Laws as Blades

A Conceptual Framework of Legislative Design

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Legislation shapes every aspect of public life and stands at the core of governance. Despite sustained attention on a variety of aspects of legislation, we still lack a comprehensive and integrated framework of legislative design. To address this gap, we introduce a novel conceptual framework that analyzes legislative design along two dimensions—*versatility* and *precision*—using six indicators: objects, subjects, instruments, dilution, derogation, and delegation. Taken together, these two dimensions offer four ideal types of legislative design which we conceptualize using the metaphor of blades. Some laws resemble Swiss army knives, highly versatile and precise; others are scalpels, precise but narrowly scoped; machetes are versatile but imprecise; and scythes are imprecise but focused. We demonstrate the validity of our framework by applying it to environmental and macroprudential legislation in the European Union, identifying laws that approximate each ideal type. By focusing on the internal architecture of legislation, our framework offers a tool to comparatively analyze legislative design across policy domains, institutional settings, and time.

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Legislation is all around us. When people apply for parental allowances, when they smoke a cigarette in public spaces, or when they buy meat in a grocery store—people are invariably bound by the power of the law. Legislation is therefore the primary vehicle through which governments translate political preferences into binding rules, yet not all laws are designed in the same way. Beyond the question of how much policy output governments produce (Adam et al. 2019, 2022) lies the equally substantial and consequential question of how laws are crafted; whether they are broad and multifunctional or narrowly focused and precise. In this article, we address this research gap by answering the crucial research question of how we can conceptualize and compare the policy substance contained in democratic legislation in a way that allows us to track and compare this policy substance across policy domains, institutional settings and time. To this end, we deliver a new typology of legislative design and demonstrate its value by applying it qualitatively to a small sample of environmental and financial policies in the European Union (EU).

This is an important endeavor for several reasons. First, the design of legislation affects implementation by bureaucracies, compliance of people and agencies, and the capacity of governments to adapt policy to complex, dynamic challenges (see e.g., Capano and Lepori 2024; Fernández-i-Marín, Knill, and Steinebach 2021; Howlett and Mukherjee 2020). Accordingly, understanding how democracies design legislation carries substantial normative relevance.

Second, though much existing research has examined determinants of legislative productivity (e.g., Bergman et al. 2024), comparatively little attention has been paid to the architecture of laws themselves (see Fernández-i-Marín, Knill, and Steinebach 2021 for an important exception). Moreover, analyses of legislation are often narrowly focused in their temporal, geographical, or substantive context and, as a result, commonly use conceptual approaches that are tailored to specific research questions. For example, scholars of social policy often focus on matters of generosity and (re-)distribution (e.g., Esping-Andersen 1990), scholars of environmental policy often study the design of regulatory instrument mixes (e.g., Steinebach 2022), and scholars of tax policy largely focus on the existence of loopholes, derogations, and complexity (e.g., Hoppe et al. 2023). Similarly, most theories of the policy process continue to conceive of the policy subsystem as the core venue in which

legislation is formulated, negotiated, and evaluated. Though this analytical focus on the subsystem level has led to major breakthroughs in how we understand and explain policy design and change (Baumgartner and Jones 2009; Howlett and Ramesh 1998; Sabatier 1998), the lack of cross-fertilization across these 'subsystemic silos' implies a failure to understand broader dynamics that govern the design of democratic legislation more generally.

Third, design choices have several important implications for legislation. For example, the structure, clarity, and flexibility of a law might help determine its long-term trajectory. Laws that are specified with precise definitions and clearly delineated responsibilities may be more resistant to frequent amendments or judicial reinterpretation, providing stability and predictability in governance. Broadly applicable but imprecise laws may be produced by policymaking processes that engage multiple stakeholders who want more breadth, also carving out greater discretion for bureaucratic groups. In such a scenario, we might also expect that these laws are particularly resistant to change. Alternatively, imprecise laws may allow for greater adaptability in response to changing circumstances, while also being more vulnerable to contested implementation, legal challenges, and political disputes. Systematically investigating legislative design using the framework proposed here can therefore help explain why some legislation endures and other laws are revised or overturned. In doing so, we position legislative design as a consequence of institutional arrangements, legal settings, and political pressures.

Addressing these challenges requires a conceptual approach that identifies the design of democratic legislation at a more abstract level than in the extant literature. We therefore conceptualize legislative design along two core dimensions: *versatility*, the breadth of subjects, objects, and instruments a law encompasses; and *precision*, the degree to which its provisions contain dilution, derogation, and delegation. These dimensions capture fundamental trade-offs in lawmaking; whereas versatile laws promote integration and coordination across policy issues at the risk of complexity, precise laws provide clarity and predictability at the cost of flexibility. We illustrate this typology using a metaphor of blades as ideal types of legislative design. Blades differ in shape, size, and sharpness—qualities that determine both their versatility in performing general or specialized tasks

and their precision in making delicate or crude cuts. Like blades designed for different cutting tasks, laws vary from highly versatile and precise *Swiss army knives*, precise but hardly versatile *scalpels*, versatile but imprecise *machetes*, to low-versatility and imprecise *scythes*. Our framework therefore offers a systematic and broadly applicable vocabulary to analyze how legislatures design the scope and specificity of legislation, allowing researchers to compare legislative design from individual legal provisions, to the entire law, to the broader policy domain, all the way up to the political system at-large.

In what follows, we first discuss the underlying conceptual considerations that we use to develop our novel typology of legislative design. Next, we discuss the indicators' operationalization and show how they contribute to our overarching dimensions of versatility and precision. We then show that combinations of versatility and precision produce four ideal types of legislative design that we liken to different types of blades. Next, we apply our framework empirically, including a comparative assessment of different legislative designs. Specifically, we demonstrate the applicability of this framework using eight EU laws across two policy domains—environmental and macroprudential financial policy—that serve as an initial validation against these ideal types. In the conclusion, we argue that our conceptual framework can be thought of as a "navigation system" to address a broad range of theoretically and normatively relevant research questions on the variance of legislative design across space and time, as well as the origins and consequences of those designs.

Towards an Integrated Perspective on Legislative Design

Legislative design reflects both the substance and the form of the law (Piris 2005). In the legal literature, design is often operationalized along a continuum of "quality"; the degree of certainty in the law's text, and conformity with principles of good legislation (see e.g., Dale 1977). Legislative design is an important step in the drafting procedure, "structuring the legislative text in a manner that facilitates understanding, and consequently invites implementation" (Xanthaki 2013, 59). Legislative design is therefore understood as a political process in which the structuring of legislative text helps determine the effectiveness of policy implementation; not only determining how laws are

interpreted by courts, administrators, and stakeholders but also affecting compliance and implementation.

In the political science literature, legislative design reflects the incentives of political actors engaged in the legislative process. Studies consider, for example, the conditions under which legislators delegate design authority to the bureaucracy based upon their personal incentives (Epstein and O'Halloran 1999), or the institutional setting within which they operate (Huber and Shipan 2011). Here, legislative design is a core element of the policymaking process, reflecting the institutional rules and power dynamics (e.g., between branches, between or within political parties). A parallel debate exists in public administration scholarship, where legislative design is seen as a determinant of policy success. Ambiguity can create space for bureaucratic expertise and adaptation (Matland 1995), but can also produce uncertainty or inconsistent application (Bardach 1977). Design choices therefore influence the actions of street-level bureaucrats, courts, and target populations.

Beyond institutional incentives, recent scholarship has emphasized the role of policy design as an intentional activity that connects instruments to policy goals under conditions of complexity (Bobrow 2006; Howlett 2014). Design choices shape the internal coherence of laws and determine whether they enable or constrain the adaptability of governance in dynamic policy environments (Peters 2010; del Rio and Howlett 2013). Yet, scholarly attention to the topic of policy design has been declining since the mid-1980s, prompting calls for renewal (Howlett and Lejano 2013) given the fundamental issues which remain unknown (Capano and Howlett 2020).

A complementary body of research explores how policy capacity[1] interacts with design to produce effective outcomes. High-capacity environments enable deliberate "packaging" rather than incremental "patching" of policy design (Howlett and Rayner 2013). For example, robust analytical capacity supports the calibration of policy instruments, while political capacity underpins the legitimacy and stakeholder coordination necessary for complex regulatory frameworks (Bali and Ramesh 2018; Wu, Ramesh, and Howlett 2015). Conversely, capacity deficits result in incoherent

[1] Defined as "a set of skills, competencies, and resources across government agencies to design and pursue policy goals" (Mukherjee, Coban, and Bali 2021, 247).

mixes and weak compliance, suggesting that legislative design is both a technical and a political process shaped by state capabilities and governance structures (Mukherjee and Bali 2019). The link between micro-level architecture of legislation to macro-level institutional conditions further underscores the need for systematic attention on the topic of legislative design.

Accordingly, different branches of scholarship share an interest in the topic of legislative design but remain oddly disconnected. The lack of interdisciplinary exchange has its roots in varying assessments on the role and meaning of legislation for democratic processes. Whereas policy scholars broadly view legislation as a vehicle for the communication of policy goals, instruments, and targets (e.g., Fernández-i-Marín, Knill, and Steinebach 2021; Howlett 2023), legal scholars are often more interested in matters of legislative drafting (Hart 2016; Nourse and Schacter 2002), ambiguity and vagueness (e.g., Endicott 2011; Hadfield 1994), or the origins and consequences of legal complexity (e.g., Ruhl and Katz 2015; Schuck 1992). Accordingly, though both disciplines analyze legislation as their primary data source, they view this legislation through distinct conceptual lenses. Using the strengths of those different perspectives, we develop a comprehensive conceptual approach to systematically describe, measure, and compare legislative designs across laws, policy domains, political systems and time.

Based on this reading of the literature, we start from the premise that legislative design is a latent characteristic of a law's text that can take diverse shapes and forms, depending on their *versatility* and *precision*. Unlike other aspects of a law—like complexity, origin, or procedural background—versatility and precision directly capture *the actual policy substance* contained in the legislation. By focusing on these two dimensions, we do not suggest that other aspects of a law's genesis cannot be important for its long-term survival or its effectiveness, but instead argue that those aspects are not directly related to the law's policy substance. Additionally, though versatility and precision are *implicitly* identified in much of the previous literature as the relevant dimensions of a law's design, they have never been analyzed *explicitly* and jointly under a common conceptual umbrella. We argue that much analytical leverage can be gained by thinking of versatility and precision as aspects that legislators need to balance or sometimes even trade off against each other

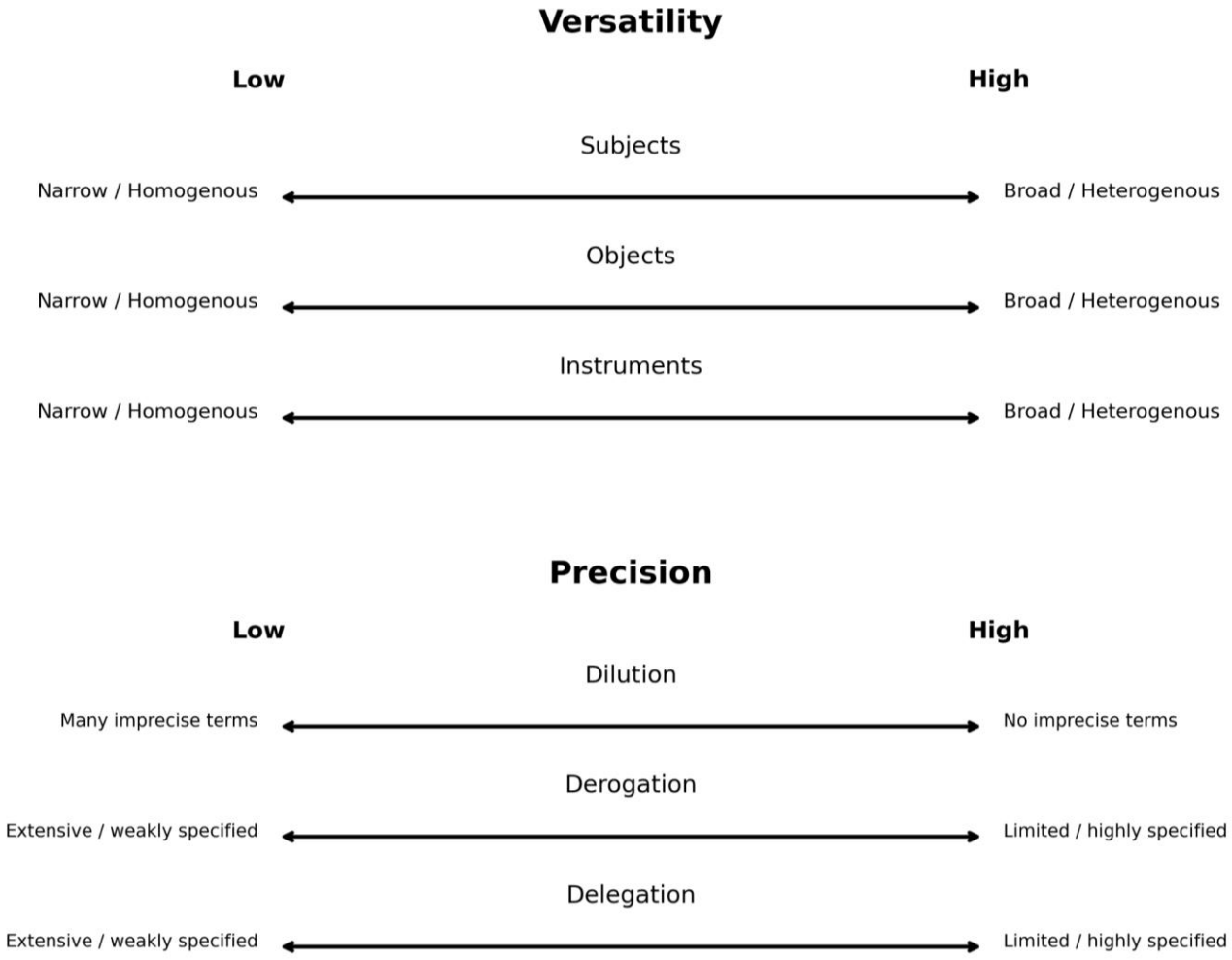
when designing a law. Accordingly, versatility and precision can be thought of as the central dimensions along which political conflicts over legislative designs are structured and resolved during the policy-making process. From an analytical perspective, versatility and precision have the main advantage that they are *abstract enough* to describe the substance of any law regardless of its precise policy domain, the institutional context in which it was formulated, and the time period in which it was crafted. Yet, these dimensions are also *concrete enough* to enable systematic measurement and comparison. We therefore contend that by conceptualizing legislative design along the dimensions of versatility and precision we can better analyze how designs vary across policy domains, how they distinguish themselves across political systems, and how they evolve over time.

Measuring Versatility and Precision in Legislation

In this section, we explain how the versatility and precision of a law can be operationalized. Specifically, we argue that versatility and precision are each constructed of three indicators. Versatility is determined through the diversity of the *objects*, *subjects*, and *instruments* contained in a law. Precision results from the *dilution* of the law's language, the amount and specificity of the *derogations* in the law, and the extent to which the law relies on *delegation*. Since this article introduces the conceptual approach and the ideal types of our typology, we do not make any prior assumptions about the relative weight of the six indicators. Without prior knowledge about the empirical distribution of the indicators in the full universe of laws, it appears reasonable to assume that all of them carry the same relevance.[2] Figure 1 summarizes the six indicators and shows their directional associations with our overarching concepts of versatility and precision. In the following, we discuss the two dimensions and their respective indicators in depth.

[2] This assumption may change as part of a large-N empirical validation and aggregation strategy.

***Figure 1**: Summary & Direction of Indicators*



Versatility

The first dimension along which democratic laws can be distinguished analytically is the versatility of their policy substance. Reflecting Lasswell's classic definition of politics as a struggle over who gets what, when, and how (Lasswell 1936), versatility can relate to three different aspects: (a) the diversity of policy objects (*what* is addressed?), (b) the diversity of policy subjects (*who* is addressed?), and (c) the diversity of policy instruments (*how* is it addressed?). Rather than studying these components of legislative versatility in detail, the existing literature often resorts to the analysis of convenient but crude quantitative measures, such as the length of the legislative text (e.g., Kousser 2006). Yet, though length can be interpreted as an important structural aspect of a law, it does not tell us anything about the content of a law (Hurka and Haag 2019; Hurka, Haag, and Kaplaner 2022). Therefore, to better understand how laws can be designed, we need to think about the versatility in terms of *what*, *who*, and *how* policy is addressed.

Objects

We start by evaluating the *what* of policy; the specific issues discussed. In public policy research, objects are the content that is targeted by the policy (Fernández-i-Marín, Knill, and Steinebach 2021). For example, an environmental law might target renewable energy or the regulation of specific chemical products; a social policy law might focus on long-term care services or pension benefits; and a tax policy law might address corporate tax incentives or income tax thresholds. At the sentence level, the object is the recipient, target, or focus of the action.

The scope of policy objects can vary significantly. Whereas some laws are very specific and only address a narrow set of closely defined issues, others cover a multitude of different objects simultaneously. To illustrate this variation, compare a law that regulates access to abortion (e.g. the UK Abortion Act of 1967) with a law to tackle the climate crisis (e.g., the UK Climate Change Act of 2008). Though the regulation of abortion access can be a contentious political issue, it is typically discussed in a rather narrow fashion. As a result, Westlaw UK[3] only lists four different topics for the UK Abortion Act (abortion, childbirth, complementary or alternative medicine, and religious freedom). In contrast, the UK Climate Change Act is tagged with seventeen topics, ranging from low carbon technologies to shale gas fracking.

Objects can also come in several types: systemic conditions, organizations, individuals, outputs, and processes. Systemic conditions refer to a general state or compliance requirement (e.g., market stability). Organizations are any legal entities (e.g., EU Commission, NGOs). Individuals reference any people (e.g., applicants, customers). Outputs reference the result of legislation (e.g., products, documents, permits). Finally, processes refers to procedure, reporting flows, or information steps.

To capture this variation in policy objects, analyses can be guided by pre-established classification schemes such as policy issue taxonomies or governmental sector categories (Fernández-i-Marín, Knill, and Steinebach 2021). We therefore consider variation in the *what* of policy by

[3] http://uk.westlaw.com

measuring the diversity of objects. At the sentence level, we identify the direct recipient, target, or focus of the subject's action as a means to identify what is affected, regulated, inspected, or decided upon. Objects are also typically stated in the first article outlining the law's scope and purpose.[4]

Subjects

The *who* of policy is about the actors who are subject to the law (Howlett 2023). In public policy research, these are the subjects targeted by a law (Fernández-i-Marín, Knill, and Steinebach 2021). We therefore consider versatility in terms of the diversity of *subjects* that a policy contains. Subjects range from states, actors in the private and public sectors, or implementing bodies. Any group, organization, institution, or individual who is implicated by the law is considered as a subject.

Subject diversity is linked to the governance architecture. Laws that address multiple subjects often need to reconcile conflicting interests, potentially increasing the complexity of negotiations during the legislative process and creating complex accountability structures during implementation. For example, multi-sectoral environmental directives often involve central governments, regional authorities, private firms, and civil society actors (Jordan, Wurzel, and Zito 2013). Institutional diversity can incentivize collaborative implementation and distributed enforcement, but risks coordination failures and conflicting interpretations if roles and responsibilities are not clearly defined. Conversely, laws targeting a narrow subject group—such as a single regulatory agency or industry segment—typically streamline implementation and monitoring, but may lack flexibility when problems cut across domains.

The diversity of subjects also reflects normative choices about where authority lies. Legislative design determines whether regulatory power is concentrated in the state or shared with non-state actors; the extent to which individuals, organizations, or companies bear primary responsibility; and where enforcement lies (Abbott and Snidal 2009). Such choices shape compliance dynamics and perceptions of legitimacy. For instance, including professional associations and private standard-

[4] In the EU case, additional information is drawn from EUR-Lex metadata, including EuroVoc descriptors, subject matter classifications, and directory codes.

setting bodies as legal subjects may increase sectoral buy-in and adaptability, whereas relying exclusively on public authorities can enhance uniformity and legal certainty (Black 2002). Subject diversity also interacts with the precision of legislation in ways that influence implementation outcomes. When multiple subjects are addressed in a single law, vague language or permissive derogations may allow competing interpretations and shifting responsibility between actors (Bardach 1977; Endicott 2011). The inclusion or exclusion of particular subjects is therefore a deliberate design decision that affects both policy effectiveness and democratic accountability, with subject diversity revealing structural choices about governance models, compliance strategies, and the allocation of interpretive authority in the policy process.

A diverse set of subjects does not necessarily align with diverse policy objects. For example, a narrow agricultural law can be exclusively directed at farmers, while assigning distinct roles to diverse institutional subjects in the private (e.g., NGOs, farmers associations, or corporations) and public sector (e.g., ministries, state administrations, or governmental agencies). Having diverse subjects can help reconcile distinct preferences about the locus of authority (e.g., state versus market, individual versus collective) and balance competing demands over the structural design of a law. This diversity enhances the law's versatility.

To measure policy subjects, researchers identify or interpret the intended recipients of policy clauses, which may appear at the beginning of a law or be embedded in specific clauses throughout the text. Operationally, we identify at the sentence level the grammatical and institutional actor responsible for carrying out the action in order to identify the locus of obligation or discretion. Information on subjects is found throughout the text when specific provisions target particular sectors or actors.[5]

Instruments

Variation in the *how* of policy is expressed through the diversity of policy instruments (Fernández-i-Marín, Knill, and Steinebach 2021). Policy instruments are the 'tools of government' (Hood 1983;

[5] In the EU, this commonly occurs in the first and last article.

Hood and Margetts 2007; Linder and Peters 1989), and are defined as the actions states take to achieve certain policy objectives. Instruments are distinct from both objects and subjects. Even if a law is strictly focused on a narrow set of policy objects and involves only a limited set of subjects, it can still contain varying degrees of instrument diversity. For example, laws can contain taxes along with subsidies and can specify both rights and obligations. The variety of these instruments is therefore the third component of a law's versatility.

One challenge of measuring policy instruments is their variation across domains, reflecting underlying differences in objects, stakeholders, and contexts. For example, environmental policies frequently employ regulatory instruments—such as emissions standards or prohibitions on harmful substances—alongside market-based instruments like taxes or subsidies to incentivize desired behaviors. In contrast, social welfare policy tends to rely on distributive mechanisms including direct financial transfers and public service provision. Healthcare legislation often uses a mix of instruments to manage specific challenges in this domain; including regulatory instruments, planning instruments, and information dissemination.

Given this domain-level variation, it appears necessary to institute a common typology that puts instruments into broader categories. The use of categories enables cross-domain comparison and helps identify whether certain types of instruments are transferable across policy sectors. For example, regulatory instruments—once typically associated with environmental policy—also appear increasingly common in welfare policy (Levi-Faur 2014; Trein 2020), such as in the regulation of private service providers. Within these categories, further coding can identify instruments and criteria that are specific to that domain.

To operationalize instruments, we extend Steinebach's (2022) classification of environmental policy instruments across domains, grouping these instruments into five broader categories as outlined in Table 1.[6] (1) *Regulatory Instruments*, which mandate or prohibit certain behavior; (2) *Market-Based Instruments*, such as incentives, cost allocations, or sanctions; (3) *Planning and Investment*

[6] In the supplementary material we present detailed examples of instruments, with examples for the environmental (Table A.1) and financial (Table A.2) domains.

Instruments, including strategic government planning; (4) *Information and Soft Instruments*, which provide information and nudges; and (5) *Other Instruments*. Accordingly, we identify the diversity of instruments within the legislative text, categorizing each instrument used.

***Table 1**: Policy Instruments*

Category	Instrument	Description
Regulatory Instruments	Obligatory standard / rule	A legally enforceable standard or rule, e.g. measurement unit, transparency rules
	Prohibition / ban	A total or partial prohibition on certain activities, products, or transactions
	Technological / procedural prescription	A measure prescribing the use of a technology, process, or infrastructure
Market-based Instruments	Tax / levy	A tax or levy for, e.g., a polluting product/activity o a financial transaction
	Subsidy / tax reduction	A measure granting a financial advantage to a certain product or to incentivize specific financial behavior
	Liability scheme	A measure that allocates the costs of harm or misconduct to responsible actors
	Sanctions	A measure that sanctions harm or misconduct
Planning and Investment Instruments	Planning instrument	A measure used to set priorities and strategies for sectors, activities, or periods that need particular protection or attention
	Public investment	A specific public investment
Information and Soft Instruments	Data collection / monitoring programmes	A specific programme for collecting data
	Voluntary measures	Voluntary agreements or commitments between the state and private actors or by private actors alone
	Information-based instrument	Transparency or disclosure requirement, e.g. on environmental externalities of a certain product or credit ratings
Other Instruments		Any instrument that cannot be assigned to the other categories (e.g., hybrids, experimental tools)

Note: Table adapted from Steinebach (2022). Adaptations are the addition of the categories and the broadening of application beyond the environmental domain.

Precision

The precision of a law can vary in three distinct ways. First, policymakers can frame the legislative text in clear or vague language (*dilution*). Second, policymakers can render legal provisions generally applicable or define various types of scope conditions (*derogation*). Third, policymakers can determine the degree to which further details of the law can be defined by third actors, such as the bureaucracy (*delegation*). These indicators jointly define how precisely a law is designed.

Dilution

Dilution, which we define as the use of vague legal concepts and indeterminate legal scripture, leaves room for interpretation when legislative agreement is hard to achieve. It can be understood that for

any vague term, there is also a precise term, a condition present in well-known definitions (e.g., Chanell 1994). By using indeterminate legal scripture, policy makers effectively delegate the interpretation of the law to the implementers (Lipsky 1980; Schram et al. 2009) and, ultimately, to the court system (Vanberg 1998; Williams 2018). Though vagueness often carries a negative connotation in everyday language, from a legal perspective, vagueness is not inherently problematic (Endicott 2011), and we should avoid attaching normative value to vague legal texts. Rather, dilution should be assessed in relation to its potential functions as well as its interaction with other dimensions of legal precision and with the chosen policy instruments, as vagueness can be employed strategically and deliberately by policymakers as a means to pass legislation.

Dilution indicates whether a legal provision is softened, weakened, or made discretionary. Measurement approaches should therefore consider the normative implications of dilution, where, though ambiguity might serve pragmatic legislative goals in politically contentious situations, excessive dilution risks undermining policy coherence and enforceability. Operationally, measuring dilution involves systematically identifying and categorizing the presence and extent of imprecise terms, phrases, and concepts that afford varying interpretations during policy implementation. Such vague legal concepts can relate, inter alia, to matters of quantity (e.g., 'some', 'several', 'many'), time (e.g., 'from time to time', 'occasionally'), degree (e.g., 'considerable', 'relevant', 'substantial') and category (e.g., 'such cases', 'such measures') (Li 2017, 2019).

Derogation

Derogation(s) are defined as opt-outs or exclusions from being subject to the provisions of a law (Müller and Slominski 2013). These opt-outs might be defined under specific circumstances, to particular groups like religious communities (Mariani 2020), certain industrial sectors (Ekins and Speck 1999), or according to particular standards. Derogations may also be territorial in nature and allow federal sub-units to opt-out of an agreement (Duttle et al. 2017; Schimmelfennig, Leuffen, and Rittberger 2015; Schimmelfennig and Winzen 2020). Derogations are not policy instruments, but they can be *attached* to any policy instrument.

Derogations affect legislative design in several different important ways. A derogation can increase the precision of a law if it defines exact, objective scope conditions under which a given legal rule applies, for example, by providing an exception from legal rules for certain regions, products, or sectors. Yet, derogations can also lead to more ambiguity if the way the derogation is formulated provides additional room for interpretation. Such derogations are popular devices to water down contentious legislation and achieve agreement (Bernauer, Prakash, and Beiser-McGrath 2020; Vannoni 2022). Accordingly, though exemptions to the applicability of a given legal rule are central components of any legislative design, the exact way that these derogations affect legislative design depends on their formulation.

Following the logic of linguistic patterns, derogation can be measured using a rule-based approach (Vannoni, Ash, and Morelli 2021). *Restrictive derogations* (e.g., "shall not apply for a period of five years") make legislation more precise. In contrast, *permissive derogations* (e.g., "states may, in exceptional cases") make laws less precise. These types of derogations must therefore be identified separately. Restrictive derogations are defined by rule-based modal verbs such as 'shall', 'must', or 'will'. Permissive derogations are instead identified through the use of permissive modals, such as 'may' or 'can', alongside derogation verbs such as 'not apply to' or 'allow exemptions'. In the case of strict modals with a derogation verb followed by a clear rule, the derogation makes a law more precise, whereas a permissive modal plus a derogation verb makes a law less precise. In both cases, the derogation can be followed by further specification, such as time in temporary derogations ("for a period of ... [date]"), or scope conditions ("less than ... [certain values] [measurement unit]").

Delegation

Delegation allows policymakers to give administrative agencies, executive branches, or other implementing entities varying degrees of rule-making authority (Anastasopoulos and Bertelli 2020; Epstein and O'Halloran 1999; Franchino 2004; Vannoni, Ash, and Morelli 2021). Delegation can help laws pass the legislative process. Leaving contentious issues unresolved and transferring the responsibility for conflict resolution to the bureaucracy may facilitate legislative agreement and

promote the passage of a law. Yet, in other circumstances, the uncertainty introduced by outsourcing may prompt legislators to specify policy details more precisely within the legislative text. In both scenarios, the more authority is delegated, the higher the uncertainty over how the law will be implemented in practice, as per Lipsky's (1980) foundational insight that street-level bureaucrats exercise considerable discretion when laws delegate substantial responsibility; i.e., when legal texts are imprecise. Such discretion is often necessary for effective public service delivery, though can lead to unequal implementation (Adam et al. 2021; Brodkin 2011; Schram et al. 2009). Given the increased uncertainty in how the law will be implemented that comes with delegation, we consider delegation as our third measure of a law's precision.

Measuring delegation involves identifying and assessing the extent to which laws explicitly grant powers or assign responsibilities for detailed policy implementation or enforcement to these non-legislative actors. Measurement approaches foreground the language of constraint and authority in legislative text (Anastasopoulos and Bertelli 2020; Vannoni, Ash, and Morelli 2021); for instance, delegation verbs (e.g., 'require', 'ought to', 'oblige') combined with different modal verbs (e.g., 'shall', 'may'). These studies show that delegations are also formulated positively (e.g., 'actor X shall enforce regulations'). Table A.3 in the Appendix shows the lexical units and extraction rules used by Vannoni, Ash, and Morelli (2021) as an example of this rule-based identification.

Accordingly, we conceive of delegation as appearing in different forms. Authority can be delegated with strict modal verbs and clearly defined responsibilities and procedures. We consider these delegations as contributing to a comparatively precise law. Alternatively, authority can be delegated with permissive modal verbs and vague or unspecified procedures, giving implementers more discretion in implementation. We consider these delegations as contributing to a comparatively imprecise law (see Figure 1).

Four Ideal Types of Legislative Design: Laws as Blades

To distill ideal types of legislative design from the previous discussion, we use the metaphor of legislative design choices as analogous to different types of blades. Legislation and blades are both

tools designed to achieve a defined purpose, and can be categorized according to their versatility and precision. Blades vary in shape, size, and sharpness; characteristics which determine whether they perform highly specialized or general tasks, and whether those cutting tasks are delicate or crude. Legislation likewise differs in breadth and specificity. Some laws are highly adaptable and multifunctional, whereas others are narrowly targeted and finely crafted. Just as a toolmaker selects the right blade for the job, policymakers design legislation to fit the nature of the policy challenge, balancing breadth with clarity.

***Table 2**. Four Ideal Types of Legislative Design*

		PRECISION	
		High	*Low*
VERSATILITY	*High*	Swiss Army Knife	Machete
	Low	Scalpel	Scythe

In combination, versatility and precision provide a two-dimensional space with four ideal types of legislative design (Table 2). *Swiss army knife designs* are highly versatile and precise. These laws are versatile because they cover a variety of objects, subjects, and instruments, and their provisions are clear and unambiguous. Normatively, Swiss army knife laws seem particularly desirable, given their breadth and clarity. Yet, these properties may also make them particularly hard to agree upon. *Scalpel designs* are defined by their narrow scope and high precision. Laws with these designs are not versatile, as they are targeted to a limited set of objects, subjects, and instruments. Provisions of scalpels are clearly articulated and consistent, leaving little room for interpretation. These designs are hence narrowly intentioned and highly specific, offering control and clarity but less adaptable to diverse problems.

Large, versatile blades like a machete can cut through many different types of obstacles, but lack the precision required for intricate work. Translated to the realm of legislation, *machete designs* therefore have a broad scope, but are also very imprecise. These laws connect a multitude of policy objects, address a broad variety of subjects, and employ various policy instruments simultaneously, yet the way these laws are formulated is associated with high degrees of uncertainty, as they use imprecise language, derogations, and broad delegation, leaving much to interpretation. Finally, *scythe designs* are laws that feature a narrow set of objects, subjects, and instruments that are addressed in

a very imprecise manner. These designs are targeted to solve a singular problem, but do so in a way that is hard to control.

Both blades and legislative designs therefore involve trade-offs between power and control, and between breadth and specificity of usage. The blade metaphor also conveys how legislation functions in practice as an instrument of governance that shapes the political order. Blades can be designed for long-term or temporary use, much as laws can be durable frameworks or ad hoc emergency measures. Legislative design determines whether laws achieve their intended effect precisely or leave room for interpretation and unintended consequences. Our goal of conceptualizing the ideal types of legislative design as blades is to emphasize that legislation is capable of broad changes or fine adjustments depending on its versatility and precision. One advantage of this novel framework is that, due to its simple and abstract nature, it does not require us to focus on a particular policy type (e.g., regulative or distributive policies) or conflict dimension (e.g., restrictiveness or generosity) to distinguish the policy substance of democratic laws conceptually. Our framework therefore allows for the comparison of legislative design across different hierarchical levels—law, domain, and system—for practically any policy that is expressed in a legislative text.

Empirical Application

We demonstrate the use and validity of our framework by applying it qualitatively to a series of cases. Though large-N empirical application and analyses are our long-term goal, we believe that a careful examination of the underlying conceptual framework should precede the extension to a larger universe of democratic laws. Our qualitative application provides a deep and nuanced understanding of the components that define legislative designs and their interaction in real-world legislation. The goal here is therefore to demonstrate the variance of legislative designs and show how the six indicators discussed above jointly define the character of a law.

As shown in Figure 1, versatility and precision are continua along which legislative designs vary. Consequently, the designs described in the previous section represent ideal types that we should not necessarily expect to often empirically observe in their 'pure' form, with most laws combining

elements of different designs. Yet, to illustrate the utility of our framework, we present case studies of legislative designs that come close to these ideal types.[7] Though the framework allows for the study of any policy domain in any political system, its potential can best be assessed if we narrow our focus to two policy domains and hold the institutional setting constant. Specifically, we focus this initial application on eight laws across two policy domains in a single institutional setting: environmental and macroprudential financial legislation produced in the political system of the EU.[8] The motivation behind the selection of environmental and macroprudential financial laws is to explore the plausibility of our framework in two salient but distinct policy domains. We justify our focus on these two domains in the supplementary material.

We apply our framework to laws from the EU, a good case due to its complex legislative environment (Häge 2013). As a supranational entity, the EU must reconcile diverse national interests, traditions, and political cultures, which leads us to expect variation in terms of both the versatility and precision of legislative designs. The EU's institutional design inherently demands negotiation and compromise in its legislative texts. Because EU legislation requires consensus among national governments and passes both the European Parliament and Council, laws are likely to vary in their precision. These features allow us to observe dilution, derogation, and delegation as tools potentially used by legislators to manage disagreement, align interests, and ensure successful legislative adoption.

Swiss Army Knives: REACH & MiFIR Regulations

The *Registration, Evaluation, Authorisation and Restriction of Chemicals* (REACH)[9] is a 2006 EU Regulation. With its multifaceted approach to chemical regulation and presence of cross-cutting issues, REACH is recognized as one of the most significant environmental laws in the EU (Lindgren and Persson 2008; Pesendorfer 2006; Willumsen 2018). REACH integrates many substances in one regulatory framework rather than focusing on a single chemical substance (Pesendorfer 2006).

[7] We provide a detailed application of each law into the framework in a series of tables in the supplementary material.
[8] In terms of legal precision, EU regulations are binding in their entirety, while directives allow Member States discretion in the choice of implementation methods (Hurka and Steinebach 2021). Regulations therefore commonly exhibit greater legal precision.
[9] Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Although primarily classified as an environmental law, REACH regulates almost all chemicals throughout their life cycle and across supply chains, intersecting with other domains such as safety at work and internal market principles.

In doing so, REACH covers a wide range of objects, targets multiple policy subjects, and incorporates a diverse set of instruments. The regulation is also notable for its legal precision, as it consolidated forty distinct pieces of legislation (Lindgren and Persson 2008), enhancing legal clarity and consistency across the EU, evidenced in the use of specific and measurable terms, such as regarding quantities and timing. For example, it requires manufacturers or importers to submit a technical dossier and a chemical safety report in a prescribed format (Art. 10). A diluted version would have required registrants to just submit "appropriate" information. REACH also specifies derogations in detail, determining which sectors or products are exempted from registration and requires exempted manufacturers or importers to notify the agency using strict modal verbs such as "shall".[10] Similarly, though the law contains several delegations, responsibilities are narrowly defined. For example, the law leaves configuration of competent authorities to Member States but defines their responsibilities specifically, including informing the public and establishing national helpdesks.[11] For the full application of our framework to REACH, see Table A.4 in the supplementary material.

Similarly, the 2014 *Markets in Financial Instruments Regulation* (MiFIR)[12] regulates a broad market ecosystem by covering both the instruments traded and the venues or systems where trading occurs, with the overarching goal of enhancing transparency (Huertas 2024). To achieve this goal, it uses a broad toolkit from regulatory rules and sanctions to planning and information-based instruments.

In terms of precision, MiFIR is highly technical and detailed. The regulation specifies clear thresholds and timelines, such as the volume cap mechanism, restricting the share of trades executed

[10] Art. 9(1): "Articles 5, 6, 7, 17, 18 and 21 shall not apply for a period of five years to a substance manufactured in the Community or imported for the purposes of product and process orientated research."
[11] Art. 121: "Member States shall appoint the competent authority or competent authorities responsible for performing the tasks allotted to competent authorities...Member States shall place adequate resources at the disposal of the competent authorities."
[12] Regulation (EU) 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012 Text with EEA relevance.

on non-transparent venues to four percent (Art. 5(1(a))), and the requirement to publish total volumes within five working days after the end of each calendar month (Art. 5(4)). Delegation is clearly structured, such as the entrustment of the European Securities and Markets Authority (ESMA) with responsibility for publishing volume data with explicit timelines.[13] Derogations are narrowly framed and tied to defined procedures using strict modal verbs.[14] For the full application of our framework to MiFIR see Table A.5 in the supplementary material.

In sum, REACH and MiFIR regulate a broad set of objects with a diverse set of tools using precise legal language and are therefore most similar to the Swiss army knife design.

Scalpels: F-gas & Benchmark Regulations

The 2024 *Regulation on Fluorinated Greenhouse Gases* (F-gas Regulation)[15] adopts a focused and sector-specific approach, targeting fluorinated greenhouse gases in particular products to strengthen climate action (European Commission 2024). Whereas REACH is tagged with general terms like "chemical product" or "product safety", the F-gas Regulation employs targeted terminology such as "fluorine". The F-gas Regulation is limited to subjects operating *within* the market of fluorinated greenhouse gases, like heating pumps or air conditioning (Art. 2). Whereas REACH speaks to a broader set of stakeholders across different chemical sectors, the F-gas regulation targets specific sectors with a smaller set of tools, mostly focused on regulatory instruments (Han and Lim 2018).

The F-gas Regulation uses precise legal language by setting clear criteria, such as outlining the criteria for when leak checks are necessary,[16] listing relevant operators and manufactures,[17] and setting specific timelines.[18] Concerning derogations, the regulation uses similar formulations as

[13] Art. 5(4): "ESMA shall publish within five working days of the end of each calendar month, the total volume of Union trading per financial instrument in the previous 12 months...and the methodology that is used to derive those percentages".
[14] E.g., investment firms are responsible for reporting transactions in financial instruments, but Art. 26(7) states: "By way of derogation from that responsibility, where an investment firm reports details of those transactions through an ARM [...], the investment firm shall not be responsible for failures [...]."
[15] Regulation (EU) 2024/573 of the European Parliament and of the Council of 7 February 2024 on fluorinated greenhouse gases, amending Directive (EU) 2019/1937 and repealing Regulation (EU) No 517/2014.
[16] Article 5(1): "Equipment containing five tonnes of CO2 equivalent or more of fluorinated greenhouse gases".
[17] Article 5(2): "Paragraph 1 shall apply to operators and manufacturers of the following stationary equipment that contains fluorinated greenhouse gases listed in Annex I or in Section 1 of Annex II".
[18] Article 17(1): "By 31 October 2024 and at least every 3 years thereafter, the Commission shall determine reference values for producers and importers".

REACH, tightly defining exemptions with explicit legal language. The F-gas Regulation contains some delegation but outlines clear responsibilities when delegating. For example, the configuration of the F-gas Portal is delegated to the European Commission with clear operational requirements,[19] specifying that the portal should be connected with the EU Single Window Environment for Customs.[20] For the full application of our framework to the F-gas Regulation, see Table A.6 in the supplementary material.

Like the F-gas Regulation, the *Benchmark Regulation*[21] targets one object, benchmarks, and regulates their chain of production and use. It relies primarily on regulatory instruments to do so, complemented by sanctions and information-based measures (Aquilina et al. 2017). In terms of legal precision, the Benchmark Regulation is detailed and technical. It lays down clear rules, for example on the development of methodologies for determining benchmarks (Art. 12) or specific requirements for different categories of benchmarks (Title III and Annex). Exemptions are explicitly defined and subject to procedural constraints.[22] Delegation is limited, with little transfer of discretion to national authorities, and where powers are delegated to the ESMA and Commission, they are carefully framed to ensure consistent implementation across Member States. For the full application of our framework to the Benchmark Regulation, see Table A.7 in the supplementary material.

The F-gas and Benchmark regulations therefore exemplify what we describe as scalpel designs, narrowly targeted and using precise legal language.

Machetes: Renewable Energy & Anti-Money Laundering Directives

The *Renewable Energy Directive* (RED)[23] aims to integrate renewable energy sources across a broad range of sectors—including the heating, cooling, and transport sectors—using a diverse set of policy

[19] Article 20(1): "The Commission shall set up and ensure the operation of an electronic system...(the 'F-gas Portal')".
[20] Article 20(2): "The Commission shall ensure the interconnection of the F-gas Portal with the EU Single Window Environment for Customs through the European Union Customs Single Window – Certificates Exchange System (EU CSW-CERTEX) established by Regulation (EU) 2022/2399".
[21] Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014.
[22] E.g., Article. 25: "An administrator may choose not to apply Article 4(2), points (c), (d) and (e) of Article 4(7), point (b) of Article 11(3) or Article 15(2) with respect to its significant benchmark".
[23] Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources.

instruments. For instance, it enables the formation of renewable energy communities (Art. 22), which is described as an innovative policy tool (Fina and Auer 2020). The RED is therefore highly versatile, supporting both environmental and energy policy goals across multiple sectors using innovative policy tools.

The RED uses imprecise legal language in terms of degree, quantity, and time that allows for interpretation by Member States using terms like "appropriate measures" which are not clarified, leaving Member States significant discretion.[24] Concerning derogations, the directive uses permissive modal verbs such as "may" that make exemptions non-binding and leave decisions to Member States.[25] Many key responsibilities are delegated to Member States and the Commission, such as the requirement to set national contributions toward the EU-wide target, granting considerable discretion. Specifically, the directive merely requires minimum national contributions based on the 2020 baseline to reach together the Union-wide target (Iliopoulos 2018). The RED therefore connects environmental and energy policy goals across multiple sectors using a variety of policy tools with a high degree of uncertainty. For the full application of our framework to the RED, see Table A.8 in the supplementary material.

The 2015 *Anti-Money Laundering Directive* (AMLD)[26] seeks to combat terrorism, money laundering, and financial crime through a mix of preventive and protective measures, addressing both criminal justice and economic integrity concerns. Its scope extends beyond core financial institutions (e.g., banks) to include auditors, lawyers, and notaries. To do so, the directive relies on a broad toolkit that combines regulatory, market-based, planning, and information-based instruments.

Like the RED, the AMLD is marked by significant dilution (Haffke, Fromberger, and Zimmermann 2020). Many obligations are formulated through general principles such as "risk-based approaches" (Art. 4(1)) or vague temporal references such as "up-to-date" (Art. 7), rather than precise

[24] E.g., Article 15(4): "Member States shall introduce appropriate measures in their building regulations and codes in order to increase the share of all kinds of energy from renewable sources in the building sector".
[25] E.g., Article 4(4): "Member States may exempt small-scale installations and demonstration projects from this paragraph, without prejudice to the applicable Union law on the internal market for electricity".
[26] Directive (EU) 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, amending Regulation (EU) No 648/2012 of the European Parliament and of the Council, and repealing Directive 2005/60/EC of the European Parliament and of the Council and Commission Directive 2006/70/EC.

legal standards. Derogations also weaken precision, as Member States "may" exempt entities from due diligence obligations on the basis of an "appropriate risk assessment" (Art. 12), without clarifying what counts as appropriate. This permissive drafting leads to case-by-case decisions, shifting the responsibility to the national level. The AMLD also exhibits extensive delegation, leaving it largely up to Member States to interpret and enforce its provisions; for instance, Member States "can" adopt stricter measures to fight money laundering (Art. 5). For the full application of our framework to the AMLD, see Table A.9 in the supplementary material.

In sum, like machetes, these directives are broadly targeted but imprecise.

Scythes: Environmental Impact Assessment & Deposit Guarantee Scheme Directives

The *Environmental Impact Assessment Directive* (EIA)[27] requires the assessment of environmental effects of certain public and private development projects prior to their approval. Like the F-gas Regulation, the EIA targets a closely defined subset of stakeholders. Moreover, it pursues its goal of assessment in the evaluation process of development projects through a single key instrument category, planning instruments.

Similar to the RED, the EIA shows low levels of legal precision. Dilution is high, as provisions use vague terms such as "likely to have significant effects",[28] or flexible temporal markers like "early" and "as soon as" (e.g., Art. 6(2)). Such terms introduce ambiguity, leaving room for interpretation by Member States or authorities regarding what constitutes a "significant" effect and creating legal uncertainty around the scope of projects subject to the EIA (Arabadjieva 2017; Ryall 2018). Derogations are discretionary and on a case-by-case basis, formulated with undefined permissive language such as "may", or "in exceptional cases".[29] Concerning delegation, the EIA relies on national implementation with unclear responsibilities and procedures,[30] delegating enforcement mechanisms

[27] Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment,

[28] E.g., Article 1(1): "this Directive shall apply to the assessment of the environmental effects of...projects which are likely to have significant effects on the environment".

[29] E.g., Article 2(4): "without prejudice to Article 7, Member States may, in exceptional cases, exempt a specific project in whole or in part from the provisions laid down in this Directive".

[30] E.g., Article 11(1): "Member States shall ensure that, in accordance with the relevant national legal system, members of the public concerned...have access to a review procedure".

to national legal systems and leaving it to domestic law to determine the standard of review (Ryall 2018). For the full application of our framework to the EIA, see Table A.10 in the supplementary material.

The *Deposit Guarantee Scheme Directive*'s (DGSD)[31] principal objective is to ensure that depositors are reimbursed if a bank fails, thereby safeguarding trust in the banking system (Mecatti 2020). The directive is narrowly tailored to a single object—deposit protection—and relies on a limited set of instruments. The DGSD establishes an obligatory standard of coverage, allocates financing responsibility to credit institutions through levies, and requires that depositors be informed of the scope and limits of protection (Gortsos 2019).

In terms of legal precision, the directive alternatives between setting a uniform coverage threshold but then using vague and diluted formulations, similar to the AMLD. It employs indeterminate terms such as "sound and transparent practices" (Art. 4(12)) or "own risk-based methods" (Art. 13(2)), without specifying these practices or methods. Derogations are likewise broadly framed. For instance, Member States, with Commission approval, can authorize a lower funding target than that otherwise required, using permissive language such as "may", and "where justified".[32] The conditions attached to this authorization are expressed using imprecise terms such as "significant share of available financial means" (Art. 8(6a)). Significant discretion is conferred on Member States, for instance, in defining the scope of a "single depositor" (Art. 7(2)), or in deciding how DGSs use their funds (Art. 11(3)). For the full application of our framework to the DGSD, see Table A.11 in the supplementary material.

Both directives rely on imprecise legal language and are narrowly focused on specific policy problems; we define this combination as the scythe ideal type.

[31] Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes.
[32] Art. 8(6): "By way of derogation from paragraph 2, Member States may, where justified and upon approval of the Commission, authorise a minimum target level lower than the target level specified in paragraph 2., [...]."

Comparative Assessment

Table 3 provides an overview of the example laws analyzed and illustrates how they correspond to the ideal types of democratic legislation.

Table 3: *Empirical Application Summary*

Law	**REACH & MiFIR**	**F-gas & Benchmark Regulations**	**RED & AMLD**	**EIA & DGS Directives**
Ideal Type	*Swiss Army Knife*	*Scalpel*	*Machete*	*Scythe*
Objects	**Broad:** Cross-cutting → whole market of chemical substances/financial instruments	**Narrow:** Focused → F-gases/Benchmark	**Broad:** Cross-cutting → Renewable energy across sectors/terrorism and money laundering	**Narrow:** Focused → EIA/DGS
Subjects	**Broad:** Member States, subjects across *multiple* areas	**Narrow:** Member States, subjects *within* one area	**Broad:** Member States, subjects across *multiple* areas	**Narrow:** Member States, subjects *within* one area
Instruments	**Broad:** Diverse set of policy instruments	**Narrow:** Limited set of policy instruments	**Broad:** Diverse set of policy instruments	**Narrow:** Limited set of policy instruments
Versatility	**HIGH**	**LOW**	**HIGH**	**LOW**
Dilution	**No imprecise terms:** Clear legal language and timelines	**No imprecise terms:** Clear legal language and timelines	**Many imprecise terms:** Vague legal language and no clear timelines	**Many imprecise terms:** Vague legal language and no clear timelines
Derogation	**Highly specified:** Strict derogations	**Highly specified:** Strict derogations	**Weakly specified:** Permissive derogations	**Weakly specified:** Permissive derogations
Delegation	**Highly specified:** Reduced granting of power	**Highly specified:** Reduced granting of power	**Weakly specified:** Increased granting of power	**Weakly specified:** Increased granting of power
Precision	**HIGH**	**HIGH**	**LOW**	**LOW**

As discussed above, REACH and MiFIR exemplify Swiss army knives: cross-sectoral, comprehensive laws that apply broadly—covering all chemical substances in the former case, and nearly all financial instruments and trading systems in the latter. They employ a wide array of policy instruments spanning all four categories of the measurement concept (high versatility). At the same time, they are drafted with precise legal terminology and set out narrowly defined conditions for derogations and delegations (high precision).

The F-gas and Benchmark regulations function like scalpels, they are narrowly tailored to address specific objectives—fluorinated gases or financial benchmarks—by targeting a limited set of actors and relying primarily on regulatory instruments (low versatility). These laws nonetheless

achieve high precision through precise legal formulations and clearly circumscribed provisions for derogation and delegation.

The RED and AMLD are like machetes that can be used for a variety of purposes. They cut across multiple sectors to advance renewable energy integration in the case of RED, and combat money laundering as well as terrorism in the case of AMLD. To this end, they employ a broad toolkit across all four identified categories of instruments (high versatility). Yet, because they rely on broadly framed derogations, often leading to case-by-case exemption decisions, and extensive delegations combined with imprecise legal language, it remains uncertain how Member States will fulfill the laws' objectives (low precision).

The EIA and DGSD fit the scythe ideal type. They address specific problems—environmental impact assessments of development projects and deposit guarantee schemes—with a relatively narrow toolkit centered on planning, or regulatory and information-based instruments (low versatility). Moreover, they employ vague legal terms, loosely defined derogations with permissive language, and significant delegation to Member States (low precision).

These examples of legislative design from two policy domains demonstrate the value of our framework for classifying laws into four ideal types. The six indicators we propose vary in whether they appear narrowly or broadly within a law and in whether they are specified in detail or left open-ended. Together, these indicators allow us to assess whether a law exhibits high or low versatility and precision. Our analysis highlights that laws differ independently along both these dimensions. For example, REACH and RED rely on a similarly diverse set of policy objects, subjects, and instruments but diverge markedly in the way derogations and thresholds are formulated. In other words, a law can appear equally far-reaching in scope, while the degree of specification in its provisions determines how predictable and robust it is.

Conclusion: A Unified Framework of Legislative Design

In this article, we introduce a novel conceptual approach to capture the substance of democratic legislation that will allow for the comparison of legislative designs across policy subsystems,

institutional settings, and time. Our approach is based on the idea that any legislative design can be described as a combination of a law's versatility and its precision. Whereas a law's versatility can vary in terms of the diversity of objects, subjects, and instruments, its precision is affected by the vagueness of its language, the way it formulates derogations, and the extent to which it delegates rule-making authority. Together, these dimensions yield four different ideal types of democratic laws: the Swiss army knife (high versatility, high precision), the scalpel (low, high), the machete (high, low), and the scythe (low, low). To illustrate the usefulness of this approach, we show how legislative design varies within two policy domains, applying our framework to four environmental and four macroprudential laws adopted by the EU. Our qualitative application shows that legislative design is not determined by functional pressure or necessity dictated by the broader policy domain, suggesting that legislative design is a political choice.

A unified framework of legislative design is long overdue. For too long, distinct subfields have approached the subject without a common conceptual language, limiting the scope for advancing theory and empirical interdisciplinary collaboration. We hope that by prioritizing universality—with few, if any, laws falling outside its scope—our framework will benefit scholars of public policy, street-level bureaucracy, law, sociology, economics, and even philosophy. The practical nature of our approach, applicable to any written law that emerges from the legislative process, offers important benefits for comparativists both within and beyond the discipline of political science; being concrete enough to allow for systematic measurement, yet abstract enough to allow for interdisciplinary exchange.

Building on this qualitative plausibility probe, future research will need to find creative ways to measure legislative design across laws, political systems, and time periods. Leveraging recent developments in computational social science, natural language processing (NLP), and large language models (LLMs) offer one avenue to meet this challenge. Accordingly, the logical next step in our research agenda will be to enhance the qualitative approach pursued here with a large-N analysis of legislative designs. Doing so will not only require the collection, pre-processing, and coding of vast amounts of textual data, but also the development of a theoretically and empirically informed data

aggregation strategy. Such an approach will enable the systematic comparative analysis of democratic legislation from the level of the individual legal provision, to the broader policy domain, to the political system as a whole. Though initial attempts at measuring and analyzing the *individual* components of legislative designs with methods of computational text analysis have been undertaken (e.g., Anastasopoulos and Bertelli 2020; Vannoni, Ash, and Morelli 2021), what is needed is a comprehensive attempt to study those individual components *jointly across space and time*. Our large-N empirical application will also help determine whether some of the indicators we discussed in this paper are more important for legislative design than others.

Our framework facilitates the analysis of a wide range of important research questions. Future research might analyze whether legislative designs are specific to policy domains or political systems, and how they evolve over time. Are certain policy domains more versatile and precise than others, or is the versatility and precision of legislative designs largely a reflection of the institutional arrangements in which they are formulated? How are legislative designs maintained (Knill et al. 2025; Mettler 2016), adjusted, and transformed after their initial adoption? Similarly, our approach allows the investigation of which contextual factors facilitate—or impede—the adoption of different legislative designs. How do the political and institutional costs of policy formulation affect the design of a law beyond its complexity (Hurka 2023, 2025)? Are there spillover or learning effects across policy domains (Goyal and Howlett 2024)? Finally, what makes certain legislative designs more robust and effective than others? This is particularly important from a normative perspective (Howlett and Ramesh 2023). By systematically comparing laws according to our conceptual approach, we will hopefully be put into a better position to understand how legislative design shapes policy outcomes.

In this article, we discussed legislative designs as a static characteristic of a law, but we are conscious that laws can change over time. The extent to which laws are adapted and transformed over time might potentially be related to their initial design. For example, highly versatile and imprecise machete laws might be the end product of contested policy-making processes in which the interests of multiple stakeholders are reconciled through complex and vague policy compromises.

Such designs might then prove to be more stable in the long run, if the costs of changing them are considered too high. In contrast, targeted and precise scalpel laws might result from a more exclusive and technical decision-making process, potentially enabling the adaptation of these laws in a changing environment. Next to the endogenous effect of the legislative design, such a longitudinal analysis will also need to evaluate the role of exogenous sources of (in)stability, including political actors (e.g., governments, legislatures, courts), societal actors (e.g., NGOs, interest groups), and political institutions (e.g., constitutional structures, legal norms and traditions). Those research endeavors require ways to measure and compare legislative design at scale; the conceptual framework we provide here therefore serves as a 'navigation system' in this endeavor.

Given that many democracies are facing increasing systemic pressures, developing a deeper understanding of the factors that drive the design, creation, and survival of democratic laws also carries substantial normative importance. The research agenda is practically relevant for street-level bureaucrats responsible for policy implementation, but also has implications for fundamental questions of democratic accountability and transparency. For example, precise legislative designs might enable clearer accountability mechanisms by explicitly defining responsibilities, reducing ambiguity, and limiting discretionary interpretations. Conversely, highly versatile and imprecise designs may diffuse accountability, complicating oversight processes and reducing transparency. Though precise laws may enhance accountability, overly rigid designs might limit the flexibility necessary to accommodate diverse interests that vary over time. Laws with high versatility and lower precision may better capture pluralistic values but risk ambiguity in implementation. We consider the question of how policy-makers solve this balancing act as central to future enquiries, and our conceptual approach should be understood as a first step in this research agenda.

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Supplementary Material

Policy Instruments

In the following, we provide a more detailed summary of policy instruments in the environmental and (macroprudential) financial policy domains. In Table A.1, we provide an overview of Environment Policy Instruments; in Table A.2, we provide an overview of Financial Policy Instruments.

***Table A.1**: Environmental Policy Instruments*

Category	Instrument	Description	Example
Regulatory Instruments	Obligatory standard	A legally enforceable numerical standard, typically involving a measurement unit, e.g. mg/l	Limit value for lead emissions in surface water, e.g., 50 mg/l
	Prohibition / ban	A total or partial prohibition/ban on certain emissions, activities, products etc.	Ban on importation of products containing chlorofluorocarbons
	Technological prescription	A measure prescribing the use of a specific technology or process	Installations have to be operated in accordance with the principle of 'best available techniques' (BAT)
Market-based Instruments	Tax / levy	A tax or levy for a polluting product or activity	Tolls and road user charges for trucks depending on the emission class
	Subsidy / tax reduction	A measure by which the state grants a financial advantage to a certain product or activity	Tax reduction for vehicles in series production complying with a regulation
	Liability scheme	A measure that allocates the costs of environmental damage to those who have caused the damage	Establishment of an emission trading system
Planning and Investment Instruments	Planning instrument	A measure used to set priorities and strategies for areas or times that deserve particular protection	Action plans indicating the measures to be taken during times when there is a risk of the limit being exceeded
	Public investment	A specific public investment	Programs given financial support for the retrofitting of in-use vehicles and for scrapping old vehicles
Information and Soft Instruments	Data collection / monitoring programmes	A specific programme for collecting data	Establishment of measuring stations designed to supply the data necessary for the application of a certain regulation
	Voluntary measures	Voluntary agreements or commitments between the state and private actors or by private actors alone	Manufacturers can apply for the CO_2 savings achieved as a result of eco-innovation (if approved can used to contribute to manufacturer's specific emissions target)
	Information-based instrument	Information provided by the state or the polluters indicating the environmental externalities of a certain product or activity	Label on fuel economy and CO_2 emissions of a vehicle displayed at the point of sale.
Other		Any instrument that cannot be assigned to the other categories	–

Note: Table adapted from Steinebach (2022). Principal adaptation is the addition of the categories.

***Table A.2**: Financial Policy Instruments*

Category	Instrument	Description	Example
Regulatory Instruments	Capital adequacy requirement	Legally enforceable minimum capital ratios for financial institutions	Basel III requirement of minimum Common Equity Tier 1 (CET1) ratio of 4.5%
	Activity prohibition / ban	Prohibition of certain risky activities or products	Volcker Rule ban on proprietary trading by commercial banks
	Technological / procedural prescription	Requirement to use specific risk management systems or processes	Mandatory adoption of stress testing frameworks for large banks
Market-based Instruments	Tax / levy	Financial transaction taxes or levies on specific activities	Financial Transaction Tax (FTT) on stock trades in France
	Subsidy / tax incentive	Tax benefits for certain financial behaviors	Tax incentives for long-term investments in retirement accounts
	Liability scheme	Allocation of costs from financial failures to those responsible	Deposit insurance schemes requiring banks to contribute to insurance funds
	Tradable permit scheme	Rights-based instruments creating markets for regulatory compliance	Emission allowances for carbon markets traded by financial intermediaries (finance-driven ETS)
	Sanctions	A measure that sanctions harm or misconduct	Sanctions for breaches
Planning and Investment Instruments	Macroprudential planning tool	Tools to manage systemic risk through scenario-based planning	Countercyclical capital buffer frameworks
	Public investment	Direct public investment in financial infrastructure or stabilization funds	Government recapitalization of banks during a crisis (e.g., TARP in the U.S.)
Information and Soft Instruments	Data collection / monitoring programme	Mandatory reporting and monitoring to ensure compliance with regulatory standards	European Market Infrastructure Regulation (EMIR) trade repository for derivatives
	Voluntary measures	Self-regulatory codes or industry-led commitments	Principles for Responsible Banking under UNEP FI
	Information-based instrument	Disclosure requirements to inform markets and consumers	Mandatory ESG disclosure for listed companies under EU SFDR
Other		Any instrument that cannot be assigned to the other categories	

Note: Table created by authors.

Justification of Policy Domains for Empirical Application

In the following, we justify our focus on the environmental and macroprudential policy domains for our empirical application.

Environmental policy is an established domain, giving us plenty of law across which to identify variation along the dimensions of versatility and precision. For versatility, the domain is inherently policy-dense and multidimensional; environmental legislation typically covers a wide range of issues, such as climate change, pollution, biodiversity, and energy policy. Environmental legislation is also innovative in terms of instrument development and experimentation, with policymakers testing novel tools that reflect both regulatory and market-based governance logics (Jordan, Wurzel, and Zito 2013). This variation enables us to meaningfully distinguish between complex combinations of instruments in a single law and more straightforward deployments of single instruments. Consequently, these legal texts may engage with a broad array of policy objects, subjects, and instruments, varying across the indicators introduced above. In terms of precision, environmental law often operates at the intersection of national and supranational legal systems in the EU, meaning that environmental directives and regulations vary in their use of language, clauses, and delegation of rule-making authority. The potential for variance in both versatility and precision implies that environmental legislation is not "pre-determined" by a lack of design options, but that it can theoretically be designed in many ways. We also think that environmental policy is normatively important, is often highly salient, and has implications for a variety of other policy domains.

Macroprudential financial policy is a distinct, but equally useful, area to apply our framework, as a well-established yet evolving domain with significant variation. The global financial crisis of 2007 to 2009 elevated macroprudential regulation from a niche concern to a central pillar of financial governance (Ampudia et al. 2021), resulting in a surge of legislative activity at both national and supranational levels (Galati and Moessner 2011), giving us many laws to compare the design of. Macroprudential policy combines measures of systemic stability, credit cycles, and liquidity risks (Constâncio et al. 2019), meaning legislation often integrates multiple objectives and tools, thereby enabling us to identify variation in versatility; with some measures narrowly targeting specific risks

and others bundling instruments to address broad systemic vulnerabilities. In terms of precision, macroprudential policy combines domestic discretion and international coordination, particularly within the Basel framework and EU financial law, with substantial heterogeneity in legal design (Piroska, Gorelkina, and Johnson 2021). Measures such as minimum capital buffers are highly codified with explicit ratios and formulas, whereas borrower-based tools or national flexibility clauses are open to interpretation. Macroprudential laws also contain complex rule-making dynamics in their interactions with other monetary policies (Martin, Mendicino, and Van Der Ghote 2021). These differences in derogation, dilution, and delegation mean macroprudential legislation does not have a predetermined precision and varies in how it binds national authorities and financial institutions. It is also an innovative domain characterized by the development of tools that combine regulatory and market-based logics (Hanson, Kashyap, and Stein 2011). Like the environmental domain, macroprudential legislation is normatively important and salient in contemporary governance through its role in ensuring the robustness of financial systems to external shocks (Allen and Wood 2006).

Measurement of Delegation

In the following, we show the lexical units and extraction rules used by Vannoni, Ash, and Morelli (2021) as an example of this rule-based identification.

***Table A.3**: Rule-Based Identification of Delegation*

Lexical Units	
Strict modals	"shall", "must", "will"
Permissive modals	"may", "can
Delegation verbs	"require", "expect", "compel", "oblige", "obligate", "have to", "ought to"
Constraint verbs	"prohibit", "forbid", "ban", "bar", "restrict", "proscribe"
Permission verbs	"allow", "permit", "authorize"
Extraction Rules	
Delegation	strict modal + active verb + not negation OR not permissive modal + delegation verb + not negation
Constraint	modal + not delegation verb + negation OR strict modal + constraint verb + not negation OR permission verb + negation
Permission	permission verb + not negation OR permissive modal + not special verb + not negation OR constraint verb + negation
Entitlement	entitlement verb + not negation OR strict modal + passive + not negation OR delegation verb + negation

Note: Table taken from Vannoni, Ash, and Morelli (2021).

Full Empirical Application of Framework to Laws

In the following set of tables (Table A.4 through A.11), we apply our framework to each of the eight laws discussed in the main text. Though we summarize the application in the main manuscript, these tables provide full details of these cases.

***Table A.4**: REACH Regulation*

Indicators	Examples	Evaluation
Objects	Environmental domain; all chemical substances; intersects with other domains, such as safety at work and internal market principles	Broad
	EuroVoc: *marketing standard, chemical product, environmental protection, public health, product safety, environmental risk prevention, administrative formalities, market approval, scientific report, European Chemicals Agency*	
Subjects	EU Member States, manufacturers and importers of *any* chemical substance or material, downstream users, and consumers	Broad
Instruments	**Regulatory instruments** *Obligatory standard:* requirement to register and evaluate chemical substances ≥1 tonne (Art. 6, Art. 10, Annexes VII-X) *Prohibitions and bans:* restricts the use of certain substances which are listed under Annex XVII *Technological prescriptions:* use of good laboratory practices (Art. 13(4)	Diverse toolkit
	Market-based instruments *Liability schemes:* principle that producers are responsible for any environmental damage caused by their chemicals (Art. 101(2))	
	Planning and investment instruments *Planning instruments:* Substance Evaluation Plan (Article 44(2))	
	Information and soft instruments *Data collection or monitoring programs:* creation of a database with a labeling and classification inventory (Art. 114) *Information-based instruments:* public risk info (Art. 119)	
Dilution	**Art. 10:** "A registration required by Article 6 or by Article 7(1) or (5) shall include all the following information [...]." → detailed technical dossier requirements; **Art. 96(5):** " [...] This estimate, which shall include a draft establishment plan, shall be forwarded by the Management Board to the Commission by 31 March at the latest." → fixed submission date	Highly specific requirements
Derogation	**Art. 9(1):** "Articles 5, 6, 7, 17, 18 and 21 shall not apply for a period of five years to a substance manufactured in the Community or imported for the purposes of product and process orientated research." **Art. 23(1):** "Article 5, Article 6, Article 7(1), Article 17, Article 18 and Article 21 shall not apply until 1 December 2010 to the following substances [...]."	Exemptions exist but are tightly defined
Delegation	**Art. 121:** "Member States shall appoint the competent authority or competent authorities responsible for performing the tasks allotted to competent authorities [...]. Member States shall place adequate resources at the disposal of the competent authorities [...]."	Delegation of responsibilities, but is tightly defined

***Table A.5**: MiFIR Regulation*

Indicators	Examples	Evaluation
Objects	Trading venues, financial instruments, trading practices, infrastructure, and systems	Broad market ecosystem
	EuroVoc: *financial instrument, administrative check, financial control, credit institution, investment company, market supervision, financial transaction, financial legislation*	
Subjects	Investment firms, trading venues, market operators, and data providers, clearing counterparties, commodity traders, regulators (ESMA, NCAs) overseeing reporting, transparency, and limits	Broad
Instruments	**Regulatory instruments** *Obligatory standard:* pre- and post-trade transparency requirements for equity and non-equity instruments (Art. 3–11) *Prohibitions and bans:* prohibition on trading outside regulated venues *Technological prescriptions:* use of good laboratory practices (Art. 13(4)	Diverse toolkit
	Market-based instruments *Liability Scheme:* Firms are liable for failures in reporting, transparency, or limits compliance *Sanctions:* Sanctions for breaches	
	Planning and investment instruments *Planning instruments:* Position limits for commodity derivatives	
	Information and soft instruments *Data collection or monitoring programs:* Transaction reporting to regulators (Article 26) *Information-based instruments:* Transparency rules (pre- and post-trade disclosures) *Voluntary measures:* Industry standards	
Dilution	**Art. 5(1(a)):** "the percentage of trading in a financial instrument carried out on a trading venue under those waivers shall be limited to 4 % of the total volume of trading in that financial instrument on all trading venues across the Union over the previous 12 months." **Art. 5(4)):** "ESMA shall publish within five working days of the end of each calendar month, the total volume of Union trading per financial instrument in the previous 12 months, [...] and the methodology that is used to derive those percentages."	Highly specific requirements
Derogation	**Art. 26(7):** "By way of derogation from that responsibility, where an investment firm reports details of those transactions through an ARM [...], the investment firm shall not be responsible for failures [...]. In those cases and subject to Article 66(4) of Directive 2014/65/EU the ARM] shall be responsible for those failures."	Exemptions exist but are tightly defined
Delegation	**Art. 5(4):** "ESMA shall publish within five working days of the end of each calendar month, the total volume of Union trading per financial instrument in the previous 12 months, [...] and the methodology that is used to derive those percentages." **Art. 7(2):** "ESMA shall develop draft regulatory technical standards to specify the following in such a way as to enable the publication of information required under Article 64 of Directive 2014/65/EU: [...]."	Delegation of responsibilities, but is tightly defined

***Table A.6**: F-gas Regulation*

Indicators	Examples	Evaluation
Objects	Environmental domain, fluorinated greenhouse gases	Narrow
	EuroVoc: *fluorine, pollution control measures, export (EU), import (EU), EU emission allowance, market approval, greenhouse gas, EU environmental policy, exchange of information, reduction of gas emission*	
Subjects	EU Member States, economic operators within the market of fluorinated greenhouse gases	Narrow
Instruments	**Regulatory instruments** *Obligatory standard:* leak checks based on CO_2-equivalent thresholds for fluorinated gases (Art. 5) *Prohibitions and bans:* bans intentional release of F-gases unless technically necessary (Art. 4(1)), prohibits the sale of products listed in Annex IV (Art. 11), restricts the sale of hydrofluorocarbons (HFCs) (Art. 16) *Technological prescriptions:* use of UNFCCC-approved abatement for trifluoromethane (Art. 4(6))	Limited set of instruments
	Planning and investment instruments None	
	Information and soft instruments *Data collection or monitoring programs:* establishment of F-gas Portal to track quotas and products (Art. 20) and transfer quota allocations (Art. 21) *Information-based instruments:* mandatory labelling and declarations of conformity (Art. 12)	
Dilution	**Art. 5(1):** "Operators and manufacturers of equipment that contains 5 tonnes of CO2 equivalent or more of fluorinated greenhouse gases listed in Annex I or 1 kilogram or more of fluorinated greenhouse gases listed in Section 1 of Annex II that is not contained in foams, shall ensure that the equipment is checked for leaks." → clear criterion **Art. 5(2):** "Paragraph 1 shall apply to operators and manufacturers of the following stationary equipment that contains fluorinated greenhouse gases listed in Annex I or in Section 1 of Annex II:" → operators listed **Art. 17(1):** "By 31 October 2024 and at least every 3 years thereafter, the Commission shall determine reference values for producers and importers [...]." → concrete timelines	Highly specific requirements and timelines
Derogation	**Art. 5(1):** "By way of derogation from the second subparagraph, where hermetically sealed equipment is installed in residential buildings, it shall not be checked for leaks where that equipment contains less than 3 kilograms of fluorinated greenhouse gases [...]"	Exemptions exist but are tightly defined
Delegation	**Art. 20(1):** "The Commission shall set up and ensure the operation of an electronic system [...] (the 'F-gas Portal')." **Art. 10(3):** "Within 1 year following the entry into force of the implementing act referred to in paragraph 8, Member States shall establish or adapt certification programmes, including evaluation processes [...]."	Delegation of responsibilities but is tightly defined

***Table A.7**: Benchmark Regulation*

Indicators	Examples	Evaluation
Objects	Financial benchmarks	Narrow
	EuroVoc: *financial instrument, stock-exchange transaction, prevention of delinquency, restriction on competition, dissemination of information, insider trading*	
Subjects	Benchmark administrators and supervised entities using benchmarks	Narrow
Instruments	**Regulatory instruments** *Obligatory standard:* requirements for benchmark methodologies (Art. 12), input data reliability, and governance (Arts. 4–7). *Prohibitions and bans:* prohibition of the use of non-authorized or non-registered benchmarks within the EU	Limited set of instruments
	Market-based instruments *Sanctions:* sanctions and administrative measures (Art. 42) impose liability on administrators/users for breaches	
	Information and soft instruments *Data collection or monitoring programs:* administrators must maintain records, publish benchmark statements, and ensure transparency of input data (Arts. 13–14) *Information-based instruments:* mandatory benchmark statements and methodology disclosure (Arts. 27, 28)	
Dilution	**Art. 12:** "An administrator shall use a methodology for determining a benchmark that [...]" → specifies the development of the methodology for determining benchmarks, what has to be communicated and be published (input data)	Highly specific requirements
Derogation	**Art. 2(2):** "This Regulation shall not apply to [...]" → outlines directly what it does not apply to, such as central bank, public authority, etc. **Art. 25:** "An administrator may choose not to apply Article 4(2), points (c), (d) and (e) of Article 4(7), point (b) of Article 11(3) or Article 15(2) with respect to its significant benchmark [...]. In the event that an administrator chooses not to apply one or more of the provisions referred to in paragraph 1, it shall immediately notify the competent authority and provide it with all relevant information confirming the administrator's assessment [...]." → outlines exemptions from specific requirements for significant benchmarks with clear procedural constraints	Exemptions exist but are tightly defined
Delegation	**Art. 13(3):** "ESMA shall develop draft regulatory technical standards to specify further the information to be provided by an administrator in compliance with the requirements laid down in paragraphs 1 and 2, distinguishing for different types of benchmarks and sectors as set out in this Regulation"	Delegation of responsibilities to ESMA but is tightly defined

***Table A.8**: RED*

Indicators	Examples	Evaluation
Objects	Environmental and energy-related concerns	Broad
	EuroVoc: *energy consumption, air quality, renewable resources, EU programme, environmental cooperation, greenhouse gas, reduction of gas emissions, energy saving, renewable energy.*	
Subjects	EU member states, heating and cooling sector, transport sector, consumers, and investors	Broad
Instruments	**Regulatory instruments** *Obligatory standard:* Union-wide target of at least 32% renewable energy by 2030 (Art. 3); requirement for fuel suppliers to ensure a minimum renewable share of 14% by 2030 (Art. 25, 26) *Prohibitions and bans:* Some biofuels are excluded from the directive and cannot receive financial support (Art. 26, 29)	Diverse toolkit
	Market-based instruments *Subsidies:* Support schemes for electricity from renewable sources (Art. 4)	
	Planning and investment instruments *Planning instruments:* National Energy and Climate Plans (Art. 3(2))	
	Information and soft instruments *Data collection or monitoring programs:* establishment of a renewable development platform for renewable energy transfers and investments between MS (Art. 8); exchange of data on renewable energy (Art. 28) *Information-based instruments:* information on support measures and renewable energy use to customers (Art. 18, 19) *Voluntary measures:* possibility of the formation of renewable energy communities by citizens (Art. 22)	
Dilution	**Art. 3(1):** Union-wide target of 32% renewable energy may be adapted "where there are further substantial cost reductions in the production of renewable energy" **Art. 15(4): "**Member States shall introduce appropriate measures in their building regulations and codes in order to increase the share of all kinds of energy from renewable sources in the building sector." **Art. 13(1): "**A distribution rule as referred to in point (b) of the first subparagraph shall be notified to the Commission not later than three months after the end of the first year in which it takes effect."	Vague legal terms
Derogation	**Art. 4(4):** "Member States may exempt small-scale installations and demonstration projects from tendering procedures." **Art. 25(1):** "[...] Member States may exempt, or distinguish between, different fuel suppliers and different energy carriers when setting the obligation on the fuel suppliers, ensuring that the varying degrees of maturity and the cost of different technologies are taken into account."	Exemptions exists, weakly specified
Delegation	**Art. 3(2):** "Member States shall set national contributions to meet, collectively, the binding overall Union target set in paragraph 1 of this Article as part of their integrated national energy and climate plans [...]." **Art. 4(1):** "In order to reach or exceed the Union target set in Article 3(1), and each Member State's contribution to that target set at a national level for the deployment of renewable energy, Member States may apply support schemes."	Significant delegation

***Table A.9**: AMLD Overview*

Indicators	Examples	Evaluation
Objects	Money laundering, terrorist financing, customer due diligence, beneficial ownership	Broad
	EuroVoc: *financial institution, game of chance, legal person, natural person, banking supervision, terrorism, money laundering, economic offence, customers, exchange of information*	
Subjects	EU member states, credit institutions, financial institutions, auditors, notaries, trust or company services, estate agents, gambling providers	Broad
Instruments	**Regulatory instruments** *Obligatory standard:* Customer due diligence (CDD) (Art. 11) *Prohibitions and bans:* No anonymous accounts or passbooks (Arts. 10, 12); prohibition of disclosure of suspicious transactions to customers concerned (Art. 39)	Diverse toolkit
	Market-based instruments *Sanctions:* Administrative sanctions and measures for breaches (Art. 58)	
	Planning and investment instruments *Planning instruments:* National risk assessments (NRAs) and EU-level coordination (Arts. 6–7)	
	Information and soft instruments *Data collection or monitoring programs:* Information on beneficial ownership (Art. 30); establishment of FIUs (Art. 32(1)) *Information-based instruments:* Feedback from FIUs/supervisors to obliged entities (Art. 32(2-8))	
Dilution	**Art. 4(1)**: "Member States shall, in accordance with the risk-based approach, ensure that the scope of this Directive is extended in whole or in part to professions [...], which engage in activities which are particularly likely to be used for the purposes of money laundering or terrorist financing." **Art. 7**: "Each Member State shall take appropriate steps to identify, assess, understand and mitigate the risks of money laundering [...]. It shall keep that risk assessment up to date."	Vague legal terms
Derogation	**Art. 12**: "By way of derogation from points (a), (b) and (c) of the first subparagraph of Article 13(1) and Article 14, and based on an appropriate risk assessment which demonstrates a low risk, a Member State may allow obliged entities not to apply certain customer due diligence measures [...]."	Exemptions exist, weakly specified
Delegation	**Art. 5:** "Member States may adopt or retain in force stricter provisions in the field covered by this Directive to prevent money laundering and terrorist financing, within the limits of Union law."	Significant delegation

***Table A.10**: EIA Directive Overview*

Indicators	Examples	Evaluation
Objects	Environmental domain, impact assessment	Narrow
	EuroVoc: *industrial project, environmental protection, impact study, environmental impact, building industry, private sector, public sector*	
Subjects	EU member states, developers engaged in projects in the building sector	Narrow
Instruments	**Planning and investment instruments** *Planning instruments:* all projects listed in Annex I must undergo EIA before development consent is granted (Art. 2(1); Art. 3; Art. 4(1))	One main instrument
	Information and soft instruments *Data collection or monitoring programs:* collection of detailed environmental information by developers, including effects on air, water, and fauna (Art. 5; Annex IV) *Information-based instruments:* authorities must inform and consult the public as part of the assessment process and publicize its findings (Art. 6(2); Art. 11)	
Dilution	**Art. 1(1):** "This Directive shall apply to the assessment of the environmental effects of those public and private projects which are likely to have significant effects on the environment." **Art. 6(2):** "The public shall be informed, whether by public notices or by other appropriate means such as electronic media where available, of the following matters early in the environmental decision-making procedures referred to in Article 2(2) and, at the latest, as soon as information can reasonably be provided:"	Vague legal terms
Derogation	**Art. 2(4):** "Without prejudice to Article 7, Member States may, in exceptional cases, exempt a specific project in whole or in part from the provisions laid down in this Directive."	Exemptions exist, weakly specified
Delegation	**Art. 1(3):** "Member States may decide, on a case-by-case basis if so provided under national law, not to apply this Directive to projects serving national defence purposes, if they deem that such application would have an adverse effect on those purposes." **Art. 2(1):** "Member States shall adopt all measures necessary to ensure that, before consent is given, projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects. Those projects are defined in Article 4." **Art. 11(1):** "Member States shall ensure that, in accordance with the relevant national legal system, members of the public concerned: [...]"	Significant delegation

***Table A.11**: DGSD Overview*

Indicators	Examples	Evaluation
Objects	Deposit protection	Narrow
	EuroVoc: *credit guarantee, management audit, financial control, credit institution, bank deposit, financial legislation*	
Subjects	Credit institutions, depositors, national guarantee funds, EU member states, European Banking Authority	Narrow
Instruments	**Regulatory instruments** *Obligatory standard:* requires all Member States to have deposit guarantee schemes (DGSs) covering at least €100,000 per depositor per bank (Art. 6(1))	Limited set of instruments
	Market-based instruments *Tax / levy:* mandatory contributions (levies) from banks, often risk-based (Arts. 8, 13)	
	Information and soft instruments *Data collection or monitoring programs:* banks must keep data enabling rapid payout; DGS reporting and testing obligations (Arts. 4, 10(10)). *Information-based instruments:* Standardized depositor information sheet and pre-/post-contract disclosures (Art. 16 & Annex I).	
Dilution	**Art. 4(12):** "Member States shall ensure that their DGSs have in place sound and transparent governance practices." **Art. 13(2):** "DGSs may use their own risk-based methods for determining and calculating the risk-based contributions by their members"	Vague legal terms
Derogation	**Art. 8(6):** "By way of derogation from paragraph 2, Member States may, where justified and upon approval of the Commission, authorise a minimum target level lower than the target level specified in paragraph 2., [...]."	Exemptions exist, weakly specified
Delegation	**Art. 7(2):** "[...] Member States may provide that deposits in an account to which two or more persons are entitled as members of a business partnership, association or grouping of a similar nature, without legal personality, may be aggregated and treated as if made by a single depositor [...]." **Art. 11(3):** "Member States may allow a DGS to use the available financial means for alternative measures in order to prevent the failure of a credit institution, provided that the following conditions are met:"	Significant delegation

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