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**Exploring the Structural Dimensions and Functions of Delegated Authority**

Short title: A Policy Framework for Structuring and Assessing Public Governance

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**Abstract**

*In recent years, regulation scholars and policymakers have increasingly turned their attention to the role of inter-governmental organizational design in effective governance. The existing literature on regulatory design has provided important insights into the advantages and disadvantages of alternative structural options. This article synthesizes and builds on that literature by describing a novel framework for characterizing, analyzing, and structuring authority across public institutions. Drawing on examples from a range of jurisdictions, it highlights the value of this framework in identifying the values tradeoffs that should drive policymakers' decisions to choose among competing structural alternatives.*

*The framework is founded on two important points. First, inter-governmental allocations of authority can be structured along three different dimensions. Failing to appreciate the existence of, and differences among, these dimensions can prompt misassessments of the reasons for existing regulatory failures and selection of structural allocations that do not suit the problems intended to be addressed. Second, allocations of authority can, and in many cases should, vary for disparate governmental functions. Differential functional allocations of authority can minimize obstacles to needed structural reforms and tailor inter-governmental relations in ways that best promote chosen regulatory values, such as efficiency, effectiveness,*

*and accountability, as well as how allocational choices may and perhaps should vary depending on the governmental function being performed. Finally, the article suggests how future regulation and governance scholarship can harness this emerging framework to help build a body of empirical evidence upon which policymakers can draw in future regulatory design endeavors.*

## **1. Introduction**

As James Q. Wilson recognized decades ago, “[o]rganization matters, even in government agencies” (1989, p. 23). A rich literature has developed that explores how authority is configured between public institutions, and the role of governmental structure in advancing effective regulation. Although this literature has made important contributions to the understanding of the importance of structure in promoting effective governance, it is incomplete, often failing to provide a systematic framework for describing, analyzing, and evaluating inter-jurisdictional relationships. The legal process school of the 1950s (Hart & Sacks 1958; Young 2005, pp. 1149-50), for example, focused primarily on the relationship between judicial and legislative institutions and neglected many of the values tradeoffs implicated in comparative institutional analysis (Calabresi 2003, pp. 2124-25). Exponents of the “structure and process thesis,” who focused on ways to enhance political control of bureaucratic decisions through legislative monitoring and administrative process to enfranchise stakeholders (McCubbins, Noll & Weingast 1987; Stewart 1975), did not consider how different ways of structuring inter-governmental and inter-agency relationships can affect the likelihood of achieving regulatory goals. And though public administration scholars and practitioners have explored the effect of

administrative organization through analytical policy evaluation (Metzger & Stack, 1268; Elmore 1986, pp. 69-72), these efforts have largely been confined to a subset of structural considerations.

To be sure, aspects of the allocation of authority, particularly questions of regulatory scale and associated divisions of authority, have been well trodden for centuries (Esty 1996, pp. 605-13). More recently, scholars have begun to fill some of the gaps in the literature on the structural aspects of governance. Some have considered whether overlapping allocations of authority among various government institutions makes sense (Ahdieh 2006). Others have identified numerous forms of agency coordination and explored the advantages and disadvantages of competition or collaboration (Jacobs 2019; Shah 2019; Freeman and Farber 2005). A recent work explores the capacity of statutory interagency coordination mandates aimed at creating a “statutory separation of powers” to constrain or enhance presidential power (Jacobs 2019). Accordingly, the regulation literature increasingly recognizes that regulatory “arrangements,” defined as the “complex web of actors whose interventions and interactions sustain the regulatory process in a given policy field,” “matter” and should be treated as a “unit of analysis” (Mathieu, Verhoerst and Matthys 2017, p. 254). This is particularly vital in light of the increased complexity of governance arrangements. “Regulatory governance is increasingly subject to power dispersion, which has led to the emergence of complex multilevel and multi-actor regulatory arrangements.” (Mathieu, Verhoerst and Matthys 2017, p. 265).

Nonetheless, the manner in which institutional design, and in particular the relationship between public institutions to which authority has been delegated, can affect the fate of

regulatory initiatives is a topic that cries out for further examination. Even today, “[w]hile it is now acknowledged that the specificities of these regulatory arrangements have an impact on regulatory outputs, this research field is only in its infancy.” (Mathieu, Verhoerst and Matthys 2017, p. 265). Many governance challenges derive from the way government institutions exercising regulatory or management authority relate to one another. Organizational systems of course are key determinants of bureaucratic effectiveness (Carrigan 2017).

We perceive at least three key ways in which analysis of inter-governmental authority by scholars and policymakers remains incomplete. First, some analyses, by focusing on one of three different dimensions of inter-governmental authority that we identify in this article, neglect or conflate one or more of the other two dimensions, either failing to appreciate their differences or attributing the characteristics of one dimension to another. Second, even some of those works that recognize the full array of dimensions do not consider how allocations of authority along these dimensions might profitably differ based on the governmental function (or task) being performed. Third, because some analyses conflate dimensions and/or functions, they offer solutions that do not match the regulatory failures they are designed to address, and/or fail to appreciate the availability (and tradeoffs) of the full array of alternative ways of structuring inter-governmental authority. We are not claiming that all scholars and policymakers have missed all of these important aspects of inter-governmental authority. Rather, we believe that analyses of such authority are at times incomplete, perhaps because of the absence of a common framework for considering the options for allocating inter-governmental authority.

This article seeks to supplement the existing literature on the structural features of institutional design and the tradeoffs associated with alternative ways of organizing inter-governmental relationships in precisely these ways. It offers a framework that can facilitate future regulation and governance scholarship on the functional and dimensional aspects of structural governance mechanisms. For purposes of this paper, *inter-governmental structural governance* refers to a particular aspect of institutional design—namely the organization of and relationships between public institutions. This is distinguishable from *substantive* governance (the goals and tools of public action) and *procedural* governance (the processes used by governmental institutions to advance such goals and implement such tools (Ruhl 2011)). It is also distinct from intra-agency organization. Though substantive and procedural governance are undoubtedly fundamental to institutional design (Camacho & Glicksman 2016, p. 724-34), and although the analytical framework presented here may also be useful for assessing intra-agency organization, these nonetheless are largely outside the paper’s scope.

Relatedly, it is worth acknowledging that the allocation of inter-governmental authority is only one relevant consideration influencing the fate of regulatory or governance mechanisms. Beyond substantive and procedural governance considerations, factors such as the adequacy of personnel and resources, and officials’ commitment to adhering to the rule of law, will influence regime efficacy. Political considerations will undeniably shape how authority is configured, as well as assessments of the efficacy of such allocations in achieving regulatory goals. Those considerations may influence the feasibility of implementing reforms that application of the framework presented here suggest are desirable.

Yet even though those considerations are important, they need not be determinative. This article rests on the premise that inter-governmental structural governance does matter and that appreciation of its potential to improve governance can make it a more salient consideration, and in some cases mitigate some of the obstacles to desirable structural reforms noted above. Both policymakers and scholars can leverage the framework explored in this article in several important ways. First, the framework provides a diagnostic tool for *characterizing* existing allocations of authority. Second, the resulting diagnoses can assist in *assessing* how those allocations may have contributed to governance pathologies. Third, application of the framework can help generate possible *prescriptive* reforms that address those mistakes, recognizing that such changes necessarily implicate tradeoffs in governance values and that the assessment of how best to accommodate those tradeoffs will vary depending on one's normative commitments. Fourth, the framework can help mitigate political obstacles to achieving sensible allocational reforms by (1) providing a common taxonomy that calls attention to the relevant tradeoffs, (2) allowing the identification of allocation options that do not require dramatic reconfigurations likely to hit political roadblocks, and (3) offering a scaffolding for future empirical data that may make programmatic efficacy in achieving regulatory or management goals more salient to both the public and policymakers (Esty 2017, p. 3).

Part 2 of the article surveys the extensive regulation and governance literature on inter-governmental structural governance, identifying gaps that this article and subsequent research based on the article's systematic framework for characterizing and assessing inter-governmental relations can begin to fill. Part 3 describes that framework and the two fundamental insights on



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which it is based. First, varying regulatory strategies based on different government functions, such as funding, information distribution, information analysis, planning, standard-setting, implementation, and enforcement, can enhance regulatory effectiveness. An allocation of authority that makes sense for one function may be ill-suited to another. Second, it is important to distinguish among three dimensions of regulatory authority: how centralized the authority is; how much overlap there is among multiple government bodies with concurrent jurisdiction over a regulatory problem; and the extent to which authority is exercised independently or coordinated with other governmental entities.

As demonstrated in Part 4, distinguishing between functions, and between these different dimensions, can help clarify previously obscured tradeoffs and configurations, avoid regulatory failures that result from poorly conceived structural choices, and ultimately improve government performance. To illustrate the value of this framework, the paper considers a range of regulatory systems (in Africa, Asia, Europe, and South America, but primarily the United States) and contexts (including pandemic planning and response, environmental impact assessment, food safety, banking regulation, national security intelligence gathering, and existing and proposed climate change governance). These examples help demonstrate both the tradeoffs of different structural alternatives and the need for varying, contextual allocations of authority both within and outside the United States. Finally, Part 4 explores how effective institutional design can benefit from not merely deconstruction of the dimensions and functions of authority, but also from a more integrated “mapping” of authority that appreciates the potential interactions between dimensions.

The paper concludes in Part 5 by exploring how regulation scholars can leverage this framework in future research to develop useful empirical evidence about the tradeoffs of organizational alternatives that is currently lacking. Drawing and expanding on longstanding legal process and more recent adaptive governance scholarship that emphasizes the vital role of empiricism and experimentalism in governance, it also explains how policymakers can and should install an adaptive governance infrastructure that integrates similar analyses systematically into the design, assessment, and periodic redesign of regulatory institutions.

## **2. Historical and Emerging Scholarship on Inter-Governmental Structural Governance**

Scholars have explored the appropriate allocation of governmental authority for centuries. For many years, governmental scale was, and in many circles remains, the key (if not the only) question. As stated by Hsueh & Prakash, “legal scholars of regulatory federalism have long debated the merits of environmental regulation at different scales of governance” (2012, p. 447). That debate largely assumed that authority should be allocated to the one level of government best suited to addressing the problem. However, the turn of the century has seen a variety of governance scholars consider more directly the potential for and risks from jurisdictional overlap. In addition, scholars have begun to explore the potential for inter-governmental coordination.

A. A Longstanding Focus on Scale

At least as far back as the origination of the concept of subsidiarity, now enshrined as a general principle of European Union law (Consolidated Version of the Treaty on European Union art. 5(3), Feb. 7 1992, 2010 O.J. (C 83) 13), many scholars have promoted the idea that authority is best allocated at the local level (Dornbos 2010, p. 17). In contrast, many others have pointed to a range of concerns about the efficiency or effectiveness of decentralized governance as reasons for more centralized authority (O’Connell 2006; Esty 1996; Engel 1997). Both in the United States and elsewhere, this debate has focused heavily on the context of federalism and the allocation of authority between national and subnational governments (e.g., Ryan 2011a). However, such analyses are also relevant in assessing the allocation of authority from the municipal and provincial scale to the international arena, and to allocations of authority within a particular level of government (i.e., whether administrative authority is or should be allocated to one or multiple administrative agencies) (Wiseman and Owen 2018).

B. Burgeoning Consideration of Other Components of Authority

Scholars for decades primarily focused the question of the appropriate scale of government as an either-or proposition (Wang, Liu & Dang 2018, p. 454). Also known as the “matching principle” (Butler and Macey 1996), the key question for inter-governmental structural governance was to identify the problem to be addressed and the appropriate level of government to address it (Abbott & Snidal 2013, p. 100). More recently, numerous scholars have identified overlapping authority as a significant feature of governance (Schapiro 2006, p.

251; Ryan 2011b). In doing so, they have advanced different lenses through which to view federalism (Bader 2014; Engel 2017). Scholars, particularly in analyzing federalism, have identified some of the potential advantages of overlapping authority (Adelman and Engel 2008, pp. 1844-49; Engel 2006, pp. 178-79, 181; Ryan 2011b, pp. 78-86).

Increasingly, some scholarly attention has also focused on the role of coordination, or lack thereof, in advancing good governance. Though many scholars and policymakers have assumed the value of coordination, others have begun to investigate the diversity in extent and type of inter-governmental coordination, i.e., the interactions between jurisdictions and authorities (Camacho & Glicksman 2019, pp. 45-46; Farber and O’Connell 2017). While some scholars have identified various advantages (Bardach 1998; Freeman and Rossi 2012), others have emphasized the value of allowing regulators to act independently of one another, though many associate such advantages with decentralization (Cohen, Cuéllar and Weingast 2006, pp. 710-11) rather than independence.

Finally, in a few contexts, some policymakers and scholars have considered the option of adjusting allocations of authority by governmental activity or function. Jordana et al. (2018), for example, identify regulatory capabilities for fourteen variables that include the authority to perform a limited range of functions, such as conducting research and imposing sanctions. Becker, Dörfer and Gehring (2018, p. 408) consider how structuring authority differently for rulemaking and implementation (or rule application) can provide “distinct institutional incentives for each of these functions.” Jacobs (2019, p. 396) notes that some statutes delegate authority

differently for adjudicative, rulemaking, and enforcement authority. Buzbee (2005) considers the federalism structures best suited to environmental enforcement.

Similar analyses historically have largely focused on dividing authority between governmental levels based on the governmental function at issue. For much of the twentieth century, some scholars of political science and public administration focused on dividing governmental functions among municipal and higher scales of government according to their relative institutional competency. In the United States, for instance, the Advisory Commission on Intergovernmental Relations (1973) sought to develop prescriptions for dividing power efficiently between municipal and regional governments based on differing expertise and competencies (Stephens and Wikstrom 2000, pp. 29-46), though this effort was subsequently criticized as quixotic (Frug 2002, 1775-76).

### **3. The Importance of Government Organization**

Thus, appreciation of the complexity of inter-governmental relations and of the role that the allocation of regulatory authority plays in achieving regulatory objectives is emerging (Jordana et al. 2018, p. 524). Despite the valuable insights that this literature has provided, appreciation of the implications of available options for configuring regulatory authority remains incomplete. Although some policymakers and scholars have focused on a subset of the different features of inter-governmental relations—such as scale, overlap, coordination, of functional differentiation—efforts to consider how to integrate these varied aspects of inter-governmental structural governance into a holistic analysis of alternative regulatory design

options have been rare. This Part proposes a taxonomy for describing the components and dimensions of inter-governmental structural authority that lays the groundwork for the kind of integrated analysis that has the potential to supplement the emerging literature on structural governance.

A. Functional and Substantive Authority

Regulatory authority necessarily involves both a substantive and functional allocation. Of course, jurisdiction is authorized over a particular subject matter (i.e., immigration, or public health). At least implicitly, however, jurisdiction is also composed of particular responsibilities or tasks, or *functional jurisdiction*. Even if multiple public actors are vested with authority over the same subject matter, each may be in charge of a different function. Attending to functional jurisdiction is often vital for characterizing and assessing the distribution of authority both within and between institutions. Though perhaps not exhaustive, functional jurisdiction could be understood as composed of various categories of governmental tasks such as: (1) funding or financing; (2) scientific research, data generation, and ambient monitoring; (3) information compilation and distribution; (4) information analysis; (5) planning; (6) standard setting; (7) plan implementation and permitting; (8) inspection and compliance monitoring; and (9) enforcement.

The failure of policymakers and scholars to consider the possibility of adjusting authority along functional lines can undercut efforts to promote effective governance through structural reform in several ways. First, commenters may incorrectly characterize authority as, for example, overlapping, when in fact certain functions may overlap while others are more distinct. Such

mischaracterizations risk confusing observers about how authority is currently configured.

Second, as detailed in Part 4 below, the tradeoffs of an allocation will often vary depending on the government function at issue. If policymakers do not distinguish allocations by function, the tradeoffs of restructuring along a particular dimension are likely to be obscured (Hadjjemmanuil 1997, p. 119 n.55; Kellman 1999, p. 542). Finally, by carefully attending to functional jurisdiction, policymakers may be able to leverage the advantages of a particular dimensional feature (e.g., decentralization) while minimizing its disadvantages.

## B. Dimensions

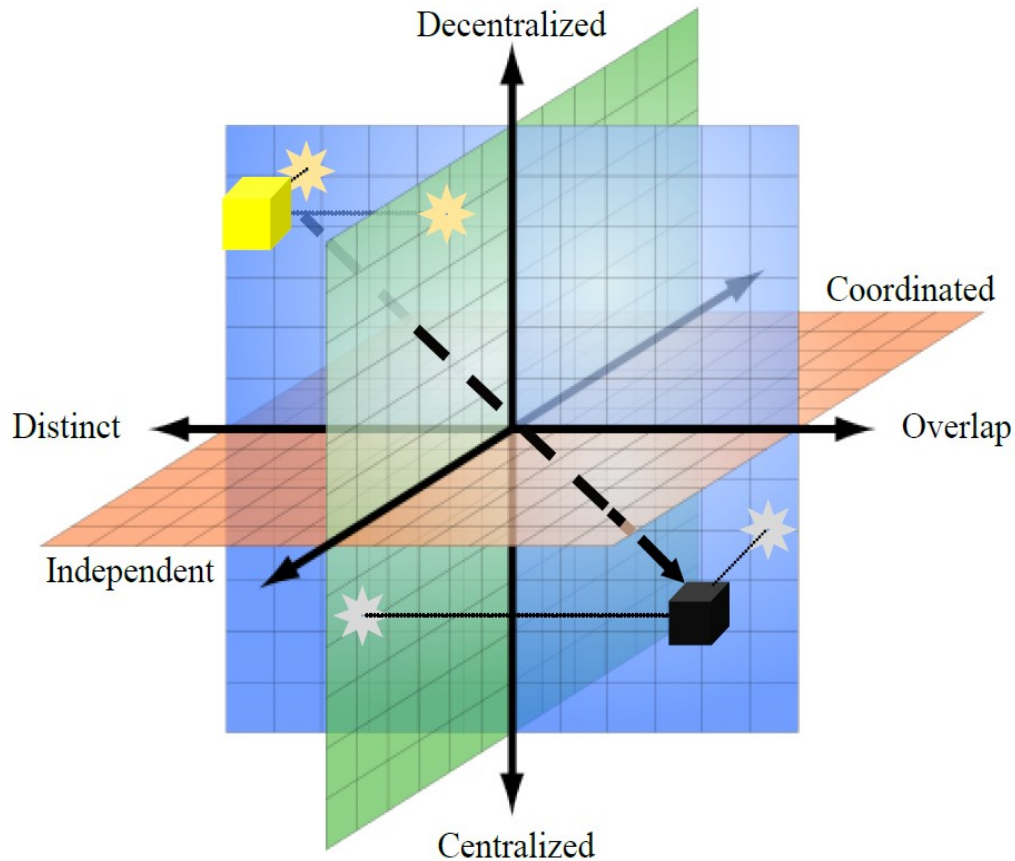
The governance literature also reveals that a regulatory program's fate can be strongly determined by (1) the extent to which authority is centralized, (2) the degree of (both substantive and functional) overlap in authority, and (3) the extent of coordination mechanisms among agencies. Authority can range from very centralized to very decentralized; it can overlap with other agencies (whether within a particular governmental (e.g., national) level or between that level and other levels) or be distinct; and it can require coordination with other agencies or allow independent action.

Policymakers should recognize these features as three *dimensions* of regulatory authority, each on a continuum, as illustrated in Figure 1 below.

### Figure 1

#### Dimensions of Authority

Source: Camacho and Glicksman (2019), p. 32



Each dimension implicates largely different sets of policies and ultimately values tradeoffs, as reflected in Figure 2 below. Significantly, a particular consideration may be addressed along more than one dimension. Concerns about uniformity may be managed by increasing centralization (i.e., reducing the number of potentially conflicting authorities), reducing overlap, or promoting coordination. It is nonetheless the case that each allocation option along the three dimensions raises a different combination of advantages and disadvantages. As such, a comprehensive characterization and evaluation of inter-governmental structural governance should include an assessment of how authority is situated among government institutions along

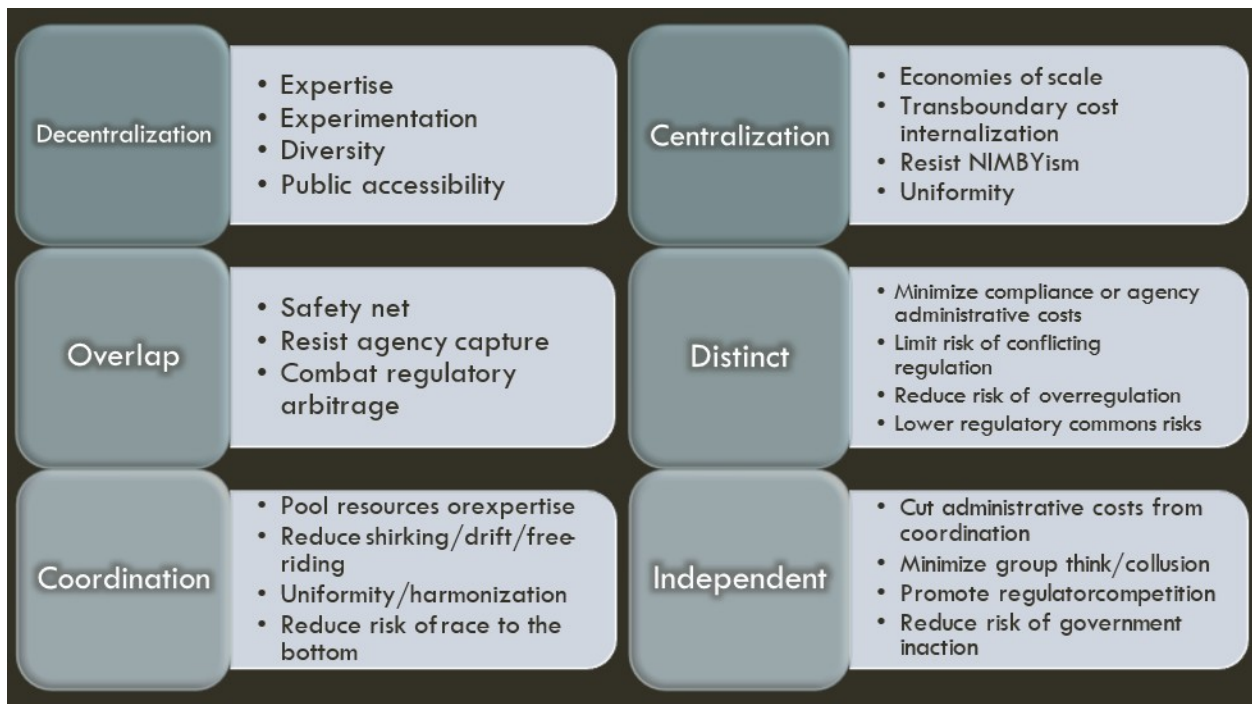


each of the three dimensions—as well as how choices along each dimension affect moves along the others.

**Figure 2**

**Dimensional Policy Tradeoffs**

Source: Camacho and Glicksman (2019), p. 50



1. From Decentralized to Centralized

Decentralized allocations may provide several advantages. Localized authority has the capacity to leverage place-based knowledge and expertise. Wang, Liu and Dang (2018, 460), for example, note that decentralized water governance systems in China “represent a local solution

to local problems.” Decentralization may also facilitate use of diverse and tailored regulatory strategies (Covilla Martínez 2020) and opportunities for regulatory experimentation (Hsueh and Prakash 2012, p. 463). In federalism contexts in particular, decentralized authority may promote public accessibility and facilitating public participation (F.A.O. 2005, 159). Bianculli (2013, p. 551), for example, notes that “[d]ecentralization and devolution within the regulatory landscape require governments to be more responsive to state and municipal demand.”

Different advantages may accompany the use of centralized authority. Centralized institutions may generate economies of scale (Esty 1996, p. 614) or foster uniform policies or legal rules. The United Nations Food and Agricultural Organization, for instance, states that a centralized food safety regulatory system may “allow for a more efficient use of resources” and enforcement of “food measures uniformly across sectors and across levels of government” (F.A.O. 2005, p. 185). Various forms of infrastructure siting have shifted from decentralized to centralized federal regimes as a result of the need to pool resources that outstripped the capacity of decentralized state and local actors (Stein 2011, p. 222). Centralization has also been touted as a way to address a range of collective action problems, such as transboundary spillover harms (Glicksman and Levy 2008, p. 600-01).

Though often thought of as an issue of regulatory scale—i.e., between local, provincial, or national institutions—the degree of centralization is also relevant *within* a particular regulatory scale. For example, after the Ebola virus outbreak, the Obama Administration created a federal Global Health Security and Biodefense Directorate to coordinate pandemic planning at all levels of government (Center for Strategic and International Studies (CSIS) 2019, p. 17; Klain

2020). The Directorate centralized national authority for biological emergencies to take advantage of economies of scale for functions such as information generation and distribution, facilitate control of interstate externalities, and promote equitable distribution of critical medical supplies among the states. At the same time, the administration decentralized planning *within* the federal government to exploit the expertise of different agencies over disparate aspects of pandemic management (such as epidemiological research, medical treatment, and national security) (Playbook 2016, pp. 32-40).

## 2. From Overlapping to Distinct

Overlapping authority occurs only if two or more government institutions have concurrent substantive *and* functional authority (e.g., shared standard-setting authority between regulators over commodities). Overlap can occur between governmental levels or between authorities within a level. Because the extent of overlap is a separate dimension from the scale of authority, both decentralized and centralized regulatory configurations can be either overlapping or distinct.

There are several reasons that policymakers may prefer distinct to overlapping authority. For those concerned about inefficiencies or ineffectiveness that may result from overlapping authority, distinct allocational configurations may be attractive. Overlap can increase administrative costs for regulators and/or compliance costs for regulated entities (Buzbee 2005, p. 126; Freeman and Rossi, 1150; Gersen 2006, p. 214; Marisam 2011, pp. 184, 223). Blanc (2020), for example, argues that “in the United States, a double layer of regulatory approval

made market entry difficult for new suppliers of face masks” during the COVID-19 pandemic. Moving toward more distinct authority thus can minimize the risk of conflicting regulation or overregulation (Buchanan and Yoon 2000, pp. 11–12; Ahdieh 2006, pp. 897–98); Buzbee 2003, pp. 5-6, 51). The overlapping antitrust enforcement authority of the Federal Trade Commission and the Department of Justice, for example, has spurred recurrent calls for elimination of that authority in one agency or the other, despite efforts by the two agencies to divide up responsibilities between themselves (Pitofksy 1981, p. 739; Jacobs 2019, p. 397). Distinct authority may also address the diffusion of regulator responsibility and resulting impaired public accountability that overlap may produce (Schapiro 2008, pp. 812-13).

Overlap, however, has countervailing advantages. Diverse competencies applied to a particular regulatory problem may improve effectiveness (Camacho 2009, pp. 67-8). The duplication established by overlapping authority can be advantageous because multiple jurisdictional authorities may reduce the likelihood of regulatory inaction (Freeman and Rossi 2012, p. 1138; Doran, 2011, p. 1819). This regulatory safety net may be especially attractive to policymakers in regulating high-cost or irreversible effects (Engel 2006, p. 179; Ewing and Kysar, 2011, p. 354). Similarly, overlap can reduce risks of under-regulation and agency capture. (Rex, 2020, p. 280).

### 3. From Coordinated to Independent

This third dimension of inter-governmental structural governance considers the extent and type of interactions between agencies. Cross-jurisdictional coordination can promote a range

of different ends. Particularly in the context of overlapping authority, coordination obligations may offset some of the increased administrative costs by reducing inefficient and duplicative regulatory efforts, as well as risks of inconsistent and conflicting regulation. Mathieu, Verhoerst and Matthys note the potential of coordination to “foster regulatory consistency” (2017, pp. 255, 257), while Abbott & Snidal describe how “reciprocal coordination arrangements” among regulators from different nations may alleviate inconsistent regulation and a destructive regulatory race to the bottom (2013, p. 101). Coordinated authority also can promote access to and integration of resources and/or expertise (Freeman and Rossi 2012, p. 1184). Moreover, coordination may increase cross-jurisdictional accountability (Camacho 2009, p. 74-75) by leveraging regulators as a check on other regulators to combat any tendencies to shirk responsibilities or free ride on the efforts of co-regulators (Freeman and Rossi 2012, pp. 1187-88; Farber and O’Connell 2017, pp. 1420-21).

Definitions of coordination in game theory, resource exchange, contingency theory, and transaction cost economics vary considerably (Macey 2011, p. 2113), and some scholars emphasize only particular components of coordination. Mathieu, Verhoerst and Matthys (2017, p. 259), for instance, focus on the number of regulatory actors involved in measuring the extent of coordination for national regulatory agencies in EU multi-regulatory arrangements. Yet the metrics for characterizing coordination are quite diverse in that coordination mechanisms differ in terms of the degree of formality, duration, frequency, voluntariness, and/or harmonization (Freeman and Rossi, 2012, pp. 1156-57; Farber and O’Connell 2017, p. 1388). On the latter, coordination can range from requirements that governments merely communicate with each

other, to prohibitions on action in the absence of universal consensus, to one agency wielding a veto power over the actions of others (Bradley 2011, pp. 757-58). Blauberger and Rittberger (2015), for example, describe the “orchestration framework” of transnational governance within the European Union, in which the supranational European Commission requires the cooperation of European Regulatory Networks to pursue governance goals directed at national regulatory agencies, through a process of “soft and informal,” rather than hierarchical governance.

Policymakers deciding whether to impose coordination requirements thus are well advised to consider not only whether inter-governmental relationships should be coordinated or independent, but also, if coordination is chosen, what forms are best suited to achieving governance goals. Each form of coordination will have its own set of advantages and disadvantages. For instance, the U.S.’s response to the 2008 financial crash—which involved greater coordination among prudential regulators of depository institutions—foundered in part because the U.S. Congress failed to invest the new federal coordinating entity with sufficient hierarchical authority to mandate adherence by regulatory agencies with uniform risk reduction requirements (Volcker Alliance 2015, pp. 20-21). In other contexts, such as intelligence gathering, information exchanges among the various agencies may be sufficient. In still others, such as permitting, opportunities for agencies with expertise to provide input on pending applications will enhance the information base to which the permitting agency has access in making its decision.

In contrast, independent allocations may be attractive, depending on the nature of the governance problems that provide the impetus for organizational reform. Coordination

mechanisms often add administrative costs to regulatory processes that more independent allocations may avoid. A more independent allocation may also lead to more effective regulation, particularly in the context of overlapping jurisdiction (Duff 2014, pp. 217-19). Allowing each regulator to proceed independently may reduce risks of government inaction, as compared to allocations that require substantial coordination, and even unanimity among multiple entities, before regulation may occur (Heller 1998, pp. 622-26).

Furthermore, according to some scholars, inter-agency or inter-governmental competition has the potential to promote socially optimal regulation (Revesz 1992, pp.1211–12; DeShazo and Freeman 2005; Abbott and Snidal 2013, p. 102). Relatedly, O’Connell details how competition between multiple authorities can inhibit agency collusion or “groupthink” among regulators that may squelch regulatory innovation (2006, p. 1676). Some attribute these competition advantages to decentralized (Cohen, Cuéllar and Weingast 2006, pp. 710-11) or redundant authority (O’Connell 2006). In our view, however, inter-governmental competition is better understood as a feature of regulatory independence, as competition is premised on regulatory autonomy. In other words, highly coordinated decentralized authority is not conducive to efficient competition, while independent allocations among a national government’s agencies can nonetheless be competitive. Similarly, overlapping authority can be highly coordinated or exercised independently, while distinct authority (such as the authority held by sovereign states) certainly can be coordinated (via treaty) or independent.

#### **4. Why Governance Choices Matter: A Few Exemplars**

As academics and policymakers have increasingly appreciated, the manner in which government authority is allocated can significantly affect the likelihood that a regulatory or management program will succeed in achieving the public policy goals it was designed to advance. Unfortunately, experience indicates that one or more of these distinctive features of inter-governmental institutional design discussed above often are overlooked or conflated with one another. The framework introduced in this article can help avoid such missteps.

First, even if scholars and policymakers are attentive to considerations associated with *dimensions* of inter-governmental structural governance, there is a risk that they will conflate them. Abbott and Snidal (2013, p. 107), for instance, usefully consider coordination and centralization, but commingle a lack of coordination among authorities with decentralization—even though fairly centralized authority can be poorly coordinated internally, and decentralized authority can rely on close coordination. Relatedly, scholars and policymakers may fail to appreciate that particular values tradeoffs are most appropriately associated with certain dimensional poles. Blauburger and Rittberger (2015), for example, helpfully emphasize the critical importance of identifying these tradeoffs, but do not distinguish among issues related to the appropriate scale of authority, choices about the extent of overlap in authority, and the coordination among authorities. Misassociating particular justifications for an allocation with the wrong dimensional choice risks creating governance structures that are misaligned with regulatory or management goals and overlooking alternative structures that may be more effective.



Second, it appears not to be sufficiently appreciated that the tradeoffs of different allocations—such as whether authority should be more or less centralized—will inevitably vary not just by substantive area but by governmental *function*. Most proposals to reorganize food safety regulatory authority in the United States, for example, have neglected the possibility of functional differentiation, a mistake not replicated in some countries within the European Union (USGAO 2005). This mistake matters. Neglect of the functional component of delegated authority can prompt mischaracterizations of existing allocations of authority, adoption of governance structures that do not suit the problems they were intended to address, and the undermining of agencies' capacity to carry out their assigned regulatory tasks.

This Part provides examples drawn from a host of regulatory contexts to illustrate the regulatory failures and missed opportunities that may result from dimensional and functional neglect. It explains how disaggregating functions and dimensions of authority in accordance with the framework presented in this article can identify a broad range of available allocational alternatives and clarify the values tradeoffs implicated in choosing among them. It then explores how an integrated analysis of the various functions and dimensions of inter-governmental authority can help policymakers in choosing structural configurations that are better tailored to promoting the values they deem most salient and addressing the regulatory risks they most wish to avoid.

A. Differentiating Among Dimensions

Fully informed structural choices require evaluation of the implications of situating inter-governmental authority along all three dimensions. If analysis focuses on the advantages and disadvantages of situating authority along only one dimension, the full range of values tradeoffs implicated in dimensional choices will escape consideration. Further, if policymakers misunderstand the characteristics of these dimensions, they are likely to conflate them, thus masking the values tradeoffs of available structural options and the need to prioritize regulatory goals when those values conflict. This section provides examples of situations in which policymakers have fallen into these traps and briefly discusses the resulting adverse consequences.

1. Conflation of the Centralization and Coordination Dimensions

Dimensional conflation can both mask available structural options and produce efforts to restructure inter-governmental authority that are not responsive to the problem that prompted the restructuring initiative. One common mistake has been to conflate the centralization and coordination dimensions. If policymakers' concerns are best associated with a lack of coordination among multiple regulators, the responsive solution should be to increase the degree of coordination, not to create more centralized (or decentralized) authority. Yet, policymakers have at times addressed their perception of inadequate coordination by merging or centralizing authority.

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A striking instance of conflation of these two dimensions arose in the wake of the 9/11 terrorist attacks in the United States. The 9/11 Commission created by the U.S. Congress to determine whether U.S. intelligence-gathering failures contributed to the attacks, concluded, as did others, that the failure to thwart the terrorists was due at least in part to (1) poor communication among the various arms of the national security intelligence-gathering apparatus, (2) a lack of consistency and harmonization within the intelligence community in collecting and circulating information, (3) information gaps, and (4) the absence of cooperation, or even the presence of adversarialism, between fellow agencies (Camacho and Glicksman 2019, pp. 155-57). Though these problems in information generation, dissemination, and analysis reflect a lack of coordination, the U.S. Congress's response largely focused on centralizing these information-related functions by enacting the Intelligence Reform and Terrorism Prevention Act (IRTPA). IRTPA centralized authority over some aspects of intelligence information management in a newly created Office of the Director of National Intelligence (ONDI).

This dimensional conflation resulted in a mismatch between the problem identified by the 9/11 Commission and the solution Congress provided. Mandating better coordination would have been a logical response to poor communication and lack of harmonization among the intelligence agencies. Coordination can also reduce the risk of shirking, plug information gaps, and replace adversarial competition with a sense of shared mission. While centralization can redress inefficiencies by achieving economies of scale, that was not the root problem identified for U.S. intelligence failures. Centralizing instead of coordinating authority not only failed to address the problems at which IRTPA was directed; it also negated the benefits of

decentralization, such as diversity of approach and experimentation, both of which are desirable in the gathering and analysis of intelligence information (Negroponte and Wittenstein 2010, p. 403; Fingar 2017, p. 186). It also undermined the accountability advantages that coordination is well suited to promoting.

## 2. Conflation of the Centralization and Overlap Dimensions

Conflating the centralization and overlap dimensions may also produce a misaligned set of problems and solutions. For example, if an existing allocation of regulatory authority raises concerns that are associated with too much overlap (such as the existence of duplicative inefficiencies), reallocations along the centralization dimension are not likely to address those concerns effectively. A relatively early example of this phenomenon is reflected in a high-profile commission engaged in detailed study of agency organization headed by former President Herbert Hoover. The commission identified overlapping governmental services as a substantial source of waste, confusion, and inconsistency in a range of substantive regulatory areas, including banking and food safety regulation (U.S. Commission on the Organization of the Executive Branch of the Government 1949, pp. 250-51, Appendix N 116). However, in each case, the only allocation of authority that it recommended was the consolidation of such authority. It never mentioned an alternative suite of reorganization alternatives that seems at least as well suited to addressing the diagnosed problem—creation of more distinct authority. Centralization may have some value in reducing inconsistent regulation by multiple regulators—although centralized configurations can still involve substantial overlapping intra-agency authority, so that increasing the extent of centralization may do little to address identified

problems associated with such overlap. Centralization also has the potential to eliminate waste if multiple regulators exercise overlapping authority. But the creation of more distinct authority among multiple regulators can achieve these same results, while preserving the benefits of diversity, experimentation, and expertise benefits of decentralization. Distinct authority could have taken the form of retention of multiple authorities, each assigned a relatively distinct function in a particular substantive area; the allocation of distinct functions to different agencies; or some combination thereof. Conflation of the overlap–distinctness and decentralization–centralization dimensions masks this option.

It is worth noting that the kind of comparative approach to institutional design we endorse here can also reveal alternative configurations that may be more politically viable than others. Bressman and Gluck (2014, p. 728) have reported that, according to U.S. congressional staff members, “statutes are sometimes drafted in contorted ways to guard committee jurisdiction and agency oversight.” Accordingly, legislators intent on retaining oversight authority over regulators may be more comfortable with solutions aimed at minimizing duplicative authority that adjust the levels of overlap among multiple regulators than they are endorsing centralizing legislation that entirely eliminates some agencies.

### 3. Conflation of the Overlap and Coordination Dimensions

Conflation of the overlap and coordination dimensions is also problematic. If, for example, an existing overlap in regulatory authority raises concerns about duplicative inefficiencies and conflicting regulation, the obvious fix is not increasing coordination (or

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independence). Those are options that relate to a separate dimension whose poles promote different values than those of the overlap-distinct dimension.

The evolution of banking regulation in the United States provides a nuanced example of the risks of conflating the overlap and coordination dimensions. In the wake of the financial crash of 2008, the U.S. Congress sought to improve financial regulation by enacting Title I of the Dodd-Frank Act (2010). Legislators and financial regulatory experts consistently attributed three problems to excessive overlap in the authority of the existing prudential financial regulators: (1) wasteful duplication of effort; (2) inconsistency in regulatory treatment of financial institutions; and (3) regulatory arbitrage (the ability of depository institutions to structure their transactions or choose their charters in ways that subjected them to one regulator rather than another) that induced a race to the bottom among prudential regulators and enhanced the risk of individual firm and systemic failure (Coffee and Sale 2009, p. 716; USGAO 2007).

Congress' puzzling response was to increase the degree of overlap by adding yet another agency, the Financial Stability Oversight Council (FSOC), to coordinate the regulatory efforts of the existing prudential regulators. As we explain in section 4B2 below, certain tailored forms of coordination are capable of at least partially addressing some of the inefficiency and inconsistency problems caused by excessive overlap. Dodd-Frank, however, did not delegate to FSOC any authority to dictate regulatory approaches to pre-existing prudential regulators. More importantly, if the inefficiency and inconsistency associated with overlap was the identified regulatory problem, the most direct way to address it would have been to create more distinct authority by either (1) allocating exclusive responsibility for prudential regulation of each

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depository institution to one federal agency, or (2) assigning to each prudential regulator the responsibility of implementing different regulatory functions. Instead, by adding yet another layer of regulation and doubling down on overlap, Congress exacerbated rather than alleviated these overlap problems (U.S. Chamber of Commerce 2011, p. 10)).

Another aspect of banking regulation under Dodd-Frank reflects conflating of the different ends of the *same* dimension. The third inducement for the adoption of Dodd-Frank was a concern over regulatory arbitrage and related agency capture risks. Many who analyzed the 2008 financial crisis attributed regulatory arbitrage to the existence of overlapping authority. Others had previously linked arbitrage to overlap (e.g., Barth 2002, pp. 166, 185). These analyses confuse the attributes of the two poles of the overlap dimension (Bipartisan Policy Center 2014, p. 30). A rational response to concerns of arbitrage opportunities by regulated lenders would be to create *more* overlap, such as by subjecting each financial institution to substantive supervision by multiple, overlapping prudential regulators. Doing so creates a safety net, so that a depository institution's choice of lenient treatment from one regulator would not disable another, more aggressive regulator's authority. Of course, creating greater overlap in the wake of the 2008 crash would have risked exacerbating costs from duplicative effort and conflicting regulations. But that may have been a price that those more concerned about arbitrage (and resulting weak regulation) than about duplication and conflicting regulatory requirements would have been willing to pay. The upshot of Dodd-Frank's organizational fixes was to create a regulatory framework that, at least according to one banking regulation expert, is "unlikely to prevent future failures of [systematically important financial institutions] and their accompanying

pressures for governmental protection of systemically important creditors” (Wilmarth 2011, pp. 1014-15).

B. Differentiating Among Governmental Functions

Another common mistake that can interfere with successful implementation of regulatory programs is assuming that allocations of authority must or should be the same for all the functions that regulators perform. Instead, the policy tradeoffs of an allocation of authority will typically vary for different governmental functions.

Failure to tailor allocations along each dimension on a function-by-function basis can contribute to several missed opportunities. Not appreciating that allocations of authority may vary by function may prompt mischaracterizations of where an allocation lies along a particular dimension. A program that allocates authority over all functions to a single entity, for example, is more centralized than one, like the federal pollution control regulatory programs in the United States under which some functions are delegated to the federal government and others to the states. Because tradeoffs among conflicting regulatory goals or values will often vary by function, foregoing functional analysis may prevent recognition of opportunities to maximize the net advantages of available organizational options. Finally, functional allocations can enhance the feasibility of regulatory reform by bypassing wholesale reconfigurations to which entrenched political interests may object.



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### 1. Functional Allocations and the Centralization Dimension

A recurring assumption is that all aspects of addressing a particular social problem must either be centralized or decentralized, instead of considering whether it makes more sense to centralize some functions and decentralize others. Allocation of authority in the United States to assure the safety of the food supply provides a long-running example of policymakers' inclination to neglect the possibility (and tradeoffs) of differential functional allocations. The U.S. national food safety regulatory regime is largely decentralized. For decades, scholars and policymakers have called for greater centralization of food safety regulatory authority across the board (Merrill and Francer 2000, pp. 115-19, USGAO 2005a, p. 5; Safe Food Act 2015). As policymakers outside the U.S. have recognized, however, in the food safety arena and more generally, centralizing some but not other regulatory functions may produce greater net regulatory advantages. The World Health Organization, for example, urged member governments to consider creating a national food agency responsible for funding, policy formulation, risk assessment and management, development of standards and regulations, and auditing, while assigning responsibility for inspection, enforcement, education, and training to multi-sectoral agencies (F.A.O. 2005, pp. 185-86).

The value of allocating authority on a function-by-function basis along the centralization dimension is well illustrated by considering the appropriate configuration of authority for information generation and dissemination versus information analysis in food safety regulation. Centralized scientific research and data *generation* about food safety risks makes eminent sense. Data collection by the many U.S. agencies currently engaged in food safety research makes it

difficult to integrate information that facilitates tracing food-borne illnesses; hinders data standardization and information-sharing; and creates a risk of persistent data gaps. (Vinik 2016; National Academies of Science 2010). Centralization can also generate economies of scale, mitigate collective action problems (such as free riding), spur synergistic insights from research across different food safety problems, and increase accountability for research successes and failures. Likewise, centralization of information *dissemination* can promote economies of scale and uniformity in messaging. Centralization is particularly likely to be a good choice when speedy dissemination is critical, such as in informing the public and those responsible for pandemic response about the nature of public health risks and of strategies to reduce those risks. Centralized information *analysis*, however, is likely to be more problematic. Two core advantages of decentralization are that it allows for diversity of approach and enhanced capacity for experimentation. Multiple agencies may draw different insights from interpretations of the same data, generating novel policy approaches. Many of the repeated calls by policymakers and food safety experts for centralization of *all* food safety regulatory functions in the United States (Merrill and Francer 2000, pp. 118-19) fail to appreciate these advantages of decentralized information analysis, even if centralized information generation is desirable.

## 2. Functional Allocations and the Coordination Dimension

As with the other two dimensions, the balance of the tradeoffs associated with allocating coordinated or independent authority is likely to differ depending on the governmental function involved, as well as factors that include the regulatory context and—if policymakers choose to require coordination—the type of coordination they select. In some situations, a formal and strict

coordination requirement of one function will provide efficiency and policy effectiveness gains that justify the administrative costs of coordination and the risk of groupthink that may stifle innovation. For a different function and in other regulatory contexts, however, the balance may point to less formal or strict forms of coordination (i.e., communication or required response to comments), or even independent authority if policymakers put a premium on avoiding groupthink or promoting inter-agency competition for a function such as information analysis.

Environmental impact assessment (EIA) provides a useful lens through which to understand the importance of tailoring allocations based on regulatory function. Evaluations of the performance of EIA laws often focus on whether coordination is excessive or insufficient. But these assessments tend not to distinguish among functions. Some countries, such as Germany and the United States, require coordination only over EIA-related planning, information generation, and information analysis, but not for other functions such as post-implementation monitoring. (Kepler et al. 2012). As some have observed, “[o]ne important aspect of the EIA process—not as commonly pursued by those preparing EIAs as others—is the monitoring of the project post implementation” (Cassar and Bruch 2003, p. 176 n.21).

Requiring coordination for planning, information generation, and information analysis but not for project implementation may make sense due to the lower administrative costs of coordination for information generation and planning as compared to the greater cost burden likely to be associated with coordinated implementation. The rationale for excluding implementation from coordination obligations might be that individual agencies will, armed with

the planning and information generated through coordination, make better implementation decisions independently than collectively.

But there are good reasons to require coordination of additional functions, particularly information dissemination and post-decision monitoring (Appiah-Opoku and Bryan 2013). Some countries, such as South Korea and Ghana, require coordination of information dissemination, implementation, or monitoring in their EIA laws (Ibid). South Korea, for example, requires that projects subject to EIAs be covered by a plan that requires the operator to keep a performance log of compliance with agreed terms and conditions and post-implementation surveys (South Korea Environmental Impact Assessment Act 2017). Requiring coordination in the gathering and analysis of information on environmental effects between the agencies reviewing development proposals and agencies with scientific expertise (such as wildlife agencies) can pool expertise and promote accountability (allowing those with expertise to serve as a check on development-oriented agencies which may be inclined to downplay unanticipated adverse effects). This kind of coordination can help negate the advantages of coordinated pre-project evaluation by providing feedback on the outcome of those earlier coordination efforts.

Even if the tradeoffs favor reliance on coordinated authority for various governmental functions, further analysis may suggest that different *forms* of coordination are desirable for disparate functions. The Trump Administration's failed efforts to minimize illness and loss of life during the Covid-19 pandemic was due largely to its failure to coordinate either the planning or plan implementation functions within the federal government or between the federal government and states and localities (Klain 2020; Oprysko 2020). But the forms of coordination that would

have been well-suited to redressing these deficiencies differed for the planning and implementation functions. Horizontal coordination in pandemic *planning* between co-equal authorities would have facilitated resource pooling and allowed the coordinating officials to draw on the disparate expertise of various federal, state, and local authorities (Robbins, Robles and Arango 2020). However, more hierarchical *implementation* of pandemic planning, in which one agency or level of government has authority to dictate actions and strategies by its partners, is more likely to mitigate duplication, conflict, inaction, and blame-shifting that may result from overlapping authority. This approach might be particularly valuable for aspects of pandemic response requiring rapid action, such as distribution of testing equipment or vaccines. Hierarchically coordinated federal leadership also would have reduced interstate competition for medical supplies that drove up prices and allocated supplies in ways that did not correspond to the urgency of need (Olorunippa, Dawsey and Abutaleb 2020).

### 3. Functional Allocations and the Overlap Dimension

Attention to governmental function is especially important in assessing the appropriate extent of jurisdictional overlap. If scholars or policymakers fail to parse functions in characterizing the extent of overlap, they may incorrectly identify overlapping authority simply because two government agencies have the same general substantive jurisdiction—even if the agencies possess distinct functional authority. Conversely, some observers characterize authority as distinct notwithstanding the presence of significant overlap.

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The operation of federal systems, such as the federal pollution control laws in the United States, is a useful example of the latter kind of mischaracterization. Some accounts of “cooperative federalism” characterize it as a distinct division of functions between federal and decentralized authority (Williams 2013, p. 1050). Justice Kennedy’s description of the Clean Air Act in a case involving the statutory program for preventing deterioration of clean air resources is an example, as he erroneously described certain regulatory functions as nearly exclusively federal in character (Alaska Department of Environmental Conservation 2004). Distinct allocations of functions under environmental cooperative federalism regimes are actually quite rare (Camacho & Glicksman, pp. 81-82). Rather, such regimes usually are a mix of overlapping authority, though the extent of overlap varies (with federal primacy over some functions, co-equal authority over others, and primacy by more decentralized authorities over still others). For example, under many United States pollution control statutes, the federal Environmental Protection Agency (EPA) is charged with primary responsibility for carrying out functions such as information gathering and standard setting, but states typically have the capacity to adopt standards that are more stringent than EPA’s. States carry the load on functions such as permitting and implementation, but EPA continues to have a significant oversight role. And enforcement authority is typically shared between the two levels of government (Percival 1995, p. 1146). Ignoring functions can thus mask the nature and extent of overlap. Functional analysis would enable policymakers to explore and ultimately leverage opportunities to create structures that best accommodate the advantages and disadvantages of overlapping and distinct authority. Distinct authority may be a good choice, for example, for collection of data on the health risks of exposure to pollutants to avoid the administrative costs that result from duplication of effort.

Overlapping authority may be attractive for functions, such as pollution control standard setting, for which policymakers deem the safety net and anti-capture advantages of overlapping authority to be important. Indeed, differing the allocation of distinct or overlapping authority by function has proven beneficial in the efforts of some federal systems, such as in Germany, to manage the Covid-19 pandemic (Saurer 2020).

Moreover, as some scholars have recognized, functional analysis may help determine the optimal *degree* of overlap, given that the choice between overlapping and distinct authority is not binary (Jacobs 2019, p. 397; Freeman and Rossi 2012, p. 1145). Such determinations will inevitably require tradeoffs, which functional analysis can highlight. For example, policymakers might choose to vest primary pollution control enforcement authority in the states, as the U.S. Congress has done for certain air pollution and hazardous waste infractions, in order to reduce the administrative costs and inefficiencies of redundant authority and to minimize the potential for conflicting enforcement mandates. At the same time, they might preserve limited overlapping authority for federal oversight and supplementation to protect against inaction or inadequate enforcement by state regulators. Effective assessment of the value of such adjustments is enriched by considering the tradeoffs of different degrees of overlap for each function.

#### C. Holistic Consideration of Dimensional and Functional Considerations

As explained in sections 4A and B above, consideration of the dimensional and functional aspects of inter-governmental authority can help identify opportunities to leverage advantages and minimize disadvantages of each dimensional pole on a function-by-function basis to fit the needs of the particular regulatory program. Yet structural design analyses

inevitably benefit not only from deconstruction of the dimensions and functions of authority, but also from holistic consideration on a function-by-function basis of the interactions among all three dimensions. As detailed in the next two subsections, holistic analyses can help weigh the effectiveness of alternative configurations at promoting prioritized regulatory values, and cross-dimensional adjustments may help mitigate some of the disadvantages of allocations along one dimension while preserving its advantages.

1. Evaluating Value Choices and Context through Integrated Analysis

The holistic analytical framework described in this article clarifies how allocation choices affect regulatory values. Nonetheless, policymakers and researchers inevitably will have to prioritize potentially competing values in designing and assessing institutional allocations. Whether one finds a particular configuration convincing is likely to depend in part on such prioritization. A holistic analysis will facilitate consideration of how alternative allocations reflect different ways to balance the values of situating authority at different points along the three dimensions on a function-by-function basis.

An integrated analysis also provides opportunities to identify how context and the nature of the governance challenge can and should shape allocational choices. The disparate risks and tradeoffs implicated by the three governance challenges associated with climate change adaptation, mitigation, and geoengineering, serve as a valuable illustration. Mitigation strategies seeking to limit greenhouse gas emissions provide environmental benefits that range from global to local in scale, but the economic harms caused by such regulation tend to be localized (Siegel



2010, p. 259). These characteristics likely point to (1) centralized standard setting, supplemented by state and local authority; (2) overlapping state and federal authority for functions for which it is desirable to create a safety net that allows regulatory action by one agency in the event of inaction by another; and (3) independent authority for functions such as standard setting and enforcement, but coordinated mechanisms for functions such as research funding and information dissemination to promote efficiency.

In contrast, adaptation actions for managing the effects of climate change tend to be deployed locally and largely involve local benefits because local climate effects are uncertain and vary substantially (Ruhl 2009, p. 423). These characteristics suggest (1) a primarily decentralized infrastructure for most governmental functions (Corfee-Morlot et al. 2011, pp. 30-31), (2) limited overlapping authority (with federal primacy) of key functions such as standard setting to exploit redundancy while minimizing inefficiencies (Ruhl 2009, p. 425), and (3) inter-jurisdictional coordination to help manage cross-jurisdictional effects. Finally, large-scale geoengineering initiatives seeking to alter the global climate can be deployed unilaterally by even a single individual and are likely to be spurred by the promise of local environmental and economic benefits (Victor 2008, p. 328). Yet these initiatives pose global environmental risks from untried, irreversible, and potentially catastrophic technologies. These risks generally suggest (1) centralized control of research and deployment (Long 2013, p. 177), (2) overlapping authority to create a safety net to guard against imprudent deployment, and (3) international coordination to minimize deployment by solitary institutions (Garg 2014, p. 216).

Because these three aspects of climate governance differ in terms of the nature of the problems (and the approaches most likely to resolve them), the values tradeoffs that are likely to drive policymaking are also likely to differ. As a result, a configuration that makes sense for one aspect of climate change will not be a good fit for another. In short, holistic analyses of allocations of authority allow policymakers to vary configurations to meet the nature of the social risk being addressed.

## 2. Offsetting Dimensional Disadvantages with Other Design Choices

In addition, this kind of holistic analysis of regulatory design options presents at least two design opportunities. First, it facilitates identification of configurations that mitigate the disadvantages of allocating authority on one *dimension* by allocating it differently for *different functions*. Functional differentiation along the overlap/distinct dimension is illustrative. As Figure 2 above shows, overlapping authority can increase regulatory effectiveness and accountability. However, it creates the risk of inefficiency through duplication of effort and of inconsistency in the approaches taken by multiple regulators. In addressing functions such as standard-setting and enforcement, for which the creation of a regulatory safety net and a hedge against agency capture are deemed important, overlapping authority may often be a sensible choice. Authorizing overlapping authority in pandemic planning, for example, can leverage safety net advantages. For other functions, such as emergency pandemic response measures, avoiding conflicting regulation, duplicative inefficiencies, or conflicting mandates may be more salient. Similarly, requiring multiple levels of government to assess and distribute information on basic scientific questions such as what levels of a pollutant first trigger serious health risks can

yield undesirable duplication of effort. Holistic analysis allows policymakers to strategically allocate more overlapping authority for functions for which redundancy is most advantageous, while minimizing its disadvantages by making other functions more distinct.

Second, integrated analysis of both the dimensional and functional aspects of the framework introduced here also may mitigate some of the disadvantages of allocating authority along one *dimension* through adjusting the allocation chosen along a *different dimension*. Coordination, for example, could have mitigated harm from Colombia's decentralized pandemic response, which was plagued by a lack of consistency among local government responses, while maintaining decentralization's advantages of regulation that is tailored to local conditions (Covilla Martínez 2020). Similarly, coordination can help mitigate some of the disadvantages of overlapping authority, while preserving overlap's safety net and anti-capture advantages. Concerns about excessive overlap can be most directly addressed by reconfiguring authority so that it is more distinct; but some of those concerns (such as duplication of effort and potential for conflicting regulation) may also be mitigated by retaining overlap but requiring greater coordination among multiple authorities. In Switzerland, for example, multiple cantonal officials have authority to respond to a single food safety emergency, which provides a hedge against inaction by a single regulator but creates a risk that one canton's action will interfere with another's response to the threat. The establishment of an information and communication system to coordinate among cantonal officials has helped minimize that risk, especially with respect to emergency responses (World Health Organization 2001, p. 22). Likewise, scholars have noted

the potential for coordination among bank regulators to address problems resulting from overlapping authority due to market convergence (Godwin 2016).

Of course, each such allocation choice entails tradeoffs. Though coordination mechanisms may serve to reduce some of the redundancy or inconsistency disadvantages of overlap, they may be costly to implement. On the other hand, more distinct authority avoids those costs, and also has the capacity to avoid administrative redundancy and conflicting mandates, but it eliminates the safety net and anti-capture advantages of overlapping authority. Whether more distinct or more coordinated authority is preferable thus will inevitably depend on policymakers' priorities, such as whether it is more important to minimize administrative costs by creating distinct authority or provide a check on the risk of inadequate action by a single regulator.

## **5. Conclusions**

Despite an expanding body of important scholarship on intergovernmental relationships, evaluations of the successes and failures of past allocations of governance authority too frequently do not address the full range of design options and the policy implications of choosing among them. Moreover, scholars have noted a general paucity of “empirical investigation into the creation and design of public institutions” (Moynihan 2004, p. 3). As long suggested by legal realists, empirical analysis of legal decision making—and the design of public institutions—is vital to understanding and improving governance (Calabresi 2003, p. 2121 n. 33; Cummings 2017, p. 1568; Erlanger et al. 2005). However, such empirical inquiries are primarily effective if

embedded in a “theoretical framework for making their empirical findings relevant to normative legal scholarship” (Fischman 2013, p. 119-20). The novel analytical framework for characterizing and assessing government dimensions and functions briefly summarized and illustrated in this article can help systematize analysis by policymakers and scholars of alternative structural configurations so that they are more likely to identify the full range of design options available for addressing a particular social problem and to carefully parse the policy tradeoffs in choosing among them.

The framework also provides an important foundation for the accumulation of *future* empirical work by scholars and policy analysts into the tradeoffs of alternative allocative configurations. The taxonomy introduced here sets the stage for many possible avenues for social science scholars and policy analysts to assess empirically the efficacy of prior, current, or future allocations or reallocations of authority. Indeed, emerging studies have begun to explore the implications of this or similar frameworks in contexts such as biodiversity conservation (Camacho 2020), climate adaptation (Kaswan 2014), energy (Jacobs 2021), public health (Camacho & Glicksman, 2021), housing (Lewis & Marantz 2021), transportation, and stormwater management (Camacho & Marantz 2020). Further studies could focus, for example, on the effectiveness of overlapping enforcement as a safety net in financial markets or pollution control. Others could explore the tradeoffs of inter-jurisdictional coordination in research and data gathering as compared to information distribution. Another promising inquiry would be to explore the relative efficacy of centralized and decentralized approaches to various aspects of pandemic management, such as planning for and distribution of critical medical supplies. In a

range of contexts, future regulation and governance scholarship can provide useful evidence about the tradeoffs of organizational alternatives, allowing scholars to posit alternative institutional changes based on these evaluations.

The inter-governmental structural governance empiricism we call for here supports, and in turn is reinforced by, regulatory experimentalism (Nourse and Shaffer 2014, pp. 179-80). Policymakers should consider establishing a public infrastructure dedicated to systematic analyses of the design of public institutions. The growing literature on regulatory experimentalism (Erlanger et al. 2005 p. 357; Nourse and Shaffer 2014, p. 146) and socio-ecological scholarship advancing reliance on adaptive governance (Cosens et al. 2017; Craig and Ruhl 2014, p. 17) suggest the pragmatic benefits of integrating provisional authority, monitoring, and adaptive management into regulatory processes. Most of that literature, however, focuses on improving the adaptability of regulatory processes, rather than governance structure or the relationships among public institutions.

*A structural adaptive governance* infrastructure can embed continued assessment of existing regulatory allocations (principally overseen by an insulated national or international authority) within governmental systems. Such a mechanism would assist policymakers in thinking systematically about inter-governmental allocations of authority in ways that facilitate identification of alternative structural options and their comparative advantages and disadvantages. This kind of infrastructure would build on the distinctive foundations of administrative law, which conditions legislative delegations of policymaking authority to administrative agencies with expertise over the matters committed to their jurisdiction on the

obligation to provide reasons for their actions that courts may evaluate to ensure congruency with the underlying delegation of authority and to promote democratic accountability (Shapiro and Levy 1987). Taken seriously, this approach to policymaking would also foster debate, reasoning, and deliberation on allocations by policymakers at all levels of government. Doing so might increase the salience of informed policy analysis in legislative deliberations over proposals to structure or restructure inter-governmental relationships.

Authority for such a learning infrastructure might preliminarily be configured to leverage the different structural tradeoffs raised by information generation, distribution, and analysis. In particular, information generation might best be allocated primarily to a relatively independent and politically insulated governmental institution that is fairly centralized to leverage uniformity and economies of scale advantages. Such authority would necessarily overlap, and its exercise would need to be coordinated with the public institutions assessed under this regime. Meanwhile, information distribution might be more appropriately centralized, independent, and distinct in the new institution to minimize inefficiencies. Authority over information analysis might be more appropriately dispersed among a variety of institutional actors through decentralized, overlapping, and coordinated authority for broad appraisal and critique. Through such an infrastructure, policymakers in many jurisdictions can learn from both effective and ineffective ventures and use the resulting insights to adjust allocations over time (Camacho 2009).

The comprehensive dimensional and functional framework provided in this article undoubtedly requires the inclination and resources to engage in complicated and thoughtful analysis. The alternatives, however, include continued reliance on improvisation or abandonment

of any pretense of reasoned decisionmaking. Prior misallocations of authority suggest that it is possible, and desirable, to do better, and future regulation and governance scholarship focused on the functions and dimensions of authority can play an important role in contributing to policymakers' understanding of the options for designing inter-governmental relationships in ways that improve government's performance.

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