INTRODUCTION

Procedural policy tools in theory and practice

Azad Singh Bali*, Michael Howlettb, Jenny M. Lewisc and M. Rameshd

aAustralian National University, Canberra, Australia; bSimon Fraser University, Burnaby, Canada; cUniversity of Melbourne, Melbourne, Australia; dNational University of Singapore, Singapore.

ABSTRACT

Policy tools are a critical part of policy-making, providing the ‘means’ by which policy ‘ends’ are achieved. Knowledge of their different origin, nature and capabilities is vital for understanding policy formulation and decision-making, and they have been the subject of inquiry in many policy-related disciplines and sector-specific studies. Yet many crucial aspects of policy tools remain unexplored. Existing studies on policy tools used in policy formulation tend to focus on ‘substantive’ tools – those used to directly affect policy outcomes such as regulation or subsidies – and largely neglect ‘procedural’ tools used to indirectly but significantly affect policy processes and outcomes. A key aim of this special issue is to fill this knowledge gap in the field. This article introduces the issue by establishing that procedural tools play a more determining role in public policy-making than is generally acknowledged and deserve a more systematic inquiry into their workings, their impact on the policy process and the organization and delivery of public and private goods and services.

Introduction: policy instruments and public policy-making

Policy tools – also referred to as policy instruments, ‘governing instruments’ and the ‘tools of government’ – are the techniques of governing that help define and achieve policy goals. These different terms broadly describe the same phenomena, although they are sometimes used to refer to slightly different aspects of policy means. In general, however, policy tools have been the subject of inquiry in many policy-related fields, including public administration and ‘governance’ studies, as well as various broader disciplines such as political science, economics, social welfare studies, to name only a few (Dahl & Lindblom, 1953; Hood, 2007). They exist at all stages of the policy process, with specific tools such as stakeholder consultations intricately linked to agenda-setting activities, while legislative rules are linked to decision-making, and subsidies to policy implementation.

These tools or techniques are of central importance to the practice of policy-making, which involves governments in constant discussions with interest groups, civil servants and other actors related to the design and adoption of various kinds of means to achieve their goals – from taxation to the provision of low-interest loans – and how best to design and legitimize those efforts (Vedung, 1998). Evert Vedung, for example, combined both

CONTACT Azad Singh Bali azadsingh.bali@anu.edu.au

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial License (http://creativecommons.org/licenses/by-nc/4.0/), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.
of these elements in defining policy instruments as ‘the set of techniques by which governmental authorities wield their power in attempting to ensure support and effect social change’ (Vedung, 1998, p. 67).

Analyses of policy tools proliferated during the 1970s and early 1980s mainly through domain and/or sector-specific areas of study, such as health care, labour markets, social policy, women’s studies, international development and others where new techniques for implementing policies – such as enhanced use of market tools – emerged or where efforts were made to improve policymaking through tools such as advisory commissions and public participation (Varone, 1998; Hood, 2007). These studies led to efforts to better understand policy instrument functions across sectors and generated a series of studies in the period between 1985 and 2000 which proposed and propagated different instrument taxonomies in order to ‘produce parsimonious and comprehensive or generic classifications that allowed comparisons across time, area, and policy domain’ (Hood, 2007, p. 129). In general, these more generic academic studies of policy instruments examined:

(1) What types of tools available to governments?
(2) How can these be classified?
(3) How have these been chosen in the past?
(4) Is there an observable pattern in the choice and use of such tools?
(5) How can these patterns be explained? and
(6) How can practice, and theory, be improved based on past patterns of use?

(Capano & Howlett, 2020; Hood, 2007; Salamon, 1981; Timmermans, Rothmayr, Serduelt, & Varone, 1998)

This article reviews the existing literature on these subjects and the findings from studies examining why some tools are used and not others and under what conditions. It stresses the need to better understand those instruments identified as ‘procedural tools’ affecting policy and administrative processes (Capano & Howlett, 2020), which are the subject of this special issue.

**What is a policy tool?**

One of the first systematic inventories of policy instruments was Kirschen et al.’s identification in 1964 of well over 40 different types of instruments then prevalent in economic policy-making in Europe (Kirsch et al., 1964). Kirschen and his fellow authors utilized a resource-based taxonomy of governing instruments to group these many different instruments into five general ‘families’ according to the resource used to give them effect: public finance, money and credit, exchange-rates, direct control, and changes in the institutional framework (1964, pp. 16–17). Other studies focused on examining the instruments prevalent in other areas, such as banking and foreign policy, and provided alternate schemes for classifying them and reducing the apparent complexity involved in policy design and policy deliberations around them (Hermann, 1982). Although these studies did not make any distinctions between general implementation preferences, policy mechanisms or the calibrations of specific kinds of tools, which were to feature in later studies of the same topics (Capano & Howlett, 2020; Howlett, 2009),
they were pathbreaking by providing the raw inventory data required for later classification and taxonomical efforts.

Most subsequent work followed the emphasis in these early studies on what can be termed ‘substantive’ tools, that is, those which directly or indirectly affect the nature of the goods and services produced or consumed in society. These kinds of policy instruments are expected to alter some aspects of the production, distribution and delivery of goods and services in society and have received the most attention in the field, largely due to their primarily economic impact and the broad attention paid to them in economic studies (Capano & Howlett, 2020). Examples of substantive tools used to affect aspects of social and individual behaviour involved in the above activities include regulation and subsidies. Substantive instruments may also be more esoteric – for example, ‘transferable quotas’ used to limit and control everything from fish harvests to CO₂ emissions, or ‘government advertising’, used to inform and implore individuals to stop smoking or lose weight and urge companies to support their employees’ healthy life choices. Many permutations and combinations of such tools exist, such as when the government runs a stop smoking campaign while at the same time bans smoking in indoor public spaces and heavily taxes cigarettes.

The likely effects of substantive tools on production activities are set out in the table below. They impact:

(1) Who produces (e.g. via licensing restrictions, preferential procurement, subsidies)?
(2) The types of goods and services produced (e.g. via bans, quotas, or suasion)
(3) The quantity and quality of goods or services produced (e.g. via product standards or warranties)
(4) Methods of production (e.g. via environmental standards or subsidies for modernization)
(5) Conditions of production (e.g. via health and safety standards, employment standards acts, minimum wage laws, zoning restrictions inspections)
(6) The organization of production (e.g. via unionization rules, employment acts, anti-trust or anti-combines legislation, securities legislation, tax laws)

Consumption and distribution effects are also manifold, some of which include:

(1) Prices of goods and services (e.g. regulated taxi fares, fixed water prices)
(2) Distribution of produced goods and services (e.g. location and types of schools or hospitals, public transport, forest tenures or leases)
(3) Level of consumer demand for specific goods (via information dissemination, nutritional and dangerous good labeling, export and import taxes and bans)
(4) Level of consumer demand in general (e.g. via interest rate policy)

Choosing policy tools and formulating policy becomes more complex when multiple goals and multiple policies are involved within the same sector (Doremus, 2003; Howlett, Ramesh, & Perl, 2009). This makes their formulation and design especially problematic (Givoni, 2013; Givoni, Macmillen, Banister, & Feitelson, 2013; Peters, 2005).
That is, policies are often arranged in ‘packages’ of tools bundled together to achieve a common end. These kinds of portfolios – referred to by Milkman et al. (2012) as ‘policy bundles’, Chapman (2003) and Hennicke (2004) as a ‘policy mix’, and Givoni et al. (2013) as ‘policy packages’ are quite common. In the education sector, for example, they range from providing free school lunches to regulation of education standards and include many goods and services provided or affected by markets. They also include public provision and regulation of goods and services such as the construction and operation of public schools as well as to the control and regulation of goods and services typically provided by the family, community, and non-profit and voluntary organizations such as the extension of family allowances or conditional cash transfer to families included in such mixes to encourage them to send their children to school.

However, ‘substantive’ tools are only one general type of policy tool. Another entire category of tool exists which has often been neglected in tools studies. These are the ‘Procedural Tools” which are the subject of this special issue.

What is a procedural policy tool?

Procedural policy instruments are primarily used to alter aspects of a government’s own workings and policy-making behaviour (de Bruijn & ten Heuvelhof, 1997). Just as they shape citizens’ behavior in the productive realm, governments manipulate policy-making behavior of policy actors or policy-making processes and have a range of tools at their disposal to do so (Howlett & Ramesh, 1998). For instance, governments can create inquiry commissions to introduce new ideas into policy processes, or establish or alter departmental advisory committees to introduce new actors (often with different goals and priorities), and they can facilitate or discourage entire new governance modes by conducting public hearings over budgets or development permits that change the basic interrelationships among governments, private producers and citizens. These institutional and behavioral modifications can affect the articulation of policy goals and means in ways that are to some extent predictable and controllable, although often only indirectly. In the area of participation and stakeholder consultations, for example, such tools are often ‘aimed at improving game (policy) interaction and results’ but, as Klijn, Koppenjan, and Termeer (1995) note, the altered network ‘structures the game without determining its outcome’ (p. 441).

We can thus define procedural instruments as those policy techniques or mechanisms designed to affect how a policy is formulated and implemented. This includes administrative processes and activities for selecting, deploying, and calibrating substantive tools. Therefore, procedural tools do not affect outcomes as directly compared to substantive tools (such as taxes, regulations, sanctions and levies) but are often required for substantive tools to function effectively or, as in the case of industry consultations or public hearings, to allow them to gain legitimacy and enhance compliance.

Some policy-related activities that can be affected by the use of procedural instruments are listed below (Goldsmith & Eggers, 2004; Klijn & Koppenjan, 2006; Klijn et al., 1995). That is, procedural tools can be used to:

1. Define or alter policy actors’ positions
2. Add actors to policy networks
(3) Change access rules for policy actors
(4) Influence policy network formation
(5) Promote self-regulation
(6) Modify governance structures used in policy delivery
(7) Change policy evaluation criteria
(8) Influence pay-off structure for policy actors
(9) Influence professional and other codes of policy-relevant conduct and behavior
(10) Regulate policy and social conflict
(11) Change how actors interact with each other
(12) Incentivize certain types of policy actions (and discourage others)
(13) Change supervisory relations between policy actors

Procedural tools include governance arrangements in public service delivery. For example, governments may establish or alter networks (Klijn et al. 2015), partnerships (Alford & O’Flynn, 2012), commissioning and contracting services (Dickinson et al., 2013; O’Flynn, 2019), change the degree of market competition in a sector to alter policy choices and their outcomes. Internal structural reorganization can also affect policy processes, as occurs, for example, when ministries are combined fostering new operating arrangements affecting policy formulation. Other common examples of procedural policy instruments include a government creating an advisory committee of select citizens or experts to aid in its policy deliberations and decision-making in contentious issue areas, such as local housing development, or public inquiry commissions (Stark, 2019; Yates, 2019) or citizen juries (Smith & Wales, 2000) or the creation of a freedom of information or access to information legislation to make it easier for citizens to gain access to government records, information and documents.

Although often neglected in contemporary work on policy tools, procedural policy tools were a subject of some interest in the past that offer insights into their types, uses and effectiveness. Some of these works expanded the range and type of instruments to include a larger number of procedural instruments, such as the selective provision of information, coordination of information, formal evaluations, hearings, and institutional reform; all of these dealing mainly with the ‘process’ aspects of policy-making rather than its substance (Bellehumeur, 1997; Chapman, 1973; Wraith & Lamb, 1971; Peters, 1992).

Research into the tools and mechanisms in international and intergovernmental arenas also identified several instruments such as ‘treaties’ and a variety of ‘political agreements’ that affect target-group recognition of government intentions (Bulmer, 1993; Doern & Wilks, 1998; Harrison, 1999). Research into interest-group behaviour and activities, for example, highlighted the existence of tools related to group creation and manipulation, including the role played by private or public sector patrons in aiding the formation and activities of such groups (Burt, 1990; Nownes & Neeley, 1996; Phillips, 1991). And still, other studies highlighted the more or less common use of procedural techniques such as the provision of research funding for, and access to, investigative hearings and tribunals (Gormley, 2007; Jenson, 1994; Salter, Slaco, & Konstantynowicz, 1981).

It is also the case - as with substantive tools - that multiple and competing goals generate different mixes of procedural tools, and procedural and substantive policy tools are linked to each other. Often, for example, the effectiveness of substantive tools
depends on the appropriate use of complementary procedural tools. For example, the functioning of value added tax, a widely used substantive tool, is crucially supported by complex procedural arrangements, such as processes for determining and calibrating the tax rate, determining the goods and services to be exempt, or how revenues are shared across different jurisdictions etc. Similarly, a spectrum of procedural tools determine how specific drugs are included, procured, and/or subsidized in national formularies, such as the Australian Prescription Benefit Scheme (PBS) or New Zealand’s Pharmac. These administrative protocols play a critical role in shaping policy outcomes but are often ignored in contemporary design studies.

**Classifying procedural tools**

Christopher Hood (1986) advanced the study of policy tools by providing a parsimonious four-fold classification of instrument types. In this classification, instruments are grouped according to (1) the resources they rely upon and (2) whether the instrument is designed to effect a change in a policy environment or to detect changes in it

(Anderson, 1975; Hood, 1986) (See Figure 1)

Hood argued that governments have essentially four resources at their disposal – *nodality* (referring to a government’s existence at the ‘centre’ of social and political networks, but which can be thought of as ‘information’ or ‘knowledge’), *authority*, *treasure*, and *organization* – which underwrite their policy efforts, creating a wide range of policy tools reliant upon each type of resource. Of course, most tools involve a combination of authority, treasure and organization resources but Hood’s insight was that in each case, the deployment of one of these resources was critical to the tool’s success. This formulation proved useful in providing a parsimonious model where the many hundreds if not thousands of different kinds and permutations of tools could be classified into only eight clearly differentiated categories.

Hood’s model remains the orthodoxy and has been extensively used in the analysis of substantive tools. As Howlett (2000) pointed out, however, it can also be used to similarly classify procedural tools, by combining effectors and detectors together and distinguishing instead between substantive and procedural impacts and effects (see Figure 2).

This schema not only helps simplify the analysis of substantive tools but also procedural ones. It also offers insights into how tools may be bundled together into relatively more or less complex ‘mixes’ of tools (Howlett & Del Río, 2015; Howlett, Vince, & del Río, 2017).
| Purpose of Tool | Substantive | Procedural |
|-----------------|-------------|------------|
| Information     | Public information campaign | Official secrets acts |
| Authority        | Independent regulatory agencies | Administrative advisory committees |
| Treasure         | Subsidies and grants | Interest group funding |
| Organization     | Public enterprises | Government re-organizations |

Figure 2. A Resource-Based Taxonomy of Procedural and Substantive Policy Instruments (Cells provide examples of instruments in each category). Source: Adapted from Howlett (2000).

**Why are specific procedural policy tools chosen?**

Besides understanding what tools are available for use – be they substantive or procedural – policy scholars are also interested in understanding which tools are actually used and why (Capano & Howlett, 2020). While detailed empirical work is needed to answer these questions adequately, and is contained in the remainder of the essays in this special issue, here we offer some general comments that are useful for framing this discussion.

First, it should be realized that instrument choices are often viewed through an ideological or conceptual lens that reduces choices to a ‘one size fits all’ motif or, more commonly, to a struggle between ‘good’ and ‘evil’ tools (for example, market competition versus state monopoly) (Le Grand, 1991). In such views certain instruments are condemned *a priori* and excluded from further consideration, even though they might be highly effective in the specific context being examined, while the merits of some alternative ideologically congruent instruments are trumpeted (Howlett, 2004). The consequences of such an approach are usually to wield policy tools – be it public enterprises in the 1950s and 1960s or the virtues of privatization, deregulation and markets in the 1980s and 1990s – less like a scalpel and more like a cleaver.

Theorists and practitioners alike want to move beyond such simple, dichotomous, zero-sum notions of policy instrument alternatives (like market vs. state) and metaphors (like carrots vs. sticks) in thinking about policy tool choices and alternatives (Wu and Ramesh, 2014). This is because blunt choices lead to blunt thinking about instruments and their modalities. Subtler studies have attempted to examine past patterns of instrument choices in determining why they were selected in practice and highlighted factors such as the manner in which certain tools (such as de-regulation in the case of industries) benefit certain policy actors and not others. Instrument choice is not a simple technical exercise and must take into account the social, political and economic context in which policy-making occurs and how it affects government deliberations and tool choices. That is, there is a ‘political economy’ or political sociology of tool use, which cannot be ignored and must be addressed in deciding upon or selecting tools, meaning this is never a neutral or purely technical choice (Capano & Lippi, 2017; Lascoumes & Le Gales, 2007).

Secondly, even in a perfect world where tool choices were purely technical, there would still be trouble choosing the appropriate tool for the governmental task at hand. That is, the choice of policy tool would be simple if all the costs and benefits of the available tools were context-free and known, and the goals of a policy clear and unambiguous. However, in real-world situations, as information difficulties arise in determining instrument effects and as the clarity and precision of goals diminishes, it becomes
increasingly likely that policy means and ends will be contested, and that mismatches and policy failures will occur (Howlett, 2019).

And thirdly, while most of the early studies of policy tools tended to focus on choices between single instruments and single criteria such as the willingness to use coercion, more recent studies have begun to examine the more complex situations described above involving multiple tools of both a substantive and procedural nature. Some instruments may work well with others, as is the case with ‘self-regulation’ set within a regulatory compliance framework (Gibson, 1999; Grabosky, 1994; Trebilcock, Tuohy, & Wolfson, 1979; Trebilcock et al., 1979), while other combinations – notably, independently developed subsidies and regulation (de Bruijn & ten Heuvelhof, 1997) – may not and this information is essential for effective policy formulation and design. Contemporary scholars and practitioners, including the authors of the essays in this special issue, are interested in a number of design questions around such portfolios, including the issues of avoiding both ‘over’ and ‘under’ design (Maor, 2012, 2014); how to achieve ‘complementarity’ and avoid ‘redundancy’ or counter-productive mixes (Grabosky, 1994; Hou & Brewer, 2010); how to enhance or alter mixes over time so that they can continue to meet old goals and take on new ones (Van der Heijden, 2011; Kay, 2007); how to sequence or phase in instruments over time (Taehagh, Givoni, & René, 2013); and how procedural and substantive tools are layered in policy mixes (Bali, Howlett, & Ramesh, 2021).

These issues of policy contestation, uncertainty, and instrument interactions involve students of policy tools necessary in the study not only of policy implementation, and the best or most effective way of putting policy tools into action, but also of policy formulation or the manner and means through which they are chosen. The process of formulation is a collective and dynamic effort by policy agents both in and outside of governments, as non-government counterparts are also significant contributors to the instrument development process (Schneider & Ingram, 2005; Weaver, 2015) and the process of instrument choice is as much affected by the capacities and interests of policymakers as it is by the dispositions of the targets of these instruments (Voß & Simons, 2014).

**Models of substantive instrument choice and their implications for choices of procedural tools**

Early students of public administration in the United States tried to deal with some of the complexities of tools choice in different ways. Cushman (1941), for example, noted that governments had only a small number of alternative choices they could make in any given situation, depending on the amount of coercion they wished to employ. Governments could either regulate or choose not to regulate societal activities; if they chose to regulate, they could do so either in a coercive or non-coercive manner (see Figure 3).

Cushman’s analysis, among other things, introduced the idea that instrument choices were multi-level and nested, an insight that would be further developed in the years to come.
Other authors also used his insight about coercion to try to identify long-term patterns in government preferences for its use. Theodore Lowi, for example, categorized the types of policies that governments could enact according to two dimensions of coerciveness: that of the level of sanctioning and of the nature of the object targeted (Lowi, 1966, 1972). He noted that there were the weakly sanctioned and individually targeted ‘distributive’ policies; the strongly sanctioned and individually targeted ‘regulatory’ policies; and the strongly sanctioned and generally targeted ‘re-distributive’ policies. To these three Lowi later added the weakly sanctioned and generally targeted category of ‘constituent’ policies (Roberts & Dean, 1994). He then used these distinctions to highlight the tendency of American governments over the 250-year history of the country to favor one of these types of policy over and over again, over very long multi-decade periods of time.

Later, authors elaborated on these choices. Elmore (1987), for example, identified four major classes of instruments – mandates, inducements, capacity-building and system-changing – while Balch and others talked about ‘carrots and sticks and other strategies (Balch, 1980). Most followed Lowi and Cushman’s lead in focusing on some aspect of coercion as the key element that differentiates policy instrument types and upon which governments had to decide ex ante prior to making a determination about what kinds of instruments to deploy in specific cases. Thus, some governments, facing powerful and recalcitrant publics or special interests, might eschew heavily coercive tools, such as ‘command and control’ regulation, in favor of incentives and consultation exercises in order to bypass protests and court challenges of their choices.

Scholars like Bruce Doern, Richard Phidd, Seymour Wilson and others published a series of articles and monographs in the late 1970s and early 1980s attempting to build upon this model and take the analysis even further, arguing that tool choices and policy
formulation were dynamics processes, which occurred on, and moved along, a continuum of policy instruments. Their initial scale organized only self-regulation, exhortation, subsidies and regulation according to the extent of government coercion required for their implementation (Doern, 1981). To these were later added ‘taxation’ and public enterprise (Tupper & Doern, 1981a; 1981b) and then a series of finer ‘gradations’ within each general category (Doern & Phidd, 1983) (See Figure 4).

![Figure 4. The Doern continuum. Source: Adopted from Doern and Phidd (1983)](image)

What Doern and colleagues identified through this type of analysis was the significant role of the willingness of governments to use their authority and their financial, informational and organizational resources against specific target groups in order to achieve their goals in policy formulation (Baxter-Moore, 1987; Trebilcock & Hartle, 1982; Woodside, 1986). And, most importantly, the manner in which these choices were amended over time as governments often ‘moved up’ the scale of coercion in order to overcome opposition to their plans and guidelines, as is occurring as this issue goes to press in the area of vaccine mandates replacing voluntary measures in many countries in order to attain needed higher rates of vaccinations to defeat the spread of COVID-19.

These studies generally failed to come to grips with the phenomenon of policy mixes but offered some insights into how individual tools were considered by governments and what kinds of considerations went into their choices. Salamon and Lund, for example, suggested that different instruments involve varying degrees of effectiveness, efficiency, equity, legitimacy and partisan support, and changes in a particular situation affects the appropriateness of their use (Salamon & Lund, 1989). That is, some instruments are more effective in some contexts than others. For example, cost efficiency may be an important consideration in climates of budgetary restraint but is less significant during other times.

Legitimacy is another critical aspect of instrument use that varies with context (Beetham, 1991; Suchman, 1995). The ability of an instrument to attract support in general and, in particular, of those directly involved in policy-making, is a key dimension of policy formulation.

Similarly, abstract notions of effectiveness may also find themselves less important in some contexts, such as a pandemic, when the use of government departments or public enterprises may be preferred, simply because they remain under direct government control or because administrators may be more familiar with their use and risks. Hence, a relatively heavy-handed approach to regulation of the financial dealings of
industry, for example, may be anathema in normal times, but in the wake of bank failures or scandals may find sudden popularity among both policy elites and the public.

In all of these cases, deployment of procedural tools in a policy mix is critical. That is, cultural norms and institutional or political arrangements may accord greater legitimacy to some instruments than others, and tool choices can be framed or developed in ways, which augment their legitimacy, or not.

Instruments also have varying distributional effects, and so policy-makers may need to select instruments that are, or at least appear to be, equitable and, again, bolster those tools through procedural efforts. For example, tax incentives are inherently inequitable because they offer limited benefits to those (the poor) without taxable income, but their use will vary to the extent that societies are bifurcated along socio-economic or class lines, and a lack of publicity may help ensure that individuals are unaware of the consequences of such incentives.

Cultural values, as noted above, are also important. Thus, in liberal democracies, citizens and policy-makers desiring high levels of individual autonomy and responsibility generally prefer instruments that are less coercive, even if the alternatives are equally or perhaps more effective or efficient alternatives. Such societies can be expected to prefer voluntary and mixed instruments to compulsory instruments on philosophical or ideological grounds (Doern & Wilson, 1974, 1974; Howlett, 1991) and governments can use interest groups and information provision to frame choices in this way.

**Filling a major gap in policy tool choice studies: this special issue on procedural tools**

The shallow and disparate literature on procedural tools leaves many vital questions unanswered. Not only is little known about their effects, even less is known about the reasons behind their selection despite the fact that techniques such as the use of public participation and administrative reorganizations are quite old and well used and have been extensively studied in fields such as public administration and organizational behaviour (Woolley, 2008). This is especially important given that procedural and substantive tools commonly co-occur and co-exist in policy mixes. Indeed, the success of one is often dependent on the success of another, and both must be understood if effective packages of tools are to be developed and deployed.

The essays in this special issue address this gap, describing in detail specific procedural tools deployed by different levels of government in different jurisdictions around the world, how they work, and why they were chosen. Taken together, the articles in the issue constitute a major advance in thinking about policy tools in general and in filling the gaps in our knowledge set out above.

Ishani Mukherjee in her paper ‘Rethinking the procedural in policy instrument ‘Compounds: a renewable energy policy perspective’ conceptualizes policy instrument design as a complex of procedural and substantive means, which she describes as ‘compounds’. To illustrate the notion of such design compounds, the paper reviews the state of knowledge on the formulation of three classes of energy policies as an illustration of how substantive and procedural components interact during policy instrument design.

Azad Bali and Darren Halpin’s paper, ‘Agenda-setting instruments: means and strategies for the management of policy demands’, offers a framework to analyse the
procedural tools that governments use to shape policy agendas. In particular, they look at tools to manage policy demands and engagement from organized interests. They differentiate tools that seek to routinise demands (e.g. consultations and stakeholder events), regularize demands (sunset clauses, scheduled reviews), generate demands (e.g. funding policy publics), and impose policy agendas (e.g. policy statements). They provide indicative examples of these kinds of procedural tools, and of the governing resources and causal mechanisms they rely on in managing policy demands.

Alastair Stark and Sophie Yates in their article ‘Public inquiries as procedural policy tools’ examine the effectiveness of one such procedural tool - public inquiry. They introduce the concept of a catalytic procedural tool to show how inquiries can take control away from policymakers, punctuate equilibria and transform policy agendas. They argue there is value in thinking about control as a means of understanding policy instruments because it can deliver insights into their effects once they leave the design table and enter a variety of technical, political and social environments.

Adam Hannah’s paper ‘Procedural tools, blame avoidance and pension reform in the long run’ explores how governments overcome barriers they face in seeking change, and the challenges of managing complex and hybridized welfare arrangements. The paper argues that procedural policy tools are critical for mitigating risk of blame, sustaining coalitions and supporting the ongoing adaptation of social policy systems to changing conditions and information. This is especially critical where policy innovations entail new relationships between states, citizens and markets, as initial assumptions about individual and group behaviour are likely to be flawed. Procedural tools can enable learning and recalibration in the pursuit of public legitimacy for changing existing policy arrangements. To demonstrate the argument, this article engages closely with a case study on public pension reform in Sweden in the 1990s.

Mehmet Akaf Demircioglu and Roberto Vivona in their paper ‘Positioning Public Procurement as a Procedural Tool for Innovation: an empirical study’ show how procurement, although usually understood as a substantive tool, can also be used as a procedural tool for promoting innovation. They note that most public buyers’ purchasing activities are ‘procedural’, and are aimed at improving the many internal stages of the procurement process. Studying the 2010 Innobarometer dataset the authors show that procurement activities are positively related to innovation within public organizations. In particular, procurement of R&D for new technologies and services has an important and meaningful effect on innovation. The authors suggest that more use could be made of such procedural policy tools to increase innovation within the public sector.

Jenny M Lewis, Phuc Nguyen, and Mark Considine’s paper ‘Are policy tools and governance modes coupled? Analysing welfare-to-work reform at the frontline’ examines the link between substantive and procedural policy tools. Their paper analyses whether policy tools and governance modes are coupled by examining how central policy shapes the work of local service delivery agencies and the work of individuals delivering welfare services. To examine the link between substantive policy tools and (procedural) governance modes, they examine four ideal-type governance modes (bureaucratic, corporate, market and network) at the frontline in Australia and the UK at four points in time and at two levels: office and personal. They found that overall, the dominant mode of organization was corporate, followed by bureaucratic, in both nations. They also show how this bureaucratic mode has grown in strength over time, in line with the re-regulation of the sector, particularly at the
personal level. The coupling between substantive policy tools and governance modes at the frontline of welfare-to-work is clear in this research.

The paper by Sarah de Vries on ‘The power of procedural policy tools at the local level: Australian local governments contributing to policy change for major projects’ is focused on how local governments - an understudied level of government when it comes to instrument choices - have often used procedural tools to augment the formal powers and less substantive policy instruments at their disposal. This paper examines the role of the procedural policy tools deployed by local governments in Australia around the policy formation for, and approval of, major projects. The paper investigates what local governments in Australia did in two high-profile cases to facilitate advocacy against the proposed projects and finds a rich mixture of procedural policy tools, ranging from providing information and expertise and supporting community campaigns, to launching their own campaign, staging regular physical protests and forming advocacy committees. These actions draw into question the legitimacy of the state government’s position in support of the projects, highlighting the power of procedural tools at the local level of government.

Finally, Paul Fawcett in his paper ‘Metagovernance of migration policy in the Asia Pacific: an analysis of Policy Tools’ considers how the Australian government has used procedural tools to steer transnational forums on migration. The paper adopts a ‘tools-based approach’ to analyse the combination of procedural and substantive policy tools used to ‘meta govern’ a complex inter-governmental and multi-level policy area. The overall argument developed is that a ‘tools-based approach’, particularly one featuring a combination of procedural and substantive tools, offers a promising way of understanding differences in the steering capacities of nation states within transnational forums.

Disclosure statement

No potential conflict of interest was reported by the author(s).

References

Alford, J., & O’Flynn, J. (2012). Rethinking public service delivery: Managing with external providers. Basingstoke: Macmillan International Higher Education.

Anderson, J. E. (1975). Public policymaking. New York: Praeger.

Balch, G. I. (1980). The stick, the carrot, and other strategies: A theoretical analysis of governmental intervention. Law & Policy, 2(1), 35–60.

Bali, A. S., Howlett, M., & Ramesh, M. (2021). Unpacking policy portfolios: Primary and secondary aspects of tool use in policy mixes. Journal of Asian Public Policy 1–17.

Baxter-Moore, N. (1987). Policy implementation and the role of the state: A revised approach to the study of policy instruments. In Contemporary Canadian politics: readings and notes, eds. RJ Jackson, D. Jackson, and N. Baxter-Moore. Nelson Canada.

Beetham, D. (1991). The legitimation of power. London: Macmillan.

Bellehumeur, R. (1997). Review: An instrument of change. Optimum, 27(1), 37–42.

Bulmer, S. J. (1993). The governance of the European Union: A new institutionalist approach. Journal of Public Policy, 13(4), 351–380.

Burt, S. (1990). Canadian women’s groups in the 1980s: Organizational development and policy influence. Canadian Public Policy/Analyse De Politiques, 16(17–28), 17.
Capano, G., & Howlett, M. (2020). The knowns and unknowns of policy instrument analysis: policy tools and the current research agenda on policy mixes. Sage Open. https://doi.org/10.1177/2158244019900568

Capano, G., & Lippi, A. (2017). How policy instruments are chosen: Patterns of decision makers’ choices. Policy Sciences, 50(2), 269–293.

Chapman, R. (2003). A policy mix for environmentally sustainable development-learning from the Dutch experience. New Zealand Journal of Environmental Law, 7, 29–51

Chapman, R. A. (Ed.). (1973). The role of commissions in policy-making. Allen & Unwin Australia.

Cushman, R. E. (1941). Independent regulatory commissions. London: Oxford University Press.

Dahl, R. A., & Lindblom, C. E. (1953). Politics, economics and welfare: Planning and politico-economic systems resolved into basic social processes. New York: Harper and Row.

de Bruijn, J. A., & ten Heuvelhof, E. F. (1997). Instruments for network management. In W. J. M. Kickert, E.-H. Klijn, & J. F. M. Koppenjan (Eds.), Managing complex networks: Strategies for the public sector (pp. 119–136). London: Sage.

Dickinson, H., Glasby, J., Nicholds, A., Jeffares, S., Robinson, S., & Sullivan, H. (2013). Joint commissioning in health and social care: An exploration of definitions, processes, services and outcomes. Southampton: National Institute for Health Research, Service Delivery and Organisation Programme.

Doern, G. B. (1981). The peripheral nature of scientific controversy in federal policy formulation. Ottawa: Science Council of Canada.

Doern, G. B., & Phidd, R. W. (1983). Canadian public policy: Ideas, structure, process. Nelson Canada

Doern, G. B., & Wilks, S. (1998). Changing regulatory institutions in Britain and North America (Vol. 1). Toronto: University of Toronto Press.

Doern, G. B., & V. S. Wilson. (1974). ‘Conclusions and Observations.’ In In Issues in Canadian Public Policy, eds., G. B. Doern and V. S. Wilson, 337-345. Toronto, ON: Macmillan.

Doremus, H. (2003). A policy portfolio approach to biodiversity protection on private lands. Environmental Science & Policy, 6(3), 217–222.

Elmore, R. F. (1987). “Instruments and Strategy in Public Policy.” Policy Studies Review 7(1): 174–86.

Gibson, R. B. (1999). Voluntary initiatives and the new politics of corporate greening. Toronto: University of Toronto Press.

Givoni, M. (2013). Addressing transport policy challenges through policy-packaging. Transportation Research Part A: Policy and Practice. doi:10.1016/j.tra.2013.10.012

Givoni, M., Macmillen, J., Banister, D., & Feitelson, E. (2013). From policy measures to policy packages. Transport Reviews, 33(1), 1–20.

Goldsmith, S., & Eggers, W. D. (2004). Governing by network: The new shape of the public sector. Washington DC: Brookings Institute.

Gormley, W. T., Jr. (2007). Public policy analysis: Ideas and impacts. Annual Review of Political Science, 10(1), 297–313.

Grabosky, P. N. (1994). Green markets: Environmental regulation by the private sector. Law & Policy, 16(4), 419–448.

Harrison, K. (1999). Retreat from regulation: The evolution of the Canadian environmental regime. In G. B. Doern, R. J. Schulz, & M. M. Hill (Eds.), Changing the rules: Canadian regulatory regimes and institutions (pp. 122–142). Toronto: University of Toronto Press.

Hennicke, P. (2004). Scenarios for a robust policy mix: The final report of the German study commission on sustainable energy supply. Energy Policy, 32(15), 1673–1678

Hermann, C. F. (1982). Instruments of foreign policy. In Callahan, P et al (eds) Describing foreign policy behavior (pp. 153–174) Beverly Hills: Sage.

Hood, C. (1986). The tools of government. Chatham: Chatham House Publishers.

Hood, C. (2007). Intellectual obsolescence and intellectual makeovers: Reflections on the tools of government after two decades. Governance, 20(1), 127–144.
Hou, Y., & Brewer, G. (2010). Substitution and supplementation between co-functional policy instruments: Evidence from state budget stabilization practices. Public Administration Review, 70(6), 914–924.

Howlett, M. (1991). Policy instruments, policy styles, and policy implementation: National approaches to theories of instrument choice. Policy Studies Journal, 19(2), 1–21.

Howlett, M. (2000). Managing the 'Hollow State': Procedural policy instruments and modern governance. Canadian Public Administration, 43(4), 412–431.

Howlett, M. (2009). Governance modes, policy regimes and operational plans: A multi-level nested model of policy instrument choice and policy design. Policy Sciences, 42(1), 73–89.

Howlett, M. (2019). Designing public policies: Principles and instruments (2nd ed.). London: Routledge.

Howlett, M. Pablo del Rio (2015). The parameters of policy portfolios: verticality and horizontality in design spaces and their consequences for policy mix formulation. Environment and Planning C: Government and Policy, 33(5), 1233–1245.

Howlett, M., & Ramesh, M. (1998). Policy subsystem configurations and policy change: operationalizing the postpositivist analysis of the politics of the policy process. Policy Studies Journal, 26(3), 466–482.

Howlett, M., Ramesh, M., & Perl, A. (2009). Studying public policy. Canada: Oxford University Press.

Howlett, M., Vince, J., & del Rio, P. (2017). Policy integration and multi-level governance: Dealing with the vertical dimension of policy mix designs. Politics and Governance, 5(2), 69–78.

Jenson, J. (1994). Commissioning ideas: Representation and royal commissions’. In How Ottawa spends, 1994-95: Making Change, Susan D. Philips (eds.) Ottawa: Carlton University Press. (pp. 39–69).

Kay, A. (2007). Tense layering and synthetic policy paradigms: The politics of health insurance in Australia. Australian Journal of Political Science, 42(4), 579–591

Kirschen, E. S., Benard, J., Besters, H., Blackaby, F., Eckstein, O., Faaland, J., . . . Tosco, E. (1964). Economic policy in our time. Chicago: Rand McNally.

Klijn, E. H., & Koppenjan, J. (2015). Governance networks in the public sector. Routledge

Klijn, E. H., Koppenjan, J., & Termeer, K. (1995). Managing networks in the public sector: A theoretical study of management strategies in policy networks. Public Administration, 73(3), 437–454.

Klijn, E. H., & Koppenjan, J. F. (2006). Institutional design: Changing institutional features of networks. Public Management Review, 8(1), 141–160.

Lascoumes, P., & Le Gales, P. (2007). Introduction: Understanding public policy through its instruments—from the nature of instruments to the sociology of public policy instrumentation. Governance, 20(1), 1–21.

Le Grand, J. (1991). The theory of government failure. British Journal of Political Science, 21(4), 423–442.

Lowi, T. J. (1966). Distribution, regulation, redistribution: The functions of government. In R. B. Ripley (Ed.), Public policies and their politics: Techniques of government control (pp. 27–40). New York: W.W. Norton.

Lowi, T. J. (1972). Four systems of policy, politics and choice. Public Administration Review, 32(4), 298–310.

Maor, M. (2012). Policy Overreaction. Journal of Public Policy, 32(3), 231–259.

Maor, M. (2014). Policy persistence, risk estimation and policy underreaction. Policy Sciences, 47(4), 425–443.

Milkman, K. L., Mazza, M. C., Shu, L. L., Tsay, C. J., & Bazerman, M. H. (2012). Policy bundling to overcome loss aversion: A method for improving legislative outcomes. Organizational Behavior and Human Decision Processes, 117(1), 158–167

Nownes, A. J., & Neeley, G. (1996). Public interest group entrepreneurship and theories of group mobilization. Political Research Quarterly, 49(1), 119–146.
O’Flynn, J. (2019). Rethinking relationships: Clarity, contingency, and capabilities. In Policy Design and Practice, 2(2):115-136.
Peters, B. G. (1992). Government reorganization: A theoretical analysis. International Political Science Review, 13(2), 199–217.
Peters, B. G. (2002). The politics of tool choice. In L. M. Salamon (Ed.), The tools of government: A guide to the new governance (pp. 552–564). New York: Oxford University Press.
Peters, B. G. (2005). The problem of policy problems. In P. Eliadis, M. Hill, & M. Howlett (Eds.), Designing government: From instruments to governance (pp. 77–105). Montreal: McGill–Queen’s University Press.
Phillips, S. D. (1991). How Ottawa blends: Shifting government relationships with interest groups. In Frances Abele (Ed.) How Ottawa spends: The politics of fragmentation (pp.183-228). Montreal: McGill–Queen’s University Press.
Roberts, R., & Dean, L. E. R. (1994). An inquiry into Lowi’s policy typology: The conservation coalition and the 1985 and 1990 farm bills. Environment and Planning C, 12(1), 71-71. doi:10.1068/c120071
Salamon, L. (1981). Rethinking public management: Third party government and the changing forms of government action. Public Policy, 29(3), 255–275.
Salamon, L. M., & Lund, M. S. (1989). Beyond privatization: The tools of government action. Washington DC: Urban Institute Press.
Salter, L., Slaco, D., & Konstantynowicz, K. (1981). Public inquiries in Canada (Vol. 47). Ottawa: Science Council of Canada.
Schneider, A. L., & Ingram, H. M. (2005). Deserving and entitled: Social constructions and public policy. Albany: SUNY Press.
Smith, G., & Wales, C. (2000). Citizens’ juries and deliberative democracy. Political Studies, 48(1), 51–65.
Stark, A. (2019). Policy learning and the public inquiry. Policy sciences , 52: 397-417.
Suchman, Mark C. 1995. ‘Managing Legitimacy: Strategic and Institutional Approaches.’ Academy of Management Review 20 (3): 571–610
Taehagh, A., Givoni, M., & René, B.-A. (2013). Which policy first? A network-centric approach for the analysis and ranking of policy measures. Environment and Planning. B, Planning & Design, 40(4), 595–616.
Timmermans, A., Rothmayr, C., Serduelt, U., & Varone, F. (1998). The design of policy instruments: perspectives and concepts. Paper presented to the Midwest Political Science Association, Chicago.
Trebilcock, M., & Hartle, D. G. (1982). The choice of governing instrument. International Review of Law and Economics, 2(1), 29–46.
Trebilcock, M. J., Tuohy, C. J., & Wolfson, A. D. (1979). Professional regulation: A staff study of accountancy, architecture, engineering, and law in Ontario prepared for the professional organizations committee. Ontario: Ministry of the Attorney General.
Tupper, A., & Doern, G. B. (1981a). Public corporations and public policy in Canada. Montreal: Institute for Research on Public Policy.
Tupper, A., & Doern, G. B. (1981b). Public corporations and public policy in Canada. In A. Tupper & G. B. Doern (Eds.), Public corporations and public policy in Canada (pp. 1–50). Montreal: Institute for Research on Public Policy.
Van der Heijden, J. (2011). Institutional layering: A review of the use of the concept. Politics, 31(1), 9–18.
Varone, F. (1998). Policy Design: Le choix des instruments des politiques publiques. In Evaluation 2 (pp. 5–14).
Vedung, E. (1998). Policy instruments: Typologies and theories. In M. L. Bemelmans-Videc & R. C. Rist (Eds.), Carrots, sticks, and sermons: Policy instruments and their evaluation (pp. 103–128). New Brunswick, NJ: Transaction Publishers.
Voß, J. P., & Simons, A. (2014). Instrument constituencies and the supply side of policy innovation: The social life of emissions trading. Environmental Politics, 23(5), 735–754.
Weaver, R. K. (2015, July 1). Getting people to behave: Research lessons for policy makers. *Public Administration Review, 75*(6), 806–816.

Woodside, K. (1986). Policy instruments and the study of public policy. *Canadian Journal of Political Science, 19*(4), 775–793.

Woolley, A. (2008). Legitimating public policy. *University of Toronto Law Journal, 58*(2), 153–184.

Wraith, R. E., & Lamb, G. B. (1971). *Public inquiries as an instrument of government*. Allen & Unwin.

Wu, X., & Ramesh, M. (2014). Market imperfections, government imperfections, and policy mixes: policy innovations in Singapore. *Policy sciences, 47*(3), 305–320.

Yates, S. (2019). “An exercise in careful diplomacy”: Talking about alcohol, drugs and family violence. *Policy Design and Practice, 2*(3), 258–274.