EUROPEAN COMMISSION
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Directorate C: Macro-economic statistics
Unit C-1: National accounts methodology, Standards and Indicators

Computing MIP indicators for European aggregates

While values for European aggregates for most of the MIP indicators were either already available in the underlying statistical domains according to standard definitions, or easy to compute as the sum of Member States' values, in some cases more attention to the definition has been necessary to compute an aggregate value. This note covers those cases, explaining the computation behind the aggregate values.

Compiling the **balance of payments and IIP** of currency unions (euro area) and economic unions (the EU) from the simple aggregation of national data would not be appropriate. Instead, it is typically undertaken by aggregating the national contributions towards the transactions and positions of the currency or economic union with non-residents of the union (so-called extra-union transactions/positions data). This means that all transactions/positions between members of the euro area/EU are eliminated.

The current account balance for a country refers to transactions of a country with the rest of the world as partner (including other euro area or EU Member States). The EU aggregate includes only those transactions/positions of the Member States, for which the counterpart is not an EU resident. By convention, the rest of the world partner in case of the EU is referred to as "extra-EU" and in case of the euro area as "extra-EA". Table 1 lists all affected MIP indicators.

Table 1 List of indicators requiring a change in partner for computing aggregate values

Type	Name and unit
Scoreboard	Current account balance - 3 year average
Scoreboard	Export market shares - 5 years % change
Scoreboard	Net international investment position -- annual data
Base	Current account balance - annual data
Base	Export market shares by items - 1 year % change
Auxiliary	Direct investment liabilities (flows) - annual data, % of GDP
Auxiliary	Direct investment liabilities (stocks) - annual data, % of GDP
Auxiliary	Export performance against advanced economies as 5 year % change
Auxiliary	Current plus capital account (Net Lending/Borrowing) as % of GDP
Auxiliary	Net trade balance of energy products as % of GDP
Auxiliary	Net international investment position excluding non-defaultable instruments as % of GDP

- **Export market shares - % of world exports (scoreboard)**

The export market share (EXMASH) scoreboard indicator presents the share of each EU Member State with respect to total exports of the world (or region). For the calculation at current prices, the market share refers to the world trade (world export market share, produced by the IMF).

EU and EA export market shares are computed according to the following formulae, where intra-EU and intra-EA exports are subtracted from total world exports in the denominator:

EXMASH(EU/World) = EX(EU to extra-EU) / [EX(World to World) - EX(EU to EU)]

EXMASH(EA/World) = EX(EA to extra-EA) / [EX(World to World) - EX(EA to EA)]

- **Net international investment position (scoreboard)**

The international investment position (IIP) is a statistical statement that shows, at a point in time, the value and composition of (a) financial assets of residents of an economy that are claims on non-residents and gold bullion held as reserve assets, and (b) liabilities of residents of an economy to non-residents.

Therefore, total Net IIP of the EU (all functional categories, including reserve assets) is estimated as the sum of Net IIP of the euro area (source: ECB), the seven non-euro area Member States (i.e. the sum of national Net IIPs vis-à-vis the rest of the world), and the net IIP of the EU Institutions (also vis-à-vis the rest of the world). Net IIP for the EU is computed according to the following formula:

Net IIP (EU to extra-EU) = Net IIP (EA to extra-EA) + Net IIP (nonEAMS1 to W1) + … + Net IIP (nonEAMS7 to W1) + Net IIP (EUI to W1)

where W1 is the rest of the world, nonEAMS1 to nonEAMS7 are the seven EU countries that do not belong to the euro area (Czechia, Denmark, Hungary, Poland, Sweden, Bulgaria and Romania) and EUI represents the EU institutions.

- **Net international investment position excluding non-defaultable instruments (auxiliary)**

The Net international investment position excluding non-defaultable instruments (NENDI) represents the Net IIP excluding instruments that cannot be subject to default. It is calculated as Net IIP minus net direct investment (all instruments), minus net portfolio investments equity (equity securities). The NENDI for the EU is computed according to the following formula:

NENDI (EU to extra-EU) = Net IIP (EU to extra-EU) – Net DI (EU to extra-EU) – Net PI Equity (EU to extra-EU)

- **Export market share in volume as 1 year % change (auxiliary)**

This indicator is calculated by subtracting the growth rate of chain-linked volumes (CLV) of world exports from the growth rate of chain-linked volumes of exports of a specific country. EU and EA aggregates are calculated by adding up the underlying country data in previous year's prices, which are then chain-linked, without netting intra EU or EA trade. Levels are the sum of the respective country, and do not represent the net exports of the EU or EA to the rest of the world. For this indicator, growth rates of the EU/EA represent a weighted average of the country growth rates, not the growth rate of net exports for the EU or EA as such. Therefore, country data are not directly comparable with the European aggregates. However, the indicator without netting of intra EU/EA flows is comparable with the corresponding data for the world, as those figures are also not netted for intra EU/EA flows.

- **Export performance against advanced economies (auxiliary)**

Since May 2021, the OECD consists of 38 member countries. However, only 22 EU Member States (out of 27) and 17 euro area Member States (out of 20) are also members of the OECD. Therefore exports of the EU/EA cannot be directly compared to OECD exports. Hence, for the purpose of calculation of this indicator, Eurostat defines advanced economies (ADVEC) as all OECD member countries plus non-OECD EU Member States (currently Croatia, Cyprus, Malta, Bulgaria, and Romania).

By analogy to the indicator *Export market shares - % of world export*, intra-EU/EA exports are subtracted from the total exports of advanced economies in the denominator. The following formulae are used:

EXMASH(EU/ADVEC) = EX(EU to extra-EU) / [EX(ADVEC to World) - EX(EU to EU)]

EXMASH(EA/ADVEC) = EX(EA to extra-EA) / [EX(ADVEC to World) - EX(EA to EA)]

Note: EX(ADVEC to World) includes intra-ADVEC exports

The same definition of advanced economies is used for the calculation of country values.

- **Gross non-performing loans of domestic and foreign entities, and Consolidated banking leverage (auxiliary)**

Those two indicators are produced by the European Central Bank, in the Consolidated banking dataset. They can be extracted by considering the following values for the two dimensions reference area and reference sector breakdown: for the dimension reference area, "B0" for the EU and "U2" for the euro area. For the reference sector, while the value for the country data is *Domestic banking groups and stand alone banks, foreign (EU and non-EU) controlled subsidiaries and foreign (EU and non-EU) controlled branches* (code 67), the value for the EA is *Domestic banking groups and stand-alone banks, foreign (non-EA) controlled subsidiaries and foreign (non-EA) controlled branches* (code 57) and the value for the EU is *Domestic banking groups and stand-alone banks, foreign (non-EU) controlled subsidiaries and foreign (non-EU) controlled branches* (code 47).

For these two indicators, the EU and EA aggregates are in <u>changing composition</u>, that is in a certain period, the indicator's value will refer to the member country composition of the aggregate valid at that moment in time.

For annual financial accounts EA20 and EU27 data are computed by summing up countries' data.

For all other (scoreboard and auxiliary) indicators, a <u>fixed composition</u> is used (that is, the time series of indicators include all countries which are members in the latest period).

Additional useful information can also be found by accessing the links in the upper part of the table, such as information on the last update or explanatory texts (metadata) for each indicator.

For any additional help, do not hesitate to use the functional address ESTAT-MIP@ec.europa.eu.