Appendix

Measuring precision precisely:
A Dictionary-Based Measure of Imprecision

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Table A1 Sample of international organizations

Organization	*Acronym*	*Source*	*Inception*
Latin American Integration Association	ALADI	UN Treaty Collection	1961
Arab Maghreb Union	AMU	UN Treaty Collection	1989
Asia-Pacific Economic Cooperation	APEC	IO Website	1991
Association of Southeast Asian Nations	ASEAN	UN Treaty Collection	1967
African Union	OAU/AU	IO Website	1963
Benelux Community	BENELUX	University of Luxembourg (2013a)	1948
Bank of International Settlements	BIS	League of Nations Treaty Series	1930
CAB International	CABI	UN Treaty Collection	1987
Andean Community	CAN	WIPO Archive	1969
Caribbean Community	CARICOM	UN Treaty Collection	1968
Central Commission for the Navigation of the Rhine	CCNR	IO Website (Revised Version from 1963)	1831
Central African Economic and Monetary Union	CEMAC	Wionczek (1969, pp. 237–53)	1966
European Organization for Nuclear Research	CERN	UN Treaty Collection	1954
Commonwealth of Independent States	CIS	UN Treaty Collection	1992
Council of Europe	COE	European Treaty Series	1949
Council for Mutual Economic Assistance	COMECON	UN Treaty Collection	1959
Common Market for East/Southern Africa	COMESA	UN Treaty Collection	1982
East African Community	EAC1	East African Community (1967)	1967
East African Community	EAC2	UN Treaty Collection	1993
Economic Community of Central African States	ECCAS	IO Website	1985
Economic Community of West African States	ECOWAS	UN Treaty Collection	1975
European Economic Area	EEA	UN Treaty Collection	1994
European Free Trade Association	EFTA	UN Treaty Collection	1960
European Space Agency	ESA	IO Website	1980
European Coal and Steel Community	EU1	University of Luxembourg (2013b)	1952
European Economic Community	EU2	UN Treaty Collection	1958
Food and Agriculture Organization	FAO	IO Website	1950
Gulf Cooperation Council	GCC	IO Website	1981
Global Environmental Fund	GEF	World Bank Website	1991
International Atomic Energy Agency	IAEA	UN Treaty Collection	1957
World Bank	IBRD	UN Treaty Collection	1945
International Civil Aviation Organization	ICAO	IO Website	1944
International Criminal Court	ICC	UN Treaty Collection	2002
Inter-Governmental Authority on Development	IGAD	IO Website	1986
International Labour Organization	ILO	IO Website	1948
International Monetary Fund	IMF	IO Website	1945

Table A1 Sample of international organizations (cont.)

Organization	*Acronym*	*Source*	*Inception*
International Maritime Organization	IMO	UN Treaty Collection	1958
International Criminal Police Organization	INTERPOL	(Silvestre et al. 2020, pp. 308–310)	1946
International Organization for Migration	IOM	UN Treaty Collection	1954
International Seabed Authority	ISA/ISBA	IO Website	1994
International Telecommunication Union	ITU	IO Archive	1865
International Whaling Commission	IWHALE	UN Treaty Collection	1946
League of Arab States	LOAS	UN Treaty Collection	1945
Common Market of the South	MERCOSUR	IO Website	1991
Northwest Atlantic Fisheries Organization	NAFO	UN Treaty Collection	1979
North American Free Trade Association	NAFTA	University of Oslo (2020)	1994
North Atlantic Treaty Organization	NATO	IO Website	1949
Nordic Council	NORDC	Council of Europe (1955, pp. 462–67)	1952
Organization of Arab Petroleum Export Countries	OAPEC	UN Treaty Collection	1968
Organization of American States	OAS	UN Treaty Collection	1951
Organization for Economic Cooperation and Development	OECD	IO Website	1948
Organization of Eastern Caribbean States	OECS	UN Treaty Collection	1968
Organization of the Islamic Conference	OIC	IO Archive	1970
Francophone Community	OIF/ACCT	UN Treaty Collection	1970
Organization of Petroleum Exporting Countries	OPEC	IO Archive	1960
Organization for Security and Cooperation in Europe	OSCE	IO Website	1973
Intergovernmental Organization for International Carriage by Rail	OTIF	UN Treaty Collection	1893
Permanent Court of Arbitration	PCA	IO Archive	1907
Pacific Islands Forum	PIF	UN Treaty Collection	1973
South Asian Association in Regional Cooperation	SAARC	WIPO Archive	1986
Southern African Customs Union	SACU	UN Treaty Collection	1969
Southern African Development Community	SADC	(Mandaza and Tostensen 1994, pp. 142–48)	1981
Shanghai Cooperation Organization	SCO	IO Website	2002
Latin American Economic System	SELA	UN Treaty Collection	1976
Central American Integration System	SICA	UN Treaty Collection	1952
South Pacific Community	SPC	UN Treaty Collection	1948
United Nations	UN	UN Treaty Collection	1945
United Nations Education, Scientific and Cultural Organization	UNESCO	UN Treaty Collection	1946
United Nations Industrial Development Organization	UNIDO	UN Treaty Collection	1985
World Tourism Organization	UNWTO	UN Treaty Collection	1975
Universal Postal Union	UPU	Library of Congress	1948
World Customs Organization	WCO	IO Website	1952
World Health Organization	WHO	UN Treaty Collection	1948
World Intellectual Property Organization	WIPO	UN Treaty Collection	1967
World Meteorological Organization	WMO	UN Treaty Collection	1947
World Trade Organization	WTO	UN Treaty Collection	1994

A2 Operationalization of variables

A2.1 Dictionary of imprecision

For our dictionary of imprecision, we systematically analyzed the pertinent scholarly literature. As our starting point, we took two foundational contributions: Abbott, Keohane, Moravcsik, Slaughter, and Snidal's introduction of "*The Concept of Legalization*" (2000), which included precision as one dimension of legalization alongside obligation and delegation; and Abbott and Snidal's application of these concepts to develop the distinction between "*Hard and Soft Law in International Governance*" (2000).[1] Because of their popularity, we limited our review to articles that have cited either of these contributions and have themselves attracted at least five citations in the *Web of Science*. This left us with 473 articles, mostly published in International Relations and Law. These articles referred to additional sources such as scholarly monographs, which we also included in our review.

Some of the articles did not use precision as a concept, but focused, for example, entirely on obligation. Even fewer have referred to Abbott and colleagues only in passing, not drawing on any of the three dimensions. We also limited our review to articles with a digital object identifier (DOI), which applied to most of them. Here, we summarize the core results of how imprecision has been operationalized in past research:

Words directly relevant to the dictionary

- "appropriate measures" (Herschinger et al. 2011, p. 448)
- "such actions as it deems necessary; as appropriate" (Vihma 2011, pp. 71–72)
- "access to appropriate means" (Breitmeier et al. 1996, p. 82)
- "as appropriate; as far as possible" (Oberthür 2019, p. 21)
- "as appropriate" (Rajamani 2016, p. 343)
- "appropriate" (Heupel 2008, pp. 14–5)
- "take all appropriate measures" (Hooghe et al. 2019, p. 64)
- "(un)reasonable [regulations]" (Abbott et al. 2000, p. 414)
- "critical; [considers] necessary; essential" [security interests] (Best 2012, pp. 677, 680)
- "necessary; essential [interests]" (Hansen 2016, p. 198)

[1] According to the Web of Science, Abbott and Snidal's article has amassed over 1,000 citations, which makes it IO's eighth-most cited article. The introduction by Abbott *et al.* has been cited over 600 times and ranks in nineteenth position.

- "substantial [quantities]" (Linos and Pegram 2016, p. 593)
- "adequate [safeguards]" (Barnett and Finnemore 2004, p. 57)

A far wider approach to imprecision

- "opinion; environment; development" (Koremenos 2016, p. 161)
- "ever closer union among the peoples of Europe" (Hooghe et al. 2019, p. 64)
- "favorable conditions; high [labor standards]" (Abbott et al. 2000, p. 414)
- "forced labor, slavery, and servitude" (Efrat 2016, p. 40)
- "funds; terrorism" (Heupel 2008, pp. 14–5)
- "political [crime]" (Best 2012, p. 677)
- "good faith" (Abbott et al. 2000, p. 414; Gilligan et al. 2010, p. 23)
- "lack of definition [of adaptation actions, metrics, and criteria to determine compliance]" (Hall and Persson 2018, p. 549)
- "extensiveness of the terms" (Kim 2012, p. 441)

Approaches to imprecision tailored towards specific contexts

<u>Commercial policy</u>

- "imprecise agreements make a general call towards non-trade issues (NTIs). [Precise agreements, in contrast, name specific non-trade issues.]" (Lechner 2018, p. 172)
- "NTI clauses include references to multilateral treaties, which add precision" (Milewicz et al. 2016, p. 750)
- "corpus of "standard clauses" across 1,200 English-language bilateral investment treaties (BITs); the more of these clauses are included in any given BIT, the more precise agreements are" (Manger and Peinhardt 2017, p. 929)

<u>Human rights</u>

- "[only vague references to the improvement of human rights, with] no direct reference [to actual human rights law] (Hafner-Burton, Mansfield, et al. 2015, p. 6)
- agreement 'might, or might not, allow for the use of torture against prisoners'" (Wallace 2013, p. 172, 2014, p. 509)

- "to take steps . . . to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized in the present Covenant" (Helfer 2002, p. 1841)
- "general reference to human rights" (Ituarte-Lima and McDermott 2017, p. 516)

Environment

- "whether standards or goals are quantified [e.g., specific emission targets in environmental agreements]" (Bernauer et al. 2013, p. 485)
- "treaty could demand only that better air quality should be achieved [instead of providing exact specifications for how much emissions must be reduced]" (Böhmelt and Spilker 2016, p. 77)
- "by 2030, achieve the sustainable management and efficient use of natural resources" (Persson et al. 2016, p. 60)
- "the Parties shall develop and strengthen their cooperation to combat climate change" (Morin and Jinnah 2018, p. 552) [high obligation, but low precision]

Survey approach

- survey experiment on experienced NGO professionals (here for environment or human rights), letting them assess the precision of key international agreements on a sliding scale from -50 to 50 (Hafner-Burton, LeVeck, et al. 2015, p. 176)

The most frequent term used in the literature to capture (im-)precision is **"appropriate."** From Abbott and colleagues, we borrow the word **"reasonable."** Best highlights **"necessary," "essential"** (see also Hanson 2016), and **"critical"** for capturing linguistic ambiguity. Linos and Pegram explicitly list the term **"substantial."** Barnett and Finnemore contribute the word **"adequate"** to the dictionary. Based on these seven words, we determined all synonyms with the help of *The Oxford Thesaurus of English*.

The following table contains all words in our dictionary and their corresponding frequencies. Note that several words can be included in the same sentence. Therefore, the number of imprecise words does not translate perfectly into the number of imprecise sentences. Moreover, note that we have implemented the words as regular expressions. Therefore, they generally include adverbials and antonyms (e.g., "adequate[ly]" and "inadequate[ly]").

Table A2.1 Dictionary of ambiguous words

Words	*Frequency*
acute	1
adequate	94
ample	31
amply	0
apposite	0
appropriate	582
burning	0
climacteric	0
compelling	2
consequential	1
considerabl	2
critical	5
crucial	2
decisive	4
enough	0
essential	67
fitting	0
high-priority	0
imperative	3
important	22
indispensabl	8
key	5
life-and-death	0
major	31
meaningful	1
momentous	0
necessar	839
notabl	5
of great consequence	0
of the essence	0
of the utmost importance	0
paramount	16
pivotal	0
practicable	68
pre-eminent	0
pressing	0
proper	59
reasonabl	211
requisite	17
sensibl	0
significant	35
sizabl	0
sizeabl	1
solid	0
substantial	88
sufficient	78
suitabl	52
urgent	24
useful	25
valuabl	1
vital	8
weighty	0
within reason	1
worthwhile	0

Notes: “Amply” included because reducing string to “ampl” picks up several other words such as “ampl(ific)ation.” “Sizable” is an alternative spelling of “sizeable.” The following words have been truncated to pick up adverbs: “considerabl(e|y),” “indispensabl(e|y),” “necessar(y|ily),” “notabl(e|y),” “reasonabl(e|y),” “sizabl(e|y),” “sizeabl(e|y),” “sensibl(e|y),” “suitabl(e|y),” “valuabl(e|y).” “Fitting” and “pressing” take a preceding blank space to exclude words such as “benefitting” and “expressing.” “Major,” “proper,” and “solid” take a succeeding blank space to exclude words such as “majority,” “property,” and “solidarity.”

Table A2.2 Excluded words

Excluded word	*Reason for exclusion*
“all-important”	included in “important”
“vitally important”	included in “important”
“called for”	too generic (e.g., a meeting called for the purpose of); 3 hits
“compulsory”	refers to obligation more than ambiguity; 10 hits
“deciding”	too generic (e.g., the parties are deciding to); 12 hits
“fundamental”	too generic (e.g., fundamental rights); 55 hits
“incumbent”	too generic; only used as “incumbent upon”; 4 hits
“marked”	too generic (e.g., vessels marked with their names); 6 hits
“mandatory”	refers to obligation more than precision; 15 hits
“material”	too generic (e.g., hazardous material); 261 hits
“needed”	too generic; 26 hits
“obligatory”	refers to obligation more than ambiguity; 6 hits
“real”	too generic; when included as “real” (to exclude “realize” etc.) 12 hits
“required”	refers to obligation more than precision; 305 hits

Table A2.3 Ten most frequent words identified by the dictionary of imprecision across all IOs (additional context)

Word	*Freq.*	*Article*	*Text*
Necessary	839	EFTA Art. 16 Establishment	1. Member States recognise that restrictions on the establishment and operation of economic enterprises in their territories by nationals of other Member States should not be applied, through accord to such nationals of treatment which is less favourable than that accorded to their own nationals in such matters, in such a way as to frustrate the benefits expected from the removal or the absence of duties and quantitative restrictions on trade between Member States. 2. Member States shall not apply new restrictions in such a way that they conflict with the principle set out in paragraph 1 of this Article. 3. Member States shall notify to the Council, within such period as the Council may decide, particulars of any restrictions which they apply in such a way that nationals of ·another Member State are accorded in their territories less favourable treatment in respect of the matters set out in paragraph 1 of this Article than is accorded to their own nationals. 4. The Council shall consider not later than 31st December, 1964, and may consider at any time thereafter, whether further or different provisions are *necessary* to give effect to the principles set out in paragraph 1 of this Article, and may decide to make the *necessary* provisions. 5. Nothing in this Article shall prevent the adoption and enforcement by a Member State of measures for the control of entry, residence, activity and departure of aliens where such measures are justified by reasons of public order, public health or morality, or national security, or for the prevention of a serious imbalance in the social or demographic structure of that Member State.

Table A2.3 Ten most frequent words identified by the dictionary of imprecision across all IOs (additional context)

Word	*Freq.*	*Article*	*Text*
			6. For the purposes of this Article: (a) "nationals" means, in relation to a Member State, (i) physical persons who have the nationality of that Member State, and (ii) companies and other legal persons constituted in the territory of that Member State in conformity with the law of that State and which that State regards as having its nationality, provided that they have been formed for gainful purposes and that they have their registered office and central administration, and carry on substantial activity, within the Area of the Association; (b) "economic enterprises" means any type of economic enterprise for production of or commerce in goods which are of Area origin, whether conducted by physical persons or through agencies, branches or companies or other legal persons.
Appropriate	582	ILO Art. 12	1. The International Labour Organization shall co-operate within the terms of this Constitution with any general international organization entrusted with the co-ordination of the activities of public international organizations having specialized responsibilities and with public international organizations having specialized responsibilities in related fields. 2. The International Labour Organization may make *appropriate* arrangements for the representatives of public international organizations to participate without vote in its deliberations.

Table A2.3 Ten most frequent words identified by the dictionary of imprecision across all IOs (additional context)

Word	*Freq.*	*Article*	*Text*
			3. The International Labour Organization may make suitable arrangements for such consultation as it may think desirable with recognized non-governmental international organizations, including international organizations of employers, workers, agriculturists and co-operators.
Reasonable	211	NAFTA Art. 714 Equivalence	1. Without reducing the level of protection of human, animal or plant life or health, the Parties shall, to the greatest extent practicable and in accordance with this Section, pursue equivalence of their respective sanitary and phytosanitary measures. 2. Each importing Party: (a) shall treat a sanitary or phytosanitary measure adopted or maintained by an exporting Party as equivalent to its own where the exporting Party, in cooperation with the importing Party, provides to the importing Party scientific evidence or other information, in accordance with risk assessment methodologies agreed on by those Parties, to demonstrate objectively, subject to subparagraph (b), that the exporting Party's measure achieves the importing Party's appropriate level of protection; (b) may, where it has a scientific basis, determine that the exporting Party's measure does not achieve the importing Party's appropriate level of protection; and (c) shall provide to the exporting Party, on request, its reasons in writing for a determination under subparagraph (b). 3. For purposes of establishing equivalence, each exporting Party shall, on the request of an importing Party, take such *reasonable* measures as may be available to it to facilitate access in its territory for inspection, testing and other relevant procedures.

Table A2.3 Ten most frequent words identified by the dictionary of imprecision across all IOs (additional context)

Word	*Freq.*	*Article*	*Text*
			4. Each Party should, in the development of a sanitary or phytosanitary measure, consider relevant actual or proposed sanitary or phytosanitary measures of the other Parties.
Adequate	94	CAN Art. 82	The Commission, at the General Secretariat's proposal, shall approve the Common External Tariff, which must provide for *adequate* levels of protection for sub-regional products, considering the Agreement objective of gradually harmonizing the different economic policies of the Member Countries. On the date indicated by the Commission, Colombia, Peru, and Venezuela shall begin the process of aligning the customs duties that are applicable under their national tariff schedules to the importation of products that did not originate in the sub-region, with the Common External Tariff in an annual, automatic, and linear way.
Substantial	88	EU1 [ECSC] Art. 33:	The Court shall have jurisdiction over appeals by a member State or by the Council for the annulment of decisions and recommendations of the High Authority on the grounds of lack of legal competence, *substantial* procedural violations, violation of the Treaty or of any rule of law relating to its application, or abuse of power. However, the Court may not review the conclusions of the High Authority, drawn from economic facts and circumstances, which formed the basis of such decisions or recommendations, except where the High Authority is alleged to have abused its powers or to have clearly misinterpreted the provisions of the Treaty or of a rule of law relating to its application. The enterprises, or the associations referred to in Article 48, shall have the right of appeal on the same grounds against individual decisions and recommendations concerning them, or against general decisions and recommendations which they deem to

Table A2.3 Ten most frequent words identified by the dictionary of imprecision across all IOs (additional context)

Word	*Freq.*	*Article*	*Text*
			involve an abuse of power affecting them. The appeals provided for in the first two paragraphs of the present article must be taken within one month from the date of the notification or the publication, as the case may be, of the decision or recommendation.
Sufficient	78	ICC Art. 17 Issues of admissibility	1. Having regard to paragraph 10 of the Preamble and article I, the Court shall determine that a case is inadmissible where; (a) The case is being investigated or prosecuted by a State which has jurisdiction over it, unless the State is unwilling or unable genuinely to carry out the investigation or prosecution; (b) The case has been investigated by a State which has jurisdiction over it and the State has decided not to prosecute the person concerned, unless the decision resulted from the unwillingness or inability of the State genuinely to prosecute; (c) The person concerned has already been tried for conduct which is the subject of the complaint, and a trial by the Court is not permitted under article 20, paragraph 3; (d) The case is not of *sufficient* gravity to justify further action by the Court. 2. In order to determine unwillingness in a particular case, the Court shall consider, having regard to the principles of due process recognized by international law, whether one or more of the following exist, as applicable:

Table A2.3 Ten most frequent words identified by the dictionary of imprecision across all IOs (additional context)

Word	*Freq.*	*Article*	*Text*
			(a) The proceedings were or are being undertaken or the national decision was made for the purpose of shielding the person concerned from criminal responsibility for crimes within the jurisdiction of the Court referred to in article 5; (b) There has been an unjustified delay in the proceedings which in the circumstances is inconsistent with an intent to bring the person concerned to justice; (c) The proceedings were not or are not being conducted independently or impartially, and they were or are being conducted in a manner which, in the circumstances, is inconsistent with an intent to bring the person concerned to justice. 3. In order to determine inability in a particular case, the Court shall consider whether, due to a total or substantial collapse or unavailability of its national judicial system, the State is unable to obtain the accused or the necessary evidence and testimony or otherwise unable to carry out its proceedings.
Practicable	68	ICAO Art. 23 Customs and immigration procedures	Each contracting State undertakes, so far as it may find *practicable*, to establish customs and immigration procedures affecting international air navigation in accordance with the practices which may be established or recommended from time to time, pursuant to this Convention. Nothing in this Convention shall be construed as preventing the establishment of customs-free airports.
Essential	67	CEMAC Art. 60:	The single tax shall be exclusive of the following: duties and charges applicable upon importation on raw materials and *essential* products used in industry for the preparation of manufactured products in the form in which they enter into trade;

Table A2.3 Ten most frequent words identified by the dictionary of imprecision across all IOs (additional context)

Word	*Freq.*	*Article*	*Text*
			all internal charges on raw materials and *essential* products used in industry as well as on manufactured products.
Proper	59	COMESA Art. 4: Specific Undertakings	In order to promote the achievement of the aims and objectives of the Common Market as set out in Article 3 of this Treaty and in accordance with the relevant provisions of this Treaty, the Member States shall: 1. In the field of trade liberalisation and customs co-operation: (a) establish a customs union, abolish all non-tariff barriers to trade among themselves; establish a common external tariff; co-operate in customs procedures and activities; (b) adopt a common customs bond guarantee scheme; (c) simplify and harmonize their trade documents and procedures; (d) establish conditions regulating the re-export of goods from third countries within the Common Market; (e) establish with respect to products originating in the Member States; and (f) recognise the unique situation of Lesotho, Namibia and Swaziland within the context of the Common Market and to grant temporary exemptions to Lesotho, Namibia and Swaziland from the full application of specified provisions of this Treaty. 2. In the field of transport and communications: (a) foster such co-operation among themselves as would facilitate the production of goods and facilitate trade in goods and services and the movement of persons;

Table A2.3 Ten most frequent words identified by the dictionary of imprecision across all IOs (additional context)

Word	*Freq.*	*Article*	*Text*
			(b) make regulations for facilitating transit trade within the Common Market; and (c) adopt a Third Party Motor Vehicle Insurance Scheme. 3. In the field of industry and energy: (a) eliminate rigidities in the structures of production and manufacturing so as to provide goods and services that are of high quality and are competitive in the Common Market; (b) provide an appropriate enabling environment for the participation of the private sector in economic development and co-operation within the Common Market; (c) co-operate in the field of industrial development; (d) adopt common standards, measurements systems and quality assurance practices in respect of goods produced and traded within the Common Market; and (e) provide an enabling stable and secure investment climate. 4. In the field of monetary affairs and finance: (a) co-operate in monetary and financial matters and gradually establish convertibility of their currencies and a payments union as a basis for the eventual establishment of a monetary union; (b) harmonise their macro-economic policies; (c) remove obstacles to the free movement of services and capital within the Common Market; and

Table A2.3 Ten most frequent words identified by the dictionary of imprecision across all IOs (additional context)

Word	*Freq.*	*Article*	*Text*
			(d) recognise the unique situation of Lesotho, Namibia and Swaziland within the context of the Common Market and to grant temporary exemptions to Lesotho, Namibia and Swaziland from the full application of specified provisions of this Treaty. 5. In the field of agriculture: (a) co-operate in the agricultural development; (b) adopt a common agricultural policy; (c) enhance regional food sufficiency; (d) co-operate in the export of agricultural commodities; (e) co-ordinate their policies regarding the establishment of agro-industries; (f) co-operate in agricultural research and extension; and (g) enhance rural development. 6. In the field of economic and social development: (a) harmonise the methodology of collection, processing and analysis of information required to meet the objectives of the Common Market; (b) harmonise or approximate their laws to the extent required for the *proper* functioning of the Common Market;

Table A2.3 Ten most frequent words identified by the dictionary of imprecision across all IOs (additional context)

Word	*Freq.*	*Article*	*Text*
			(c) promote the accelerated development of the least developed countries and economically depressed areas through the implementation of special programmes and projects in various fields of economic development; (d) adopt a regional policy that will look into all possible economic problems that Member States may face during the implementation of this Treaty and propose ways and means of redressing such problems in a manner that will satisfy the conditions of equitable and balanced development within the Common Market; (e) remove obstacles to the free movement of persons, labour and services, right of establishment for investors and right of residence within the Common Market; (f) promote co-operation in social and cultural affairs between themselves; (g) co-operate in tourism and wildlife development and management; (h) co-operate in the development and management of natural resources, energy and environment; and (i) take, jointly, such other steps as are necessary to further the aims of the Common Market.
Suitable	52	OSCE Co-operation in Humanitarian and Other	(c) Improvement of Working Conditions for Journalists The participating States, desiring to improve the conditions under which journalists from one participating State exercise their profession in another participating State, intend in particular to: - examine in a favourable spirit and within a *suitable* and reasonable time scale requests from journalists for visas;

Table A2.3 Ten most frequent words identified by the dictionary of imprecision across all IOs (additional context)

Word	*Freq.*	*Article*	*Text*
		Fields – 2. Information	- grant to permanently accredited journalists of the participating States, on the basis of arrangements, multiple entry and exit visas for specified periods; - facilitate the issue to accredited journalists of the participating States of permits for stay in their country of temporary residence and, if and when these are necessary, of other official papers which it is appropriate for them to have; - ease, on a basis of reciprocity, procedures for arranging travel by journalists of the participating States in the country where they are exercising their profession, and to provide progressively greater opportunities for such travel, subject to the observance of regulations relating to the existence of areas closed for security reasons, - ensure that requests by such journalists for such travel receive, in so far as possible, an expeditious response, taking into account the time scale of the request; - increase the opportunities for journalists of the participating States to communicate personally with their sources, including organizations and official institutions; - grant to journalists of the participating States the right to import, subject only to its being taken out again, the technical equipment (photographic, cinematographic, tape recorder, radio and television necessary for the exercise of their profession); - enable journalists of the other participating States, whether permanently or temporarily accredited, to transmit completely, normally and rapidly by means recognized by the participating States to the

Table A2.3 Ten most frequent words identified by the dictionary of imprecision across all IOs (additional context)

Word	*Freq.*	*Article*	*Text*
			information organs which they represent, the results of their professional activity, including tape recordings and undeveloped film, for the purpose of publication or of broadcasting on the radio or television. The participating States reaffirm that the legitimate pursuit of their professional activity will neither render journalists liable to expulsion nor otherwise penalize them. If an accredited journalist is expelled, he will be informed of the reasons for this act and may submit an application for re-examination of his case.

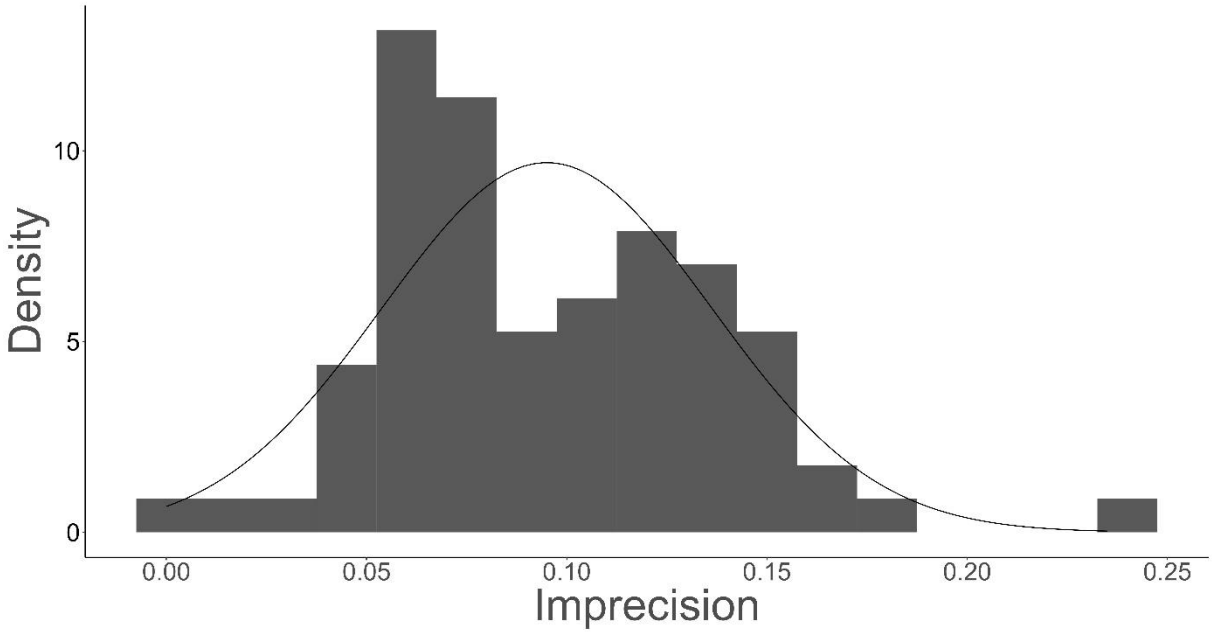

Fig. A2.1 Distribution of dependent variable

A2.2 Independent variables

- *Number of states:* we operationalize the number of IO funding members with the help of the Correlates of War (COW) International Organizations dataset which provides annual membership information for most IOs in our sample (Pevehouse et al. 2020). We add missing membership information by counting the number of members listed in founding treaties.

- *UN vote (robustness check):* to measure preference heterogeneity among founding members, we draw on ideal-point estimates from UN General Assembly voting patterns (Bailey et al. 2017). We compute the standard deviation of ideal-point estimates for the year an IO was created across all founding members. For IOs in our sample created before 1946, we use the 1946 ideal points as a proxy.

- *Major powers:* we operationalize the presence of a major power in a given IO with the help of an indicator variable that classifies IOs as dominated by a major power if *one* of the following states was part of the group of founding members: China, France, Germany (pre-1945 and post-1990), Japan, Russia, the UK, and the US. We code the

absence of a major power if either none or more than one of these countries was a founding member of a given IO.

- *Number of major powers (robustness check):* we operationalize the number of major powers by counting how many of the following states were founding members: China, France, Germany (pre-1945 and post-1990), Japan, Russia, the UK, and the US.
- *Concentration ratio (robustness check):* Using data on states' material capabilities from the National Material Capabilities (NMC, Version 5.0) dataset (Singer et al. 1972), this variable computes the concentration measure suggested by Ray and Singer (1973). This measure is standardized between 0 and 1, 0 indicating a perfectly even distribution of power and 1 a perfectly uneven concentration.
- *Delegation:* we operationalize the level of delegation with the help of the MIA dataset created by Hooghe and colleagues (2017). This dataset provides information on the number of tasks delegated to the IOs in our sample and adjusts this score for bindingness and ratification rules. The resulting score is scaled to a range between 0 and 1. The dataset covers the period between 1950 and 2010. Hence, for some IOs in our sample, we have to use the 1950 score as a proxy because IOs were created earlier.
- *Pooling:* we operationalize the pooled IO authority level with the MIA dataset's help. This dataset provides information on the number of decisions pooled in IOs and the type of decision-making member states apply.

Controls

- *Democracy:* we operationalize the density of democratic norms among IO founding members with the help of the Polity IV dataset on the democratic quality of states (Marshall et al. 2016). This dataset combines several dimensions into an index that measures the democratic quality of states per year. It provides data for member states of the IOs in our sample for 1800-2015. For IO membership information, we rely on the COW International Organizations Dataset (Version 3), which provides annual membership information for IOs (Pevehouse et al. 2020). We add missing membership information. From this, we calculate the share of founding members with a Polity IV score of seven or higher.
- *Common law:* we operationalize the effect of domestic legal traditions based on data gathered by Powell (McLaughlin Mitchell and Powell 2011; Powell 2015, 2019). This dataset classifies the legal systems of 194 states as civil, common, Islamic, or mixed.

We combine this classification with information on founding members to calculate the share of states rooted in common law traditions.

- *Scope:* we use data available in the Measure of International Authority (MIA) dataset (Hooghe et al. 2017), providing the number of policy areas from a list of 25 in which an IO is formally active in a given year.[2]

Table A2.4 Descriptive statistics

	N	*Min*	*Max*	*Mean*	*Pctl(25)*	*Pctl(75)*	*St. Dev.*
Imprecision	76	0.000	0.235	0.095	0.066	0.124	0.041
Number of states	76	3	134	23.737	6	28.8	27.224
Delegation	76	0.000	0.564	0.141	0.025	0.254	0.143
Pooling	76	0.000	0.728	0.243	0.076	0.382	0.193
Democracy	75	0.000	1.000	0.355	0.100	0.533	0.303
Common law	76	0	1	0.197	0	0.251	0.233
Scope	76	1	14	4.539	2	7	3.485
UN vote	76	0.076	1.841	0.707	0.351	0.970	0.442
Number of major powers	76	0	7	2.158	0	4.2	2.263
Concentration ratio	76	0.055	0.980	0.443	0.316	0.552	0.191

A3 Diagnostics

Table A3.1 Multicollinearity (for Model 2 presented in Table 2 of the main manuscript)

	Tolerance	*Variance Inflation Factor (VIF)*
Number of states	0.62	1.62
Major powers	0.76	1.32
Delegation	0.73	1.37
Pooling	0.58	1.72
Democracy	0.77	1.30
Common law	0.96	1.05
Scope	0.75	1.33

[2] The data are available at: https://garymarks.web.unc.edu/international-authority

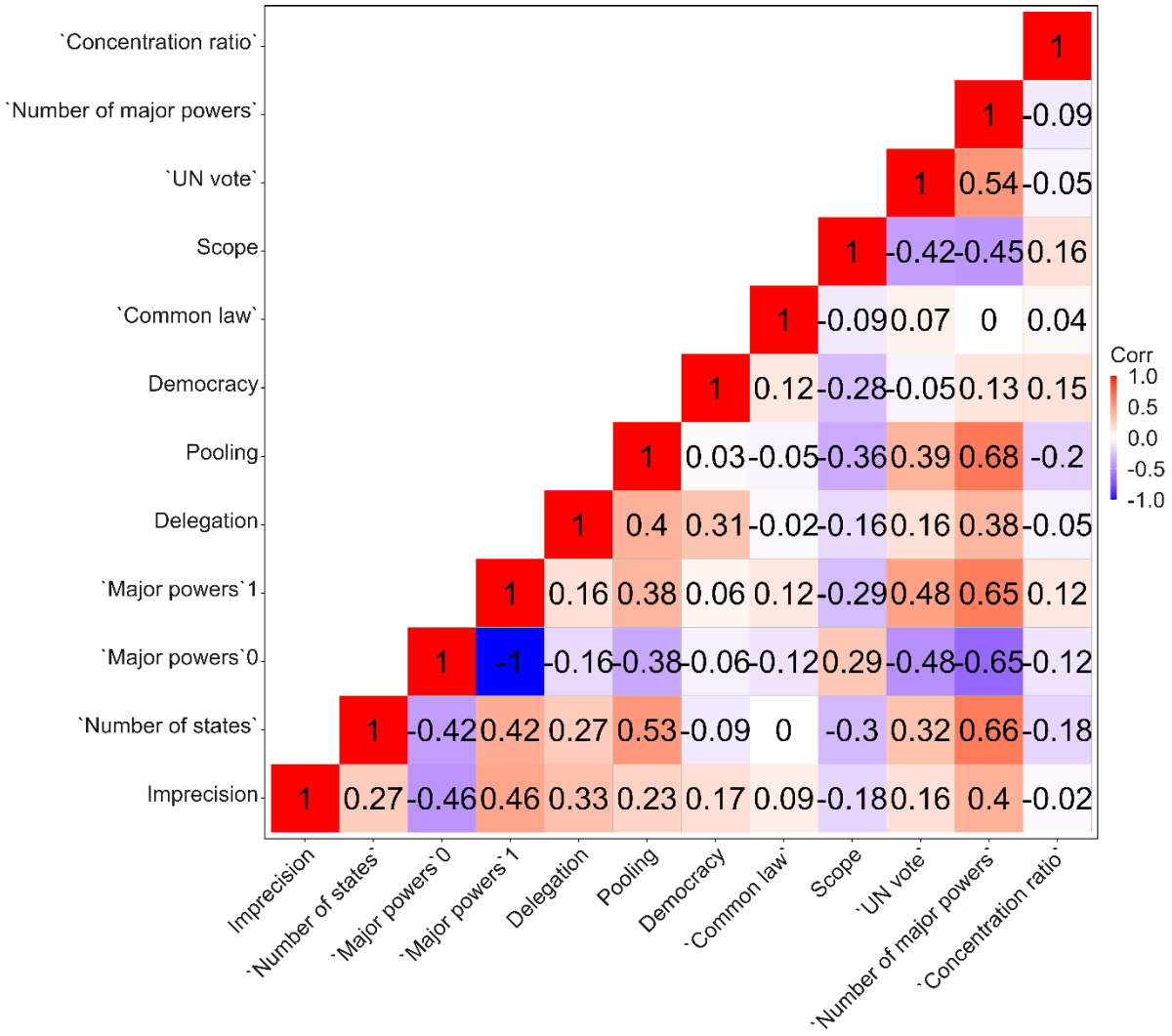

Fig. A3.1 Correlation matrix

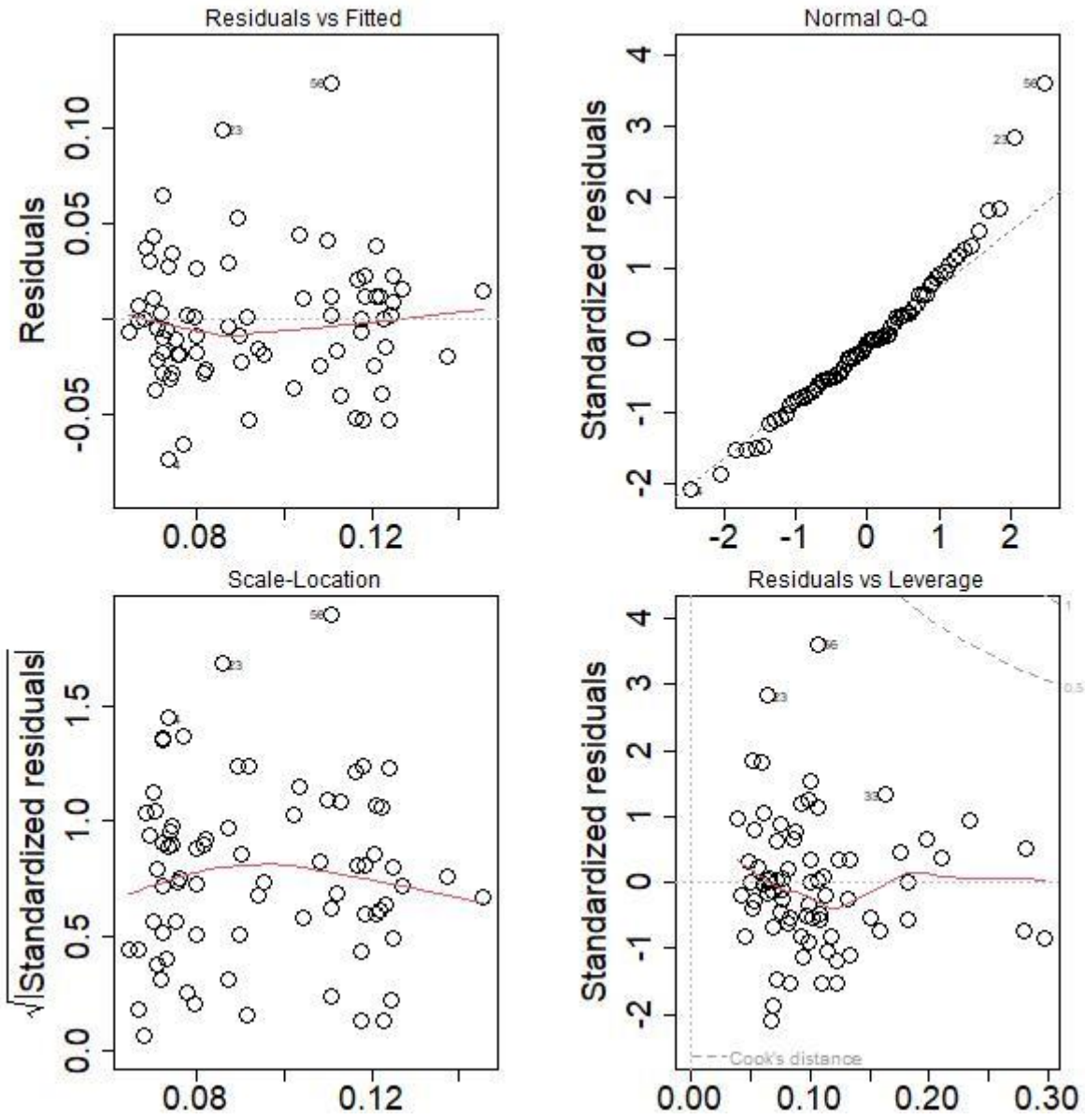

Fig. A3.2 Residual plots (Model 2 presented in Table 2 of the main manuscript)

A4 Robustness checks

Table A4.1 Imprecision and institutional design (alternative IVs)

	UN vote	*Number of major powers*	*Concentration ratio*
Number of states		0.0000	0.0003
		(0.0002)	(0.0002)
Major powers	0.04***		
	(0.01)		
Delegation	0.08**	0.07**	0.08**
	(0.03)	(0.03)	(0.03)
Pooling	-0.01	-0.03	0.003
	(0.03)	(0.03)	(0.03)
UN vote	-0.01		
	(0.01)		
Number of major powers		0.01**	
		(0.003)	
Concentration ratio			0.01
			(0.02)
Constant	0.08***	0.08***	0.07***
	(0.01)	(0.01)	(0.01)
Observations	76	76	76
R-squared	0.27	0.20	0.14
Adjusted R-squared	0.23	0.15	0.09
Notes:	***p < .01; **p < .05; *p < .1		

Table A4.2 Imprecision and institutional design (subsamples)

	IOs created after 1944	*No outliers*
Number of states	0.0000	0.0000
	(0.0002)	(0.0002)
Major powers	0.03***	0.03***
	(0.01)	(0.01)
Delegation	0.09**	0.08***
	(0.03)	(0.03)
Pooling	-0.02	-0.01
	(0.03)	(0.02)
Constant	0.08***	0.07***
	(0.01)	(0.01)
Observations	70	73
R-squared	0.25	0.28
Adjusted R-squared	0.21	0.24

Notes: ***p < .01; **p < .05; *p < .1

Table A4.3 Imprecision and institutional design (separate regressions)

	Model 1	*Model 2*	*Model 3*	*Model 4*	*Model 5*
Number of states	0.0004**				0.0001
	(0.0002)				(0.0002)
Major powers		0.04***			0.03***
		(0.01)			(0.01)
Delegation			0.09**		0.07**
			(0.03)		(0.03)
Pooling				0.04*	-0.01
				(0.03)	(0.03)
Democracy	0.02	0.02	0.005	0.02	0.01
	(0.02)	(0.01)	(0.02)	(0.02)	(0.02)
Common law	0.01	0.003	0.01	0.01	0.01
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Scope	-0.001	-0.0001	-0.001	-0.001	-0.0000
	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)
Constant	0.08***	0.07***	0.08***	0.08***	0.07***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Observations	75	75	75	75	75
R^2	0.11	0.23	0.13	0.09	0.29
Adjusted R^2	0.06	0.19	0.09	0.04	0.21
Notes:	***p < .01; **p < .05; *p < .1				

Table A4.4 Imprecision and institutional design (alternative DVs)

	Logistic transformation	*Without synonyms*	*Without necessary*	*Without appropriate*	*Without reasonable*	*Without critical*	*Without essential*	*Without substantial*	*Without adequate*	*Words ratio*
Number of states	-0.0002	0.0001	0.0002	-0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0000
	(0.002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0000)
Major powers	0.41***	0.02**	0.03***	0.03***	0.03***	0.04***	0.04***	0.04***	0.03***	0.002**
	(0.13)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.001)
Delegation	1.04**	0.07**	0.06**	0.06**	0.07**	0.08**	0.08**	0.08**	0.08**	0.004
	(0.41)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.003)
Pooling	-0.05	-0.01	-0.01	-0.01	-0.02	-0.02	-0.01	-0.01	-0.02	-0.001
	(0.36)	(0.03)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.002)
Democracy	-2.51***	0.06***	0.04***	0.06***	0.08***	0.07***	0.07***	0.07***	0.07***	0.01***
	(0.09)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.001)
Observations	76	76	76	76	76	76	76	76	76	76
R-squared	0.24	0.19	0.26	0.20	0.23	0.27	0.27	0.27	0.26	0.15
Adjusted R-squared	0.20	0.14	0.22	0.15	0.18	0.22	0.23	0.23	0.21	0.10

Notes: $^{***}p < .01$; $^{**}p < .05$; $^{*}p < .1$

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