

Spatial Expansion Trends of International Economic Integration Systems

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Abstract: The research aims to identify patterns and trends in the spatial expansion of international economic integration (IEI) systems in the context of regional and interregional free trade agreements (FTAs), concluding within or between micro-, macro-, and mega-regions. The author applied methods of structural and dynamic analysis of WTO RTA-IS data. To define micro- and macro-regions, the author used the WTO and UNCTAD approaches. To identify mega-regions, the author took geopolitical, pan-ideal, and civilizational criteria. To periodize the development stages of the global IEI system, long waves of differentiation-integration and evolution cycles of the world system are used. To identify IEI centers, the author used the classifications of UNIDO and UNCTAD. The research revealed patterns of the alternation of regional and interregional IEI and an increase in the share and number of FTAs concluded with more distant countries (from micro to macro and then to mega-regions). The research focuses on a quantitative analysis of long-term world patterns and trends of spatial expansion and the design of IEI systems by their leaders, while previous studies are limited to a qualitative analysis of the factors of expansion and a study of expansion cases.

Keywords: economic integration, integration system, interregional integration, regional integration, spatial expansion

JEL codes: F02, F13, R12

In developing international economic integration (IEI) systems, the stages of block formation and deepening IEI are replaced by their expansion from centers to the periphery. Over time, the nature of expansion changes and becomes quite aggressive due to the limited geo-economic space. The expansion is based on the goals of the leaders. Almost all countries are participating in IEI projects; some are the centers of large IEI systems with many free trade agreements (FTAs). As a result, multipolarity and plurality in approaches to the development of IEI appear in different regions. Geopolitical, geo-economic, civilizational, and pan-ideal factors of IEI systems became the most important. New leaders or centers of integration attraction are being formed under increased protectionism. They design their IEI systems and

compete with old leaders for attracting countries and setting the rules of the game. The world has entered a phase of the struggle between blocks and their leaders for geo-economic space.

In this regard, some questions arise, including the following:

- What are the patterns, trends, and results of the spatial expansion of IEI systems?
- At what stage of development is the global IEI system, and what does the future hold?
- Will the formation of integration blocs as new actors of the multipolar world take place?
- Will their competition be replaced by cooperation and integration?
- What place will the Eurasian project take in the new global IEI system?

On this basis, the research aims to identify patterns and trends in the spatial expansion of IEI systems in the context of regional and interregional FTAs, concluding within or between micro-, macro-, and mega-regions.

The research solved the following tasks:

- To determine the structure and dynamics of regional and interregional FTAs in micro-, macro-, and mega-regional perspectives;
- To identify patterns and trends in the expansion of IEI systems;
- To design the further development of the global IEI system and outline the directions for developing the Eurasian integration project.

Method

The research focuses on a quantitative analysis of long-term world patterns and trends of spatial expansion and the design of IEI systems by their leaders using the following methodology:

- 1) The WTO database is used as a source of data on the number and dynamics of regional and cross-regional FTAs (WTO, 2023).
- 2) For the classification of micro- and macro-regions, the WTO and UNCTAD approaches were used because the WTO limitedly identifies micro-regions and classifies a few cross-regional FTAs as regional and vice versa (Table 1). Mega-regions (American; Euro-Afro-Arab; Asia-Pacific; and Eurasian as CIS-12 or wider as Eurasia continent) are taken based on several scientific works (Haushofer, 1931; Brzezinski, 1998; Dugin, 1997).
- 3) To periodize the development of IEI (Table 2), the author used long waves of differentiation-integration and cycles of world-system evolution with phases of great shocks (GS), world market revolution (WMR), structural crisis (SC), and technological upheaval (TU) (Pantin & Lapkin, 2019).
- 4) Given the dependence of IEI on the level of economic and industrial development, the author used data from (UNIDO, 2020) and (UNCTAD, 2023) to identify IEI centers.

Old centers are industrially developed economies (the USA, Canada, the EU, EFTA, the UK, Japan, Australia, New Zealand, Israel, etc.). New centers include industrial developing (Bahrain, Hong Kong, Qatar, Kuwait, Macau, Malaysia, UAE, Republic of Korea, Singapore, and Taiwan) and transition economies (Russia); emerging industrial developing (Argentina, Brazil, Brunei, Venezuela, India, Indonesia, China, Colombia, Costa Rica, Mauritius, Mexico, Oman, Saudi Arabia, Suriname, Thailand, Tunisia, Turkey, Uruguay, Chile, and South Africa) and transition economies (Belarus, Ukraine, Kazakhstan, Serbia, Macedonia, and Montenegro). The rest of the countries are classified as peripheral.

Table 1
 Classification of macro-regions (micro-regions)

I. WTO	Europe (including Turkey and Cyprus) CIS-12 Africa Middle East Asia (East Asia, West Asia, and Oceania) America (South, Central, and North America, including Mexico and the Caribbean)
II. UNCTAD: - Adjustment of micro-regions of Asia and America, allocation of micro-regions of Africa and Oceania according to UNCTAD - Division of Europe into micro-regions - Assignment of the CIS to a separate macro-region, as in the WTO	Europe (EU, including Cyprus, EFTA, and other European countries) CIS-12 Africa (East, Central, West, North, and South) Asia (East, South, Southeast, and West Asia (except CIS)) America (North, Central, South America, and Caribbean) Oceania (Australia, New Zealand, Melanesia, Micronesia, and Polynesia)

Source: Compiled by the author based on (WTO, 2023) and (UNCTAD, 2023)

Table 2
 Development stages of global IEI system

Long wave	Cycle of world-system evolution			
	Phase	Years	Trend of leadership and world order	Conjuncture Trend
Differentiation	WMR	1945–1968	Rise	Uptrend
Integration	SC	1969–1980		Drop
	TU	1981–2004	Uptrend	
Differentiation	GS	2005–2016	Rise	
	WMRn	2017–2041		Uptrend

Source: Compiled by the author based on (Pantin & Lapkin, 2019).

Data Availability

Data on the dynamics and structure of FTAs in relation to mega-, macro-, and micro-regions in 1949–2023, which supports the findings of the study, is available at <https://figshare.com/> with ID <https://doi.org/10.6084/m9.figshare.23691750>.

Results

The sequential analysis of FTAs based on their geographical location in one or different mega-, macro-, and micro-regions revealed a gradual increase in the number and share of interregional FTAs due to rapid growth in the SC and GS phases as part of the integration policy of block expansion of old and new IEI centers.

Seven interregional FTAs were signed in the WMR phase, 36 in the SC phase, 160 in the TU phase, and 351 in the GS phase. In 2017–2023, 27 FTAs were signed. Among the existing FTAs, these data were 0, 6, 98, 187, and 23. In 2023, the share of signed regional FTAs was 45%, only 56% of which are in force (11 FTAs were canceled in the WMR phase, and 18 FTAs were canceled in the SC phase due to their renewal or inefficiency; another 129 FTAs were canceled in the TU phase due to the entry transition economies in the EU or the consolidation of bilateral FTAs with their participation). The share of signed interregional FTAs in 2023 was 55%, of which 86% were in force. Among the FTAs in force, the share of interregional ones prevails and has grown from 17% to 65% over 1970–2023, in physical FTAs in force – from 25% to 64% (Figure 1 and Figure 2 below and Figure 3 and Figure 4 at <https://figshare.com/>).

Based on WTO data, the pattern of the cyclical alternation of regional and interregional IEI in the WMR, TU, SC, and FS phases was confirmed. In the WMR and TU phases, the number of signed regional FTAs prevails, and their share is growing compared to interregional ones. In the SC and GS phases, the number of interregional FTAs prevails; their share is growing compared to regional ones.

Using the UNCTAD approach (Table 1), the pattern is also confirmed. However, in the TU phase, there is no quantitative superiority of signed regional FTAs. Nevertheless, there is an increase in the number of regional FTZs, more significant than the growth of interregional FTZs, compared to the TU phase.

The analysis of mega-regions showed that for the phases of WMR, SC, and TU integration between mega-regions is almost not typical – 3 FTAs (14%), 7 (9%), and 31 (9%). In turn, in the phases of GS and WMRn, it intensifies but still does not dominate – 75 and 108 FTAs (18%) (Figures 5–6 at <https://figshare.com/>). Its growth is expected in the WMRn phase (2017–2041) and especially after the 2040s due to the transition to a long wave of integration. In 2023, FTAs between mega-regions were dominated by FTAs of the Euro-Afro-Arab mega-region with Asia-Pacific (6.2%), American (5.5%), and Eurasian (4.0%) regions.

The largest share of FTAs is within the Euro-Afro-Arab mega-region (47.3%), and the smallest is within the Eurasian one (6.8%). The share of FTAs for IEI within Trilateral was 6.0%–1.3% in 1964–2023 if only trilateral interaction is considered and 8.0%–13.1% in 1961–2023 given bilateral interaction. Within the Anti-Trilateral, there is no trilateral interaction; the share of bilateral was 8.0%–10.8% in 1961–2023. This shows an increase in

the importance of IEI within the Anti-Trilateral and the Trilateral. However, the latter prevails (55% to 45%), and the former lags in importance and timing (Figures 5–8 at <https://figshare.com/>).

If we understand the Eurasian mega-region wider than the CIS (as the continent of Eurasia), then Eurasia has concluded 138 FTAs with the countries of other mega-regions (120 FTAs in force, 110 physical FTAs in force), which is 23.2% (30.7% and 31.3%) FTAs of the world. The contribution of the CIS-12 is only the Ukraine-Canada FTA. For comparison, the Americas concluded only 6.2% FTAs (7.2% and 7.2%) with other mega-regions. Within Eurasia, 355 FTAs have been signed (187 in force, 167 physical FTAs in force), which is 59.6% (48.1% and 47.4%) of all FTAs. The share of 50 FTAs, including CIS-12, is 30% of FTAs within Eurasia.

The analysis of macro-regions also indicates an increase in the share and number of FTAs concluded with more distant countries outside the macro-regions. In Figures 9–11 at <https://figshare.com/>, their share in the WMR phase increased to 29% (6 FTAs). In the SC phase, it continued to grow to 45% (34). Then, it slightly decreased in the TU phase to 30% (108). In the GS phase, it again increased to 36% (188). Cyclicity is also noted: an increase in the share of FTAs between macro-regions is characteristic in the SC and GS phases; a decrease in the TU phase is explained by an increase in the importance of interregional IEI in the SC and GS phases.

In 2023, among the FTAs within the macro-regions, the share of FTAs in Europe dominated. A decrease is observed in FTAs (it increased to 38% in 1949–2004 but fell to 26% by 2023) in Africa (from 50% to 3% since 1951), America (from 50% to 11% since 1951), and Oceania (from 5% to 1% since 1969). The share of FTAs in Asia (10% in 2023) and the CIS (7%) was growing due to the intensification of IEI after the Asian crisis in 1997 and the collapse of the socialist system in the 1990s. FTAs of Asia with Europe (12%) and America (6.3%) prevail among the FTAs between macro-regions.

The analysis of micro-regions (Fig. 12 at <https://figshare.com/>) showed that the second half of the WMP and SC phases were accompanied by a drop in the initially high share of FTAs in micro-regions (from 100% to 52% and up to 18%) due to an increase in the share of FTAs with more remote countries: between micro-regions within macro-regions – to 19% (WMR) and up to 37% (SC); between macro-regions within mega-regions – up to 27 and 36%; and between mega-regions – up to 14% in the WMR phase (in the SC phase, the share fell to 9%). This confirms the growing importance of interregional IEI compared to regional IEI in the SC phase, mainly within mega-regions. In the TU phase, the share of FTAs within micro-regions increased to 32%; until the middle of the phase, the share of FTAs between micro-regions within macro-regions increased to 52% and then fell to 39%. The share of FTAs between mega-regions did not change (9%). The share of FTAs within mega-regions between macro-regions fell to 21%. The relevance of regional IEI in the TU phase is growing. However, its space is becoming wider, capturing more remote countries. In the GS phase, the share of FTAs within micro-regions and between them within macro-regions fell to 26% and 36% in 2016. The share of FTAs between mega-regions and within them between macro-regions increased to 14% and 24% by 2016 and to 18% and 25% by 2023, which indicates the growing importance of interregional IEI, including with countries outside the

mega-regions. Thus, the importance of interaction between mega-regions is growing (Figure 1 and Figure 2).

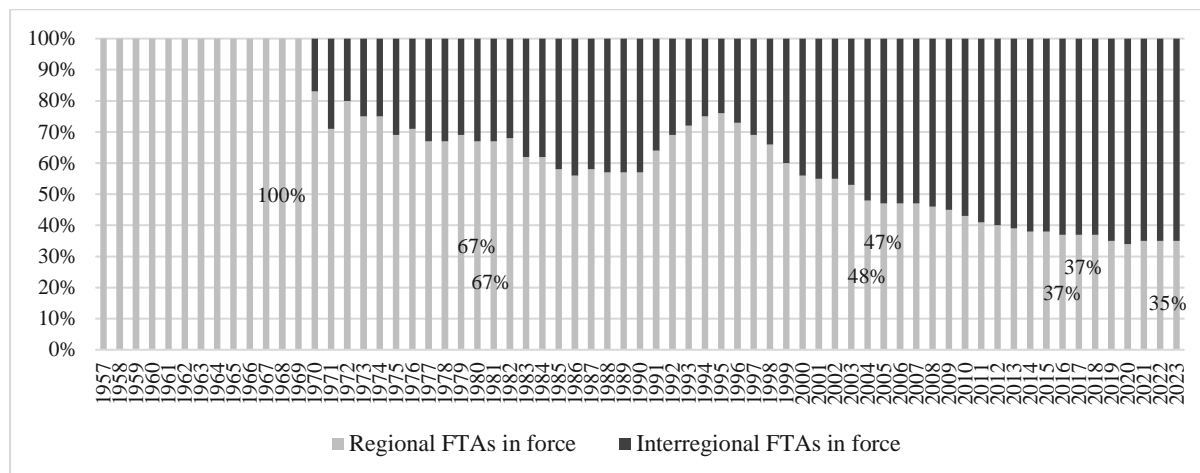


Figure 1
 Share of FTAs in force by years

Source: Calculated and built by the author based on (WTO, 2023)

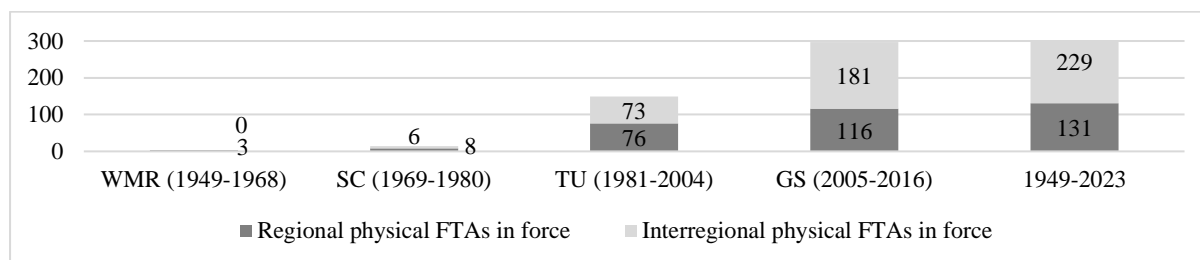


Figure 2
 Number of physical FTAs in force by phase

Source: Calculated and built by the author based on (WTO, 2023)

Discussion

The patterns of spatial expansion of regional IEI systems and the development of interregional FTAs are set out in various theories that study the following:

- Factors of expansion: geopolitical, particularly geostrategic (Cohen, 1963); trilateral (Brzezinski, 1998); anti-trilateral (Dugin, 1997); pan-ideal (Haushofer, 1931); civilizational (Huntington, 1992); pan-nationalist (Ozhigina, 2021); and economic (Baldwin & Venables, 2013);
- Constructing IEI systems based on common values, cultures, norms, and rules (Jackson, 2021; Katzenstein, 2009); building and designing them based on discourses (Neumann, 1994);

- Additive (Harrison et al., 2002), hub and spoke (Baldwin, 2008), network (Seno-Alday, 2019), comparative (Acharya, 2012), conflicting (Kabandula & Shaw, 2018), and spaghetti bowl and jigsaw puzzle regionalism (Menon, 2014).

Thus, the spatial expansion of IEI systems is understood, on the one hand, as a complex multidimensional self-developing phenomenon and, on the other hand, as a process of conscious design of IEI systems by countries and blocs. However, previous studies are limited to a qualitative analysis of individual factors of expansion and the study of specific expansion cases. In turn, this research focuses on a quantitative analysis of long-term world patterns and trends of spatial expansion and the design of all IEI systems by their leaders worldwide and considers a whole range of factors influencing expansion (e.g., economic, social, technological, geopolitical, geographical, civilizational, and institutional factors). Considering a wide range of factors, structural and dynamic analysis of the entire available data set on FTAs made it possible to identify patterns and trends in the expansion of IEI systems common to the world, as well as prove its cyclical nature and predict possible changes in the future to design Eurasian integration.

Conclusion

The analysis made it possible to confirm the following patterns:

- Cyclical alternation of regional and interregional IEI in the phases of WMR, TU and SC, and GS;
- An increase in the share and number of FTAs between more distant countries, which means a transition from IEI in micro-regions (WMR), to IEI mainly within macro-regions (SC and TU), to subsequent IEI mainly between macro-regions in mega-regions, increased IEI between mega-regions (GS and WMRn), and its further intensification and dominance between mega-regions (SCn).

The following trends have also been identified:

- Growth in the number and share of interregional FTAs due to the rapid growth in the SC and GS phases during the expansion of old and new IEI centers;
- An increase in the importance of IEI within the Anti-Trilateral and Trilateral, with the latter prevailing and the former lagging in importance and timing;
- A decrease in the share of FTAs in the macro-region of Europe, Africa, America, and Oceania; an increase in Asia and the CIS.

The nature of the expansion of IEI systems is changeable and cyclical. An important role is played by cycles of the world system, world order, and IEI centers. Therefore, it is possible to develop a geoinformation system of FTAs that provides visualization of spatial data on the global IEI system and its micro-, macro-, and mega-regional expansion.

For Eurasian project at the current stage, it is important to design deep IEI on the intra-regional contour through regulatory convergence using the WTO plus and WTO extra norms, the transition from a common to a single market, stimulating mutual ties and multilateral

projects, promoting growth and development, strengthening financial opportunities of union, and providing structural and defensive regulation of the single market (Ozhigina, 2020). Subsequently, the expansion in Eurasia and strategic interaction on the external contour of the EAEU with third countries and their blocs inside and outside Eurasia are being updated.

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