

## **Appendix A:** **Coding Authority in 72 International Governmental Organizations**

We investigate the formal rules and then determine whether these are translated into institutions in order to narrow the gap in coding between unrealized intention and actual practice. However, we do not code practices that have only an informal basis.

The information for interpreting IO authority is extracted primarily from founding IO documents, protocols, rules of procedure, and annual reports, which are in the public realm and can be accessed on the web, at the Union of International Associations library in Brussels, or by writing to the relevant IO. Case studies detail and explain coding decisions and can be accessed at [URL]. Their purpose is to make our judgments explicit, and therefore open to amendment or refutation.

Andean Community	Andean	International Seabed Authority	ISA
Asia-Pacific Economic Cooperation	APEC	International Telecommunication Union	ITU
Association of Southeast Asian Nations	ASEAN	International Whaling Commission	Iwhale
African Union	AU	Latin American Integration Association	LAIA
Benelux Community	Benelux	League of Arab States	LOAS
Bank for International Settlements	BIS	MERCOSUR	Mercosur
CAB international	CABI	North American Free Trade Association	NAFTA
Caribbean Community	Caricom	North Atlantic Treaty Organization	NATO
Central Commission for the Navigation of the Rhine	CCNR	Nordic Council	NordC
Central African Economic & Monetary Union	Cemac	Organization of Arab Petroleum Export Countries	OAPEC
European Organization for Nuclear Research	CERN	Organization of American States	OAS
Commonwealth of Independent States	CIS	Organization for Economic Cooperation & Development	OECD
Council of Europe	COE	Organization of Eastern Caribbean States	OECS
Common Market for East/Southern Africa	Comesa	Organization of the Islamic Conference	OIC
Commonwealth of Nations	Commonwealth	Organization of Petroleum Exporting Countries	OPEC
East African Community	EAC	Organization for Security and Cooperation in Europe	OSCE
Economic Community of Central African States	Eccas	Intergovernmental Organization for International Carriage by Rail	OTIF
Economic Community of West African States	Ecowas	Permanent Court of Arbitration	PCA
European Economic Area	EEA	Pacific Islands Forum	PIF
Euro Free Trade Association	EFTA	South Asian Association for Regional Cooperation	SAARC
European Space Agency	ESA	Southern African Customs Union	SACU
European Union	EU	Southern African Development Community	SADC
Food & Agriculture Organization	FAO	Shanghai Cooperation Organization	SCO
Francophone Community	Francophonie	Latin American Economic System	SELA
Gulf Cooperation Council	GCC	Central American Integration System	SICA
Global Environmental Facility/ Fund	GEF	South Pacific Community	SPC
International Atomic Energy Agency	IAEA	United Nations	UN
World bank	IBRD	UN Education, Scientific, & Cultural Organization	UNESCO
International Civil Aviation Organization	ICAO	UN Industrial Development Organization	UNIDO
International Criminal Court	ICC	World Tourism Organization	UNWTO

Inter-Governmental Authority on Drought Protection and Development	IGAD	Universal Postal Union	UPU
International Labour Organization	ILO	World Customs Organization	WCO
International Monetary Fund	IMF	World Health Organization	WHO
International Maritime Organization	IMO	World Intellectual Property Organization	WIPO
International Criminal Police Organization	INTERPOL	World Meteorological Organization	WMO
International Organization for Migration	IOM	World Trade Organization	WTO

### Measuring delegation

Delegation is a conditional grant of authority to a non-state body. For the purposes of this paper we focus on the general secretariat as a recipient of delegated authority. Every IO in our dataset has a secretariat with infrastructural functions such as running the IO's headquarters, organizing meetings, and maintaining records. However, the extent to which the secretariat carries out executive functions, monitors compliance, and facilitates member state bargaining varies. We assess a general secretariat's discretion in agenda setting in six decision domains and also assess its executive role:<sup>1</sup>

- **GS1: Membership accession.** Is the secretariat authorized to vet, solicit, or negotiate membership of the IO (0, 1)?
- **GS2: Constitutional revision.** Is the secretariat authorized to initiate, draft or negotiate constitutional amendments (0, 1)?
- **GS3: Suspension of membership.** Is the secretariat authorized to initiate a formal proceeding against a member state in non-compliance with IO rules (0, 1)?
- **GS4: Financial non-compliance.** Is the secretariat authorized to initiate a formal proceeding against a member state in financial arrears (0, 1)?
- **GS5: Drafting the budget.** Is the secretariat authorized to (co-)draft the annual budget of the IO (0, 1)?
- **GS6: Policy initiation.** Is the secretariat authorized to propose one or more of the following: recommendations, resolutions, or declarations; programs or projects; laws, regulations, decisions, or directives; protocols or conventions (0, 1)?
- **GS7: Monopoly of policy initiation.** Is the role of the secretariat in initiating policy a) not mandated; b) mandated by the IO's founding document and shared with other bodies; c) anchored in the IO's founding document and exclusive (0, 0.5, 1)?
- **GS8: Executive functions.** Is the secretariat authorized to carry out executive functions, such as framing multi-year strategic plans, drafting policy, or turning general legislation into directives or executive orders (0, 1)? It is not sufficient for the secretariat to be designated as (a/the) executive in the IO's founding documents; coding demands a verifiable basis in the task description for the secretariat.
- **GS9: Executive monopoly.** Does the secretariat share these functions with another body, or does it monopolize them (0, 1)?

**Delegation** is calculated as a summated rating scale ranging from 0 (no delegation) to 9 (maximum delegation) by adding scores across these items, then rescaled from 0 to 1.

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<sup>1</sup> Technocratic or "no rules" is coded as zero.

### Measuring pooling

Pooling refers to the transfer of authority from individual member states to a collective body in which member states directly participate, but which they do not individually control. Four basic elements feed into the measure: composition of an IO body, voting rule, binding character of the decision, and ratification rules.

- A. **Composition:** Pooling pertains to assemblies or executives that are fully or primarily composed of member state representatives.
- B. **Voting:** We capture the incidence of majoritarian voting in the member state body (or bodies) that take the final decision in six domains. We code the decision rule for the body that is most intergovernmental:
- Accession of member states
  - Suspension of a member state
  - Constitutional revision
  - Budgetary allocation
  - Financial non-compliance
  - Policy making (if there is more than one policy stream, we take the highest value)

Decision rules are coded from 0 to 1, with consensus, unanimity, no voting rule=0; supermajority or selective veto=0.5; simple or absolute majority = 1. Technocratic decision rules receive an intermediate code. An alternative specification that omits instances with technocratic decision rules does not produce significantly different results.

- C. **Bindingness.** We ask whether IO decisions are nonbinding, partially binding, or binding. A decision is nonbinding if there is a voluntary provision or if objections by one or several countries postpone or annul the decision. A decision is partially binding if there is a procedure for an individual member state to opt out or postpone a decision, but this does not affect its binding character for other member states. A decision is binding if there is a formal legal provision to this effect or if there is no provision for a member state to opt out or postpone implementation of a decision. The binding character of the decision applies to policy making and budget allocation.
- D. **Ratification.** Do IO decisions have to be ratified to come into effect? We distinguish three possibilities: a) the decision comes into force for all states if ratified by all, or comes into force only for those member states that ratify; b) the decision comes into force for all states after ratification by a subset of states; c) the decision comes into force without ratification. Ratification applies to accession, constitutional reform, and policy making.

**Pooling** is calculated for each domain as a function of the decision rule, bindingness, and ratification. The “weakest link”—the most intergovernmental option—prevails. The maximum score is majority voting over a binding decision that does not require ratification. The minimum score is unanimous decision making. Discounts are applied to non-unanimous decisions that are partially binding or non-binding or require partial or full ratification. Super-majoritarian decision rules, partial ratification, and partial bindingness produce

intermediate scores. Scores are calculated for each domain and summated on a scale from 0 (no pooling) to 6 (maximum pooling), then rescaled to 0 to 1.

### Aggregation

The fifteen items for delegation and pooling can be treated as indicators in a principal components analysis or multidimensional scaling procedure (MDS). This produces two factors—one on which all delegation items load, and one on which all pooling items load. The items can also be summed in two additive scales, which is the approach taken in this paper. The Cronbach's alpha for delegation items is 0.671, and for pooling items it is 0.881. The additive scale, factor, and alpha scales are highly correlated, while the two dimensions of authority – pooling and delegation—are weakly correlated. Only the MDS factors are orthogonal by design.

**Descriptive statistics**

Indicator	Mean	Standard deviation	Min--Max
GS role in accession	.125	.333	0–1
GS role in constitutional revision	.111	.316	0–1
GS role in membership suspension	.125	.333	0–1
GS role in financial non-compliance	.111	.316	0–1
GS role in drafting the budget	.861	.348	0–1
GS role in policy initiation	.722	.451	0–1
GS monopoly of policy initiation	.438	.290	0–1
GS role in executive functions	.250	.436	0–1
GS executive monopoly	.056	.231	0–1
<b>DELEGATION (additive)</b>	.311	.184	0–.78
Pooling on accession	.281	.333	0–1
Pooling on suspension	.174	.254	0–1
Pooling on constitutional revision	.155	.184	0–.5
Pooling on budgetary allocation	.457	.384	0–1
Pooling on financial non-compliance	.347	.381	0–1
Pooling on policy making	.266	.308	0–1
<b>POOLING (additive)</b>	.280	.245	0–.90

	Delegation (additive)	Delegation (MDS)	Delegation (alpha)	Pooling (additive)	Pooling (MDS)
<b>Delegation (additive scale)</b>	1.000				
<b>Delegation (MDS)</b>	.966	1.000			
<b>Delegation (alpha)</b>	.997	.956	1.000		
<b>Pooling (additive scale)</b>	.029	.165	.047	1.000	
<b>Pooling (MDS)</b>	-.142	.000	-.124	.959	1.000
<b>Pooling (alpha)</b>	.023	.163	.041	.997	.966

## Appendix B: Coding Policy

The policy portfolio of each IO in 2010 was assessed by two independent coders with a list of 25 policies in hand. This list was adapted from a classification scheme initially developed for the European Union by Lindberg and Scheingold (1970), and updated by Philippe Schmitter (1996) and Liesbet Hooghe and Gary Marks (2001). Coders were asked to code the policy responsibility of each IO in two ways: a) in what policies does the IO have substantial involvement, and b) of these policies, which policy constitutes the core activity of the IO in 2010? The Krippendorff's alpha among coders was 0.70, which indicates reasonably high intercoder reliability.

An IO is coded as having substantial involvement in a policy area in 2010 if it meets three or more of the following criteria: a) the policy is mentioned in the constitution/founding documents; b) the IO has a distinct organizational component for the policy (agency, department, office, unit); c) the IO collects or spends money on policy (budget category, taxes, fees, fines, penalties); d) there is a consistent policy pattern (laws, decisions, regulations, conventions, protocols, rulings); e) the policy is in the mission statement on the IO website.

1. Agriculture
2. Competition policy, mergers, state aid, antitrust
3. Culture and media
4. Education (primary, secondary, tertiary), vocational training, youth
5. Development, aid to poor countries
6. Financial regulation, banking regulation, monetary policy, currency
7. Welfare state services, employment policy, social affairs, pension systems
8. Energy (coal, oil, nuclear, wind, solar)
9. Environment: pollution, natural habitat, endangered species
10. Financial stabilization, lending to countries in difficulty
11. Foreign policy, diplomacy, political cooperation
12. Fisheries and maritime affairs
13. Health: public health, food safety, nutrition
14. Humanitarian aid (natural or man-made disasters)
15. Human rights: social & labor rights, democracy, rule of law, non-discrimination, election monitoring
16. Industrial policy (including manufacturing, SMEs, tourism)
17. Justice, home affairs, interior security, police, anti-terrorism
18. Migration, immigration, asylum, refugees
19. Military cooperation, defense, military security
20. Regional policy, regional development, poverty reduction
21. Research policy, research programming, science
22. Taxation, fiscal policy coordination
23. Telecommunications, internet, postal services
24. Trade, customs, tariffs, intellectual property rights/ patents
25. Transport: railways, air traffic, shipping, roads
- (26. Data collection, statistics, reports – coded separately)

**Appendix C:**  
**Correlations Between Independent Variables**

	Scope	Members	Democracy	Power asymmetry
Scope	1.00			
Members	-.54	1.00		
Democracy	.15	-.00	1.00	
Power asymmetry	-.51	.89	.04	1.00
Weighted voting	-.10	.36	-.11	.39

N=72

**Appendix D: Robustness Analyses for Table 1**

	Delegation				Pooling			
	Coeff.	OLS s.e.	Bootstrap s.e.	Jackknife s.e.	Coeff.	OLS s.e.	Bootstrap s.e.	Jackknife s.e.
Policy scope	.079	.024	.026	.024	-.045	.022	.021	.021
Members	.146	.044	.036	.039	.169	.040	.042	.041
Democracy	-.003	.020	.021	.022	.014	.018	.014	.016
Power asymmetry	-.121	.044	.036	.039	-.016	.040	.048	.045
Weighted voting	.017	.022	.027	.026	.037	.020	.019	.022
Constant	.311	.020	.022	.020	.280	.018	.019	.018
R <sup>2</sup>			.243				.652	
(Adjusted R <sup>2</sup> )			(.185)				(.625)	

Note: N=72. Standardized coefficients for the models in Table 1 followed by three sets of standard errors.

Bootstrap and jackknife estimate the precision of sample statistics by comparing the variability of those statistics between subsamples. Jackknife uses subsets of available data (by dropping one case at a time) and produces exact estimates, while bootstrapping draws randomly with replacement from a set of data points and may therefore produce different estimates when repeated on the same data. Both procedures give insight in the precision (efficiency) of the coefficients, i.e. the size of the standard errors. A comparison with the standard errors in Table 1 suggests high efficiency, with only one out of 28 estimates changing significance (jackknife: weighted voting on pooling). The model is also robust if particular cases are dropped, such as the European Union or the World Bank.



## **Appendix E: Matching weighted propensities**

The observational data reveal clearly that IOs are not randomly located on the variables of interest. IOs that tend to have broad policy responsibilities also tend to have few members. The presence of such imbalances is a severe problem for the integrity of regression analysis. The possible result is that we end up comparing apples and oranges, while making unwarranted assumptions about our ability to control for this. A direct response to this challenge is to approximate an experimental set-up by comparing cases that are matched in that they are similar in all respects except for the main covariate of interest (Ho et al. 2007; Holland 1986).

There is a trade-off between minimizing bias (by engaging in matching) and maximizing efficiency (by using all information). We now prune the cases by excluding observations for which we cannot compare treatment and control groups and by weighting the remaining cases to achieve better balance between treated and control groups.<sup>2</sup> This enables us to assign cases more or less equally across the covariates of interest.

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<sup>2</sup> We use coarsened exact matching developed by Blackwell, et al. 2009.

**Table E1: The Effect of Policy Scope on Delegation and Pooling after Matching**

Successive models with matching on:	Delegation		Pooling		N	Lambda $\lambda_1(f, g)$
	slope estimate for Policy scope	s.e.	slope estimate for Policy scope	s.e.		
Members	.078***	.022	-.049**	.020	70	.12
Democracy	.100***	.022	-.050**	.022	65	.09
Power asymmetry	.090***	.026	-.041*	.021	52	.01
Weighted voting	.079***	.023	-.034	.021	72	.00

**Table E2: The Effect of Membership on Delegation and Pooling after Matching**

Successive models with matching on:	Delegation		Pooling		N	Lambda $\lambda_1(f, g)$
	slope estimate for Members	s.e.	slope estimate for Members	s.e.		
Policy scope	.194***	.043	.185***	.042	66	.03
Democracy	.129***	.057	.165**	.056	64	.11
Power asymmetry	.124***	.042	.159***	.046	43	.08
Weighted voting	.212***	.050	.214***	.040	72	.00

Note: Each row represents a full OLS model (omitting matched covariate) but reports only the estimates of the variable of interest, Policy scope or Members. We use the CEM stata algorithm developed by Blackwell, Iacus, King, Porro (2009) to obtain a matched data set. This method applies automatic coarsened exact matching. N reports the number of observations retained and matched after treatment. Lambda is a measure of global imbalance, which varies between 0 (perfectly balanced) and 1 (perfectly imbalanced or complete separation).

The results in Tables E1 and E2 provide strong confirmation of the results in the base OLS model. The treatment in Table E1 is *Policy scope*, and the first row displays results for a fully specified OLS model with matching for *Members*. This produces a weighted sample where *Members* is quite well balanced between a control group of IOs that have narrow policy portfolios and a treatment group having broad policy portfolios. The  $\lambda$  (lambda) for

this sample is 0.12 which is a considerable improvement on the global  $\lambda$  of 0.55 for an unmatched sample with *Policy Scope* as treatment.

The estimate in the first row of the first column is the coefficient for *Policy scope* where *Delegation* is the dependent variable using this weighted sample in OLS under full controls. The estimate in the first row, third column, is the coefficient for *Policy scope* with *Pooling* as dependent variable. *Policy scope* is significant and carries the anticipated sign: positive on *Delegation* and negative on *Pooling*.

The treatment in Table E2 is the membership scale of an IO. The first and third columns of each row display the slope coefficient for *Members* where the sample is matched for the variable shown on the left of the row. The Lambdas compare favorably with an unmatched sample with *Members* as treatment which has a global  $\lambda$  of 0.86.

Matching is a severe test given the limited number of units in our dataset. By pruning unmatched IOs to control for confounding influences we err on the side of avoiding type-1 error, and the results for both scope and scale are strongly consistent with expectations.

#### References:

Blackwell, M., Iacus, S., King, G. & Porro, G.. (2009). Cem: Coarsened Exact Matching in Stata. *The Stata Journal* 9, 524-46.

Ho, D. E, Imai K., King G., Stuart E. A. (2007). Matching as nonparametric preprocessing for reducing model dependence in parametric causal inference. *Political Analysis* 15, 199–236.

Holland P. W. (1986). Statistics and causal inference. *Journal of the American Statistical Association* 81, 945–60.