

Measuring Delegation

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Abstract Principal-agent analyses of delegation to international organizations have advanced our understanding of international cooperation through institutions. However, broader tests of why and when states delegate are not possible without a clear means for objectively identifying and measuring delegation. This paper develops a metric for delegation based upon the services the agent provides to its principals and the resources and autonomy it has to provide those services. This numerical metric is continuous and generalizable to a wide variety of principal-agent relationships. This paper then demonstrates the face validity of the measure with case studies of delegation to the International Atomic Energy Agency (IAEA) and the International Monetary Fund (IMF). The paper concludes with a test of Realist and Institutionalist hypotheses for cooperation using the delegation metric, demonstrating the complexity of the underlying reasons we observe delegation.

Keywords International organizations · Delegation · Cooperation theory

JEL Classification C32 · D20 · D23 · D73 · F53 · F55 · H11 · N40

1 Introduction

Why do states cooperate through international organizations (IOs)? Empirical studies of international cooperation have lagged behind theory development (Hafner-Burton et al. 2008). While the study of international organizations (IOs) has been recently advanced using principal-agent (PA) theories of delegation (Bradley and Kelley 2008b; Hawkins et al. 2006a), most authors measure along a single dimension or

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assume delegation is present. Tests of why and how states cooperate and simple comparisons across issues or institutions are prevented without a clear means for objectively identifying and measuring delegation.

This paper offers a “definitionally unique” dependent variable (Bueno de Mesquita 1985, 132): a practical and replicable metric for delegation that is generalizable to a wide variety of PA relationships. This metric of delegation quantifies eight indicators of an agent’s contracted authority and autonomy to act and two indicators of the resources it possesses to fulfill its responsibilities. The metric is then applied to two IOs to demonstrate its face validity: the International Atomic Energy Agency (IAEA) and the International Monetary Fund (IMF). To demonstrate its applicability to testing IR theories about international organizations, I test two competing hypotheses in the literature: are IOs created by powerful state to serve their interests or to fulfill the functional needs of the international community.

Whenever translating abstract concepts into quantitative measures there are disagreements about the meaning of provisions or their relative importance. The goal of this paper is to facilitate further scholarship by articulating clear definitions and measures of the most salient characteristics of delegation. I accept that some measures may appear ad hoc or debatable. However, without existing data to draw upon, I offer my reasoning and the resulting index of delegation as my attempt to define the terms under which debate about the causes and effects of delegation can occur. The operationalization of delegation provides a new and unique contribution to the study of PA relationships.

2 Delegation Measures?

Individuals form a collective principal if they agree to a single contract by which their relationship with an agent is established and maintained. A delegation contract transfers decision-making authority from a principal to a subset of the principal or to an external agent (Hawkins et al. 2006a). Delegation is always conditional and never permanent; it is simply more or less costly for a principal to retract or renege on the contract (Hawkins et al. 2006a). While international decision-making bodies may pool the sovereignty of the participating states, this is not delegation by states to an agent (Lake and McCubbins 2006; Lake 2007).¹ The UN Charter, for example, created the United Nations General Assembly, a legalized institutionalization of bargaining among states that pools their sovereignty, but is not delegation. Meanwhile, the Charter’s grant of authorities and resources to the UN Secretariat and the UN Security Council are each “upwards” delegation. States may also delegate laterally to other states (as in South Korea’s reliance on the US for security guarantees, Brown 2002; and more generally, see: Lake 2009) or “downwards” to nongovernmental organizations (Cooper et al. 2008).

Delegation requires agent autonomy in order to be more efficient than alternative strategies (Hawkins et al. 2006a). Therefore, states grant the authority to make

¹ Others argue delegation to an international legislature occurs when a group of actors agrees to accept decisions made according to less-than-consensus rules (Bradley and Kelley 2008b; Cooper et al. 2008; Vaubel 2006).

decisions or take actions (Bradley and Kelley 2008a, 1), but also constrain agent autonomy to limit their ability to act opportunistically with respect to the principal (Hawkins and Jacoby 2008, 4; Huber and Shipan 2002). This authority is explicit when the PA relationship is expressed in a contract, which often restricts analysis to legalized institutions like treaties (Bradley and Kelley 2008a, 2–3).² Implicit delegation also occurs, however, when one actor informally grants another actor the authority to make decisions or take actions, often by enabling action through the grant of resources.

Unfortunately, most work on delegation does not measure delegation or does so poorly. Some authors simply assume delegation has occurred in certain contexts. For example, Milner's analysis of when states will delegate foreign aid delivery to an IO only differentiates bilateral lending between states from multilateral lending through the World Bank and International Monetary Fund (Milner 2006). The existence of delegation is assumed, even though nothing about collaborative lending necessarily requires the employment of an agent. Epstein and O'Halloran measure Presidential discretion in individual acts of domestic delegation by the US Congress by comparing the number of provisions that grant and constrain the President's authority (Epstein and O'Halloran 1999).³ They differentiate fourteen categories of constraints often imposed upon agents, which include: limits on agent's power to expend resources, actions that require pre-approval by another actor, legislative veto power over regulatory changes, *ex ante* consultation (including approval) or *ex post* reporting requirements, and specified processes for rulemaking. However, they do not compare the importance of these constraints.

Most applications focus on one or two dimensions along which there is variation useful for the cases they examine. For example, Koremenos measures delegation only as dispute resolution provisions of treaties (Koremenos 2007).⁴ While all international dispute resolution provisions may entail delegation, the reverse is not true and delegation cannot be captured with a single dimension. Delegation to the World Health Organization and the World Trade Organization is more than voting rules among the principals and whether the staff is seconded from national governments or not (Cortell and Peterson 2006). Delegation to the IMF is more than the staff's power to design international lending programs; it includes the authority and capacity to selectively collect and report information (Martin 2006; Gould 2006a).⁵

These narrow measures of delegation have enabled hypothesis testing but are less useful for comparing across time, institutions, or issues. A useful measure should include the range of strategies in which principals use agents to access or produce

² Legalization has occurred when actors regularize relations with obligation, precision, delegation, or some combination and degree of any of the three (Abbott et al. 2001).

³ In an early application of delegation theory to IR, Pollack (1997) creates a ratio of "treaty provisions delegating executive powers" to "total provisions in the issue chapter" to measure delegation by European states to the European Commission.

⁴ Koremenos (2008) describes a more exhaustive differentiation of legalized delegation and a data collection process from treaty texts.

⁵ Martin (2006) measures delegation to the IMF by tracking changes in internal conditionality procedures, treatment of confidential information, and use of preconditions the staff requires a state to make before a program will be presented for approval.

expertise, ease decision-making, and increase credibility (Hawkins et al. 2006a). These include monitoring, the provision of goods and services (including technical expertise and assistance), the discretion to selectively enforce compliance, and the power to make decisions with important effects for all its principals. Contractual grants of authority do not accurately describe IO behavior without referencing the agent's actual autonomy of authority (or, in its negative connotation, agency slack) and its resources. I argue delegation is indicated by the extent of autonomy from direct oversight and control by the principal(s) *and* the resources available to provide the requested services.

3 Measuring Delegation

A measure of delegation useful for hypothesis testing should differentiate between similar but alternative conceptualizations and be a good translation of expectations into measurements (Trochim 2001, 71–73). While some cases may surprise, a measure has greater “face validity” if it quantifies existing qualitative beliefs about the ranking of cases. I identify and translate into numerical indicators the ten central components of delegation. Organized into three meta-categories—agent services, agent resources, and agent autonomy—the indicators can be combined or disaggregated, depending on the application. Higher scores indicate greater delegation, but completely dissimilar acts of delegation should become comparable. The index implies that the services and autonomy categories are roughly equivalent in their contribution to delegation, which I believe is a useful first-cut estimate.

Some may disagree with using an additive index. First, the assigned weight of some indicators is debatable. The alternative to my attempt at rationalizing the weighting is to justify them using the observed distribution of the underlying components in the real world (Lockwood 2004). However, a statistical approach is not possible when the data do not exist. An additive rather than single ordinal index also allows greater flexibility to adjust weights as additional data is gathered on delegation.

Second, some indices combine features that commonly occur together. While most delegation may appear to follow similar models, this collinearity is assumed and collapsing the indicators *ex ante* would preclude identifying additional variation in outcomes. For example, while monitoring authority is useful to an enforcement authority, as in the IAEA and IMF cases below, the Organization for the Prohibition of Chemical Weapons (OPCW) and the Intergovernmental Panel on Climate Change (IPCC) possess authorities for monitoring but not enforcement. Even if not all possible paths are empirically observed, a theoretical advantage of the additive index is the capacity to observe multiple routes to “delegation” (Gleditsch and Ward 1997).⁶ An additive delegation metric should therefore be able to better capture the variety of design choices when principals contract with new or existing agents. Gleditsch and Ward note that the multi-path option makes scores comparable for

⁶ Gleditsch and Ward observe that only 1.16% of all possible Polity score combinations are actually observed (Gleditsch and Ward 1997).

specific purposes (Gleditsch and Ward 1997, p.380). Ultimately, however, my decision to collapse the multiple concepts into a single metric should be judged on its ability to represent the underlying multi-dimensional concept of delegation (Lockwood 2004, 508; Trochim 2001, 71–73).

Third, this measure does not address IOs that operate in multiple issue areas. Therefore, the measure would be difficult to apply to the “European Union” but would be appropriate to analyzing individual EU institutions. Finally, the measure ignores variation in principal characteristics, which are important to the specific functioning of the IO and likely influences institutional design, but are not characteristics of the delegation contract or the resulting processes (Tierney 2008; Thompson 2006; Lyne et al. 2009).

3.1 Agent Services

For Rationalists, actors delegate to acquire services that they would find inefficient or politically difficult to accomplish on their own. Pollack argues IOs can monitor compliance and solve problems of incomplete contracting by devising practical regulations or structuring negotiations to modify the contract (Pollack 1997).⁷ Epstein and O’Halloran include the discretion to make rules or regulations, modify decision-making criteria behind rules and regulation, allocate resources, apply regulations selectively, and extend existing discretionary authorities that would otherwise lapse (Epstein and O’Halloran 1999). These services are categorized along functionalist lines as contract bargaining, monitoring, and enforcement (Keohane 2009).

3.1.1 Bargaining

Agents can generate policy information useful for decision-making. Agents vary in their authority to recommend and implement changes in the regulatory or constitutional structure of cooperation. Less autonomous agents may mediate in or informally advise policy negotiations but must implement policies selected by the principal. They are more constrained by bureaucratic procedures and oversight mechanisms. More autonomous agents can set regulations within their mandate without the principal’s specific approval and can even present take-it-or-leave-it proposals to the principal to amend their mandate (Cortell and Peterson 2006; Martin 2006). Exclusive differentiation is difficult but this offers a tractable distinction between “regulatory” and “legislative” delegation in contract bargaining authorities (Bradley and Kelley 2008a, 14).

Bargaining delegation, therefore, is “0” when there is no delegation to produce policy information. Bargaining authority increases to “1” when the agent may recommend regulations and influence policy, “2” if it may set regulations and propose legislation within its mandate (including negotiation of subsidiary contracts, such as IAEA safeguards agreements or IMF lending arrangements), “3” if it may propose legislation to change its mandate, and “4” if it may unilaterally alter its

⁷ Exogenous changes in costs can create incentives to renegotiate existing contracts.

mandate. For example, through the Chemical Weapons Convention, states formally delegate to the OPCW the authority to negotiate subsidiary contracts that govern inspections and to train national agents in how to comply with the treaty (“1”), but also creates influence in major policy decisions (a “2”) through the OPCW’s Scientific Advisory Board, drafting of inspection selection protocols, and drafting of the budget (interviews with OPCW officials).

3.1.2 Monitoring

Actors may collectively delegate but individually cheat because they dissembled their interests *ex ante* or their interests change *ex post*.⁸ Agents can produce and reveal information about actor behavior and therefore vary in their authority to monitor. Routine monitoring is generally a negotiated process that the principals accept as providing a reasonable probability of detecting cheating but limit inspections geographically (e.g., to declared facilities), temporally (e.g., during and immediately prior to an election), or technologically (e.g., limiting the size of monitoring teams and the equipment they may use) to limit the information they may gather. Monitoring delegation occurs when an IO is more than a clearing-house for self-reporting and has some autonomy to select the time (length of notice), place, or intrusiveness of routine monitoring activities or performs analysis of the acquired private information that produces new data needed for mission-relevant conclusions. For each of the four routine monitoring authorities possessed, the agent receives one point (+1) in measuring delegation.

Some agreements provide for special investigation procedures that go beyond routine monitoring by relaxing many of the negotiated limits. Delegation progressively increases when such procedures can be initiated only by a principal (+1), by the agent without the express request or approval by the principal (+2), and when a non-principal, non-agent actor can initiate the procedures (+3).⁹ Non-principal initiation is important to delegation because states accept less control over outcomes when the agent or third-parties can initiate extraordinary investigations.

Therefore, three points would be earned by human rights treaties with individual petition mechanisms that authorize court investigations to be initiated by a non-principal actor, and three by the OPCW because it conducts regular inspections and analyzes data from inspections and reported trade data. The CWC, though, also provides for OPCW “challenge inspections”—if requested by a principal and approved by the collective principal, bringing its monitoring authority to four of a possible seven in monitoring authority. Seven points for monitoring appears to be a good weighting, relative to bargaining or enforcement, because this is often the ultimate source of IO expertise and, therefore, its authority (Barnett and Finnemore 2004).¹⁰

⁸ This is the heart of the credible commitment problem (Fearon 1995; Powell 2006).

⁹ Hawkins and Jacoby (2008) describe access by third-parties to the policy-making process of an IO as “institutional permeability,” whereas “permeability” is used here to refer specifically to the ability of actors other than the collective principal to influence staff appointments (below).

¹⁰ Authority in this usage corresponds not to a legal power but is closer to a normative conception (Barnett and Finnemore 2004; compared to Lake 2009). Bauer (2007) also discusses this bias in the Rationalist approaches to principal-agent theory.

3.1.3 Compliance and Enforcement

A contract is not self-enforcing if parties may benefit by cheating. Enforcement measures may be necessary to align some actors' interests to make cheating less advantageous and IOs have two distinct enforcement roles.

First, agents can apply their issue-area expertise to judging compliance. States view monitoring capacity as distinct from the authority to make a legal declaration of compliance with an agreement.¹¹ An agent receives one point if it may verify compliance (+1). Compliance authority also increases if the agent may base compliance decisions upon information not acquired through institutional monitoring and reporting mechanisms (+1) or may withhold from the principal some information upon which compliance decisions are based (+1). Delegation for compliance verification therefore ranges from 0–3.

Second, whereas most domestic enforcement agents may not sanction without a legal judgment of guilt, international enforcement does not require such limits. An agent with neither the right nor the capacity to impose costs lacks enforcement powers and would receive a "0." Delegation increases with the authority and capacity to deny membership benefits such as voting rights or access to the agent's services ("2"), an authority that appears common to many IOs. Assuming IO membership is valuable, delegation further increases if the agent may propose specific sanctions to its principals ("3"), decree compulsory sanctions to its principals ("4"), or possesses an autonomous capacity to coerce ("5"). These authorities represent increasing delegation as they transfer from states some of their sovereign right to autonomous decision-making. Enforcement skips from "0" to "2" to weight the importance of an agent's enforcement powers relative to other authorities.¹²

The OPCW possesses some coercive capacity because it may recommend specific collective actions to its principals, deny membership benefits, and decree an embargo on international chemical trade with other members. It receives five points for enforcement authority but only two points for compliance authority (totaling seven of a possible eight): it may withhold information obtained during inspections from its reports to its principals and must inform the Executive Council when it has "doubts, ambiguities or uncertainties about compliance" (CWC Article 8 Section C (40)), but may not judge compliance.

3.2 Agent Resources

IOs with more resources and more autonomous resources have a greater capacity to provide services and are harder for principals to monitor and sanction. To capture the volume of resources, I focus on the staff and the budget. To scale the number of

¹¹ "Monitoring is the process of gathering information... Verification is the use of information to make a judgment about the compliance of parties" (Boulden 2000, 45).

¹² Many dispute the enforcement powers of IOs and I focus here on enforcement powers (an authority) as distinct from enforcement power (an effect). The effect of recommended or compulsory sanctions may be greater, and more coercive, but presents a second-order enforcement problem. Enforcement authority is greater if the agent can punish noncompliance without requiring the positive action of other actors.

staff to be comparable to other delegation components, IOs receive 1 point per 1000 regular staff. Therefore, when the Provisional Technical Secretariat of the Comprehensive Test Ban Treaty (CTBT) was created in 1997 with only 9 personnel, it received a score of 0.009, which grew to 0.184 in 1998 and is currently about 0.25. This approach parallels the straightforward count of individuals as used in the Correlates of War project. While it seems logical that there be diminishing returns to incremental increases in staff beyond some point, as could be proxied using log of the number of employees, it is inappropriate to force such values without a theory about when diminishing returns would be realized for individual issue areas.

The budget resource score is the administrative budget as a fraction of world GDP (Maddison 2009), scaled by one-fourth to be proportional to other delegation components. The IMF reported an administrative budget in 2006 of \$938 m, when world GDP was \$47.3t, earning it a budget resource score of 4.96 for 2006. Measuring only the formal budget likely understates the resources available to IOs that can accept additional resources from their principals or other actors. This particularly is true for IOs where voluntary contributions are significant.¹³ However, this indicator does not count state contributions, only the resources available to the IO irrespective of their source.

3.3 Agent Autonomy

The volume of an agent's resources and the authority to deploy these resources as services are important to measuring delegation but do not convey information about the autonomy to acquire resources.

3.3.1 Staffing Autonomy

Before constraining agent autonomy to reduce agency slack, principals screen potential agents to select those with preferences closer to their own. Formal and informal mechanisms for principals to interfere in staff and management selection and retention help constrain policy outcomes, which I term the permeability of the IO, but reduce IO independence.¹⁴ Compared to an independently recruited civil service, permeability is high when major functions are carried out by staff seconded or otherwise appointed by states. Seconded staff may put the interests of their governments first if their long-term prospects remain controlled by governments. Alternatively, secondments can be a vehicle for influence through norms transmission (Nielson and O'Keefe 2009). Staff autonomy therefore increases as the principals, collectively or individually, lose staffing influence.

¹³ Formal voluntary contributions to the IAEA routinely amount to 10% or more of the Regular Budget. Most IOs, though, do not report monetary contributions with sufficient reliability for inclusion into the measure. They are also often unable (or unwilling) to price cost-free experts, equipment, training and other non-monetary assistance.

¹⁴ Control over staffing may also target domestic constituencies. Many states, especially poorer and less developed ones, justify the expense of IO membership by providing relatively high-paying positions to domestic supporters, essentially international patronage politics.

The IO receives one point when managerial and professional staff is not primarily seconded (+1).¹⁵ Also, an IO receives a half point each when the collective principal cannot vote to reject or terminate (“red-light”) or approve (“green-light”) appointments (+0.5), and a point for independent recruitment (no requirement to recruit from government-provided lists; +1). An IO with few seconded staff, no principal approval or rejection procedure for most professional staff and management positions, and completely independent recruitment would receive a “3,” the maximum score for staff selection autonomy.

The United Nations Special Commission (UNSCOM) for Iraq (1991–1998), for example, had a small professional staff but relied entirely on seconded inspectors (Official 2005d).¹⁶ Even at the highest levels of staffing delegation, principals have limited influence over staff appointments at lower levels but usually approve the appointment of the head of the organization. Therefore, the IO’s executive head will nearly always be subject to principal approval while the employment of individual janitorial, clerical, and security staff will nearly never be. Most variation in agent permeability will occur at the professional staff and management levels.

Even IOs with highly autonomous staffing must consider citizenship to balance the “geographic distribution” of the staff and prevent domination by a minority of states. For many developing states this creates political patronage positions for domestic supporters. More important to measuring autonomy, senior positions in many IOs are traditionally filled by a national of a particular state or region (Kahler 2001, 14). As long as these informal practices do not compromise the principles above, neither should they compromise delegation.

3.3.2 Financial Autonomy

When principals delegate to IOs, they must choose among financing models with varying degrees of obligation for the financiers. There is no financial commitment to delegation when states spend in a decentralized fashion, such as when the G-8 states volunteer debt forgiveness to developing states. At the lowest level of financial obligation, states may authorize actors to undertake specific acts for which they will reimburse costs, often according to an agreed upon scale or division among the principals. This is the case for most UN sanctioned uses of force.

Delegation increases as states empower an agent with quasi-taxation powers. For many IOs, ratification of the underlying treaty is the basis for IO membership and creates a legal commitment to pay a share of the collectively determined annual

¹⁵ A two-thirds threshold is used because it is difficult to determine the exact number of seconded staff at an IO; both the IOs and the host governments face incentives to hide the relationship to avoid the appearance of bias (interviews with IAEA and UNSCOM officials). Further, almost all IOs will make some use of seconded staff, even if on a short-term basis as external contractors to train staff or provide other consulting services (interviews with IAEA and OPCW officials).

¹⁶ Thompson (2006) highlights an interesting dilemma with UNSCOM, relative to UNMOVIC, in which an IO relying extensively on seconded staff may actually have access to greater (human) resources than one relying on independently recruited staff.

assessment. Even stronger, the EU can levy taxes directly upon the constituent states' citizens.¹⁷ The score for financial autonomy of IOs is "0" for IOs with decentralized and reimbursed spending by principals. IOs subsisting on voluntary contributions alone (such as UNSCOM, 1991–1996) receive a "1," IOs with non-binding member assessments receive a "2," and those with quasi-taxation powers (legally obligatory assessments) receive a "3."

While the power to tax has implications for sovereign authorities, there are alternative financing systems. For example, the Catholic Church extracts tithes, either a quasi-tax or voluntary contribution depending on the case and time, but receives also rents on properties and donations to pursue particular activities. The Red Cross and other organizations receive donations but also offer for-profit services. Some agents can acquire financing by issuing bonds or taking voluntary contributions from non-principals.¹⁸ An IO is more autonomous if it may access resources outside those provided by their principals by accepting voluntary/in-kind contributions from its principals beyond assessment or quasi-tax levels (+1), offering services for a fee (+1), or pursue external fundraising (+1), bringing the total possible score for financial autonomy to "6."

3.3.3 *Management Autonomy*

Delegation increases with the decreasing ability of the principal to revise or retract the delegation contract. Just as oversight of public corporations relies on a shareholder-elected Board of Directors, management of many IOs is also by a subset of the principals. The Board of Governors of the IAEA is a sub-committee of the full Conference of States Parties, and makes most decisions by consensus or a one-state, one-vote simple majority rule, whereas the IMF uses super-majority weighted voting and a few states can force changes to the status quo (Gould 2006a).

The agent's autonomy from principal oversight is inversely proportional to the principals' formal ability to modify the status quo. In most cases, the number of principals required to change outcomes is fewest on an IO's Board and greatest in meetings of its full membership. Therefore, while I define the executive body as the peak agent, management autonomy is indicated by the minimum percentage of the total membership required to implement substantive changes. An extra point is awarded if there is a role (standing) for non-principals (+1) as may be the case in IOs that recognize NGOs as participants. The IAEA receives "0.82" in 1958 when as few as 18% of the members can force changes through the Board.

3.3.4 *Principal Obligations*

A state becomes obligated when, if it fails to fulfill its international commitments, others can assert established international mechanisms (Abbott et al. 2001). Obligation decreases if the contract permits temporary or permanent escape from

¹⁷ IOs generally lack the "concentrated means of violence" (Levi 1988) to enforce a true taxation system but can deny membership benefits and shame states. The distinction between quasi- and true tax systems is a question of enforcement for most rationalists but to others may be an issue of IO legitimacy.

¹⁸ I am grateful to an external reviewer for making this point.

some treaty commitments, withdrawal, or reservations that modify its legal effects. The delegation score for obligation begins at a baseline of “4” and decreases by one point (−1) for each such class of clause because they erode the credibility of commitments (Rosendorf and Milner 2001, 829). Obligation increases by one point (+1) each for the inclusion of specific guidelines for domestic enforcement mechanisms, implementing bodies, and legislative deadlines.

4 Application

The delegation metric operationalizes PA relationships as the breadth of services the agent offers, the discretion to provide those services as it sees fit (resource and management autonomy), and the principal’s obligation to observe its commitments under the delegation contract (summarized in Table 1). The metric is applied to two important IO cases to demonstrate its usefulness as a translation of the delegation concept (e.g., it possesses face validity): delegation to the International Atomic Energy Agency (IAEA) by the Statute of the IAEA (creating the IAEA in 1956) and the Nuclear Non-Proliferation Treaty (expanding the IAEA’s authority in 1970), and to the International Monetary Fund (IMF) under the Articles of Agreement of the International Monetary Fund (1946). Data were gathered from published IO reports, interviews with IO and government officials, and secondary sources. The results also demonstrate the metric’s discriminant validity: the substantial variation across institutions but also within institutions across time shows the metric’s ability to capture institutional change with respect to delegation.

4.1 The International Atomic Energy Agency (IAEA)

The Statute of the International Atomic Energy Agency came into force on 29 July 1957. The IAEA was created to prevent diversion of nuclear materials to military uses: in exchange for assistance with peaceful uses, recipients would accept IAEA verification, or “safeguards,” of the non-diversion of nuclear materials. The extension of safeguards over national nuclear programs was to occur as states contracted with the IAEA for assistance. However, the IAEA never received the resources necessary to become such a provider and safeguards were directly imposed by major nuclear suppliers, acting in coordination, as a condition for trade in nuclear materials and technologies. Suppliers conspired to transfer—delegate—safeguards that had been bilateral to the IAEA. The major extension of IAEA safeguards occurred with delegation to the IAEA through the NPT and treaties for nuclear weapons-free zones (NWFZs).¹⁹

¹⁹ The NPT enshrines a grand bargain in which non-nuclear weapon states promise not to acquire, or help others to acquire, nuclear weapons, and the nuclear weapons states promise to disarm and ensure access to peaceful nuclear technologies for all NPT states. Nuclear weapon-free zones (NWFZs) are regional treaties banning nuclear weapons in their territories. They generally follow the same pattern of delegating to the IAEA the authority to implement safeguards, similar to the language used in the NPT (Qvester 1973; McKnight 1971; Jensen 1974; Wittner 1997; Pilat 2005; US Senate 1978).

Table 1 Delegation indicators

Category (Range)	Description
1. Agent Services	
1a. Bargaining (0–4)	<p>Recommend regulation (including negotiation of subsidiary contracts and influence policy) (1)</p> <p>Create and implement regulations; formally recommend policy changes (2)</p> <p>Recommend changes to mandate (3)</p> <p>Authority to alter mandate (4)</p>
1b. Monitoring (0–7)	<p>Routine monitoring: Select the time (+1)</p> <p>Routine monitoring: Select the place (+1)</p> <p>Routine monitoring: Select the level of intrusiveness (no managed access) (+1)</p> <p>Routine monitoring: Data analysis (+1)</p> <p>Special investigation process triggered by principal (+1)</p> <p>Special investigation process triggered by agent (+2)</p> <p>Special investigation process triggered by non-principal, non-agent actor (+3)</p>
1c. Compliance (0–3)	<p>Compliance authority: Legal compliance decisions (+1)</p> <p>Compliance authority: Base compliance upon alternative sources of information (+1)</p> <p>Compliance authority: Withhold compliance decision-relevant information from the principal (+1)</p>
1d. Enforcement (0–5)	<p>Hortatory statements, no compellance powers (0)</p> <p>Denial of membership benefits (2)</p> <p>Recommended (private) action (3)</p> <p>Compulsory (quasi-private) sanctions (4)</p> <p>Compulsory (public) coercion (5)</p>
2. Agent Resource Autonomy	
2a. Staff selection autonomy (0–3)	<p>International civil service (not seconded) staff (+1 if >2/3 of total staff)</p> <p>No requirement for collective principle approval of staff appointments (+0.5 if >2/3 of total staff)</p> <p>No requirement for individual principle approval of staff appointments (+0.5 if >2/3 of total staff)</p> <p>Independent recruitment (+1 if >2/3 of total staff)</p>
2b. Financial autonomy (0–6)	<p>Voluntary contributions (1)</p> <p>Member assessments (2)</p> <p>Quasi-taxation or other legally obligatory assessments or tax (3)</p> <p>Authority to offer fee-for-services (+1)</p> <p>Authority to accept voluntary/in-kind contributions beyond assessment or quasi-tax levels (+1)</p> <p>Authority to conduct external fundraising (+1)</p>
2c. Mgt Autonomy (0–2)	<p>Percentage of principals required to modify outcomes (0–1)</p> <p>Management role for non-principals (+1)</p>
2d. Principal obligation (0–7)	<p>(Baseline value is 4)</p> <p>Specific guidelines for domestic implementing legislation: Deadlines (+1)</p> <p>Specific guidelines for domestic implementing legislation: Enforcement mechanisms (+1)</p>

Table 1 (continued)

Category (Range)	Description
	Specific guidelines for domestic implementing legislation: Implementing bodies (+1)
	Clauses that permit: Temporary escape from the treaty obligations or from a specific clause (-1)
	Clauses that permit: Permanent withdrawal from the treaty (-1)
	Clauses that permit: Opting-out out of treaty requirements (-1)
	Clauses that permit: Reservations that modify the treaty's legal effects in application (-1).
3. Agent Resources	
3a. Size of budget (0–5 ^a)	¼ of share of world GDP
3b. Size of staffing (0–3 ^a)	1/1000 of total staff
0–48 ^a	= Total

^a Size of budget and staff upper bounds for IAEA and IMF; other institutions may go higher

4.1.1 Management Autonomy

The IAEA includes its General Conference, Board of Governors, and Technical Secretariat. The General Conference is the collective principal composed of all member states. As the top-level policy body, it elects Governors to the Board (subject to constraints), and approves amendments to the Statute, applications for membership, the Board's annual report, and the annual budget (IAEA 2002). The General Conference also appoints the head of the Secretariat, the Director General (Fischer 1997).

As a committee of the whole and the agent of the General Conference, the Board oversees the Secretariat's day-to-day operations, approving safeguards agreements, appointing inspectors, and judging safeguards compliance (Fischer 1997). Just as a corporation's Board of Directors has more power than its shareholders, the Board's autonomy makes it more powerful than the General Conference. The Board traditionally makes decisions by consensus, though the Statute allows for the budget to be approved by a two-thirds majority and all other issues by a simple majority where each Governor has one vote. The General Conference approves the budget but may not amend it; it can only return it to the Board for revision.

While a number of collective and individual principals contract with the IAEA, the Agency is only accountable to a single, collective principal: the General Conference. The IAEA may submit reports to the UN like the UN's specialized agencies, but it is an independent IO (Fischer 1997; Scheinman 1987; US Senate 1969). Likewise, regional NWFZs and the NPT have provided the IAEA with little guidance in implementing its delegated safeguards responsibilities. Given that the Statute does not provide for principals or non-principals to individually renegotiate aspects of the contract or initiate any process other than negotiation of safeguards agreements, the minimum number of principals who can initiate major changes to the mandate or ongoing operations of the treaty is a simple majority of the Board of Governors.

IAEA management autonomy therefore increases from 0.818 in 1958 to 0.843 in 1971 as IAEA membership increases from 66 to 101 but the Board is fixed at 23 Governors. Autonomy decreases sharply in 1972 to 0.777 with the expansion of the Board to 34. This expansion explicitly occurred to reduce the autonomy of the Secretariat from those states who would bear the weight of safeguards under the NPT (Fischer 1997, 90–93). Management autonomy reaches 0.827 in 2005 as membership grows to 139 states for 35 Board seats.

4.1.2 Agent Services

The IAEA promotes peaceful nuclear energy but is known for its safeguards: defining what constitutes assurance that nuclear materials are not diverted to weapons programs (bargaining), implementing the rules by producing information about state nuclear activities (monitoring), and issuing legal rulings on compliance (enforcement).

Bargaining The IAEA may implement safeguards over any nuclear arrangement between states “at the request of the parties” or over various national nuclear activities “at the request of a state” (McKnight 1970). When the first safeguards were requested by Japan in 1956, negotiations within the Board were more politically contentious than expected. The Board therefore agreed in 1961 that future safeguards agreements would be negotiated by the Secretariat using a Board-approved framework: Information Circular #26 or “INFCIRC/26” (McKnight 1971).²⁰ Though not consulted on INFCIRC/26, subsequent guidelines were negotiated among the Board with minimal and informal advice from the secretariat.

The decision of the NPT parties to delegate to the IAEA implementation of NPT safeguards reflected growing international trust in the agency (Scheinman 1985, 29). To plan implementation of its new authorities under the NPT, the Board created an *ad hoc* Safeguards Committee, composed of Governors but establishing a formal role for the Secretariat to provide advice (Jensen 1974). It drafted, and the Board approved, the INFCIRC/153 model safeguards. Bargaining authority increases in 1970 from “0” to “1.”

Little about safeguards changed until the embarrassing revelation in 1991 that, undetected by the IAEA, Iraq had operated an entire parallel but covert nuclear program (Muller et al. 1994). Another *ad hoc* Safeguards Committee of Governors was created and, advised by the staff, arrived at a list of new legal authorities potentially useful to the safeguards system. Some of the proposals could be adopted within INFCIRC/153 and the staff took the lead in adapting the guidelines. The more revolutionary proposals it translated into the Additional Protocol, which the Board approved as INFCIRC/540 in 1998 (IAEA 1998).²¹ The Board also established in June 2005 a permanent standing Committee on Safeguards and Verification to facilitate future proposals for strengthening safeguards (Official 2005a), creating a formal staff role in recommending major policy changes.

²⁰ IAEA official documents are announced through “Information Circulars,” hence the “INFCIRC/” designation.

²¹ The Secretariat may have also had greater freedom in writing INFCIRC/540 than INFCIRC/153 because of the end of the Cold War (Official 2005b).

The IAEA also provides policy expertise under its NPT Article III.2 responsibilities to define which nuclear commerce should require IAEA safeguards, implemented within the IAEA's Nuclear Exporters (or Zangger) Committee (Bertsch et al. 1994). It later agreed to exchange information about exports or licenses for exports to any non-NPT state through confidential reports circulated among members (Schmidt 1999). The IAEA also took a leadership role in international negotiations to amend the Convention on the Physical Protection of Nuclear Materials in 1998. The IAEA has leveraged its expertise to increase its bargaining authority—even though largely informal—from an initial “0” in 1957 to a “3” by 1998.

Monitoring Safeguards agreements are bilateral treaties between states and the Agency.²² Early revisions of the safeguards guidelines incrementally expanded what the IAEA could safeguard but included a restrictive “Inspectors’ Document” under which inspectors had to be approved by states for their territory, had to provide details of the intended inspection in advance, and were constrained in their movements during inspections (Fischer 1997). The capacity to monitor was present but limited through the 1960s, earning the Agency a “1” for a basic monitoring system.

After 1970, the NPT requires that all acceding non-nuclear weapons states accept IAEA comprehensive safeguards against the non-diversion of “all source or special fissionable material in all peaceful nuclear activities within the territory of such State, under its jurisdiction, or carried out under its control anywhere” (“Treaty on the Non-Proliferation of Nuclear Weapons” 1970). The resulting INFCIRC/153 (1971, /153 (Corr.) in 1972) extended safeguards over nuclear materials (but not facilities), limiting routine inspections to predetermined points and limiting the IAEA's transmission of private information. However, INFCIRC/153 also created safeguards that were far more technical, systematic, and quantitative than under INFCIRC/66 (Muller et al. 1994). While longer model agreements might “typically place greater constraints” on the agent (Huber and Shipan 2002), the shift to more objective and quantifiable standards increased the IAEA's authority to make judgments (Barnett and Finnemore 2004, 69).

Under INFCIRC/153, the Agency may also at its discretion conduct any-time, any-place “special inspections.” This is an abdication of national sovereignty because safeguards “require the consent of the state concerned but if it is not given, the IAEA may command the state to comply” (Muller et al. 1994, 69). Prior to the dramatic use of this authority in 1993 with North Korea, the Agency had only two previous occasions in which routine consultations could not resolve IAEA concerns (Rockwood 2002). Monitoring authority increases to a “3” in 1970 with the NPT authority to select the time of inspections and to trigger special inspections.

As mentioned above, INFCIRC/153 was unchanged until talks began in 1993 between IAEA staff and the Board to identify the problems and potential solutions. The Safeguards Committee decided, first, to require additional declarations of

²² Many safeguards imposed as a condition of nuclear supply are trilateral agreements, allowing safeguards to revert to the supplier state if the IAEA is somehow prevented from implementing safeguards. However, these safeguards tend to be item specific.

information, improve remote monitoring, and increase unannounced or “no notice” inspections and environmental sampling under INFCIRC/153 (IAEA 1998; Rockwood 2002). Second, it created the INFCIRC/540, under which states voluntarily acceding must provide greater information about and access to their entire nuclear fuel cycle, permit short-notice access at declared facilities, report on all nuclear exports and imports, accept expanded environmental sampling, and recognize inspectors’ rights to multiple-entry visas and satellite communications access during inspections (IAEA 2002; Rockwood 2002; Schmidt 1997).²³ To balance the increased intrusiveness, INFCIRC/540 (Corr.) and other documents include stronger confidentiality policies (Rockwood 2002).

Third, the Board authorized creation of an internal intelligence group to collect and use IAEA, open-source, and national intelligence information to better determine whether undisclosed nuclear activities may be occurring (Scheinman 2005; Traub 2004). There are also proposals to shift to an “integrated safeguards” system that would allow compliance decisions to be based upon non-inspection information (Scheinman 2004; Bragin et al. 2001).²⁴ Monitoring authority increases under INFCIRC/153/Rev.1 to “4” in 1995 and to “5” with INFCIRC/540 and the internal “intelligence agency” in 1998.

Outside its NPT and bilaterally-requested safeguards responsibilities, the IAEA has been delegated authorities by several international organizations, including for the 1967 Treaty of Tlatelolco (a NWFZ for Latin America), the 1986 Rarotonga Treaty (a NWFZ for the South Pacific), and, from 1991–1998, verification of the disarmament of Iraq under UN Security Council Resolution #687 (along with UNSCOM).

Enforcement The IAEA Board has the legal authority to judge compliance by states with their NPT or other safeguards obligations, making it one of the few actors empowered to declare that a sovereign state is in violation of their international commitments. Decisions occur in response to compliance reports by the staff, transmitted through the Director-General to the Board, and simultaneously to the UN General Assembly and UN Security Council. As then-Director General Mohammad El Baradei stated, “I have the right to sit in judgment, where [then-UN Secretary-General] Kofi Annan does not. And that makes many countries uncomfortable.” (Traub 2004)

The verification or compliance authority earns the IAEA +1 point. The Secretariat was also expected, from the outset, to withhold information from its principals to protect confidential business information if irrelevant to judging compliance, earning it another +1. Finally, beginning in 1995, the Agency was allowed to base compliance decisions in part on non-inspection sources of information, bringing compliance authority from a “2” to a “3” (out of “3”).

²³ Accession to INFCIRC/540 is not currently considered by the IAEA to be necessary for compliance with NPT commitments, though the IAEA is considering seeking approval to make it mandatory (Official 2005a).

²⁴ This change is welcomed by “safe” states that bear a large safeguards burden, such as Japan and Germany, but rejected by states whose compliance is more suspect.

To enforce compliance, the IAEA may “suspend any non-complying member from the exercise of the privileges and rights of membership” (IAEA 1957). Otherwise, its capacity to coerce is limited to “direct curtailment or suspension of assistance being provided by the Agency or by a member, and call for the return of materials and equipment made available to the recipient member or group of members.” The real enforcement power, though, is that the Agency “serves as a trigger mechanism. It can tell the world and should tell the world when the possibility of proliferation is something we should be worried about in a particular country.” (US Senate 1977) The IAEA therefore receives a “2” out of “5” for enforcement for its authority to deny membership benefits and formally propose enforcement by placing discussion of violations on the UN agenda.²⁵

4.1.3 Agent Resource Autonomy

Budget Autonomy Member states are required to contribute to the IAEA budget according to an assessment scale guided by that used in the UN system. Paying a centrally determined assessment is required to remain in full compliance, earning the IAEA a “3” for its quasi-taxation budget authority. The negotiators believed assessments would be minimal as regular budget costs were to be offset by profits from IAEA ownership of nuclear facilities, the loaning of fissile materials, and the provision of other services.

The Board also decided at the outset that the Agency would fund Technical Cooperation through voluntary contributions rather than assessments. This strategy later enabled states in the 1980s to counter underfunding of safeguards (interviews with IAEA and US government officials).²⁶ This includes “off-voluntary” contributions, not even noted in the budget because they are uncoded, of cost-free experts, staff training, equipment, and research and development. The extrabudgetary contributions allow support for programs that state members and the IAEA wish to pursue, such as safeguards, beyond that which a majority of the Board or the General Conference are willing to support (Official 2005a). In short, the IAEA has high resource autonomy. The IAEA receives +1 point each for its authority to offer services for a fee and to accept voluntary contributions, in total a “5” for budget autonomy for all years.

Size of budget As shown in Fig. 1, the regular budget grew steadily from the 1960s with increasing safeguards duties. Correspondingly, the delegation indicator for the size of the budget, the share of a fraction of world GDP, increased from 0.11 in 1958 to peak at 2.08 in 1995. However, the IAEA budget did not keep pace with inflation

²⁵ The IAEA’s enforcement powers include the authority to terminate nuclear assistance between members, which is possibly quasi-public enforcement (a “4”) and its capacity to impose costs by terminating Technical Cooperation assistance could be considered public enforcement (a “5”). The difference would be across time for the IAEA and therefore would cause statistical differences only in comparisons to other institutions.

²⁶ The voluntary contributions reported in the budget, which does not include many “in-kind” contributions of goods and services, exceeded 20% of the amount assessed on the member states in 11 years and was less than 10% in only 2 years.

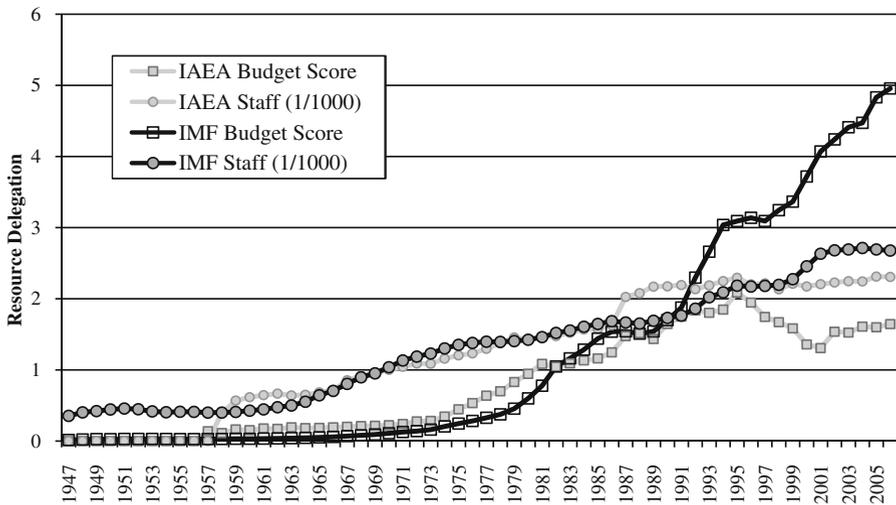


Fig. 1 Comparing IAEA and IMF resource delegation across time

or declined in a number of years, particularly after the completion of denuclearization in Iraq and South Africa, which represents practical retractions of delegation: Budget resources declined during 1996–2001 to 1.31 before increasing in 2004 when budget increases were approved to implement expanded safeguards over a larger population of states.

Staffing The Statute does not describe the bureaucracy and provides only for a Director General to be the “chief administrative officer,” under the Board’s control but responsible for “the appointment, organization, and functioning of the staff” (Art. VII, IAEA 1957). The Board therefore has wide latitude from the General Conference to construct the agency. The General Conference confirms Board’s recommendation for Director General, but the Board approves the Director General’s appointments of the Deputy Director Generals and department heads.

The Board apparently only rarely objects to the Director General’s choices (Official 2005a). However, just as the head of the World Bank is traditionally American and the head of the IMF is European, the Board expects senior appointments to be of particular nationalities: the Assistant Director General for Administration should be American, Technical Cooperation goes to a person from a developing state, and verification goes to a developed state that is also not a recognized nuclear weapon state. Finally, the Board retains the right to appoint individuals as inspectors.

All staff positions are publicly announced and independently recruited, though states seeking to promote an individual can communicate their interest to the staff. State influence over staff selection, therefore, continues below senior appointments. Some, for example, press to see their nationals appointed to the extent “entitled” by their share of the budget or norms of equitable geographic representation. More powerful states tend to concentrate their attention on only the most senior positions (Official 2005a).

Seconded personnel have always been important to the Agency’s ability to provide safeguards and technical cooperation missions, but their number was never great (always <1/3) and has decreased over time. Their purpose also appeared to

have changed from a means of influence to simply another form of off-voluntary contribution. The Agency actively tries to constrain national influence (“permeability”) through its philosophy of unbiased service, limits on the number of a state’s nationals in each area of operations, and increased regulation of staff interactions with the outside world (Official 2005b). Still, staff must work more closely with states to accomplish Agency goals where it has a weaker mandate (Official 2005a). Director Generals have therefore increasingly created institutionalized avenues for advice from member states and from experts, including permanent standing advisory committees at all bureaucratic levels.

To summarize, nearly all positions are independently recruited international civil servants and only one requires explicit principal approval. The Agency further reduced national influence over recruitment in the mid-1990s by eliminating a government veto over the appointment of their nationals (Official 2005c). For example, El Baradei was considered as a candidate for Director General despite Egypt nominating another candidate. The IAEA therefore receives a “2.5” for staff selection autonomy from 1957 to the mid-1990s, after which delegation for staffing increases to “3” when the Board ended national vetoes over the appointment of their nationals.

Size of Staff The size of the staff has increased incrementally over the past fifty years, but growth is also occasionally negative (see Fig. 2).²⁷ The size of staffing indicator increases from .393 in 1958 to 2.23 in 2002.

4.1.4 Principal Obligation

Membership is not a precondition for accepting safeguards: some safeguarded states are not members and some members do not require safeguards. However, safeguards obligations are in force until the state withdraws from whatever agreement requires IAEA safeguards. Member states may withdraw from the Agency but withdrawal “shall not affect its contractual obligations entered into...or its budgetary obligations for the year in which it withdraws” (Art. XVIII Para. D,E). Some have argued that even after withdrawal from the NPT, a state (e.g., North Korea) may be obligated to prove compliance with its commitment up to the point of withdrawal. The IAEA receives a “3” because the Statute permits withdrawal (−1) and does not mention other provisions noted as affecting obligation to the agent.

4.1.5 IAEA Summary

The combined delegation score for the IAEA is 15.82 at formation in 1958, increases to 19.56 in 1970, and averages 27.60 during 1998–2007 (summarized in Table 2 and Fig. 1). This growth appears to be an accurate translation of the increase in size and acquisition of greater contracting and monitoring authorities by the IAEA. These indicators reflect the extent to which the IAEA transformed over time from a purely technical agency to one with important political effects (Scheinman 1985).

²⁷ The data indicate a jump in staffing in the late 1980s, however the spike is an artifact of changes in IAEA reporting; beginning in the late 1970s the IAEA reported conflicting numbers in its Annual Report and its annual Budget Report.

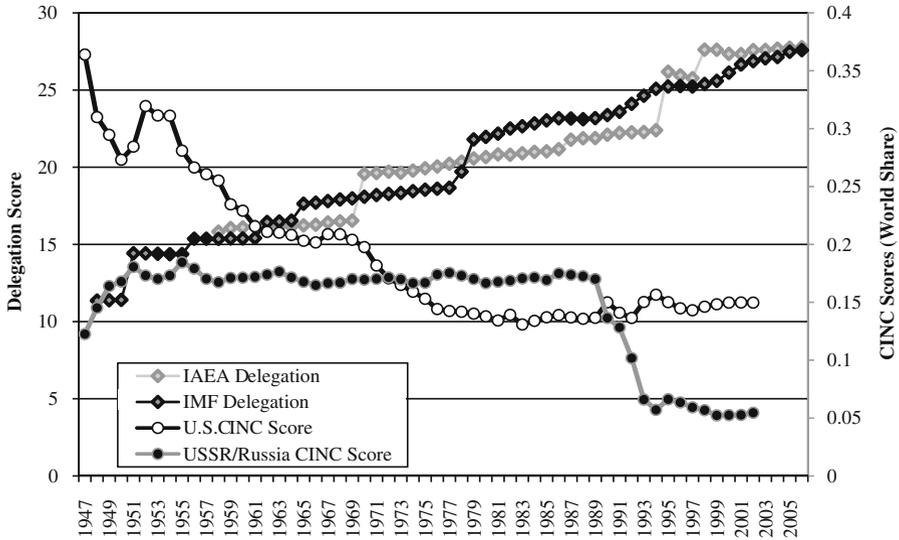


Fig. 2 Comparing IAEA and IMF delegation to US and USSR/Russia CINC scores

4.2 The International Monetary Fund (IMF)

The Articles of Agreement of the International Monetary Fund entered into force on 27 December 1945, and the IMF began operations in 1947. The IMF facilitated economic cooperation by promoting an open and stable international monetary system (Frieden et al. 2009, Chapter 8). The “par value” system required the United States to fix the dollar’s value in terms of gold and for all other countries to fix their currencies to the dollar (IMF 2009a). Currency values were to change only in response to a “fundamental disequilibrium” in a country’s balance of payments, but the IMF could provide short-term assistance while states correct the problem.

The Articles have been amended three times since 1946. The First Amendment, in 1969, authorized creation of a new currency, SDRs or Special Drawing Rights, to insulate the Bretton Woods system from a growing crisis with the US dollar. The Second Amendment entered into force in 1978, allowing the members to select their own exchange rate regime but also creating the Article IV mandate to monitor IMF members through country consultations (Peet 2003, 63). The Third Amendment entered into force in 1992, allowing the IMF to suspend some member rights for failure to fulfill treaty obligations (IMF 2001, 182).

4.2.1 Management Autonomy

The Articles provide for “a board of governors, executive directors, a managing director, and a staff,” and, as later amended, “a Council” (Art.12 Sec.1, IMF 1944, 1992). The Board of Governors is the collective principal composed of its individual members. Whereas the original text implies the Board of Governors would be an active principal (“may delegate,” with few exceptions), the amendment has it abdicating most authorities to its agent (see Article 12 Section 2(a), IMF 1944).

Table 2 IAEA Delegation (selected years)

Category	Indicators	1958	1970	1980	1990	1995	1998
1. Agent Services							
	1a. Bargaining: Implements BOG-approved safeguards models and staff negotiates subsequent agreements; staff greater role in negotiating later models; changes to mandate recommended with safeguards and CPPNM update	0	1	1	1	2	3
	1b. Monitoring: Updates of INFCIRCs provide guidance: upgrades of 153, 93 + 2 for 153, 540; 153 provides greater access and challenge inspections; 540 provides broader routine access.	1	3	3	3	4	5
	1c. Compliance: Authority to make legal decisions regarding compliance. Agency is expected to withhold some information from principals to protect commercial information. Basing decisions on non-inspection data possible with reinterpretation of INFCIRC/153 (1995).	2	2	2	2	3	3
	1d. Enforcement: IAEA implements safeguards agreements and may punish noncompliance through denial of membership benefits.	2	2	2	2	2	2
2. Agent Autonomy							
	2a. Staff selection autonomy: IAEA end in mid-1990s policy that hires require state approval.	2.5	2.5	2.5	2.5	3	3
	2b. Financial autonomy	5	5	5	5	5	5
	2c. Management autonomy: Non-Budget Votes (1/2 majority of BOG)	.82	.88	.84	.84	.85	.85
	2d. Principal obligation: withdrawal clause but no domestic legislation required	3	3	3	3	3	3
3. Agent Resources							
	3a. Size of budget	0.137	0.222	0.944	1.65	2.09	1.67
	3b. Size of staffing	.393	1.001	1.43	2.175	2.29	2.13
Total:		16.85	20.60	21.71	23.17	27.23	28.65

Unlike the IAEA's one-member one-vote decision rule, the IMF's weighted voting system gives each member an equal number of basic votes and then additional votes proportional to their subscription share or quota. All voting is weighted in this manner on both the Board of Governors and the Executive Board.

The Executive Board is composed of the Executive Directors, a few of which are appointed by members with the largest quotas and the remainder elected by groups of smaller quota members.²⁸ The Executive Board is explicitly responsible for the "conduct of the general operations of the Fund" (see Article 12 Section 3(a), IMF 1944).²⁹ It is more powerful than the collective principal because it appoints the Managing Director and is to "function in continuous session," meeting "as often as the business of the Fund may require" to conduct the Fund's daily operations (IMF 1944). The Board of Governors created two sub-committees in 1974 in response to pressures for reform: the Interim Committee, renamed as the International Monetary and Financial Committee in 1999, and the Development Committee, a joint IMF-World Bank committee. However, each sub-committee has 24 members appointed following the same process used to select Executive Directors and therefore reflects the same distribution of power.

Management autonomy has increased only slightly: the number of members has increased from 29 at entry into force to 185 in 2008, but the number of Executive Directors has also grown from 12 to 24. More importantly, as the voting power of its most powerful members has declined, the number of states required for a majority has increased from 3 in 1947 to 9 by 1992. For example, the US has always had the largest voting share but this declined from 30% in 1949 to 25% in 1959, and by 2007 was 17% (Southard 1979, 5–6; Vreeland 2007, 15).³⁰ Therefore, management autonomy is high at 0.938 in 1949 and increases only to 0.951 by 1994–2005.

4.2.2 Agent Services

States encounter balance of payments problems when international trade and investment imbalances create an excessive supply (demand) of its currency, requiring it to buy (sell) its currency to maintain domestic price levels. This was not a problem under the classical gold standard, requiring the IMF to create new economics expertise (Barnett and Finnemore 2004, 52). The IMF therefore provides four basic services: develop expertise in international monetary conditions, monitor macroeconomic conditions affecting exchange rate stability, provide technical (policy) assistance to states in how to build sound macroeconomic policies and monitor domestic conditions, and provide loans to states suffering from balance of payments problems. The services are interdependent: making loans without monitoring would create moral hazards and without loans there would be no incentive to participate in monitoring or accept its policy advice.

²⁸ To exemplify, the United States appoints its own with 16.77% of votes in both the Executive Board and the Board of Governors, whereas Spain, Mexico and other Central American countries together elect an Executive Director who votes on the Executive Board with their collective voting power of 4.45% (IMF 2009b).

²⁹ The original text does not refer to an Executive Board, only the Executive Directors, though the description of their behavior is similar.

³⁰ Though in decline, US voting power is sufficient to enable it to block proposals which require an 85% majority to pass: amendments, quota adjustments, and membership admissions or expulsions.

*Monitoring*³¹ The original Articles offered the IMF only limited surveillance authority because states were required to consult in any detail only when they employed capital controls (Article 14). Most states ended capital controls by the 1950s and were required to provide only limited data to the IMF, depriving it of annual in-depth consultations and surveillance except when states sought assistance. The Executive Board recognized that staff required greater routine monitoring authority and the 1978 Second Amendment empowered the IMF to “exercise firm surveillance over the exchange rate policies of members” (Southard 1979, 9) and required member states to cooperate with this oversight (Peet 2003, 63). Article 4 surveillance became a powerful tool because the staff has been allowed to interpret its surveillance authority broadly as including any domestic macroeconomic policies that could affect exchange rates (Fischer 2004, 43).

While consultations to prepare bailout programs are information intensive, they are not intrusive like audits by domestic banking authorities (or by IAEA inspectors of nuclear activities, above). Surveillance occurs largely through compulsory self-reporting. IMF staff also use in-country missions to meet with those who can provide relevant information, and the range of such domestic actors has grown. The IMF earns a “1” for a basic monitoring system beyond self-reporting because of extensive in-house analysis of data that is (or was) also uniquely collected by the IMF.

Bargaining The Articles were originally vague about the IMF’s right to withhold loans (quoted in Peet 2003, 57). However, when demand in the late 1940s threatened to outstrip IMF resources, the US resisted automaticity for borrowing. The Executive Board determined in 1947 that the Fund could challenge a member’s declared purpose for borrowing and rejected its first loan, to France in 1948, because of its exchange rate policies (Martin 2006, 150; Vreeland 2007, 22). Lending was interrupted by the conditionality-automaticity debate (Martin 2006, 151) but also by the US effort to rebuild Europe through the Marshall Plan.³²

When lending resumed in 1951, the Executive Directors decided conditionality could increase with the size of the loan (Martin 2006, 150–151). States sought United States preapproval before even approaching the IMF, however, as it was the primary demander for conditionality. Frank Southard, an American Executive Director and then IMF Deputy Managing Director from 1962–1974, agreed that while the US would concur with Executive Board decisions, borrowing from the IMF nearly always began with an approach to the US (Southard 1979, 20).

This tradition came to a close with declining US dominance but also with “the gain in Management/staff strength and independence” (Southard 1979, 20). Loan conditionality provided the vehicle for IMF staff to advise member states in designing effective loan programs. By the late 1950s, the staff had sufficient expertise, and the Executive Board sufficient independence from the influence of individual principals, that the Executive Board would reject programs without staff analysis and recommendation.

The IMF developed economic models to fill the intellectual vacuum and “a standardized set of fiscal and monetary performance criteria” (Babb and Buirra 2005,

³¹ For a review of current IMF monitoring authorities, see Lavigne et al. (2009).

³² Offering \$17b to be spent over four years, compared to the IMF’s reserves of \$7.6b, the US blocked IMF loans to any country that participated in the Marshall Plan (Driscoll 1988, 6).

74). The resulting quantification made policy recommendations less subjective but also created new classes of macroeconomic data that only the IMF was collecting (Barnett and Finnemore 2004, 69). This expertise became the basis for technical assistance to national officials and even help building new national economic institutions (Barnett and Finnemore 2004, 60–61). The IMF formalized its technical assistance programs within its Fiscal Affairs Department, Central Banking Service, and IMF Institute in 1964 (Boughton 2001, 1017), but does not charge a fee for these services.

By the 1970s, the staff had ended Executive Director participation in consultation missions and previewing of reports before their presentation to the full Executive Board (Southard 1979, 9–10; see also Fratianni and Pattison 2005, 7).³³ By the 1980s, staff negotiations with borrower countries were so complex, cumbersome, and time-sensitive that staff reports and recommendations were almost never amended and were considered “take it or leave it” proposals (Martin 2006, 143). Garritsen de Vries even goes so far as to argue Directors could only comment on staff papers and “are not entitled to correct, or to request redrafting of, the text of staff papers on country matters,” though they will frequently request revisions to general policy papers (Garritsen de Vries 1985, 987).

The IMF staff has acquired an economic data collection and analysis capacity that few states possess, and which Executive Directors require to make informed lending decisions. The IMF has not, however, played a significant role in the alteration of its basic mandate. The IMF therefore earns a “2” for its bargaining authority to create regulations (setting performance standards) and recommend policy to its principals (loans with conditionality).

Compliance and Enforcement The Board of Governors may decide by a majority of voting power to make a member ineligible to use Fund resources or force “compulsory withdrawal” (Art.26, IMF 1944). However, this is coercion by the collective principal and not the agent. The Articles do not authorize the Executive Board, management, or staff to judge member states for their past behavior. Also, the Articles do not identify specific standards of behavior beyond a good-faith effort to maintain stable exchange rates and to inform the IMF when taking certain steps. Legally, delegation for compliance was very limited.

However, the IMF management/staff acquired practically (and later formally) the authority to judge past and expected future compliance through loan conditionality, the major source of its power over the international economy. Conditionality initially focused on monetary and fiscal aggregates and the exchange rate, but did not acquire legal status until the 1969 First Amendment (Babb and Buira 2005, 62). Formal recognition of conditionality, and the Executive Board conditionality guidelines in 1968 and 1979, occurred to reign in the Fund after principal complaints that policies were inconsistent and excessive (Martin 2006, 157). The Fund does not present programs it does not like to the Executive Board for approval and, if Fund conditions are not met, may block subsequent payments (loans are usually paid out over multiple payments). Once authorized, conditionality expanded over time to also include a wide range of national microeconomic policies until a backlash after the

³³ Southard implies the Directors’ acceptance of a hands-off role was an act of self-restraint; as he notes, the Executive Board recognized no single Director could represent all their interests (Southard 1979, 6,10).

1997 Asian Financial Crisis (Kapur 2005, 37; Vreeland 2007, 25). New guidelines in 2002 standardized consultations with potential borrowers and the performance clauses to be used in stand-by agreements, but also preserved staff autonomy (Martin 2006, 157; Babb and Buirra 2005). In general, the Fund has significant autonomy to enact stabilization programs or reject them, effectively compelling compliance with its delegated authority over the international monetary system.

To maintain oversight, the Executive Board decided early that Directors were “entitled to request and receive all the information in the possession of the Fund” (Garritsen de Vries 1985, 991; see also Southard 1979, 11). Directors were also active in program negotiations until 1948, and still “outlined detailed instructions for them” through the early 1950s (Horsefield 1969, 11). By the mid-1950s, though, the Executive Directors began allowing the Managing Director to keep information from it (Martin 2006, 161). After the 1978 Second Amendment expanded the IMF’s surveillance powers, Article 4 reports on individual countries and lending arrangements detailed in Letters of Intent were not made public because “most member governments say that they would not be willing to discuss their economic problems frankly with the Fund if reports were to be published” (Fischer 2004, 74). Many governments wanted information kept from domestic opposition parties and foreign competitors (Martin 2006, 145), though there has been greater publishing of these reports since the late 1990s. The Executive Board ruled in 1997 that states could publish their own reports, after a number of states leaked their own, and increasingly is also making Letters of Intent public, to increase transparency into its operations (Vreeland 2007).³⁴

IMF compliance authority is therefore a “1” after the mid-1950s for its ability to withhold information from its principals. While it lacks the legal authority to judge compliance, the Fund can block program approval or not disperse funds on approved programs, even without a decision by the collective principal to sanction the member under Article 26 of the Articles. Therefore, the ability to deny member benefits earns the IMF a “2” for its enforcement authorities after the 1951 resolution of the debate over conditionality (de jure with 1969 First Amendment).

4.2.3 Agent Resource Autonomy

Staffing The Managing Director is appointed by the Executive Board to five-year, renewable terms and is “responsible for the organization, appointment and dismissal of the staff of the Fund” (see Article 12 Section 4(b), IMF 1944). In parallel to practices at other IOs, the Managing Director is always European, though the backing of other states can be decisive in selecting among the candidates (Kahler 2006, 26–34). Of all the staff, only the Deputy Managing Director must be approved by the Executive Board after being nominated by the Managing Director. It is an established norm that directors of area department be nationals of the area, and the Managing Director often consults with a region’s Executive Directors for that reason, but debates over appointments led by the 1960s to the Managing Director only

³⁴ States appear to want transparency into their own programs as a check on IMF staff, to tie their own hands with domestic actors, and, increasingly, as a signal to third-party investors (Gould 2006b).

notifying the Executive Board of other senior appointments (Southard 1979, 8–9). The IMF staff have always been independently recruited international civil servants.

Southard notes that only on one occasion known to him during the entire 1946–1979 period did a Managing Director withdraw a staff appointment because of Executive Board objections (Southard 1979). Still, “it is hard to find a clear case in which a country’s national at the top has served to advance national influence within the organization” (Kahler 2001, 16). IMF staff selection autonomy is +1 each for having an international civil service and independent recruitment after 1946, and by the 1960s is also +1 for the absence of direct principal influence over staffing below the Deputy Managing Director position.

Size of the Staff The IMF had 354 staff in 1947, receiving a staff resource score of 0.354. While growth was strong 1960–2004, adding cumulatively over two thousand staff (from 0.409 in 1959 to 2.456 by 2000), reductions (a form of resource delegation retraction) occurred several times during this period and since 2004 declined from its high of 2714 staff to 2605 (2.605).

Budget Autonomy The IMF’s core mission is short-term lending, the capital resources for which are the membership subscription quotas charged to members. Quotas are determined by a state’s “weight and role” in the international economy (IMF 2008). Other than the one-time payment of their quota, states are not obligated to provide additional resources to the IMF unless the Executive Board increases the total quota to expand its lending resources. For example, the IMF decided in 1998 to increase IMF subscription quotas by 45% but in the subsequent two 5-year reviews (2003 and 2008) declined to increase quotas. Most states would prefer a higher quota, *ceteris paribus*, because quotas are the basis for a states voting power in IMF governance.³⁵

Funding for day-to-day operations comes not from an annual assessment, but from the profits earned from fee-based services: the interest charges on loans (and charges for other currency and gold transactions). Its financial autonomy is further increased in three ways. First, when the IMF anticipates declining demand for its services will result in an administrative budget deficit, it may invest idle capital. The 1969 First Amendment expressly authorized investment accounts but as a practical matter the first was created in 1956. Second, the Executive Board increased access to lending resources without requiring an adjustment of quotas under the General Agreements to Borrow program in 1962 (and created additional similar programs later). Third, when the Bretton Woods system was failing in the late 1960s, the IMF created its own currency in 1969. The SDR, or Special Drawing Rights, is based on a basket of currencies whose weightings are periodically reviewed to provide a medium-term mechanism to adjust for negative externalities created by problems in the economies of its major shareholders.

The IMF therefore has significant financial autonomy from its principals: the quota system is a form of quasi-taxation, earning it 3 of a possible 3. The IMF also receives an additional point each (+1) for the authority to offer services for a fee (lending and currency transactions at “market related” rates from 1946), accept

³⁵ As a result, the formula used to translate quotas into voting power is highly politicized; it was most recently revised in 2008 to increase the voice of developing states.

contributions beyond approved quasi-tax levels (the borrowing agreements from 1962), and pursue external fundraising (investment accounts from 1956). The creation of the SDR does not earn the IMF additional points but reflect the face validity of a measure showing high financial autonomy for the IMF: 4 points from 1946–56, 5 from 1956–62, and 6 points from 1962 to the present.

4.2.4 *Principal Obligation*

States have few obligations to the IMF beyond their membership quota unless they request IMF assistance. States may withdraw from the IMF on short notice (Article 26 Section 1, IMF 1944), as did Czechoslovakia in 1955 and Cuba in 1964, though the IMF repays any positive balance remaining in the state's quota in ten installments over five years (Southard 1979).

States receiving assistance are only obligated to repay what is borrowed. Technically, there is no treaty or other formal agreement underlying a state's borrowing from the IMF: a prospective borrower state submits a Letter of Intent to the Secretariat and, if the Executive Board concurs, the funds are simply dispersed to the borrower (Vreeland 2007, 31–32). The IMF staff may demand specific conditions for lending (and even pre-conditions before submitting a program for approval) that impose requirements for domestic implementation (+1), but only if a state "opts in" for borrowing. Otherwise, the Articles of Agreement do not allow states to opt out or temporarily escape from treaty obligations or attach reservations to modify its effects. In short, the IMF earns only 3 of 7 points: a baseline score of 4, minus 1 for the withdrawal option.

4.2.5 *IMF Summary*

The combined delegation score for the IMF, summarized in Table 3 and Figs. 2, is 11.36 after the first year of operations in 1948, 19.71 in 1978, and increases steadily through to 2005, reaching 27.46. As shown in Figs. 1 and 2, increasing delegation over the past thirty years is a result of increases in resource delegation whereas in the Fund's early years the increases were predominantly institutional. As with the IAEA, trends in the resource and institutional delegation measures reflect common beliefs about the IMF's power in the international economy (Table 3).

5 Hypothesis Testing

5.1 Hypotheses

Who creates IOs and why? To demonstrate the usefulness of the metric, I test two competing hypotheses for institution creation and expansion using this new data on IMF and IAEA delegation. One hypothesis, proposed by Realists, argues international institutions only reflect the international distribution of power: they are created by powerful states to serve their short-term interests and should therefore wax and wane along with the power of their most powerful members (Mearsheimer

Table 3 IMF delegation

Category	Indicators	1948	1969	1978	2005
1. Agent Services	1a. Bargaining: Initial loans with conditionality in 1951 that by early 1980s is de facto regulation	0	1	2	2
	1b. Monitoring: Surveillance powers erode in late 1950s as capital controls end until 1978 Amendment creates Article 4 surveillance.	1	0	2	2
	1c. Compliance: Fund can withhold information in compliance reports beginning in mid-1950s	0	1	1	1
	1d. Enforcement: Denial of membership benefits authorized with 1951 end of conditionality debate	0	2	2	2
2. Agent Autonomy	2a. Staff selection	2	3	3	3
	2b. Financial autonomy: Quasi-tax quotas and fee-for-service from 1946; empowered to borrow in 1962	4	6	6	6
	2c. Management autonomy	0.936	0.939	0.941	0.951
	2d. Principal obligation: withdrawal clause (-1); domestic obligations imposed only on borrowing states	3	3	3	3
3. Agent Resources	3a. Budget size	0.022	0.093	0.375	4.832
	3b. Staff size	.403	0.95	1.39	2.69
Total:		11.36	17.98	19.71	27.46

1994, 2001). Alternatively, IOs facilitate cooperation because of the functional benefits anticipated by the cooperating states (Hawkins et al. 2006b): the contribution of powerful states may be necessary to help overcome collective action problems (Olson and Zeckhauser 1966), but the IOs themselves grow in response to greater demand for their services.

5.2 IAEA Delegation: Data and Results

The dependent variable is delegation to the IAEA, 1958–2007. I employ the full measure and, because a more fine-grained analysis of individual indicators is potentially useful, I also decompose this into a resource delegation score (staff and budget size) and an institutional delegation score (composed of all authority measures). Serial correlation in the observations of the dependent variables are a problem because observations over time are not fully independent despite detrending the budget data using constant dollars (2003) and the share of world GDP. The hypotheses are therefore tested using Prais-Winston Feasible Generalized Least Squares (FGLS).³⁶

³⁶ Lagged dependent variable (LDV) tests are inappropriate with many autoregressive processes (Keele and Kelly 2005, 203). Maximum likelihood models, including ordered probit, are inappropriate because of the small number of observations. Further, this discards significant variation in the dependent variable, a goal of this project. Tests yielded similar results but an expectation of unreliable and biased errors from the constrained sample and fewer controls.

To test the Realist hypothesis, I use the Composite Index of National Capability (CINC) scores for the US and USSR/Russia (Singer 1987). If Realists are correct, there should be a positive and significant correlation between their CINC scores and delegation to the IAEA. I also introduce a dummy variable to control for potential structural effects caused by the end of the Cold War (ColdWar = 1 for 1947–1990, = 0 for 1991–). To test the functionalist hypothesis, I assume delegation to the IAEA occurs in response to greater threats from proliferation. Therefore, IAEA delegation should be correlated with proliferation threats, which I proxy using the number of states with nuclear weapons programs and with nuclear weapons (data from: Jo and Gartzke 2007) and the number of “Minutes to Midnight” on the clock published monthly in the Bulletin of the Atomic Scientists as their representation of “the perils posed by nuclear weapons” (Scientists 2008).

Table 4 shows that international delegation to the IAEA is more complicated than many Realists accept. The US CINC score has a negative relationship with delegation to the IAEA (significant at $p < 0.05$ for models I1–I2 and at $p < 0.001$ for F1–F3). Soviet/Russian power is also negatively correlated with institutional delegation (significant at $p < 0.01$ for F1–F3 and I1–I2). Power variables have less effect upon institutional delegation even though they are insignificant for resource delegation. Perhaps more important, none of the independent variables provide traction in explaining the level of resource delegation (R1–R2).³⁷ Clearly it is a weaker US, and not a stronger one, that is correlated with greater IAEA authority, causing us to reject the Realist hypothesis. The relationship between IAEA delegation and US and USSR/Russian CINC scores is graphically illustrated in Fig. 2.

The functionalist variables, however, perform poorly in this analysis: delegation does not appear correlated with increases in the number of states with nuclear programs or nuclear weapons or with decreases in the number of minutes to nuclear midnight. The exception is a weakly significant correlation (at the 0.10 level) between the number of minutes to midnight and full delegation. Though not significant, the coefficient on the number of nuclear weapons states is in the expected direction (positive) while the number of states with nuclear programs is not: delegation may be viewed as a solution to the shared threat from proliferation more than a strategy for coping with states believed to be pursuing nuclear weapons. Delegation, therefore, may be a signal about norms of appropriate behavior. Table 5 summarizes the findings. The significance of some results, however, is sensitive to the employed time-effects control.

5.3 IMF Delegation: Data and Results

The dependent variable is delegation to the IMF, 1948–2007. As above, I use full, institutional, and resource delegation measures. The Realist argument is tested employing the US and USSR/Russian CINC scores but also US GDP because cooperation through the IMF is economic. The functionalist hypothesis is tested using three proxies for demand for greater cooperation against international economic instability. First, the change in per capita world GDP (Maddison 2009)

³⁷ The missing Adjusted R2 score for models R1–R2 are not a typographical error.

Table 4 IAEA delegation, 1958–2006 (Prais-Winston FGLS)

Dependent Variable: Model:	Full Delegation			Institutional Delegation		Resource Delegation	
	F1	F2	F3	I1	I2	R1	R2
US CINC Score	-43.52 [#] (9.44)	-41.89 [#] (9.91)	-47.07 [#] (7.42)	-23.74** (10.85)	-26.15** (9.70)	-3.66 (3.66)	-3.81 (3.75)
USSR/Russia CINC Score	-44.99 [#] (9.34)	-41.63 [#] (10.14)	-47.70 [#] (8.87)	-30.69*** (10.18)	-34.47*** (9.77)	-3.97 (2.85)	-4.14 (2.97)
Number of Nuclear Weapon Program States		-0.03 (0.08)	-0.06 (0.08)	-0.05 (0.07)	-0.07 (0.08)	-0.00 (0.01)	-0.00 (0.02)
Number of Nuclear Weapons States		0.09 (0.10)	0.16 (0.11)	0.09 (0.09)	0.13 (0.10)	0.01 (0.02)	0.01 (0.02)
“Minutes to Midnight”			0.11* (0.06)		0.05 (0.06)		0.00 (0.01)
ColdWar	-0.69 (0.83)	-0.67 (0.90)	-0.35 (0.86)	-0.16 (0.85)	-0.01 (0.85)	-0.25 (0.18)	-0.24 (0.18)
Constant	35.18 [#] (1.82)	34.06 [#] (2.24)	34.11 [#] (1.89)	26.96 [#] (2.39)	27.11 [#] (2.21)	3.50*** (1.15)	3.51*** (1.16)
Adjusted R2	0.682	0.669	0.816	0.568	0.613	.	.
N	46	46	46	46	46	46	46

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$, [#] $p < 0.001$

Full Delegation includes all components of the delegation index, Institutional Delegation includes Category 1 and 2 components; Resource Delegation includes the Category 3 resource measures

is one indicator of global economic health. Second, as precious metals are often used by investors as a refuge in times of economic crisis, causing their price to rise, the price of silver is an indirect proxy.³⁸ Third, given the enormous US share of global economic activity, US unemployment levels are another indirect proxy.

Table 6 shows the dilemma facing states between deepening (reducing) cooperation and increasing (retracting) the IO's authority or resources. US power (CINC) is negatively correlated with the full and institutional delegation measures (significant at $p < 0.01$) but US GDP is positively correlated with all measures of IMF delegation (significant at $p < 0.05$ level in I1-I2 and at $p < 0.001$ in F1-F2 and R1-R2). Meanwhile, USSR/Russian power is negatively correlated only with resource delegation (R1-R2, significant at $p < 0.001$). The results suggest a militarily weaker US causes increased IMF authority but greater IMF resources follow an economically stronger US and a weaker USSR/Russia.

The results also provide weak support for the functionalist argument: whenever significant, increased IMF resource delegation follows higher silver prices and higher US unemployment (R1-R2). However, while greater instability in world GDP per capita should be associated with increased demand for the IMF's services,

³⁸ Gold prices are a possible candidate, but is excluded because prices were fixed in terms of gold throughout a large portion of the period.

Table 5 IAEA results summary: direction of significant coefficients

Dependent Variable:	Delegation (Full Measure)	Institutional Delegation
Realist variables:		
US CINC	–	–
USSR/Russia CINC	–	–
Functionalist Variables:		
Minutes to Midnight	+	0

Excluded variables include Cold War, Number of Nuclear Weapon Program States, and Number of Nuclear Weapons States

greater variation from mean GDP growth is not significant but the coefficient is positive for IMF institutional delegation and negative for resource delegation.

6 Conclusions

This article offers a simple metric for comparing acts of delegation. This metric translates into numeric indicators an agent’s contractual authority and autonomy to

Table 6 IMF Delegation, 1948–2005 (Prais-Winston FGLS)

Dependent Variable:	Full Delegation		Institutional Delegation		Resource Delegation	
	F1	F2	I1	I2	R1	R2
Model:						
US CINC Score	–23.23 [#] (5.54)	–17.69*** (5.82)	–21.77 [#] (5.53)	–16.75*** (5.80)	–4.09*** (1.52)	5.04 [#] (1.29)
US GDP	0.00 [#] (0.00)	0.00 [#] (0.00)	0.00** (0.00)	0.00** (0.00)	0.00 [#] (0.00)	0.00 [#] (0.00)
USSR/Russia CINC Score	–7.00 (8.09)	–8.30 (6.98)	3.25 (8.09)	0.81 (6.90)	–9.05 [#] (2.09)	–8.70 [#] (1.66)
Annual Change in World GDP per capita		0.00 (0.00)		0.00 (0.00)		–0.00* (0.00)
Price of Silver (US dollars per ounce)		0.02 (0.03)		0.01 (0.02)		0.02*** (0.01)
US Total Unemployment		0.00 (0.00)		–0.00 (0.00)		0.00 [#] (0.00)
Constant	19.63 [#] (2.97)	19.02 [#] (2.69)	18.53 [#] (2.97)	18.37 [#] (2.67)	2.05** (0.86)	–1.21* (0.64)
Adjusted R2	0.772	0.816	0.532	0.732	0.520	0.987
N	56	52	56	52	56	52

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$, [#] $p < 0.001$

Full Delegation includes all components of the delegation index, Institutional Delegation includes Category 1 and 2 components; Resource Delegation includes the Category 3 resource measures

provide services and the agent's resources to fulfill its contractual responsibilities. Data from in-depth case studies of the IAEA and IMF allowed quantitative measures of their delegation contracts and practices. The correspondence between qualitative and quantitative evidence demonstrates the metric's face validity.

The measures enable simple tests of IR theories of cooperation. I demonstrate using this new data on delegation that functionalist arguments can be empirically validated and that Realist assumptions are too parsimonious to be useful for prediction. However, more important than the specific findings, this reveals that estimation of causes or consequences of delegation that rely on only one or two indicators actually misses the richer story possible with a more complete measure of delegation.

This metric should be useful for measuring delegation to other institutions that use non-national agents to facilitate policy setting and implementation and behavior monitoring and enforcement, whether other international lending agents (the World Bank), trade organizations (WTO), or alliances (NATO). This metric should also be useful for measuring domestic acts of delegation, such as the creation of new executive or judicial bodies. One weakness is its inability as structured to capture cooperation across multiple issue areas (as in the European Union or the US government), for which I welcome suggestions. Still, understanding the structure of the relationship between principals and their agents is a necessary precondition to understanding how IOs serve their state principals. With a metric for measuring and comparing delegation to IOs across a range of issue areas, analysis can advance testing hypotheses on the causes and anticipated consequences of delegation.

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