### Data availability and quality review by method

The below tables have been designed to help evaluate data availability and quality. For ease of use, we provide one table for each method. This is an indicative list of variables and the final selection will depend on the national data environment. Four variables are listed in the following walk-through example: imports; exports; taxable profits of MNE units in a country; and offshore portfolio wealth of citizens of a country. The following elements are evaluated:

* **Variable/data needed**: listing the variable required for a particular method to measure IFFs.
* **Data source/agency**: listing which agency has the data and is considered a data source for this variable.
* **Frequency**: frequency of the reported variable.
* **Timeliness**: time lag of when data become available after the event.
* **Access**: how easily the data are accessible by an agency (group of agencies) compiling IFF statistics, including also legal setup.
* **Coverage**: what units and phenomena are measured by the variable selected, indicating whether there are potential gaps or overlaps in measurement.
* **Granularity**: what level of granularity for a variable is available.
* **Interoperability/format (linking)**: how is the variable integrated with other data, e.g., at which level and through which variable.
* **Alternative/proxy**: if variable is not available, what is the alternative variable and its source.
* **Fit for purpose**: is the variable in line with measurement requirements of IFFs?
* **Availability**: indicating whether variable/data with required quality are available or not.

#### Example of a data availability and quality review

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable/  data needed | Data source/  agency | Frequency | Timeliness | Access | Coverage | Granularity | Interoperability/ format (linking) | Alternative/proxy  Variable Source | | Fit for purpose | Availability |
| *Value of imports* | *Customs office* | *Monthly* | *2 months* | *Access within NSS* | *No gaps* | *6-digit HS* | *Time and product-level* | *Value of imports* | *United Nations Comtrade* | *Yes* | *Yes* |
| *Value of partner’s exports* | *Partner’s Customs office* | *Monthly* | *2 months* | *Bilateral agreement* | *No gaps* | *6-digit HS* | *Time and product-level* | *Value of exports* | *United Nations Comtrade* | *Yes* | *Yes* |
| *Value of taxable profit of MNE’s unit* | *Tax authority* | *Annual* | *6 months* | *Special agreement* | *Units above threshold* | *Firm-level* | *Firm’s ID* | *Accounting profits* | *Tax authority* | *Yes* | *Yes* |
| *Offshore assets of citizens* | *BIS* | *Annual* | *12 months* | *Publicly available* | *Overlaps, including other units* | *Country-level* | *Country-level* |  |  | *Partially* | *Yes* |

#### Method #1 - Data availability and quality review: Partner Country Method (PCM) +

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable/  data needed | Data source/  agency | Frequency | Timeliness | Access | Coverage | Granularity | Interoperability/ format (linking) | Alternative/proxy  Variable Source | | Fit for purpose | Availability |
| *Value of imports* |  |  |  |  |  |  |  |  |  |  |  |
| *Value of exports* |  |  |  |  |  |  |  |  |  |  |  |
| *Value of re-imports* |  |  |  |  |  |  |  |  |  |  |  |
| *Value of re-exports* |  |  |  |  |  |  |  |  |  |  |  |
| *Volume of imports* |  |  |  |  |  |  |  |  |  |  |  |
| *Volume of exports* |  |  |  |  |  |  |  |  |  |  |  |
| *Volume of re-imports* |  |  |  |  |  |  |  |  |  |  |  |
| *Volume of re-exports* |  |  |  |  |  |  |  |  |  |  |  |
| *Transport costs to FOB value* |  |  |  |  |  |  |  |  |  |  |  |
| *CIF-FOB margins* |  |  |  |  |  |  |  |  |  |  |  |
| *CIF price declared by importer* |  |  |  |  |  |  |  |  |  |  |  |
| *FOB price declared by exporter* |  |  |  |  |  |  |  |  |  |  |  |
| *Trade system* |  |  |  |  |  |  |  |  |  |  |  |
| *Mark-up by third country* |  |  |  |  |  |  |  |  |  |  |  |
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| *…* |  |  |  |  |  |  |  |  |  |  |  |
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#### Method #2 - Data availability and quality review: Price Filter Method (PFM) +

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| Variable/  data needed | Data source/  agency | Frequency | Timeliness | Access | Coverage | Granularity | Interoperability/ format (linking) | Alternative/proxy  Variable Source | | Fit for purpose | Availability |
| *Export prices* |  |  |  |  |  |  |  |  | |  |  |
| *Import prices* |  |  |  |  |  |  |  |  | |  |  |
| *Volume of imports* |  |  |  |  |  |  |  |  |  |  |  |
| *Volume of exports* |  |  |  |  |  |  |  |  |  |  |  |
| *Volume of re-imports* |  |  |  |  |  |  |  |  |  |  |  |
| *Volume of re-exports* |  |  |  |  |  |  |  |  |  |  |  |
| *Transport costs* |  |  |  |  |  |  |  |  |  |  |  |
| *CIF price declared by importer* |  |  |  |  |  |  |  |  |  |  |  |
| *FOB price declared by exporter* |  |  |  |  |  |  |  |  |  |  |  |
| *Free-market prices* |  |  |  |  |  |  |  |  |  |  |  |
| *Partner member of the same MNE* |  |  |  |  |  |  |  |  |  |  |  |
| *Contractual terms* |  |  |  |  |  |  |  |  |  |  |  |
| *…* |  |  |  |  |  |  |  |  |  |  |  |
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#### Method #3 - Data availability and quality review: Global distribution of MNEs’ profits and corporate taxes

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable/  data needed | Data source/  agency | Frequency | Timeliness | Access | Coverage | Granularity | Interoperability/ format (linking) | Alternative/proxy  Variable Source | | Fit for purpose | Availability |
| *Profits before taxes of MNE units* |  |  |  |  |  |  |  |  |  |  |  |
| *Effective tax rate of countries* |  |  |  |  |  |  |  |  |  |  |  |
| *Value of taxes paid by MNEs* |  |  |  |  |  |  |  |  |  |  |  |
| *Number of employees of MNE units* |  |  |  |  |  |  |  |  |  |  |  |
| *Value of tangible assets of MNE units* |  |  |  |  |  |  |  |  |  |  |  |
| *GDP per capita in PPP of countries* |  |  |  |  |  |  |  |  |  |  |  |
| *Population of countries* |  |  |  |  |  |  |  |  |  |  |  |
| *Corruption Perception Index of countries* |  |  |  |  |  |  |  |  |  |  |  |
| *…* |  |  |  |  |  |  |  |  |  |  |  |
| *…* |  |  |  |  |  |  |  |  |  |  |  |
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#### Method #4 - Data availability and quality review: MNE vs comparable non-MNE profit shifting

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| Variable/  data needed | Data source/  agency | Frequency | Timeliness | Access | Coverage | Granularity | Interoperability/ format (linking) | Alternative/proxy  Variable Source | | Fit for purpose | Availability |
| *Per capita turnover* |  |  |  |  |  |  |  |  |  |  |  |
| *Persons employed* |  |  |  |  |  |  |  |  |  |  |  |
| *Share of goods and services on total costs* |  |  |  |  |  |  |  |  |  |  |  |
| *Export-to-turnover ratio* |  |  |  |  |  |  |  |  |  |  |  |
| *Import-to-cost ratio* |  |  |  |  |  |  |  |  |  |  |  |
| *Share of salaries on total costs* |  |  |  |  |  |  |  |  |  |  |  |
| *Share of services on turnover* |  |  |  |  |  |  |  |  |  |  |  |
| *Share of services on total costs* |  |  |  |  |  |  |  |  |  |  |  |
| *EBIT-to-turnover ratio* |  |  |  |  |  |  |  |  |  |  |  |
| *Value added-to-turnover ratio* |  |  |  |  |  |  |  |  |  |  |  |
| *R&D spending* |  |  |  |  |  |  |  |  |  |  |  |
| *Share of royalties on total costs* |  |  |  |  |  |  |  |  |  |  |  |
| *Average taxation on productive income in foreign countries* |  |  |  |  |  |  |  |  |  |  |  |

#### Method #5 - Data availability and quality review: Flows of undeclared offshore assets indicator

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable/  data needed | Data source/  agency | Frequency | Timeliness | Access | Coverage | Granularity | Interoperability/ format (linking) | Alternative/proxy  Variable Source | | Fit for purpose | Availability |
| *Domestically reported offshore assets of citizens* |  |  |  |  |  |  |  |  |  |  |  |
| *Cross-border positions* |  |  |  |  |  |  |  |  |  |  |  |
| *Offshore assets of citizens reported by partner jurisdictions* |  |  |  |  |  |  |  |  |  |  |  |
| *MSCI world price index* |  |  |  |  |  |  |  |  |  |  |  |
| *Financial flows of citizens* |  |  |  |  |  |  |  |  |  |  |  |
| *…* |  |  |  |  |  |  |  |  |  |  |  |
| *…* |  |  |  |  |  |  |  |  |  |  |  |
| *…* |  |  |  |  |  |  |  |  |  |  |  |

#### Method #6 - Data availability and quality review: Flows of offshore financial wealth by country

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| Variable/  data needed | Data source/  agency | Frequency | Timeliness | Access | Coverage | Granularity | Interoperability/ format (linking) | Alternative/proxy  Variable Source | | Fit for purpose | Availability |
| *International portfolio liability positions* |  |  |  |  |  |  |  |  |  |  |  |
| *International portfolio asset positions* |  |  |  |  |  |  |  |  |  |  |  |
| *Cross-border deposits* |  |  |  |  |  |  |  |  |  |  |  |
| *FDI-to-GDP* |  |  |  |  |  |  |  |  |  |  |  |
| *MSCI world price index* |  |  |  |  |  |  |  |  |  |  |  |
| *Financial flows of citizens* |  |  |  |  |  |  |  |  |  |  |  |
| *Division of offshore wealth into deposits and portfolio investments* |  |  |  |  |  |  |  |  |  |  |  |
| *Non-compliance rate* |  |  |  |  |  |  |  |  |  |  |  |
| *…* |  |  |  |  |  |  |  |  |  |  |  |
| *…* |  |  |  |  |  |  |  |  |  |  |  |
| *…* |  |  |  |  |  |  |  |  |  |  |  |