Eurostat representatives (at the June 2012 meeting of the ECB Working Group on External Statistics). The CSCG is appreciative of the interest expressed by the ECB and Eurostat in collaborating with STA on matters related to identifying and addressing data inconsistencies;
- Prepared a text box dedicated to the CSCG work, which was included in the 2012 General Note on STA's Recent Developments and Current Initiatives.³

8. In connection with the indicators/time series compared, the CSCG reviewed the methodology of the previous Working Group, and worked on further improving the data sets compared, and the formulas that were used to highlight significant inconsistencies.⁴ The CSCG identified for each pair of indicators currently compared, instances where inconsistencies may occur because of differences in classification, sectorization, valuation, time of recording, etc. in data that are compiled according to international standards. Among such instances we note that the classification by institutional sector of money market funds and so-called offshore banks (i.e., deposit-taking corporations that engage exclusively or almost exclusively with nonresidents) differs between external sector statistics and monetary statistics; the treatment of goods that are transported across borders for processing but without any change in economic ownership differs between external sector statistics, *International Merchandise Trade Statistics (IMTS)*, and *Direction of Trade Statistics (DOTS)*; there are differences in the valuation of goods between external sector statistics and *IMTS*; and there are differences in the valuation of gold in the IIP, monetary and financial statistics, and international liquidity data that are reported to the IMF for publication in *International Financial Statistics (IFS)*. Information on differences in international

² STA's topical divisions are the Balance of Payments Division, Financial Institutions Division, Government Finance Division, and Real Sector Division.

³ See BOPCOM-12/03.

⁴ Inconsistencies are being analyzed looking at both percentage difference (> 25 percent; 15-25 percent; 5-15 percent) and absolute value difference.

standards was included in the preparation of correspondence with countries on inconsistencies. The current list of indicators/data series that are being compared is presented in Attachment III.

9. As per its Terms of Reference, the correspondence with the member countries refers to inconsistencies in the *reported* data to STA. Thus, if a member country is reporting *BPM5* basis data, the correspondence with the authorities will refer to *BPM5* data, even though STA is converting reported data to a *BPM6* basis for publication purposes.

10. Mindful of resources, the CSCG does not automatically follow up on inconsistencies in exports/imports of goods (inconsistencies may arise due to dissemination of estimated data for *DOTS* versus direct reporting by countries; the use of f.o.b. versus c.i.f. valuation; etc) and for reserve assets (e.g., Reserve Data Template versus international liquidity data in *IFS* given that other comparison/checking processes are ongoing in STA).

11. As part of the initial steps, the group identified a first set of countries (about 30), for which major inconsistencies are being followed up. The list encompasses G20/PGI countries; countries represented on the Committee; countries with whom STA discussed inconsistencies during the 2012 IMF/World Bank Spring Meetings; and countries proposed by the IMF area departments in response to May 2012 memorandum.

12. The CSCG prepared correspondence for most of the countries included in the initial list, which was sent by the topical divisions to the relevant counterparts in the countries. In response, the CSCG received very positive feedback from the authorities, which translated in significant immediate improvements in a number of cases (Brazil; Mexico; Indonesia; Uruguay; South Africa; Bangladesh; Mauritius).

13. While all the CSCG work has been conducted from the Headquarters, the group also provided inputs to other related work such as technical assistance missions. Recently, two missions (China and Philippines) undertook some cross-sector consistency work. Further, the CSCG identified other potential missions that could undertake cross-sector consistency work; as a result, Mauritius has been selected as a country for which a possible multisector mission will look into consistency issues.

IV. THE WORK GOING FORWARD

14. The CSCG's future work encompasses the following steps:

- Monitor inconsistencies on an ongoing basis and contact countries with significant inconsistencies;
- Help explore some discrepancies that are “internal” to a division (e.g., bilateral data reported by countries for a specific position such as inward Direct Investment in country X by country Y with outward Direct Investment data by country Y in country X, reported to STA in the context of the Coordinated Direct Investment Survey);

- Explore the possibility of having STA staff join Article IV missions to look into consistency matters;
- Prepare a Board Paper to inform the IMF Management and Executive Directors on STA progress in cross-sector consistency work;
- Maintain a list of methodological differences among the major macroeconomic statistical manuals and bring these to the attention of the relevant agencies and bodies.

Questions for the Committee:

1. *What efforts are ongoing in economies and agencies represented on the Committee?*
2. *Do members of the Committee have any other comments on the CSCG's work?*

Attachment I. Cross Sector Consistency Table: Botswana 1/

	2008A1		2009A1		2010A1		2011A1	
	Percent Difference	Difference (Abs Value)	Percent Difference	Difference (Abs Value)	Percent Difference	Difference (Abs Value)	Percent Difference	Difference (Abs Value)
NET CLAIMS ON CENTRAL GOVT_CB: MFS VS GFS	...	...	...	...	...	...	...	...
NET CLAIMS ON CENTRAL GOVT_DC: MFS VS GFS	...	...	...	...	...	...	...	...
EXTERNAL TRADE, EXPORTS: BOP VS DOTS 2/	...	...	...	...	...	...	...	...
EXTERNAL TRADE, EXPORTS: BOP VS IMTS 2/	3.09	150.81	0.60	20.76	1.29	59.98	...	...
EXTERNAL TRADE, EXPORTS: DOTS VS IMTS 2/	...	...	...	...	...	...	...	...
EXTERNAL TRADE, IMPORTS: BOP VS DOTS 3/	...	...	...	...	...	...	...	...
EXTERNAL TRADE, IMPORTS: BOP VS IMTS 3/	17.66	845.58	16.11	701.49	15.53	815.08	...	...
EXTERNAL TRADE, IMPORTS: DOTS VS IMTS 3/	...	...	...	...	...	...	...	...
FOREIGN ASSETS (CENTRAL BANK): IIP VS MFS 4/	0.14	12.55	0.11	9.96	0.27	21.02	...	...
FOREIGN ASSETS (OTHER DEPOS CORP): IIP VS MFS 4/	8.63	66.65	6.34	37.83	34.82	268.77	...	...
FOREIGN LIABILITIES (CENTRAL BANK): IIP VS MFS 5/	112.36	17.26	55.88	69.82	70.59	96.49	...	...
FOREIGN LIABILITIES (OTHER DEPOS CORP): IIP VS MFS 5/	141.07	180.69	115.76	150.03	200.00	446.04	...	...
RESERVES: IIP VS MFS 6/	0.14	13.02	0.11	9.96	0.27	21.02	...	...
RESERVES: IIP VS ILQ 7/	0.11	9.97	0.29	25.16	0.24	18.87	...	...
RESERVES: MFS VS ILQ 6/ 7/	0.03	3.05	0.40	35.12	0.03	2.16	0.05	4.40

Legend (Percent Difference)

5% - 15%
15% - 25%
>25%

Notes and Footnotes to Attachment I

Note: CB-central bank; MFS-monetary and financial statistics; GFS-government finance statistics; BOP-balance of payments; DOTS - direction of trade statistics; IMTS-international merchandise trade statistics; IIP-international investment position; ILQ-international liquidity

... missing data.

1/ All data are published/reported data unless otherwise noted.

2/ Exports BOP are f.o.b. ; Exports DOTS are f.o.b. ; Exports IMTS are f.o.b. (IFS section: Intl Transactions & Positions).

3/ Imports BOP are f.o.b. ; Imports DOTS are c.i.f. ; Imports IMTS are c.i.f. (IFS section: Intl Transactions & Positions).

4/ Foreign Assets MFS are calculated: Foreign Assets, in national currency / Market Rate, e.o.p. In MFS, Foreign Assets include direct investment equity and debt instruments while in IIP, Foreign Assets excludes direct investment equity and debt instruments.

5/ Foreign Liabilities MFS are calculated: Foreign Liabilities, in national currency / Market Rate, e.o.p. In MFS, Foreign Liabilities excludes portfolio investment equity securities (they are included in "shares and other equities") while in IIP, Foreign Liabilities include portfolio investment equity securities.

6/ Reserves Assets MFS are calculated: Official Reserves Assets / Market Rate, e.o.p.

7/ Reserve Assets, ILQ (IFS section: International Liquidity) are calculated: Gold (national valuation) + Total Reserves Minus Gold

Attachment II. Post Mission Template—Summary of Findings on Cross-Sector Consistency

Country	Mission Type	Description ^{1/}	Products	Actions Taken During Mission:					
				No Issues	Data Missing/ Not Applicable	Resolved Pre-Mission	Resolved During Mission	Discrepancy Source Identified/ Future Plans Discussed	Authorities Made Aware of Issue
		Net Claims on Central Government - CB	MFS vs GFS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Net Claims on Central Government - DC	MFS vs GFS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		External Trade - Exports ^{2/}	BOP vs DOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		External Trade - Exports ^{2/}	BOP vs RE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		External Trade - Exports ^{2/}	DOT vs RE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		External Trade - Imports ^{3/}	BOP vs DOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		External Trade - Imports ^{3/}	BOP vs RE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		External Trade - Imports ^{3/}	DOT vs RE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Foreign Assets - CB ^{4/}	IIP vs MFS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Foreign Assets - ODC ^{4/}	IIP vs MFS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Foreign Liabilities - CB ^{5/}	IIP vs MFS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Foreign Liabilities - ODC ^{5/6/}	IIP vs MFS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Reserve Assets ^{7/}	IIP vs ILQ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Reserve Assets ^{8/}	IIP vs MFS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Reserve Assets ^{7/8/}	ILQ vs MFS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

Attachment III. Current List of Compared Indicators/Data Series

Macroeconomic Datasets	Compared Indicators
BOP – DOTS	Imports and Exports of Goods
BOP – IMTS	
DOTS – IMTS	
IIP – MFS	Foreign Assets for Central Bank, Foreign Assets for Other Depository Corporations
	Foreign Liabilities for Central Bank, and Foreign Liabilities for Other Depository Corporations
MFS – GFS	Net Claims on Central Government for Central Bank
	Net Claims on Central Government for Depository Corporations
IIP – MFS	Reserve Assets
IIP – ILQ	
MFS – ILQ	

BOP: Balance of Payments; DOTS: Direction of Trade Statistics; IMTS: International Merchandise Trade Statistics; IIP: International Investment Position; MFS: Monetary and Financial Statistics; GFS: Government Finance Statistics; ILQ: International Liquidity Data.