ADB’s Global and Regional Integration Indexes

Presenter:

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In collaboration with

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Aims

- Develop composite indexes of global and regional integration
- Examine their possible effects on economic growth, income inequality, and inclusive growth
- Suggest policy implications

Plan of this presentation

(1) Globalization and Regional Integration

(2) Introducing Global and Regional Integration Indexes

(3) Presenting Global and Regional Integration Indexes

(4) Effects on economic growth, income inequality, and inclusive growth

(5) Summary and concluding remarks

1. Globalization and Regional Integration

- Globalization is one of the most noticeable phenomena over the past few decades
- Globalization promotes economic growth and human development
- Globalization can generate income inequality and political polarization, potentially undermining social and cultural cohesion
  - Some argue that globalization has been a major driving force in widening inequality between and within countries
- Regional integration has gathered momentum in response to the intensifying pressures of global competition and deepening polarization (e.g., regional trading arrangements such as FTA, RTA)
  - As for RTA in the Asian Pacific region, RCEP, CPTPP, and IPEF
- Regional integration is often thought to provide the opportunity to take advantage of foreign trade on a smaller, regional scale while being less exposed to the intensifying pressures of global competition and financial risks of full liberalization
- Under so-called open regionalism, regionalization is regarded as a stepping stone to globalization
- Some countries, particularly small developing ones, may wish to promote regionalization as a strategy to secure economic and financial resilience and a more controlled path toward globalization

- This project examines how global and regional integration differ in costs and benefits
- First, develop global and regional integration composite indexes that can capture complex and multifaceted aspects of economic integration
  - Using the same platform allows one to gauge how relatively well each country has progressed in global and regional integration
- Then, examine if global and regional integration differ in terms of their effects on economic growth, income inequality, and inclusive growth
- If global and regional integrations suggest different results, they can inform policymakers about how best to manage economic integration in various layers of geographic groupings, given its potential benefits and risks
  - Particularly the case when a country seeks to balance the pace of globalization with integration policies that prioritize its affiliated region based on shared interests

2. Introducing Global (GII) and Regional (RII) Integration Indexes

- The GII is built upon Huh and Park (2018, 2021) but is updated and extended substantially
  - Two new dimensions of technology and digital connectivity and environment
  - Various new indicators to the existing dimensions, including services exports and imports, value-added, cultural goods trade, and trademark and patent applications
  - 15 countries in the Middle East newly included
- A total of 43 indicators are apportioned across eight dimensions depending on their origin and relevancy
- A total of 173 countries across six regions from 2006 to 2018
- For the RII, the indicators are defined in terms of regional values wherever applicable
- For details, see 'Measuring Globalization: Framework, Analysis, and Implications' (ADB, 2023)
- Normalization: Panel min-max scaling in the range of zero to one
- Weighting and aggregation: Two-step PCA (Principal Component Analysis)
  - PCA can group collinear indicators to form a composite index that can capture as many common movements as possible
  - First, PCA is applied to each dimension to construct the corresponding dimensional index
  - Second, PCA is applied to a set of eight-dimensional indexes to compute an overall index of global/regional integration

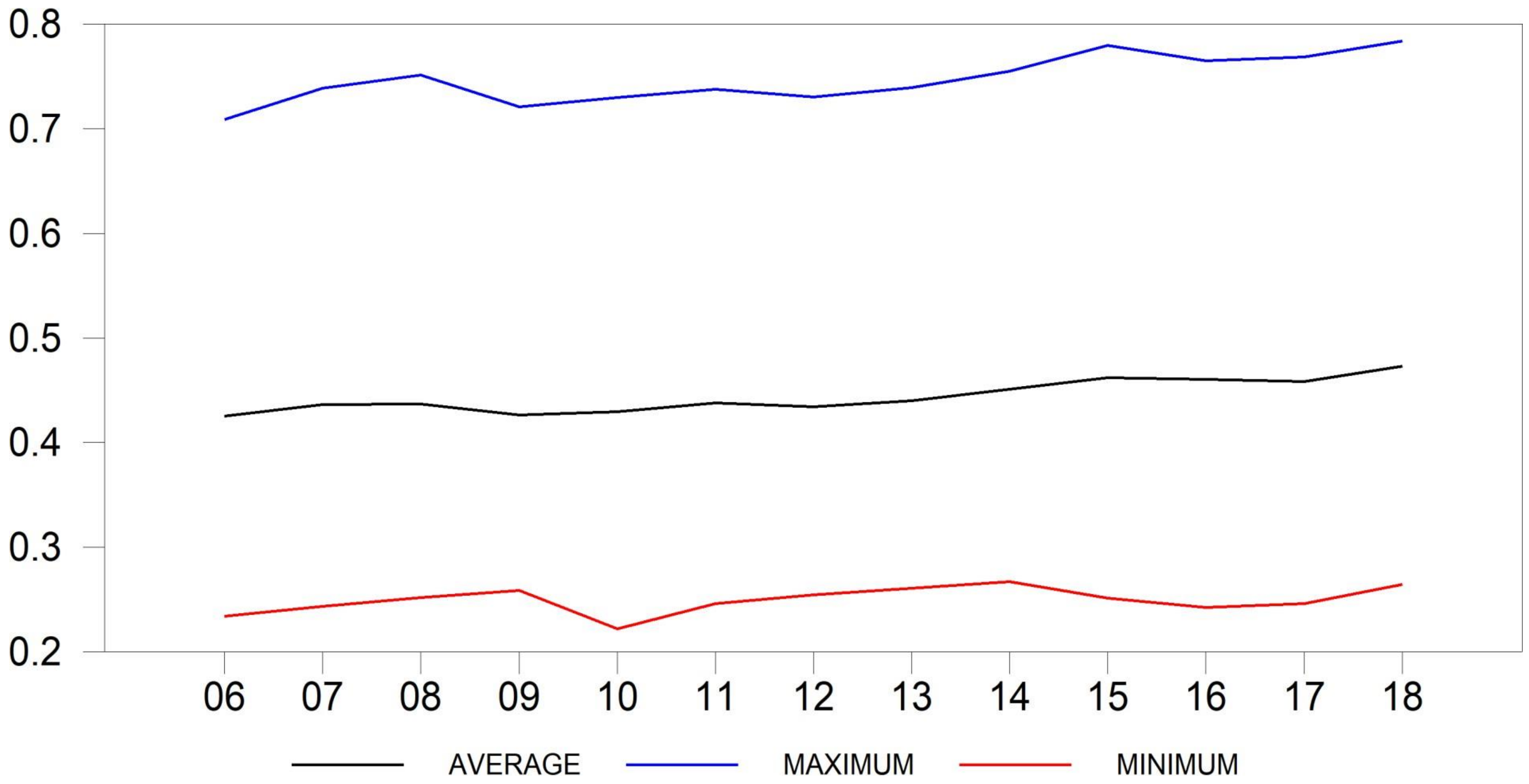
Pillar		Indicator
P1. Trade and Investment Integration	P1a	Ratio of total (regional) goods exports to GDP
	P1b	Ratio of total (regional) goods imports to GDP
	P1c	**Ratio of total services exports to GDP**
	P1d	**Ratio of total services imports to GDP**
	P1e	Ratio of total (regional) FDI inflows to GDP
	P1f	Ratio of total (regional) FDI inflows plus outflows to GDP
P2. Money and Finance Integration	P2a	Ratio of total (regional) cross-border equity liabilities to GDP
	P2b	Ratio of total (regional) cross-border bond liabilities to GDP
	P2c	Pair-wise dispersion of deposit rates averaged over all (regional) trading partners
	P2d*	**Capital account openness via the Chinn-Ito index**
	P2e	**Correlations of exchange rates vis-à-vis USD averaged over all (regional) trading partners**
P3. Global (Regional) Value Chain	P3a	Averaged trade complementarity index over all (regional) trading partners
	P3b	Averaged trade concentration index over all (regional) trading partners
	P3c	Ratio of total (regional) intermediate goods exports to total (regional) goods exports
	P3d	Ratio of total (regional) intermediate goods imports to total (regional) goods imports
	P3e	**Ratio of the sum of the value-added contributed by all (regional) trading partners to total (regional) exports**
P4. Infrastructure and Connectivity	P4a	Averaged trade cost over all (regional) trading partners
	P4b	Averaged liner shipping connectivity index over all (regional) trading partners
	P4c	**Ratio of passenger seats sold on all (regional) flights to population**
	P4d*	Logistics performance index
	P4e*	Doing Business Index
P5 People and Social Integration	P5a	Ratio of total (regional) outbound migration to population
	P5b	Ratio of total (regional) tourists inbound plus outbound to population
	P5c	Ratio of total (regional) remittances to GDP
	P5d	Cultural proximity averaged over all (regional) trading partners
	P5e	**Ratio of total (regional) cultural goods exports plus imports to GDP**
	P5f	**Ratio of trademark applications made with foreign (regional) residents to the population**
P6. Institutional Arrangements	P6a	Ratio of all (regional) trading partners that have signed FTAs with
	P6b	Ratio of all (regional) trading partners that have signed business investment treaties with
	P6c	Ratio of all (regional) trading partners that have signed double taxation treaties with
	P6d*	**Number of international inter-government organizations joined**
	P6e	Ratio of all (regional) trading partners that have an embassy
P7. Technology and Digital Connectivity	**P7a**	**Ratio of all (regional) ICT goods exports and imports to GDP**
	P7b	**Ratio of research outputs with foreign (regional) collaborators to population**
	P7c	**Ratio of patent applications made with foreign (regional) residents to total patent applications**
	P7d*	**Ratio of persons using the Internet to population**
	P7e*	**Mobile subscriptions per 100 persons**
	P7f*	**International Internet bandwidth per Internet user**
P8. Environment	**P8a**	**Ratio of total (regional) environmental goods exports and imports to total (regional) goods exports and imports**
	P8b	**Ratio of total (regional) natural resources exports and imports to total (regional) goods exports and imports**
	P8c*	**Number of international environmental agreements ratified**
	P8d*	**CO_2 emissions per capita**
	P8e*	**Ecological footprint of consumption per capita minus biocapacity per capita**

3. Presenting Global (GII) and Regional (RII) Integration Indexes

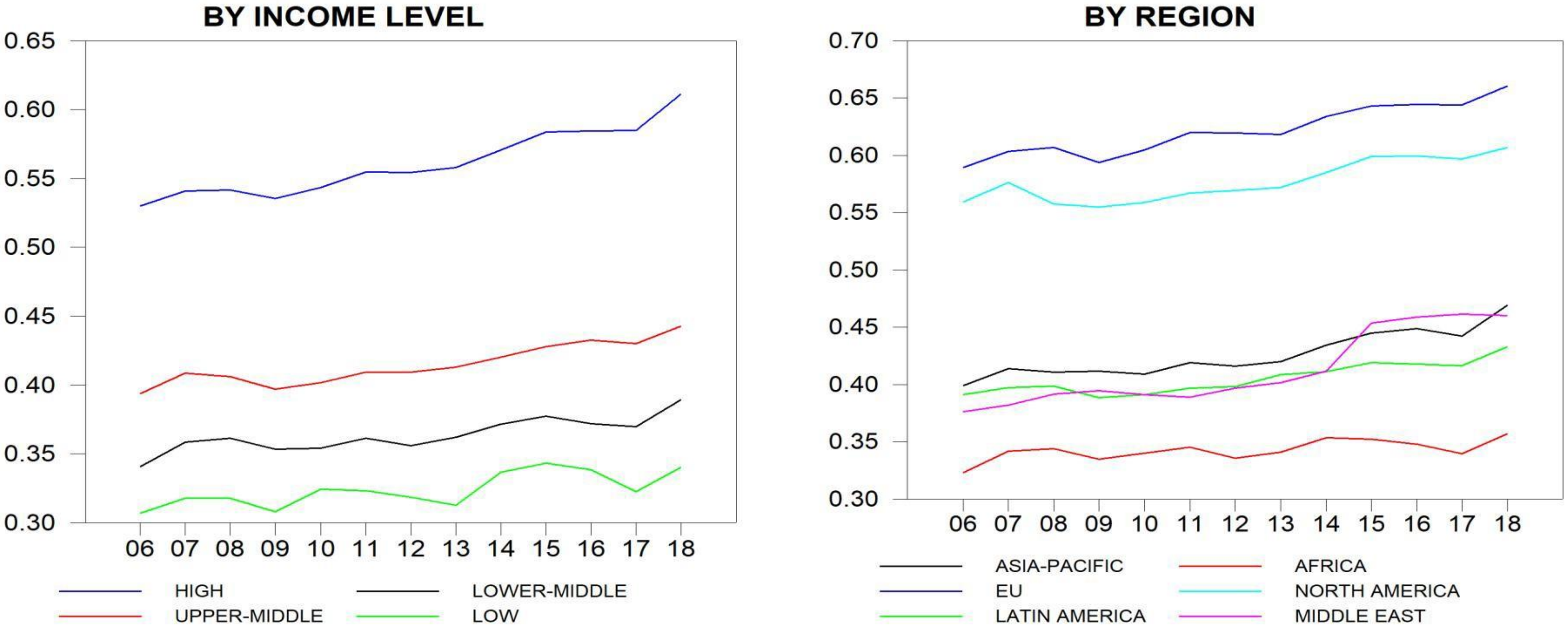
Rankings of the Global Integration Index (GII)

	2006		2012		2018	
Rank	Country	GII	Country	GII	Country	GII
1	Netherlands	0.709	Netherlands	0.731	Netherlands	0.784
2	United Kingdom	0.697	Belgium	0.708	Singapore	0.745
3	Sweden	0.674	Sweden	0.701	United Kingdom	0.740
4	Singapore	0.673	Ireland	0.695	Belgium	0.737
5	Belgium	0.669	United Kingdom	0.695	Sweden	0.709
6	Ireland	0.658	Singapore	0.694	Germany	0.706
7	Germany	0.656	Denmark	0.682	Denmark	0.700
8	Denmark	0.644	France	0.664	France	0.694
9	France	0.641	Finland	0.663	Ireland	0.684
10	Austria	0.635	Germany	0.663	Finland	0.678
11	Finland	0.626	Austria	0.643	Cyprus	0.672
12	Malta	0.607	Cyprus	0.624	Austria	0.668
13	Hungary	0.606	Malta	0.623	Spain	0.667
14	Spain	0.597	Spain	0.621	Hungary	0.655
15	Canada	0.588	Hungary	0.611	Czech Republic	0.649
16	Italy	0.585	Italy	0.609	Portugal	0.646
17	Cyprus	0.580	Czech Republic	0.609	Lithuania	0.645
18	Malaysia	0.569	Malaysia	0.600	Estonia	0.643
19	Estonia	0.558	Estonia	0.597	Italy	0.638
20	Portugal	0.557	Canada	0.595	Canada	0.632
21	Czech Republic	0.545	Portugal	0.578	Malaysia	0.627
22	Australia	0.541	Latvia	0.572	Latvia	0.624
23	New Zealand	0.537	Slovenia	0.566	Poland	0.619
24	Slovak Republic	0.531	Korea Rep.	0.565	Korea Rep.	0.609
25	United States	0.530	Poland	0.562	Slovenia	0.609

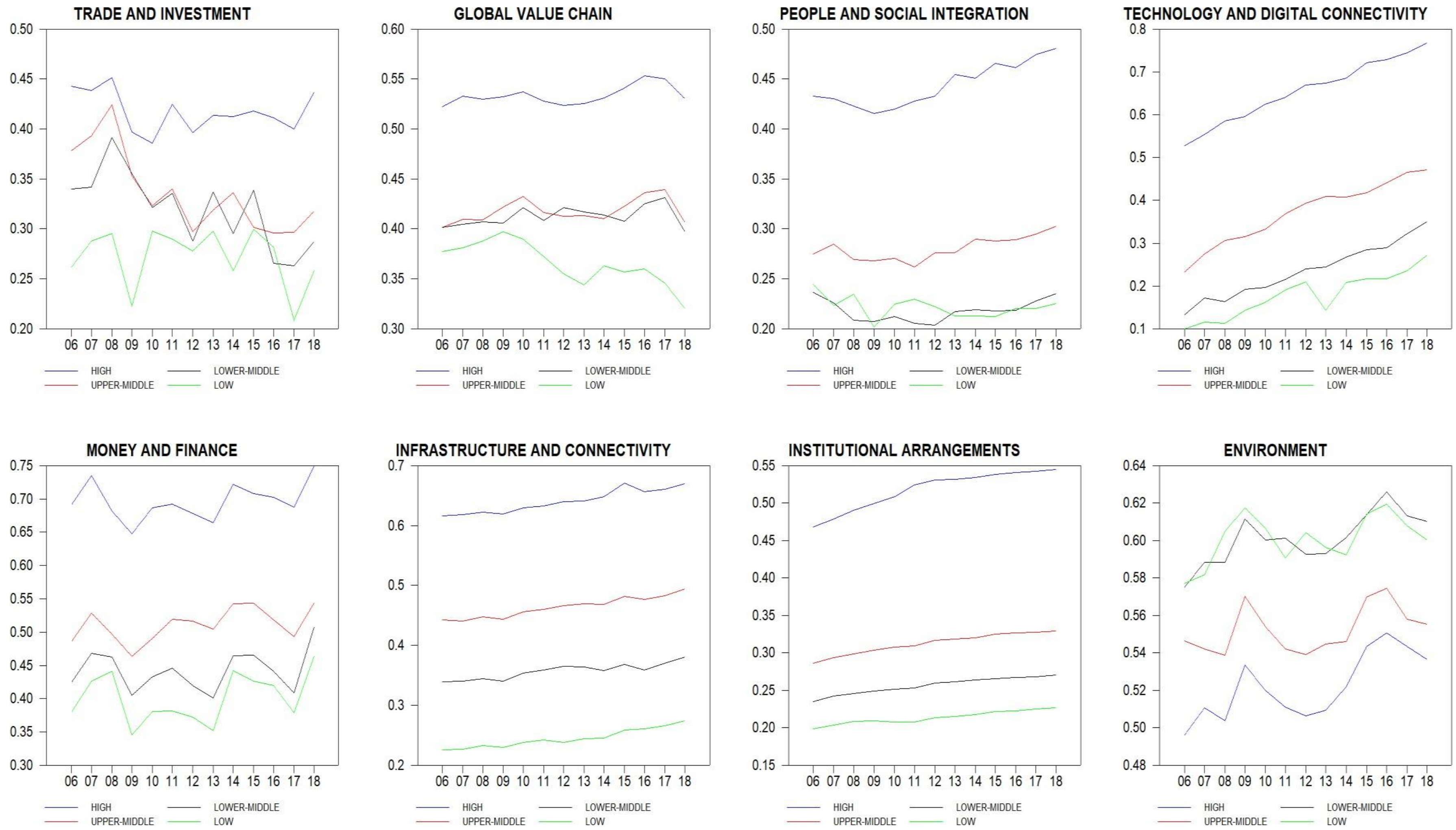
Global Integration Index



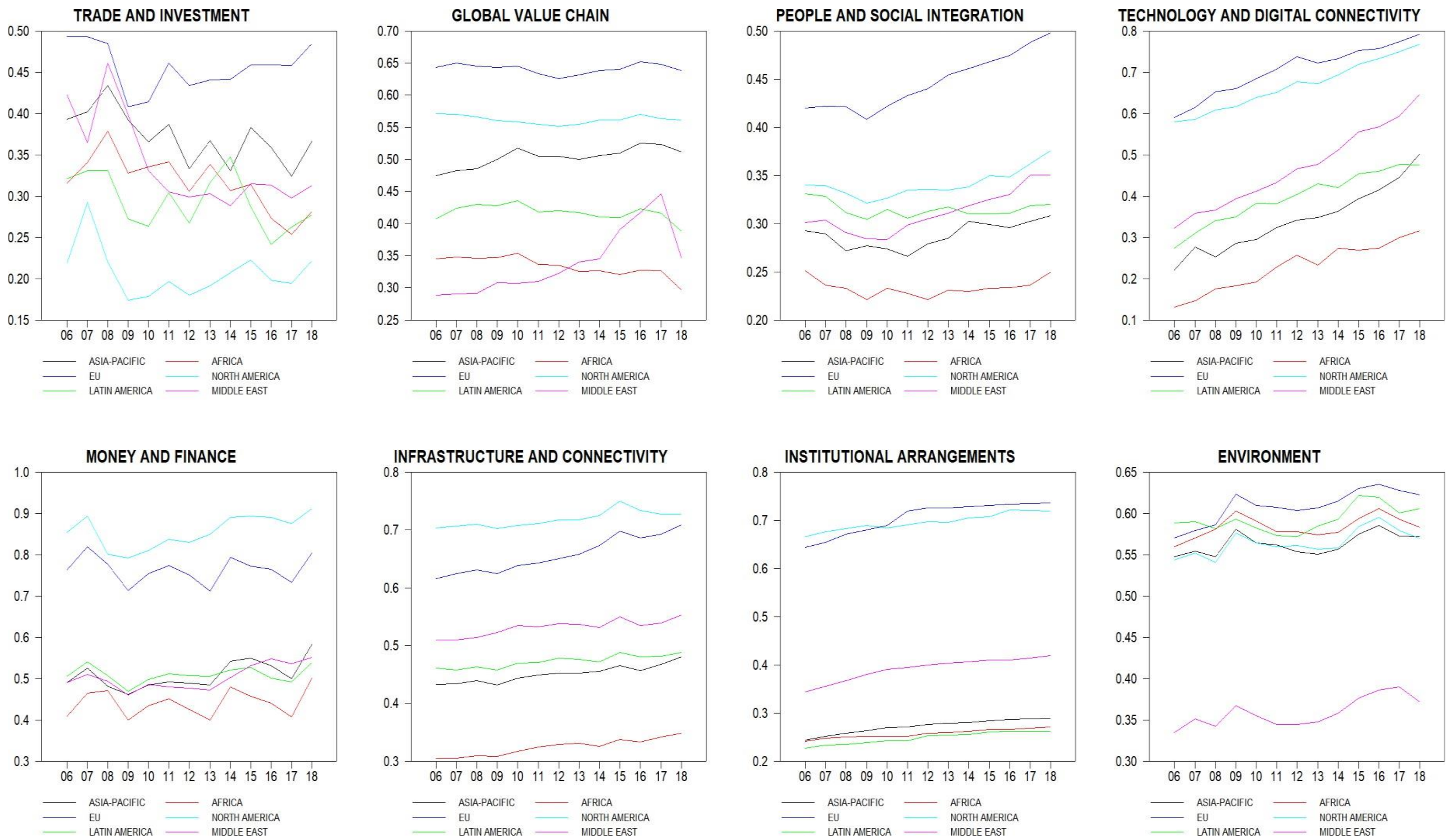
Global Integration Index by income level and region



Dimensions of the Global Integration Index by income level



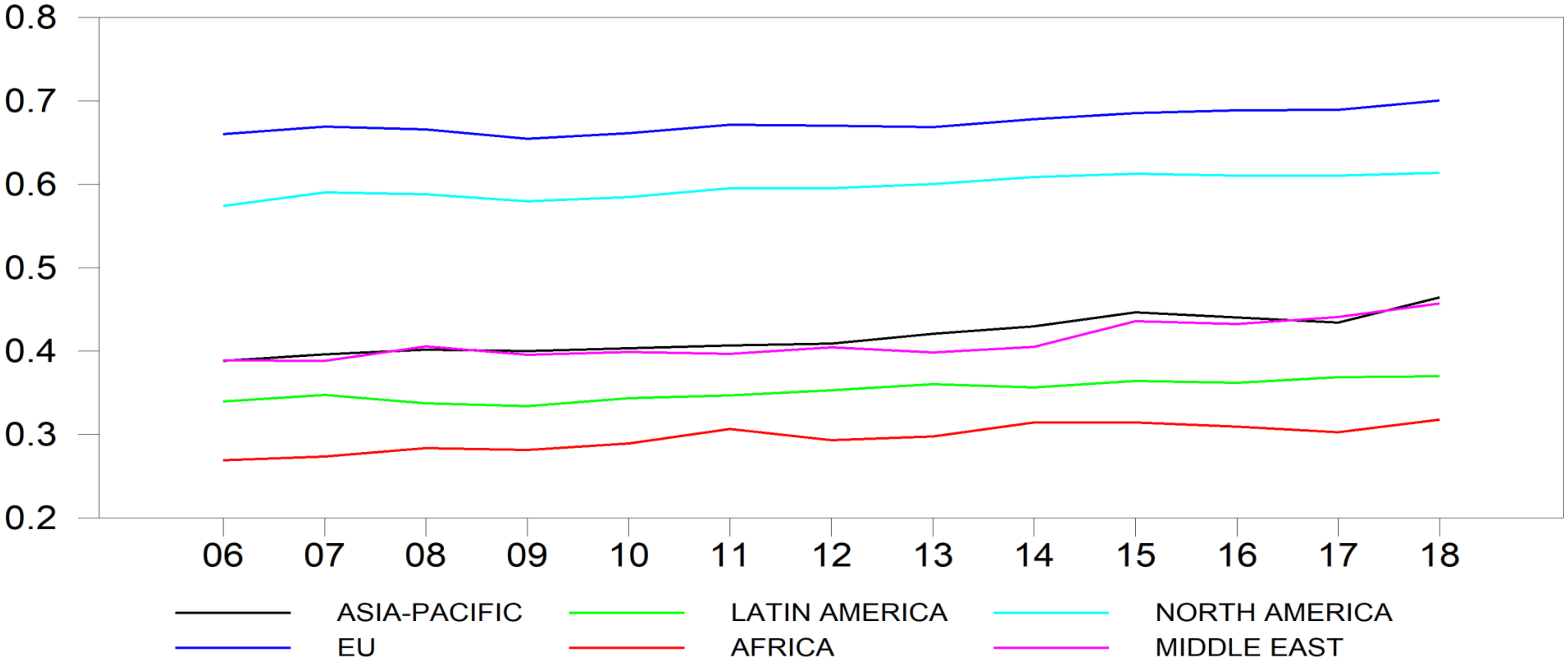
Dimensions of the Global Integration Index by region



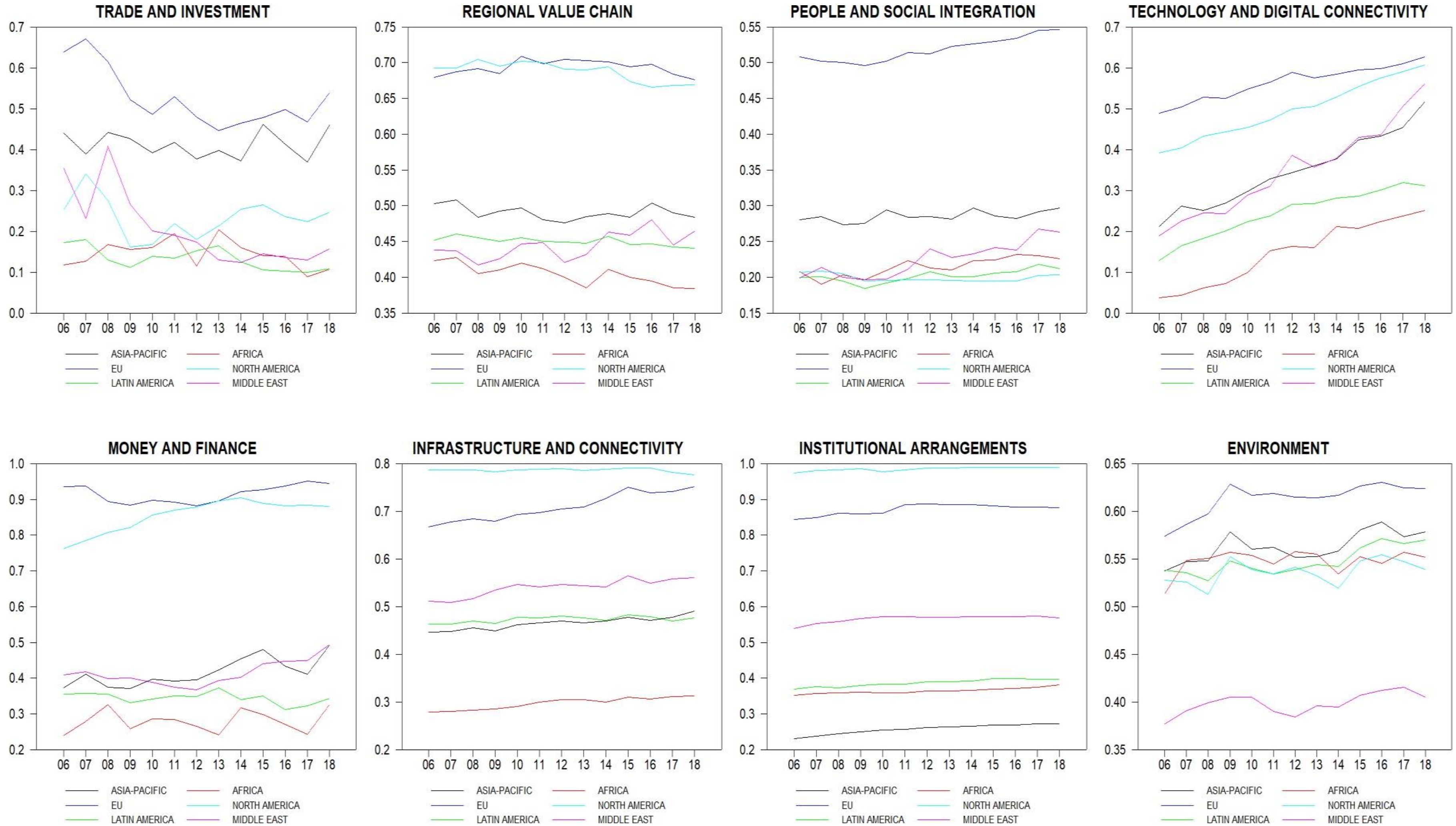
Rankings of the Regional Integration Index (RII)

	2006		2012		2018	
Rank	Country	RII	Country	RII	Country	RII
1	Netherlands	0.723	Belgium	0.733	Netherlands	0.767
2	Sweden	0.717	Netherlands	0.714	Belgium	0.748
3	Belgium	0.714	Sweden	0.711	Estonia	0.745
4	Estonia	0.702	Denmark	0.708	Lithuania	0.738
5	Ireland	0.699	Ireland	0.700	Denmark	0.731
6	Denmark	0.692	Finland	0.699	Hungary	0.727
7	Austria	0.685	Czech Republic	0.696	Singapore	0.722
8	Hungary	0.685	Estonia	0.696	Latvia	0.719
9	United Kingdom	0.683	Malta	0.692	Sweden	0.718
10	Czech Republic	0.678	Singapore	0.692	Portugal	0.713
11	Finland	0.677	Austria	0.683	Germany	0.709
12	Germany	0.675	Hungary	0.680	Austria	0.708
13	Singapore	0.670	Lithuania	0.670	Ireland	0.707
14	Malta	0.668	Cyprus	0.670	Poland	0.705
15	Canada	0.662	Germany	0.668	Czech Republic	0.702
16	Lithuania	0.660	Canada	0.666	United Kingdom	0.701
17	Slovak Republic	0.657	Poland	0.663	Finland	0.700
18	Cyprus	0.654	United Kingdom	0.658	Canada	0.683
19	Latvia	0.654	Latvia	0.658	Spain	0.682
20	Portugal	0.653	Romania	0.656	Romania	0.677
21	Poland	0.640	Portugal	0.656	Bulgaria	0.677
22	Spain	0.635	Bulgaria	0.653	Slovak Republic	0.672
23	France	0.624	Spain	0.645	Malaysia	0.666
24	Italy	0.619	Slovak Republic	0.641	Cyprus	0.666
25	Bulgaria	0.614	France	0.640	France	0.660

Regional Integration Index



Dimensions of the Regional Integration Index by region



4. Effects on economic growth, income inequality, and inclusive growth

- Empirically examine the possible effects of global and regional integration
- Panel estimation with country fixed effects

Economic growth: Annual growth rate of GDP per capita

- One-year lagged level of GDP per capita (PERGDP[1])
- Mean years of schooling (SCHOOL)
- Fertility rate (FERTILITY)
- Domestic investment as a ratio of GDP (INVEST)
- Ratio of government consumption to GDP (GOV_CON)
- Government effectiveness index (EFFECTIVENESS)
- Political stability index (STABILITY)

Income inequality: Gini index by the World Inequality Database (WID)

- GDP per capita (PERGDP)
- Mean years of schooling (SCHOOL)
- Unemployment rate (UNEMPLOYMENT)
- Government payment of transfers and subsidies as a proportion of GDP (GOV_AID)
- Domestic credit to the private sector as a ratio of GDP (CREDIT)
- Index of accountability (ACCOUNTABILITY)

Inclusive growth: Growth adjusted for income inequality, representing equitable income growth*

- One-year lagged level of GDP per capita (PERGDP[1])
- Domestic investment as a ratio of GDP (INVEST)
- Ratio of government consumption to GDP (GOV_CON)
- Unemployment rate (UNEMPLOYMENT)
- Government payment of transfers and subsidies as a proportion of GDP (GOV_AID)
- Government expenditure on education as a ratio of GDP (GOV_EDU)
- Index of labor market regulation (LABOR)

* Applying the Atkinson inequality index for the income distribution of WID

Regression results for global integration and economic growth by income level

Equation	(1)	(2)	(3)	(4)	(5)	(6)
Income level	All	High	Upper-Middle	Lower-Middle	Middle	Lower
GII	**0.310**	**0.564**	**0.245**	**0.323**	**0.281**	**0.145**
	(0.00)	**(0.00)**	**(0.01)**	**(0.00)**	**(0.00)**	**(0.03)**
PERGDP[1]	-0.135	-0.199	-0.157	-0.106	-0.128	-0.105
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
SCHOOL	0.037	0.021	0.092	-0.001	0.047	0.012
	(0.02)	(0.56)	(0.09)	(0.95)	(0.03)	(0.54)
FERTILITY	-0.036	-0.042	0.045	-0.090	-0.026	-0.062
	(0.02)	(0.06)	(0.21)	(0.00)	(0.25)	(0.04)
INVEST	0.001	0.003	0.001	0.003	0.001	0.001
	(0.00)	(0.00)	(0.00)	(0.14)	(0.00)	(0.01)
GOV_CON	-0.004	-0.010	-0.001	-0.002	-0.002	-0.001
	(0.00)	(0.00)	(0.19)	(0.00)	(0.00)	(0.05)
EFFECTIVENESS	0.016	0.022	0.010	0.022	0.012	0.031
	(0.00)	(0.01)	(0.43)	(0.04)	(0.15)	(0.00)
STABILITY	0.009	0.011	0.008	0.008	0.008	0.009
	(0.00)	(0.17)	(0.29)	(0.06)	(0.04)	(0.03)
Number of observations	1471	548	363	421	784	560
R^2	0.56	0.56	0.60	0.68	0.63	0.61

Notes: The dependent variable is the GDP growth rate. The figures in parentheses are the marginal significance levels (*p*-value) of the t-test statistics for the null hypothesis that the coefficient equals zero. The value 0.000 (-0.000) denotes the case where the magnitude of the coefficient estimate is less than 0.000 (-0.000).

Regression results for global integration and income inequality by income level

Equation	(1)	(2)	(3)	(4)	(5)	(6)
Income level	All	High	Upper-Middle	Lower-Middle	Middle	Lower
GII	**0.041**	**0.040**	**0.103**	**0.069**	**0.068**	**0.025**
	(0.06)	**(0.27)**	**(0.08)**	**(0.08)**	**(0.04)**	**(0.48)**
PERGDP	-0.015	-0.028	0.003	0.019	0.004	0.014
	(0.00)	(0.02)	(0.76)	(0.04)	(0.55)	(0.10)
SCHOOL	-0.047	-0.021	-0.134	-0.057	-0.062	-0.052
	(0.00)	(0.31)	(0.00)	(0.00)	(0.00)	(0.00)
UNEMPLOYMENT	0.001	0.001	-0.000	-0.001	-0.000	-0.000
	(0.01)	(0.03)	(0.91)	(0.27)	(0.44)	(0.57)
GOV_AID	-0.002	-0.002	0.001	-0.002	-0.001	-0.002
	(0.00)	(0.00)	(0.01)	(0.00)	(0.66)	(0.00)
CREDIT	-0.001	-0.000	-0.001	-0.001	-0.001	-0.001
	(0.09)	(0.84)	(0.00)	(0.00)	(0.00)	(0.03)
ACCOUNTABILITY	-0.009	-0.012	-0.009	-0.001	-0.003	-0.008
	(0.01)	(0.14)	(0.33)	(0.80)	(0.38)	(0.05)
Number of observations	1246	484	305	355	660	457
R^2	0.50	0.67	0.44	0.34	0.20	0.22

Notes: The dependent variable is the Gini index, a proxy for income inequality. The figures in parentheses are the marginal significance levels (*p*-value) of the t-test statistics for the null hypothesis that the coefficient equals zero. The value 0.000 (-0.000) denotes the case where the magnitude of the coefficient estimate is less than 0.000 (-0.000).

Regression results for global integration and inclusive growth by income level

Equation	(1)	(2)	(3)	(4)	(5)	(6)
Income level	All	High	Upper-Middle	Lower-Middle	Middle	Lower
GII	**0.618** **(0.00)**	**1.473** **(0.00)**	**0.242** **(0.43)**	**0.167** **(0.26)**	**0.193** **(0.25)**	**0.112** **(0.39)**
PERGDP[1]	-0.198 (0.00)	-0.436 (0.00)	-0.196 (0.00)	-0.093 (0.00)	-0.131 (0.00)	-0.094 (0.00)
INVEST	0.002 (0.00)	0.007 (0.00)	0.001 (0.63)	0.001 (0.24)	0.001 (0.05)	0.001 (0.24)
GOV_CON	-0.008 (0.00)	-0.016 (0.00)	-0.005 (0.52)	-0.001 (0.69)	-0.002 (0.33)	-0.001 (0.66)
UNEMPLOYMENT	-0.006 (0.00)	-0.004 (0.02)	-0.010 (0.04)	-0.004 (0.04)	-0.007 (0.00)	-0.005 (0.01)
GOV_AID	0.001 (0.10)	-0.000 (0.81)	0.003 (0.03)	-0.000 (0.70)	0.001 (0.08)	-0.000 (0.51)
GOV_EDU	0.002 (0.62)	0.021 (0.00)	-0.005 (0.74)	0.009 (0.07)	0.000 (0.97)	0.008 (0.05)
LABOR	0.011 (0.03)	0.010 (0.08)	0.046 (0.01)	0.009 (0.34)	0.021 (0.03)	-0.006 (0.43)
Number of observations	670	308	155	171	326	207
R^2	0.38	0.51	0.34	0.59	0.37	0.61

Notes: The dependent variable is the inclusive growth rate. The figures in parentheses are the marginal significance levels (*p*-value) of the t-test statistics for the null hypothesis that the coefficient equals zero. The value 0.000 (-0.000) denotes the case where the magnitude of the coefficient estimate is less than 0.000 (-0.000).

Regression results for integration and economic growth by region

Equation	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Index	Regional integration index (RII)					Global integration index (GII)				
Region	Asia-Pacific	EU	Latin America	Africa	Middle East	Asia-Pacific	EU	Latin America	Africa	Middle East
RII/GII	**0.221**	**0.625**	**0.291**	**0.104**	**0.464**	**0.295**	**0.683**	**0.218**	**0.033**	**0.270**
	(0.00)	**(0.00)**	**(0.00)**	**(0.14)**	**(0.01)**	**(0.00)**	**(0.00)**	**(0.02)**	**(0.72)**	**(0.20)**
PERGDP[1]	-0.129	-0.197	-0.145	-0.118	-0.257	-0.130	-0.224	-0.141	-0.116	-0.268
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
SCHOOL	0.096	0.148	-0.020	0.025	-0.158	0.101	0.045	-0.019	0.034	-0.117
	(0.00)	(0.00)	(0.61)	(0.38)	(0.04)	(0.00)	(0.42)	(0.62)	(0.23)	(0.15)
FERTILITY	-0.035	0.024	-0.142	-0.003	-0.002	-0.027	0.015	-0.141	-0.007	0.006
	(0.25)	(0.44)	(0.04)	(0.94)	(0.96)	(0.37)	(0.61)	(0.04)	(0.88)	(0.91)
INVEST	0.001	0.003	0.002	0.001	0.000	0.001	0.004	0.003	0.001	0.001
	(0.00)	(0.00)	(0.00)	(0.11)	(0.90)	(0.00)	(0.00)	(0.00)	(0.10)	(0.48)
GOV_CON	-0.002	-0.012	-0.007	-0.000	-0.003	-0.002	-0.011	-0.007	-0.000	-0.003
	(0.01)	(0.00)	(0.00)	(0.80)	(0.03)	(0.01)	(0.00)	(0.00)	(0.82)	(0.04)
EFFECTIVENESS	0.003	0.007	0.016	0.030	0.086	0.000	0.015	0.012	0.033	0.095
	(0.73)	(0.57)	(0.16)	(0.05)	(0.00)	(0.96)	(0.19)	(0.28)	(0.03)	(0.00)
STABILITY	0.006	0.009	0.012	0.008	0.010	0.006	0.010	0.009	0.008	0.004
	(0.33)	(0.36)	(0.14)	(0.16)	(0.57)	(0.32)	(0.32)	(0.26)	(0.18)	(0.84)
Number of observations	352	337	246	394	116	352	337	246	394	116
R^2	0.74	0.65	0.67	0.41	0.42	0.75	0.67	0.66	0.40	0.39

Notes: The dependent variable is the GDP growth rate. The figures in parentheses are the marginal significance levels (*p*-value) of the t-test statistics for the null hypothesis that the coefficient is equal to zero. The value 0.000 (-0.000) denotes the case where the magnitude of the coefficient estimate is less than 0.000 (-0.000).

Regression results for integration and income inequality by region

Equation	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Index	Regional integration index (RII)					Global integration index (GII)				
Region	Asia-Pacific	EU	Latin America	Africa	Middle East	Asia-Pacific	EU	Latin America	Africa	Middle East
RII/GII	**-0.002**	**0.005**	**0.001**	**0.020**	**0.076**	**0.118**	**0.020**	**-0.076**	**0.030**	**-0.064**
	(0.95)	**(0.92)**	**(0.98)**	**(0.63)**	**(0.07)**	**(0.00)**	**(0.66)**	**(0.24)**	**(0.51)**	**(0.22)**
PERGDP	0.017	-0.001	-0.111	-0.020	-0.034	0.014	-0.003	-0.108	-0.021	-0.026
	(0.10)	(0.96)	(0.00)	(0.11)	(0.02)	(0.17)	(0.85)	(0.00)	(0.10)	(0.08)
SCHOOL	-0.006	-0.007	-0.074	-0.027	-0.061	-0.014	-0.012	-0.074	-0.026	-0.038
	(0.76)	(0.81)	(0.00)	(0.08)	(0.00)	(0.52)	(0.70)	(0.00)	(0.08)	(0.06)
UNEMPLOYMENT	0.002	0.001	0.000	-0.001	0.000	0.002	0.001	0.000	-0.001	0.000
	(0.04)	(0.01)	(0.81)	(0.19)	(0.96)	(0.01)	(0.01)	(0.80)	(0.18)	(0.81)
GOV_AID	-0.002	-0.003	-0.001	0.000	0.000	-0.003	-0.003	-0.001	0.000	0.000
	(0.00)	(0.00)	(0.00)	(0.69)	(0.81)	(0.00)	(0.00)	(0.00)	(0.71)	(0.51)
CREDIT	-0.001	0.000	0.001	-0.000	-0.001	-0.001	0.000	0.001	-0.000	0.000
	(0.00)	(0.41)	(0.02)	(0.48)	(0.09)	(0.00)	(0.41)	(0.01)	(0.49)	(0.89)
ACCOUNTABILITY	-0.000	-0.023	-0.003	-0.015	-0.010	-0.001	-0.023	-0.004	-0.015	-0.017
	(0.96)	(0.02)	(0.74)	(0.01)	(0.23)	(0.90)	(0.02)	(0.71)	(0.01)	(0.06)
Number of observations	247	329	233	333	88	247	329	233	333	88
R^2	0.38	0.28	0.21	0.41	0.47	0.38	0.29	0.18	0.34	0.37

Notes: The dependent variable is the Gini index, a proxy for income inequality. The figures in parentheses are the marginal significance levels (*p*-value) of the t-test statistics for the null hypothesis that the coefficient equals zero. The value 0.000 (-0.000) denotes the case where the magnitude of the coefficient estimate is less than 0.000 (-0.000).

Regression results for integration and inclusive growth by region

Equation	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Index	Regional integration index (RII)					Global integration index (GII)				
Region	Asia-Pacific	EU	Latin America	Africa	Middle East	Asia-Pacific	EU	Latin America	Africa	Middle East
RII/GII	**0.682**	**1.001**	**0.607**	**-0.399**	**n.a.**	**-0.182**	**1.210**	**0.618**	**0.209**	**n.a.**
	(0.06)	**(0.00)**	**(0.03)**	**(0.17)**		**(0.30)**	**(0.00)**	**(0.04)**	**(0.50)**	
PERGDP[1]	-0.130	-0.322	-0.177	-0.104	n.a.	-0.105	-0.389	-0.295	-0.162	n.a.
	(0.00)	(0.00)	(0.00)	(0.16)		(0.00)	(0.00)	(0.00)	(0.02)	
INVEST	0.002	0.003	0.001	0.000	n.a.	0.002	0.004	0.001	0.000	n.a.
	(0.00)	(0.05)	(0.42)	(0.80)		(0.00)	(0.00)	(0.47)	(0.77)	
GOV_CON	-0.005	-0.024	0.002	0.003	n.a.	-0.004	-0.019	0.001	0.003	n.a.
	(0.07)	(0.00)	(0.65)	(0.47)		(0.10)	(0.00)	(0.89)	(0.42)	
UNEMPLOYMENT	-0.003	-0.005	-0.010	-0.004	n.a.	-0.003	-0.005	-0.015	-0.001	n.a.
	(0.37)	(0.02)	(0.01)	(0.44)		(0.25)	(0.01)	(0.00)	(0.75)	
GOV_AID	0.001	0.000	0.002	-0.000	n.a.	0.001	-0.000	0.002	0.000	n.a.
	(0.05)	(0.75)	(0.04)	(0.90)		(0.06)	(0.83)	(0.07)	(0.99)	
GOV_EDU	0.001	0.016	-0.001	0.010	n.a.	-0.001	0.014	0.007	0.001	n.a.
	(0.95)	(0.07)	(0.89)	(0.35)		(0.90)	(0.09)	(0.56)	(0.89)	
LABOR	0.001	0.021	-0.008	0.043	n.a.	-0.001	0.015	-0.007	0.041	n.a.
	(0.90)	(0.00)	(0.51)	(0.03)		(0.95)	(0.03)	(0.62)	(0.04)	
Number of observations	144	276	94	137		144	276	94	137	
R^2	0.64	0.42	0.57	0.24		0.65	0.46	0.59	0.23	

Notes: The dependent variable is the inclusive growth rate. The figures in parentheses are the marginal significance levels (*p*-value) of the t-test statistics for the null hypothesis that the coefficient equals zero. The value 0.000 (-0.000) denotes the case where the magnitude of the coefficient estimate is less than 0.000 (-0.000).

5. Summary and Concluding Remarks

- Both global and regional integration strengthened from 2006 to 2018, and they also moved closely together and shared similar patterns
- By region, the EU ranks highest, and North America is the second highest. The Asia-Pacific ranks third, followed by the Middle East and Latin America, while Africa is the least integrated region
- Global integration fosters economic growth across regions, but the effects are not statistically significant in the Middle East and Africa
- In contrast, regional integration increases economic growth, which is also statistically significant in the Middle East and Africa (albeit marginally)
- Global integration fosters inclusive growth in the EU and Latin America. While regional integration does the same, the Asia-Pacific region is additionally included in the list
- Therefore, global and regional integration yield similar implications, while the effects of regional integration are relatively more favorable

- The results may provide some scope for countries that seek to balance the pace of globalization with integration policies for affiliated regions based on common interests
- Equally important, regional integration may be exploited as a stepping stone to globalization
- According to open regionalism, regionalization is a good preparation for an open international economy and provides a safer version of globalization
  - Open regionalism is a device through which regionalism can be employed to accelerate progress towards global liberalization
- It remains to be seen how regional cooperation and initiatives evolve further within the framework of a continued commitment to multilateralism to ensure that regional and global liberalization proceed together and reinforce each other

Thank you