Regional Integration, Trade and Development in the Balkans: A Dynamic Poisson Approach

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(1) Regional-bilateral FTAs & CEFTA

(2) Empirical Strategy and Data Limitation Issues

(3) Preliminary Results

(4) Interpretation of Results

(5) Conclusion & Policy Implications

(1) FTAs & CEFTA

South-south agreements: "reap more easily the benefits of competition, specialisation and […] scale" (UNCTAD, 1964: 24; UNIDO, 2009: 76-8).

- Market access (UNCTAD, 2007)

- Higher positive externalities (Amighini and Sanfilippo, 2014)

- 'Nurturing habitat' for infant industries (UNCTAD, 1964)

(1) FTAs & CEFTA

- Empirical lit: average effect of FTAs is positive but heterogeneous

 (1) Institutional design features (Baier et al., 2014; Kohl et al, 2016)

(2) Proactive policies to complement trade liberalisation (UNCTAD, 2007)

(3) Persistence of non-tariff barriers (Nel and Taylor, 2013)

(1) FTAs & CEFTA

CEFTA as:

- An 'appendix' to post-conflict peace-building and 'Europeanisation'

- A 'training ground' for regulatory convergence with the EU (Biukovic, 2008)

- Extension of CEFTA-1992

- Intra-regional trade stubbornly low

Regional trading bloc	Intra-regional/total trade
South-South	
CEFTA (2006)	8.0%
CEFTA (2011)	8.9%
MERCOSUR	16%
ASEAN	25%
North-South	
NAFTA	51%
North-North	
EU	65%

Sources: authors' calculations based on UN Comtrade, 2016; Nel and Taylor, 2013: 1099)

(2) Empirical strategy & Data

$$X_{ij} = g_0 \, Y_i^{\alpha} Y_j^{\beta} \tau_{ij}^{c}$$

- *Geographical distance* (transportation & information costs)
- *Trade policy* (CEFTA; SAA; GSP; FTA; WTO)
- *Geography* (contiguity, access to sea)
- *Institutions* (rule of law)
- *Culture* (common language, religion, diaspora networks)
- *Historical legacies* (Ottoman rule, membership in same trans-national state entity during socialism)

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Difficulties with empirical analysis:

(1) CEFTA area has shifted geographically

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(1) CEFTA area has shifted geographically

(2) New sovereign countries (Kosovo) during lifetime of trade agreement

(3) Montenegro separate entity one year before trade agreement came into force

(4) Kosovo is not a UN member state → use different data sources

(2) Empirical strategy & Data

→Focus on 2006-2011 period, 8 reporters, 54 partners

Weaknesses:

- Cannot control for MTR (country-year FE)
- Cannot allow for FTAs to have a lagged effect
- Cannot distinguish between trade creation/diversion

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Strengths:
- Estimate dynamic model (Wooldridge, 2005)
- Use PPML estimator (Santos Silva and Tenreyro, 2006)
- CEFTA exogenous → no need to use bilateral FE
- Lots of control variables

(2) Empirical strategy & Data

Estimating Equation (dynamic RE model):

$$X_{ijt} = \exp\big[g + \rho X_{ijt-1} + \alpha \ln Y_{it} + \beta \ln Y_{jt} + c \ln \tau_{ijt}\big] \times u_{ij} \times \varepsilon_{ijt}$$

Estimator: Pseudo-Maximum Likelihood (= Poisson ML)

EXPORT EQUATION	RE Gamma	RE Gamma	RE Gamma	RE Normal
	(1)	(2)	(3)	(4)
Main Gravity Variables:				
Log (Reporter's GDP)	.6012*	.5519*	.6116*	.6028*
	(.2859)	(.2652)	(.2848)	(.2855)
Log (Partner's GDP)	.6985**	.6409**	.7088**	.6909**
	(.2289)	(.2339)	(.2290)	(.2274)
Log (Distance)	-1.489***	-1.480***	-1.402***	-1.543***
	(.1243)	(.1244)	(.1457)	(.1182)
Log (Δ GDP per capita)	-.0161	-.0124	-.0126	-.0134
	(.0324)	(.0325)	(.0331)	(.0324)

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Main Gravity Variables:				
Log (Reporter's GDP)	1.027***	.9505***	1.033***	1.026***
	(.1858)	(.1777)	(.1850)	(.1872)
Log (Partner's GDP)	.0313	.0250	.0350	.0399
	(.1119)	(.1131)	(.1058)	(.1017)
Log (Distance)	-.4404**	-.4377**	-.4341***	-.7097***
	(.1325)	(.1260)	(.1188)	(.1430)
Log (Δ GDP per capita)	.0057	.0073	.0059	.0058
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Export Equation (2006-11)

Trade Policy

CEFTA	.0651	.1237	.5049*	.0152
	(.2400)	(.2454)	(.2467)	(.2763)
FTAs	.1786	.1887	.1829	.2017
	(.1342)	(.1298)	(.1397)	(.1375)
SAA with EU	.3429***	.3169***	.3224***	.3458***
	(.0894)	(.0885)	(.0898)	(.0906)
GSP	.2626**	.2489**	.2413**	.2687***
	(.0758)	(.0748)	(.0759)	(.0771)
WTO	.04008	.11353	-.03923	-.00435
	(.1281)	(.12138)	(.13193)	(.1232)

Historical Legacies

Lagged Exports	.0044**	.0044**	.0044**	.0044**
	(.0015)	(.0014)	(.0015)	(.0015)
Ottoman Rule	.0352**	.0133	.0297*	.0376**
	(.0120)	(.0091)	(.0129)	(.0125)
YugoSoviet	1.570***	1.611***		1.659***
	(.2181)	(.2202)		(.2306)

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Import Equation (2006-11)

Trade Policy

CEFTA	-.3833	-.3842	.1165	-.3742
	(.2975)	(.2982)	(.2672)	(.2864)
FTAs	-.0018	-.0011	-.0027	-.0055
	(.0310)	(.0287)	(.0308)	(.0325)
SAA with EU	.0138	.0047	.0144	.0200
	(.0378)	(.0367)	(.0378)	(.0380)
WTO	-.0348	-.0318	-.07351	-.0035
	(.1092)	(.1002)	(.09707)	(.1196)

(4) Interpretation of Results

What explains variation in the export-promoting effects of different agreements?

- **Comprehensiveness of FTA**: range, depth and enforceability of its provisions

- CEFTA lacks enforceable provisions on trade, border procedures and dispute settlement

(4) Interpretation of Results

: Comprehensiveness of Trade Agreements (By Type of Provision)

	N	WTO-related		non-WTO-related	
		Any	Enforceable	Any	Enforceable
EU	1	0.85	0.85	1.00	1.00
Pre-CEFTA FTAs	19	0.87	0.72	0.46	0.46
SAAs with EU	5	0.78	0.71	0.65	0.55
CEFTA	1	0.77	0.69	0.50	0.50
FTAs (other)	9	0.74	0.61	0.47	0.47

Sources: author's calculations from Kohl et al. 2016, online database; *Notes:* N stands for number of trade agreements included in the averages. A higher value indicates a higher degree of comprehensiveness. WTO-related provisions confirm countries' existing obligations under the WTO agreement.

(4) Interpretation of Results

What explains variation in the export-promoting effects of different agreements?

- **Supply-side Environment**: policies aiming to mobilise productive resources for development and accumulate new export capabilities
- 'Hands-off' approach to export promotion (Uberti, 2014).

(4) Conclusion & Policy Implications

- The WB countries have been "engaged in a complex and contradictory process of simultaneous regional integration and disintegration" (Bartlett, 2009: 44)

- South-South CEFTA vs. North-South SAA

- 'Hub-and-spoke' trade pattern in the region

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POLICY IMPLICATIONS:

1. Deeper regulatory and normative integration (CEFTA)

2. Proactive industrial policy: "no guarantee [that] market access could replace measures [...] to stimulate industries capable of production for export" (UNCTAD, 1964: 75)

(4) Conclusion & Policy Implications

NEXT STEPS:

1. Extend panel to include years before 2006
2. Extend panel to include years after 2011
3. CoW vs. UN Comtrade data
4. Focus on CEFTA reporters or move to squared matrix with same n. of reporters as partners (including non-member-to-non-member country pairs).
5. MRTs (country-year FE, country FE, 'remoteness index')
6. RE vs. bilateral (country-pair) FE