Governance modes, policy regimes and operational plans: A multi-level nested model of policy instrument choice and policy design

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Abstract Policy goals and means exist at different levels of abstraction and application and policies can be seen to be comprised of a number of components or elements, not all of which are as amenable to (re)design as others. Defining and thinking about polices and policy-making in this way is very useful because it highlights how policy design is all about the effort to match goals and instruments both within and across categories. That is, successful policy design requires (1) that policy aims, objectives, and targets be coherent; (2) that implementation preferences, policy tools and tool calibrations should also be consistent; and (3) that policy aims and implementation preferences; policy objectives, and policy tools; and policy targets and tool calibrations, should also be congruent and convergent. Policy instrument choices can thus be seen to result from a nested or embedded relationship within a larger framework of established governance modes and policy regime logics. In this contextual model, the range of choices left at the level of concrete targeted policy instrument calibrations—the typical subject of policy tool analysis—is restricted by the kinds of decisions made about policy objectives and the appropriate tools to attain them, and both of these, in turn, by the kind of choices made at the highest level setting out general policy aims and implementation preferences.

Keywords Public policy · Policy tools · Governing instruments · Policy design

Introduction: defining the dependent variable in policy tool choices

Policy goals and means exist at different levels of abstraction and application and, as a result, policies are comprised of a number of components or elements, not all of which are as amenable to design as others. A failure to recognize the multi-level or embedded nature

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of public policies has been a hallmark of most literature on the subject of policy instrument choices and a source of much theoretical and terminological confusion (Trebilcock and Hartle 1982; Bemelmans-Videc 1998; Peters et al. 1998; Salamon 2002).

Defining and thinking about polices and policy-making as multi-level, nested phenomena is very useful because it highlights how policy design and instrument choices are all about constrained efforts to match goals and expectations both within and across categories of policy elements (Keohane, Revesz and Stavins 1998). It suggests that successful policy design requires (1) that all levels of policy aims, objectives and targets be coherent; (2) that implementation preferences, policy tools and tool calibrations should be consistent; and (3) that, within and across levels, policy aims and implementation preferences; policy objectives and policy tools; and policy targets and tool calibrations, also be congruent and convergent (Schneider and Ingram 1990a, 1990b, 1993, 1994, 1997).

This multi-level analysis helps explain some of the real complexity and difficulties involved in successful policy design (Bobrow 2006; Bobrow and Dryzek 1987), while the fact that the choices and decisions made at each level can usefully be viewed as co-determining each other in a form of embedded or "nested" relationship helps explain the severely constrained nature of actual policy instrument choices (Veggeland 2008; Lodge 2008; Feiock, Tavares and Lubell 2008; Kooiman 2008). That is, the range of choices left at the micro-level of concrete targeted policy tool calibrations is restricted by the kinds of meso-level decisions made about policy objectives and policy tools, and both of these, in turn, are restricted by the kind of choices made at the highest or meta-level of general policy aims and implementation preferences.

A typical substantive policy instrument choice, for example, involves the prior adoption of some very abstract general "aims" or goals, such as, for example, in the cases of criminal justice or education policy, attaining a just society or a prosperous one; along with a set of less abstract "objectives" actually expected to achieve those aims such as, in the examples provided above, reducing crime or providing better educational opportunities to members of the public. Further, those objectives themselves must be concretized in a set of specific targets or measures which allow policy resources to be directed toward goal attainment, such as reducing specific types of crimes to specific levels within specified periods of time or increasing post-secondary educational attendance within some set temporal period (Stavins 2008; Kooiman 2008).

Similarly, the means or techniques for achieving these goals also exist on several levels, from highly abstract preferences for specific forms of policy implementation, such as a preference for the use of market, government or non-profit forms of organization to implement policy goals in areas such as healthcare, or crime prevention; to the more concrete level of the use of specific governing tools or mechanisms such as regulation, information campaigns, public enterprises or government subsidies to alter actor behavior in order to promote or increase wellness or prevent crime; to the most specific level of deciding or determining exactly how those tools should be "calibrated" in order to achieve policy targets, such as, for example, providing a specific number of additional police on the streets within a specified period of time, or a specific level of subsidy to non-profit groups to provide additional hospital beds or other types of health services within the same set period of time (Howlett 2005; Stavins 2008).

The six principle "components" of public policies involved in policy design, following this logic, are set out in Table 1 below.

Table 1 Components of public policies involved in policy design

	Policy level		
	High level abstraction	Programme level operationalization	Specific on-the-ground measures
Policy goals	*General abstract policy aims* The most general macro-level statement of government aims and ambitions in a specific policy area.	*Operationalizable policy objectives* The specific meso-level areas that policies are expected to address in order to achieve policy aims	*Specific policy targets* The specific, on-the-ground, micro-requirements necessary to attain policy objectives
Policy component			
Policy means	*General policy implementation preferences* The long-term preferences of government in terms of the types of organizational devices to be used in addressing policy aims	*Operationalizable policy tools* The specific types of governing instruments to be used to address programme level objectives	*Specific policy tool calibrations* The specific 'settings' of policy tools required to attain policy targets

Source: Modified from Cashore and Howlett (2007)

Nested policy instrument choices: The three levels of policy instrument choices for policy design

Designing successful policies requires a model of policy tool choice which fully takes into account the multiple levels of policy elements or components as well as the interlinkages that exist across and between each "level" or "order" of policy and the need for these to be harmonized both within and across levels. It is important to recognize in this model that deliberations of goals and means are not independent of each other, since their discussion is related to the extent that the articulation of goals involves due consideration of what is feasible, or possible, to achieve at any given conjuncture; while the selection of means is also dependent on the nature of the goals to be pursued.

While, in practice, goal discussions can and do proceed without necessarily involving an accurate or realistic assessment of the capabilities of more concrete policy tools or their possible calibrations, this is a contributing factor to policy failure through improper design, just as a bridge can fail from inaccurately assessing the load-bearing strength of the materials used in construction. It is also the case that consideration of means can occur in the absence of discussion of goals, a second common source of policy failure, just as a failure to properly consider the loads a structure must bear can lead to its collapse even if its engineering and materials are otherwise excellent (Bovens and 't Hart 1996).

Improved policy design requires understanding the linked nature of goals and means but also the nature of their relationship in each of the different orders of policy: from governance mode to policy regime logic to instrument calibration. In what follows these elements of a "nested" or "embedded" model of policy instrument choice are set out. As shall be discussed, the task of policy design is somewhat simplified by the existence of

nested relationships among policy components. This greatly restricts the number of alternatives which are feasible in any given design situation, reducing to manageable proportions the otherwise almost infinite range of possible specific micro-level instrument choices. But the process of design and instrument selection is still made complex by the fact that some of the elements of public policies remain more amenable to careful thought and deliberate government manipulation than others. Understanding exactly how instrument choices are constrained by higher-order sets of variables is thus crucial to making correct policy design decisions in specific policy-making contexts.

Level 1: Governance arrangements—determining abstract policy aims and general implementation preferences

High-level abstract "macro" policy goals typically vary in accordance with the nature of the particular set of political actors, ideas, and institutional rules which are prevalent in that jurisdiction at the moment at which policy deliberations and decision-making takes place (Howlett and Ramesh 2003; Moore 1988; Braun 1999).

This would seem to auger for a situation in which design principles for calibrating specific policy tools would be very difficult to develop and instrument choice decisions would be made on a largely ad hoc, case by case, basis. However while the specific content of abstract policy goals will change from context to context, it has often been observed that high level government goals and implementation preferences are not random but rather tend to cluster over time into favored sets of ideas and instruments, or *governance modes,* which are used over a wide-range of policy-making contexts (Hood 1983 and 1986; Howlett 1991). The existence of these fairly long-term and stable governance arrangements helps explain relatively constant general implementation preferences since these derive from and are constrained by the same set of factors which influence and inform the development and articulation of abstract policy aims (Kooiman 2000 and 2008; Dunsire 1993).

Mark Considine and his colleagues have investigated these arrangements and linkages and identified four common governance modes found in modern liberal-democratic states which they relate to specific policy foci, forms of state-society interactions and overall governance aims (see Table 2).

These different modes involve different preferences for general kinds of substantive- and procedural-policy instruments that are expected to attain the general aim of government in each sub-type. Different countries and sectors share these styles and they are the first important overall determinant of policy-design parameters in specific policy and issue areas. The existence of such governance modes means government policy designers typically work within a set of *pre-established* abstract aims and implementation preferences. These affect the articulation of more concrete policy elements such as policy objectives and tools, as well as policy targets and tool calibrations. Such pre-established aims and preferences do not necessarily lead to sub-optimal policy outcomes in specific contexts, but can be thought of as the policy equivalent of overall aesthetic preferences in architecture or fashion, resulting in identifiable overall trends or eras such as, in the architectural analogy, the modern, baroque or classical.

Some empirical evidence of the existence of these kinds of long-term overall governance arrangements exists in the work of Theodore Lowi, for example, who noted that while the historical record in general throughout the world has been one featuring the constant expansion of the range and scope of instruments used in governance, that in the case of the United States, at least, these arrangements proceeded through four principle

Table 2 Modes of governance

Mode of governance	Overall governance aim	Implementation preference
Legal governance	Legitimacy and compliance through the promotion of law and order in social relationships	*Legal system*: legislation, law and rules and regulations
Corporatist governance	Controlled and balanced rates of socio-economic development through the management of major organized social actors	*State system*: plans and macro-level bargaining
Market governance	Resource/cost efficiency and control through the promotion of small and medium sized enterprises and competition	*Market system*: auctions, contracts, subsidies, and tax incentives and penalties
Network governance	Co-optation of dissent and self-organization of social actors through the promotion of inter-actor organizational activity	*Network system*: collaboration and voluntary associational activity and service delivery

Source: Modified from Considine (2001) and English and Skellern (2005)

periods (see Table 2). As he argued in "Four Systems of Policy, Politics, and Choice" (Lowi 1972, p. 300): "It is not hard to document historically that the overwhelming proportion of policies produced by the U.S. federal government during the nineteenth century were distributive" while regulatory policies were introduced in the late nineteenth century and re-distributive ones in the twentieth. This record is summarized in Table 3 (updated to take into account more recent developments and trends) (see also Orren and Skowronek 1998; Skowronek 1982). These arrangements roughly correspond to rotating periods of Considine's legal, market and corporate modes of governance.

As it would become clear in *The End of Liberalism*, Lowi associated these changes in policy regimes with the formation of interest groups and later "peak" associations which were able to influence policy-making for their own ends (Lowi 1969). However, it is also the case that governments also preferred these arrangements, suggesting that relatively long-term state and societal preferences for specific general policy goals and means has played a crucial role in determining choices of specific policy objectives and tools over a wide-range of problem areas.

Historically, in many countries outside the U.S., the preferred instruments for policy implementation also have been configured as largely legal and corporatist rather than market based, but the context, style, and substance of the marketplace has increasingly tended to infiltrate much of the policy design process in most countries in recent decades (Pollitt 2001; Knill 2001; Heritier et al. 1996). Compliance with government intentions has been increasingly approached in terms of market-based factors: profit margins and the economic viability of industry, employment patterns, and international competitiveness. This new emphasis on market-based policy tools is the essence of what has sometimes been referred to as "the new governance" (Rhodes 1996; Salamon 2001) and underlines the linkages which exist in governance modes between patterns of policy instrument choices and general governance preferences. Governance modes, in Considines's terms, have shifted in many countries and sectors from legal and corporatist styles to market and, in the European case, to network models (de Bruijn and Porter 2004; Kickert and Koppenjan 1997), in either case affecting the range and types of programme objectives and policy tools chosen to address specific problems.

Table 3 Lowi's historical model of American instrument eras seen as governance modes

Years	Lowi type	Characteristic aims	Implementation preferences	Considine mode
(1) 1776–1820	Constitutive era	Nation and institution-building, property rights creation	Laws, regulations, court rulings	Legal governance
(2) 1820–1880	Distributive era	Economic and industrial expansion	Land allocation, railway and industry subsidization and trust-based industrialization.	Corporatist governance
(3) 1880–1930	Regulatory era	Control of Trusts, centralization of welfare, price supports for small producers	Independent regulatory commissions, marketing boards	Legal governance
(4) 1930–1970	Re-distributive era	Expansion of welfare state protections	Pensions and social security, unemployment insurance, food stamps and rent controls	Corporatist governance
(5) 1970–present	Re-regulatory era	Reduction in size or growth rate of public sector expenditure, enhancement of private sector competition	Privatizations, de/re-regulation, de-subsidization, contracting out, and downsizing	Market governance

While policy designers can promote particular sets of abstract goals and preferences through their own activities in managing policy processes or their participation in them—as shall be discussed below—overall government aims and general instrument preferences most often can be taken as "given", or a fixed constraint, and designers typically must work within their ambit in matching the remaining policy objectives, tools, targets, and tools calibrations to established overall meta-policy aims and instrument preferences (Kooiman 2008).

Level 2: Policy regime logic and capacity issues—determining policy objectives and policy mechanisms

The contemporary preference in most developed liberal-democratic countries such as the U.S., Canada, Australia and New Zealand and most of those in the European Union is currently for a form of market governance whose goal is the efficient delivery of consumer and capital goods and services through the use of market-mechanisms wherever possible (Salamon 2001). Other countries and types of states in Africa, the Middle East, Asia, Eastern Europe, and South America include the additional aims of rapid economic expansion and social development, or "modernization". This is typically accomplished through the use of corporatist modes of governance in which state agencies and major non-state social actors engage in planning major investment decisions.

As described above, these governance modes set the outside boundaries or context for the second level of policy objectives and policy tools. Both the two preferred governance modes—market and corporatist—for example, involve preferences for particular types of general policy tools; such as preferences for markets or hierarchies in goods and service delivery (Tenbensel 2005; Thompson 2003; Thorelli 1986; Williamson 1975, 1996). Policy objectives, of course, vary greatly according to the specific nature of the problems specific policies are expected to address. However, in general, governments pursuing any of the types of governance modes set out above tend to develop *policy regime logics* which combine a preference for certain types of tools along with a more or less generic set of overall policy objectives.

In the modern liberal-democratic state operating under a market-governance mode, for example, policy objectives are typically framed in a discourse which expects state power to be used only, or mainly, to correct or offset market and collective action, or "governance" failures. These refer to overcoming situations in which optimal outcomes do not emerge "spontaneously" through unaided reliance on non-governmental actors and market mechanisms, but which also require a guiding hand ("steering") on the part of governments (Dollery and Wallis 1999; Kleiman and Teles 2006). The objectives pursued by government are often defined as (1) to correct a real or perceived *market failure*[1] in which private economic actors fail to autonomously deliver optimal social welfare outcomes (Stokey and Zeckhauser 1978) or (2) to correct a *governance failure*,[2] in which public or private actors fail to deliver an optimal policy formulation or implementation process and outcome from a collective or state-wide perspective (Wolf 1979, 1987, 1988).

Examples of the most well-known market failures and the kinds of tools that can be employed to correct them are included in Table 4 below.

A very similar set of objectives and corrective policy tools exists for *governance failures*. Like the idea of correcting market failures, correcting governance failures provides the objective of many government policies, which can be addressed using a variety of policy tools (Olson 1965; Le Grand 1991). Several of the most notable such failures and examples of potential corrective policy mechanisms are set out in Table 5 below.

These two concepts yield some insights into how liberal-democratic governments think about policy-making objectives in the context of concrete policy issues and suggest a clear rationale and overall logic for policy design in specific situations. This involves: (1) identifying a market or governance failure and the types of mechanisms which might correct it, (2) choosing the "best" or most efficient mechanism from among those which could theoretically address the issue and (3) implementing that mechanism in a standard

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[1] "Market failures" are specific instances where markets cannot be expected to provide an efficient or optimum level of production of goods and services desired in society. Based on the work of Alfred Pigou, a British economist writing during and after WWI on the "economics of imperfect competition" (or what has come to be known as the "economics of welfare" or "welfare economics" after the title of one of Pigou's books (Pigou 1932; Kleiman and Teles 2006; Bator 1958), several discrete instances of such failures have been uncovered by generations of economists. These are well-known and based on the recognition that the market's need for profit in order to engage in any productive activity precludes the delivery of any good or service for which accurate prices cannot be charged.

[2] "Governance failures" stem from the problems associated with collective action identified by the American political scientist Mancur Olson (1965). Activities such as interest group formation and operation, legislative and administrative behaviour, and other policy relevant political action suffer from difficulties associated with individual interests diverging from collective ones, contributing to problems such as implementation failures, bureaucratic pathologies, underrepresentation of social groups and the like. These are well known and affect the ability of policy-makers to receive or correctly process information on social interests and desires (Le Grand 1991; Weimer and Vining 2004).

Table 4 Examples of typical market failures and corrective tools

Market failure	Example of possible corrective policy mechanism
Imperfect information and information asymmetries	Voluntary or mandatory disclosure e.g., nutritional labeling, securities disclosure
Public goods	State provision via organisations funded by taxes e.g., park service, armies, policing etc.
Externalities	State regulations 'internalizing' costs e.g., mandating proper waste disposal, installing scrubbers etc.
Natural monopoly	State ownership or by heavy regulation of terms and conditions of service e.g., telephone companies and utilities commissions
Destructive competition	Health and safety/consumer regulation—workers compensation boards, mandatory health and safety inspections
Tragedy of the commons	State ownership or regulation e.g. oil and gas conservation boards, state companies, environmental regulation

Table 5 Governance failures and corrective tools

Governance failure	Example of possible corrective policy mechanism
Collective action problem	Provision of benefits to participation e.g. tax benefits for charitable donations, political party membership etc.
Freeridership	Mandatory participation laws, fines altering cost-benefit calculations of actors
Regulatory information and data limitations	Development of state, market and non-profit alternative sources of data
Normative nature of risk assessment	Inclusion of multiple actors in establishing risk assessments
Uneven economic power of regulated groups	Representation of all stakeholders/targets in government decision-making. Extension of funding to interest groups
Barriers to public participation	Provision of state funding to participatory forums
Lack of effective enforcement	Provision of greater personnel and financial resources
Legitimation problems	Use of procedural instruments such as advisory committees, public participation and stakeholder consultations

way (Wolf 1987; Le Grand 1991; Zeckhauser 1981; Mandell 2008). It does not assume or require that decision-makers be welfare economists and understand the logic of the analysis, but only that those administrators and some policy subsystem members approach problems in this way (Markoff and Montecinos 1993).

Choosing the "best" instrument in a particular situation is, of course, not an unproblematic proposition. There is not a 1:1 correspondence between failure and corrective tools and, typically, many instruments could conceivably address a problem. However, the question of policy tool choice is circumscribed not only by the embeddedness of the decision within a governance mode but also, as was the case with implementation preferences and policy aims, by tool preferences governments develop over the course of their policy-making and implementation experience.

Over time the range of policy tools used in a particular sector or issue area can become quite complex. Policy instrument mixes can become quite dense—either by design or by accident of history (Webb 2005; Howlett and Rayner 2007). However, although seemingly

faced with a large choice of possible instruments in creating their strategies, governments often repeatedly choose from a much more limited set of options. That is, there is a distinct tendency for governments to develop an implementation style in various sectors and to stick with this style for quite some time (Kagan and Axelrad 1997; Kagan 1997; Howlett 1991, 2000a, 2002). This is linked intimately to the nature of the overall governance mode and implementation preferences states have, as well as the kind of market and governance failures they face and their familiarity with specific kinds of instruments in dealing with these or similar issues, as well as the nature of the resource endowments they have at their disposal.

This last point is significant because the various instruments and mechanisms governments use to design and give effect to public policies attempting to address market and governance failures can be classified according to which basic governing resource they principally rely upon for their effectiveness (Hood 1986). Government preferences for the use of particular types of resources, thus is a factor which affects which general type of tool is chosen to attain a given policy objective.

The resources governments have at their disposal in developing the means to attain policy objectives are fourfold. These include the age-old use of coercive authority to more or less force society's members to abide by government intentions; the equally ancient use of government treasure or financial resources to influence conduct; the use of government staff and organization to do the same—something which has grown dramatically over the last century as governments have expanded and multiplied—and, finally, the use of government information to alter societal behavior, a resource with old roots like organization but also, like organization, one which has grown dramatically in recent years as governments have collected and collated larger and larger amounts of data on social interactions of all kinds (Hood 1983, 1986; Anderson 1977; Hood and Margetts 2007).

A government regulation requiring a licence in order to use a particular pesticide, for example, is a policy tool expected to give effect to a set of policy objectives (in this case a problem with externalities from pollution and information asymmetries between producers and consumers of sophisticated chemical products) within a set of aims (such as environmental protection and species preservation) and preferred implementation preferences (such as market-based service delivery within a market mode of governance). Such a mechanism requires an organization to implement it, some funding to pay the personnel involved in that activity, information notices to regulatees that a licence is required and that the requirement will be enforced, and some legal authority to create a licence scheme and enforce it. Such an instrument thus involves the use of many types of governing resources, but the *primary* resource it relies upon is the legal authority to enforce compliance, without which all of the other resources would be ineffective and unnecessary.

Table 6 sets out some examples of common procedural and substantive policy tools associated with each type of governing resource, classified according to the primary resource they rely upon for their effectiveness.

An implementation style is usually composed of a combination, or mix, of substantive and procedural instruments, at minimum two. Hence, for example, a very well-known implementation style found in many U.S. policy sectors, dubbed "adversarial legalism" by Robert Kagan, is composed of a preferred substantive instrument—regulation—and a characteristic procedural one—judicial review—based on wide-spread, easily accessible, legal procedures allowing regulatees to challenge and occasionally overturn regulations (see Kagan 1991, 1996, 1997; Kagan and Axelrad 1997). This choice of policy tools is utilized in many sectors in the U.S., and in many other countries with similar governance modes and objectives, not least because it is congruent with these meta-policy preferences

Table 6 A taxonomy of substantive and procedural policy instruments by principle governing resource employed

		Governing Resource		
		Information	Authority	Treasure	Organization
Substance		Advice	Licenses	Subsidies	Bureaucracies
		Training	User charges	Grants	Public enterprises
		Reporting	Regulation	Loans	Quangos
		Education	Self-regulation	Tax expenditures	
		Advertising Surveys	Vouchers Quotas	Program funding	
Purpose					
Process		Information-suppression (Censorship)	Advisory group creation	Interest-group funding	Administrative re-organization
		Information- release (Access to Information)	Interest group or party bans	Campaign funding	Administrative delay and obfuscation
			Denial of access	Denial of funding	

Source: Hood (1986); Howlett (2000b)

and relies upon readily available governing resources (authority) with whose use legally trained policy and decision-makers are very familiar (Eliadis et al. 2005).

Taken together, the policy objectives and policy tools found in a particular sector comprise a meso-level *policy regime logic* within which further micro-level policy design decisions are taken. This second meso-level of policy design thus is both significantly influenced by pre-existing governance modes, but also acts as a significant influence on ultimate policy instrument choices and is an integral component of effective policy designs.

Level 3: Technical instrument design—determining policy targets and calibrations

Many authors have argued (de Bruijn and Hufen 1998) that there is more to instrument choice than the purely technical issues surrounding the "objective" characteristics of a particular proposed policy tool. However, this concern for the significance of the "politics of policy instrument choice" over consideration of technical criteria should not be construed so as to imply that technical concerns are irrelevant but merely that they are embedded within the governance mode and policy regime contexts of any given policy tool choice situation.

As suggested above, government choice in the realm of micro-level policy design activities are constrained by both pre-existing meso-level policy regime logics as well as meta or macro-level governance modes. Both considerations of what is feasible and desirable at the micro-level depend on what tools are available and considered appropriate to use, subjects tied to governance modes and policy logics, and to micro-level policy goals, that is, to the specific targets policies are expected to accomplish or achieve (Huitt 1968; Majone 1975; Webber 1986). At the core of policy design activities at this level, within the range set by abstract policy aims and implementation preferences and those related to governing capacities and assessments of market and governance failures, is the matching of specific program means to specific policy targets.

Policy targets are sometimes set in legislation, as is the case with monetary and fiscal policy goals (McMillin and Fackler 1984), but often are less formally prescribed. However, they are established, though, they are requisite for effective policy implementation, (Kiviniemi 1986). They establish the final level of operationalized goals policy-makers set out to achieve in specific policy and problem areas. While the range of possible policy targets is theoretically enormous, the fact that the targets should be congruent with macro-level policy aims and meso-level programme objectives limits this range substantially. This final level of policy specification is thus highly constrained, lending some order and continuity to what might otherwise be a largely random selection of micro-level policy goals. Regularized patterns of interactions between major policy players (Grin and Graaf 1996; Spicker 2005), their perceptions of what is feasible to accomplish given existing and future resources and the presence of the dominant sets of ideas held by epistemic communities and other relevant policy actors vis-a-vis notions of problem causation and target group behavior (Donovan 2001) heavily influence the development of specific program goals and targets which will vary considerably from context to context as a result. Nevertheless, once such goals have been set they become entrenched and difficult to alter, forming a final core context for policy tool choices.

That is, the final development and calibration of specific substantive and procedural policy tools is tied to the assessment in specific circumstances of the nature of governing resources available and the challenges to be faced, within the prior identification of the appropriate type of instrument to use given an existing regime logic and governance mode. Targets may include considerations of efficiency, effectiveness and equity, among others, and as Linder and Peters (1989) suggest, developing policy targets involves assessing different levels of administrative intensiveness, degrees of precision of targeting, political risk and legitimacy, and state activity (see Table 7).

Once that assessment is complete, however, the technical aspects of particular instruments that can be specifically calibrated to meet the desired policy end must be adjusted. That is, the attainment of these goals is expected to be achieved through the fine-tuning or "calibration" of the policy tools previously highlighted in an existing policy regime logic into a set of *operational plans* for policy problem resolution and goal attainment. At this final stage of calibrating tools to match articulated policy target goals, factors such as the technical characteristics of the instruments and their match with the context and dynamics of the problem(s) need to be addressed, as well as such political and administrative factors as the past experiences of governments and target groups in using these tools to deal with the same or a similar problem.

Taken individually these characteristics of specific possible instrument calibrations could generate a large number of possible micro-level tool design choices, however, taken

Table 7 Micro-level policy target criteria

(1) *Administrative intensiveness*, including administrative cost and operational simplicity and its ability to adapt to changing circumstances

(2) *Targeting*, including precision and selectivity among groups and policy actors and effect on points or stages in production and policy processes

(3) *Political risk*, including the nature of support and opposition for its use, public visibility, and chances of failure

(4) *Constraints on state activity*, including difficulties with coerciveness and ideological principles limiting government activity

Source: Linder and Peters (1989)

Table 8 Micro-level policy tool calibration criteria

(1) *Degree of coerciveness* required for effectiveness
(2) *Directness* in delivery vs use of intermediaries
(3) *Automaticity* or use of existing implementation structures vs creation of new ones
(4) *Visibility* in budgeting and policy review activities

Source: Salamon (2002)

together within the context of the constraints established by governance modes and policy regime logics, and micro-level policy goals, they typically serve to reduce the number of potential choices to a very small number which can then to subject to standard evaluative techniques such as efficiency or cost-benefit analysis (Bemelmans-Videc 1998) (Table 8) .

Conclusion: analyzing policy design choices as nested, highly constrained policy instrument decisional processes

In spite of its centrality and importance to public policy-making, policy design still remains in many respects a "missing link" in policy studies (Hargrove 1975). The design process is complex, often internally orchestrated between bureaucrats and target groups, and usually much less accessible to public scrutiny than many other kinds of policy deliberations (Donovan 2001; Kiviniemi 1986). In addition, design decisions are linked both to the characteristics of policy instrument choices (Linder and Peters 1990a, 1990b), another subject which has received very uneven treatment in the policy studies literature, and to the nature of general governance contexts and long-term policy preferences, a third subject which has not been addressed as directly as needed by existing policy studies (Linder and Peters 1990c, 1991, 1992).

Studies in fields such as political science, economics, law and public administration have all underlined that translating policy aims and objectives into practice is not as simple as might first appear. Policies are made by a variety of different actors interacting with each other over a relatively long period of time within the confines of a set of political and economic institutions and governing norms, each with different interests and resources, and all operating within a climate of uncertainty caused both by context and time-specific knowledge and information limitations as well as those inherent limits caused by the game-like nature of their policy-making interactions and relationships—that is, in which what is in one actor's best interest depends in part on the activities of other actors involved in the same, and other, ongoing policy processes (Bressers and O'Toole 1998, 2005). Understanding who these actors are and how they act is thus a critical aspect of all public policy-making activity, including policy instrument selection and use involved in policy design. Administrative, legal and economic studies have also shown, however, that assessing the reasons for instrument choice in any policy area requires a multivariate explanation since actors exist within an institutional structure in which the nature and types of resources they possess and the level of overall government capacity are crucial factors affecting policy decisions and actions. Similarly, different instruments have different impacts and capabilities in-themselves which affect their efficiency and effectiveness in any given policy design context.

Given this complexity it is not surprising that many noble efforts by governments and citizens to create a better and safer world have foundered on poor policy design. This has led to a greater appreciation of the difficulties encountered in designing public policies and
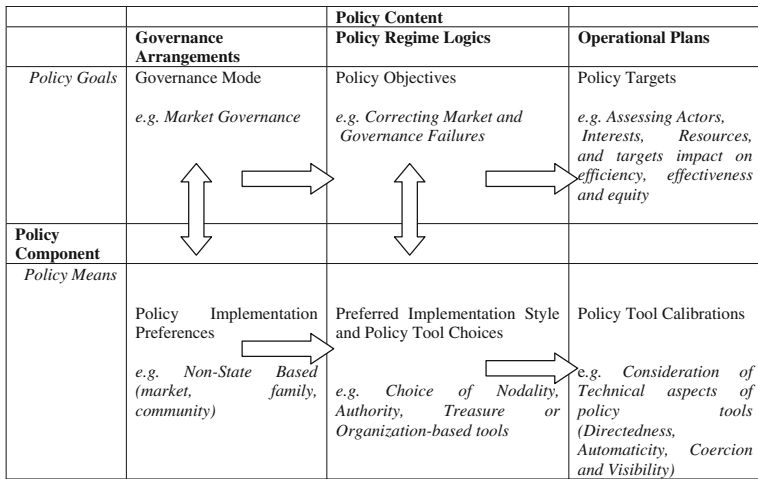
	Policy Content		
	Governance Arrangements	Policy Regime Logics	Operational Plans
Policy Goals	Governance Mode *e.g. Market Governance*	Policy Objectives *e.g. Correcting Market and Governance Failures*	Policy Targets *e.g. Assessing Actors, Interests, Resources, and targets impact on efficiency, effectiveness and equity*
Policy Component			
Policy Means	Policy Implementation Preferences *e.g. Non-State Based (market, family, community)*	Preferred Implementation Style and Policy Tool Choices *e.g. Choice of Nodality, Authority, Treasure or Organization-based tools*	Policy Tool Calibrations *e.g. Consideration of Technical aspects of policy tools (Directedness, Automaticity, Coercion and Visibility)*

Fig. 1 A model of nested policy instrument choices in liberal-democratic states

to the attempt to correct the gaps in our understanding of the nature of policy instruments and their governance contexts (Lester and Goggin 1998).

Figure 1 reveals the general elements of policy design decisions found in liberal-democratic states and the embedded relationship they enjoy, using the multi-level nested model of instrument choice discussed herein. In this model, as set out above, decisions are made within the context of (a) general governance aims and tool preferences and (b) the definition of policy objectives and mechanisms used to correct market or governance failures while taking (c) the nature of resource constraints and specific tool characteristics taken into account in designing policy targets and tool calibrations.

Innovative and effective policy design requires that all of these parameters of instrument choice be well understood, both to reduce the risk of policy failure and to enhance the probability of policy success (Linder and Peters 1990a, 1990b, 1988 and 1991; Schneider and Ingram 1997). There is a need to expand the menu of policy design and policy instrument theory to appreciate the nuances and complexities of governance arrangements, policy regimes logics and operational planning (Linder and Peters 1984, 1988). This is especially the case given that increased governmental and societal use of capacity-enhancing information technologies, coupled with the increasing sophistication of networks of citizens and clients, has allowed for greater experimentation with nontraditional governance arrangements (Kooiman 1993). The potential for failure in these experiments is high if the logic of constrained policy tool selection has not been made clear beforehand. The model set out herein is intended as a first step in the process of improving policy design in contemporary states.

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