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Rules and the Doctrine of Performance Management

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Rules and the Doctrine of Performance Management

Abstract
The doctrine of performance management has been promoted as an alternative to rule-based governance. Analyzing performance management as a system of rules, this article examines how performance management is adopted through rules. The question is examined based on a systematic counting and content coding of all of the national rules within the domain of primary education in Denmark from 1989 to 2010. Contrary to the prescriptions of the performance management doctrine, the analysis shows a clear increase in the number of rules. This reflects the creation of many new rules about performance measurement without the repeal of rules constraining the autonomy of public service providers and their managers. The result is congruent with the expectations derived from the literature on rule dynamics, which emphasizes rules as the carriers of learning and interests. The article thereby demonstrates the utility of analyzing performance management as a system of rules.

Practitioner points
• Adoption of the performance management doctrine requires new rules on performance targets and performance measures.
• Given the obstacles to repealing the existing rules constraining autonomy, the net result of adopting performance management is likely to be an increase in the total population of rules.
• Thus, despite popular claims the adaption of this doctrine does not constitute a clear break with traditional, rule-based governance.
• In a reform perspective, this is important input to policymakers when deciding whether or not to adopt new performance management systems.
Rules and the Doctrine of Performance Management

The last decades have been characterized as an era of performance management (Moynihan 2008; Walker, Boyne, and Brewer 2010). The classic, rule-based, bureaucratic form of governance has been challenged by the doctrine of performance management, advocating that the managers of public service provision should be relieved of their rule-based constraints and instead held accountable based on their results (Behn 2002; Moynihan 2008; Osborne 1993).

This article examines the adoption of performance management through the lens of rule-making. To date, we are unaware of any studies that systematically trace whether the adoption of performance management leads to fewer rules. More particularly, we investigate how the performance management doctrine has been adopted in national rules within the policy domain of education. Previous research has investigated the adoption of the doctrine of performance management at the state, local, and/or agency levels using surveys and/or in-depth interviews (Christensen and Lægreid 2003; Lægreid, Roness, and Rubecksen 2006; Moynihan 2005; 2008), and some have provided insightful case studies of particular national reforms (Binderkrantz and Christensen 2009; Christensen, Lie, and Lægreid 2008).

Investigating the adoption of the performance management doctrine in national-level rule-making offers two important contributions to the study of performance management adoption. First, it demonstrates the utility of studying performance management as a system of rules. The doctrine prescribes new rules on performance measures and fewer rules constraining the autonomy of public service providers. However, a systematic, empirical examination of rule dynamics over more than two decades shows how the adoption of performance management has
not followed the prescriptions of the doctrine. To the contrary, the population of national rules on education has increased markedly in recent decades. This reflects the creation of many new rules about performance measurement without the repeal of rules constraining the autonomy of public service providers and their managers.

Second, the article reveals how the distinct literature on rule dynamics (see March, Schulz, and Zhou 2000; Schulz 1998; Witteloostuijn and Jong 2008; 2010; Zhou 1993) enhances our understanding of the adoption of performance management. The rule dynamics literature offers a rather precise account of how subpopulations of rules on performance and rules restricting autonomy develop over time; an account that deviates from the prescriptions of the doctrine of performance management, as it points out the difficulties in reducing the size of rule populations.

Empirically, the paper studies the adoption of the performance management doctrine in national government regulation of the local-level provision of primary education in Denmark from 1989 to 2010.¹ The delivery and financing of primary education is the responsibility of local, multipurpose municipalities but takes place within a set of rules decided at the national level of government. Investigating how the number and content of national rules for education developed from our baseline in 1989 to 2010, the primary education sector offers unique opportunity to systematically assess the adoption of the doctrine of performance management. All rule creations, rule changes, as well as rule repeals in the Danish act on primary education have been content coded at the level of clauses and sub-clauses. The content coding focuses on whether the rule was aimed at regulating the production process of education or whether it focused on school performance. We supplement with data on all of the executive orders issued with reference to the

¹ Throughout the paper, we use the term “primary education,” which in this case covers public schooling of all 6–15-year-old children.
act on primary education in Denmark. As noted by Page (2012), the importance of such secondary legislation has not been adequately reflected in earlier studies of rule-based regulation.

**Performance Management: Prescriptions and Previous Research**

Formal rules have traditionally been seen as a key governance tool for national governments, and, as Max Weber predicted at the beginning of the last century (Weber 2006), formal rules have today penetrated most aspects of modern society (March, Schulz, and Zhou 2000; Olsen 2006). The importance of rules is also reflected in the views that the modern state is a post-Weberian state (Pollitt and Bouckaert 2011) and a regulatory state (Levi-Faur 2003). Yet the emphasis on rule-making as a governance tool has been challenged by the doctrine of performance management. This doctrine is a programmatic theory for the adoption of performance management systems (Kettl 1997; Moynihan 2008; Pollitt and Bouckaert 2011). Performance management systems generate information on performance and link this information to managerial decision-making (Moynihan 2008: 5). They consist of a three-phased process of (1) choosing indicators, (2) specifying targets, (3) and improving how an organization scores with respect to these targets (Boyne 2010, 209).

Contrary to a bureaucratic, rule-centered doctrine of governance, according to which accountability and effectiveness are achieved through rules and orders prescribing procedures and behavior, the doctrine of performance management prescribes more measurement and management of performance accompanied by autonomy to the organizations and their managers (Behn 2002, 6). The doctrine (Moynihan 2008) implies a shift from rule and input-based control to output and incentive-based control (see Cyert and March 1963), seeing these factors as substitutes rather than supplements (Cardinal, Sitkin, and Long 2010). In other words, the
doctrine is based on that which Behn (2002, 14) calls a “big bargain,” where public service providers promise to deliver increased performance in return for fewer rules constraining autonomy.

According to the performance management doctrine, the focus on performance will make managers not only attentive to but also accountable for results instead of for rule-abidance, whereas greater autonomy should allow them to setup their organizations for the delivery of better results (Moynihan 2008, 32–3). This autonomy can relate to finances, human resource management, and the actual tasks performed by the organization (Nielsen 2014). In the subsequent argument, we focus on how task autonomy—that is, the freedom public service providers have to organize the production of their service—is constrained by external rules. The overall argument is also valid for the other dimensions of autonomy, but as they—in contrast to task autonomy—are typically very influenced by either collective bargaining (HR autonomy) or budgetary matters (financial autonomy), task autonomy is the most relevant for examining how general legislation constrains the autonomy of public service providers.

Yet the doctrine encompasses at least two different mechanisms for improving performance. The most prominent mechanism focuses on the incentives that performance management systems create for public managers to improve performance (Pollitt 2013, 346–7). Another mechanism emphasizes the learning that performance information and autonomy should initiate and where performance improvement is not driven by high-powered incentives (Moynihan 2005). This difference is reflected in the distinction between “making managers manage” through incentives or just “letting managers manage” by granting them more autonomy (Kettl 1997). Both external accountability and learning, however, require autonomy for public service providers and their
managers. Thus, a key element of the doctrine is that decision makers should create more autonomy through fewer rules (see also Moynihan 2008, 26).

While the performance management doctrine envisages positive results from performance management practices, the scholarly literature is less clear and so far only “allow[s] initial judgments” (Boyne 2012, 217). Some studies have found positive effects on performance in areas such as health care and education, but the effect is conditioned upon the provision of autonomy (Hanushek and Raymond 2005; Hvidman and Andersen 2014; Kelman and Friedman 2009; Nielsen 2014). Other studies have identified dysfunctional outcomes in terms of selection and gaming effects (Bevan and Hood 2006; Bohte and Meier 2000; Pollitt 2013).

A key finding in the literature is that performance management systems are often only partially adopted (Pollitt & Bouckaert 2004, 70; De Araújo and Branco 2009; Goldfinch 2006; Moynihan 2005).\(^2\) Within the performance management literature, partial adoption refers to the phenomenon that units “…have embraced the creation of performance information systems, but they have been reluctant to increase managerial authority” (Moynihan 2008, 45). Partial adoption thus implies a performance management system in which an increased focus on results is not accompanied by increased autonomy. With partial adoption, governance based on rules and input is combined in an integrative manner with incentives and output (Cardinal, Sitkin, and Long 2010, 66), which is consistent with the view that governance develops through a process involving the layering (not replacement) of different forms of governance (Christensen and Lægreid 2008; Lægreid, Roness, and Rubecksen 2006).

\(^2\) Generically, “partial adoption” refers to cases where only a part of a whole, like a part of the doctrine of performance management, is put into use by a unit such as a public organization.
Performance is an inherently ambiguous concept as it is multi-dimensional (e.g. efficiency, equity, probity, quality, satisfaction) and fraught with attribution problems as to who and what are the drivers of performance (Boyne 2003; March 1984). Policymakers have to deal with this ambiguity when they adopt the doctrine of performance management by specifying performance dimensions, tools of measurement, targets and comparisons, and a linkage between performance and managerial decision-making. Such specification requires authoritative standards and criteria, which are all different forms of rules. Without such rules, performance management becomes a fragmented and highly heterogeneous tool of governance.

From this perspective, the doctrine of performance management focuses on two subpopulations of rules, namely rules relating to performance and rules constraining managerial autonomy. According to the doctrine of performance management, an increase in performance rules should be followed by a decrease in other rules in order to provide for flexibility and discretion in service provision. Hence, if new performance-related rules replace rules restricting autonomy, the adoption of the performance management doctrine would lead to a decrease (or at least not an expansion) in the population of national rules within the given policy domain. In other words, the performance management doctrine prescribes a negative cross-subpopulation relationship: as performance-related rules increase, production-related rules should decrease. Following the most rule-hostile versions of the doctrine of performance management, this negative cross-subpopulation relationship should be so strong that the net number of rules in the entire rule population would decrease. Otherwise, performance management would imply more—not fewer—rules.
The Literature on Rule Dynamics

Turning to the literature on rule dynamics, we derive a set of different expectations with respect to the adoption of a doctrine such as performance management. In this literature, there are two broad theoretical perspectives explaining rule dynamics. One, which is predominant in the American organizational literature on rule dynamics, is *learning* where rules are created to solve problems (March, Schulz, and Zhou 2000; Schulz 1998; Zhou 1993). The literature draws on classical concepts of learning as a process of “encoding inferences from history into routines that guide behavior” (Levitt and March 1988, 320). Rules are conceptualized as formalized means with which to deal with organizational problems, whether they stem from the organizational environment or internal organizational processes. Such codified practices could be rules that secure accountability and control within an organization, for instance, by constraining autonomy. In this perspective, the removal of a rule is also the removal of a codified solution to a problem. Similarly, the creation of new rules could represent a solution to new problems.

The other explanatory factor, which is predominant in the more policy-oriented literature on rule dynamics, is the interests of the actors involved in the rule-making process (Jennings et al. 2005; Witteloostuijn and Jong 2007; 2008; 2010). This is a less coherent perspective than learning. It centers on how, based on different interests, specific actors like political parties, ministries, civil servants, and interest organizations seek to further the creation, revision, or repeal of rules. Bureaucrats pursue their interests through rules (Witteloostuijn and Jong 2007), ministries seek to legitimize their existence through rules (Witteloostuijn and Jong 2010), and trade unions wish to safeguard their members through, for instance, standardized personnel procedures. Consequently, many existing rules may have strong stakeholders who will try to protect them from repeal even if the initial problem that led to the creation of the rule no longer exists.
Both learning and interest-based perspectives are compatible with an expansion of performance-related rules over time. Within an environment in which new problems constantly surface—as is the case for most policy domains—policymakers seeking to handle these problems will often turn to rules to develop and institutionalize responses. This is particularly the case with the national governance of local governments, where classical management tools such as hiring and firing are not at the disposal of national-level policymakers. The expansion of rule populations can thus be seen as a response to problems, and when looking through the lens of the doctrine of performance management, more rules on performance becomes the obvious policy response.

Considering the subpopulation of performance rules, interest-based explanations also predict an expanding rule population. More rules on performance within the policy domain of education legitimize both the ministry and the number of civil servants within the Ministry of Education. Furthermore, as pointed out by Moynihan (2005, 230), there is no natural constituency to oppose more performance information. Even for public employee trade unions, it is difficult to argue against the measurement of results.

Turning to the subpopulation of the rules on the production process, the implications derived from the literature on rule dynamics are nevertheless clearly at odds with the prescriptions of the performance management doctrine. In a learning perspective, such rules have been introduced to handle problems of, for instance, control and effectiveness, and these benefits may weigh more for policymakers than any notions of autonomy. Hence, there is no reason policymakers would automatically repeal such existing rules if they introduce new performance-related rules.

This prediction is supplemented by the interest-based explanation focusing on the entrenched interests behind existing rules. As suggested by studies of performance information at the decentralized level of policymaking, for instance, unions may be against increased autonomy at
the level of local public service providers in order to ensure that their members enjoy similar and predictable treatment (Moynihan 2005, 230). Furthermore, as implied by the literature on the regulatory state, national policymakers may also display a general reluctance to relinquish control levers (Christensen, Lie, and Lægreid 2008; Laegreid, Roness, and Rubecksen 2008; Levi-Faur and Jordana 2005; Vogel 1996).

This points out the strong asymmetry between (the lack of) obstacles when introducing new rules and the potentially severe opposition against repealing the existing rules. Thus, based on the literature on rule dynamics, we do not expect a negative cross-subpopulation relationship, where new performance-related rules are introduced to replace existing production rules. Rather, we would expect that the creation or repeal of performance rules is a process that evolves rather independently of the process of the creation or repeal of production-related rules. Consequently, the net results of introducing performance rules would be an expansion over time of the population of rules. The cross-subpopulation relationship could also be positive if rule makers respond to problems by expanding both performance and production rule populations in order to signal their attention to the problems as well as trying to solve the problems.

Table 1 summarizes the prescriptions and expectations about the adoption of the performance management doctrine in national rules on local-level service provision. It shows how the expectations derived from the literature on rule dynamics differ on important dimensions from the prescriptions derived from the performance management doctrine. The next section explains how we examine the adoption of the performance management doctrine empirically.
Data and Research Strategy

The Policy Domain of Primary Education in Denmark

Education belongs to the group of service-producing policy domains, where the tasks can be solved in a variety of ways and employees often have substantial discretion in terms of how they handle their jobs (Wilson 2000). The governance challenge is thus considerable within this policy domain, which implies that the scope and content of rule regulation is not a trivial question. The governance challenge for the national politicians is further complicated by the fact that, in Denmark—as in many other countries—the financing and delivery of primary education are the responsibility of local governments. These local governments are run by democratically elected councils that are not under the hierarchical jurisdiction of central-level ministers, but they are subjected to national legislation.

In Denmark, the performance management doctrine has been on the political and administrative agenda since the early 1980s, when a newly elected right-wing government prescribed public sector reform with a stronger focus on results and more autonomy for public sector organization (Ejersbo and Greve 2014, 41, 101–123). In the early 1990s, the Ministry of Education (1992) launched a campaign to promote performance management within education under the heading Operation Rule Storm. The number of rules was to be reduced to increase school autonomy, and the municipalities were encouraged to mirror national rule reductions with similar reductions in local rules (Ministry of Education 1992, 10–11). Driven by a series of disappointing PISA rankings in the 2000s, the performance management doctrine has remained a salient frame of reference within primary education until today (Gustafson 2012).

3 Before the large-scale administrative reform implemented in January 2007, the number of Danish municipalities was around 270. Today, there are 98 local, multipurpose municipalities in Denmark.
National Rules on Primary Education

Two types of national rules are particularly relevant to this study: the primary acts passed by a simple majority in the national parliament and the executive orders issued by the Minister of Education, with a legal basis in the act on primary education passed by the parliament. These orders are also legally binding for the municipalities, schools, teachers, and other actors towards whom the order is directed.4

Throughout the period under investigation, one major act has been regulating primary education (Folkeskoleloven). The act is divided into sections that deal with parts of the legislative domain, and each section is divided into articles and sub-articles, paragraphs and sub-paragraphs, and clauses and sub-clauses. To chart the changes in the act at the most detailed level, our critical unit of study is the lowest level of text in the act, frequently a clause or sub-clause. As argued by Witteloostuijn and De Jong (2008, 507), this disaggregated level of analysis is critical to the empirical study of the dynamics in national rules, since entire acts, sections, or parts of acts are rarely amended. Recording the amendments at the most detailed level of regulation also ensures consistency over time, since the overall structure of the act may change with successive acts, but each act contains text at the level of clauses (Witteloostuijn and De Jong 2008 508).

All changes to the act on primary education were identified from an online database (www.retsinfo.dk) in which the ministries are legally required to register acts, law amendments, executive orders, departmental circulars, and so on. The database contains very old rules, but

4 The Minister of Education also issues circulars that serve as guidelines and suggestions, but they are not included in this study given that they are not legally binding for the local level of government.
reporting by ministries was not fully systematized until 1989. As argued below, the 1990s and 2000s are the most relevant decades when studying the rise and adoption of the performance management doctrine within the Danish primary education sector.

We began by counting all of the clauses in the act on primary education from 1989, 274 clauses in total. Using this count as our baseline, we used the database to identify all of the changes to the act on primary education from 1989 to 2010, a total of 52 amendments of the law. For each of these law amendments, we then recorded at the most basic level of rules the number of 1) new clauses, 2) changes in existing clauses, and 3) repeals of existing clauses. Aggregated to yearly time intervals, Figure 1 illustrates the distribution of rule creations, rule revisions, and rule repeals from 1989 to 2010. To examine the expectation about how the total number of rules has evolved, we use these rule events to construct a concise net measure of the overall changes to the number of rule regulations.

[Figure 1 around here]

Next, we coded each of these rule events with respect to the content of the rule. First, the number of clauses regulating the content and delivery of education are used as indicators of the extent to which the production process is regulated. These are rules regulating the what and how of the local delivery of primary education in various ways. Examples include the rules that regulate the maximum number of teaching hours, the maximum number of students in each class, the number of school days, what subjects the students should be taught in their classes, and so on (see Table 2). This variable is used to measure how the autonomy component of the performance management doctrine is adopted in primary legislation and executive orders. It does not measure autonomy directly, measuring instead the level of constraints on task autonomy from legislation.
Similarly, for each year we coded the number of clauses with a performance focus. The clauses are categorized as having a performance focus if they relate to either the goals and/or standards that pupils or schools must meet, the measurement of the actual ability of the pupils and schools to reach these goals, and the consequences for management of this (in-)ability (for examples, see Table 2). In this approach, hence, we measure performance indicators as they show up in formal rules, because doing so is practically the only way the national level of government can secure the establishment of indicators across 98 municipalities and some 1300 public primary schools. This variable is used to measure the degree to which the performance component of the performance management doctrine is implemented.

Finally, we include a measure of how the executive orders issued on the basis of the act on primary education have developed from 1989 to 2010. Executive orders are much more numerous than primary legislation. In 1989, the Minister of Education issued 29 executive orders based on the act on primary education, and the equivalent number of executive orders was 41 in 2010. We develop annual measures of the net length of executive orders (number of words) and follow the development of executive orders within different categories that match the coding of

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5 It is possible to code a clause as containing both rules that constrain autonomy and rules that have a performance focus. In reality, however, such overlap was extremely rare (less than 1 percent of the clauses in the act on primary education). This indicates that we do in fact measure two different subpopulations of rules.

6 The coding has been carried out by a trained research assistant based on a systematic coding scheme. To assess the level of intercoder reliability, a randomly selected sample of 200 clauses has been recoded independently by the researchers. Across all coders, intercoder agreement reached a satisfactory level of p > .90, and Krippendorff’s alpha is .76, which is normally considered acceptable (see Lombard, Snyder-Duch, and Bracken 2002, 596).
the primary acts; that is, a category of executive orders regulating the “content and delivery of education” and a category of executive orders about “performance management.” The categorization of all of the executive orders is presented in Table A1 in the Appendix.

Findings

Figure 2 shows the number of clauses and the rate of change in the act on primary education from 1989 to 2010. First, it shows how the number of clauses has almost doubled within this 20-year period. In 1989, there were slightly fewer than 300 clauses, while there were almost 600 clauses in 2010. Another way of gauging the scope of rule regulation is to count the number of words in the act (see Huber and Shpan 2002, 45; Witteloostuijn and Jong 2008). Based on this measure, we find a similar increase, from 6,227 words in 1989 to 13,176 words in 2010.\(^7\)

Including the number of words in executive orders issued with a legal basis in the act on primary education, the increase becomes even more remarkable. The number of words in these executive orders summed to 28,532 in 1989 compared to 103,343 in 2010 (see also Figure 4 below).

One way of assessing the size of this growth is to make a comparison with the general increase in the length of national rules in Denmark from 1989 to 2010. Whereas the increase in words in the act of primary education from 1989 to 2010 sums to a 112 percent increase, the total length of primary legislation across all policy areas in this period increased by 82 percent. This means that the regulation of the primary education sector—despite the political focus on performance

\(^7\) To avoid artificial increases over time, the count does not include the paragraphs about how the acts come into force.
management—has increased more than the regulation of society in general (X and X 2014). A similar conclusion is reached based on the executive orders.  

Furthermore, in none of the years have we seen a decline in the total number of clauses in the act on primary education, but Figure 2 shows a halt in the increase in the number of clauses both in the beginning and the end of the period under investigation. These years coincide with the center-right government’s across-the-board campaigns on de-bureaucratization, but given that the sharpest increase in the number of clauses took place during the center-right government from 2001 to 2007, Figure 2 does not imply that the party color of the government has a systematic effect.

Figure 2 also shows the annual rate of change in clauses for each year in the period from 1989 to 2010. The average rate of change in the number of clauses has been 3.8 percentage points (the average rate of change in words has been 3.7 percentage points for the entire period). There is no indication that the rate of change is declining over time. Both at the beginning and end of the period, we see similar distributions of years with very little change combined with years with change rates above 10 percentage points. Furthermore, Figure 2 shows that the number of clauses has more than doubled from 1989 to 2010. The number of clauses does not decline in any of the years. With respect to the rate of rule production, no clear downward trend can be observed.

Hence, the expectation derived from the rule dynamics literature about an increase in the population of rules is clearly supported by the rule development depicted in Figure 2, while the decline prescribed by the doctrine of performance management has not materialized.

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8 The net increase in the length of executive orders within the domain of primary education is 262 percentage points, whereas the net increase within the broader education sector is 102 percentage points. Across all policy areas, the total length of executive orders grew by 143 percentage points from 1989 to 2010 (source: X and X 2014).
We now turn to an examination of the subpopulation of rules in the act on primary education. Based on the literature on rule dynamics, we expect an increase in the subpopulation of performance-related rules but no decrease in the subpopulation of rules related to the content and delivery of education in the primary schools. In the left side of Table 3, these expectations are evaluated based on the absolute number of clauses related to performance, delivery, and content. Focusing on absolute numbers implies a bottom-up approach in the sense that regulation is viewed in terms of the number of national rules to which schools and municipalities must relate.

Table 3 provides clear support for the expectation of more rules related to performance from 1989 to 2010. The number of such clauses has increased from 14 in 1989 to 87 in 2010. This is a strong indication that a key element in the performance management doctrine has been incorporated into the national regulation of the Danish primary school. This increase in the number of performance rules has not been followed, however, by fewer rules pertaining to the production process. As evident in Table 3, the number of clauses related to the regulation of the production of the primary school has not decreased over time. Instead, the number of such clauses has increased from 74 in 1989 to 133 in 2010. This development runs counter to the prescriptions derived from the performance management doctrine but clearly supports the expectation based on the apparently more empirically accurate literature on rule dynamics.
The right-hand column of Table 3 examines these expectations in a less restrictive way by comparing the ratio of performance-/production-related clauses in 1989 and 2010. This is a top-down approach to regulation in the sense that we examine the relative mix of rules decided by the national policymakers and not the absolute number of rules to which schools and local governments are subjected. These ratios provide further support for the expectation of an increase in performance rules and moderate the support for the expectations regarding production rules. Whereas in 1989, there were five times as many clauses regulating the production process than performance-related clauses in the Danish act on primary education, there are only one-and-a-half clauses regulating the production process for each performance clause in 2010. Hence, although the number of clauses regulating the delivery of education has increased, their share of the overall rule population is less. Local governments and school managers, however, might not regard this relative change as an increase in the autonomy over the production process.

In sum, we find strong evidence that the performance component in the performance management doctrine has been integrated into the Danish primary school legislation from 1989 to 2010. In terms of less regulation of content and delivery of education, however, there has not been any discernible adaption to the performance management doctrine. This supports the conclusion of a partial adoption of the performance management doctrine.

[Figure 3.a about here]

[Figure 3.b about here]

Adding the executive orders to the analysis does not substantially challenge this conclusion. Figure 4 shows a major and permanent increase around 2003 in the executive orders about performance, which reflects how the national level of government that year specified the
intermediate and final goals for student competencies in each subject. However, Figure 4 also shows an increase over time in executive orders regulating the production of primary education. The latter increase is much more moderate than the increase in executive orders on performance-related issues, but it has not declined. Looking at the executive orders, the increased focus of national rule-making on performance has not been followed by a similar reduction in the regulation of the production of public services; in this case, the content and delivery of primary education.

[Figure 4 around here]

In the period from 1989 to 2010, the law on primary education in Denmark was amended 52 times. Using these amendments as our units of analysis, we conclude the analysis with an examination of the cross-subpopulation relationship between the creation/repeal of clauses on performance and creation/repeal of clauses on the production process. Recall that the performance management doctrine prescribes a negative cross-subpopulation relationship, whereas the rule dynamics literature predicts no relationship or a positive relationship (see Table 1 above). According to the correlation matrix in Table 4, there is a very low and statistically insignificant correlation between the creation of new performance rules and the repeal of existing production clauses ($r = 0.16$). In fact, the correlation between the creation of performance rules and production rules is almost twice as big ($r = 0.31$), although still not statistically significant. More generally, the correlations between events related to performance rules and events related to production rules are rather low, whereas the correlation of events within the two subpopulations is relatively high. This suggests that the dynamics of the two subpopulations of
rules are largely unrelated. In other words, national legislators apparently have no problems discussing and deciding on new rules on performance without simultaneously repealing rules on production. This is further evidence of a partial adoption, where the two major elements of performance management systems are in reality decoupled.

[Table 4 around here]

**Conclusion and Discussion**

Performance management has been promoted as the antithesis to governance by rules. Only results should matter. The empirical analysis of the adoption of the doctrine of performance management through national government rule-making in the Danish primary school sector has shown an increase in the subpopulation of performance rules but no similar decrease in the subpopulation of rules governing the production process. Furthermore, the negative cross-subpopulation relationship between rules for performance and rules governing the production process prescribed by the doctrine of performance management could not be identified. Instead, the analysis at the level of national policy-making shows how rule events (creations and repeals) are *de facto* decoupled between the two rule subpopulations. Based on these results, three issues merit discussion: 1) the generalizability of results, 2) theoretical and methodological implications, and 3) implications for practitioners.

The generalizability of the findings is important for the broader significance of the results. There are three key characteristics of the case worth emphasizing. First, Denmark is a country with rule of law and a high level of government effectiveness (World Bank 2014a), which makes formal legislation a consequential and important policy tool. If this was not the case, formal legislation could neither be expected to constrain the task autonomy of public service providers nor to
facilitate the measurement of performance. The results of the article are, hence, mostly relevant for countries with rule of law and high government effectiveness, most (but not all) of which are found in Europe and North America (World Bank 2014b).

Second, the argument that performance management due to ambiguity requires formal rules is relevant no matter whether governance is inter-governmental or takes place within a given level of government. That said, the inclination to use formal rules may nevertheless be stronger between levels of government (e.g., national–local) than within. Within one level of government, other tools of governance, such as hierarchical instructions, hiring, and firing, might also be applicable, making formal rules less relevant. Given the intergovernmental nature of modern governance, however, this multilevel aspect of the case studied here can be found in a broad range of countries and policy areas (see Hooghe and Marks 2003; Hooghe, Marks and Schakel 2010; O’Toole and Meier 2011).

Third, reflecting a long period of problem solving through rule-making, the domain of education is a mature policy area with a high density of existing rules that must be reduced in order to adopt the doctrine of performance management. In policy areas with small rule populations, policymakers do not have to confront the difficult politics of repealing existing rules. Thus, while we would expect the adoption of the doctrine of performance management at the state and federal levels in the US primary school system (Mintrop and Sunderman 2009) to exhibit a similar pattern as the one revealed in this analysis, we are cautious about generalizing the findings to new policy areas with few existing rules.

Theoretically, the rule perspective applied in this article offers a new toolbox for the study of performance management. As argued and shown in this article, the literature on rule dynamics produces an empirically valid prediction of the adoption of the performance management system
that is partly at odds with the prescriptions of the doctrine. The rule perspective also makes it possible to relate the study of performance management to the broader literature on regulation and governance. Thus, comparable results have been found in the literature on the regulatory state, where attempts at de-regulation have instead led to re-regulation (Christensen, Lie, and Lægreid 2008; Levi-Faur and Jordana 2005; Laegreid, Roness, and Rubecksen 2008; Vogel 1996). From this perspective, the findings of new rules on performance but not fewer rules on tasks demonstrates how performance management systems are embedded and put into practice through the traditional tool of rule-based governance. In other words, the observed adoption can be interpreted as a process involving the layering of governance tools, which has also been demonstrated in the broader literature on governance (Christensen and Lægreid 2008; Lægreid, Roness, and Rubecksen 2006).

Methodologically, the rule perspective allows us to study performance management on a large scale and over long periods of time. The ability to perform longitudinal studies of performance management is a huge advantage compared to studies employing either surveys or interviews, where it is much more difficult to validly measure dynamics and processes over time. Expanding the number of units and extending the time series, future research based on the rule perspective could employ multivariate techniques to analyze the likelihood of rule creations, amendments, and repeals for different rule populations, depending on factors in the environment (e.g., performance problems), developments in other rule populations, and internal factors such as the existing density of rules (see Witteloostuijn and Jong 2010 for an illustration). There are, however, also methodological limits to the rule perspective. Formal rules do not capture informal rules and practices, which can importantly shape how performance management works.
Furthermore, the rule perspective is limited to domains with written and complete archives of rules over time.

From a practitioner perspective, this article shows that the doctrine of performance management is not just a technocratic, non-political tool to increase performance. It is a policy that often requires political involvement at the highest levels of government with all of the challenges that follow from trying to affect rule-making at this level. The Danish Ministry of Education drew this conclusion themselves after trying to adopt performance management in the early 1990s. No matter how much they wanted to reduce the number of rules through administrative measures, a substantial rule reduction had to follow from changes in primary legislation, which was the domain of the politicians on the national political scene (Ministry of Education 1992, 14). For the public sector managers exposed to performance management, it is therefore important to remember that talk about performance management is cheap. There are good reasons to expect large-scale performance management systems to be only partially adopted, as the removal of rules constraining their autonomy is not easily realized. In a reform perspective, this is important input to decision makers when deciding whether or not to adopt new performance management systems.
References


# Tables

Table 1. Prescriptions and expectations about rule dynamics over time

<table>
<thead>
<tr>
<th></th>
<th>Performance management doctrine</th>
<th>Literature on rule dynamics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of rules</td>
<td>Declines</td>
<td>Increases</td>
</tr>
<tr>
<td>Rules on performance</td>
<td>Increases</td>
<td>Increases</td>
</tr>
<tr>
<td>Rules on the production process</td>
<td>Declines</td>
<td>SQ or increase</td>
</tr>
<tr>
<td>Cross-subpopulation relationship between performance rules and production rules</td>
<td>Negative</td>
<td>No or positive</td>
</tr>
</tbody>
</table>
### Table 2. Content coding of rules in the act on primary education

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content and delivery</strong></td>
<td>The overall content of classes (e.g., Danish, math) and specific instructions for topics and levels</td>
<td>Education in the primary school includes: 1) road safety education, 2) sex education, 3) Norwegian and Swedish, 4) foreign religions and other outlooks on life, 5) education and vocational orientation, 6) health, 7) computer use.</td>
</tr>
<tr>
<td></td>
<td>The delivery of education, e.g., teaching methods, hours of teaching, structure and size of classes, student participation</td>
<td>Teaching time may on a daily basis not supersede: 1) 5 hours in kindergarten and grades 1–2, 2) 6 hours in grades 3–5, 3) 7 hours in grades 6–7, 4) 8 hours in grades 8–10</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td>Determination of performance standards, measurement of performance, publication of performance results (including grades)</td>
<td>As part of the teaching, a continuous evaluation of the pupils’ learning must take place. Parents must be notified in writing about test results. If the quality report, based on an overall evaluation, shows that the academic level at a school is unsatisfactory (as indicated by e.g. test and exam results), the municipal council must produce an action plan for improving the academic level at the school.</td>
</tr>
</tbody>
</table>
Table 3. Number of rules regulating production or performance, 1989 and 2010

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of rules regulating the production of primary education (A)</th>
<th>Number of rules with an explicit performance focus (B)</th>
<th>Ratio (B/A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>74 (A)</td>
<td>14 (B)</td>
<td>.19</td>
</tr>
<tr>
<td>2010</td>
<td>133 (C)</td>
<td>87 (D)</td>
<td>.65</td>
</tr>
</tbody>
</table>
Table 4. Correlations between the creation and repeal of rules for production and performance

<table>
<thead>
<tr>
<th></th>
<th>Creation of performance rules</th>
<th>Repeal of performance rules</th>
<th>Creation of production rules</th>
<th>Repeal of production rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation of performance rules</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeal of performance rules</td>
<td>0.79***</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creation of production rules</td>
<td>0.31</td>
<td>0.09</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Repeal of production rules</td>
<td>0.16</td>
<td>0.08</td>
<td>0.61***</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Notes: N = 52 (number of amendments to the law on primary education). Pairwise correlations between counts of rule events measured at the time of amendments to the law on primary education. An extreme event of 1993, where the whole law was fundamentally restructured is excluded. *p < 0.05; **p < 0.01; ***p < 0.001 (Bonferroni-adjusted confidence intervals).
Table A1. Categorization of executive orders

<table>
<thead>
<tr>
<th>Category</th>
<th>Decree</th>
<th>Year of creation</th>
<th>Year of repeal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Performance</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Decree on grading in primary school</td>
<td>&lt;1989</td>
<td>1994</td>
</tr>
<tr>
<td></td>
<td>Decree on grading system</td>
<td>&lt;1989</td>
<td>1994</td>
</tr>
<tr>
<td></td>
<td>Decree on final tests etc. and decree on grading in primary school</td>
<td>&lt;1989</td>
<td>&gt;2010</td>
</tr>
<tr>
<td></td>
<td>Decree on the use of computer at the final written tests in primary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>school</td>
<td>1998</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Decree on grading system and other assessments</td>
<td>2005</td>
<td>2010</td>
</tr>
<tr>
<td></td>
<td>Decree on the use of tests in primary school</td>
<td>2006</td>
<td>2010</td>
</tr>
<tr>
<td></td>
<td>Decree on student plans in primary school</td>
<td>2006</td>
<td>2010</td>
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<tr>
<td></td>
<td>Decree on the use of quality reports and action plans in the municipal</td>
<td></td>
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<tr>
<td></td>
<td>councils’ work on assessment and quality development of primary school</td>
<td></td>
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<tr>
<td></td>
<td>Decree on focus on absence in the quality report from the local</td>
<td>2007</td>
<td>&gt;2010</td>
</tr>
<tr>
<td></td>
<td>government council about primary school</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Decree on objectives, intermediate aims and ultimate aims for subjects</td>
<td></td>
<td>&gt;2010</td>
</tr>
<tr>
<td></td>
<td>and topics in primary school (Common Objectives)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Decree on objectives of teaching school subjects in primary school</td>
<td>&lt;1989</td>
<td>2008</td>
</tr>
<tr>
<td></td>
<td>Decree on temporary rules in connection with the local governments’</td>
<td></td>
<td>2005</td>
</tr>
<tr>
<td></td>
<td>obligation to lay down descriptions of the teaching development</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>towards the intermediate and ultimate aims for the schools 2003/04,</td>
<td></td>
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<tr>
<td></td>
<td>2004/05, and 2005/06</td>
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<tr>
<td></td>
<td>Decree on the project assignment in the 9th grade</td>
<td>1996</td>
<td>&gt;2010</td>
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<td></td>
<td>Decree on the obligatory self-chosen assignment in the 10th grade</td>
<td>1994</td>
<td>&gt;2010</td>
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<tr>
<td></td>
<td>Decree on pupils’ absence from classes in primary school</td>
<td>2004</td>
<td>&gt;2010</td>
</tr>
<tr>
<td></td>
<td>Decree on encouragement of order in primary school</td>
<td>&lt;1989</td>
<td>&gt;2010</td>
</tr>
<tr>
<td></td>
<td>Decree on number of teaching hours in primary school</td>
<td>2003</td>
<td>&gt;2010</td>
</tr>
<tr>
<td></td>
<td>Decree on the school summer holiday date in primary school</td>
<td>1993</td>
<td>&gt;2010</td>
</tr>
<tr>
<td>**Content and</td>
<td>Decree on supplementary teaching for new-coming pupils and others in</td>
<td>&lt;1989</td>
<td>1989</td>
</tr>
<tr>
<td>delivery</td>
<td>primary school</td>
<td></td>
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<tr>
<td></td>
<td>Decree on sex education in primary school</td>
<td>&lt;1989</td>
<td>1993</td>
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<tr>
<td></td>
<td>Decree on teaching in particular subjects as part of obligatory subjects</td>
<td>&lt;1989</td>
<td>1993</td>
</tr>
<tr>
<td></td>
<td>in primary schools</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Decree on teaching of optional subjects in primary school</td>
<td>&lt;1989</td>
<td>1993</td>
</tr>
<tr>
<td></td>
<td>Decree on optional subjects according to Section 9 (5) in the act on</td>
<td></td>
<td>&gt;2010</td>
</tr>
<tr>
<td></td>
<td>primary education</td>
<td>1991</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Decree on teaching in kindergarten</td>
<td>2003</td>
<td>&gt;2010</td>
</tr>
<tr>
<td></td>
<td>Decree on sign language as a subject in primary school</td>
<td>1991</td>
<td>&gt;2010</td>
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<tr>
<td></td>
<td>Decree on teaching Danish as a second language in primary school</td>
<td>1998</td>
<td>&gt;2010</td>
</tr>
<tr>
<td></td>
<td>Decree on the project assignment in the 9th grade</td>
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<td>2003</td>
<td>&gt;2010</td>
</tr>
<tr>
<td></td>
<td>Decree on the school summer holiday date in primary school</td>
<td>1993</td>
<td>&gt;2010</td>
</tr>
</tbody>
</table>
Figures

Figure 1. Distribution of rule events in the Danish act on primary education, 1989–2010.
Figure 2: Rules in the Danish act on primary education, 1989–2010
Figure 3.a. Yearly births and cumulative number of performance rules, 1989–2010
Figure 3.b. Yearly births and cumulative number of content and delivery rules, 1989–2010
Figure 4. Content and scope of executive orders regulating primary education, 1989–2010