W02 / Managing Uncertainty in Policy Design: Policy Tools and Capacities

Topic : Policy Design, Evaluation, Policy Analysis

Chair : Azad Singh Bali (University of Melbourne)

Second Chair : Brian Head (University of Queensland, Australia)

Third Chair : Jenny Lewis (University of Melbourne)

Fourth Chair : M Ramesh (LKY School of Public Policy, National University of Singapore)

CALL FOR PAPERS

Dealing with uncertainty is a central challenge for policy designers and in design studies. Recent events, including polycrises, public health emergencies, and the rapid proliferation of new technologies such as artificial intelligence, have underscored the critical importance of addressing uncertainty in policy design. The central question this workshop engages with is how to address and manage uncertainty in policy design.

We explore two inter-connected issues: a) specific tools used to deal with uncertainty in policy designs, and b) the role of policy capacity.

We welcome submissions that advance conceptual understanding or case studies on addressing uncertainty in policy designs. We encourage authors to engage with some aspects of the questions outlined below. All papers will include a discussion that develops strategies or offers insights for policy designers in dealing with uncertainty.

1) How designers deal with problems or challenges in the context of uncertainty (in the understanding of the issue or lack of an appropriate knowledge base such)? (see for e.g. Head, 2019; 2023; Cairney 2016;
2) How designers set policy goals and objectives in an environment characterised by uncertainty?
3) How designers use policy tools and mixes to address uncertainty in policy designs (Howlett and Ramesh, 2023; Fowler, 2021;)?
4) How designers adjust policy settings in the context of uncertainty in targets (Capano and Woo, 2018)?
5) The role policy capacity plays in managing uncertainty during the design process? Are certain types of capacities more critical in dealing with uncertainty? (Wu, Ramesh and Howlett, 2015; Mukherjee and Bali, 2018)
6) How lessons/best practices in dealing with uncertainty are institutionalised (Stark and van der Erend, 2023; Nair and Howlett, 2017; Dunlop and Radaelli 2017)?

ABSTRACT

A lot of the discussion around uncertainty in the context of policy design has focussed on what are described as 'ill-structured' problems, marked by a lack of clarity about the issue's nature and limited knowledge about solutions. An extensive literature describes and categorizes types of uncertainty and the challenges they present in policymaking (see Peters, 2018, Head 2022; Janicke and Jorgens 1999; Koppenjan and Klijn 2004; Nair and Howlett, 2017).

Policymakers often deal with limited information, asymmetric knowledge, or an inability to grasp a problem's root causes within time constraints (Koppenjan and Klijn, 2004; Howlett, 2024). This differs from debates involving contested problem definitions, as seen in climate change or health reform discussions (Sovacool, Brown and Valentine, 2016; Ramesh and Bali, 2021). Uncertainties in goals, objectives, and policy tools can stem from decision-makers' awareness and the nature of the issue (Howlett, 2024). Uncertainty also surrounds the effectiveness of policy tools and their combinations, particularly over time. That is, are interventions made at time t likely to be effective at time t + 1 (Howlett and Leong, 2021). There are also uncertainties associated with the accuracy of specific settings of policy tools, such as tax rates or subsidy levels, which tend to resist change despite calls for flexibility. Further, policymakers also grapple with overarching uncertainties in the political environment and resource availability (Howlett, 2024), which are

interconnected in unfathomable ways which make policymaking difficult.

To understand how policy designers deal with these different types of uncertainty and manage them, this workshop looks at two interconnected issues: a) specific tools used to deal with uncertainty in policy designs, and b) the role of policy capacity.

Recent design studies reiterate the need for multiple tools (with substantive and procedural components, primary and secondary elements) to manage uncertainties and create ‘agile’ or ‘resilient’ designs to deal with uncertainties (Capano and Woo, 2018; Bali et al 2021). The choice of tools and their effective deployment is equally a function of the capacities of policymakers and implementing agencies (Wu et al 2015). That is, the skills and competencies of public actors to be able to understand the spectrum of uncertainties, develop processes, and choose tools to manage them.

The twin foci on tools, and the capacities of policymakers to effectively deploy are central to the new design orientation in the policy sciences (Howlett and Lejano, 2013; Mukherjee and Bali, 2018).This workshop thus aims to advance scholarly debate and discussion within the policy sciences around the efficacy of policy designs, as well as contribute to policy practice by developing strategies/best practices for the effective management of uncertainty

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Session 1Introductions: Uncertainty & Problem Framing

Wednesday, June 26th 10:15 to 12:00 (AULA 23)

Discussants

Kris Hartley (Arizona State University)

From decision to deliberation support: Modeling for water quality problem-structuring and intervention

Schuyler Houser (TU Delft)

Water managers and planners working within complex social-environmental water systems are challenged with difficult choices when tasked with prioritizing interventions, particularly when water problems and attendant goals are unclear and when problems and interventions can be experienced and applied at multiple scales. This is often the case for river water quality management, which involves coordinating pollution control across sectors and administrative bounds to steer progress towards multiple (and potentially competing) ecological, social, and economic goals expressed at local, regional, and hydrological levels – all in the presence of competing definitions of the notion of 'water quality' itself. As such, water planners and other decision-makers must grapple with a bundle of shifting objectives and targets that introduce policy ambiguities and limit the applicability of optimizing approaches.

Through the case of a multi-stakeholder water quality project in the Brantas River basin in East Java, Indonesia, this paper explores the how systems-based water quality modelling, often applied as an optimizing decision support tool, can also be used to support open deliberations regarding the characterization of water pollution problems in terms of both measurable water quality parameters and adjacent policy goals, in turn to support prioritization of interventions according to emergent problem structures. The water quality model combines mapped terrestrial pollution source estimates with rainfall-runoff and pollution transport and fate process models to estimate localized, regional, and basin-wide impacts of various source-reduction scenarios on water quality. By visually identifying pollution source concentrations and illustrating estimated impacts of alternative source reduction strategies, the model offers a visual tool for policymakers to consider root causes of water pollution, relative effects of geographically-targeted versus dispersed interventions, and desirability of alternatives based on different definitions of effectiveness at various scales (e.g., reduction of municipal water supply costs versus basin-level attainment of environmental standards). In this way, the case demonstrates how model-based scenario-building can be an invitation for policy-makers to simultaneously deliberate alternative problem structures alongside interventions at various scales in order to better deal with policy ambiguities inherent to water resources management.

Designing goals under uncertainty

Kidjie Saguin (University of Melbourne)

Policy goals play an important role in shaping the effectiveness of policy instruments by simplifying complex policy interdependencies and setting policy priorities (Fukuda-Parr 2014). But current understanding of the role of policy goals in effective policy design is often undermined by the tendency to relegate policy goals as fixed constraints that policymakers need to work with (Howlett 2009, Thacher and Rein 2004). In taking

goals as givens, policy sciences ignored how goal formulation can motivate action, “which is the foundation of purposiveness” of policy design (Anderson 1986, 64). Since goals are what distinguishes a public policy from a random action, the policy sciences need to pay more attention to policy goals. After all, consciously modifying goals are argued to be instrumental to achieving them (Linder and Peters 1984).

This proposed article seeks to advance Linder and Peters’ (1984) seminal work on policy design by conceptualizing the design of goals under uncertainty. Existing studies rely on Wildavsky’s (1979) notion of ‘strategic retreat on objectives’ to examine goal changes as a fixation on implementing the means rather than achieving the substantive goals of the policy. This process of goal displacement is often a response to an certain type of uncertainty pertaining the complexity of the policy problem. However, there are different kinds of uncertainties that are ignored in policy design. On top of uncertainty over the means-ends relationship, uncertainty over actor interdependence (strategic uncertainty) and institutional divergence or conflict (institutional uncertainty) also exists to undermine policy effectiveness (Koppenjan and Klijn 2004). This article argues that the process of goal changes would depend on the type of uncertainty that policymakers face.

The proposed paper presents three empirical cases from the Philippines to develop this argument. It argues that different types of uncertainties are responded to through different forms of goal changes. The Bottom-Up Budgeting (BUB) is an experiment at improving local governance but is faced with uncertainty over what participatory instruments works best to improve local governance. The goal of poverty reduction was displaced over implementing ‘good governance’ measures to instill budget and planning discipline in local governments. The BUB is a quintessential example of *goal displacement*. The oldest private-public partnership on education in the world (Education Service Contracting) is presented as a case of strategic uncertainty where goals were modified to establish some predictability around how the state can regulate private schools. New goals were replaced as a form of *goal diversion* where old goals were considered irrelevant given the changes in policy context. I propose a new form of goal change – *goal dissociation* – to capture responses to institutional uncertainty in the national cash transfer program (Pantawid Pamilyang Pilipino Program). Dissociated goals serve to legitimize means irrelevant to the existing policy but relevant to goals of other policies. In this case, dissociated goals of the program were relevant to increasing the supply-side interventions for education and health.

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Session 2Managing Uncertainty: Implementation, Tools, and Capacity

Wednesday, June 26th 14:00 to 17:15 (AULA 23)

Discussants

Kidjie Saguin (University of Melbourne)

Júlia Gabriele da Rosa (Universidade Estadual Paulista)

Assessing policy capacity for disaster risk reduction policies implementation

Guiselle Romero Lora (Pontificia Universidad Católica del Perú)

In the context of the intensification of natural disasters because of climate change and the slow progress of disaster risk reduction policies in Latin America, this paper proposes an analytical framework to assess policy capacity of relevant stakeholders to implement the National Disaster Risk Management Policy in Peru. Building on the conceptual framework developed by Wu, Ramesh and Howlett (2015) who propose a model of analysis of competencies and skills analyzed at the individual, organizational and systemic level and considering operational, analytical and political competencies; this framework focuses on the organizational and systemic level and the competences and resources needed to implement disaster risk reduction (DRR) policies.

The framework includes perspectives from the organizational resilience literature. Resilience allows organizations to cope with crises and not interrupt their operational capacity (Barnett and Pratt, 2000; Vogus and Sutcliffe, 2007). Another perspective goes beyond and suggests that resilience allows organizations to be inherently transformed, strengthened, and able to overcome threats (Lengnick-Hall et al., 2011). Thus, resilient organizations are better prepared to perform in contexts of disasters.

The framework also includes reflections from the work of Kattel (2022) on dynamic capabilities and Head's (2019, 2022) studies on the wicked problems due to their implication on policy capacity studies; as well as concepts related with DRR policies such as vulnerability, disaster, and risk (Brenes 2007, Lavell 1993).

Building on this literature, the framework proposes variables that reconcile with the model developed by Wu, Ramesh and Howlett (2015) to assess policy capacity for DRR policies.

References:

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Vogus, T. and Sutcliffe, K. (2007), “Organizational resilience: Towards a theory and research agenda”, Paper presented at the IEEE International Conference on Systems, Man, and Cybernetics, SMC, Montréal, Canada, October 7-10.

Wu, Xun, M. Ramesh, Michael Howlett. (2015) Policy capacity: A conceptual framework for understanding policy competences and capabilities. Policy and Society 34:3-4, pages 165-171.

Mitigating Uncertainty in Policy Design during Implementation: Organizational Responses from a Carnegie Perspective

Wai-Hang Yee (The Chinese University of Hong Kong, Shenzhen)

Naikang Feng

Inherent uncertainty in local policy environments demands appropriate system-wide adaptations of organizational dynamics and policy design during policy implementation. Extant literature explains policy design patterns mainly through state-level drivers and/or perceptions and logics of individual decision makers. While the two complementary perspectives balance structural and agentic forces, few studies explicitly investigate the influence of organizational structures and processes. Drawing on insights from the behavioral decision school in the organizational literature, the study discusses their influence on policy design and discuss ways how implementing organizations may address local environmental uncertainty during policy implementation.

Based on the Carnegie perspective, this study conceptualizes organizations as adaptive systems consisting of a coalition of participants. We formulate propositions linking implementing organization’s responses to uncertainty in policy design to three major pathways of organizational adaptations: adaptation of goals, adaptation of attention rules, and adaptation of search rules. First, organizations can mitigate uncertainty in policy design through goal adaptation, adjusting their goals based on past experience and the experience of comparable organizations. Second, attention rules adaptation allows organizations to focus on a select set of performance criteria as demanded by organizational participants, reducing uncertainty in the performance effects of policy design choices. Third, organizations can engage in search rules adaptation, learning from their performance outcomes and actively seeking more effective policy design in local implementation environments.

A case study on the adoption of market-based instruments in China’s food policy reform is discussed as an illustration of how organizations adapt and adjust its policy design in response to uncertainty. Specifically, this research examines the joint conditions that facilitate the recurrent use of market-based instruments among street-level food safety regulatory organizations (SLOs) in China. Data from ten cities in five provinces, spanning diverse socioeconomic stages and policy enforcement scenarios, were collected through surveys of chief executive officers and frontline workers. A fuzzy-set Qualitative Comparative Analysis (fsQCA) is employed to analyze the data and identify causal configurations leading to the adoption of policy design with high usage of market-based instruments.

The findings reveal three distinct configurations of causal conditions that explain the frequent use of market-based instruments by SLOs. The first configuration involves goal adaptation to meet target demands, considering policy targets' compliance attitude and upper-level governments' policy style and capacity. The second configuration highlights attention rules adaptation by referencing instrument choices and effectiveness in other SLOs, as well as considering upper-level governments' style and strategy. The third configuration suggests search rules adaptation through internal communication channels, enabling organizations to negotiate conventions and reduce decision-making uncertainty.

This study contributes to understanding organizational influences on policy design, emphasizing the Carnegie perspective as a foundation for examining how organizations respond to uncertainty. The findings provide valuable insights for policymakers and practitioners in mitigating uncertainty during policy implementation through adaptive adjustment in organizational and policy design.

FULL PAPER IS AVAILABLE. (Apology, as I thought the call is a paper call.)

I plan to present the paper in person at the workshop, but I shall confirm my summer class schedule first.

Policy design for SDG localization: innovations and challenges in uncertain contexts

Kris Hartley (Arizona State University)
Glen D. Kuecker (DePauw University)

Urban policymaking is under stress from political and environmental uncertainties. Global policy narratives give the impression of a growing consensus about polycrises, but policy guidance at high levels is intentionally general and often ambiguous. With progress measured against the United Nations Sustainable Development Goals tracker, national governments endeavor to varying degrees to meet global policy expectations even in the absence of enforcement and sanctioning power. Where national governments fall short in such efforts, city governments having adequate capacities often embrace aspects of the SDGs that concern their local needs and have undertaken structured tracking and reporting through Voluntary Local Reviews. In this context, some city governments are pursuing policy innovations through the SDG framework as a way to secure legitimacy. Does the dynamic interface between global policy goals and local policy action change the way urban policies are designed? This article addresses this underexplored question through the case of smart cities in London, New York, and Singapore, examining whether new uncertainties that contextualize urban policymaking engender innovative thinking about policy design and capacity. Findings suggest (i) that instrumental-rationalist policy narratives and techno-fundamentalist discourses like ‘smart’ and ‘sustainable’ are common pathways for attempting to manage existential uncertainty, and (ii) that they also perpetuate an anachronistic policy epistemic and safeguard the powerful interests relying on it.

Designing and uncertainty: Can policy labs be the right tool to provide lessons?

Jenny Lewis (University of Melbourne)

The growth of policy labs over the last few decades has been substantial, with numerous examples appearing in many nations. In response, there has been a focus on developing typologies of labs based on relationship to governments, staffing, focus of inquiry, methods used, and other factors. There have also been considerations of which part of the policy process these labs are most engaged with, analyses of the policy sectors that they examine and at what level of jurisdiction, and considerations of how effective they are in addressing policy problems. Critically, there has also been a growing interest in understanding whether labs that use design methods are able to function alongside more traditional approaches to policy design.

But how do labs deal with problems or challenges in the context of uncertainty? Many labs have been established to deal with ‘ill-structured problems’, taking mainly cross-sectoral policy problems outside of the bureaucratic structures of government so that they can be ‘labbed’ in hope of a solution. These labs can be considered as a particular type of procedural policy tool, with a focus on changing the shape of governing structures. But given the limits of labs in ‘everyday’ situations, where they have been shown to hold promise but also face significant limits, are they capable of producing solutions in a context of uncertainty?

This paper examines policy labs and their potential for functioning under uncertainty, aiming to address two gaps. First, while labs are often created to deal with seemingly intractable problems, that is against a background of understanding that the issue is multifaceted and the knowledge base might be strong but conflicting across different actors who hold a stake in the solution. This is a different situation to one where labs are used to work on problems where there is little understanding of the issue or there is an inadequate knowledge base to support solutions, as is the case in uncertainty. How do policy labs work in this context?

Second, because labs are ‘outside’ the bureaucratic system in many nations, even though they are at least loosely coupled with it, there is an important question about how lessons in dealing with uncertainty can be spread via networks and institutionalised by governments and other organisations. While labs are connected to each other around the world, they are often less connected to government departments where policy decisions are made. In some situations, labs are being funded and evaluated by national or international agencies, while in others there is little steering of labs and not much evidence of whether they are achieving what they were established to do. What kinds of structures are needed to ensure that the lessons learned from mostly small and transient labs are captured, shared, and ultimately institutionalised?

These questions about how policy labs work under uncertainty and how lessons from their work can be institutionalised, will be addressed conceptually and by using empirical examples from labs.

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Session 3Managing Uncertainty: The Complexity of Environmental Policy

Thursday, June 27th 09:00 to 12:15 (AULA 23)

Discussants

Schuyler Houser (TU Delft)

Federico Toth (Università di Bologna)

Mapping the Uncertainty of Climate Resilience in Mumbai: Measurement, Governance Issues and Policy Implications

Piyush Kumar (Indian Institute of Technology, Bombay)

Rapid urbanization is perceived as weakening people's connections with nature and ignoring the need to protect the environment. This has led to environmental degradation, including increasing air and water pollution, waste disposal, and management issues. Indeed, India's cities portray a depressing picture today. However, reducing urbanization is not the solution; rather, it is essential to ensure that it continues in a manner that has minimal environmental repercussions.

In the city of Mumbai, the concerns owing to the coastal geography, the significant proportion of vulnerable sections of the society, and difficult climatic conditions at certain points of time are well-known reasons for the city’s struggles against disaster management.

Developing economies like India are seen to prioritize disaster rehabilitation and rescue over risk reduction and preparedness due to limited resources for planning and resilience building. Cities like Mumbai claim to be India's greatest metropolis due to their enormous population and economy. However, its large slum population on elevated terrains, river banks, and obstructed drainage systems, with a persistent demand for resources, make it vulnerable.

In the face of accelerating climate change, uncertainty emerges as a pivotal challenge for crafting effective public policies aimed at enhancing climate resilience in India. The paper explores the multifaceted dimensions of uncertainty within the Indian context, highlighting its implications for policymaking and climate resilience strategies through different governance and policy incremental models. Drawing from a synthesis of scholarly research and policy documents, the paper delineates the sources and manifestations of uncertainty, encompassing climatic variability, socio-economic complexities, and technological uncertainties via a fuzzy logic process. Moreover, it delves into the inherent uncertainties surrounding climate projections, resource availability, and the diverse impacts on vulnerable populations and simplifies the decision-making process. When confronted with limited data and substantial uncertainty, expert knowledge and linguistic assessments often become a necessity. Fuzzy set theory serves as a foundation for modeling non-probabilistic uncertainty, incorporating subjective insights and human expertise to represent uncertainties in parameters.
The paper attempts to incorporate various socio-economic variables to be put in a suitable hierarchical structure, along with their interdependency analysis. Surveys were conducted to include domain expertise at two stages of the process. Hierarchical Fuzzy Logic Process is used for fuzzification, inferencing, and aggregation at each level of the hierarchy until the final output set is obtained, representing a ward’s performance in terms of its belongingness in good, average, and poor categories. The wards’ performances can be compared at all levels of hierarchy across each dimension. It also provides an insight into

understanding of risk as a composite of not just external hazard factors, but also of intrinsic characteristics that may act as vulnerabilities or capacities for systems, people, the economy, governance, and built environment in coping with external forces.

Recognizing the imperative to navigate uncertainty, the paper elucidates emerging approaches such as co-benefits approach, scenario planning, adaptive governance, and participatory decision-making in crafting resilient policies. Furthermore, it underscores the role of robust scientific assessments, interdisciplinary collaborations, and stakeholder engagement in informing policy responses amidst uncertainty.

HOW (NOT) TO DEAL WITH CLIMATE CHANGE CONSEQUENCES: ADAPTING, MITIGATING AND RESILIENCE IN THE SOUTH OF BRAZIL

Júlia Gabriele da Rosa (Universidade Estadual Paulista)

The effects of climate change in Southern Brazil are evidenced by floods, inundations, and power outages, resulting in water rationing and the displacement of communities and ecosystems. There remains uncertainty regarding the impacts of these activities. In response to this issue, international organizations and treaties emphasize the need for public policies that address everything from reducing greenhouse gas emissions (mitigation) to adaptation and resilience strategies. However, the prevention of catastrophes through mitigation policies becomes complementary in the face of the emergency of the most vulnerable populations who seek to maintain life, especially women and girls. An analysis of policies produced by the capitals of Southern Brazil reveals a significant gap in responding to these problems: less than 5% of policies address adaptation and resilience strategies. Overall, policies related to the consequences of climate change lack clear objectives and sustainability in their instruments. These results were obtained through a qualitative doctoral research study that examined the content of public policies published between September 2015 and January 2024 in the capitals of Southern Brazil states: Porto Alegre (Rio Grande do Sul), Florianópolis (Santa Catarina), and Curitiba (Paraná). An analytical model was developed to examine these policies, utilizing concepts, categories, and classifications. The concept of objective was employed to evaluate the social change that the policy aims to consolidate, while the concept of instrument was used to understand the strategies outlined to achieve the objectives. Categories of mitigation, resilience, and adaptation were used as parameters for the sustainability of policy content. Classifications were employed to indicate the consistency of objectives, instruments, and the congruence between them in pursuit of intended outcomes. The primary objective of presenting this work on-site is to refine the analytical model, and the specific objective is to promote the usability of the results obtained from the doctoral research.

Water Policy Design Under Uncertainty: Policy Capacities Under Weak Institutions in Latin American Cities

Jaime Sainz-Santamaría (Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM))

Latin American cities face deep uncertainty about the volume of water available to meet their competing demands. This uncertainty arises not only from climate change but also due to the intrinsic complexity of groundwater and surface water systems that supply most of the major capitals in the region. In addition to climate-derived and scientific uncertainty, water stress and occasionally water policy itself generate social conflict (political uncertainty), further complicating the design of water policies. Policy regimes characterized by weak institutions, seen as settings of low stability and poor enforcement, add to the complexity faced by policymakers. The policy mix to navigate these uncertainties includes a range not limited to inter-basin water transfers, price reforms, green infrastructure, and desalination, each with distinct trade-offs among various policy criteria such as water delivery, conflict management, and political payoffs. What are the analytical, operational, and political capacities required for effective policy design under these uncertainties? Through content analysis of policy reports, scholarly research, and newspapers, this paper takes inventory of the capacities demonstrated in managing water crises in a sample of Latin American countries and identifies the capacities that need to be developed. The paper discusses implications for building theory on policy design under uncertainty.

(Virtual) Co-creative Processes in the Face of Wicked Problems: Ownership as a Catalyst for Integration into Public Policies

Fanny Sbaraglia (Université Libre de Bruxelles)

For about a decade, co-creative processes have received special attention from public policy, urban planning, and environmental researchers to address the acceleration, proliferation, and complexity of wicked

problems (Head, 2022). Defined as the organizational capacity to collaboratively work with relevant stakeholders to develop innovative solutions to our most pressing societal challenges (Ansell & Torfing, 2021), co-creative processes are currently being analyzed in terms of public value (Osborne & al., 2021) and the democratic quality of the process (Ansell & Torfing, 2022). Few studies explore how these co-creative processes fundamentally transform public policies in the face of wicked problems.

To tackle this question, I argue that the degree of ownership by different policy designers and stakeholders enables the sustainable integration of co-creative process outcomes into public policies. Drawing from Lachapelle's definition, which sees ownership as "a concept through which to assess whose voice is heard, who has influence over decisions, and who is affected by the process and outcome" (2008: 52), I propose an operationalization of this concept to qualitatively observe two contrasting cases of processes addressing wicked problems in the Brussels-Capital Region: a group co-creation case (Team4 Neder-over-Hembeek) and a co-creation case with a societal dimension (Les Lieux d'avenir). My analyses will be based on participant observations, stakeholder interviews, and documentary research. I will demonstrate the significance of the ownership concept for policy designers, emphasizing its role in integrating co-creation outcomes in both research and policymaking processes related to wicked problems.

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Session 4Managing Uncertainty: Hierarchical Tools & Instrument Mixes

Thursday, June 27th 14:00 to 17:15 (AULA 23)

Discussants

Piyush Kumar (Indian Institute of Technology, Bombay)

Guiselle Romero Lora (Pontificia Universidad Católica del Perú)

Tackling uncertain targets' behavior. Instrument mixes and policy design for highly collaborative policies.

Federico Toth (Università di Bologna)

From the policy designer's perspective, one of the main sources of uncertainty concerns how policy recipients will respond to the policy initiative. Will they cooperate in the success of the policy or will they remonstrate against it? It is not just a matter of political consensus or social legitimacy of the measures taken, but of active policy cooperation and behavior change.

Recent literature on co-design has highlighted the potential benefits of involving stakeholders, citizens and, more generally, policy recipients in the policy formulation phase, in terms of the quality of interventions, the innovativeness of proposed policy solutions, as well as the increased willingness of 'lay actors' to cooperate with policy-makers in the production of goods and services that benefit the community. However, the full benefits of such an opening up of policy-making to potential policy recipients appear reduced in all those policy areas that go beyond the provision of goods and services, but rather affect the individual conduct of citizens. This is especially true for what we might call behavior-oriented policies (or "highly collaborative policies"), i.e. those where the active participation/compliance of policy recipients is critical to the achievement of policy goals and policy success.

In these policy areas, finding a mix of instruments that can overcome any resistance to compliance on the part of the target group and nudge them towards the desired behavior is one of the key challenges for policymakers in reducing the uncertainty of policy outcomes (and hence the risk of failure). In this regard, some authors suggest the strategy of the least intrusive policy instruments (the 'least restrictive alternative' principle) and that a purely regulatory and intrusive approach risks not only being ineffective but even counterproductive compared to inaction. However, there is no clear evidence on the merits of different policy recipes. Assessing the effectiveness of different policy mix schemes is still an open question for empirical research.

The paper sets out to reflect on these issues, focusing in particular on two cases of 'highly collaborative'/behaviour-oriented policies, both of which can be ascribed to the macro-sphere of public health interventions: 1) tobacco control policies; 2) childhood vaccinations. Through the comparison of policy mix design strategies in these two policy areas in a number of countries characterised by different welfare regimes and varying degrees of democratic consolidation, we intend to answer a threefold research question:

a) is it possible to identify recurring patterns in the policy mixes adopted by individual countries in the two different areas, from a configurational and/or evolutionary perspective?

b) is it possible to identify recurring patterns for 'families' of countries that share certain political-institutional characteristics (e.g. policy legacy in the health field; margins of freedom left to individual initiative)?

c) is it possible to identify a relationship between specific patterns of policy mix and the results obtained in

terms of target groups' compliance?

Authors: Federico Toth and Stefania Profeti (University of Bologna). Federico Toth is the corresponding author and will attend the panel.

Designing policy strategies for complex environmental issues

Brian Head (University of Queensland, Australia)

This paper sketches the challenges of designing effective policies for three environmental policy challenges marked by complexity, uncertainty and policy controversy. The first example, plastic waste management, is often discussed in terms of the ‘circular economy’ framework and optimising recycling. The second example, biodiversity conservation, is often discussed in terms of habitat protection and requiring ‘offset’ equivalence where habitat is ‘necessarily’ destroyed. The third example, protecting water quality on the Great Barrier Reef, is often discussed in terms of reducing harmful runoff from agricultural lands. These three policy challenges have shared a common historical pattern, namely, that governmental attempts to influence the behaviour of corporations and citizens have commenced with soft or voluntary measures, such as information, financial incentives, and industry codes of conduct. The paper suggests that these voluntary measures have facilitated avoidance and non-compliance. The alternatives require enforceable standards and targets as part of a multi-layered approach to addressing complexity, uncertainty and the need for public support.