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Polity configurations and the performance of state intervention in transformative policies: A conceptual framework

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Abstract

The imperatives of addressing grand societal challenges, such as fighting the causes for and implications of climate change, have driven a burgeoning scholarship on policy intervention to facilitate directional change in socio-technical systems. While the role of the state has come into focus – in particular in sustainability transition studies – there is little systematic conceptualization as to what drives and hinders the performance of state intervention in transformative policies. What is particularly missing is the understanding of how the polity of political systems affects the way in which the state facilitates political decision-making and mobilizes societal efforts for transformative change; and how different polities contribute to differences in state performance across Western democracies. This paper is a first systematic attempt to close this gap by conceptualizing the role of polity for state performance in the context of transformational policies. To do so, it first conceptualizes state performance as the introduction, ambition and sustainability of transformational policies, their input and throughput legitimacy and the societal efforts mobilized towards system change. Second, it focuses on two dimensions of polity configuration which, according to political science literature, have proven to be of particular importance for state performance: (i) the form of government in combination with the electoral system, and (ii) unitary versus federalist systems. Based on comprehensive deduction from conceptual and empirical literature in political science as well as governance and transition studies, the paper derives starting assumptions as to how specific manifestations of those polity configurations shape state performance in transformative policies. The resulting series of starting assumptions indicates that different polity configurations across Western democracies shape state performance in transformative policies in distinct ways. This conceptual paper thus provides the basis to inform future empirical studies that are interested in the long-term performance of the state when it comes to driving transformations.

1 Introduction

Tackling “grand challenges” (Kuhlmann & Rip, 2014), such as climate change, an ageing society, or the loss of biodiversity, necessitates the transformation of existing socio-technical systems (Child et al. 2017; Geels et al. 2007; Hölscher et al. 2018). “Transformation” has been understood as “fundamental changes in structural, functional, relational and cognitive aspects of socio-technical systems that lead to new patterns of interactions and outcomes” (Patterson et al. 2017, p. 2). The complex, uncertain, and long-term nature of system transformation raises significant governance challenges to policymakers, politicians and all other groups affected by and supporting transformation, as well as to analysts who seek to understand governance processes and conceptualize ways in which transformations can be supported successfully. Considering that system transformations are “multi-actor processes, which entail interactions between social groups” (Geels et al. 2010, p. 11), we define *governance of system change* as the way in which state and non-state actors intentionally interact and coordinate in order to regulate issues of societal concern, and ultimately, transform socio-technical systems (Borrás et al. 2014a).

The increasing recognition of governance challenges as to system transformations has led to renewed attention to the role of the state, as efforts on driving system change are often subject to “directionality failures” (Lindner et al. 2016). Here, “the state” refers to the political entity that has the monopoly to use force and to exert regulative, distributive and redistributive power over a certain territory.¹ The urgency to accelerate transitions (Roberts et al. 2019a; Sovacool et al. 2025) has led to the recognition that “the need for an executive authority to *make binding decisions* that cannot be made by the market or non-state actors entails a key role for the state in sustainability transitions” (Johnstone et al. 2018, p. 74). This is crucial because the state provides “a critical mechanism for taking collective decisions, giving effect to collective choices and mobilizing societal resources for societal ends” (Meadowcroft 2005, 2009). However, despite these recognitions and proposals, and numerous studies on the design and effectiveness of mission-oriented or transformative innovation policies (Edler et al. 2025; Edmondson et al. 2019; Flanagan et al. 2011; Rogge et al. 2018), the basic conditions of the *polity framework* under which the state can play its role in transformative policies has been largely neglected.

While public policies in Western democracies generally require a certain degree of legitimacy and stakeholder buy-in to remain successful over the long term (Jagers et al. 2020; Wallner 2008), polity conditions are particularly important for transformative policies that extend beyond ordinary or narrow sectoral interventions. Transformative policies seek to redirect entire socio-technical systems, i.e., to influence a multitude of heterogeneous actor groups with divergent interests and routines, towards desired outcomes. This process can rarely be catalyzed and governed through incremental or isolated measures alone. Instead, transformation typically requires a mix of policies capable of inducing broad and sometimes radical changes in the trajectory of system development (Borrás et al. 2014a; Lindner et al. 2016; Rogge et al. 2016). Relatedly, the scale and radicality of such transformations inevitably produce winners and losers, while successful transformation depends on the conscious reorientation of a wide range of actors towards new and desirable trajectories (Dewulf et al. 2015). Hence, binding decisions on transformative change must mobilize broad political and societal support for these decisions if they are to set such change in motion (Borrás et al. 2014a). Moreover, transformation is a long-

¹ How the state is organized and how those powers are exerted by governments is organized very differently in different political systems. In Western democracies, the executive defines and executes policies and is responsible for the administration to ensure the functioning of the state, while the legislative as part of the state makes the laws and controls the government and the judicative interprets and upholds the rule of law. In this article, the state may refer to all three branches of government.

term and uncertain process that usually extends beyond individual legislative cycles. A certain degree of policy continuity is thus a central condition for effectiveness. Therefore, the challenges of directionality, contestation, and uncertainty associated with transformative policies make it necessary to look beyond the instrumental effectiveness of policy measures and instead pay attention to the democratic institutions that structure political decision-making, mediate conflict, forge consensus, and sustain support over time (Patterson et al. 2017; Voß et al. 2009). In this sense, the success of transformative policy is heavily conditioned by the polity within the political system.

In consequence, it is not only worthwhile but necessary to understand the performance of the state as regards policies for system change and the polity conditions that influence this performance. First, we conceptualize “*performance of state intervention*” in transformative policies, which is our dependent variable, the explanandum. To do so, we build on an established conceptual framework (Borrás et al. 2014b) and define two performance aspects: a) the *input and throughput legitimacy*, which entails finding acceptance for the process of decision-making; and b) effectiveness, which refers to (i) the ability of the state to facilitate binding political decisions, (ii) the level of ambition and sustainability of transformative policies, as well as (iii) the level of transformative efforts in the broader society mobilized towards system change.

Second, we conceptualize the independent variables, the *polity conditions* under which state policies are decided upon, designed and implemented. Existing literature has noticed that the way the state intervenes in specific domains of socio-economic life differs across national contexts, featuring different “policy styles” (Howlett et al. 2018). One attempt to conceptualize the role of the state in a very basic way has been made by Borrás et al. (2020). In this framework, the distinction as to the opportunities and limits of state action and the interplay of the state with non-state actors is determined by the qualities of the specific socio-technical system that is to be transformed. However, importantly, the authors observe and acknowledge that the performance of state action in the same socio-technical system still differs between political systems (Borrás et al. 2020; Kuhlmann et al. 2018). This, Borrás et al. (2020) concede, has – inter alia – to do with the basic political structures, i.e., polities² that regulate the organization and distribution of power and autonomy in nation states (Ferguson et al. 2000) and that can be defined as institutionalized authority patterns of states operating within the world’s state systems which hold potential for political actions (Lijphart 2012; Users’ Manual 2002). However, how state performance in transformative policies is shaped by those polity conditions and how this differs across political systems in Western democracies³, remains insufficiently understood in the existing literature.

In consequence, we seek to mobilize political science literature to enrich our understanding of state performance in transformative policies following the neo-institutional perspective that acknowledges the structuring consequences of formal political institutions (Campbell 2025; Kato 1996). In the recent decade, the transition studies community has started to pay attention to the role of institutions and institutional change in sustainability transitions and their governance (Fuenfschilling 2019; Lockwood 2022; Patterson et al. 2017). However, little attention has so far been paid to formal, hard-core political institutions, i.e., the polity. To our knowledge, there are only two notable exceptions. First, in explaining

² The Greek term of “polity” is *Politeia*, originates from Polis (ancient city-state), which refers to its political system. In Webster’s New World College Dictionary, the definition of “polity” is “political or governmental organization; a society or institution with an organized government; state; body politic.”

³ In this paper, we limit ourselves to Western democracies, because there is already considerable diversity among these countries in terms of polity configurations and transformative policies, while the organization of the state and democratic rules provide certain basis for cross-country comparison, as demonstrated in (Lijphart 1999, 2012). We do not extend to the discussion of other political systems such as autocracies, as the organization of the state and distribution of power is radically different, which may be of future research interests.

policy feedback in energy transitions in the UK and Germany, Lockwood (2022) included the role of electoral systems and political decentralization as part of the “broader institutional context”. The second effort has been made by Sovacool et al. (2025), who listed electoral systems and veto players as two of many variables relevant to the acceleration of transitions. However, these two studies have predominantly focused on explaining policy feedback loops or general acceleration mechanisms in transitions by partly referencing to selective aspects of formal political institutions. However, the role of *polity* – the basic constitutional architectural design of the state itself – has not been explicitly isolated and systematized as regards the ability of the state to facilitate and steer transformative policies.

To shift our focus to polity, we turn to the Pattern of Democracy (PoD) thesis in comparative political institution literature, from which we develop core elements of our own framework. We build on Lijphart (2012) and focus on those two polity configurations which have, according to existing political science literature, proved highly consequential for the performance of the state (Beck et al. 2001; Lijphart 2012; Rhodes et al. 2008), not least in the context of sustainability and energy transitions (Lockwood 2022; Sovacool et al. 2025). Our first dimension is the *horizontal distribution of power*, as manifested in the form of government and the electoral system. Second, we look at the *vertical distribution of power*, as manifested in the (simplified) dichotomy of unitary versus federalist systems. We conceptualize different manifestations within these two polity dimensions by constructing stylized *ideal types*, as simplified models consisting of consistent combinations of core characteristics (Rose 1950). On such a basis, we seek to develop our conceptual framework through a comprehensive and critical deduction from existing theoretical and empirical literature (Jaakkola 2020; McGregor 2018) in political science, governance studies and socio-technical systems transformation.

Furthermore, the implication from the PoD thesis is that political systems differ across Western democracies at the national level, and this bears strong implications for differentiated democratic governance. At the same time, however, there remains a lack of understanding as to how different polity configurations may affect state performance in transformative policies. For our purpose, a comparative perspective focusing on polity conditions and their consequences for state performance can be further informed by insights from comparative political economy literature. We learn and distinguish ourselves from the well-established Varieties of Capitalism (VoC) framework. Its core argument is that constellations of institutional factors⁴, which are country-specific, combine to shape different types of innovation performance at the *level of firms*. This results in the differentiation between the liberal market economy (LME), inclined to produce radical innovations, and the coordinated market economy (CME) featuring incremental innovations (Hall et al. 2001). In light of growing interests in capitalism in transitions, the VoC framework has been mobilized to examine how the generation and diffusion of low-carbon technologies can differ across capitalist systems (Loewen 2022; Mikler 2009; Mikler et al. 2012). An agenda to more systematically foreground comparative capitalism in transition studies is formally advocated by Bailey (2024). Nonetheless, in this stream of literature, the dependent variable is mostly focused on national variations of the innovation and diffusion of low-carbon technologies rather than state performance in relation to setting up and sustaining deliberate transformative policies.

It is thus our objective in this paper to contribute one important missing link as to the explanation of the performance of state intervention in transformative policies. We need to stress that in doing so we deliberately limit ourselves to the role of state structures – polity, and do not seek to provide a

⁴ In the Hall and Soskice thesis, multiple institutional forms influencing firm economic and innovation performance complement each other (“institutional complementarity”). They consist of five institutional variables at different levels: financial markets, industrial relations, education and training, inter-firm relations, and firm-employee relations (corporate governance). These institutions are largely market-based rather than about “the state”.

comprehensive framework to explain state performance in total, or even transformative change in general. For example, by focusing on the polity as one determinant of state performance, we complement the state capacity school of explanation that focuses on the resources and capabilities of the public sector (Banda et al. 2024; Borrás et al. 2023). In addition, with an interest in the role of the state in making “binding decisions” in transformative policies, we limit ourselves to the so-called “elite politics” at the center of formal political decision-making (Johnstone et al. 2018), among others (e.g., mass politics and political culture) (Schmid et al. 2021). This also means that the explanation of policy implementation and the broader transformative outcomes are beyond the focus of this paper. For this matter, existing literature has documented a wide array of factors, ranging from sector- or system-specific characteristics (Freeman 1985; Markard 2011), lower-order institutions associated with respective sectors or systems (Lockwood 2022), and the heterogenous non-state actors, their material and normative interests, and specific power constellations to technological and infrastructural complexities of the functional systems and the distribution of switching costs (Farla et al. 2012). Therefore, with our framework, we hope to complement existing research by providing a starting point for empirical research that takes into focus the basic polity conditions in shaping state performance in transformative policies.

The remainder of this paper proceeds as follows. Section 2 describes and operationalizes the main building blocks of the model, i.e., the independent variables (polity configurations) and the dependent variable (state performance). In section 3, we introduce two institutional mechanisms – political access and veto power – through which the polity conditions take effect and thus help build up our assumptions. We then present the overall conceptual model on the basis of which we proceed in section 4 to develop starting propositions on how the two polity configurations defined in section 2 may affect the performance of state intervention in transformative policies. The last section 5 closes with discussions on the implications and limitations of this conceptual paper, and directions for future applications in empirical research.

2 The conceptual building blocks

2.1 Independent variables: polity configurations

2.1.1 The form of government and electoral systems

2.1.1.1 The form of government: the presidential versus the parliamentary system

In terms of horizontal distribution of powers, a basic and fundamental difference between political systems is the form of government⁵. The political science literature draws a key distinction between the presidential system and the parliamentary system (Elgie 2005). Though empirically there are a variety of hybrid forms of government, we stick to this simplified, stylized difference to develop our conceptual framework, considering that “all presidential and parliamentary systems have a common core that allows their systematic comparisons” and that the systematic and fundamental difference is meaningful (Linz 1990a, 1990b). Moe et al. (1994) echoed this point by stressing the “transcendental

⁵ In political science literature, this is sometimes termed as political regime sub-types or system of government. See Alvarez et al. (1996) and (OECD 2022).

nature” of the choice of government forms – when nations choose a presidential or parliamentary form, they are choosing a whole system with various institutional properties of a democratic government. Therefore, we adopt this basic differentiation as it represents a majority of Western democracies and serves as a parsimonious starting point to explore differences in polity configurations in Western democracy and their performance consequences.

Typically, a presidential system features separation of powers between the executive branch and the legislative branch, and both are elected independently (Carey 2005). The parliamentary system is organized according to the opposite principle, featuring fusion of powers, where the authority of government is dependent on the legislative branch (e.g., the Cabinet), creating a single locus of origin of sovereignty at the national level (Carey 2005). Thus, one critical difference between the two systems is whether there is mutual dependence between the executive and legislature. Some key characteristics accompanying this basic demarcation, according to political science literature, are summarized in Table 1.

Table 1: A comparison between the ideal-typical parliamentary and presidential systems⁶

	Parliamentary system	Presidential system
Key characteristics	<ul style="list-style-type: none"> The head of government and the Cabinet are dependent on the legislature’s confidence and can be dismissed from office by vote of non-confidence or censure. The head of government is elected by the legislature. Collective or collegial executives. 	<ul style="list-style-type: none"> The head of state, called president, is elected for fixed term and under normal circumstances cannot be forced to resign by vote of non-confidence. The president is popularly elected. One-person, thus non-collegial executive.
Essence	The executive and legislature are mutually dependent.	The executive and legislature are mutually independent.
Sub-types	The Westminster model, and multi-party coalition system, etc.	Pure presidential system, semi-presidential system, etc.
Examples	UK, Canada, Germany, Norway, etc.	US, South Korea, France, etc.

This dichotomy is nevertheless highly stylized, and within each category, there can be considerable variations. For example, while the United States (US) represents a relatively “pure” form of presidential system, there are a range of semi-presidential or hybrid forms, such as France (Lijphart 1991a; Stepan et al. 1993).⁷ Further, as regards the ability of the president to push through her or his political preferences, there is a significant difference between two constellations in the legislature: first, the so-called “unified government” where the president has the majority support from the legislature, and the so-called “divided government” where the legislature is dominated by the opposing party (Carey 2005, 2008). We refer to this difference when exploring the implications of the presidential system on state performance in transformative policies.

⁶ Authors’ summary based on (Carey 2005) and (Lijphart 2012).

⁷ For example, within a “pure” presidential system, the power of the president varies drastically as well. The president in countries like the US has discretion over selected policy domains, especially foreign affairs, according to (Lowande et al. 2022), and can issue executive orders within the limits of existing laws, which however often sparks controversy as to how far the autonomy of the president may reach. In Brazil, the provisional measures (“medidas provisórias”) of the president even function as a major decree-like legislative instrument, as explained in (Pereira et al. 2005).

The parliamentary system is no less heterogeneous. One noticeable internal variation is between the UK's so-called Westminster model, which most often features a single-party government⁸, and various forms of coalition governments in most European countries (Proksch et al. 2015). Part of these internal variations is attributed to another institutional difference, i.e., the combination of government forms with electoral systems. We turn to this point in the next sub-section.

2.1.1.2 The electoral system

Above, we have noticed that the internal variations within each higher-order category of government forms are partly attributable to the associated electoral system – the combination of the electoral rule and the resulting partisan system. This combination interacts with the form of government and hence leads to certain configurations that organize and structure the government in specific ways (Baron et al. 2001). Therefore, we include the electoral system as a key element alongside the form of government.

In terms of electoral systems, political scientists have categorically distinguished between proportional representational (PR) and majoritarian electoral rules (Lijphart 2012; Smelser et al. 2001). PR refers to an electoral method designed to approximate the ideal of proportionality in converting citizens' votes into legislative seats. Under the majoritarian electoral rules, parties compete for a single authority in each electoral unit, to then form a majority in parliament on that basis. There are, of course, electoral systems that mix PR and majoritarian principles; however, in this paper, we focus on the two ideal types for necessary simplification. Closely discussed together with the electoral system is the partisan system, as the electoral system has a probabilistic causal impact on the type of partisan composition that forms the government (Colomer 2018; Duverger 1959; Taagepera et al. 2012). Specifically, the PR electoral systems tend to produce multiparty systems and often coalition governments, while majoritarian electoral systems tend to result in two-party competition for sole dominance in the government⁹. While the correlation is not definitive, it is widely adopted as a baseline assumption in further theorization and empirical tests (Gallagher et al. 2005; Lijphart 1991b). Regarding the electoral and partisan system, we limit ourselves to this level of abstraction. We do not engage the examination of more micro-level institutional set-ups or rules that govern intra- and inter-party competition, or strategies adopted by political actors in the political competition (Bartolini 2002; Strom 1990) as these pre-government dynamics are not part of the "polity" configuration per se and are thus beyond the scope of this paper.

To this point, the interaction between governmental forms and electoral systems produces three concrete configurations of government forms: PR-parliamentary system, majoritarian-parliamentary system, and majoritarian-presidential system. A "missing" fourth one, the presidential – PR combination is hardly a political equilibrium (Carey 2005), as "presidential elections are inherently disproportional...The party that wins the presidency wins 'all' of the seats – that is, the one seat that is available -and the losing parties win no seats at all." (Lijphart 2012, pp. 146). Nor does the presidential-PR combination exist empirically. Therefore, we skip this sub-type in this paper.

Taking these sub-types together, we categorize ideal-typical government forms and electoral system combinations as follows: in the parliamentary system, we analyze the Westminster model and PR, multi-party model; in the presidential system, we analyze the constellations of unified government versus divided government. On such a basis, we intend to derive starting assumptions with regard to

⁸ On rare occasions there are coalition governments between the two parties, such as the Labor-Conservative coalition in the UK in early 2010s.

⁹ Again, in rare cases there can still be coalition government. A historical record of coalition governments in the UK can be found at https://en.wikipedia.org/wiki/United_Kingdom_coalition_government, subject to verifications.

how government forms and electoral systems influence state performance in transformative policies. For example, one intuitive result of the multi-party coalition government is that the state can be slower to make decisions compared to a single-party government due to the fragmentation of powers in the government (Lardeyret 1991; Lijphart 1991b). We will dive deeper into this point in section 4.

2.1.2 Vertical distribution of power: Unitary vs federal systems

The vertical distribution of power is another important dimension of polity configurations, with a major distinction drawn between the unitary and federalist systems. A unitary system is straightforward in its definition, as most powers (functions) are assigned to the national level of government, which has the authority to legislate in all domains of activity (Breton 2000)¹⁰. The counterpart of the unitary system is the federalist system, where power is divided between at least two levels of government, i.e., national level and “state” level, in a variety of configurations. The vertical division of power functions “in such a way that each kind of government has some activities on which it makes final decisions” (Riker 1975, p. 101).

The notion of federalism embodies the idea to use vertical checks and balances as a complement to horizontal organization of power (Lijphart 2012). However, it is acknowledged in the literature that the operationalization and categorization of federalism is a demanding task, and there are many different approaches that delineate the core analytical elements of the federalist system to allow for meaningful comparison. Just to name a few, Scharpf (1988) draws a distinction between “dual” federal systems where both decision-making and implementation powers are constitutionally separated, and “cooperative” federal systems that are subject to joint responsibilities and “interlocked politics”. While Scharpf focuses on the extent to which the policy-making is coupled (interlocking, “Politikverflechtung”), Benz (2000) more explicitly defines federalism from a comparative and dynamic view, seeing federalism as a multi-level polity in terms of how between-level government coordination is organized. Federalism in Benz’s definition then varies between “loosely coupled”, with high autonomy of units at both levels in specific domains, and “tightly coupled”, with a higher need for joint decision-making. Others classify federal systems based on the distribution of the “right to decide” and “right to act” at the two levels of government (Braun 2000). While there is more or less overlapping between these different approaches, and each has its specific rationales and analytical (de)merits, Gamper (2005) convincingly sorts out two substantial analytical elements as generic to all federalist systems, i.e., the distribution of powers between the central and constituent units, and the participation of the constituent units at the central level of legislation in certain forms.

For our purpose, we follow the Gamper (2005) approach and draw a simplified distinction between two models of federalist system that are representative (by no means exhaustive) in Western democracies: first, the *dual model* where legislation and administration can be enacted relatively independently by the national and sub-national level authority; and second, the *compound model* where national and sub-national level governments are functionally complementary, and which features joined decision-making and shared responsibility. In Western democracies, a key feature in the compound model that differentiates it from the dual model is that constituent units can exercise veto power over policy and legislation, such that federal initiatives can hardly be pushed through by the federal government alone. By contrast, in the dual model, while territorial interests are represented at the national level, typically at the second chamber of legislature, these do not necessarily constitute a veto over national policy unless they reach a certain threshold.

¹⁰ To different degrees communes have some authority to regulate local matters also in strictly centralized systems, without any participation in decision making at national level, though.

It is useful here to take the federalist systems of Germany (DE) and the US as an example to illustrate the difference between the two sub-types. Germany is generically regarded as a compound model that is especially complex and intricate. The fact that the executive branches of the governments of the Länder (constituent units in Germany) have legislative representation at the national level is often described as a “marble cake” model of federalism (Jeffery 1999; Kropp et al. 2016). This means that many competencies are shared between the two levels of government, whereby the federal level is dependent on the support of the majority of the Länder governments in many areas. This leads to constant negotiations for major political decisions (“Verhandlungsföderalismus”). At the same time, lots of decisions taken at the Federal level are subsequently executed at the Länder level (“Exekutivföderalismus”). By contrast, the US is frequently cited as a typical dual model of federalism. The powers of the federation and the states are more clearly distinct compared to Germany, and the states have far more autonomy in legislation relative to the federal government. The states as political entities in the US are nevertheless involved in federal decision-making through the Senate in the Congress that is composed of two elected Senators from each state. While these *personal* representatives can still defy the political agenda of national party leaders, there is no formal involvement of state governments at the federal level as a necessary condition for policy change.

Political science literature has long recognized that the manifestation of federalism bears close consequences for the nature and quality of democratic governance (Erk 2006). However, the concrete rationales and empirical evidence supporting the role of federalism in policymaking are contested and mixed (Wachendorfer-Schmidt 2000), and one important reason is the confusion between federalism and decentralization. These two concepts are closely related to each other but not the same. Even in a unitary system, there can be decentralized institutional mechanisms that help deliver a country’s governance objective, for example, devolution in the UK (Woods et al. 2010). However, a critical difference between the two concepts lies in that federalism essentially deals with the “right to decide”, i.e., “the organization of democratic decision-making in relation to the level – national or not – and the competencies involved” (Wachendorfer-Schmidt 2000, p. 192). Thus, the “right to act” does not constitute a fundamental feature of federalism, but rather an expression of decentralization in terms of the concrete and material organization of policy implementation of the nation state (Wachendorfer-Schmidt 2000). Therefore, for our purposes, we stick to the territorial definition of federalism and focus on the “right to decide” structured by polity, and do not extend to the analysis of decentralization in general.

2.2 Dependent variables: the performance of state intervention in transformative policies

After having introduced the two polity variables that condition how state action is shaped, we now turn to the dependent variable, i.e., “performance” of state intervention in transformative policies. We conceptualize performance building on the two widely regarded key dimensions: first, *input and throughput legitimacy* – which means the social acceptance of state intervention on the grounds of the process by which decisions are taken, and second, *effectiveness* – the introduction, ambition and sustainability of transformative policies, and the degree that societal efforts among diverse non-state actors are mobilized towards transformative change.

2.2.1 Input and throughput legitimacy

The concept of legitimacy lies at the heart of democratic governance. It means that there is the “socially shared view” that the state has the capacity and authority to impose rules on a community of citizens (Boedeltje et al. 2004a; Scharpf 2003). In the context of transformative policies, there are at least three important reasons why legitimacy is so central to state performance (Borrás et al. 2014a). First, the inherent uncertainty of challenges and transformation initiatives and the related contestation of scientific and technological changes necessarily ask for legitimate processes as a basis for decision-making under uncertainty (te Kulve et al. 2010). Second, because the governance of system change entails concerted efforts, the very process is inevitably political in nature as it affects the interests and value systems of various stakeholders, and thus the perception of this process as being fair is critical for the acceptance of the political decision. Third, if agreed governance approaches lead to binding decisions and socially shared envisioning of change, then legitimacy beliefs serve to create a sense of normative obligation that supports voluntary compliance from different societal actors (Scharpf 2009).

In this paper, we contend that political decision-making is not just about channeling policy and political inputs, but also the moderation of multi-actor interaction, which lies at the heart of governance of system change. Thus, deciding on the directionality of system change in the political process is concerned with both the *input legitimacy* and *throughput legitimacy* of the state in transformative policies. Our conceptualization of input and throughput legitimacy is built on the efforts of Scharpf (2003) and Schmidt (2013). By definition, input legitimacy means that governing processes are generally responsive to the manifest preferences of the governed (“government by the people”)...” (Scharpf 2003, p. 3). It thus depends on the extent to which policy decisions are “derived from, directly or indirectly, authentic preferences of citizens” (Scharpf 1997, p. 19). Following Scharpf, from an institutional point of view, “input legitimacy flows from the governance system’s responsiveness to public preferences through public participation in the deliberative production of laws and rules” (Taylor 2019, p. 217). Thus, input legitimacy is reflected in the degree to which policy decisions regarding system change reflect citizens’ preferences, including minority interests. It is not only the inclusion of citizens’ preferences that is important, but also the quality of this inclusion, i.e., the representativeness of a broad array of heterogeneous preferences.

The concept of throughput legitimacy is more recent, and its operationalization is more controversial. It is often treated as an umbrella concept that entails democratic principles governing the *decision-making process* – inclusiveness, accountability, efficacy, and quality of deliberation (Schmidt et al. 2019). It is recognized in the literature that these principles do not always sit comfortably with each other, and political scientists rarely explore all these dimensions in one attempt (Caby et al. 2021). Nevertheless, what emerges from the literature as a commonly accepted measurement of throughput legitimacy is the criteria for the quality of inclusion (i.e., what it actually *means* to be included), and the capacity and roles of decision-makers and stakeholders (Caby et al. 2021). This means that stakeholders relevant to system transformations should be granted a seat at the decision-making table and an opportunity to present their arguments (Geeraert 2014; van Meerkerk et al. 2015), in a way that who participates is open to discussion and that decision-makers and stakeholders have equal capacity in the process (Geeraert 2014; Munta 2020).

Therefore, while input legitimacy is about the degree of participation and representation in channeling citizen preferences into the policymaking system, throughput legitimacy is more specifically about the quality of the governance of the political decision-making process itself, in terms of the involvement of stakeholders, the openness and fairness of inclusion, and procedural fairness (Schmidt et al. 2019).

However, in empirical analyses, it is recognized among political scientists that the boundaries between input and throughput legitimacy are frequently blurred and entangled in practice, as participatory mechanisms are frequently embedded in decision-making systems and procedures that rarely allow clean separation (Scharpf 2009; Schmidt 2013).

2.2.2 Effectiveness

Governance of system change through transformative policies involves performance goals against which it can be assessed by citizens¹¹, that is, the production of binding decisions regarding directionality change and its instrumentation (Borrás et al. 2014b; Strebel et al. 2019). Given our focus on the role of the state in shaping transformative policies and sustained societal commitment to the decisions, our definition of effectiveness entails two performance dimensions: first, the introduction, ambition and sustainability of transformative policies, and second, the degree of societal efforts mobilized towards transformative change.

(1) The introduction, ambition and sustainability of transformative policies

Governance of system transformation requires policy and institutional change to modify the existing trajectory of development. This comes to the ability of the state to formulate and introduce adequate transformative policies to address societal challenges and problems, with the scope and level of ambition necessary for the transformation to happen (Edler et al. 2021; Lindner et al. 2016; Sovacool et al. 2025).

For transformative policies, these issues are far from trivial. Goal definition and prioritization as reflected in the normative agenda of transformation initiatives (Kattel et al. 2018; Wanzenböck et al. 2020) are made amidst a range of diverse normative and material interest constellations. The potential for conflict is determined by the extent to which the envisaged system deviates from the existing trajectory, resulting in ambitious, radical or non-ambitious, incremental goals (Andersson et al. 2021). Polity configurations influence the way normative conflicts are dealt with, and interests are mediated in the decision-making process. Thus, polity certainly influences the level of ambition of aspired transformation that is politically supported, be it in terms of changing direction, catalyzing developments, broadening or lifting the goal to be achieved.

Moreover, given that transformation often has a long-term time horizon, the effectiveness of the state in politically facilitating transformative policies also has to do with the way in which those policies can be sustained over time, for “whatever the exact shape of a country’s policy, it can only work if it is pursued consistently and pragmatically” (Diamond 1990). This political sustainability entails the incorporation of positive feedback to transformative policies based on learning and experimentation, which then induce broader actor coalitions to contribute to the course of change (Lockwood 2022; Loorbach et al. 2015; Sewerin et al. 2020), as well as the capacity to deal with “undesirable” change, e.g., abrupt political disruptions or punctuations that reverse or cancel out transformative policy initiatives.

(2) Societal transformative efforts mobilized

Once an agenda for transformation is set, concerted efforts are needed for instrumentation and implementation. The transformation of socio-technical systems affects behavioral, material and cognitive

¹¹ We focus on the objective result of how a certain societal problem is being addressed. We are aware that this has its conceptual affinity with output legitimacy. However, in this paper we do not engage this concept as it inevitably involves citizens’ subjective perception of governance outcomes which suffers measurement problems and is largely beyond the structural implications of polity configurations. To look into the matter, please refer to (Boedeltje et al. 2004b).

dimensions (Patterson et al. 2017) across a wide scope of stakeholders, ranging from distributed state agencies to interested industrial and research actors and citizens affected in very diverse ways. Transformation is hence not a command-and-control exercise, but necessitates de facto governance, where agencies of governance are becoming increasingly distributed, involving new actors as well as existing actors in changing contexts. Concerted efforts among sufficient actor constellations (Kuhlmann et al. 2018) become crucial for successful intervention via transformative policies, and sufficient buy-in by those groups contributing to and being affected by transformations is critical. The delivery of transformative policies thus relies on the behavioral changes among various non-state actors towards the politically decided direction of change. The effectiveness of state intervention then has to do with its ability to incentivize and mobilize broader stakeholders and societal efforts towards the achievement of transformation goals.

It is thus of interest to look for conditions in polity configurations that incentivize stakeholders to actively contribute to system change. The literature of change management (Hubbart 2022) and transition management (van de Kerkhof et al. 2005) has conceptualized the latter as stakeholder commitment, understood as the voluntary support and willingness of concerned stakeholders to invest time and effort, and thus contribute to the transformation of socio-technical systems that has been politically decided upon. Stakeholder commitment to politically steered transformation is indispensable for the effective problem solving process, though this does not guarantee the ultimate success of transformations per se, which depends on a huge number of other factors (Farla et al. 2012; Sovacool et al. 2025).

Finally, from a system view of politics and political process, there is a certain correlation between the two independent variables, i.e., input and throughput legitimacy of state intervention in transformative policies and its effectiveness. The concept of input and throughput legitimacy rests on the idea that the exercise of state authority is justifiable even if one disagrees with specific decisions (Gilley 2006). A comprehensive review of the literature overall suggests that the production of throughput legitimacy can not only strengthen input legitimacy but also improve the outcomes of political decision-making (Caby et al. 2021; Schmidt 2013). Thus, “legitimacy provides a ‘reservoir of support’ for institutions and authorities, something besides immediate self-interest” (Tyler 2006, p. 281), thereby increasing the capacity of the state to mobilize societal efforts towards transformative change. Therefore, although effectiveness depends on a wide range of variables, it is reasonable to speculate that a higher level of input and throughput legitimacy could be conducive to stakeholders’ voluntary contribution to transformations through conscious behavioral changes.

3 Conceptualizing the link between polity configurations and the performance of state intervention in transformative policies

So far, we have conceptualized polity configurations (the independent variables, section 2.1) and dimensions of state performance in transformative policies (the dependent variables, section 2.2) as the building blocks for our conceptual framework. It is the objective of section 3 to develop the linkage between the dependent and independent variables through deduction from political science, governance and socio-technical system transformation literature, including a short introduction of two major mechanisms that mediate this influence, i.e., political access and veto power.

3.1 The overall conceptual model

Rooted in a political systems perspective (Easton 1965), our paper has so far conceptualized political governance of system change as a multi-actor interaction process with a focus on the polity conditions for political decision-making and its implications on the broader societal efforts mobilized towards system change (Borrás et al. 2014a; Fischer et al. 2017; Loorbach 2010; Loorbach et al. 2015). While the actual political process is far more complex and intricated (Zahariadis 2016; Zohlnhöfer et al. 2016), we deliberately focus on the policymaking process and do not extend our analytical focus to policy implementation and the outcomes.

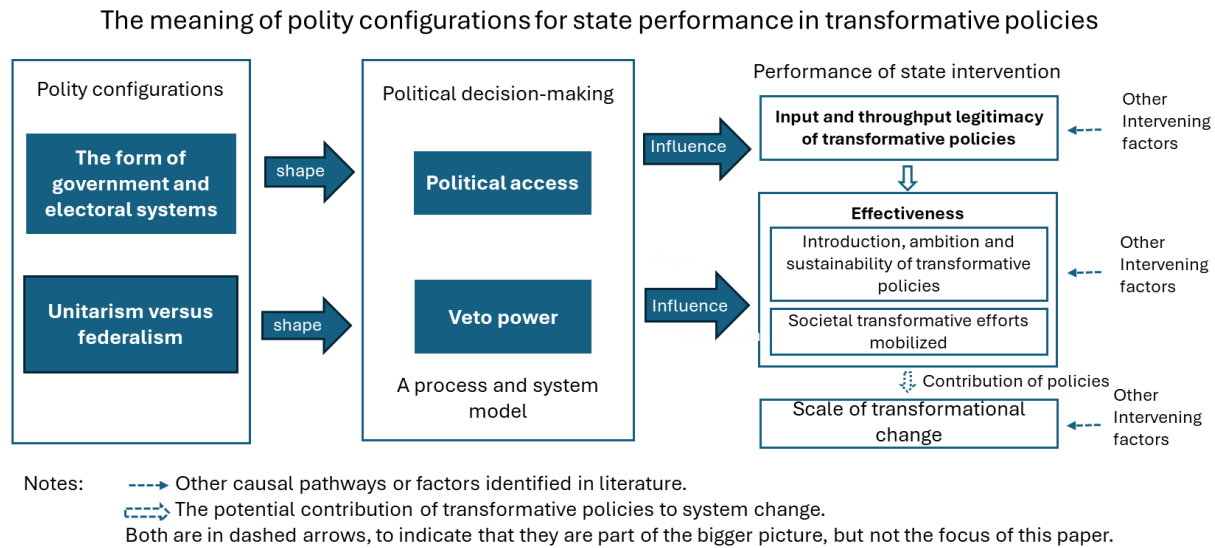
The starting point of our argument has been that the performance of state intervention in transformative policies is influenced by the polity configuration in a political system. Polity configurations are consequential because, as part of formal political institutions, they are an important factor constraining or enabling policy change by structurally restricting/extending its potential and feasibility (Henisz 2004; Nash et al. 2022; Steinmo 1989). Polity configurations thus structure the opportunity space and mode of political interaction within the state apparatus and between state and non-state actors regarding decision-making in the context of fundamental transformations.

However, if we want to develop a conceptual framework that helps us to understand and eventually support meaningful transformation policies, to conceptualize the meaning of polity conditions is not enough; we also need to conceptualize *how* and *in what way* those conditions make a difference. At the same time, we notice that in governance and transition management literature, there has been a strong argument for increased participation as a means to improve policy outcomes (Fischer 2012; Loorbach 2010; Loorbach et al. 2015). However, while attending to concrete institutional mechanisms that regulate participation and representation in the actual governance process, this literature has almost remained silent about the basic political institutional context, including polities, through which participation and representation are moderated. Thus, it is our objective in this section to deduce from relevant literature the core institutional *mechanisms* that allow us to trace state performance in transformative policies back to polity conditions and use them as a basis for developing starting assumptions for cross-system comparison in Western democracies.

Given our understanding of political governance of system change, and our interest in societal acceptance, scope and sustainability of transformative policies, we have chosen to focus on two institutional mechanisms offered in the literature that moderate (1) political interaction regarding directionality and instrumentation of change, and (2) the mobilization of non-state actors relevant for system transformation. Consequently, the relevant mechanisms that link state performance back to polity configurations are a) *political access* by non-state actors to the political and policymaking system to influence the transformation agenda, b) *veto power*, through the exercise of which political actors can formally influence the final stage of decision-making given their structural position in the political system. Political access and veto power are two mechanisms that are critically concerned with the “input” and “throughput” side of the political system that can bear significant consequences on the performance of the state, and ultimately system change¹² (Easton 1965). Taken together, the configurations of polity, which differ across Western democracies, influence the way in which political access and veto power manifest themselves and their constellations, which, in turn, influence the performance of the state in transformative policies. The overall conceptual framework is presented in Figure 1 below.

¹² Despite the rationale, explaining the role of state in the ultimate system change is beyond the focus of this paper.

Figure 1: The conceptual model of this paper¹³



To reaffirm, we explore how polity configurations as defined in section 2 shape the opportunity space and mode of political interaction and *potential* consequences on decision-making and societal efforts mobilized towards system change. This means that we avoid an overly structural-functional and deterministic understanding of the meaning of polity conditions for state performance. In the following subsections 3.2 and 3.3, we introduce the two proposed mechanisms in more detail and discuss in very general terms how they condition political interaction and opportunity space for directionality change in political decisions in Western democracies, and briefly summarize the conceptual model. In section 4, we then propose how different polity configurations make a difference in terms of state performance in transformative policies.

3.2 Institutional mechanisms that mediate the influence of polity configurations on state performance in transformative policies

3.2.1 Political access

3.2.1.1 The concept of political access

Political access concerns the institutionally defined opportunity space opened up for different actors to influence the policymaking process. This contains direct and indirect channels. The indirect channel is the constituency's electing political decision-makers (Dalton et al. 2004). The direct channel is concerned with influencing the entire process of policymaking in a stylized "policy cycle" (Klijn et al. 2000; Wampler 2012). In this paper, we examine both channels but put greater emphasis on the direct channel of access, given the latter's relevance to the very political decision-making process of transformative policies.

¹³ Authors' elaboration based on literature. To clarify, the dependent variable, state performance, focuses on transformative policies and societal support mobilized to contribute to desired directionality change. This means that the explanation of policy implementation and transformative outcomes are beyond the focus of this paper.

To operationalize, political access to policymaking is determined by the location and number of “access points”. In political science literature, an “access point” is defined as any *structural feature* in the national political institution through which non-policy-makers and non-politicians can get their voices heard and transferred into the political process (Ehrlich 2011). In the context of transformative policies such access points could either be a) policy makers or politicians who, by their position in the political system (e.g., the legislature and executive branch, or judicial branch), have the power to initiate policy changes, bring an initiative into the pre-decision stage or influence the decision-making process; or b) policy makers who are part of a certain stage of the policy making process. Access to the policy making process has different meanings depending on the specific stage of the policy cycle (Fischer et al. 2017). While the pre-decision stage is highly contested and fluid, the formal decision-making stage provides the most influential access as this is where the ambition and direction of transformative change are negotiated, and it is where actors structurally granted with veto power can significantly alter or stop decision making processes (see 3.2.2 below). Therefore, it is important to understand at what stage and through which entities (political parties, governmental bodies, etc.) interest groups and stakeholders can influence the agenda-setting and instrumentation of transformative policies.

Stakeholders who seek to influence policymaking can include organized interest groups (Andreas Dür et al. 2007), as well as diffused social groups and social movements (Walgrave et al. 2012), etc.¹⁴ Organized interest groups have always been important actors in the political process and strongly influence policy change in interaction with the government (Richardson 2000). Consequently, they are also recognized as critical in socio-technical system transformation, not only in terms of being affected by and shaping transformation, but also in terms of influencing state decision-making (Wesche et al. 2024). The political science literature has a long tradition of studying the way interest groups exert influence on policymaking, through pluralistic or corporatist mechanisms (Schmitter 1974, 1989). In contemporary Western democracies, corporatism denotes systems of political decision-making with formalized access of a limited number of organized interest groups, which is mainly consensus-oriented (Binderkrantz et al. 2015; Lijphart 2012; Molina et al. 2002; Vesa et al. 2018; Wiarda 2016). Thus, it varies in degree instead of being a binary variable (Siaroff 1999). In contrast to corporatism, pluralism denotes the opportunity for accessing the political arena by a vast, and in principle unlimited number of interest groups, undertaken in an ad hoc, irregular and competitive way (Lijphart 2012; Munk Christiansen et al.). There is no simple correlation between corporatism and pluralism on the one hand and the manifestations of the polity configurations on the other hand, as demonstrated by Lijphart (2012). Thus, we discuss the implications of interest group influence on state performance only when relevant for a certain manifestation of polity configurations.

3.2.1.2 The implications of political access on state performance in transformative policies

Political access bears strong implications for the input and throughput legitimacy of state intervention in transformative policies. According to existing political science literature, three features about political access stand out as consequential for state performance: the breadth, fairness and formalization of political access. Broad access, in operational terms, a high number of access points at multiple locations of the political system, enables participation by a broad range of non-state actors, partly by lower costs of

¹⁴ There are rare occasions where citizens vote for policy options and directly influence decision-making, for example, in Switzerland, and in this case, the political system has the highest level of accessibility, according to (Obinger 1998). However, the majority of Western democracies are representative democracy and the specific electoral rule matters.

access (Ehrlich 2011). Equally important is the fairness of access, i.e., access being open to relevant stakeholders on equal terms, which is identified as a key criterion for the quality of access (Boedeltje et al. 2004b; Lindgren et al. 2010). In a most general sense, broad and fair political access in combination provides the opportunity space for building a high level of input legitimacy of state intervention (Taylor 2019). By contrast, broad access without safeguarding arrangements of fairness would limit input legitimacy, as it would privilege those who are, for all kinds of reasons (material resources, information, etc.), can wield stronger influence over policymaking (Boedeltje et al. 2004b; Borrás et al. 2007). When access is particularly about the decision-making process, then the same applies to throughput legitimacy. The third feature of political access is about its degree of formalization, which can be a double-edged sword for state legitimacy in transformative policies. Institutional formality provides the credibility of access in making binding decisions (Rodríguez-Toribio 2025), which in principle, positively affects input and throughput legitimacy. However, a high level of formalization may also tend to firmly exclude certain stakeholder groups from the policymaking process. This is particularly problematic in a complex transformation process where the level of affection of stakeholders can hardly be anticipated *ex ante*.

Political access would bear implications for effectiveness, too, but arguably in a more indirect manner, as many other factors join to influence effectiveness at the later stages of the policy process (Fischer et al. 2017). Therefore, below we postulate the potential with which political access may bear implications on effectiveness in terms of the introduction of transformative policies and societal efforts mobilized towards transformation.

The “input” into the political system by non-state actors has two interrelated facets for the design and introduction of transformative policies. The first facet is political, in terms of different political demands, interests and values. The second facet is cognitive, in terms of different knowledge, competence, worldviews and beliefs held by different actors. These two facets together can yield mixed implications on the introduction of transformative policies. On the one hand, the participation of non-state actors in the policymaking process can produce “more intelligent” outcomes (Boedeltje et al. 2004b), for in modern society “no single actor group, public or private, has all knowledge and information required to solve complex, dynamic and diversified problems” (Kooiman 1993, p. 4). This is conducive to, but not sufficient for, effective problem-solving. As Tops (1999) pointed out, a good interactive procedure is necessary to be successful in terms of the content of the policy, but the quality of this procedure is not sufficient in itself for success. This is because very broad and diverse political access and input can cognitively overburden political deliberation and can lead to overly contested and conflictual policymaking. These two facets, considered as pressure and expertise in the literature (Bruycker 2016), can be the two sides of the same coin.

Another channel of influence of political access on effectiveness is through the mobilization of societal efforts towards transformative change. High-quality access creates the opportunity space to broaden and strengthen *stakeholder commitment* via granting inclusive and credible participation. Stakeholder involvement in the agenda building and decision-making process has been well documented to have facilitated successful change initiatives, both in the context of organizational change management (Hubbart 2022) and, recently, transition management (Loorbach 2010; Shove et al. 2007; Voß et al. 2009). This can be strengthened in turn by the perceived input and throughput legitimacy as the indirect influence from political access, which enhances the support of, and therefore contribution to, transformative change among relevant stakeholders.

Fair, inclusive and formalized political access is no guarantee for the legitimacy of transformative policies nor societal support for them. Procedurally guaranteed political access does not translate into de

facto influence of stakeholders and thus into a perception of a high level of legitimacy. By contrast, empirically, we often observe a perception of tokenistic involvement by stakeholders, with counter-productive effects (Caby et al. 2021; Greenwood 2007). However, it is still believed that institutionalized, high-quality access is overall conducive to building up legitimacy, and existing literature does indicate a positive link between them. For example, the analysis of 5,000 respondents in eight metropolitan areas in France, Germany, Switzerland and the UK by Strebel et al. (2019) has identified that input legitimacy, independent of policy outcomes or other factors, exhibits a positive influence on citizens' evaluations and beliefs on democratic governance.

3.2.2 Veto power

3.2.2.1 The concept of veto power

In the stylized policy process, the stage of formal decision-making substantiates the various "input" potentialities of political access discussed in 3.2.1 into the final political decisions. This formalized political access to the very decision-making stage is manifested in the second institutional mechanism in our conceptual model, namely, the exercise of veto¹⁵ power stemming from the structural position enabled by a certain polity configuration (Tsebelis 1995). Veto power thus endows certain political actors with the formalized ability to reject certain measures or proposals passed on by other actors(s), or to create the space to amend or re-negotiate those proposals (König et al. 2001; Slapin 2011). To operationalize this institutional mechanism, we focus on the agent of veto power, that is, veto players who are formally involved in the decision-making process.

In a very general definition, a veto player is "an individual or collective actor whose agreement is required for a policy decision" (Tsebelis 1995, p. 293). This general definition can be used to analyze all political systems regardless of government form (presidential or parliamentary), party system or type of parliament (Tsebelis 2000). In this paper, we focus on veto players who have formal positions in the system that guarantee them veto power on political decisions. Generally, those veto players structured by polity are within the state apparatus, e.g., legislators in the US presidential system. However, organized interest groups constitute a *de facto* type of veto player when their formal involvement in the decision-making process is mandated in basic institutional arrangements, as is the case of corporatism (Vigour 2014).¹⁶

Given our process-based understanding of the political governance of system change, we do not reduce the concept of veto players to the mere preventative power held by them or their act of preventing a policy change, but look at the interaction among these actors in the decision-making process. Arguably, political actors who advocate a policy change may often need to offer concessions¹⁷ in order to gain the support of policymakers who possess veto power (Herweg et al. 2015). Thus, negotiation and bargaining are commonplace and should be viewed as an integral part of the decision-making process and veto power. We hence understand veto players as including both their role in affecting the final decision and the political interactions among them.

¹⁵ The word "veto" has its Latin origin as "*vetare*", meaning to forbid or prohibit.

¹⁶ However, we do not extend ourselves to the extensive discussions on actor strategies in gaining certain degree of veto power by influencing veto points in the political system, which is another line of research in comparative politics and political economy literature. For more literature in this stream of research, see, for example: (Binderkrantz 2005, 2008; Dockendorff et al. 2023).

¹⁷ The lower-order institutional dynamics that define how concessions are made, and strategies of political actors, are not the direct implications of polity configurations.

Political scientists have well recognized that “not all veto players are created equal” (Birchfield et al. 1998) – veto players differ in their characteristics and mode of interaction in a political system. One mostly cited differentiation is drawn between *institutional* veto players and *partisan* veto players. While institutional veto players are specified by the constitution, partisan veto players are determined by the party system, the electoral rules and the characteristics of coalition governments (Tsebelis 1995, 2000). In more general terms, the difference has to do with the mode of political interaction between veto players, depending on whether they are in the same institutional arena. i.e., the executive or legislative branch when there is a separation-of-powers arrangement. It is found that veto players interacting in the same arena (i.e., legislative or executive) are more prone to negotiation and consensus-making; otherwise, the interaction can be more competitive and conflictual (Birchfield et al. 1998; Crepaz et al. 2004). We take this into consideration when analyzing the implications of the nature of veto players in different political systems.

3.2.2.2 The implications of veto power on state performance in transformative policies

Veto players exercising their specific influence on, including their veto power, over policy agendas at the decision-making stage can be viewed as a specific, very strong expression of political access. An arrangement in which positions occupied by veto players are distributed fairly across the system can thus strongly bear positive implications of input and throughput legitimacy in the formal decision-making stage. This is especially true when stakeholders affected by the transformation also constitute, or can meaningfully influence, existing veto players in the political system. Following the reasoning in 3.2.1, we can postulate that the scope and fairness by which affected stakeholders are involved as veto players can increase the level of input and throughput legitimacy. This would, then, indirectly enhance stakeholder commitment towards transformative change, as well as the resulting political sustainability of transformative policies.

The number and characteristics of veto players bear closer implications on the introduction and scope of transformative policies¹⁸. According to the veto player framework, for a policy to be adopted, the agreement of all relevant veto players is needed, thus it can be less likely to introduce transformative change in the policy agenda when there is a high number of veto players and when the ideational/preference distance between veto players is far away (Tsebelis, 1995, 2000). However, the number of veto players only provides partial implications and should not be viewed as absolute (Jahn 2011). As argued earlier in 3.2.2.1, multiple veto players do not categorically prevent policy change at the decision-making stage; what needs to be additionally considered is the characteristics of veto players and how they interact as structured by polity conditions in a political system. For example, on occasions where veto players interact in a more collaborative manner, political compromise and concessions can be more easily reached compared to occasions where veto players interact in a more conflictual way, partly because of the division of institutional arenas (Birchfield et al. 1998; Crepaz et al. 2004). The implication on scope and ambition of transformative policy hence follows that, to the extent the decision-making process needs to accommodate differentiated political demands, interests and values to reach a consensus, this would compromise the scope and ambition of transformation and result in a more incremental transformation agenda (Tsebelis 2000).

¹⁸ The rationale for this is explained by (Tsebelis 1995) in his work based on the assumption of “winset of status quo”. Here, we do not go to details but rather build on its implications on policy change and its scope.

3.3 Summary

To understand how polity configurations affect state performance, we have introduced two institutional mechanisms, i.e., political access and veto power. These two mechanisms have been found in existing literature to be critical factors that affect the conditions for political decision-making and resulting societal support – two key processes in the political governance of system change. Different configurations in our two polity dimensions across Western democracies and concrete actor constellations as a result of elections structure political access and veto powers differently (Lijphart 2012; Lockwood 2022). Thus, to understand state performance, one needs to understand how access and veto power are organized in a given polity constellation. In the following, we examine how the two polity configurations defined in 2.1 structure political access and veto power, and then come to the core of this contribution, i.e., to draw starting assumptions on how polity configurations influence state performance in transformative policies across Western democracies.

4 Polity configurations and the performance of state intervention in transformative policies: starting assumptions

So far, we have conceptualized our dependent and independent variables, and the structural features of institutions (polity) that link them. In section 2.1, with a focus on polity, we built on the PoD thesis and defined two polity configurations: form of government and electoral systems (2.1.1), and unitary versus federal systems (2.1.2). In section 2.2, we have specified the two core dimensions of state performance, i.e., legitimacy (input and throughput) and effectiveness (the introduction, ambition and sustainability of transformational policy, and societal efforts mobilized to transformative change). Following that, in section 3, we have identified two key mechanisms (political access and veto power) through which the polity configurations in section 2.1.1-2.1.2 may influence state performance. These form the overall conceptual model of the paper.

In this section 4, we now combine our building blocks and formulate a range of starting propositions as to the way in which each polity configuration may affect the input and throughput legitimacy and effectiveness of state intervention in transformative policies. The structure of this section follows the order of polity configurations outlined in section 2. Specifically, in section 4.1, we focus on the difference between the two constellations of presidential system (“unified government” and “divided government”) and two sub-types of parliamentary system (The Westminster model, and the PR, multi-party model). In section 4.2, we compare two sub-types of the federal system (the compound model and the dual model) with the unitary system.

4.1 The form of government and the performance of state intervention in transformative policies

4.1.1 The presidential system

4.1.1.1 Input and throughput legitimacy

In the presidential system, despite the popular election of the president directly by the people, the interplay of political access and veto power tends to constrain the level of input legitimacy, and to a lesser degree, the throughput legitimacy of state intervention in transformative policies. This is more pronounced in the situation of a unified government. Limited legitimacy then reduces the buy-in of broader stakeholders for transformational change.

At first sight, input legitimacy in the presidential system is high. Both the president and legislature are popularly elected by the nationwide constituencies, which constitutes a wide basis for input legitimacy in terms of direct, broad citizen involvement in selecting decision makers (Mettenheim 1997) and in having direct access through the legislators elected in their constituencies.

However, input legitimacy tends to be limited somewhat as there is a representational deficiency in channeling interests and preferences into the policymaking system. In the executive branch, the president constitutes a significant, personal access point. Yet, this focus on one person tends to reduce the possibility for a range of stakeholders to directly access the highest-level decision-making. As Carey (2008, p. 94) puts it, “the presidential executive privileges an individual whose election may induce him/her to claim a popular mandate even when popular support may be more limited”. The tendency of neglecting a huge bulk of dissenting voices could be intensified in the instance of a unified government, where the president has a majority in both houses of the parliament. **Consequently, one may find that the level of inclusiveness and fairness in political access to the policy-making system in the presidential system – and thus input legitimacy – tends to be limited, especially in the unified government constellation.**

The throughput legitimacy could also be confined in the presidential system, and again, in particular for the unified government constellation. In the decision-making process, it might be true that the existence of multiple veto players reflects the design principle of the checks and balances to prevent “the tyranny of the majority” (Gunther 1999; Linz 1994), and thus lays a certain foundation for throughput legitimacy. From this perspective, a higher number of veto players increases the stock of throughput legitimacy at the very decision-making stage. This is particularly pronounced in the instance of divided government. However, such a stock of throughput legitimacy is only based on the involvement of actors *within* the political system. When it comes to stakeholders relevant to transformations more broadly, in presidential systems, access of interest groups tends to be biased. The often plural form of group access means that there is a lack of institutional mechanisms to involve interest groups and stakeholders in the policymaking process, and consequently, group influence is exerted in an ad hoc, competitive, and less formalized manner (Lijphart 2012). Considering the resource-dependency of political parties (Dür et al. 2007), seemingly open group access might in effect privilege large, resourceful interest groups that win in the free-for-all competition and hence dominate political influence, and cause severe bias in terms of the inclusion and representation of diverse interests, especially minority interests (Rasmussen et al. 2023).

In sum, despite a diversity of access points and veto players in the polity configuration of the presidential system, the majoritarian electoral system and tendency of plural form of group access is likely to undermine the representativeness, inclusion and fairness in access to the policymaking process. As a result, input and throughput legitimacy in a presidential system tend to be somewhat limited, especially in the unified government constellation, than in the divided government constellation. For our main concern, i.e., state intervention through transformative policies, this means that for the formulation and acceptance of long-term decisions that may be highly contested in the population, the presidential system configurations remain particularly challenging.

4.1.1.2 Effectiveness

In the presidential system, the interplay between political access and veto power, combined with limited input and throughput legitimacy, is likely to constrain the effectiveness of the state in introducing and sustaining ambitious transformative policies and mobilizing transformative efforts in society. These aspects differ between the unified government and divided government constellations.

The number and role of veto players in the presidential system tends to reduce the possibility of radical policy change and the ambition of transformative policies, especially in the divided government constellation. The president and the legislature constitute what is called *institutional* veto players whose agreement is a necessary condition for introducing laws and policy changes (Tsebelis 1995). The agreement between branches is not easy to reach, as in the presidential system, legislators are less inclined to support the executive compared to the parliamentary system, in which any intransigence threatens to jeopardize the very survival of the government (Diermeier et al. 1998). Between-branch agreement is even harder to reach if the president holds no party majority in the parliament in the instance of divided government. This is why the presidential system has frequently been characterized as nurturing deadlocks (Campbell 2018).

Under such circumstances, transformative policies as a compromise between branches may be of limited ambition. This is more pronounced in the divided government. While the president usually enjoys strong autonomy in initiating policy changes, the necessity to go through the legislature increases the likelihood of watering down policies. For radical policy change to occur in a presidential system, the president either needs a (party) majority in the parliament (i.e., unified government) or issues need to be part of package deals that allows the legislature to offer logroll-type proposals to the president and entice him/her to accept some policies desired by it for certain policies preferred by the president (Carey 2008).

Transformative policies tend to also lack long-term political sustainability in the presidential system, regardless of the electoral constellations. While the fixed terms of the president and legislature may secure a policy agenda from reversals in the short-term (Alt et al. 2008), the one or two administrative terms' duration is barely sufficient for a long-term transformation. As in most presidential systems, re-election is only possible once – in contrast to most parliamentary systems – the electoral cycles in presidential systems tend to lead to a fully-fledged change of policy direction and administration after two terms in office at the latest (Balkin 2014). Consequently, the presidential system is likely to produce an unfavorable combination of short-term rigidity and long-term volatility that poses to reduce the political sustainability of transformative policies.

Finally, the institutional division of power between parliament and president is argued to favor antagonism between the branches due to a lack of constitutional resolve mechanisms (Carey 2005; Linz 1990a), which is deeply and strongly institutional and may not change easily or significantly with the shift between unified versus divided government constellations. Such an antagonistic political culture does not nurture cooperation and solidarity (Linz 1990a), and therefore could jeopardize the broader societal efforts needed for achieving long term system change goals.

4.1.2 The parliamentary system

4.1.2.1 Input and throughput legitimacy

The PR, multi-party parliamentary system tends to generate a higher level of input and throughput legitimacy of the state in transformative policies than the Westminster model.

In the parliamentary system, indirect access – in terms of citizens electing politicians – is mainly channeled through the political parties and the parliament, not through directly and popularly elected leaders of the executive (Mettenheim 1997). While this is the same for both sub-types of the parliamentary system, there are important differences in terms of inclusiveness and fairness of access. The PR, multi-party parliamentary system, via proportional means of election and multiple political parties, resulting in general in coalition governments, features more equal and broader representation of the constituency, including in particular minority interests. By contrast, the composition of the government in the Westminster model suffers a representational bias very often resting on a majority of one party, which in turn is built on first past the post, thus tends to neglect even large minority interests in constituencies (Blais et al. 2006). For this reason, the PR parliamentary model tends to generate a higher level of input legitimacy compared not only to the presidential system but also to the Westminster model (discussed in 4.1.1 above).

Similar implications can be drawn concerning throughput legitimacy. In basic terms, in the two sub-types of parliamentary system, direct access to influence the policymaking process can find its way through both the executive and legislative branches and the party or parties in power. In the Westminster model, the government has very strong de facto agenda-setting power, given that it most often rests on one political party. Although this strong position in principle enables it to resist the capture of special group interests (Marsh et al. 2007), it can also open up skewed influence dynamics. Most often, representatives of only one party are actively involved in the formal decision-making stage. Even if we consider that parties in power are no monolithic block and also combine heterogeneous interests, and that stakeholders can be involved in other venues such as parliamentary committee, stakeholder inclusion in the Westminster model tends to be still limited and biased, which has been found to often privilege organized and resource-rich groups structured through insider networks in practice (Culpepper 2010; Grant 1989; Lijphart 1999). In the PR model, in which single-party governments are uncommon, multi-party coalition government grants more access to minority and diverse interests that are channeled through smaller political parties represented in the parliament (Low-Beer 1984). Interest groups are more frequently and more formally involved in policy deliberation, while due to multiple veto players, it is very rare that single interest groups capture the policy agenda (Richardson 2018). This feature of inclusiveness and fairness of access to the decision-making process tends to favor a higher level of throughput legitimacy in the PR model compared to both the Westminster counterpart and the presidential system.

4.1.2.2 Effectiveness

In parliamentary systems, it is less likely to introduce radical transformative policies in the PR model compared to the Westminster model. However, transformative policies, once introduced, tend to be more durable in the PR model.

In the PR model, departments and sections in the government, as well as the parties of a ruling coalition, are the major basis for most policy initiatives (Mayntz et al. 1975). Multi-party coalition governments mean that the number of veto players is almost as high as in the presidential system (Schick 1998; Tsebelis 1999), and decisions for transformative change tend to be based on the least common denominator (Scharpf 1988). This has to do with the fact that ministries initiating specific policies are often forced into concessions that “reduce the scope of innovative policy proposals and the effectiveness of problem solutions” (Mayntz et al. 1975, p. 147), resulting in incrementalism or “structural conservatism” (Fleischer 2006). However, in the PR model, policy change is still likely, considering that the more consensual and collegial interaction between partisan veto players is more capable of resolving conflicts and reaching compromises than in the presidential system (especially divided government) (Huber 1996; Linz 1990b). In the Westminster model, there is a strong executive, often as the single veto player backed by a one-party parliamentary majority. In the UK, for example, the agenda-setting role is more concentrated in the PM and a number of cabinet committees, which sometimes leads to a single “executive office in all but name” (Burch et al. 1999, 2004). Under such circumstances, not only could the introduction of transformative policies be easier, but also more radical if the governing party and its leader intend so, according to Peters (1997, p. 57), by the government providing “leadership to shape the debate and move the decisions away from the lowest common denominator realm”.

Moreover, transformative policies tend to be more sustainable in the PR model. The broad inclusion of stakeholders and the high number of de facto veto players could limit the likelihood of radical reversal of policies once decided. This is even true in a change of government in cases in which at least one party remains in power after the election in a new coalition government, thus reducing the likelihood of total turnarounds (Lijphart 2012). Thus, PR, multi-party parliamentary systems tend to “generate policies of continuity rather than discontinuity, and it is normally associated with limited short-term elasticity in policy making” (Schmidt, p. 173). In the Westminster model, in contrast, reversal is more likely with the change of government, especially when the government commanding a majority in the lower house of the parliament constitutes the only veto player in the decision-making system. For example, the pace of policy change in the UK has been coined as a “pop-up” style of policymaking, rendering policy deliberation and continuity especially challenging (Richardson 2018).

Finally, the PR model is likely to be more capable of mobilizing stakeholder commitment to transformative change. Broad stakeholder commitment to politically facilitated transformative initiatives can be traced back to more inclusive and fairer political access, and more consensus-oriented interaction between partisan veto players. This also has the benefit of facilitating cooperation, for “the ‘consensual’ patterns of interaction among political groups, reduce the stakes inherent in political conflict and give all participating groups a rational self-interest in the preservation of the system.” (Gunther 1999, p. 68). By contrast, in the Westminster model, stakeholder commitment could be narrow due to biased and exclusive political access, which, as a result, may not be sufficient for the scope of transformative efforts needed.

4.1.3 Synthesis

From 4.1.1-4.1.2, we have discussed how polity configurations in the ideal-typical presidential system (two constellations, “unified government” and “divided government”) and parliamentary system (two sub-types, the Westminster model and the PR, multi-party model) may influence state performance in transformative policies through the two key institutional mechanisms (political access and veto power). Now we bring them together and synthesize these starting assumptions in Table 2 below.

Table 2: Hypothesis as to the form of government, electoral systems and state performance¹⁹

		Presidential system (e.g., US)		Parliamentary system	
		Unified government constellation	Divided government constellation	Majoritarian electoral system (e.g., UK)	PR electoral system (e.g., Germany/DE)
Legitimacy	Input	Medium-low	Medium-high	Lowest	Highest
	Throughput	Medium-low	Medium-high	Lowest	Highest
	The introduction, ambition and sustainability of transformative policies	Moderately likely to introduce transformative policies, which could be radical or incremental. Transformative policies, if decided upon, tend to have a low level of political sustainability.	Least likely to introduce transformative policies, especially radical ones. Transformative policies, if decided upon, tend to have a low level of political sustainability. This constellation is more frequent.	Most likely to introduce transformative policies, which could be very radical or incremental. But transformative policies tend to have very low level of political sustainability.	Less likely to introduce transformative policies compared to the majoritarian model. Transformative policies, if decided, tend to be often incremental. But these policies are likely to have the highest level of political sustainability.
Effectiveness		This constellation is not very frequent.			
	Societal transformative efforts mobilized	Very limited stakeholder commitment towards transformative change. Institutionally rooted adversarial political culture is likely to jeopardize the broad societal efforts.	Very limited stakeholder commitment towards transformative change. Institutionally rooted adversarial political culture is likely to jeopardize the broad societal efforts.	Very limited and unstable stakeholder commitment towards transformative change.	Broad and strong stakeholder commitment towards transformative change.

The interplay between political access and veto power in each form of government and electoral system has different implications for state performance in transformative policies. In the presidential system, while the state can still initiate radical transformative policies, the likelihood of such change, its ambition, and sustainability tend to be limited, in particular in situations in which the party of the president does not hold the majority in the parliament. In addition, there tends to be a low level of input legitimacy and constrained throughput legitimacy in the process. A related consequence is that due to limited engagement of stakeholders in the decision-making stage, in the presidential system, it is less likely to mobilize broad societal efforts towards transformative change. In the parliamentary system, the Westminster model may exhibit similar state performance features to the presidential system in several aspects, but it is more likely to introduce radical transformative policies, while at the same time, policy reversals tend to be easier and more frequent compared to the presidential system. The PR model, on the other hand, may not facilitate the swift introduction of transformative policies, especially ambitious ones, but once a policy initiative is installed, it is more likely to be sustained over time, and exhibit a higher level of input and throughput legitimacy and a greater level of societal efforts mobilized towards transformative change.

¹⁹ Authors’ synthesis of starting hypotheses derived from existing literature.

In sum, no single polity configuration has an absolute advantage given the multi-dimensionality of institutional features of polity and state performance. Thus, the structural implications of polity conditions are about trade-offs and “comparative advantage” in certain performance dimensions over others. For example, our discussions so far have revealed certain advantages of the PR parliamentary system in terms of long-term transformative policies and societal efforts mobilized, but disadvantages in terms of the introduction of ambitious policy programs. This is echoed in Lijphart (1991a), who cautions not to confuse governmental strength with its performance: “In the short run, one-party cabinets or presidents may well be able to formulate economic policy with greater ease and speed. In the long run, however, policies supported by a broad consensus are more likely to be successfully carried out and to remain on course than policies imposed by a ‘strong’ government against the wishes of important interest groups.” (Lijphart 1991a, p. 8).

4.2 Vertical distribution of power and the performance of state intervention in transformative policies

In this section, we proceed to analyze the influence of the second set of polity configurations – vertical distribution of power, differentiating between the unitary system and federalist systems (including the two sub-types, e.g., the dual model and compound model) as defined in 2.1.2. Similar to 4.1, we do so by exploring how each polity configuration shapes the working of the two institutional mechanisms – political access and veto power, and thus the implications for the input and throughput legitimacy of state intervention, and its effectiveness. We focus on transformative policies at the national level and discuss sub-national dynamics only when they are relevant to the national level transformative initiatives. Because the institutional features of the unitary system are relatively straightforward, and the discussion of the unitary system inherently involves comparison with the federalist system, we choose to first analyze the federalist systems and then proceed to a very brief discussion of the unitary system.

4.2.1 The dual model versus the compound model of federalism

4.2.1.1 Input and throughput legitimacy

In general, multi-level structures provide political parties and interest groups with multiple venues and access points (Wälti 2004). This structure generates two co-existing characteristics. On the one hand, the federalist system, via power sharing and a specified policy autonomy at the sub-national level, creates stronger state-constituency bounds, as it institutes closer connections between government rules and the citizens they are intended to serve (Gerring et al. 2004). Besides, the electoral system channels local elected representatives to national legislatures, which allows for diverse minority interests to be represented to a varying extent depending on the concrete arrangement of bicameralism (e.g., symmetric or asymmetric) (Benz et al. 2013).²⁰ On the other hand, a multi-level governance structure also provides considerable room for rent seeking (Wälti 2004) and lobbying activities by political and economic actors, who may use the various venues to cater to their clients and constituents (Peterson 1995). Thus, political access in the federalist system generates two countertendencies – the constructive and rent-seeking potential – as two sides of the same coin.

²⁰ For asymmetrical federation, some states enjoy enhanced self-rule, with the intension to incorporate diverse territorial interests and enhance equity, however such design in turn often suffers from over-representation of minority interests and small states. For more literature on this issue, see, for example, (Horowitz 2006) and (Brenton 2023).

How these tendencies play out for input and throughput legitimacy differs between the dual model and the compound model. **As far as national policymaking is concerned, the compound model overall tends to generate a higher level of input legitimacy in the context of politically facilitated transformative policies.** In the dual model, constituent units are more autonomous and enjoy a full set of constitutionally granted “rights to decide”. Under such circumstances, sub-national constituencies elect governments that govern a defined set of issues autonomously, and the government of individual states is held to take more direct accountability and closer bearing of local political demands (Karch et al. 2019). Thus, the dual model is more likely to provide input legitimacy for transformative policies that can be decided and implemented at the sub-national level. These forces play out in a contrary direction in the compound model. In the latter, while constituent units have fewer “rights to decide” at the sub-national level, interdependent policy making at both levels of government (Benz, 2000) could enhance the build-up of input legitimacy of national-level policymaking, as “early involvement of all levels of a federal state creates procedural legitimacy and shared responsibilities – also with regard to policy outcomes” (Sturm 2000).

The compound model, with its extensive veto power and interplay of veto players, tends to produce a higher level of throughput legitimacy for federal policies than the dual federalist model. The design principle of federalism embodies the intention to apply checks and balances to the vertical dimension (Lijphart 2012). Generally, for policy initiatives in the jurisdiction of the federal government, states have certain veto power through their representation and voting in the second chamber. While the veto power of states depend on the specific design of bicameralism (Lijphart 1999; Swenden 2010), the critical difference between the dual model and the compound model is that in the latter, the joint decision-making arrangement means that a group of states, driven by diverging interests in individual states and/or by diverging party interests in the individual states, are formally and necessarily involved as veto players concerning national initiatives. In the compound model, the need to convince the majority of federal states, including small states representing minority interests, tends to increase the inclusiveness and the sense of fairness of sub-national involvement in national policymaking, thus throughput legitimacy in the political decision-making process. Besides, the limited policy autonomy of states is also likely to reduce the extent to which transformative policies are captured by special interest groups when states are involved in political negotiations at the national level. In the dual model, while both levels of government are involved in extensive bargaining and negotiation, the fact that states are not necessarily veto players on national initiatives – though states are still represented and vote in the parliament – means that the level of throughput legitimacy for policies at the national level tends to be lower.

4.2.1.2 Effectiveness

The two models of federalism have very different consequences for the likelihood of introducing ambitious, transformative policies. **In the compound model, it is less likely for the federal government to introduce transformative, ambitious policies at the national level.** In the joint decision-making arrangement (Benz et al. 2013), the agreement among states is a necessary condition for policy change, raising the threshold level of agreement necessary for reaching any political agreement. While this often leads to consensus as each state is forced to seek the cooperation of most others (Gerring et al. 2004), the bargaining process tends to often undertone the ambition and scope of the transformation agenda. This is frequently depicted as the result of the so-called “joint decision-making trap” (Scharpf 1988, 2006), producing the lowest common denominator solutions (Scharpf 1988). In the dual model, the fact that each states government does not constitute a veto player on national initiatives in the loosely coupled

system (Benz 2000) means that there is less necessity to offer concessions among states, and therefore, it is more likely for the federal government to introduce transformative policies and the policy ambition tends to be higher compared to the compound model.

National-level transformative policies are more likely to be politically viable in the long term in the compound model than in the dual model. In the compound model, the existence of many veto players, including the federal government and all state governments, tends to reduce the room for frequent policy reversals at the federal level. In the dual model, by comparison, federal government policies could be more easily reversed without the necessary agreement of all states. Individual states have the power to reserve their own transformative policies; for instance, the Trump administration's withdrawal of the Obama administration's Clean Energy Act did not mean an overhaul of California's Zero Emission Vehicle (ZEV) policies (Saurer et al. 2021). Nonetheless, national-level transformative policies tend not to be as sustainable as in the compound model.

Last, in the compound model, the federal government tends to be more likely to mobilize broad societal efforts towards transformative change. In the compound model, joint decision-making is followed by shared responsibility, which prompts states to bind to jointly agreed transformation agendas. The high level of input and throughput legitimacy at the national policy level could also help broaden and strengthen the commitment of stakeholders to reorient their efforts to transformative change. However, in the dual model, in policy domains that are not reserved exclusively to the federal government and in which cooperation between states and the federal level would be important, states can often choose not to adopt or implement federal policy initiatives (Riker 1975). Alternatively, individual states can choose to carry on with transformative initiatives when there is policy discontinuity at the federal level (see the example of Clean Energy Act above), and they are frequently cited as sources of policy innovations (Pollitt 2007). However, on both occasions, transformative policies are very likely to be confined to certain regions and are not easy to heed territorial authority boundaries (Figueiredo Jr et al. 2007; Ostrom 1990). This can be exacerbated by limited input and throughput legitimacy at the national policy level, thus overall tends to undermine the scope of societal transformative efforts mobilized.

4.2.2 The unitary system

4.2.2.1 Input and throughput legitimacy

In the unitary system, the level of input legitimacy is likely to be lower compared to federal systems due to limited political access to national policymaking. Citizens can only elect legislators and decision-makers at the national level, leading to a deficit in participation and representation of local interests and preferences. In the policymaking system, the level of central government is the only access point based on constitutional design. While local governments can be sources of political input via various decentralization mechanisms, these are not the result of polity configurations per se (for a differentiation between federalism as a polity versus decentralization, please refer to section 2.1.2). Overall, political access could be rather constrained, as "within the pyramid access is closely controlled and must go through the chain of command" (Elazar 1997, p. 241). Besides, compared to federalist systems, the unitary system has been regarded as less representative of heterogeneous, locally based, and minority interests (Mathieu 2022; McGarry 2007). Therefore, the input legitimacy of transformative policies in the unitary system tends to be lower than both sub-types of federalism.

Equally, the throughput legitimacy of transformative policies at the national level is likely to be more limited in the unitary system, too. This is because sub-national level governments are not involved in the decision-making process as any sense of veto players, be it joint decision-making or certain forms of bicameralism. This significantly reduces the breadth and inclusiveness of participation in political decision-making. One positive side is that the encompassing feature of the decision-making body at the national level (Crepaz 1996), which, combined with absence of veto players, makes the central government less prone to the influence of particularist interests, as demonstrated by the evidence on the positive correlation between unitarism and low-level of political corruption (Gerring et al. 2004). However, this is an implication drawn only from the perspective of vertical distribution of powers, thus inevitably partial, and one needs to take into consideration other polity configurations that affect group access. Taken together, overall, we expect a lower level of throughput legitimacy of transformative policies at the national level due to deficit in participation and representation at the very decision-making stage of transformative policies.

4.2.2.2 Effectiveness

In the unitary system, the central government is the sole authority that can initiate policy changes. The absence of veto players from other levels of government strongly empowers the state to introduce transformative policies. However, the ambition of the transformative policies can go either way, depending on the actual actor constellations and their policy orientations. **Therefore, in the unitary system, it is more likely for the state to introduce ambitious transformative policies.**

However, the prospect of political sustainability of transformative policies tends to be mixed in the unitary system. On the one hand, a single locus of political authority can effectively maintain political stability (Feeley et al. 2017) in democratic countries, which provides a relatively stable macro-level political environment certainly within one legislature. By contrast, the federalist system has been argued to be a “moving target” (Gibson 2004), “permanently in motion or exposed to pressure for change caused by social developments or internal tensions” (Benz et al. 2013, p. 2). Moreover, multiple elections at states level during the legislature of the federal level constantly change the power relations between the two levels of government (Pal 2021). On the other hand, political stability prevents major, macro-level disruptions. However, this does not guarantee policy continuity, as the central government can just as easily reverse transformative policy agendas as maintain them for the same reason of lacking other veto players. Therefore, the combined implication is that transformative policies in the unitary system tend to de facto lack long-term political sustainability, especially compared to the compound model of federalism.

Last, in the unitary system, it tends to be less likely to mobilize societal efforts towards transformation. It could be true that the state in the unitary system may be especially capable of employing a top-down approach of political decision-making, which can be efficient for distributional or command and control policies of the central government (Wibbels 2005). However, successful governance of transformation otherwise often relies on true buy-in and voluntary action from a variety of non-state stakeholders. Thus, in the unitary system, a lack of strong and broad stakeholder commitment, reinforced by limited input and throughput legitimacy, could consequently restrict the buy-in of society, and the incentive and scope of societal efforts necessary for addressing complex societal problems.

4.2.3 Synthesis

Based on the discussions above, the implications of the polity configuration in terms of vertical distribution of power on the input and throughput legitimacy and effectiveness of the state as to transformative policies are synthesized in Table 3.

Table 3: Hypothesis as to unitary system, federalist systems, and state performance²¹

		Unitary system (e.g., France)	Federalist systems	
			The dual model (e.g., US)	The compound model (e.g., DE)
Legitimacy	Input	Low	Lower at the national level (versus the compound model).	Higher at the national level (versus the dual model).
	Throughput	Low	Medium, lower than the compound model	High
Effectiveness	The introduction, ambition and sustainability of transformative policies	Most likely to introduce transformative policies, which could be either radical or incremental. The political sustainability of transformative policies is uncertain. It tends to be de facto low due to low hurdles for policy reversal.	Moderately likely to introduce transformative policies at the national level, and policy ambitions are likely to be higher than in the compound model. The political sustainability of transformative policy at the national level tends to be lower than in the compound model.	Least likely to introduce transformative policies, especially radical ones. Transformative policies, if decided upon, tend to have a high level of political sustainability.
	Societal transformative efforts mobilized	Limited stakeholder commitment towards transformative change.	Medium. The scope of societal efforts towards transformative tends to be territorially limited.	Broad stakeholder commitment towards transformative change.

Similar to 4.1 on the consequences of the form of government and electoral systems, the propositions above point to the trade-offs and “comparative advantage” of each polity configuration from the perspective of vertical distribution of power. For example, in the compound model of federalism, the propensity to yield sub-optimal policy outcomes and inclination to incrementalism at the federal level (Scharpf 1988) could be problematic when an ambitious reimagination of the existing trajectory is necessary. However, this same feature is likely to be an advantage to achieve given goals in a pragmatic, stepwise manner, to be sustained, and elicit societal efforts in the long-term transformation. By contrast, while the dual model is more likely to introduce transformative policy in particular at the sub-national level, the ability to sustain it in the long-term at the national level could nevertheless be limited.

5 Conclusion and discussions

The role of the state in governance of system change has captured growing attention, given the magnitude of grand societal challenges that necessitates transformative policy intervention (Bell et al. 2009; Borrás et al. 2020; Schot et al. 2018). In this paper, we make for the first time a systematic effort to explore conceptually how polity configurations – understood as very basic, fundamental “hardware” political institutions – may shape the performance of the state in transformative policies in Western democracies. In doing so, we lay the ground for comparative analysis of the role of the state in system transformations.

²¹ Authors’ synthesis of starting hypotheses derived from existing literature.

Our endeavor to conceptualize and theorize the linkage of polity configuration and state performance has been inspired by the literature of comparative political economy (Vatter et al. 2024) and, in particular of the PoD approach (Lijphart 1999, 2012) and the VoC programme (Hall et al. 2001). We have developed our conceptual framework through deducing systematically and comprehensively from existing theoretical and empirical literature in political science, governance research and socio-technical system transformations. Our basic premise has been that polity configurations can structure the opportunity space for the state to orchestrate conditions for political decision-making and mobilizing societal efforts, and in doing so influence the scope of transformational decisions and the likelihood with which they are introduced, supported, and sustained. The structural potential of the polity configurations is channeled through two key mechanisms, i.e., political access and veto power. These two mechanisms critically influence the input and throughput of political decision-making and thus have important implications on political decisions and societal efforts that follow.

Based on this premise, we have then derived a series of starting assumptions regarding the role of polity for state performance. These starting assumptions converge to the realization that there is some systematic relation between types of polity configurations and performance of the state in relation to systems change. To repeat just one example, in the Westminster model of parliamentary system, the state is likely to be swift in pushing through radical transformative policy initiatives, but very often these policies tend to lack long-term political sustainability, as well as the broader societal commitment and efforts needed towards transformative change. These potentials are, of course, moderated by existing actor constellations in the specific system under transformation, and many other factors. However, we have deliberately isolated the polity in order to highlight its role in a simplified and stylized manner.

While we do not go to great lengths repeating those assumptions here, it is important to re-articulate several key reservations that we have pointed out in the introduction and mentioned throughout the paper where relevant. These reservations set the boundary conditions of – and limitations to – the ambition of our endeavor. They clarify how our approach should properly be interpreted and exploited against the broader background of extant multi-disciplinary research.

First, our focus on the meaning of the polity for the performance of state action in transformative policies of course does not mean that polity conditions explain *in total* state performance. There are admittedly many other factors, which often even prove more influential in certain concrete transformation contexts. For subsequent work, they can be studied as intervening or moderating variables. One notable variable is the nature and specificity of policy areas. This has been echoed by scholars on the relevance of policy issues in energy transitions, for example, the role of renewable energy sectors and respective actor constellations (Lockwood 2022). Similarly, in the context of the governance of system change, the types of systems that need to be transformed are also important contextual parameters to take into consideration (Edler et al. 2021). Relevant to this line of argument, a further context that matters is the specific mode of governance (Borrás et al. 2014b, 2020). For example, in the governance mode where the state is initiating and driving a transformation, and where the state has limited power to regulate top-down, polity conditions that enable mobilization of stakeholders become particularly important. In sum, all these specifications point to the importance of relating the influence of polity conditions to its broader material and sectoral contexts and actor groups.

Second, our focus on polity conditions has been placed on two basic and fundamental dimensions that have proven most consequential in existing literature (Bernauer et al. 2016; Lijphart 2012; Vatter 2009; Vatter et al. 2024). This by no means exhausts important political institutional variables. In many

cases, lower-order institutional arrangements in a specific context can be very influential, for example, policy networks that function as the filter of political actors and issues (Rhodes 2006). These traditions may constrain and shape the workings of the higher-order polity configurations and should not be separated from each other in concrete empirical analysis. Another frequently studied tradition is political culture (Elkins et al. 1979; Pateman 1971; Welch 2016), especially those deeply ingrained cultural features that structure expectations of stakeholders and their willingness and commitment to participate constructively (Roberts et al. 2019b). The Polder model of collective consensus building in the Netherlands, for example, has functioned, to some extent at least, not mainly because of conditions of the polity, but of deeply held expectations and norms in the systems developed out of a place-specific historic need for cooperation (Schreuder 2001).

Third, following from the first two points, a deterministic view of the role of political institutions, including polity, should be avoided. While the structuring power of polity conditions is fundamental and far-reaching, they do not always bear clear-cut causal consequences on political decisions and their societal acceptance and support. Our conceptualization efforts have demonstrated that institutional effect can be very explicit on certain occasions, such as the role of veto players on the introduction of transformative policies (Tsebelis 2000), but in many other cases, the causal relation may not be straightforward, often implying a potential for influence. Thus, by "*starting assumptions*", we seek to explore – on the basis of existing conceptual and empirical political science literature – how polity configurations *are likely to* impact on state performance.

Fourth, it is well recognized in the literature that political institutions take effect in combination and specific constellations (Gunther 1999; Lijphart 2012; Vatter et al. 2024); and by looking at the interaction between multiple institutional conditions, the influence on the quality of democratic governance can be better grasped. So far, we have examined each polity configuration individually given the complexity of institutional mechanisms that link each polity configuration to state performance on the one hand, and the paucity of existing conceptual and theoretical understanding in the literature on the other hand. While this approach has its constraints, our effort to conceptualize the potential role of individual polity aspects can sharpen our perspective and pave the way for developing more holistic and systematic explorations (Vatter et al. 2024).

Last, because polity configurations take effect through their combination and constellation, a certain constellation may imply "comparative advantage" of some institutional elements, whereas reveal the disadvantage of others, depending on which aspect of state performance is valued more in a specific transformation context. Thus, it would be untenable to claim that any one polity configuration supersedes others absolutely; it partly depends on the dimension and purpose of comparison and specific contexts. This has stood in line with political scientists arguing that the consequences of political institutions on democratic governance are essentially about trade-offs (Gunther 1999; Vatter et al. 2024), for example, between a high likelihood for ambitious transformative policies (Westminster Model) and a high likelihood for sustainability of transformative policies (proportional representation model with compound federalism). Thus, while the work by Lijphart (2012) provides a valuable road map for our research, we find that in transformative policies, it is not so much about the systematic advantage of certain democratic models, but more about comparative advantages and trade-offs.

On the basis of the discussions above, we offer a few future directions of research on the basis of the endeavors undertaken in this paper. First, more conceptual and theoretical work still needs to be done to refine, corroborate and supplement the assumptions drawn in this paper. Second, we encourage testing these assumptions in various empirical settings and by undertaking rigorously designed

longitudinal comparative studies. Given the multi-dimensionality and trade-offs of institutional features, empirical research should examine how political institutions, in combination and interaction, affect state performance in governance of system change. We suggest that future research build upon this through inductive case work based on careful methodological design, rather than through the construction of increasingly complex “mega-systems” of polity configurations and even institutional constellations. Third, research considering the influence of factors other than polity conditions, and their interaction with them, can shed light on the extent and the conditions polities actually matter for the performance of the state. This includes, notably, how certain qualities of the systems to be transformed may influence the way polity conditions play out in a given governance mode. This then may help policymakers reflect on existing institutional designs so that their merits can be extended and shortcomings can be overcome by supplementary institutional mechanisms.

Empirical work along those lines could build on ongoing scholarly endeavors to operationalize transformative innovation policies in terms of their characteristics and outcomes. For example, Haddad et al. (2023) put forward an integrate framework that access directionality and additionality at the system level. Other efforts focus on outcomes of transformative innovation policies, such as twelve transformative outcome dimensions by Ghosh et al. (2021), and the “*Innovationsindikator*”²² with a sustainability dimension built on Rainer Walz (2023). These contributions do not yet amount to a single settled operationalization, but they indicate a promising agenda for future work to link our constitutional concept to outcomes of transformative policies through longitudinal work.

The need for and challenges of ambitious transformative policies call for a much better understanding of the specific challenges and opportunities in given political systems. As this conceptual article has shown, the polity of a political system has severe implications for policy decision-making and how those policies are followed through and become effective. For transformational policies, this meaning is even more important than for less ambitious and systematic policy decisions. Given the complexity of sociotechnical systems change and given the need to mobilize a broad range of diverse stakeholders to make transformation happen, the way political decision-making and inclusion are organized and stabilized is absolutely critical for the scope of transformational ambition and for the likelihood with which transitions are being pursued and sustained over time. The concept delivered in this paper and a research programme to better understand the meaning of polity configurations may lead to a more realistic and appropriate design of policy processes and implementation strategies. In particular, political actors and other initiators of transformative policies may subsequently be in a better position to understand where specific efforts need to be taken to improve the legitimacy and effectiveness of transformative policies in any given democratic polity. We see this current work as an invitation to more conceptual, theoretical and empirical research that exploits the “polity” dimension alongside tremendous studies on “policy” and “politics” in governance of system change.

²² The *Innovationsindikator* 2025 can be found at: <https://www.innovationsindikator.de/2025>.

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