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Anticipating and designing for policy effectiveness

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ABSTRACT

The new design orientation in the policy sciences has placed renewed emphasis on problem-solving and developing effective public policies. In this paper, we contribute to this scholarship by presenting a policy framework on anticipating effective policies. We argue that anticipation – that is, foreseeing the future and preparing for it – must be central to how a policy is designed, executed and assessed. Anticipating policy effectiveness requires a careful understanding of the problem and its root causes, as well as selection and utilization of the most ‘appropriate’ policy instrument(s) to solve it. We consider ‘appropriateness’ along three dimensions – *analytical, political and operational* – in two different respects: choice of policy tools and the capacity of the implementing agency.

KEYWORDS

Anticipatory policy design; policy effectiveness; policy tools; policy capacity

Healthcare, climate change, financial malpractice – these are just three examples of increasingly complex and multifaceted problems that governments across the world continue to face. Not only do policymakers have to contend with the increasing ‘wickedness’ of these problems but must design and implement solutions in policy environments that are characterized by economic and political uncertainty, and technological disruptions. This is matched by an admitted decline in the abilities of governments to address these problems (Bakvis, 2000; Peters, 2015b). How do we then design policies that are robust, durable and ultimately more effective?

The concern for developing ‘better’ public policies has always been central to design studies in the policy sciences. The first wave of these studies focused on largely technocratic, ‘top-down’ and synoptic designs (Peters et al., 2018). The second wave, inspired by efforts to overcome the implementation challenges that had plagued policy in the 1970s–80s, focused on developing designs that were ‘workable’, and could address underlying problems in given constraints. These studies challenged the prevailing orthodoxy of incrementalism and bounded rationality that assumed that policy contexts were complex, and that synoptic solutions would be difficult to implement. The most recent wave of design studies emphasize policy tools, and how they are bundled or combined in a principled manner into policy ‘portfolios’ or ‘mixes’ in an effort to attain policy goals (Doremus, 2003; Howlett & Rayner, 2013; Salamon, 2002; Schaffrin, Sewerin, & Seubert, 2014; Sovacool, 2008).

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Despite the proliferation of research in design studies over the past three decades, there is limited consensus on what is ‘good’ design, on what criteria it must be evaluated, and what fundamental goals that designs must serve (Peters et al, 2018). Nor do we know how designers should act to increase the likelihood of success of their decisions. In this paper, we argue that the fundamental goal of any design is effectiveness, i.e. the extent to which a policy is able to give affect to its stated goals. We contribute to the ‘new’ design orientation in the policy sciences (Howlett and Lejano, 2013; Howlett et al 2015), and present a framework on how designers can anticipate policy effectiveness. This, we argue, is a function of the appropriateness of policy tools, and the capacities of government agencies.

The rest of the paper is organized as follows. The subsequent section offers a synthesis of the literature on policy effectiveness and anticipation. This is followed by a review of the framework on anticipating policy effectiveness, and a summary of papers presented in this issue.

Effectiveness in policy design

Policy design involves a deliberate endeavor to link policy tools or instruments with clearly articulated policy goals or a policy problem (Bobrow, 2006; Linder & Peters, 1984; Majone, 1975; Howlett, 2019). It is a systematic effort to identify the most appropriate means to solve a problem, or an element of the problem, or to achieve a policy target (Bobrow & Dryzek, 1987; Gilabert & Lawford-Smith, 2012; Sidney, 2007; Weaver, 2009a, 2009b).

Earlier design studies have helped to clarify the role of historical policy choices, policy capacities and design intentions in shaping formulation processes and policy designs (Howlett et al, 2015). More recently, design studies have been involved in understanding how assembling multiple policy elements to meet policy goals can be improved. Although this work has progressed, the discussion of the overall goals that policy designs should serve remains disjointed (Peters et al., 2018; Howlett and Lejano, 2013).

Implicit in these design studies is the problem-solving orientation, a central tenet of the contemporary policy sciences. That is, the goal of public policy is solve a problem through a deliberative process. Thus, if policies are primarily about solving collective problems, then policy design is essentially about developing policies that accomplish the purpose (Howlett, 2019). Accordingly, an effective policy is one that is able to address the problem in question (Peters et al., 2018). Effectiveness therefore should serve as the basic foundation of any design, upon which other goals such as efficiency and equity are constructed. Effectiveness, in this context, can be understood at various levels.

The first at the level of *design spaces*. This refers to policy formulation environments that allow for deliberations and debates to occur which contribute to producing superior designs (Howlett, 2011). The intuition here is that the greater the government’s ability to alter the status quo (by overcoming policy legacies and path dependencies in a given area), and its intention to solve a problem, the more likely that policy formulation processes can produce effective designs (Peters et al., 2018).

The second is at the level of the policy instrument or the *policy-mix*. This refers to the extent to which multiple policy tools instruments, sequenced and assembled in ‘portfolios’ or ‘bundles’, work in concert to give affect to different aspects of a policy goal. The intuition here is that attributes of these policy-mixes such as *coherence*, *consistency*, *congruence*, *goodness of fit*, ensure that policy goals are better aligned with policy means, and can contribute to producing more effective designs (Bali and Ramesh, 2018). While most of the earlier scholarship on policy tools was focused on classifying tools, and policy styles of governments across the world (Hood 1983; Peters and van Nispen, 1998), recent scholarship has also focused features of specific tools that increase their effects on policy targets. (Howlett 2018; Howlett and Rayner 2013; Howlett and del Rio 2015; Thomann 2018).

Some studies have taken a meta view of effectiveness. For instance, for Chindarkar, Howlett, and Ramesh (2017), effectiveness relates to the extent to which a policy advances both the technical or problem-centered concerns and the political priorities of the government. In similar vein, Compton and ‘t Hart (Forthcoming), building on Bovens and ‘t Hart (1996) and McConnel (2010), unpack policy effectiveness (success) in four dimensions. These are *programmatic* (the degree to which a policy achieves its stated goal), *process* (the extent to which the design process is socially appropriate and perceived as being just), *political* (the extent to which there is widespread political support) and *temporal* (the extent to which a policy sustains its performance in the face of changing circumstances).

There is also the notion of ‘dynamic’ policy effectiveness, i.e. ensuring that the policy addresses not only the problem in a given context, but how it adapts to changing conditions and circumstances over time. This requires designers to accommodate for turbulence and uncertainty in policy environments, and policy ‘surprises’ through feedback mechanisms and procedures that allow for automated or semi-automated calibrations to be made. This entails going beyond well-known cause and effect relationships among variables in a ‘static’ context and accommodating for the unpredictable and unprojectable (Capano and Woo, 2018; Nair and Howlett, 2017). Developing such ‘resilience’ and ‘robustness’ in a policy, i.e. *‘the property of policies that allows them to continue to deliver, overtime, their intended functions, purposes, and objectives, even under negative circumstances’* (Howlett et al., 2018), requires layering existing policy-mixes with a range of substantive tools (*automatic or semi-automatic* adjustments), procedural tools and overcoming capacity deficits.

As this brief review suggests, there are various levels at which effectiveness in policy design can be understood. Effectiveness at each of the levels can contribute to more sophisticated designs and deliberations, and ultimately a clearer relationship between policy goals, means and outcomes.

Anticipation in policy design

Policy design is invariably about the future and how to get there (Lasswell, 1951; Peters, 2018). Indeed, Simon (1996) defined design as ‘the human endeavour of converting actual situations into preferred ones’. This in turn requires policymakers to approximate an idealized solution to a problem, and in each iteration of the policy process get closer to the ideal-typical model by giving design structure, meaning and functionality (Peters, 2018; Peters & Rava, 2017). Designers have to essentially develop pathways to

‘that-which-does-not-exist’ and make it appear in concrete form as a new purposeful addition to the real world (Nelson and Stolterman, 2003). This not only requires problem-solving, but the use of foresight to anticipate how an approximated solution can be realized.

One of the meanings of the word *anticipate* (*anticipare* in Latin) is, according to Cambridge Dictionary, ‘to take action in preparation for something that you think will happen’. It is about taking action or doing something at t_0 that is capable of addressing and preparing what will happen at times $t_{1..2,3}$ in a way that it will be congruent/coherent with the agent’s expectations over that time period. Anticipation has been the object of theorization and empirical analysis in many fields, including biology (Rosen, 1985), psychology (Fukukura, Helzer, & Ferguson, 2013), socio-ecological systems (SES) (Almedom, 2009; Almedom, Tesfamichael, Mohammed, Mascie Taylor, & Alemu, 2007; Martin-Breen & Anderies, 2011; Zolli & Healy, 2012), anthropology (Nuttall, 2010) and future studies (Miller, 2011; Quay, 2010). While definitions vary in detail, its essence is captured by the definition offered by the founder of anticipatory studies: the biologist Robert Rosen, who stated that ‘*an anticipatory system is a system containing a predictive model of itself and/or its environment, which allows it to change state at an instant in accord with the model’s predictions pertaining to a later instant*’ (Rosen, 1985, p. 341). All in all, anticipation is about *thinking ahead in a way that things happen according to an expected plan, or in a way that eventual unexpected events cannot damage the expected outcome*.

In social science, the focus on anticipation is marginal, except for certain specific areas, such as on socio-ecological systems (SES) and risk management. In SES analysis, anticipation is somewhat synonymous with resilience, thus referring to the capacity of systems to adapt to new situations without losing their characteristics. In risk management, anticipation means the capacity to prevent, mitigate and prepare for the emergence of eventual crises or disasters.

In governance studies, a specific stream of literature focusing on ‘anticipatory governance’ has flourished (Fuerth, 2009; Karinen & Guston, 2010; Miller, 2011; 2012; Quay, 2010). It refers to ‘*a system of institutions, rules and norms that provides a way to use foresight for the purpose of reducing risk and to increase capacity to respond to events at early rather than later stages of their development*’ (Fuerth, 2009, p. 19). Studies in this tradition focus largely on practical strategies for developing good policies, focussing on foresight, integration, democratization and networks (Ramos, 2014).

Anticipation is rarely a central theme in public policy, although there are notable exceptions. First, the well-known typology of policy styles from Richardson (1982), in which an anticipatory policy style is theorized as the capacity of governments to anticipate problems through proper planning. Second, there are the lessons of Wildavsky (1988), which theorize about the management of uncertainty by designing policies that are capable of either eliminating possible problems in advance or of remaining resilient once unexpected events happen. Finally, recently, Bob DeLeo (2015) has analytically and empirically reviewed anticipatory policy-making to show how this could be considered as a distinctive policy type and, at the same time, a specific pattern of policy change.

Table 1. Anticipating policy effectiveness: a framework.

		Elements of policy effectiveness	
		Instrumentality	Capacity
Dimensions of Policy Effectiveness	Analytical	Is/are the instrument(s) capable of solving the problem?	Does the agency know how to choose, adapt, and calibrate policy tools?
	Operational	Is the instrument operationally feasible?	Does the agency have the accountability mechanisms, coordination mechanisms, and trained bureaucracy necessary to use the tool?
	Political	Is the instrument socially acceptable and politically viable to use?	Does the agency have the legitimacy/ability to reconcile political differences? Or deal with political opposition?

Source: Authors.

The brief review of the studies on anticipation suggests how the concept may be useful also in policy design, when policy-makers pursue effectiveness in a comprehensive sense – analytical, political, operational – to achieve desired goals. It is particularly relevant to implementation, wherein policy makers ‘anticipate’ what could happen during the process of implementation (because of the emergence of unexpected problems, differentiated contexts, etc.) and to pre-address it through policy design. From a policy design perspective, this means that policy designers should be able to anticipate how both decision-makers and implementers, and ultimately even policy evaluators, including the public, will react to their interventions.

This line of reasoning is hardly new, of course, as the view that good policy design should be based on foresight, prevention and forecasts is widely shared among social scientists. At the same time, this dimension is too often taken for granted or dealt with in a simplistic way, outside those policy technical fields such as climate change and disaster management. Therefore, anticipation should be considered a fundamental dimension of policy design not only from the perspective of practitioners but also from the analytical point of view. Scholars should also assess the anticipatory content of policy design when studying it.

So what should be the characteristics of anticipatory design? Since policy effectiveness is the main goal of policy design, anticipatory design should be characterized by pre-arranging, organizing and addressing public policies in the most suitable way to reach the set goals. Thus, all the three dimensions of policy effectiveness described in [Table 1](#) should work in concert when policy-makers are in charge of design, as well as when scholars are committed to assessing the quality of policy design. Although anticipatory policy design is undoubtedly a top-down policy-making strategy, it does not necessarily neglect bottom-up views. It merely reiterates that governmental policymakers are the primary actors in public policy-making and in charge of steering the process.

Anticipating and designing for effectiveness

The extent to which a policy design is effective can be conceptualized as a function of two broad features: its *instrumentality* or the substantive ability of a tool, or a series of tool(s) to solve the problem it seeks to address; and the *capacity* of the government agency to actively calibrate, deploy and manage these tools. In line with Wu, Ramesh, and Howlett (2015), these features are discussed along three (*analytical, political and operational*) dimensions ([Table 1](#)).

Analytical dimension

For a design to be effective, i.e. give effect to its goals or solve a problem, it is essential that the instruments used are, in the first instance, capable of solving the problem. Further, that the agency that calibrates, deploys and actively manages these instruments has the capacity to do so. We describe this as the *analytical dimension* for anticipating effectiveness. For example, if the policy goal is to organize retirement security for the poor in a society, then a mandatory savings program is unlikely to address the goal. Similarly, health reforms in developing economies are often weakened as government agencies do not have the capacity to manage complex provider payment instruments (Bales, 2018).

The *instrumentality element* of this dimension relates to the intrinsic ability of the policy tool to address the problem at hand, or at least substantially mitigate its adverse effects. It requires a shared understanding if not consensus, based on analysis and reasoning, on the root cause of the problem. Defining the root cause of the problem, and its constituent elements, is often a contested and conflictual exercise (Bacchi, 2012; Baumgartner, 1989, p. 75; Peters 2018) as problems vary in their tractability and their complexity (Peters, 2015c; Head, 2008) and the degree of behavioral change required to solve them (Howlett 2018; 2019).

Having determined the root cause of the problem, it then requires identifying a policy tool or a portfolio of tools that can potentially address the problem. If promoting vaccination is the objective, for example, then what tool would best help to achieve it: subsidized vaccines for users, a public information campaign or legislative tools, such as the ‘*No Jab, No Play*’ that requires all children to be fully vaccinated to participate in childcare programs in Victoria, Australia? While the basic types of tools are limited, there are almost infinitely many permutations of each tool, and, more significantly, many combinations of hybrid tools (Howlett & Del Rio, 2015; Kivimaa & Kern, 2016; Yi & Feiock, 2012). This stage requires identifying reasons based on logic and evidence to believe that a tool will help solve the problem. Why will this tool work? How will it work? To what effect? Under what conditions? (Howlett, 2019; Peters 2015a) For example, employment-based approaches to finance healthcare such as social insurance programs in Japan and South Korea are unlikely to be effective in developing economies with large informal employment (Asher & Bali, 2015).

The *capacity elements* relate to the technical know-how of the implementing agency, and its ability to utilize a policy tool to its full potential. Contemporary instruments – electronic road pricing to address traffic congestion, environmental offsets and carbon permits to reduce pollution – in the arsenal of most governments are extremely complex. Utilizing these instruments, being able to customize these instruments to local contexts, and calibrate them requires a spectrum of analytical capabilities including individuals with the ability to access and apply technical and scientific knowledge and analytical techniques (Cohen & Levinthal, 1990; Howlett, 2019). What governments do, indeed can do, and the likelihood of their success depend critically on their policy analytical skills in diagnosing problems and developing appropriate strategies for addressing them (Craft et al., 2013). For example, social insurance agencies need sufficiently many statisticians and actuaries, accountants, fraud detectives. Similarly, treasury and central budgetary agencies need economists, financial analysts, accountants and others that are able to generate fiscal forecasts and other macroeconomic projections.

Operational dimension

Apart from being intrinsically able to solve a problem, policy tools must be operationally feasible. This refers to the extent to which a tool can be readily deployed in a given context, and its fit with the underlying policy architecture. Moreover, responsible agencies must have the requisite capacity to implement the design. We describe this as the *operational dimension*. For instance, medium-term budget frameworks – a popular instrument in public financial management – are difficult to operationalize unless they are accompanied with fiscal rules (Harris, Hughes, Ljungman, & Sateriale, 2013). Countries that have organized their pension programs largely on individual retirement accounts (such as India, Singapore, Malaysia) will find it challenging to transition to a tax-funded or non-contributory based programs due to the policy lock-in that individual accounts create (Asher & Bali, 2015; Peters et al 2005). Similarly, contracting and commissioning, key features of contemporary public service delivery, require government agencies to have a range of public management systems including mechanisms to manage procurement, contract negotiations, enforcement, etc. (Alford & O’Flynn, 2012).

While policy design requires approximating idealized solutions, the solutions need to work on the ground. ‘Good policy, poor implementation’, a popular refrain of failed designs reminds analysts that implementation needs to be actively designed. A good policy design *anticipates* critical implementation difficulties and address them in the policy itself and rejects them if that is found to be too expensive or difficult. Vital operational issues that need to be addressed include: Does the tool provide for enforcement of accountability? Does it provide sufficient incentives for improvement? Does it provide sufficient flexibility for re-calibration? Can the tools be employed within the planned timeframe?

Bali and Ramesh (2018, p. 334–336), surveying the recent literature on policy design, identify a range of attributes that effective designs must embody. These include *coordination* (the extent to which changes in a policy are incorporated with the existing design architecture), *coherence* (the consistency of actions in addressing a given set of problems), *consistency* (the extent to which policy measures work towards the same goal), *degrees of freedom* (the leeway for designers to make adjustments or calibrate policy in the future), *goodness of fit* (the extent to which a design is compatible with the governance styles and political context), *complementarity* (the extent to which there are synergies between different elements of a policy mix), *targeting* (the extent to which distributive public policies account for errors of inclusion and exclusion), *reversibility* (the extent to which elements of a program can be changed), *contingency* (the extent to which designs accommodate contingent liabilities) *and transitions* (the extent to which the costs of changing a policy-mix are recognized). More recently, attributes such as adaptability, resilience, robustness, sustainability, explicitness and agility are argued to be central to ‘good’ designs (Capano & Woo, 2018; Folke, Hahn, Olsson and Norberg, 2005; Room, 2011; Thomann, 2018).

Agencies that implement these designs also need to have a broad spectrum of skills and competencies. Given the complexity of contemporary designs, public agencies require a system for coordinating the diverse activities that need to be performed to address problems. The increased expenditure on public procurement (averaging 12% of GDP in OECD economies) in recent years requires deft use of management systems,

such as tenders, personnel, contract management, accrual accounting, etc. For example, the Australia government launched a parliamentary enquiry on \$47 billion spent on contractors in 2016–17 (Dingwall, 2017) to ensure sufficient accountability mechanisms were in place.

Political dimensions

In addition to analytical and operational dimensions, the social acceptability of a policy tool, and the ability of an agency to navigate entrenched economic and political interests are important. We describe this as the *political dimension* to anticipate policy effectiveness. For example, while tax-financed single-payer healthcare is the dominant instrument used to finance healthcare in many OECD economies, there is widespread public hostility to it in the USA where it is presented as an example of socialism (Béland, Rocco, & Waddan, 2016). Similarly, not all government agencies have the capacity to overcome opposition from stakeholders and other interests that impede reforms.

The *instrumentality element* of this dimension refers to the political acceptability of a tool. The political context within which problems are defined and solutions are searched, selected and applied are vital determinants of what policies can or cannot achieve (Chindarkar et al., 2017; Howlett and Mukherjee 2018a, 2018b). Problems are constructed realities shaped by the interests and ideas of different actors posturing to define problems and solutions in ways that promote their own interests (Peters 2018). All policies create winners and losers. It is therefore important that policy options are supported sufficiently by potential winners, or at least not so opposed by potential losers that they are abandoned.

Political viability asks whether or to what extent a proposed policy alternative will be acceptable to relevant powerful groups, decision makers, legislators, administrators, citizens or others. Is the proposed alternative acceptable to policy makers, policy targets, the general public, voters, etc. (Chindarkar et al 2017)? Is the proposed alternative appropriate to the values of the community, society, the legislature, etc.? Government politicians are the most critical actors in the policy process, so the proposed solutions must be acceptable to them. Their primary motivation is to attain and maintain office and the measure should, by and large, not undermine their electoral fortunes. The likely response of powerful interest groups (e.g. business and labour unions and media) to a policy tool is also important because their stance affects the decisions made and implemented.

The *capacity element* refers to the implementing agency's public engagement resources and skills (Bryson et al., 2013), and its ability to reconcile differences among stakeholders. The overall level of trust in government affects agencies' performance and needs to be factored into policymaking. This in turn is a function of a broad spectrum of skills.

For instance, policy managers need to develop quick judgment on the desirability and feasibility of different policies: what will be considered feasible or acceptable by managers, politicians, stakeholders or the public, what will not, and why (Hartley et al 2015). So is an understanding of the political trade-offs necessary for an agreement among contending actors and interests. This would require a nuanced understanding of stakeholders interests, their strategies and resources (Wu et al., 2015). The political legitimacy of governments is equally critical in reconciling stakeholder interests, and overcoming opposition to programs (Capano et al., 2015).

Papers in this special issue

Papers in this special issue cover a variety of issues in anticipatory policy and policy effectiveness from different perspectives.

Colin R. Kuehnhanss offers a sophisticated overview of the origins of the behavioral insights from the Libertarian Paternalism movement and critically considers the normative foundations of nudging as a policy tool. He also discusses the ongoing efforts to build policy capacity for integrating behavioral insights and experimental methods into the creation of public policy to support anticipatory design. It emerges that while behavioral insights offer a powerful tool to re-shape and design new evidence-based policies, designers – and the targets of those policies – should be aware of the normative biases of the celebrated examples of nudging despite their value-free appearance. Furthermore, these tools have been insufficiently subjected to legal and political analysis scrutinizing their legality and compliance with democratic norms.

Luigi Bobbio reviews the substantial literature on participation in policy-making to assess the possible paths for designing effective participation (by assuming that participation is an added value for policy-making). He distinguishes between two possible arrangements for designing participation: participatory arrangements and deliberative arrangements. The former is characterized by on-line participation, the capacity for mobilizing militants and stake-holders, and by decisions that are often made in an adversarial and politicized way. The latter is characterized by the on-site participation of ordinary people and serves as a consultative instrument that is capable of developing rational and ‘cold’ deliberation. Bobbio suggests that while the two settings are not completely substitutable, they may be merged and hybridized, to suit the needs of the problem being addressed

Zeger van der Wal, Martijn van der Steen and Pieter Bloemen present an intriguing analysis of a design process for addressing a policy issue that is highly complex, has a very long time-horizon and encompasses interventions and instruments with a long lead-time: the case of climate change adaptation policy in the Netherlands. The high uncertainty associated with this issue deeply complicates any effort towards anticipation, because complexity and non-linear dynamics make it impossible to foresee all of the future possibilities of the issue. The long time-horizon enhances the space for complexity and widens the range of possible outcomes; the long lead time of possible interventions presses the policy maker for time, since the design process needs to start early in order to ‘pre-address’ any developments. The authors specify how analytical, political and operational capacities should be adopted for anticipating effectiveness in the contexts of high uncertainty by following the framework proposed in this introductory article.

The paper by Olivia Jensen focusses on the links between governments’ capacities to formulate and implement policies and the effectiveness of these policies in the context of water policy in developing countries. It examines two cases: the metropolitan area of Manila in Philippines and the country of Malaysia, in which far-reaching reforms were introduced which involved shifts in ownership and the establishment of regulatory agencies. She shows how regulatory capacity, intended as a strategy for anticipating effectiveness, develops over time, at least in developing countries. Then, Jensen’s empirical analysis demonstrates that the characteristics of the regulated entities matter,

and regulatory design can be made more effective where this is deliberately taken into account. Finally, it emerges how water policy involves the intrinsic problem of balancing the goal of encouraging regulation to adapt to new issues and priorities with the need to mitigate the level of regulatory risk and the associated cost of capital.

Giliberto Capano and Elena Pavan focus on how and under what conditions current digital communication technologies can become an asset to the design of effective policies. In doing this, they bridge two strands of reflection that have hitherto developed quite independently: policy design studies and research on the use of information and communication technologies (ICTs) to reform the public sector. By assuming that different governmental, political and technical capacities shape different spaces for action and thus different types of policy design, policy-makers can involve citizens via ICTs in three modes: co-design, design fine-tuning and crowdsourced policy design. According to this framework, they analyze three different 'revelatory case studies' in which ICTs have been employed by governments while designing policies: Iceland's recent experiment to collectively redraft its constitution; La *Buona Scuola*, the latest Italian public education law; and the Finnish *Avoim Misteriö*, a platform for crowdsourced legislation. Capano and Pavan show that when designing ICTs for policy-making, policy designers can manipulate citizens' participation by channeling their focus on specific issues or even nullifying the potential of ICTs.

Benjamin Cashore and colleagues focus on the issue of whether dialogues between stakeholders can improve by anticipating effectiveness in global governance. Based on a review of relevant policy literature, they extract those factors that seem more likely to influence the success of global interventions in improving problems 'on the ground'. They develop insights for how managers might nurture six distinct, but related processes, to increase the likelihood that means-oriented policy learning processes will enhance goal attainment: problem definition assessments, problem framing, coalition membership, causal framework development, scoping exercises and knowledge institutionalization. They provide empirical evidence indicating absence of such structured learning processes at the global level, suggesting the need for a policy entrepreneur or knowledge broker to foster learning and enhance the capacity for anticipating problems at the global level.

Finally, the paper by Azad Bali and M Ramesh focuses on the 'new' design orientation in policy sciences, and applies the framework presented in this paper to comparative case studies of health policy reform in India and Thailand. Their substantive argument is that contemporary health policy reforms do not adequately emphasize the appropriateness of policy tools, and the range of operational and political capacities required to implement complex designs.

Overall, the papers presented in this special issue offer a broad review of the different ways in which policy-makers approach the issue of anticipating effectiveness through policy design. They suggest that an anticipatory perspective for implementing and studying policy design improves understanding of not only the process-related characteristics of policy design but also the quality of its content in terms of prospective effectiveness.

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