

The Global Diffusion of Competition Law: A Spatial Analysis

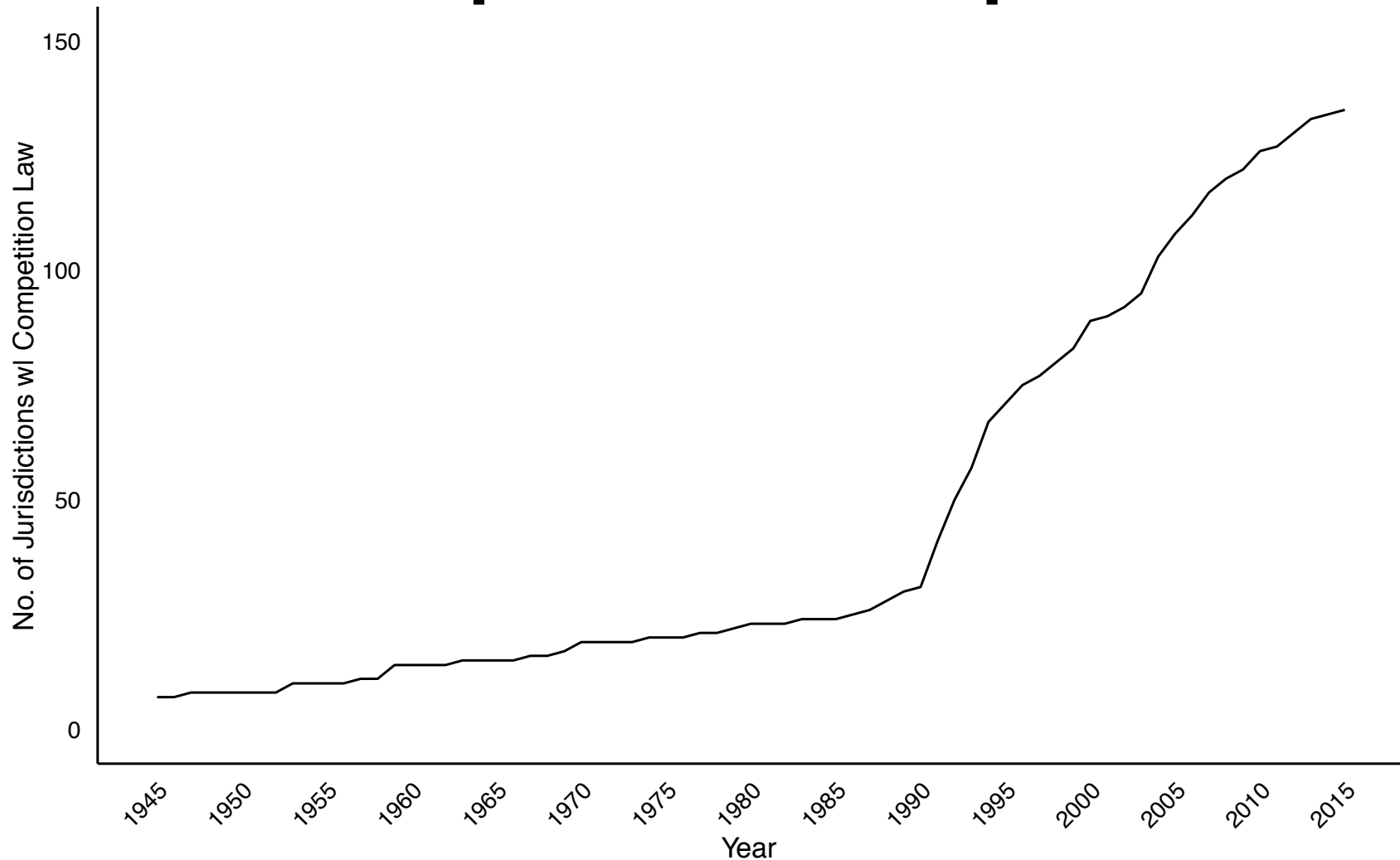
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The views expressed are those of the authors and do not necessarily reflect the views of UNCTAD

The Global Spread of Competition Law



Minimum Requirements to "Count" as Competition Law:

- Law has at least the declared purpose of fostering market competition
- Contains at a minimum a prohibition of cartels and cartel-like collusion

Previous Statistical Analyses

	Palim (1998)	Kronthaler & Stephan (2007)	Parakkal (2011)	Weymouth (2015)
# Laws, final	70 in 1996	101 in 2004	118 in 2008	102 in 2007 72 in non-OECD countries
Analysis:	cross-sectional logit, 1980-1996 averages	panel logit, 1980-2004	panel logit, 1990-2008	Weibull hazard model, 1975-2007
Stat. Significant Regressors:	econ. development severe econ. crisis U.S. aid (-)	econ. development market size econ. liberalization trade flows (imp.) FDI % GDP industry % GDP gov. consumption IMF credits Regional PTAs	K&S core variables + democracy partisanship	econ. development market size democracy rent-preserving alliance
Ambiguous:	econ. liberalization	Misc. others	rule of law	aid p.c. trade
Insignificant:	political liberalization OECD aid trade (imports)	-	-	governance quality regulatory quality gov. partisanship
Max. # Laws Expl.	55	75	?	63 (of 75 possible)
Max. # Countries:	102	164	183	132 non-OECD + 3

Key Issues

- Inconsistent, often unclear definition of "competition law"
- Adoption/enactment of competition laws modeled as an essentially domestic decision, independently taken in each country—as if pattern of prior competition laws in other countries had no influence

Solutions

- Panel dataset of competition laws, based on the content of the laws
- Theoretical account of the political rationale for competition policy that takes international context seriously
- Diffusion/network analysis, using spatial lags

Key Variables

- Economic Development: $\ln(\text{GDP p.c.})$
- Market Size: $\ln(\text{population})$
- Democracy: polity2
- EU Export Dependence (Doleys; Aydin):
Portion of country's exports going to the EU
- Institutionalization of Trade Openness

SPATIAL LAGS:

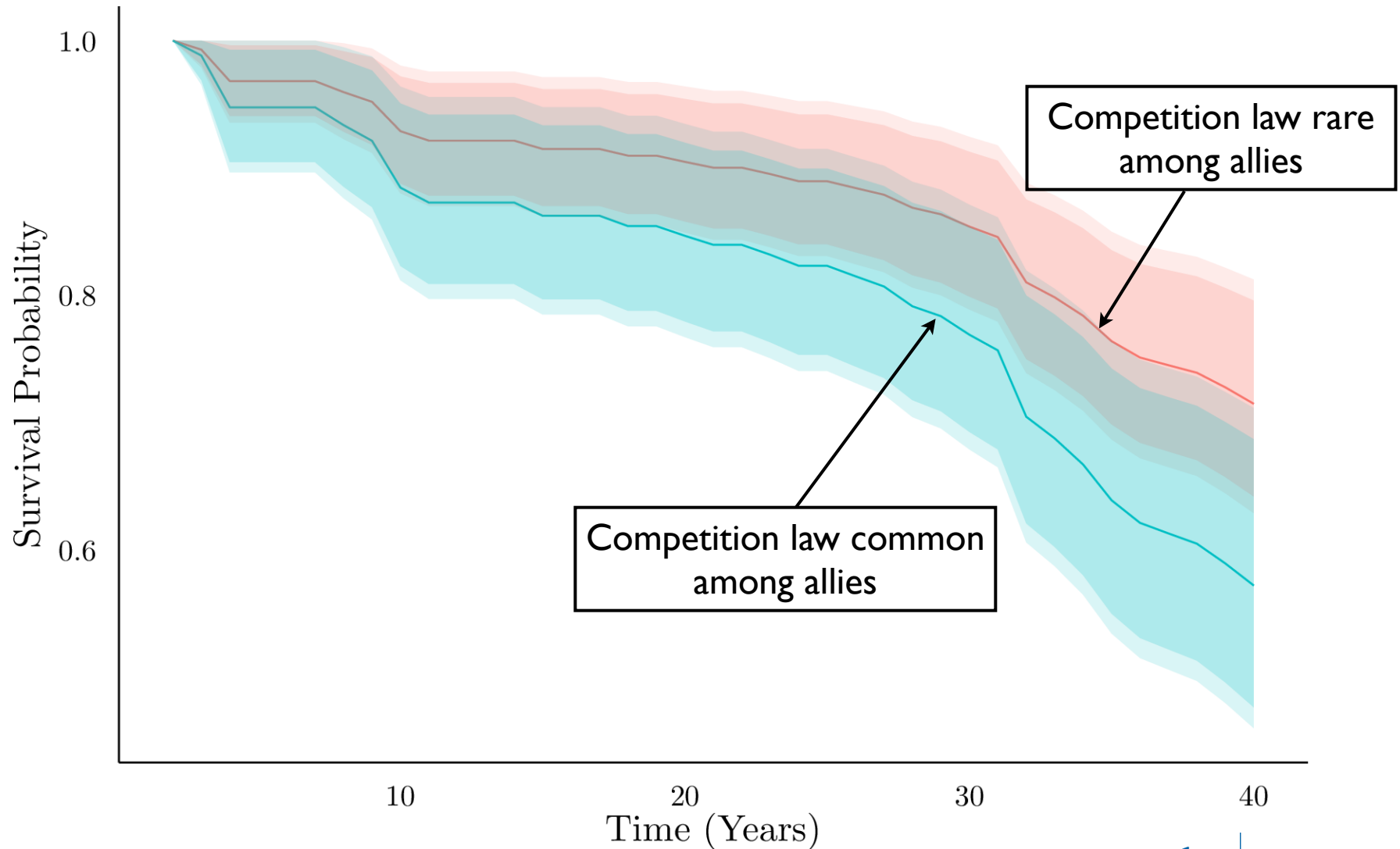
- Policies of Neighbors: Distance-between-capitals weighted measure of competition laws enacted by other countries
- Policies of Allies ...
- Policies of PTA Partners ...
(correspondingly weighted spatial lags)

Law Enactment All Countries, 1961-2013

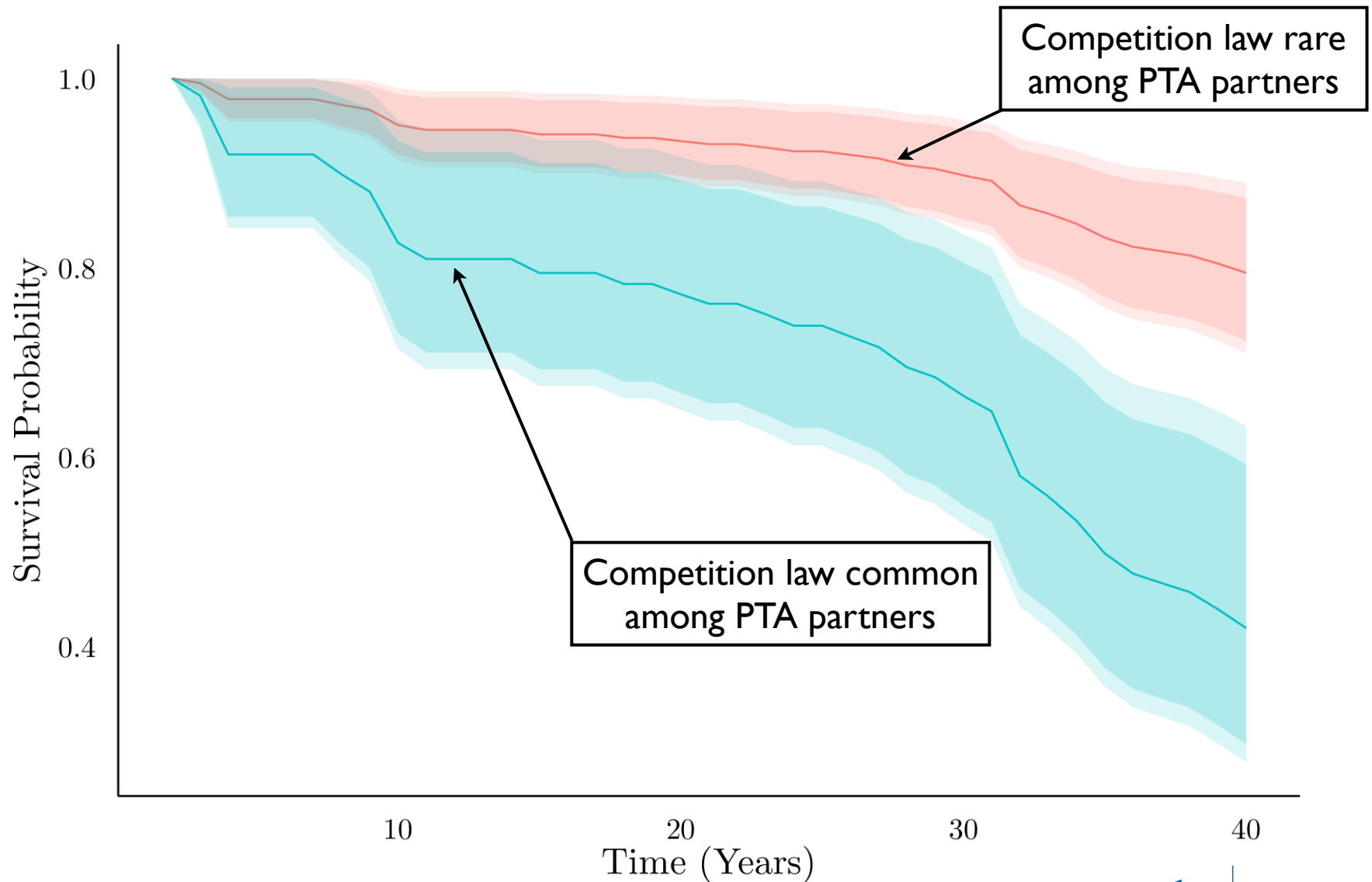
	<u>Model 1</u>	<u>Model 2</u>	<u>Model 3</u>
Econ. Development $i,t-1$	0.345*** (.072)	0.241*** (.077)	0.272*** (.082)
Market Size $i,t-1$	0.278*** (.065)	0.276*** (.065)	0.252*** (.065)
Democracy $i,t-1$	0.047*** (.016)	0.041** (.017)	0.030* (.017)
EU Export Share $i,t-1$	0.090 (.838)	0.681 (.834)	1.05 (.851)
GATT/WTO $i,t-1$	-0.210 (.253)	-0.049 (.266)	-0.200 (.269)
Policies of Neighbors		2.43** (.963)	0.331 (1.029)
Policies of Allies			1.12*** (.366)
Policies of PTA Partners			1.90*** (.489)
Events	100	95	95
Countries (n)	140	135	135
N	4232	4180	4180

Coefficients from duration models with time-varying covariates, estimated using Cox Proportional Hazards (not hazard ratios) rounded to 3 signif figures; standard errors in parentheses. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Substantive Effects, Model 3: Survival Probabilities over Time by Policies of Allies



Survival Probabilities over Time by Policies of PTA Partners



Alternative Explanations Tested

MONADIC FACTORS, PROBLEMATIC:

- Economic Liberalization Measures
- Corruption

MONADIC FACTORS, CONSIDERED BUT NOT SIGNIFICANT:

- Rule of Law
- Government Partisanship
- Foreign Direct Investment / GDP
- Trade Flows (various measures)
- Aid (Net ODA receipts)

FURTHER SPATIAL LAGS, CONSIDERED BUT NOT SIGNIF:

- Centroid Distance; Minimum Distance
- Trade Flows
- Aid

Enactment, Developing Countries, 1961-2013

	Model 1	Model 2	Model 3
Econ. Development $i,t-1$	0.443*** (.095)	0.312*** (.101)	0.313*** (.103)
Market Size $i,t-1$	0.310*** (.072)	0.294*** (.073)	0.262*** (.073)
Democracy $i,t-1$	0.061*** (.018)	0.052*** (.019)	0.039** (.019)
EU Export Share $i,t-1$	0.153 (.913)	0.758 (.914)	1.081 (.929)
GATT/WTO $i,t-1$	-0.086 (.261)	0.016 (.272)	-0.111 (.274)
Policies of Neighbors		2.89*** (.978)	0.811 (1.12)
Policies of Allies			0.971** (.448)
Policies of PTA Partners			1.641*** (.589)
Events	84	79	79
Countries (n)	124	119	119
N	3798	3746	3746

Coefficient for non-OECD countries from duration models with time-varying covariates, estimated using Cox Proportional Hazards (*not* hazard ratios); standard errors in parentheses. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Conclusion

- Understanding the global pattern(s) of competition law enactment requires looking beyond strictly domestic factors and consider international factors and spatial network effects.
- Understanding the pattern(s) of diffusion of competition law is susceptible to statistical analysis ...
- ... but should involve modeling the diffusion process directly.
- Institutionalized trade openness emerges as an important conduit for the diffusion of competition law.

Thank you

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