

■ *Discussant's Comment*

Enhancing Joined-Up Government and Outcome-Based Performance Management through System Dynamics Modelling to Deal with Wicked Problems: the Case of Societal Ageing

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The paper by Auping *et al.* (2015) focuses on the topic of societal 'ageing', that is, 'a population process, caused by declining fertility and mortality rates, which manifests itself in the growing number of older persons in society' (Huber, 2005). A broader definition frames societal ageing as a 'demographic, structural, cultural and economic transformation resultant from the increase in the number and proportion of "older" people within society' (Victor, 2005, p. 5).

'Double societal ageing' today characterizes most developed countries, which experience both an increase in the percentage of older people and in their life expectancy. In terms of public policy and finance, the relevance of this phenomenon is related to its effects on healthcare budgets, pension costs and fiscal sustainability.

From the very beginning of the paper, the topic is clearly framed in the broad context of 'wicked problems', which characterize most of governmental planning, with a specific concern with social issues (Rittel and Webber, 1973, p. 160). These are complex policy problems featured by

high risk and uncertainty and a high interdependency among variables affecting them.

'Wicked problems', as in the context analysed in the paper, cannot be clustered within the boundaries of a single organization, or referred to specific administrative levels or ministerial areas. They are characterized by dynamic complexity, involving multi-level, multi-actor and multi-sectoral challenges. Other examples of such problems include social cohesion, climate change, unemployment, crime, homelessness, healthcare, poverty, education and immigration (Laegreid and Rykkja, 2014; Bianchi and Williams, 2015).

Such problems are usually ingrained in major social issues of modern life, whose interpretation is not univocal, because it depends on the adopted value perspectives. Therefore, by simply gathering more information can be insufficient to understand and resolve them. This implies that there is not a definitive (i.e. true or false) solution to them; there can be rather a 'good' or 'bad' way to frame them and to profile one or more consistent (or inconsistent) alternative decision sets (Head and Alford, 2013). Wicked problems also imply a multitude of stakeholders. Both the different interests and the multiple mindsets or

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cultures related to the policy makers who may affect a wicked problem imply that—in order to effectively deal with it—decisions should be made based on a strategic learning process, focused on conflict resolution and dialogue among the players. Even material and information delays play a major role in characterizing the hidden feedback structure underlying wicked problems' behavior. Therefore, enabling decision makers to promptly perceive weak signals of change and to provide reliable keys to frame them is an important attribute for diagnostic and interactive control systems (Simons, 2000, p. 207–229) in those public sector organizations that should address wicked problems.

Public administration has always experienced difficulties in dealing with such problems: specifically with respect to its capability to support planning, policy design, decision making, results measurement, assessing policy outcomes, coordinating decision makers and making them accountable to targets. Examples of such difficulties are witnessed by hierarchical forms of organization and systems of control, focused on input monitoring or process compliance, resulting into sharp disconnections between different institutions and among agencies. A consequence of such formal perspective to public administration, aimed to pursue an 'illusion of control'—rather than a learning-oriented approach in dealing with wicked problems—has been referred to as 'muddling through' (Lindblom, 1959).

Although, since the 1980s, 'New Public Management' (NPM) reforms were designed to fix the described limitations of traditional public administration (Meier and Hill, 2005, p. 55), their emphasis on decentralization of power has produced unintended effects on the capability of the public sector to affect the outcomes associated with wicked problems such as in the case of societal ageing. In fact, such reforms have been a major cause of governance fragmentation (Christensen and Laegreid, 2007a) and lack of communication in and among agencies.

What policies would be effective in decreasing the potential negative effects of societal ageing, being acceptable to stakeholders? Which limits apply to public expenditure related to societal ageing, as part of gross domestic product?

The paper from Auping *et al.* (2015) clearly demonstrates the limitations of current approaches adopted by governments in dealing with such problem. Policy makers are prone to take symptomatic solutions (e.g. increasing retirement age) to the issues of fiscal sustainability emerging from societal ageing. The use of a sectoral approach often leads to lack of coordination in policy-making between different public agencies, non-profit and other private stakeholders. In the broad context of societal ageing, policy-making refers to several jurisdictions, both in terms of level (e.g. national, regional, local) and domain (e.g. labour, social policies, social security, health care, industry, finance).

Such fragmentation has been a major cause of the public sector difficulties to design and implement policies that can improve cohesion. To counteract these problems, a number of countries have started to look beyond NPM and to develop new approaches that may enable policy makers to deal with wicked problems (Halligan, 2010). To describe such process, both the scientific literature and practitioners have coined different terms. Among them are the following: joined-up government¹ (Christensen and Laegreid, 2007b and 2013; Christensen *et al.*, 2014),² whole-of-government (OECD 2005), integrated governance, outcome steering (Hood, 2005), holistic governance and new public governance (Osborne 2010).

To implement such post-NPM processes, three main sets of levers should be synergetically managed by governments, that is, institutional reforms, organization structures and performance management systems and cultural/social

¹ According to Pollit (2003, p. 35), "Joined-up government" is a phrase that denotes the aspiration to achieve horizontally and vertically coordinated thinking and action. Through this coordination, it is hoped that a number of benefits can be achieved. First, situations in which different policies undermine each other can be eliminated. Second, better use can be made of scarce resources. Third, synergies may be created through the bringing together of different key stakeholders in a particular policy field or network. Fourth, it becomes possible to offer citizens seamless rather than fragmented access to a set of related services'.

² Christensen and Laegreid (2013) describe the Norwegian experience in dealing with such wicked problems, with a specific reference to welfare services. In 2005, Norway merged the central pensions and employment agencies and creates a partnership with locally based welfare services. In the years 2006–2009, Norwegian municipalities established local one-stop-shop welfare offices. In 2008, regional pension units and administrative back offices were established in the counties.

systems. The idea is to design and implement more flexible and pervasive governmental systems that may foster a more pragmatic, less formal and intelligent collaboration among different stakeholders, not only in the public sector sphere.

For instance, in the UK, the Blair government implemented intensive whole-of-government programmes, which led to a stronger role of the centre (Christensen and Laegreid 2013). Australia and New Zealand governments established new organizational units (e.g. cabinet committees, inter-ministerial or inter-agency collaborative units, inter-governmental councils, task forces, cross-sectoral programmes) to foster coordination among different decision makers (Halligan and Adams 2004).

The implementation of such post-NPM reforms also implies the use of an outcome-oriented view of performance to frame and assess the desirability of the effects produced by the adopted policies. This approach does not only consider effects in the short run but also in the long run. Furthermore, it does not only focus them in the perspective of a single unit or institution but also under an inter-institutional viewpoint (Bianchi, 2012), that is, that of the relevant system structure generating observed behavior.

By focusing only single (i.e. isolated) input and output measures (e.g. pension or long-term care expenditures, number of retirees, number of working hours), policy makers may be inhibited to assess the aptitude of their own actions to find sustainable solutions that may deal with the problems related to societal ageing.

On the other hand, by combining such measures with outcome performance indicators—for instance related to the community's quality of life (e.g. change in life expectancy from the prevention of unhealthy behavior), labour participation and productivity, productive ageing, stakeholders' perceptions and public support to government policies—may allow governments to better assess the sustainability over both time and space of their own policies to face societal ageing.

A third lever to implement post-NPM reforms refers to cultural/social systems. A fundamental

change, in terms of cross-sectoral collaboration and coordination, is possible if a strong sense of values, team building, inclusion and trust is fostered among stakeholders. Changing culture and building trust is not an easy and fast process; it requires that a learning-oriented and systems approach is adopted to support the performance management cycle of each unit.

The previous comments provide a substantial basis to assess the strong contribution of the paper by Auping *et al.* (2015) to both the scientific literature and practice on the investigated field. System dynamics (SD) modeling, possibly combined with other methods (such as robust decision-making), may significantly contribute to a concrete implementation of post-NPM programmes to deal with wicked problems. The model described by the authors demonstrates the benefits of an outcome-oriented view of performance management to policy making. It also shows how SD modeling can support substantially the performance management cycle in public sector organizations to frame and gauge intangibles (e.g. perceptions and public support to governmental policies). Last, but not least, the paper shows how SD modeling can support an assessment of the outcomes referred to different interconnected viewpoints, that is, retirement age, prevention of unhealthy behavior, and labour productivity, and to assess the financial/fiscal sustainability of different scenarios.

Therefore, the model described in the paper by Auping *et al.* is a clear demonstration of how SD can support strategic planning, policy design and performance management in the public sector, according to an outcome-oriented view.

REFERENCES

- Auping WL, Pruyt E, Kwakkel JH. 2015. Societal ageing in the Netherlands: a robust system dynamics approach. *Systems Research and Behavioral Science* 32: 485–501.
- Bianchi C. 2012. Enhancing performance management and sustainable organizational growth through system dynamics modeling, In *Systemic Management for Intelligent Organizations: Concepts, Model-Based Approaches, and Applications*, Groesser SN, Zeier R (Eds.), Springer-Publishing: Heidelberg.

- Bianchi C, Williams DW. 2015. Applying system dynamics modeling to foster a cause-and-effect perspective in dealing with behavioral distortions associated with a city's performance measurement programs, *Public Performance & Management Review* 38(3): 395–425.
- Christensen T, Laegreid P. 2007a. Transcending New Public Management, Ashgate: Surrey.
- Christensen T, Laegreid P. 2007b. The whole-of-government approach to public sector reform. *Public Administration Review* 67(6): 1059–1066
- Christensen T, Laegreid P. 2013. Welfare administration reform between coordination and specialization, *International Journal of Public Administration* 36: 556–566, 2013.
- Christensen T, Fimreite AL, Lægred P. 2014. Joined-up government for welfare administration reform in Norway, *Public Organization Review* 14(4): 439–456
- Halligan J. 2010. Post-NPM responses to disaggregation through coordinating horizontally and integrating governance, In *Governance of Public Sector Organizations. Proliferation, Autonomy and Performance*, Lægred P, Verhoest K. (Eds.). Basingstoke: Palgrave Macmillan.
- Halligan J, Adams J. 2004. Security, capacity and post-market reforms, public management change in 2003. *Australian Journal of Public Administration* 63(1): 85–93.
- Head B, Alford J. 2013. Wicked problems: implications for public policy and management, *Administration & Society*, Published online, doi: 10.1177/0095399713481601
- Hood C. 2005. The idea of joined-up government. A historical perspective. In *Joined-Up Government*, Bogdanor V (ed.), Oxford University Press, Oxford: British Academy.
- Huber B. 2005. Implementing the Madrid plan of action on ageing. *United Nations Department of Economic and Social Affairs*. http://www.un.org/esa/population/meetings/EGMPopAge/EGMPopAge_21_RHuber.pdf
- Laegreid P., Rykkja L. H. (2014). Governance for complexity – how to organize for the handling of «wicked issues»? , Stein Rokkan Centre for Social Studies, <https://bora.uib.no/handle/1956/9384>
- Lindblom CE. 1959. The science of “muddling through”, *Public Administration Review* 19(2): 79–88.
- Meier KJ. 2005. Bureaucracy in the twenty-first century, In *The Oxford Handbook of Public Management*, Ferlie E, Lynn L, Pollitt C (Eds), Oxford University Press: Oxford. 51–71.
- OECD. 2005. Modernizing government. The Way Forward. Paris, <http://www.oecd.org/gov/modernisinggovernmentthewayforward.htm>
- Osborne SP (ed.). 2010. *The New Public Governance: Emerging Perspectives on the Theory and Practice of Public Governance*, Routledge: London.
- Pollit C. 2003. Joined-up government: a survey, *Political Studies Review* 1: 34–49.
- Rittel HWJ, Webber MM. 1973. Dilemmas in a general theory of planning, *Policy Sciences* 4: 155–169.
- Simons R. 2000. *Performance Measurement & Control Systems for Implementing Strategy*: Pearson, Upper Saddle River, New Jersey.
- Victor C. 2005. *The Social Context of Ageing*, Routledge: Abingdon.