

Should international organisations also use non-official sources when providing official international economic statistics?

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Abstract

There is an increasing need for official international economic and financial statistics that support multilateral surveillance purposes and allow policy-makers and business people to compare economic developments among countries and economic areas. By contrast, not all countries and regions are able to provide timely statistics that are internationally comparable. International and supranational organisations are therefore compelled to use non-official sources in order to provide comparable statistics across countries and economic areas or for the world as a whole.

This paper discusses under which conditions international and supranational organisations should be entitled to depart from official national statistical sources. The paper also addresses whether the statistical methodological guidelines of international and supranational organisations are sufficiently developed and harmonised to provide sufficient guidance in the discussions with countries that typically report statistics to several international organisations.

Key Words: Official international statistics, statistical reporting and methodology, international organisations, non-official statistical sources.

1. Role and function of international organisations in the statistics system

International and supranational organisations (ISOs) serve many functions on the international policy scene. A common function is the collection of official statistics from national sources and the release of comparable national statistics and consistent regional or global aggregates to serve the international policy agenda.

The primary source of economic statistics used by the organisations is the national statistical systems (NSS), normally supplied by the national statistical offices (NSOs) or the national central banks (NCBs). These national statistics feed into the production system of international and supranational organisations and the resulting statistics are released to serve the international policy agenda, for instance G20 meetings in the case of international economic and financial statistics.

The international and supranational organisations typically follow the Principles Governing International Statistical Activities¹ that are aligned with the Fundamental Principles of Official Statistics² widely applied by NSSs. The international statistical standards are the statistical foundations for these organisations when **selecting a sub-set of relevant concepts and definitions** for the reporting templates, also called “transmission programmes”, which specify the methodologies

¹ http://unstats.un.org/unsd/methods/statorg/Principles_stat_activities/principles_stat_activities.htm

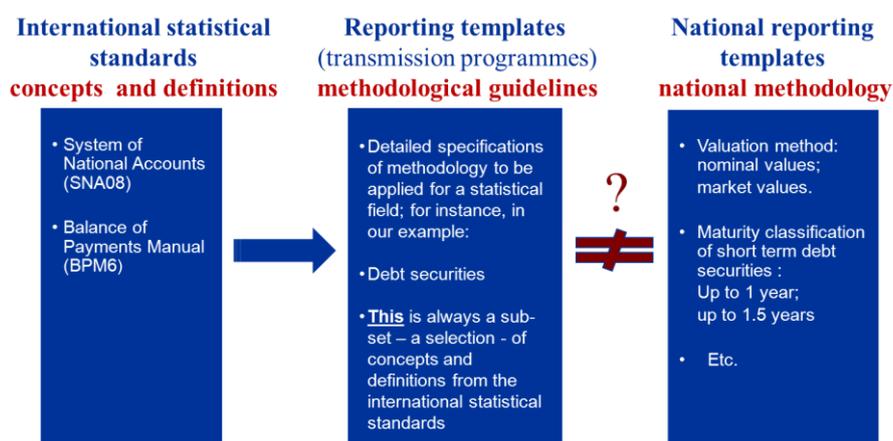
² <http://unstats.un.org/unsd/dnss/gp/fundprinciples.aspx>

for releasing internationally comparable statistics. Although the national statistics may be sufficient for national policy purposes, they may not be adequately aligned for making comparisons across countries or regions.

This discrepancy can pose significant risks to the comparability of international statistics. The balance between serving the needs of national users and those of international users may need to be adjusted in view of the increasing demand for **multilateral surveillance** and for **regional/global** aggregates.

The statistical question arises, what should international and supranational organisations do in cases where national statistics are not fully aligned with the international reporting templates?

Graph 1: The concept of international and national reporting templates



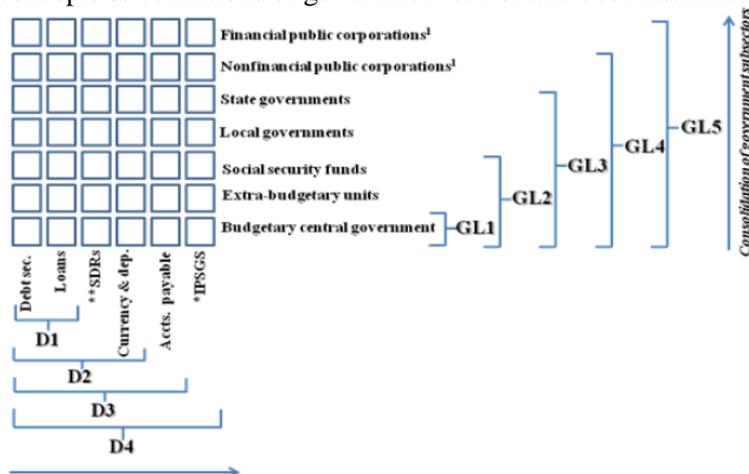
Let us provide a couple of practical examples

2. The importance of international reporting templates

International statistical standards are the back-bone of the concepts and definitions for specifying the international reporting templates. These templates provide the methodological guidelines for each set of statistics; such as maturity breakdown, the frequency of reporting, the currency of denomination, seasonal adjustments, timeliness and revision policies. However, for economic and financial statistics, these international reporting templates may not be sufficiently detailed. This provides significant flexibility for national sources to supply statistics following national practices. The national methodologies may diverge from each other and this may have an impact on the comparability of international statistics for multilateral surveillance purposes.

The example of government debt securities issues may illustrate the situation. National statistics may differ in the **coverage** of the institutions included in the government sector and by **type of financial instruments** classified as debt securities, both of which may impact the comparison of countries' debt levels.

Table 1: Different concepts & definitions of government sector and debt instruments applied by NSS³.



The impact of applying different national methodologies can provide quite a different picture of a country’s debt level. These values may then be used in constructing other economic and financial indicators, such as debt/DGP ratios.

Different national statistics may obviously have an impact on the comparability of statistics for **multilateral surveillance**. This leads to the following questions.

1. To what extent and under which conditions may international and supranational organisations adjust national statistics or even use alternative (non-official) sources to align these with international reporting templates, thereby enhancing the comparability of international statistics?

2. **Should international organisations always present official national statistics as supplied by national sources?**

There is no single answer fitting all international and supranational organisations, but *many statisticians of national statistical authorities would instantly and faithfully reply “Yes” to the second question*. However, are there other options?

3. Presenting international statistics with a focus on multilateral surveillance purposes⁴

There are at least four different ways international organisations can present national statistics at the international level *in cases where national reporting templates differ significantly from international reporting templates*, each of which has its own merits and drawbacks.

³ “What Lies Beneath: The Statistical Definition of Public Sector Debt”. Robert Dippelsman, Claudia Dziobek, and Carlos A. Gutiérrez Mangas, IMF discussion note, July 27, 2012

⁴ This article refers only to the comparability of national statistics from a statistical methodological point of view and does not include examples of statistics where (i) the independence of agents in the NSS can be called into question and/or (ii) where the reported statistics and metadata have been distorted by short-term electoral cycles and national party political objectives.

Table 2: Different options of presenting national statistics at international level.

#	Options	Impact
1	Publish blank value	not sufficient
2	Publish national statistics	presenting less comparable statistics
3	Estimate/adjustments	presenting more comparable statistics
4	Alternative sources + adjustments	Possibly higher comparability

Option 1: This option is not an option.

Option 2: Presenting national statistics as supplied by the official national source, while clearly acknowledging the national methodological choices. If these differ from the international reporting template, these are explained in footnotes or endnotes and, in some cases, deviations could be quantified within the associated metadata. National statistics would be presented next to each other and the international statistics may be (i) comparable or (ii) not comparable as specified in footnotes/endnotes and/or in the metadata. Presenting international statistics using this option may be sufficient for individual country surveillance purposes, where the statistics are used to assess the national performance.

Option 3: Adjusting national statistics. This option may be valid for certain types of statistics, where the national statistics do not sufficiently comply with the international reporting template and therefore pose risks to the comparability of country-by-country statistics. In the case, where it is not feasible for national sources to comply with international reporting templates or to provide associated adjustments, it may be necessary for international and supranational organisations to perform these adjustments themselves. Examples would be conversions of quarterly national data into monthly national data or seasonal adjustments to a national series.

Such adjustments could be useful for multilateral assessment programmes, where the international statistics need to be as comparable as possible to ensure an equal assessment process for all participating countries.

The international and supranational organisations have a well-defined feedback loop with the official national sources, when their quality check procedures highlight abnormalities in the submitted national statistics. This well-functioning loop clarifies abnormalities, deviations from the international reporting templates, new updates, quantify and document deviations and impacts, and propose enhancements to the international reporting template for the next update cycle.

Option 4: Searching for alternative sources. In the worst-case scenario, where official national statistical sources do not supply statistics or fulfil a level of minimum compliance with the international reporting template, the international organisation may need to make statistical choices and search for alternative sources such as data vendors, research centre, universities, private corporations etc.

International and supranational organisations have to remain transparent and be accountable for their choices. They need to be transparent and release their international reporting templates, publish any adjustments applied to national statistics and/or any estimation methods used on them, and elaborate on the choices and reasons for using alternative sources. In this regard, international and supranational organisations should take full responsibility for international statistics and source them accordingly.

4. Presenting international statistics with a focus on regional or global statistics

In a similar vein, certain international and supranational organisations produce regional and/or global statistics, such as GDP of the G20 countries or for an economic or geographical region.

Do the same options apply when international and supranational organisations produce and release regional and global statistics as for multilateral surveillance purposes?

Again, the answer to this question depends on the type of statistics concerned. At least for economic and financial statistics, there are two options available.

Table 3: Different options of using national statistics for releasing regional or global statistics.

#	Options	Impact
1	sum of the national statistics	yes, same 3 options; For example debt securities issued within a region
2	national contributions used as input to aggregates	no, different production flow and adjustments need; for example regional/global GDP or regional import/export

Option 1: For certain types of international statistics, international and supranational organisations have the same three options at their disposal for providing comparable regional statistics as for multilateral surveillance purposes. Let us take the example of the total value of outstanding debt within a region and issued by governments. In this case, the national statistics remain the source and an international reporting template is generated specifying in detail the required concepts, definitions and associated methodological choices. If the national statistics are in compliance with the reporting template, the region’s aggregate can be produced summing the national statistics. If the national statistics deviate from the international reporting template, international and supranational organisations would need to choose from the following options: (i) include the national statistics as provided by the source (and include footnotes, endnotes and meta-data); (ii) make adjustments or estimates; and/or (iii) use alternative sources and make adjustments.

Option 2: This option requires significantly more statistical production efforts and closer interaction with national experts than option 1. *Here, the statistical expert’s knowledge goes beyond the layman’s cliché that this is just “an aggregation of official national statistics”.*

An example is the production of international import/export statistics for a region. This requires the netting out of all intra-regional imports/exports, so only those import/export transactions leaving or arriving in the region are included within the regional statistics. For two members of a region, the national (input/export) statistics would report an “export” to another country within the same region (and equivalently the receiving country would report an “import” from the sending country⁵). However, as both countries are located in the same region, the “export” and “import” flows – are intra-regional flows, and therefore need to be netted out, as they do not contribute to the (external) import or export figures of the region. This netting operation becomes significantly more demanding with the number of countries and for each statistical breakdown required for the region.

A similar example would be the calculation of the consolidated balance sheet of banks within a region. Producing a consolidated balance sheet for the banking sector requires the netting-out of all interbank loan and deposit positions (within the region) from the national banking balance sheet.

⁵ Thought the two values would not always match for various reasons.

International and supranational organisations are obliged to be **fully transparent** in documenting their methodological and statistical choices. This relates to the publication of methodological guidance (international reporting templates), transparency in the estimation procedure and the use of alternative sources where applicable, aggregation and consolidation methods, and taking **responsibility for sourcing the released international statistics**.

5. Conclusion

There is an increasing need for official international economic and financial statistics that support multilateral surveillance purposes. This is a natural development as markets become more open and economies more integrated.

This paper demonstrates that there are many variations at the national level in applying international reporting templates and that these variations can pose significant risks to the international comparability of statistics for multilateral surveillance purposes. It calls for that the **international reporting templates**, which specify the methodological guidelines for sending statistics to the international and supranational organisations, need to be significantly **more detailed**. In particular, international statistics cannot be viewed in isolation since a chain is only as strong as its weakest link. **There is therefore a fundamental need for international organisations and the respective national statistical agents to tighten the links of the entire statistical system.**

Against this background, this paper poses the question **should international organisations always present official national statistics as supplied by national sources?**

Despite the fact that most statisticians of national statistical authorities would instantly reply “**Yes**” to this question, the paper demonstrates that there are **examples within financial and economic statistics where international organisations should adjust and estimate national statistics**, if these adjustments/estimations are not done at the national level.

Finally, the paper shows that making estimations of and adjustments to national statistics is frequently a necessity when producing regional and global aggregates. In doing so, the international and supranational organisations is obliged to be fully transparent in documenting its’ methodological and statistical choices. While the compilation of regional and global aggregates benefits from comparable national statistics, the aggregation is more demanding in terms of statistics.