



Technical Notes

Regional Integration Knowledge System – RIKS

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Terms of Use

RIKS is essentially a web-based information and learning platform on regional integration processes worldwide.

Data contained in RIKS, even if calculated on the basis of United Nations (UN) data and other official sources, are not official statistics from the UN, United Nations University (UNU), regional organizations, or UN Member States.

Primary information is carefully gathered, processed and presented, with the indication of original sources. Any errors and omissions that are not already present in the primary data are the sole responsibility of the builders of the system. Users are encouraged to notify the builders if they observe or suspect any anomalies, so that they can be rectified.

The data for each indicator can be viewed through a web-browser or as a comma separated file (.csv). Tables and images are rendered on demand, thus they always represent the latest data available in our website.

When using data from RIKS in publications, please include the following reference:
UNU-CRIS (2019), Regional Integration Knowledge System (RIKS), <http://www.cris.unu.edu/>.

Regional Integration Arrangements

Definition

The list of arrangements presented in the Regional Arrangements section is not based on a single definition of regional arrangements or regional organizations, but rather should be considered as an open list. Therefore the non-inclusion of an arrangement or organization in this list does not necessarily imply that it is not recognized as such.

The criteria to select the regional arrangements included in RIKS include:

- Member states belong to the same geographical sub-region or to neighbouring geographical sub-regions; geographical sub-regions are those used by the United Nations Statistic Division, with arrangements such as ACP, APEC, and OIC have also been included.
- A minimum participation of three states. The regional dimension taken into account in RIKS has a “quantitative” facet as well, excluding from its scope of analysis bilateral organizations/arrangements (although involving two countries in the same geographical sub-region);
- Regional integration is explicitly set among the purposes of establishment of the organization/arrangement, as defined in treaty texts: RIKS specific focus is on monitoring and analysing (intended) regional integration processes, and not overall cooperation among countries belonging to the same geographical sub-region(s);
- Even if information on organizations which are not yet (or no more) in force could help understanding the dynamics and the effects of regional integration, RIKS currently concentrates on present organizations/arrangements and the current membership.

Information

The information displayed for the different regional arrangements includes:

- Name and acronym of organization
- Year of establishment
- Membership information over time
- Legal basis
- Link(s) to official homepage (if applicable)

The information displayed for single countries provides an overview of the regional arrangements the country is involved in. This covers only those arrangements that are included in the Regional Arrangements section of RIKS.

Illustrative maps are available for regional arrangements.

Treaty texts

The collection of treaty texts includes a corpus of legal texts on which regional arrangements are built. The selection of the texts is based on:

- importance of the text;
- public availability of the text in electronic format.

Whenever possible, the texts are presented in PDF format.

Regional Integration Indicators

The data provided in this section for predefined regions cover the regional arrangements as they are presented in the regional arrangements section of RIKS. The set of countries belonging to each regional arrangement changes over time such that it reflects the historical memberships.

Depending on availability of the raw data that originally come from UN and other official sources, time series normally start in 1970.

Currently any missing data is treated as zero value in the calculation.

Data sources

Trade

Migration

Investment

Population

GDP

HDI

Indicators of trade, migration and investment

Total flows (TT, TM, TI)

Definition

The sum of all trade (TT), migration (TM), or investment flows (TI) from the countries belonging from a particular regional arrangement.

$$TT_t = \sum_{i \in \text{region}} \sum_{j \in \text{world}} T_{ij,t}; \quad TM_t = \sum_{i \in \text{region}} \sum_{j \in \text{world}} M_{ij,t}; \quad TI_t = \sum_{i \in \text{region}} \sum_{j \in \text{world}} I_{ij,t}.$$

where $T_{ij,t}$, $M_{ij,t}$, and $I_{ij,t}$ represent the flow of trade, migration, and investment between country i and country j at time t .

Intra-regional flows (IT, IM, II)

Definition

The sum of the trade (IT), migration (IM), or investment flows (II) flowing between the countries belonging from a particular regional arrangement.

$$TI_t = \sum_{i \in \text{region}} \sum_{j \in \text{region}} T_{ij,t}; \quad TM_t = \sum_{i \in \text{region}} \sum_{j \in \text{region}} M_{ij,t}; \quad TI_t = \sum_{i \in \text{region}} \sum_{j \in \text{region}} I_{ij,t}.$$

Extra-regional flows (ET, EM, EI)

Definition

The sum of the trade (ET), migration (EM), or investment flows (EI) between a country belonging from a particular regional arrangement to a country that is not member of the agreement.

$$TI_t = \sum_{i \in \text{region}} \sum_{j \notin \text{region}} T_{ij,t}; \quad TM_t = \sum_{i \in \text{region}} \sum_{j \notin \text{region}} M_{ij,t}; \quad TI_t = \sum_{i \in \text{region}} \sum_{j \notin \text{region}} I_{ij,t}.$$

Intra-regional share (ITS, IMS, IIS)

Definition

The intra-regional trade (ITS), migration (IMS) and investment shares (IIS) are the ratio of the intra-regional flows (IT, IM, or IS) and the total flows (TT, TM, or TI).

$$ITS_t = \frac{IT_{i,t}}{TT_{i,t}}; \quad IMS_t = \frac{IM_{i,t}}{TM_{i,t}}; \quad IIS_t = \frac{II_{i,t}}{TI_{i,t}}.$$

Range of values

The value ranges from 0 to 100.

Interpretation of results

This indicator reflects how important the intra-regional flows of a particular regional arrangement are relative to its overall trade. It measures the interdependence among Member States of a particular regional arrangement from the perspective of international trade, migration or investment.

Intra-regional intensity index (ITI, IMI, III)

Definition

The intra-regional trade (ITI), migration (IMI) and investment intensity index (III) are the ratio of the intra-regional shares divided by the region's share in the world's trade, migration or investment flows.

$$ITI_{i,t} = \frac{\frac{IT_t}{TT_t}}{\frac{WT_t}{TT_t}}; \quad IMI_{i,t} = \frac{\frac{IM_t}{TM_t}}{\frac{WM_t}{TM_t}}; \quad III_{i,t} = \frac{\frac{II_t}{TI_t}}{\frac{WI_t}{TI_t}}.$$

Where WT_t , WM_t , and WI_t are the world's total trade, migration and investment flows in year t .

Range of values

The value ranges from 0 to $\frac{T_{w,t}}{T_{i,t}}$.

Interpretation of results

This indicator is used to determine whether the value of intra-regional flows is greater or smaller than would be expected on the basis of the region's importance in worldwide flows.

This value is:

- equal to zero in the case of no intra-regional trade, migration and investment;
- equal to one if the region's weight in its own trade is equal to its weight in world flows (geographic neutrality);
- higher than one if intra-regional flows are relatively more important than the flows with the rest of the world;
- equal to the reciprocal of the region's share in world trade when all flows are intra-regional.

Homogenous intra-regional and extra-regional intensity indexes

Definition

The homogeneous version of the intra-regional intensity index, whose maximum value is independent from region i's trade, migration or investment size. Its denominator is the region's share in the trade of the rest of the world. Thus:

$$HITI_t = \frac{\frac{IT_t}{TT_t}}{\frac{ET_t}{TW_t - IT_t}}; \quad HIMI_t = \frac{\frac{IM_t}{TM_t}}{\frac{EM_t}{MW_t - TT_t}}; \quad HIII_t = \frac{\frac{II_t}{TI_t}}{\frac{EI_t}{IW_t - II_t}}.$$

The homogenous extra-regional intensity indexes are the complementary indicators:

$$HETI_t = \frac{1 - \frac{IT_t}{TT_t}}{1 - \frac{ET_t}{TW_t - IT_t}}; \quad HEMI_t = \frac{1 - \frac{IM_t}{TM_t}}{1 - \frac{EM_t}{MW_t - TT_t}}; \quad HEII_t = \frac{1 - \frac{II_t}{TI_t}}{1 - \frac{EI_t}{IW_t - II_t}}.$$

Symmetric introversion index (STJ, SMJ, SIJ)

Definition

The trade, migration and investment introversion indexes are indicators of relative intra-regional intensity, meaning that they show whether the intensity of intra-regional flows varies at a faster or at a slower pace than that of extra-regional flows.

The symmetrical version is defined as follows:

$$STJ = \frac{\frac{HITI_t}{HETI_t} - 1}{\frac{HITI_t}{HETI_t} + 1} = \frac{HITI_t - HETI_t}{HITI_t + HETI_t};$$

$$SMJ = \frac{\frac{HIMI_t}{HEMI_t} - 1}{\frac{HIMI_t}{HEMI_t} + 1} = \frac{HIMI_t - HEMI_t}{HIMI_t + HEMI_t};$$

$$SIJ = \frac{\frac{HIII_t}{HEII_t} - 1}{\frac{HIII_t}{HEII_t} + 1} = \frac{HIII_t - HEII_t}{HIII_t + HEII_t};$$

Range of values

The value ranges from -1 to 1.

Interpretation of results

The STJ index value is:

- equal to minus one in the case of no intra-regional trade;
- equal to zero if the region's weight in its own trade is equal to its weight in the trade of the rest of the world (geographic neutrality);
- equal to one in the case of no extra-regional trade.

Other indicators

Population (POP)

Definition

The sum of the population figures of the countries belonging to a particular regional integration arrangement.

$$POP_t = \sum_{i \in region} POP_{i,t}$$

Share of world population (POPS)

Definition

The regional population as a percentage share of the world's total population.

$$POPS_t = \frac{\sum_{i \in region} POP_{i,t}}{\sum_{i \in world} POP_{i,t}} 100$$

Gross Domestic Product (GDP)

Definition

The sum of the GDP at current prices in US dollars of the set of countries belonging to a particular regional integration arrangement.

$$GDP_t = \sum_{i \in region} GDP_{i,t}$$

Regional share of Gross Domestic Product (GDPS)

Definition

The regional GDP at current prices in US dollars as a percentage share of the world's total at current prices in US dollars.

$$GDPS_t = \frac{\sum_{i \in region} GDP_{i,t}}{\sum_{i \in world} GDP_{i,t}} 100$$

Weighted average of region's Human Development Index (HDI)

Definition

The weighted average of the Human Development Index value of the set of countries belonging to the regional integration agreement, weighted by their population size.

$$HDI_t = \frac{\sum_{i \in region} POP_{i,t} * HDI_{i,t}}{\sum_{i \in region} POP_{i,t}}$$