

Evaluating International Government Data Quality

International Governmental Data

International government datasets are usually sourced from national statistical authorities. International Governmental Organizations (IGOs) then compile, standardize, and disseminate this data to improve comparability and access. This process is complex and can involve delays in release. The quality and reliability of the data are often dependent on the capabilities and integrity of the governments that provide the data. There are two basic categories of international government data:

Aggregate Data and Statistical Databases: IGOs collect, harmonize, and publish data in centralized systems according to internationally agreed-upon standards and in official languages. Data is typically at the country level and an annual frequency. Users can generate custom tables using a graphical user interface or download entire datasets, which allows users to compare statistics across multiple countries over multiple time periods in the language users are most comfortable with.

Microdata: IGOs conduct their own surveys and may publish the associated microdata (individual level data). This is quite different from the data collected from national governments.

Data Quality Frameworks and Standards

IGOs invest significant effort in developing and refining frameworks, methods, and guidelines through international agreements and collaboration with statisticians and national experts. Notable examples include:

- [UN National Quality Assurance Frameworks Manual for Official Statistics](#) (UN NQAF Manual)
- [World Bank International Comparison Program](#) (ICP)
- [IMF Data Quality Assessment Framework](#)

- [European Union Statistical Requirements Compendium](#)
- [UNESCO Education Data Quality Assessment Framework](#)

These frameworks are continuously developed and debated, focusing on data quality aspects such as validity, timeliness, completeness, consistency, and integrity.

The Common Data Quality Issues

International government data is extraordinarily useful and convenient for temporal and cross-country comparisons. It is harmonized, standardized, and translated. It is reviewed by national and IGO statistical authorities. With some exceptions, it is largely open access and public. There is often a lack of alternatives or the alternatives can be expensive. However, there are specific data quality issues with compiled international government data that need attention:

- **Missing Geographies and Values:** It is common to have missing geographies and values. Not every country reports every metric.
- **Temporal Limitations:** Harmonizing data across countries is time-consuming, often taking months or years. Challenges include discontinued indicators, regime changes, lack of transparency, and insufficient statistical capacity in some countries.
- **Adjustments:** The adjustments that need to be made sometimes can be inconvenient, and occasionally demoralizing. Converting national currencies to US dollars and switching between constant (real) and current (nominal) prices are common tasks. The metrics may not be done the way it needs to be done for research purposes.
- **Changes in Methodologies:** Governments may revise their statistical methodologies due to changes in the economy or counting methods. New versions may not map well to older versions, and IGOs may not keep older data, which can be disconcerting.
- **Changes in Historical Data:** Not all IGOs have data preservation policies. Data may be updated, revised, deleted, or taken down without explanation.
- **Discrepancies:** International data can be published in different databases (e.g., in both the International Labor Organization statistics and UNData). When data in one system is updated or deleted, it may still exist in another. The



discrepancies in the data retrieved from different systems can lead to confusion and inconsistencies in analysis.

- **Data Manipulation:** Data may be intentionally misreported by countries. Occasionally, data may be manipulated to achieve a goal or a target. For example, the World Bank’s Doing Business Report was discontinued after accusations that it gave certain countries preferential treatment in the report’s annual country rankings.
- **Concept-Measurement Gap:** There can be a gap between a concept defined in a manual and the capacity of a government or statistical authority to measure it accurately.

When considering international government data, it is crucial to distinguish between data compiled by international organizations and the surveys they conduct. Be aware of high-profile rankings and their political or economic implications. Pay attention to changes in methodologies and be mindful of any campaigns, incentives, or agendas influencing data quality. Recognize the differences and capacities of national statistical agencies. No data source is perfect—do not take the data quality for granted and always maintain a healthy skepticism.

References

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Visit the project website to learn more!

<https://www.dataqualityliteracy.org>