Instruments for policy integration

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Abstract

Solving complex problems is one of the most important challenges for public policy and administration today. To effectively address them, different policy instruments must be integrated into policy mixes that deal with the different dimensions of the problem. A crucial task for the policy maker is to identify the set of instruments to be deployed and to integrate them into a policy mix (Kern & Howlett, 2009). However, policy instruments do not only need to be coherent in their design (to avoid clashes among them and to take advantage of complementarities), but also their implementation requires instruments that preserve the integrated logic of the policy mix.

The purpose of this paper is to identify the instruments that make integration work. For doing so, we look not only at the policy tools being integrated, but at the instruments used for integrating them. We argue that the policy mixes for policy integration entail more than guaranteeing certain design and operational attributes of a policy but, also, performing perform a specific function to keep them integrated. We propose a set of integrative tools (that entail the performance of a specific function) that the actors responsible for policy implementation need to undertake for policies to become integrated. We use three different cases where governments have attempted to solve complex problems through policy integration to illustrate our argument.

With this paper we seek to move forward the discussion on policy integration for better understanding the way in which it works, and by doing so, to inform decision makers about the specific policy tools necessary to achieve it.

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I. Introduction

Solving complex problems is one of the most important challenges for public policy and administration today. To effectively address them, different policy instruments must be integrated into policy mixes that deal with the different dimensions of the problem. A crucial task for the policy maker is to identify the set of instruments to be deployed and to integrate them into a policy mix (Kern & Howlett, 2009). However, policy instruments do not only need to be coherent in their design (to avoid clashes among them and to take advantage of their potential complementarities), and coordinated, but also to preserve those attributes throughout the implementation process, that is, to keep them integrated.

We argue that in order for policy mixes to solve complex require more than guaranteeing certain design and operational attributes of a policy but, also, instruments that perform a specific integrative function to keep them integrated. We identify two integrative instruments: first, a policy narrative that sets a shared understanding of the problem being addressed by the policy mix, the goals being pursued and the specific contributions by each instrument in the policy mix towards the overarching goal; and, second, a decisional platform with authority and information for deciding over the set of organizations and policies responsible for the policy mix.

We contribute to the literature on policy mixes and policy integration in three ways: first, by identifying the integrative elements that bind together the instruments that conform the policy mix; second, by paying attention to the "micro-management tools and their effects on macro-regime characteristics" (Tosun and Lang, 2017), and thus showing the interplay between the institutional and policy components of the policy integration process; and, third, by using existing case studies to analyze the performance of these elements in different sectors and countries.

For this analysis, we use recent literature on policy instruments to explain how dealing with complex problems requires multiple instruments aggregated into a policy mix (section 2), and how the instruments in the policy mix need to be articulated in the design of the integrated policy mix and in their joint operation (section 3). We then build on the policy integration literature to understand policy integration as a process that requires integrative instruments to articulate the policy instruments (section 4), and we show these instruments work on three different sectors and countries, building on recent research on policy integration in food policy in South Africa (Candel 2018), child care in Chile (Molina 2018), and social inclusion in Australia (Carey *et al.* 2015).

2. Dealing with complex problems require multiple instruments

Solving complex problems has long been a concern for governments and scholars alike. Different theoretical approaches have been put forward to advance new ways to tackle them (see Tosun and Lang, 2017), such as network governance (Van Bueren, Klijn, & Koppenjan 2003), policy coherence (Bolognesi and Pflieger, 2019), policy coordination (Peters 2015), joined-up government (Pollitt, 2003) and policy

integration (Candel and Briesbroek, 2017). Common to these approaches is the underlying idea that, by employing different policy instruments, an integral or holistic approach to address these complex problems — whose causes are multiple and rooted in different policy arenas (Agranoff 2003; Agranoff and McGuire 1998; O'Toole 1997) — will produce more effective outcomes.

This concern has given rise to a renewed literature on policy instruments, which has been focused both on defining and categorizing these tools, and on identifying the best possible combinations of tools for addressing complex problems. In general terms, policy instruments have been defined as specific tools that governments employ to attain a policy objective. Such tools or instruments are "methods" that structure collective actions (Salamon 2002), or "techniques of governance" (Howlett 2005) undertaken to address public problems.

One of the earliest attempts to classify policy instruments was made by Hood (1986), who distinguished them according to (a) the use governments seek to make of them (i.e. effect a change, or detect a change, in a policy environment), and (b) the governmental resources they require to be put into practice. Schneider and Ingram (1990) put forward a classification of tools based on government's ability to affect policy actors' behavior, which led them to propose five types of instruments: authority, incentives, capacity, symbolic and learning. By considering "the degree of constraint involved in the governance effort" to effect or prevent social change, Vedung (1997) identify three types of instruments: the carrots (economic means), sticks (regulation) and sermons (information). The classification Howlett (2000) proposes is based on what the instruments are intended to affect when put into action, which might be the specific features of the goods and services government provides (substantial instruments), or the institutional arrangement through which governments supply such goods and services (procedural instruments). Salamon (2002) provides a typology of instruments based on two criteria (a) the expected consequences of each tool (in terms of effectiveness, equity, among others) and (b)

the dimensions in which tools may differ or coincide (for example, their degree of coerciveness, directness or visibility).

Sometimes these instruments are combined to deal with problems that require more than one intervention. When more than one instrument is used to achieve a policy objective, the literature refers to this set of instruments as "policy packages" (Givoni 2014) or "policy mixes" (Kern & Howlett, 2009). Adding policies do not only create a combination of different types of instruments, but a governance strategy aimed at attaining certain policy objectives (see Salamon 2002; Howlett and Rayner 2007). The mix of them create a governance strategy aimed at attaining certain policy objectives (see Salamon 2002; Howlett and Rayner 2007).

3. If the policy mix needs to be integrated, then how?

Since there is an agreement that policy instruments need to work together, as mixes, in order to better address complex public issues, this renewed approach of the literature on policy instruments has also been focused on identifying the best possible combinations of tools for attaining this goal. As Zehavi put it: "when combined these instruments [can] produce more effective governance than when employed separately" (2012: 243). This also highlights the need for these instruments to get along together: it is not enough for them to be deployed at the same time, but they also need to coexist without frictions. Accordingly, the attributes of the different possible ways in which instruments relate has gained more attention.

Since instruments within a policy mix are not isolated from each other but constantly interacting (Howlett, 2017), such interaction must lead them to complement and reinforce, rather than counteract each other (Briassoulis, 2005; Howlett and Rayner, 2007; Givoni, 2013). Hence, in order to be effective, the

instruments of a policy mix should be coherent, which means that "[their components] correspond because they share a set of ideas or objectives" (May et. al. 2005: 37). In other words, a set of coherent instruments means that those that are part of the same mix can contribute to, reinforce, or improve the chances of attaining their individuals goals (Cejudo and Michel 2017).

However, the responsibility of the design and operation of policy instruments is dispersed among different agencies, ministries, and levels of government (Briassoulis 2004; Christensen and Lægreid 2007; Koschinsky and Swanstrom 2001; OECD 2005; Peters and Savoie 1997), which makes evident that for a policy mix to be effective, coordination is also required (Peters, 2015). Indeed, in order to identify the design attributes of the tools that must be fine-tuned to achieve complementarity, avoid duplications and determine how best to sequence instruments over time (Taeihagh, Givoni, & Bañares-Alcántara, 2013) during the enterprise of formulating effective policy mixes, it is required that information sharing and joint decision making exist between public officials from different agencies and levels of governments.

The task for designing an optimal policy mix becomes more difficult when the aim is to address complex problems. The more complex the problem to be addressed, the more difficult to formulate an effective policy mix (Givoni, 2013; Peters, 2005) particularly when instruments belong to different territorial/administrative levels (Howlett and Del Rio, 2015). Indeed, when it comes to complex problems, the number of instruments that need to be coordinated and coherent to each other increases. Moreover, the policy mix is not the mere addition of instruments; their interaction among them is crucial (Howlett & Rayner, 2014) because the inter-instrument microdynamics (Woo, 2018) affect their chances of achieving the overarching goal.

The literature on policy tools and policy mixes has mainly been devoted to understanding *what* is integrated in the policy mix, whereas the understanding of

how they are integrated has received less attention. This vacuum is explained by the implicit assumption that, if the policy instruments within a policy mix are coherent and coordinated, they would automatically be able to comprehensively address a complex problem. We challenge this proposition and argue that for them to work together, some instruments must exist to integrate/bind them into a process (that of policy integration).

We demonstrate the argument by analyzing three cases from the literature on policy integration and joined-up government where governments attempted to solve complex problems in a comprehensive way. We look not only at the tools of policies being integrated, but at the instruments used for integrating them. From the comparative analysis of such cases we propose a set of integrative tools (that entail the performance of a specific function) that the actors responsible for policy implementation need to undertake for policies to become integrated.

4. The process of integration requires integrative instruments

The integrative tools or instruments are the glue that binds the policy tools into a mix so that, when integrated, this mix can solve complex problems. This glue consists of two integrative instruments or tools that perform a very specific function: generating interdependence between the policy tools and subsystems. The first integrative tool is the narrative, which plays the role of generating a common understanding about the problem and about the responsibilities each of the parts involved has in addressing it. It becomes an integrative instrument when the actors involved understand that each one requires that the others do their part for them to perform their own, and thus be able to jointly address the problem. This integrative instrument is, in short, the narrative of the interdependence

between every subsystem (and their corresponding policy tools) for achieving the same objective.

The second integrative tool is a decision-making platform. This platform plays the role of keeping the policy mix coherent and coordinated throughout the implementation process. To do so, the decision-making platform employs two mechanisms: *Information* to know which are the pieces that should be adjusted (and the extent to which it should be done), and *authority* to be able to mandate the execution of those adjustments. The strategic exercise of authority requires information, but for information to be generated in a way that allows the decision-making platform to make decisions regarding the mix as a whole (and not just of each of the tools that form part of it), is required authority.

The decision-making platform becomes an integrative instrument when makes subsystem (and their corresponding policy tools) interdependent first, by generating new information of the policy mix as a whole (through the activation of its two mechanisms); second, by making such information necessary for each part involved to operate (and perform their own role). Hence, it is in the best interest of very actor and agency involved in the strategy to generate and share high-quality information. This means that, for the decision-making platform to perform an integrative function, the exercise of its authority must not be limited to mandate the generation of information with certain characteristics for it to be useful, but also for designing procedural policy tools that makes the use of that information indispensable for the parties to operate (that is, a system of incentives).

Naturally, the capacity for each integrative instrument to perform their function (that of generating interdependency between subsystems and policy tools) would depend on the quality of its attributes. A narrative that clearly communicate the problem to be addressed and the expected role of each of the actors involved in such enterprise, would in a better position for making evident the necessity for every actor and agency to do their part. On the contrary, if the narrative is too

vague, the odds will be stacked against having an effective policy mix. An equivalent scenario can be expected in terms of the decisional platform.

Notwithstanding the many possible configurations of these integrative instruments, the central argument is that integrating policy mixes entail more than guaranteeing certain design and operational attributes of a policy tool but, also, performing a specific integrative function, that of generating interdependencies between them.

The ways in which different instruments can comprehensively address complex problems have also been studied in the policy integration literature (6 2005; Adelle and Jordan 2014; Adelle and Russel 2013; Bornemann 2016; Candel and Biesbroek 2016; Christensen and Lægreid 2008; Jordan and Halpin 2006; Jordan and Lenchow 2010; Nordbeck and Steurer 2015; Russel and Jordan 2009). The focus, however, has been less on the instruments to be integrated and more on providing conceptual clarity of what policy integration is and, hence, in the identification of its attributes (Candel and Brisbroek 2016). Thus, a growing body of literature has developed in recent years with the aim of determining, first, the extent to which policy integration differs from other related concepts such as coordination and policy coherence (Cejudo and Michel 2017) and, second, the factors that allows for policy integration to occur (Trein *et al.*, 2018; Candel and Brisbroek, 2019).

Through the analysis of individual cases (Lenchow 2002; Meijers and Stead 2004; Persson et. al. 2018) and, more recently, through the comparative analysis among policy areas (Briassoulis 2005; Carey *et al.* 2015) and between countries (Howlett et. al. 2017; Trein 2017), the scholarly research has put forward different attributes of policy integration. Policy coherence and coordination are, in all cases, deemed as necessary for policy integration to exist. Attaining policy integration require "adopting policy tools *capable* of overcoming or avoiding conflicts and contradictions in a policy mix" (Howlett et al, 2017:74. Own emphasis added). This

capacity, however, entails attributes that are not of the policy tools but of the process of integration.

Policy integration is not just a moment in which an overall goal or central priority is set, after which all the instruments appropriately interact with each other, automatically enabling them to achieve such goal (Cejudo and Michel 2017). As Candel and Brisbroek argue, "policy integration goes beyond a 'mere' change in policy-level variables, in that it also requires a particular adjustment of institutional contextual conditions, such as subsystem jurisdictions and dominant policy belief systems" (2016: 217). Hogl and his coauthors explain that distinguishing what is integrated with what is an empirical question (Hogl et al 2016: 399). We put forward another empirical question: how are those elements integrated? This question is different from the concern of designing an optimal mix (such as the range of policies in which a problem is embedded or the coherence between them) (see Candel and Brisbroek 2017; May and Jochim 2013: Howlett et al, 2017:7), but also, of identifying the factors that enable policy integration (such as institutional capacities, financial resources, timing, and context) (Candel and Brisbroek 2019; Trein 2017).

As elements of a process that must follow a particular pathway for attaining a policy goal, policy instruments require that specific functions within the process of integration are performed. Indeed, if policy integration is a process, this process "needs to be managed or steered" (Hogl et al 2016: 410). Based on the attributes of policy integration set forth in the literature, we argue that such functions can be grouped in two. First, a shared narrative of a solution to the complex problem with its specific characteristics and the corresponding contributions of each instrument to the solution; and second, someone an official, a committee or an organization with authority over policy-level and institutional variables for being able to adjust them so that they are capable of achieving the desired solution, with information on those two levels of variables for commanding the adjustments

deemed as necessary. These two functions are not to be performed by the policy instruments or tools that are part of a policy mix, but through the process of integration, by different elements of such process. We refer to them as "integrative instruments" since they are the glue that will allow policy mixes to be integrated.

Figure 1: Integrative instruments
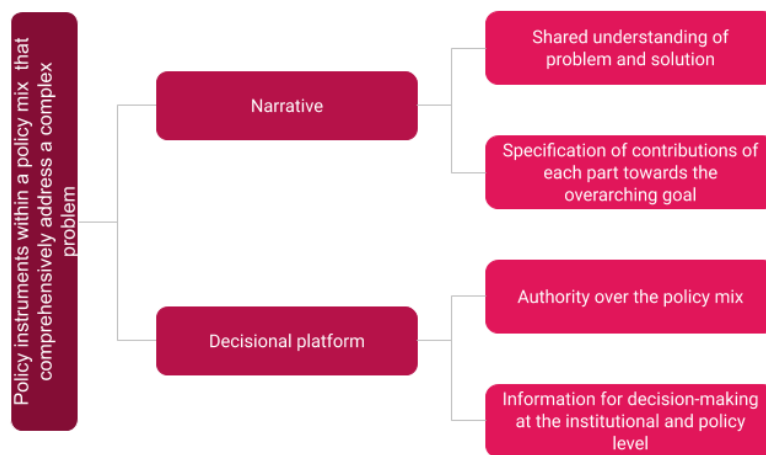
In the following sections, we explain these integrative instruments and use examples from three different case studies to illustrate how these elements work. We use cases from three different countries (Australia, South Africa and Chile) and sectors (social inclusion, food policy, and child care). Moreover, we put forward examples from other policy sectors and regions to demonstrate how the lack of these elements affect the process of policy integration.

The first case is from Australia, where the Social Inclusion Agenda (SIA) was an attempt by the federal government to "strengthen the Australian welfare state, reducing inequality and disadvantage" (Carey *et al.* 2015:177); see also Marston and Dee, 2015). The authors, who analyze this initiative as an example of joined-up

government, explain that the SIA expected several ministries to be coordinated to promote social, economic and civic participation, while fostering compatibility between different policies, goals and processes. They identify two interventions that the government deployed for achieving this goal: the adoption of a policy narrative of social inclusion and the introduction of new administrative structures, to "develop a shared understanding of, and coordinate efforts to embed, social inclusion approaches across agencies and jurisdictions" ((Carey *et al.* 2015: 179).

The second case is about food security policy integration in South Africa (Candel, 2018). The South African government launched in 2002 an Integrated Food Security Strategy, "to combine a wide range of existing but fragmented food security efforts into an overarching approach", including instruments from several sectors and levels of government to address the different dimensions of food security (availability, access, utilization, and stability). There was an Official recognition "that food security is a crosscutting problem that needs to be governed holistically" and a set of units in charge of coordination, led by the National Department of Agriculture (Candel, 2018).

Finally, Chile Grows with You (Chile Crece Contigo) is an initiative that seeks to integrate several government programs and services to offer a "comprehensive protection system for children from the prenatal period to 4 years" (Molina et al 2018), in order to address the problem of child poverty, and its consequences on child development and on social inequality. For doing so, several agencies were charged with specific responsibilities for the program: The Ministry of Social Development as a national coordinating body, a Technical Committee within the Ministry of Planning and Executive Secretariat at the Ministry of Health (Cunill et al 2013). Given the fragmentation of the social protection system in Chile, information was crucial, and a new law establishes the obligation for the "systematic collection and use of data for program management, and coordination of health, education, and social services" (Molina et al 2018: 1). At the municipal

level, social workers followed detailed guidelines to provide counseling and to reference beneficiaries to social services.

5. Integrative instruments (1): a narrative with specific implications

A policy narrative, that is, a shared understanding from different actors of a given system regarding the nature and attributes of a problem that is to be addressed, has been pointed out in the literature as an element necessary for keeping policy tools integrated. By referring to it as "policy frame", Candel and Biesbroek (2016) argue that the existence of a dominant understanding within the governance system's macropolitical venues and decision-makers of the problem to be addressed is a constitutive property of policy integration. Since the policy frame not only establishes a common ground on the extent of the cross-cutting nature of certain problem, but also, on the extent to which it requires to be comprehensively approached (Candel and Biesbroek 2016) policy frames serve as the theory of change of the policy mix: the existence of a shared understanding on the problem and the means to address it allows for the parts (subsystems[1] that consider a particular issue to be of their concern, agencies that substantially contribute to addressing the problem and the policy tools they implement) to recognize themselves as components of a new governance arrangement, and to define the specific contributions required from them to achieve the overarching goal. As May and Jochim (2013) argue "ideas" (the term they use to refer to policy narratives) are

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[1] Unlike Candel and Bisbroek (2016), who consider the number of subsystems involved (and the frequency of their interactions) as another dimension of policy integration, we include it as part of the function that the "policy narrative" performs: making subsystems aware of the problem's cross-cutting nature, delineating the formal responsibility each has for dealing with the problem and establishing the corresponding actions (and interactions, such as information exchange) they must conduct for complying with such responsibility.

representative of shared commitments and understandings and, as such, they guide government's actions: they serve as organizing principles because they depict a picture of what should be done.

However, a policy narrative entails more than providing a problem definition and a shared understanding of each one's contribution towards addressing it (Carey *et al.*, 2015); it demands for public officers to transform the narrative into concrete actions. Thus, the policy narrative has the potential of "shaping practice through the power of language and the story about (…) a new approach to policy." (Carey *et al.*, 2015: 179). Indeed, the policy narrative perform a specific function during the process of policy integration: by bringing about change in the manner in which actors perceive the problem, the narrative shift values and promote the coordination of people and ideas across organizations (Klijn and Koppenjan 1997; Carey et al 2015) and around a same issue.

Whenever a policy narrative fails to generate a common understanding of the problem to be addressed, the actors responsible of solving it or the manner in which they are expected to so, policy tools might be coherent and even coordinated, but not integrated: "Changing the design of [policy tools for making them coherent] entails taking decisions that are not a product of coordination, but a result of substantive analysis of policy design that does not necessarily represent a coordination activity" (Cejudo and Michel 2017). Hence, if well understood, "ideas" serve as integrative forces whereas if they are not understood "due to their vagueness, or are not endorsed, the glue for holding the [governing arrangement] together is weak" (May and Jochim 2013: 435).

For instance, Australia's SIA was built on a narrative of social inclusion that expected every Australian to be able to participate in society and get equal access to goods and services. As a policy narrative, it did "not intended to modify behavior as such, but to bring about change in how actors perceive the problem and, through this, shift values" (Carey *et al.* 2015: 179). According to the authors, the

narrative did not work as planned, the SAI was perceived as a diffuse agenda, with vague responsibilities, and therefore participants "fell back on their existing practices". In this case, the policy narrative managed to promote a common objective, but without explicitly detailing the contributions expected from each department involved (the authors call it "a mismatch between communicative and process level instruments and actions" (Carey *et al.* 2015: 181).

In the case of food policy in South Africa, Candel (2018) identifies a similar pattern: Government officially understood "food security [as] a crosscutting problem that needs to be governed holistically", but this frame was not "institutionalized". A shared problem definition across all relevant actors was not developed, and "[i]nstead, stakeholders had very different understandings of food security policy and associated causes and effects". Consequently, the overall narrative of food policy integration was "narrowed down", and each department continued working on its own routines and towards its own objectives.

In Chile, the narrative included both the shared understanding of the problem and of the solution and a detailed definition of the contribution of each department and program to the overall goal. After a presidential advisory board called for the creation of a comprehensive child protection system in order to address the problem of child poverty, and its consequences on child development and on social inequality (Torres *et al.*, 2017), a law was passed to institutionalizing Chile Grows with You, and establishing detailed responsibilities for each ministry and level of government. From then on, the regular operation of the ministries towards the target population had to respond to the priorities set by Chile Grows with You.

Thus, to perform its function as an integrative element, a policy narrative requires not only establishing goals and providing a shared understanding of the

purposes of the policy mix,[2] but also the detailed definition of the contributions of each actor, policy or organization being incorporated into the integrated mix.

6. Integrative instruments (2): a decisional platform with authority and information

The literature on policy integration (or joined-up government) has identified several factors that inhibit governments that decide to embark in the difficult task of comprehensively addressing a complex problem. However, most of them are, in fact, a mixture of design properties of the existent policy tools, both substantial and procedural. For instance, O'Flynn *et al.* (2011) distinguish the programmatic focus of government's intervention as a factor that inhibited a comprehensive approach; May and Jochim (2013) the difficulty of having a sustained support from all the actors involved, and Howlett (2008) another set of "typical procedural policy instruments" such as training, institution creation, the selective provision of information, formal evaluations, accountability mechanisms and institutional reform that affect the possibility of addressing cross-cutting problems. Whereas their potential to affect the incentive structure that drive actors' behavior in relation to a new governance arrangement is unquestionable, they are not unalterable.

On the contrary, addressing crosscutting problems entails altering the current governing arrangement: it requires the modification of systems and

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[2] This is an element that appears in analyses of other countries and sectors. For instance, Rietig (2019) singles out as a condition for successful climate policy integration the "compatibility of key actors' beliefs". Similarly, in an initiative of conservation agriculture in Malawi, even if the overall narrative aimed at harmonising the narrative (presented in the conservation agriculture guidelines) among all actors involved, some inconsistencies and contradictions regarding the role of different participants reduced the effectiveness of the narrative in modifying the behavior of participants (Chinseu, Stringer and Dougill 2018).

processes, and fine-tuning the substantive policy tools. Hence, a 'supportive architecture' within government capable of making those changes happen (O'Flynn *et al.* 2011) is regarded as an integrative element. The 'supportive architecture' to which O'Flynn refers is built on Bardach's (1998) proposition that, in order to facilitate interagency collaborative capacity, an operating system must be created. The general idea is that the public officer or agency designated as responsible for promoting the new governing arrangement has the authority to alter the policy instruments (both substantive and procedural), and the necessary information to execute that authority, so they can operate as required for addressing certain complex problem (O'Flynn *et al.* 201; Carey et al 2015).

Defining a complex problem and making a strategic use of the existent policy tools (or creating new ones) to achieve it is a decision that can be made only by an actor with authority over all of them (Cejudo and Michel 2017). Indeed, affecting the current governance arrangement means that each of the subsystems involved would have to give up some of their discretion and resources on behalf of the success of it. Whether it is a policy czar, an inter-ministerial group, a dominant agency or whatever figure considered most suitable, the need for it to have formal authority over other subsystems is fundamental if it is to be able to influence activities across government. The absence of an actor with formal authority over the rest of the parts involved run the risk of "generat[ing] limited change" (Carey et. al. 2015) and providing "a powerful rationale for inaction in some cases and for serious dysfunction in others." (O'Flynn *et al.* 2011: 248).

But making a strategic use of the existent policy tools does not only entail a decisional platform with authority over different subsystems: at the end, the aim is not only to modify procedural and substantive policy tools, but to do it in order to become more effective in the enterprise of addressing every dimension of a complex problem. Accordingly, the decisional platform must have the necessary information for exercising its authority: information on the evolution of the

complex problem and information on the actual progress that each of the subsystems deemed as necessary for addressing it (see the policy narrative section) is making (Cejudo and Michel 2017).

Having authority over other subsystems involved is different from having the responsibility of "coordinating" them just as having useful information for strategic decision making is not the same that having information sharing processes. Regarding the difference between authority and a mandate for coordinating different parts, May and Jochim drawing on the literature on organizational attention argue that "the mere designation of roles and responsibilities is insufficient for focusing attention, establishing desired information flows, and building organizational relationships in support of a policy" (2013: 433). It is not a matter of coordinating existing elements of a governance arrangement, but of altering its structure by endowing a person, an organization, or a committee with the authority to influence the patterns of interaction between actors.

Similarly, regarding information, filling reports on the activities, products or services delivered within each subsystem would not be enough; neither would an assessment of the extent to which the problem has been addressed would work. The required information must be generated and delivered with the characteristics (format, time and specific content) that allow the actor or committee that has been endowed with authority, to make the necessary adjustments on the policy tools to keep the policy mix coherent, coordinated and pertinent giving the ever-changing nature of the problem.

The instrument is not only the existence of information, but its availability to every actor involved and, more importantly, its use for decision-making. As Ran and Nedovic-Budic (2018: 53) show, in order to have integrated flood risk management, "what needs to be improved is the access to geographic information and geographic technologies by individual policy makers, rather than the

ownership of such resources by one organization as a whole". Information sharing among different actors does not solve informational asymmetries, there is a need to make sure that there is a "transfer of information from policy users to policymakers" (Woo, 2018).

In short, keeping different policy tools integrated into a mix requires someone a person, an organization, or a committee with mandate over the set of policy tools and authority over each subsystem involved, and information for steering the exercise of its authority towards solving a complex problem. The three cases under analysis show the importance of both elements.

In Australia, the government created a Social Inclusion Unit (an interdepartmental working committee in the Department of Prime Minister and Cabinet (PMC)), in charge of driving coordination across government and coherence between policies. Although the intention of placing it under the PMC was to demonstrate that the Agenda was indeed a priority of the Prime Minister, it did not have formal authority over other departments. The new Unit did not manage to create new lines of accountability or new financial structures and was unable to transform the way agencies worked and, therefore, had limited effects on how SIA was implemented and the information it generated. Inevitably, departments "continue to carry the burden of accountability and implementation, whereas interdepartmental teams generate ideas, but lack the implementation capacity or accountability mechanisms for getting things done" (Carey *et al.* 2015: 183). Without authority or relevant information, its capacity for making decisions at the institutional and policy levels was limited.

In South Africa, achieving an integrated food security policy involved the creation of various spaces for coordination at the national and provincial levels, as well as a National Food Security Forum (NFSF). The responsibility for coordinating them lied in the National Department of Agriculture (NDA). However, even when the aim was that the NDA could steer the food security policy,

it was not endowed with authority over other sectors. This lead to a shift from an ambitious strategy to a less comprehensive one that ended up only focusing on agricultural production while "other subsystems participated infrequently or, in the case of provincial levels, used their autonomy to refrain from active implementation" (Candel, 2018). As Drimie and Ruysenaar explain (2010, p. 324; quoted in Candel 2018), the 'institutional architecture' of the initiative "remains no more than scaffolding". Not surprisingly, the generation, sharing and strategic use of information at the system level was not a task performed by any of the actors involved.

The Chile Grows with You initiative, in Chile, started in a similar way: a coordinating body was created in the Ministry of Social Development (originally at the Ministry of Planning) to steer the activities related to the initiative in three sectors (Health, Education, Childcare) and in regional and municipal authorities. Yet, its mandate was broader: included not only designing and overseeing the implementation of the initiative, but also the authority to allocate budgets and monitor compliance based on information gathered from all sectors. "Data are managed centrally by the Ministry of Social Development. Key performance indicators are used to track completeness of reporting and outcomes for children classified with developmental delays" (Molina et al 2018).

Indeed, the budget for Chile Grows with You is allocated to the Ministry of Social Development who transfer it to the ministries involved according to their performance on certain indicators (for which an information system that keeps it available and updated was created) (Molina *et al.* 2018). More importantly, the programs that are part of the strategy require this information for operating since the Ministry of Social Development would only transfer them the economic resources for targeting the people identified in the registry of the strategy.

These examples show that it is not the creation of a coordinating body, but the continuous exercise of authority which allows the integration of the policy mix.

In other words, the interaction of different instruments of an integrated strategy is not guaranteed by the design of the policy mix; it requires the authority of a decision-making body that exercise it throughout the process, for being able to continuously affect the design and operation of the policy tools based on updated and relevant information. As Molina et al (2018: 6) identify in the Chilean case, good practices regarding information use included: "collection and use of data for program management and intersectoral coordination using the program monitoring system; regular evaluation of program components and use of data for improving services; and increasing focus on developing and implementing quality standards, which are used for both tracking progress and providing incentives".

Research on other sectors point out to the importance of this integrative instrument. Vince (2015) explain the failure of Australia's Ocean Policy in part as a consequence of "limited decision-making power" of the National Oceans Office as the agency in charge of integrating this policy, whereas existing agencies "had policy capacity to deliver outcomes but were reluctant to do this beyond their jurisdictional/sectoral scope".

Conclusion

A policy mix is composed of several instruments that, working together, aim at solving complex problems. Working together as a policy mix does not mean merely coexisting without clashing, even if they are perfectly complementary or coherent, but interacting with each other, following a narrative with a shared understanding of their contribution to an overarching goal and under the authority that steers, based on information about the whole policy mix, the operating of each component of the mix. If there were no need of interaction, each element of the policy mix

could work separately. If there is interaction, then a process of policy integration is required.

Paraphrasing Givoni (2014), we suggest that, if there were no interactions between policy instruments within a mix, there was no use of and need for policy integration. We have shown that there are two instruments that integrates them: a narrative and a decisional platform. But have also argued that it is not the mere existence of such instrument, but their continuous performance of functions to specify the attributes of the problem and the specific contributions of each subsystem (and their corresponding instruments within the mix) and a decisional platform with authority and strategic information to steer the operation of the mix as a whole. These integrative instruments make unavoidable the interdependency among policy tools.

By using examples from the existing literature on policy integration, we have seen these integrative instruments explain the process of integration, and that when they are incomplete or do not perform their functions adequately, they are part of the explanation for the shortcomings of this process. The argument could be further tested in experiences of policy integration in new sectors and countries.

With this argument we seek to move forward the discussion on policy integration for better understanding the way in which it works, and by doing so, to inform decision makers about the specific policy tools necessary to achieve it and for opportunities for redesign (Woo 2018) when policy integration is not working.

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