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# Global reform meets local context: cultural compatibility and practice adoption in public sector reform

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#### Abstract

**Purpose** – The paper proposes that public sector organizations facing institutionalized reform pressure may not only integrate the reform into their operation when it fits but also pace the integration while undergoing organizational cultural transformations to fit with the reform. The newly cultivated cultural characteristics, nonetheless, need to be compatible externally with the ideational basis of the reform and internally with existing values and beliefs embodied by the organizations.

Design/methodology/approach — Building on a neo-institutionalist perspective, the paper develops a model which considers the possibilities and conditions that local cultural change in the reforming organizations may facilitate reform integration. To test the model's analytical potential, the paper analyzed reform responses of semi-autonomous agencies from Denmark, the Netherlands and Sweden under the New Public Management (NPM) reform. Ordinary least square (OLS) regression models were performed on the survey data collected from agency heads (or representative) during the peak of the reform trend. Analyzing this sample of later adopters whose government generally enjoyed high degrees of capacity and autonomy provided a preliminary test to the model's potential.

**Findings** – Significant statistical relations were found between the adoption of operation-level NPM practices and the extent that an agency's cultural characteristics fit with both the ideational basis of NPM and the exiting value-belief mix the agency embodied. Agency characteristics of "proactive responsiveness" and "goal-oriented cooperation" were found significantly related to adoption of NPM practices, showing the possibility of cultivating local cultural changes in reforming organizations.

**Originality/value** – While compatible with neo-institutionalist emphasis on local continuity, the paper describes an alternative scenario of reform integration for public managers.

**Keywords** Public sector reform, Adoption, Agencification, Neo-institutionalism, Agency, Organizational culture

Paper type Research paper

The diffusion and adoption of public sector reforms has long interested public administration scholars (de Vries Hanna and Bekkers, 2018; Guinn and Straussman, 2017; Schmitt, 2014; Andrews, 2013). Divergent reform trajectories are often observed across different countries, as public sector organizations around the world respond differently to changing public and international expectations (Pollitt and Bouckaert, 2011; Christensen and Laegreid, 2003). While early reformers strive to realize raw reform ideas in practice, later reformers often have to meet with the institutional pressure to reform as new reform measures gain popularity and become standard or best practices. They need to reconcile these new ideals and practices with their existing operations and local socio-political contexts, resulting in divergent paths and varying degrees of reform adoption.

An example of such diffusion/adoption dynamics may be found in the earlier global wave of administrative reform widely known as New Public Management (NPM). Contextual



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institutional features such as governmental structure, constitutional setting, administrative tradition and country culture have been found to be major factors linking with national trajectories of reform adoption (Pollitt and Bouckaert, 2011; Painter and Yee, 2011; Yesilkagit and Christensen, 2010; Cheung, 2011; MacCarthaigh *et al.*, 2016; Bach *et al.*, 2017). Their basic argument is that although worldwide public sector reforms may have been driven by similar reform ideas, the local contexts in which public sector organizations are embedded affect their adoption.

This study focuses on the potential role of organizational culture in divergent reform trajectories and asks how public organizations' cultural characteristics might influence the uptake of reform practices (Pollitt and Bouckaert, 2009, pp. 156–158). Like other structural forces, organizational cultures are generally quite stable over time. Yet they are not unchangeable (Selznick, 1957; Schein, 2004): how might this "stable-but-changeable" nature of organizational cultures play a role in public sector reform adoption? If cultures do play a role, how could this role be compatible with existing accounts of reform institutionalization process which tend to emphasize "ceremonial adoption", "form-operation decoupling" or in general local continuity (Meyer and Rowan, 1977)? While the diffusion or "spread" of reform across countries is widely studied (Verhoest et al., 2012; Pollitt et al., 2004; OECD, 2002), this study focuses on how public organizations' internal cultural characteristics might influence their extent or "depth" of adoption as a reform diffuses and institutional reform pressure builds up.

Below, we first review major models of administrative reform diffusion/adoption in the literature and discuss their limitations. We then look into semi-autonomous agencies – a special type of public sector organization featured in the global trend of NPM reform – and develop hypotheses about potential relations between organizational culture and decisions on reform practice adoption. We next present a preliminary test of these hypotheses with these agencies in a sample of later NPM reformers (i.e. Denmark, The Netherlands and Sweden) using survey data collected when the reform trend reached its peak. Last, the results and limitations of the test, as well as the implications of our study, are discussed.

#### The adoption of institutionalized public sector reforms

From a neo-institutionalist perspective, the diffusion and adoption of public sector reforms can be understood as an institutionalization process. Once a reform is institutionalized, there is a strong isomorphic pressure for public organizations in the same organizational field to adopt the reform similarly, as doing so is essential to their legitimacy and survival prospects (DiMaggio and Powell, 1983). A classic example from Tolbert and Zucker (1983) showed that legitimacy concerns, instead of instrumental considerations, drove the spread of civil service reform among American cities in the beginning of the last century.

Studies under this perspective argue that organizational responses to institutionalized pressure are mainly "ceremonial" in nature. Given the major concern for legitimacy, adopters of institutionalized reforms are likely to respond with changes in their organizational form but *decouple* it from their internal operation (Meyer and Rowan, 1977), resulting in the persistence of pre-reform practices despite the appearance of formal change. As Christensen and colleagues suggest (2007, pp. 57–78; also Brunsson, 1989), the phenomenon may be understood from a "myth" perspective; public managers may discuss about reforms and framing reform efforts as fulfilling the institutional pressure, but they do little to actually realize them internally.

In part to reconcile the emphasis on local continuity with growing observations of different reform patterns, some scholars have developed revised models to understand reform diffusion/adoption differently. Their models posit that adopters conceive the institutionalized reform as an idea, and then translate and edit it into forms that fit with local contexts (Røvik, 2011; Smullen, 2010; Sahlin and Wedlin, 2008). The original logics of the reform, with its presumed goals and means and causes and effects, are reformulated, and local lexicon

including "concepts, categories, prototypical examples, counter-examples, references and ideological frameworks" is used to reframe the reform (Sahlin and Wedlin, 2008, p. 226). Alternatively, Røvik (2011) uses a "virus" metaphor to describe this idea-handling process. In encounter with the reform-virus, prospective local hosts may acquire "full immunity" or suffer from "full infection", whereas the virus may also transform in the process, achieving changes such as "mutation" and "maturation" (Røvik, 2011, p. 646). Overall, the adopting agents alter the underlying conceptions and logics of the reform for the local contexts, resulting in changes of the purposes and usages associated originally with the reform.

Another stream of literature emphasizes the influences of wider political-administrative institutional contexts in shaping reform trajectories. This "transformative perspective" (Christensen *et al.*, 2002) stresses the persistent influence of these structural institutions on the adoption of institutionalized reform, constraining public sector organizations from fully embracing the reform (see also Christensen and Laegreid, 2011; Cheung, 2011). Local institutions such as government structure (Painter and Yee, 2011), constitutional setting (MacCarthaigh *et al.*, 2016), country culture (Yesilkagit and Christensen, 2010) and administrative tradition (Bach *et al.*, 2017) have been identified as major determinants of the process. This perspective sees reformers as conducting a "consistency" test on the compatibility between the institutionalized reform and the local contexts, and different test results have generated different reform outcomes (Brunsson and Olsen, 1993, p. 22). In the case of NPM reform, for example, the "many houses" of political-administrative regimes have given rise to "Neo-Weberian States" and varying "NPM-ness" in different reforming countries (Pollitt and Bouckaert, 2011).

Notably, the above variations tend to be sceptical about the potential embracing of institutionalized reform. While earlier neo-institutionalists express this scepticism by theorizing the decoupling of internal operation from formal structure, the translation/virus accounts predict an infusion of local conceptions and logics into the adopted reform measures. The transformative perspective meanwhile casts local political-administrative contexts mainly as constraining forces shaping the trajectory of reform. In essence, these variations anticipate a by and large continuation of local orientations when public sector organizations respond to institutional reform pressure.

Building on these works, this study similarly wonders if organizational culture plays a role in the adoption of institutionalized public sector reforms. Nevertheless, we ask further whether local organizational culture may be transformed to accommodate for more genuine reform integration in the reforming organizations. The question is important as public sector innovations, especially those that "worked", are often being promoted to reforming countries for improving their public administration (Guinn and Straussman, 2017), but these foreign practices might also be rejected by the reforming organizations because of local cultural incompatibility (Andrews, 2013). We wonder if genuine reforms are possible, with institutionalized practices adopted for *their* supposed conceptions and logics in the reforming organizations.

Meanwhile, organizational culture is usually seen as modifiable. Selznick (1957) and Schein (2004), for example, have long argued for the importance of institutional/cultural leadership and discussed various strategies for organizational cultural development. Leaders are encouraged to cultivate desirable cultural characteristics in their organizations (see also Cameron and Quinn, 2006). The literature on institutional work (Lawrence, Suddaby and Leca, 2011), or the "purposive action of individuals and organizations aimed at creating, maintaining and disrupting institutions (p. 215)", also argues that organizational actors, even though they are local embedded, can facilitate institutional change inside, or even outside, their organizations. Could organizational culture be changed for reforms, and what might its role be given the neo-institutionalist emphasis on local continuity? Below, we propose a reform integration model which takes these questions into account.

# Value and belief compatibility for reform integration

Reform when fit

Drawing on Brunsson and Olsen's (1993) earlier insight that "organizational responses to external reform effort are affected by the degree of consistency between the value basis and beliefs underlying a proposed reform and the value basis and beliefs of an organization" (p. 22), the study proposes that reform integration, that is, adopting reform measures with their supposed conceptions and logics, can be influenced by the fit between the ideas underlying the institutionalized reform and the values and beliefs embodied in the reforming organizations. Institutionalized reforms may be understood as normative and cognitive ideas (Schmidt, 2008, pp. 306–307) [1]. Normative ideas specify "what is good or bad about what is" and "what one ought to do"; they "attach values to ... and serve to legitimate" reforms "through references to their appropriateness". Cognitive ideas specify "what is and what to do"; they are causal ideas which "provide the recipes, guidelines, and maps ... and serve to justify" reform efforts "by speaking to the interest-based logics and necessity" of the reforms. If the constitutive normative and cognitive ideas of the institutionalized reform are compatible with some values and beliefs held by members in the reforming organizations, the reform may be seen as fitting for the reforming organizations.

This understanding of fit is different from that in contingency theories (Thompson, 1967; Lawrence and Lorsch, 1967; Donaldson, 1987) which focus on instrumental fit, or whether organizational structure fits with environmental contingencies, and how that fit influences performance. Our model posits that the extent of reform integration depends on the degree of fit between elements of reform ideas and elements of values and beliefs which constitute the culture of the reforming organizations; the higher the degree of cultural fit, the deeper the integration (Ansari *et al.*, 2010; Christensen *et al.*, 2007, pp. 37–56). Instead of modifying the conceptions and logics of the reform, the reforming organizations may adjust its extent of adoption. Adopting only when the reform fits promotes local acceptance of new reform practices, minimizing the need for decoupling.

#### Reform to fit

Furthermore, our model suggests that the reforming organizations may undergo cultural transformations which make them fit for the reform, Reforming organizations may not only adopt reform practices when they fit but also undergo transformations to make them fit, as long as the resultant organization cultures are compatible with existing cultural elements (values and beliefs) embodied in the reforming organizations. This understanding aligns with more recent research on the proactive role of public managers in facilitating gradual institutional/cultural change in their organizations. The literature on institutional work (Lawrence et al., 2011), for instance, reinvigorates old institutionalists' interests (Selznick, 1957) in managerial infusion of desirable community and societal values into organizations, and focuses on their purposive actions of creating, maintaining and disrupting institutions. But as Christensen and Laegreid (2007) observe insightfully, institutional leaders "will have to 'administer the necessities of history', meaning being sensitive to cultural traditions and guarding historical paths", while "gradually changing cultural traditions in order to adapt to a new and changed environment and context ... [Their efforts] may involve socialization, training, and manipulation of symbols aimed at changing the attitudes of the organization's members" (p. 5). This cultural transformation process may be seen as a gradual idea-assimilation process for the reforming organizations, gradually integrating elements of the reform's ideational basis into the organization, the result of which influences the extent public managers adopt foreign reform practices. Important to this model is what new amalgamations of cultural characteristics may be successfully cultivated in the reforming organizations to facilitate gradual reform adoption. Can there be more than one such mix compatible with both ideational elements of the reform and existing cultural landscape of the reforming organizations? Do they similarly facilitate reform adoption? These are empirical questions, and with them we turn to the case of NPM reform in semi-autonomous agencies.

## Semi-autonomous agencies and New Public Management reform

The globally diffused NPM reform presents a good case for exploring the empirical manifestations of our proposed model, providing a preliminary test of its analytical potential. NPM was a major public sector reform in the past few decades. It enjoyed global presence and had a lasting impact even until today. Many public sector organizations in different countries were influenced by the reform, adopting some of its prescribed practices. New management measures were introduced to the lexicon and toolkits of public administration worldwide – structural ones such as decentralizing, autonomizing and privatizing, as well as operational ones such as managing by objectives, flexible and long-term planning, contracting-out, measuring performance and producing public services that cater to the "taste" of the citizens (see Pollitt and Bouckaert, 2011 for details).

Agencification, or the structural disaggregation of government executive units, represents one key reform measure in NPM (Hood, 1991). Large numbers of semi-autonomous agencies have been created by governments around the world in recent decades (Verhoest et al., 2012; Pollitt et al., 2001; OECD, 2002). These agencies operate at arm's length of the government. They are in charge of policy implementation such as providing public service and regulating certain target group(s) and/or policy domain(s). A great variety of semi-autonomous agencies can be found. Examples may vary per country, but they often include social welfare agencies like schools and hospitals, as well as independent regulators like central banks, authorities regulating airports, railways and telecom (for an overview of agencies in 30 countries, see Verhoest et al., 2012). Some agencies do not possess legal independence. Examples include the Next Steps Agencies in the UK, agenzia in Italy and the trading funds in Hong Kong. Some are statutory bodies established either on public or private law basis, such as public establishments (France, Italy, Portugal), non-departmental bodies (UK), statutory corporations in Australia, indirect administration in Germany, verket in Sweden and ZBOs in the Netherlands (Van Thiel, 2012).

Different types of agencies are granted varying degrees of structural managerial autonomy to execute their assigned tasks (Hood, 1991; Van Thiel, 2004; Verhoest *et al.*, 2004). For example, agencies can make independent personnel and financial management decisions and utilize management techniques from the NPM "basket" such as management by objectives and performance measurement. This is expected to lead to improved performance as agency managers are expected to focus more on outputs and results in their operation rather than on inputs and procedures, and will become more attuned to the expectations of the general public (customers). Such expectations of structure-operation alignment are generally in line with the logic of NPM advocates (Osborne and Gabler, 1992) and the underlying assumptions of models of (effective) political and administrative oversight (e.g. Weingast and Moran, 1983; Schwartz, 1994). If this intended logic is true, one may hypothesize that *the extent of an agency's adoption of operation-level NPM practice is positively associated with its degree of managerial autonomy* (H1).

However, as discussed above, structural reform is not necessarily associated with operational change. Agencification may change the reforming organization's structural form, but it does not guarantee changes in operational practice. Agencies may decouple their operation from their granted autonomy; business may continue as usual, and management in these organizations may remain hierarchical and rule-driven, as in the traditional paradigm of public administration. According to our model, the extent to which agencies adopt reform in their operations depends on the cultural fit between the ideational bases of the reform and existing cultural characteristics (values and beliefs) embodied by the agencies. In an

institutionalized reform environment, the adoption of reform practices hinges on the presence of a reform-fitting set of values and beliefs in the agency, allowing the reforming organizations to fulfil new legitimacy expectations without undermining internal integrity. The extent to which an agency's values and beliefs are consistent with the underlying ideas of NPM reform may be expected to vary with the extent of adoption of operational-level NPM practice. The extent of adoption of operation-level NPM practice is positively associated with the extent to which an agency embodies an NPM-fitting set of cultural characteristics (H2).

## Reform integration and cultural compatibility

Our model above suggests that there are many possible mixes of cultural characteristics which agency managers may cultivate to facilitate reforms, as long as they are compatible with some ideational elements (normative and cognitive) of the reform, and some existing cultural characteristics (values and beliefs) embodied in the reforming organizations. What might these mixes be for semi-autonomous agencies under NPM reform?

Historically, public organizations have long emphasized the primacy of procedurality and impartiality since the late 19th century. Earlier government bureaucracy in the USA was established in part to eliminate the spoils system which awarded positions in the federal government based on political affiliation rather than merit (Tolbert and Zucker, 1983). It got mature in times of high demand for operational certainty in the World Wars and became a major form of government in many developed countries subsequently. Similar forms of public administration were observed among Scandinavian governments in which one can find "the jurists' golden age" and "dominance" after Second World War (Christensen *et al.*, 2007, p. 49). They are supported by the common use of rule-based authorities and documentation, as well as a hierarchical arrangement of different ranks, among others. Public organizations operating under these arrangements emphasize stable structures and usually have an internal focus (see Pollitt and Bouckaert, 2011, p. 50).

The values and beliefs embodied by these organizations stand in great contrast with the ideals of NPM which stress customer orientation, competition, results and quality of services. Albeit often criticized as an assortment of values, beliefs and practices to make governments operate more like a business, NPM may be considered as underpinned by two major ideas (Hood, 1991; also Pollitt and Bouckaert, 2011; Christensen and Laegreid, 2003; Osbourne and Gaebler, 1992). One relates to the ideology of neoliberalism (Hayek, 1944; Friedman, 1962), which emphasizes the use of market coordination mechanisms such as competition and free choice based on local/private information. Another pertains to the logic of scientific management (Taylor, 1967), which champions a larger managerial role of government officials for better performance. In the USA, for example, the reform was branded as "reinventing government", stressing the introduction of a performance-based and customeroriented reinvention at all levels of governments (Kamensky, 1996, 2018). What alternative cultural characteristics might allow semi-autonomous agencies to fit with both the ideational basis of NPM and principles of traditional public administration?

As for agencies in democratic regimes, political ideas such as public accountability and bureaucratic responsiveness have been guiding the operation of government bureaucracy. Like government bureaucracy, semi-autonomous agencies are also likely to find these ideas amicable: being responsive to the people, paying attention to their expectations and finding ways to address them. With growing and increasingly divergent needs and aspirations from the people, public managers may build on these democratic emphases and cultivate the cultural emphasis of serving better the people. Agency managers may, for example, persuade other agency members to be more willing to experiment with alternative implementation methods, and they have a higher tolerance for potential failures in the experimentation process for the purpose of serving the people better. With such changes, agencies are likely to

come up with and try out new policy instruments and delivery styles and take more risk for potential improvement. Emphases such as these are compatible with both the responsiveness emphasis of democratic regimes and to some extent the customer-orientation underlying NPM, resulting in deeper NPM integration. Thus, the extent to which an agency has managed to cultivate a cultural characteristic which emphasizes "proactive responsiveness" is positively associated with the extent of adoption of operation-level NPM practice (H3a).

Meanwhile, traditional bureaucratic organizations tend to emphasize hierarchical seniority and discipline to ensure conformity, in part to guarantee its reliability for operational certainty. Unintended consequences of these arrangements are nevertheless observed, such as bureaucratic rigidity, "goal displacement" and "ritualistic rule-following" (Crozier, 1964; see also Jung, 2011). These dysfunctions are reinforced by further managerial efforts to introduce more impersonal rule and centralize control power, and by organizational members' subsequent countering efforts to protect and isolate their own units and strata and develop parallel power relationship wherever possible (Crozier, 1964, p. 187). At first sight, these emphases and resultant dynamics differ considerably from NPM's emphasis on customer orientation and service quality.

Drawing on Pierre et al. (2011), we suggest that reformers may reinvigorate agencies by shifting their management emphasis from input- to output- or goal-oriented control. Instead of breaking up existing closely knitted but externally isolated units and strata, which are reinforced by "concomitant group pressure (Crozier, 1964, p. 187)", agency managers may stress the collective effort needed to attain the latest missions of the organizations. Public managers may build, on existing group norms and solidarity, an organizational level esprit de corps for these goals, and this stronger identification with the organization could enhance their willingness to cooperate across teams and even the whole organization. Cultivating these cultural characteristics probably demands strong managerial leadership, but doing so can preserve the structural stability and hierarchical control emphasized in traditional public administration. Through mobilizing existing teams and encouraging them to work with one another, agencies may be more compatible with the output-orientation of NPM, allowing for a larger extent of NPM practice adoption. Thus, the extent that an agency manages to cultivate a cultural characteristic which emphasizes "goal-oriented cooperation" is positively associated with the extent of adoption of operation-level NPM practice by the agency (H3b).

The above cultural characteristics discussed are but two potential ways for integrating NPM ideas into organization hived-off from traditional public administration, the origin of most semi-autonomous agencies. For other public sector reforms, alternative cultural characteristics are likely needed, fostered from different constitutive ideas of the reform and the value-belief landscape of the reforming organizations.

### Data and method

To test the proposed model's analytical potential, the paper analyzes reform responses of semi-autonomous agencies from Denmark, the Netherlands and Sweden under the NPM reform. Compared to pioneers such as New Zealand, the United Kingdom and the United States, the three countries are later NPM reform adopters. Moreover, they have all established semi-autonomous agencies in the country (Verhoest *et al.*, 2012). Denmark saw a major increase in its agency number around the end of the 1980s and the beginning of the 1990s (Hansen, 2012). The number of agencies in the Netherlands skyrocketed in the 1980s and increased even further in the 1990s (Yesilkagit and Van Thiel, 2012). The case for Swedish agencies is a little special. Autonomous agencies have been a relatively common form of organizational arrangement in Sweden even before the reform had become a global wave (see Sahlin-Andersson, 2001). While its number decreased slightly in the 1990s, their use of result-oriented management techniques such as budgeting and evaluation has grown overall (Niklasson, 2012; Niklasson and Pierre, 2012).

Our sample of semi-autonomous agencies is useful for testing our hypotheses. First, this type of public organizations lets us probe into the potential relations between formal reform change (management autonomy) and operation-level change (the adoption of NPM practices). Second, the governments of these three countries enjoy relatively high autonomy in the face of internationalized reform pressure. In contrast to some less-developed countries in Africa and Asia, they are long-standing members of the European Union. They do not need to rely on foreign aid or debt relief from international organizations and have no conditionality-like legal obligation to adopt the best practices they promote [2]. Meanwhile, the three countries are similarly mature parliamentary democracies. Compared to other high-income, developed countries, they share traits of corporatist states, with organized interests in the society well integrated into their respective public administration and policy-making (Lijphart and Crepaz, 1991, p. 245). Their public administrations are likely to be influenced by local concerns more than international pressure. Also, public sector organizations in these countries are endowed with relatively strong capacity and autonomy. Despite slight differences in the form of ministerial accountability ("individual" in the Netherlands vs "collective" in Sweden), these countries display a similar agency governing style of "weak" executive dominance" over their agencies (Christensen and Yesilkagit, 2006, pp. 212–215). With their country's developed economies, mature democracies and strong endowment in public sector, semi-autonomous agencies in these countries should have the strongest ability to act against any global institutional reform pressure. As our hypotheses require strong organizational-managerial capacity to cultivate local cultural change and stand against external pressure, we expect reform response from these agencies to be good test cases for the hypotheses.

Data were collected through a survey questionnaire adopted from the international COBRA study [3]. The questionnaire contained items measuring the perceived levels of autonomy and control of government agencies, the adoption of various management practices, organizational cultural characteristics, performance and so on. Participating national research teams administered the questionnaire to the head or his/her nominee of all agencies in their belonged jurisdictions. The Netherlands survey was conducted in 2006, and in Denmark and Sweden in 2009. An advantage of examining these historical data is that they showed us the agencies' responses during the peak of the NPM trend, arguably a period of largest global institutional pressure [4]. The average response rates for the variables used in our models ranged from 59.8% to 73.2%. Examples of participating agencies include independent regulators and public service delivery agencies such as benefits agencies. These respondents are not necessarily representative of all agencies in these countries, but as a group of later adopters whose government generally enjoys high degrees of capacity and autonomy (Fukuyama, 2013), the corresponding analytical results are indicative of the potential of our hypotheses: If cultural hypotheses hold no water among these agencies in these countries, it is hard to expect them to work elsewhere. Table 1 shows the descriptive statistics of and correlation coefficients among all the variables (see Appendix for operationalizations).

While NPM encompasses a wide range of ideas for reforming bureaucratic structures and processes (Hood, 1991), we heuristically focus on some key internal practices of NPM-style management as our dependent variable. Agency managers were asked to what extent the following activities took place in their organization: (1) customer surveys, (2) internal steering of the organizational subunits and lower management levels by objectives and results, (3) planning in the form of a multi-year plan or a (long-term/future) business plan and (4) development of innovative products and/or services. A three-point scale was used for *each* of these four questions (0 = no; 0.5 = to some extent; 1 = to large extent), and an aggregate score was created through summation.

	N	Min	Max	Mean	SD	П	2	3	4	2	9	7	8	6	10	11
1. NPM practice	435	0.00	4.00	2.24	0.88											
2. Managerial autonomy	380	0.00	10.00	69.7	2.11	0.14										
3. Proactive	436	1.00	7.00	4.52	1.28	0.32	0.19									
responsiveness	001	7	5	ç	6	-	0	ç								
4. Goal-oriented	439	T.07	00.7	20.0	 8	0.19	0.00	0.42								
cooperation																
5. Regulation	433	0.00	1.00	0.22	0.41	-0.11	-0.09	-0.22	0.04							
6. Service provision	433	0.00	1.00	0.53	0.50	0.15	0.21	0.31	-0.03	-0.56						
7. Policy formulation	433	0.00	1.00	0.02	0.14	0.03	-0.07	0.11	0.02	-0.08	-0.16					
8. Agency size	504	-6.91	10.61	2.10	2.77	0.13	0.04	-0.07	-0.06	0.05	-0.11	-0.05				
9. Without legal	632	0.00	1.00	0.62	0.49	-0.29	-0.23	-0.10	-0.02	0.02	-0.12	0.03	0.40			
independence																
10. Denmark	635	0.00	1.00	0.28	0.45	-0.04	-0.32	0.13	0.31	0.00	-0.03	0.09	-0.05	0.11		
11. The Netherlands	635	0.00	1.00	0.32	0.47	0.32	0.14	-0.03	-0.14	-0.01	0.11	-0.08	-0.38	-0.77	-0.43	
12. Sweden	635	0.00	1.00	0.40	0.49	-0.26	0.17	-0.09	-0.18	0.01	-0.07	-0.02	0.39	0.64	-0.50	-0.57

**Table 1.**Descriptive statistics and coefficients of correlation

The managerial autonomy perceived by agency managers was gauged from two reported aspects: "strategic personnel autonomy" (SPA) and "financial management autonomy (FMA)" (Verhoest *et al.*, 2004). We measured SPA by the degree to which agencies could set agency policies regarding (1) levels of salaries, (2) conditions for promotions, (3) personnel evaluation, (4) personnel appointment and (5) overall personnel downsizing (0 = no; 1 = yes). FMA was measured based on whether agencies could (1) take loans, (2) set charges for services or products, (3) shift between budgets for personnel and running costs, (4) shift between these budgets on the one hand and investment on the other, and (5) shift between budgets of different years (0 = no; 1 = yes). An aggregate score was created by summing the averages scores of both autonomies.

Measuring the extent that an agency embodies certain values and beliefs is difficult. Given our data limitations, we strived for a balance between validity and availability by relying on the assessment of our respondents for their characterization of the agencies. Although their evaluations may not capture detailed cultural variations within the agency, our respondents could provide a fair overview. Measuring their perception is also relevant as they are chiefly responsible for the pace of reform. Our empirical test thus measures the respondent's *perceived* cultural characteristics of the agency. The characteristic of "proactive responsiveness" was measured by (1) risk-taking, (2) willingness to experiment and (3) creativity, whereas the characteristic of "goal-oriented cooperation" was measured by (1) goal-orientedness, (2) team spirit and (3) cooperation with colleagues. Respondents were asked to evaluate how "characteristic" these features are of their organization. A 7-point Likert scale was given, ranging from (1) "very uncharacteristic" to (7) "very characteristic". Scores were aggregated through summation and averaged by the number of indicators.

The literature has hypothesized the possible influence of a country's cultural context on agency. Yesilkagit and Christensen (2010) found that agency's formal structural autonomy varied significantly between agencies in Denmark, the Netherlands and Sweden (Denmark as the baseline). Pollitt and Bouckaert (2011) also discussed the possible relations between the receptiveness of NPM-style management practices and different national cultures based on Hofstede's influential cross-country study (see also Verhoest et al., 2010; Hofstede, 1980, 2001). Following these studies, we controlled for the potential influence of country culture on the variation of practice adoption by introducing two dummy variables, Denmark and The Netherlands (i.e. Sweden as the baseline). The literature also points to the importance of task in public management reform (Painter and Yee, 2011; Van Thiel and Yesilkagit, 2014). To control for its potential influence, we created three task-related dummy variables: "regulation", "service provision" and "policy formulation". Finally, we also controlled for agency type (1 = without legal independence; 0 otherwise) and size (log of agency budget in million Euro).

Ordinary least square (OLS) regression analyses were conducted. Independent variables were regressed towards the adoption of operation-level NPM practice [5]. Table 2 displays the results. The aggregate model showed reasonable predictable power (F=14.671; adjusted R-square = 0.320). Significant relations in the expected direction were found between the dependent variable and the agency characteristics of "proactive responsiveness" and "goal-oriented cooperation", as well as agency size and country variable of the Netherlands.

#### Discussion and conclusion

Except for H1, the empirical results are consistent with our hypothesized expectations. The significant statistical relations between reform-fitting characteristics and the adoption of operation-level practices correspond to our expectation that elements of reform-fitting values and beliefs may facilitate the adoption of reform practice (H2). Also, the significantly positive relations found for the agency characteristics of "proactive responsiveness" and "goal-oriented cooperation" showed support to our hypotheses that reforming

IJPSM 34,2

234

	Aggregate ( $n = 291$ ) Standardized coefficient	<u>t</u> -statistics
(Constant)		
Managerial autonomy	0.036	0.640
Proactive responsiveness	0.168**	2.826
Goal-oriented cooperation	0.172**	2.985
Regulation	-0.023	-0.347
Service provision	0.099	1.409
Policy formulation	0.061	1.167
Agency size	0.316***	5.845
Without legal independence	-0.058	-0.725
Denmark	0.081	1.243
The Netherlands	0.504***	5.951
R	0.586	
R-square	0.344	
Adi. R-square	0.320	
F	14.671***	

**Table 2.**Regression model on the adoption of NPM practice by semi-autonomous agencies

**Note(s):** Various standard tests were performed to ensure the validity of the model. The results include VIFs for the coefficients are all smaller than 5, indicating no major issues of multicollinearity; White test was performed, and its result does not reject the null hypothesis of homoskedasticity; Ramsey "RESET" test was also performed, and its result does not reject the null hypothesis of functional form misspecification. Also, the model yielded largely the same results (except for a 0.05-level significant relationship for Denmark) when missing values of the variables were replaced with variable means. \*\*\*significant at the 0.001 level; \*\*significant at the 0.01 level

organizations may assume new cultural characteristics compatible with both reform ideas and their earlier values and beliefs, facilitating reform integration (H3a-b).

The results suggest that public sector organizations facing institutionalized reform pressure may not only integrate the reform into their operation when it fits but also vary the integration while undergoing organizational transformations to fit with the reform. They support an alternative scenario of reform integration compatible with the neo-institutionalist emphasis on local continuity. Genuine reform integration may be achieved when reforming organizations embody elements of cultural characteristics that are compatible externally with the ideational basis of the reform and internally with existing values and beliefs embodied by the organizations.

Conceptually, our model disaggregates the concept of organizational culture into its component parts. The treatment is different from that of common organizational culture frameworks such as Schein's (2004) holistic, three-level conception, that is, artefacts, espoused values and basic underlying assumptions, and Cameron and Quinn's (2006) competing values framework, which consists of artefacts (behaviours), values and beliefs (see Hartnell et al., 2011 for detailed comparison). Following Brunsson and Olsen (1993), the study distinguishes values and beliefs embodied by the reforming organizations from artefacts such as symbols, behaviours, norms and practices. Also, it draws on Schmidt's (2008) insight of separating the normative-cognitive ideational bases of policies and programmes, and public sector reforms in our case, from policy positions advocated by different groups. These disaggregations lay the foundation for our proposed model, allowing the comparison between normative-cognitive ideational bases of reform proposals and the value-belief mixes the reforming organizations embodied. Their comparability allows us to conceptualize reform integration as potentially an idea assimilation process.

While focusing on developing a neo-institutional theoretical explanation for studying public sector reforms, the study acknowledges important theoretical alternatives such as public choice theory (Weingast and Moran, 1983; Schwartz, 1994), which explains reform

tendencies based on incentives of public managers and political-administrative mechanisms controlling the agency, and contingency theory (Painter and Yee, 2011; George et al., 2019), which explains reform adoption based on the task environment of agencies. But as found in a recent review, the field of public management has "rarely applied" neo-institutionalism theory to the study of diffusion and adoption of public sector innovations (de Vries Hanna and Bekkers, 2018, p. 15), validating the importance of our study. Our reading of the literature suggests that the theory's prediction of local continuity may have made it difficult for researchers to accommodate more genuine forms of reform integration. Our model suggests that the potential assimilation of reform ideas into an organization's value-belief system may help facilitate reform integration. Public organization reformers may facilitate reform integration by promoting an organizational cultural change which assimilates selectively compatible elements of reform ideas into the local value-belief system. Despite the varied levels of incompatibility and thus difficulties one may encounter in the reform process (e.g. Besharov and Smith, 2014), as far as compatibilities are concerned, the organizational culture literature developed from studying industrial organizations has much to offer (e.g. Schein's primary and secondary embedding mechanisms [2004, pp. 245–271], or Cameron and Quinn's detailed checklist for implementing cultural change [2006, pp. 139– 142)). Future research can probe into these rich sources for identifying potential mechanisms and strategies for cultural change.

A few limitations of our empirical findings should be mentioned. First, although the data were collected under the same survey protocol, they were obtained in different years, which might potentially influence our observations. Second, our data set has only one measurement per agency (usually its head), which creates the risk of common source bias (Meier and O'Toole, 2012; Podsakoff *et al.*, 2003). The factual measurement of the dependent variable (actual adoption of NPM practices) may reduce this risk, but it cannot exclude the risk entirely. More research with measurements from multiple respondents per agency, or external respondents (like expert evaluations), is warranted to confirm the validity of our measurements and findings (e.g. the actual and the perceived agency cultural characteristics). Alternatively, a more qualitative approach could be the next step forward. Finally, researchers are encouraged to study the adoption of other public sector reforms to ascertain whether similar mechanisms might be found.

#### **Hypotheses**

- H1. The extent of an agency's adoption of operation-level NPM practice is positively associated with its degree of managerial autonomy.
- H2. The extent of adoption of operation-level NPM practice is positively associated with the extent to which an agency embodies an NPM-fitting set of cultural characteristics.
- H3a. The extent to which an agency has managed to cultivate a cultural characteristic which emphasizes "proactive responsiveness" is positively associated with the extent of adoption of operation-level NPM practice.
- H3b. The extent that an agency manages to cultivate a cultural characteristic which emphasizes "goal-oriented cooperation" is positively associated with the extent of adoption of operation-level NPM practice by the agency.

#### Notes

The distinction originally referred to the ideas underlying public policies and programmes. We adopt
it here for public sector reforms.

- 2. See Pfeffer and Salancik (1978); see also Serra and Stiglitz (eds.) (2008) for details and critiques.
- COBRA: Common Public Organization Database for Research and Analysis. For more information
  on the COBRA network and the questionnaire, see <a href="https://www.soc.kuleuven.be/io/cost">www.soc.kuleuven.be/io/cost</a>. In 2006–2011, part
  of the network's research was facilitated by the COST Action Programme, Grant ISO601.
- 4. In preparing the cross-country data set, the COBRA research team first included all agencies in individual surveyed countries based on information provided by national research teams. The respective national research teams also input the data for agency size (budget) and without legal independence (legal status) (except for the agency budget information of Denmark and the Netherlands, which was obtained through the survey). The response rates for each of the remaining variables in the respective countries were largely similar, except for the expected data losses (~20%) with the major independent variable management autonomy, which was calculated based on a number of constitutive questions. The data loss is believed to be reasonable and acceptable, given especially the theoretical importance of the variable (see Appendix).
- 5. To check if there is a systematic missing of data for each of the countries, we have utilized two tests (*t*-test for equality of means and independent samples Mann–Whitney *U* test) to compare the properties (means and distribution) of the responded and unresponded samples (based on the dependent variable *NPM practice*) of two variables, agency age and agency size. The results were statistically not significant, and the null hypotheses that the means and distributions of the two variables from the two samples are the same were retained.

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Global reform

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IJPSM 34,2
240

Table A1. Variables and measures

## Appendix

Variables	Measures
Operational-level NPM practice (Cronbach's $\alpha = 0.727$ )	Agency managers were asked to what extent the following activities actually take place in the agency: (1) customer surveys, (2) internal steering of the organizational subunits and lower management levels by objectives and results, (3) planning in the form of a multi-year plan or a business plan and (4) development of innovative products and/or services. A three-point scale was used for <i>each</i> question (0 = no; 0.5 = to some extent; 1 = to large
Managerial autonomy	extent), and an aggregate score was created through summation Agency managers were asked to report their perception about the following two aspects: "strategic personnel autonomy (SPA)" and "financial management autonomy (FMA)" (Verhoest <i>et al.</i> , 2004). SPA was measured by the degree to which agencies were able to set agency policies with regard to (1) levels of salaries, (2) conditions for promotions, (3) personnel evaluation, (4) personnel appointment and (5) overall personnel downsizing (0 = no; 1 = yes) (Cronbach's $\alpha = 0.827$ ). FMA was measured based on whether agencies could (1) take loans, (2) set charges for services or products, (3) shift between budgets for personnel and running costs, (4) shift between these budgets on one hand and investment on the other and (5) shift between budgets of different years (0 = no; 1 = yes) (Cronbach's $\alpha = 0.632$ ). An aggregate score was created by summing the average scores
"Proactive responsiveness" (Cronbach's $\alpha=0.807$ )	of both autonomies Respondents were asked to evaluate how "characteristic" the following items are in their organization: (1) risk-taking, (2) willingness to experiment and (3) creativity. A 7-point Likert scale was given, ranging from (1) "very uncharacteristic" to (7) "very characteristic". Scores were aggregated through summation and averaged by the number of indicators
"Goal-oriented cooperation" (Cronbach's $\alpha=0.643$ )	Respondents were asked to evaluate how "characteristic" the following items are in their organization: (1) goal-orientedness, (2) team spirit and (3) cooperation with colleagues. A 7-point Likert scale was given, ranging from (1) "very uncharacteristic" to (7) "very characteristic". Scores were aggregated through summation and averaged by the number of indicators
Agency size Agency without legal independence (dummy)	Log of agency budget in million euro 1 = without legal independence; 0 = otherwise
Country dummies	Denmark dummy: 1 = Denmark; 0 = otherwise The Netherlands dummy: 1 = The Netherlands; 0 = otherwise
Agency tasks: Regulation (dummy) Service provision (dummy) Policy formulation (dummy)	Respondents were asked to identify the agency's primary or secondary tasks from the following: policy formulation, general public services (public service), business and industrial services (business service), regulation-scrutiny-control-inspection (regulation) and other kind of exercising public authority. Respondents were allowed to choose more than one answer. Three dummy variables were created for those who chose (1) regulation, (2) public service and business and industrial service and (3) policy formulation

## Supplementary material for reference

The supplementary material is available online for this article.

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