Performance Information in Politics and Public Management: Impacts on Decision Making and Performance

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PhD Dissertation

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ISBN: 978-87-7335-174-1

Cover: Svend Siune

Print: Fællestrykkeriet, Aarhus University

Layout: Annette Andersen

Submitted September 2, 2013 The public defense takes place November 15, 2013 Published November 2013

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Acknowledgments

This dissertation marks the end of an unpredictable 3-year research process characterized by a lack of linear progress. Many ideas and research designs were developed and later discarded, some based on their lack of merit or practical feasibility and fewer due to unfortunate outside circumstances. But some proved worthy of pursuit and even publication, well nourished by an ambitious and helpful research environment. Specifically the section for public administration has provided enlightening critique and suggestions for my work and, more importantly, has introduced me and other PhD students to the professional practice of criticizing the research of others always with the aim of improving their work and political science more broadly.

The PhD group has additionally offered a stimulating academic and social environment. Though many others deserve mention, I should particularly thank Anne Mette Kjeldsen, Morten Hjortskov Larsen, Kim Sass Mikkelsen, Maria Falk Mikkelsen, and Martin Bisgaard Christiansen for their friendships and willingness to engage in discussions on such important topics as table formatting, statistics, public schools, Roskilde Festival, and the formidable work of Herbert Simon. I also had the good fortune to get to run an experiment and co-author an article with Martin Bækgaard, a good friend now for 17 years.

My two supervisors, Peter Bjerre Mortensen and Simon Calmar Andersen, have provided detailed and highly perceptive, if sometimes annoying, comments on my work that have proven immensely helpful. Simon additionally granted me access to data collected by him. Although at times there was some disagreement between us about the most fruitful course forward for the project, probably fuelled by mutual ambition and a good deal of stubbornness on my part, their strive for excellence has been inspiring.

Finally, I would like to thank Don Moynihan for hosting me at UW-Madison for one semester and for providing me with insightful comments on my work, on baseball and on the workings of the US public administration community. And then a final thanks to Marie for taking such good care of my life while I was away, and while I was not.

Poul Aaes Nielsen Palo Alto, October 2013

Chapter 1: Introduction

This dissertation explores the impacts of performance information in politics and public management. It aims to demonstrate that a theory-guided approach to understanding the role of context and the mechanisms through which performance information operates can yield novel and important insights that are critical to the advancement of both the theory and practice of performance management. The dissertation further shows that understanding how performance information shapes political and management decision making can contribute to answering some of the classic and enduring questions of public administration and broader political science. These questions include: How can we improve the performance of public services? How do organizations prioritize between different goals and tasks? How does organizational change come about? And how do decision makers decide on the allocation of scarce budget funds?

The present dissertation report summarizes the separate articles of the dissertation and provides a general introduction aimed at describing the combined contributions of the dissertation's separate parts.

Performance focus and the proliferation of performance information

Public service performance has increasingly become the center of academic and political debates on how to organize public services. Concerns with public service performance in the Danish welfare state have recently been dominant in negotiations over public school reform, collective agreements, and more general administrative reforms. In the so-called trust reform negotiated between the Danish government, municipalities, and labor unions in June 2013, the first principle stated that "Public sector governance should be based on goals and results, rather than on rules and procedures" (Regeringen et al. 2013). This is echoed in the quality reform introduced by the previous government stating, for instance, that "The next great task is to ensure continued renewal and development of the quality of (...) all parts of the public welfare services" (Regeringen 2007, 9).

This focus on performance has been accompanied by increasingly widespread performance measurement and dissemination of performance information to managers, citizens, and elected political representatives (Bouckaert and Halligan 2008; Ejersbo and Greve 2008; Moynihan 2008). Such performance information can cover multiple dimensions of performance, the most important being the outputs, outcomes, and responsiveness of public services (Boyne 2002). To take a familiar example from this dissertation, the outputs of public schools include the number of students and hours taught, whereas outcomes concern the impact on users and society, such as student learning (typically measured by test scores), future education attainment, earnings, and life satisfaction. Finally, responsiveness to the needs and demands of users and citizens is often measured by the levels of parent and student satisfaction with their school.

Performance information is published in different formats, such as annual performance reports, rankings, or more elaborate benchmarking schemes (Ammons 2000; Dixon, Hood, and Jones 2008). Perhaps the most politically debated examples in Denmark have been the publication of PISA test scores that rank national school systems as well as rankings of schools within Denmark based on grade point averages. Other well-known examples include "Den Danske Kvalitetsmodel" in health care, indicators of timeliness and job placement rates for employment agencies, and the use of performance contracts and performance reports in the central administration. With the so-called quality reform of 2007, efforts have also been made to broaden the scope of performance measurement to also include "softer" service areas, such as child care and elderly care.

The introduction of performance measurement is often argued to follow a much broader trend in administrative reforms referred to as New Public Management (NPM), which in varying degrees extends across large parts of the globe (Pollitt and Bouckaert 2004). Rather than a coherent set of ideas and practices, NPM incorporates a number of different and, some would arque, inconsistent prescriptions for public sector reform that were designed to remedy perceived inefficiencies and waste (Hood 1991; Osborne and Gaebler 1992; J. G. Christensen 2010). These prescriptions include instruments such as competition and financial incentives, importing private sector management practices, measuring performance, and, which is sometimes forgotten, granting organizations greater autonomy over how to organize the production of public services (Hood 1991; Kettl 1997). Yet, during the 2000's, some authors began to note a fading practical and academic influence of the general NPM movement (Hood and Peters 2004; Dunleavy et al. 2006; T. Christensen and Lægreid 2007). Performance measurement, however, appears to have undergone the opposite development, leading numerous authors to refer to the present as nothing short of "an era of government by performance management" (Moynihan 2008, 3).

Even though performance measurement predates NPM (Williams 2003), performance management falls well in line with NPM prescriptions designed to improve the performance, transparency, and accountability of government. Whereas NPM describes a range of rather different management tools and philosophies, performance management focuses more narrowly on managing of and for the performance, results, or outcomes of public services as opposed to narrowly focusing on inputs and process regulation (Moynihan 2008). In other words, performance management aims to direct the attention of public sector organizations toward delivering the results that are demanded by citizens and users and their elected representatives. Performance information has thus been argued to assist citizens and elected politicians in holding public organizations accountable and to inform the decisions of public managers as they learn from continuous and systematic feedback on performance.

Performance measurement has also met fierce criticism, however, perhaps particularly by the professionals working at the frontlines of public service provision (e.g., Danmarks Lærerforening 2005). Many opponents claim that quantifiable performance indicators fail to capture the complexities of public service provision; that focusing on what is measured induces potentially dysfunctional effort substitution and gaming behaviors; that performance-based control systems alienate and de-motivate public service employees; and that the costs of introducing elaborate measurement schemes will prove much greater than the potential benefits that might be reaped from them (Bevan and Hood 2006; Dahler-Larsen 2008; Soss, Fording, and Schram 2011).

Concerning the empirical evidence, little academic consensus exists on the relative merits and ills of reporting performance information. Existing studies have found differing and seemingly contradictory effects of introducing performance measurement in the public sector (Ammons 2002; Swiss 2005; Yang and Hsieh 2007; Moynihan et al. 2011; Moynihan 2013; Nielsen forthcoming). A similar observation can be made concerning the evidence on dysfunctional effects, which are sometimes present (e.g., Bohte and Meier 2000; Bevan and Hood 2006; Soss, Fording, and Schram 2011) but other times not (e.g., Wenger, O'Toole, and Meier 2008; Kelman and Friedman 2009). Studies have also shown that purposive use of performance information in actual decision making is often limited (Melkers and Willoughby 2005; Van Dooren and Van de Walle 2008; Moynihan and Pandey 2010).

These mixed findings suggest that our understanding of the role of performance information in public management remains highly limited. Considering the importance of performance information to present and future public sector governance, expanding our knowledge of how and under which circumstances performance information might work successfully plays a key role in improving the performance of public service provision.

Similarly, numerous scholars have called for the establishment of a stronger theoretical foundation for the academic literature on performance information (Jennings and Haist 2004; Talbot 2005; Yang and Hsieh 2007; Moynihan et al. 2011). Particularly, understanding *how* performance information affects organizational decision making and behavior has been neglected in existing work. Often, performance information is more or less assumed to improve future performance but with little or no account presented of how this might come about, that is, how managers or elected representatives are supposed to use the information. Instead, authors have focused on more abstract notions and survey measures of whether performance information is used and whether it results in organizational learning. The next 'big question' for performance management research might therefore well concern how performance information shapes decision making.

Existing findings also indicate that we should recognize the role of context in determining the effects of performance management on organizational performance (Jennings and Haist 2004; Moynihan et al. 2011). Performance information is likely to have different impacts depending on the capabilities, incentives, and opportunities that are available to managers (Swiss 2005). In recent years, a considerable body of work has studied the antecedents of performance information use in decision making and learning practices, and these studies give some indication of the factors that might improve the impact of performance information (Julnes and Holzer 2001; Moynihan and Ingraham 2004; Melkers and Willoughby 2005; Askim, Johnsen, and Christophersen 2008; Bourdeaux and Chikoto 2008; Askim 2009; Van Dooren and Van de Walle 2008; Dull 2009; Moynihan and Landuyt 2009; Moynihan and Pandey 2010; Taylor 2011; Moynihan, Pandey, and Wright 2012; Kroll 2013). Factors affecting reported levels of performance information use have been found to include individual mission orientation and public service motivation; organizational factors such as leadership, information availability, decision authority, learning forums, task characteristics, culture, capacity, and resources; and environmental factors such as stakeholder influence and conflict, political ideology, and political competition.

In terms of answering how context matters to performance management effects, however, this literature is still of limited use. First, it is not clear that performance information use would automatically lead to performance improvements, as other obstacles might intervene at a later stage or managers lack the capacity or ability to engineer performance-oriented change. Stud-

ies have yet to demonstrate general links between the perceptual measure of performance information use and impacts on organizational decision making and performance (Moynihan et al. 2011). Managers using performance information might also be oriented toward other goals than performance improvement (Moynihan 2009), and more generally, the factors promoting performance information use might be different from those that support positive performance effects. Third, it is important to acknowledge that gathering, reporting, and evaluating performance data is costly in terms of time and resources that might have been better spent on other tasks (Nielsen forthcoming). Finally, existing quantitative findings are vulnerable to potential selection effects and common source bias as they all utilize cross-sectional research designs that, for the most part, rely exclusively on self-reported measures of performance information use. Understanding the importance of context to the impact of performance information thus remains a pressing concern for performance management research.

These considerations lead to the following general research questions, which guide this dissertation: How, if at all, does performance information affect management and political decision making? Does context influence the impact of performance management and, if so, how?

Outline of the project

Partial answers to these questions are provided in the three articles listed below. Apart from explaining their individual contributions, this report also provides an introduction to the articles aimed at describing their combined contributions and the lessons to be drawn when looking across the separate articles.

- 1. Nielsen, Poul Aaes (forthcoming). Learning from Performance Feedback: Performance Information, Aspiration Levels, and Managerial Priorities. *Public Administration*.
- 2. Nielsen, Poul Aaes and Martin Baekgaard (forthcoming). Performance Information, Blame Avoidance, and Politicians' Attitudes to Spending and Reform: Evidence From an Experiment. *Journal of Public Administration Research and Theory.*
- 3. Nielsen, Poul Aaes (forthcoming). Performance Management, Managerial Authority, and Public Service Performance. *Journal of Public Administration Research and Theory*.

The following chapter proceeds by clarifying the distinctions between a number of concepts related to performance information, and it provides a general introduction to the purposes of performance information. Chapters 3 through 5 summarize the theoretical arguments and findings of the dissertation's three articles. Chapter 3 examines the role of performance information in management decision making by introducing an aspiration-based learning model of performance evaluation that is applied to how managers prioritize between different goals. Chapter 4 presents and reports the findings on a blame-avoidance model of how elected political representatives are affected by performance information when deciding on budgeting and reform. Chapter 5 describes how the level of managerial authority over different organizational aspects is a central contextual factor in determining the impact of performance management on subsequent organizational performance. Finally, Chapter 6 concludes by discussing the central contributions of the articles, how the separate parts can be integrated, and what their implications are for our understanding of the role of performance information in public administration and political science.

Chapter 2: Performance Information – A Multi-Purpose Tool

Defining performance information

The concept of performance information has been defined in slightly different ways in existing work (e.g., Pollitt 2006; Bouckaert and Halligan 2008; James 2011). Definitions differ both in what is meant by performance and which types of information are included. Some definitions of performance information are based on a very broad definition of performance consisting of, for instance, "the inputs, processes, outputs, and outcomes of public services and organizations" (James 2011, 400). Based on the conceptual framework laid out by Boyne (2002), I find it more prudent to restrict performance to concern the outputs, outcomes, and responsiveness of public services.¹ The inputs and production processes of public services are important when explaining the level of performance and evaluating whether performance is satisfactory, but this does not make them part of performance. Indeed, performance information is also frequently referred to as "results information" and performance management as "results-based management" and "managing for results" (Swiss 2005), which highlights the consequences of public services. Outputs consist of the quantity and quality of the service provided, whereas outcomes typically refer to the impact of the service or policy on users or society at large (Boyne 2002). Such outcomes include the formally stated purposes of public policy, but it might also encompass any additional positive or negative side effects. The third dimension concerns whether public services are responsive to the needs and demands of service clients and the public (Boyne et al. 2003). Public organizations might produce high-quality outputs with high levels of goal achievement, but this may be of little value if the services provided do not correspond to the needs or preferences of clients and citizens.²

¹ Boyne (2002) includes an additional dimension termed "democratic outcomes", which covers probity, participation, and accountability.

² By adding cost information, these three dimensions can, ideally, be turned into separate measures of efficiency, which would, by construction, also be types of performance information.

A second question concerns the performance of whom or what. In this dissertation, public sector performance information is restricted to cover the performance of public organizations, programs, and political entities (Olsen 2013). Information about the performance of individual managers or employees is thus only included insofar as it is based on broader measures of organizational or sub-unit performance (Talbot 2005).

Concerning the relevant types of information, performance information usually takes the form of continuously monitored, quantitative indicators of performance. This would be too restrictive for a formal definition, however. Performance indicators would still be performance information regardless of whether they are measured at multiple points in time, although one-time measures would probably be of less use. In many instances, performance appraisal takes the form of a general and essentially qualitative assessment carried out, for instance, by external auditors such as OMB staff in the US federal PART program (Heinrich 2012). On the other hand, performance information should be systematic in the sense that it does not include managers' and other decision makers' own, vaguer, impressions of how well an organization is operating. Performance information is aimed at improving the basis for decision making and not at renaming existing sources of information. For the purposes of this dissertation, performance information is therefore defined as: systematic information describing the outputs, outcomes, or responsiveness of the policies and services of public organizations, programs, or political entities.

Purposes of performance information

In order to properly assess the impacts of performance information and performance management, it is appropriate to consider what its stated purposes are. This is not a simple task, however, as performance information has been introduced in order to achieve a host of different goals. Additionally, because performance management has become something of a management (and academic) fad (Moynihan 2008), performance management has been used to denote a wide range of different, and often inconsistent, management systems and practices. The present outline of the different uses and purposes of performance information therefore does not aspire to be a complete overview. Nevertheless, a number of general purposes and uses of performance information are highlighted in this and the following section.

The performance management model underlying performance measurement can be described as a continuous cyclical process in which elected officials or top administrators focus primarily on defining organizational

goals, setting performance targets, and subsequently using performance data to hold subordinate agencies and managers accountable to these targets. Performance information then becomes the key steering tool, which, ideally, should replace much more costly command structures and systems of oversight. In return, public sector organizations should be set free from dysfunctional rules and regulations that constrain those same organizations in their pursuit of performance improvements (Moynihan 2006a).

Introducing a system of measuring and managing of and for performance has been argued to affect organizational behavior and performance in several ways. A primary goal for many public sector performance measurement schemes has been to make the outputs and results of public service provision visible and transparent, which can help executives and legislatures secure compliance by holding managers accountable to official goals and performance standards (Halachmi 2002; Moynihan 2008). In addition, performance information has been argued to rationalize budgetary processes by assisting elected representatives in achieving a more efficient allocation of budgetary funds (Joyce 1993; Moynihan 2006b). In turn, performance information can also be used by citizens to hold their elected representatives accountable for government performance (James 2011), and, in some instances, to influence public service organizations and their managers directly through, for instance, user board participation and complaints or by voting with their feet and choosing other service providers (Hirschman 1970; Lassen and Serritzlew 2011). Apart from promises of improved performance, performance information is therefore also promoted as a tool for strengthening democracy.

At the organizational level, the continuous process involving goal setting and performance feedback also sends signals to managers and employees about the current goals of their principals and how to prioritize between them. This has traditionally been seen as a fundamental challenge to large bureaucracies, be they public or private, as the distance from top to bottom will necessarily create information asymmetries and needs for discretion (Simon 1947; Brehm and Gates 1997). A more general aspect of this type of signaling has been aimed at creating a stronger focus on results and outcomes among managers and their principals alike as a replacement of more traditional modes of input and process regulation (Joyce 1993).

In some cases, performance-related incentive schemes have been introduced to strengthen these objectives. Incentive schemes differ greatly in their design, but the general idea is to let either part of the budget or pay depend on achieved performance (Swiss 2005). However, the presence of financial incentives is not a necessary condition for performance manage-

ment systems to affect subsequent organizational performance (e.g., Kelman and Friedman 2009; Nielsen 2013). At the individual and team levels, psychologically based goal-setting theory has argued that setting challenging but realistic goals and providing feedback on goal achievement may by itself have a motivating effect on employees and managers, at least if the goals are generally accepted in the organization (Locke and Latham 1990; Locke and Latham 2002).

Finally, providing continuous and systematic feedback on performance has been argued to improve organizational learning, as managers and employees become better equipped to identify performance problems in their organization and seek out solutions to them (Greve 2003; Moynihan and Landuyt 2009). In turn, this should make for better informed decisions concerning, for instance, the allocation of organizational resources, investments in specific human capital, setting up teams or task forces, or laying off employees that are deemed inadequate for the task.

These different purposes are not isolated from each other. In some instances, the achievement of one purpose reinforces another, for instance, if performance-based accountability motivates managers to strive for performance improvement. But different purposes can also be at odds with one another. For instance, some reward and punishment types of accountability systems have been found to increase gaming and cheating behaviors, which are often detrimental to organizational performance (Bohte and Meier 2000; Bevan and Hood 2006) and which will undermine organizational learning from performance feedback (Greve 2003b; Moynihan 2005) or even direct learning efforts toward how to better game the system (Soss, Fording, and Schram 2011).

Conceptual distinctions among uses of performance information

These different purposes concern multiple levels of government and are associated with different activities and decisions. The most general concept used is that of performance management. The term performance management is, like performance information, not used consistently across academic studies. Much work on performance management implicitly applies an inclusive version of the concept, in which even a weak version of the cyclical performance management model described above is sufficient for using the concept. More restrictive uses of the term performance management require that one or more additional elements are included in the management sys-

tem. Such additional elements might be the use of performance contracts, performance-related incentives, strategic planning, creating a performance-oriented culture, or increasing managerial authority.³ This reflects the fact that performance management schemes differ substantially in how they are designed and implemented, so the different definitions and descriptions of performance management are not necessarily a sign of real conceptual disagreement as much as a result of the different empirical cases studied.

However, the different conceptions of performance management have the unfortunate consequence of making it difficult to compare findings on the effects of performance management across studies, even within the same service sectors, and this may help account for the mixed findings present in existing work. In turn, it also suggests that a research agenda might oriented at studying whether systematic variations in these additional elements make a difference to the impact of performance management (Andrews, Boyne, and Walker 2011; Moynihan et al. 2011) and, indeed, of broader public management (O'Toole and Meier 2013). This also implies that the question of how we understand and test for contextual conditioning is intimately connected to how management concepts and behaviors are defined, as the definitions are what demarcate them from what is considered the context. I therefore adopt an inclusive definition of performance management as "a system that generates performance information through strategic planning and performance measurement routines and that connects this information to decision venues, where, ideally, the information influences a range of possible decisions" (Moynihan 2008, 5). The term ideally suggests that performance information is not necessarily used in decision making, but that its use is present as an underlying rationale of the system. Any additional elements of a specific management system can then be treated as contextual characteristics that might or might not condition the effectiveness of performance management (Jennings and Haist 2004; Brambor, Clark, and Golder 2006).4

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³ Note that inclusive/restrictive here refers to the extension of the concept, that is to its empirical coverage understood as the number of empirical referents that can be subsumed under the concept. Following Sartori's "ladder of generalization" for classical concepts, an inverse relationship exists between the extension of a concept and its semantic intension, that is, the number of attributes or dimensions included in the concept (Sartori 1970; Collier & Mahon 1993).

⁴ Alternatively, different configurations of such additional elements could be treated as different performance management types, but such a typology would grow exponentially in complexity as more dimensions are added. This would also be a practical concern for the proposed contextual approach, though. A more general implication of the contextual perspective has been outlined by Pawson and Tilley

In this dissertation, the term performance management is used to denote management systems occurring at different levels within organizations, but again, this is not a consistent practice in the literature, and other studies have used the term much more broadly. When performance information is used in the relation between elected officials and the bureaucracy, the term performance-based steering is sometimes applied, and past studies have, among other aspects, focused on the use of internal contract management and formal steering documents (Pollitt 2006b; Lægreid, Roness, and Rubecksen 2008; Binderkrantz and Christensen 2009).

The use of performance information in the different stages of the budgetary process, that is, in budget preparation, negotiation, and appropriations decisions, is often referred to as performance-based budgeting (Melkers and Willoughby 2005; Moynihan 2006b; Joyce 2011; Raudla 2012). If budgetary funds are automatically linked to outputs or outcomes, this is sometimes referred to as activity-based budgeting, output-purchase budgeting, or outcome-based budgeting (Serritzlew 2006; Posner and Fantone 2008), but examples of automatic links between outcomes and funding are rare (Joyce 2011).

At different levels of the organization, performance information can also be used to reward individual and team performance. Different types of performance-related pay systems have been referred to as examples of performance management as well, but again, this creates unnecessary conceptual confusion. Thus, while performance-related pay can be used as a tool in performance management systems, it is not a definitional characteristic of performance management.

Having described some of the general purposes and concepts related to performance information, the following three chapters present the dissertation's main theoretical arguments and empirical findings regarding the impacts of performance information.

(1997), who argue against the notion that social programs have an independent causal effect based on the characteristics of the program itself. Instead, they propose a theory-guided "realistic" approach by arguing that social programs offer reasons, resources, inducements, etc., to actors who might or might not let their behaviors be affected by these. Whether actors are affected depends on whether the context, including actors' individual characteristics, is conducive to change. Such a strategy of research has the added advantage that the policy advice that policy makers are looking to public administration research for also concerns when and for whom what types of policy will (or will not) work.

Chapter 3:

A Behavioral Model of Performance Evaluation: Management Priorities

Chapters 3 and 4 concern the question of how key decision makers interpret and respond to performance information. This chapter focuses on how performance information affects managerial priorities, while Chapter 4 addresses the role of performance information in political decision making. These chapters only provide an overview of the theoretical arguments and findings, while further details can be found in the dissertation's articles.

Management uses of performance information: What we don't know

Performance information systems focused on the systematic and continuous evaluation of organizational performance are frequently argued to improve future performance by promoting organizational learning and improving the quality of organizational decision making (Behn 2003; Moynihan 2008; Moynihan and Landuyt 2009).

This kind of learning requires that organizational decision makers are informed by the information and use it actively in their decision making. Elaborate and well-designed systems of performance measurement do not guarantee the use of performance information. Accordingly, a growing body of work has focused on actual use of performance information as a behavioral measure of reform implementation (Moynihan and Pandey 2010; Moynihan and Hawes 2012). This work has primarily studied the antecedents of performance information use, and a number of different individual, organizational, and environmental factors promoting the use of and learning from performance information have been identified (Van Dooren and Van de Walle 2008; Askim, Johnsen, and Christophersen 2008; Moynihan 2008; Moynihan and Landuyt 2009; Moynihan and Pandey 2010).

However, we still know little about what the use of performance information really entails and, as a consequence, what the specific organizational impacts of performance information are (Moynihan et al. 2011). We are thus in lack of a theory of what performance information does. Which particular attitudes and decisions are affected by performance information, and how they are affected by it are therefore open questions. Answering these

questions is crucial to providing a stronger theoretical foundation for the literature on performance information (Jennings and Haist 2004; Yang and Hsieh 2007). In addition, understanding how performance information shapes management decision making promises to shed light on broader organizational phenomena, which I will return to in Chapter 6.

Making sense of performance data: Reference points for comparison

This chapter is based on the article "Learning from Performance Feedback: Performance Information, Aspiration Levels, and Managerial Priorities" (Nielsen forthcoming). The article builds on an aspiration-based model of performance evaluation inspired by Cyert and March's (1963) *A Behavioral Theory of the Firm.* This model suggests that systematic performance evaluation can be understood as a means to ensure organizational adaptation. As high and low performing organizations face different environmental pressures and potentials for learning, decision makers' responses to performance information should depend on what the information tells them about their performance. Particularly, perceptions of low performance point to the existence of a problem requiring attention, which might, in turn, influence key strategic decisions in predictable ways (Greve 2003b).

How performance is interpreted is not a trivial question, however, as numbers typically tell us little on their own. Decision makers have to rely on some point of reference or performance standard in order to make sense of performance data. Such reference points are seldom, if ever, naturally given (Greve 2003b). Because of the complex nature of the causal relations leading from actions to outcomes, boundedly rational decision makers face uncertainty regarding what the true performance potential of an organization is. Decision makers are therefore forced to look to the organizational context for available information cues on what constitutes satisfactory performance (March 1994; Greve 2008). These information cues can then be used to construct performance aspirations against which decision makers can compare actual performance and decide whether organizational adjustments are needed.

As the bases for such reference points, existing private sector studies have pointed to the performance history of the organization itself as well as to social comparison to the performance of other similar organizations. These are typically referred to as *historical* and *social* aspirations (Baum and Lant

2003; Greve 2003b).⁵ Two organizations receiving fairly similar information about their own performance might therefore interpret this information differently depending on differences in their initial performance aspirations (Greve 2003). For instance, if the same current performance represents an increase in performance for one organization but a decrease for another, the same performance might well lead to different conclusions among decision makers concerning whether performance is satisfactory. However, this kind of historical performance comparison has obvious limits as a means for organizational adaptation, as it does not take into account any general performance trends present across organizations operating in the same sector, for instance, because of technological developments or societal changes. Such general trends are better incorporated by making social comparisons to the performance of other relevant organizations. Only relying on social comparison can also be problematic, however, as similar types of organizations often face very different operating conditions. For instance, public organizations are often challenged by different levels of task difficulty as well as differences in the financial circumstances under which they operate. Such conditions might be better taken into account by historical performance comparison, if such factors remain relatively stable over shorter spans of time. Both historical and social aspirations are therefore likely to matter for performance comparison.

In Cyert and March's (1963) original work on the behavioral theory of the firm, this need for reference points and comparison was extended into a more general aspiration-based model of performance evaluation. Already March and Simon (1958, 4) argued that "organizations focus on targets and distinguish more sharply between success (meeting the target) and failure (not meeting the target) than among gradations in either." Performance aspirations ("targets") function as a means to simplify complex procedures of performance evaluation by turning performance levels into discrete measures of success or failure in order to make them manageable for real-world decision-making purposes (Bendor 2010). For performance measurement, aspiration levels are thus thresholds that partition all possible levels of performance into two (or more) disjoint sets for subsequent evaluation, and they can be defined as "the smallest outcome that would be deemed satisfactory by the decision maker" (Schneider 1992, 1053). As the boundary be-

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⁵ Apart from socially and historically based aspiration levels, a third kind of aspiration level may be specifically relevant for some public sector organizations, namely aspiration levels set through coercion in the form of performance requirements or targets regulated by legislative or governmental standards (Bevan and Hood 2006; Boyne and Chen 2007; Salge 2011).

tween success and failure, aspiration levels have also been described as the starting points of doubt and conflict in decision making (Lopes 1987). When performance falls in the domain of success, aspiration-based theories typically suggest a preference for the status quo, whereas perceived failure poses a challenge that might trigger reconsideration and a need for active decision changes. However, how the aspiration-based decision process proceeds will differ depending on the type of decision studied.

Managerial priorities

This dissertation has examined whether performance information affects how public managers prioritize between organizational goals. Understanding how priorities are formed and change is a pertinent question to the study of public sector organizations, as they are often pursuing multiple and democratically contested goals (Chun and Rainey 2005; Wenger, O'Toole, and Meier 2008; Moynihan et al. 2011). Moreover, impacts of performance information on mangerial priorities are particularly interesting as they can help us understand not only which behaviors that are affected by performance information but also toward which goals such affected behaviors are oriented. Studies of private sector firms tend to focus on economic goal variables such as profits, costs, or growth (Greve 2003b), but it is often more difficult to clearly state the goals of public service organizations (Chun and Rainey 2005; Pandey and Wright 2006). Most public organizations are deliberately created to pursue multiple goals, and some of these may even be at odds with one another (Kelman and Friedman 2009). This can force a trade-off between different organizational goals. Performance evaluation offers a means to resolve this trade-off by prioritizing goals that are currently underperforming (Wenger, O'Toole, and Meier 2008). Thus, March and Simon (1958, 4) continue by noting that, "organizations devote more attention to activities that are currently operating below their own targets than they do to activities that are achieving their targets." This is consistent with work on a broader "negativity bias", suggesting that negative information is generally given greater weight than equally strong positive information (Lau 1982; Soroka 2006; Hood 2011).

Figure 3.1. Managerial priorities and a behavioral learning model of performance evaluation



Cyert and March (1963) argued that organizations deal with goals sequentially because of bottlenecks of attention, such that decision makers devote attention to one goal at a time. Priorities would then shift between goals in a hierarchical order according to whether performance on the more important goals succeeds in meeting aspirations. The allocation of attention therefore results in an implicit prioritization of goals (Cyert and March 1963). Thus, because managers are expected to focus primarily on under-performing goal variables, how they prioritize among different goals is expected to differ systematically depending on organizational performance relative to aspiration levels (Cyert and March 1963; Greve 2008). In other words, when performance relative to aspirations declines on a goal variable, managers' prioritization of that goal should increase.

This expectation was examined using administrative data on student academic performance in Danish public schools and cross-sectional survey measures of the school principals' priorities of academic learning compared to other goal variables. Historical aspiration levels were measured as each school's own past performance, while social aspirations was constructed as the average performance of schools placed within the same geographically based jurisdiction, in this case the Danish municipalities (Gulick 1937). Schools located within the same municipality will have more knowledge of each other than of schools placed further away, they are subject to the same political principal, the city council, and they might compete against each other for funding and, to a limited extent, for students. The other public schools in the municipality therefore form an immediately relevant reference group for comparison when school principals attempt to construct expectations that are useful for evaluating their own performance (Baum and Lant 2003).

The findings showed strong support for the separate impacts of performance relative to both historical and social aspirations on managerial priorities, also when mutually controlling for the aspirations levels. The results indicated a linear association, suggesting that attention is not allocated strictly sequentially between goal variables, but instead that higher-performing

goal dimensions are paid less (and not no) attention, when performance exceeds aspirations (Greve 2008; Nielsen forthcoming). The article thus contributes by showing how an aspiration-based model of performance evaluation can be adapted to the study of public organizations, and by demonstrating specific impacts of performance information on managerial priorities.

Chapter 4: A Political Blame-Avoidance Model of Performance Evaluation

Besides aiding management decision making, another central motivation driving the development of performance measurement was the perceived need to assist elected politicians in holding public organizations accountable and making better informed decisions regarding resource allocation and institutional design (Halachmi 2002; Joyce 1993). By shifting decision makers' focus from input and process regulation to government outputs and outcomes, elected representatives and agency managers were to pay greater attention to performance and creating public value (Kettl 1997). Incorporated in the political budget process, performance information has been argued to create a system of performance-based budgeting whereby decision makers reward high-performers and punish low-performers, with the aim of allocating resources according to the value added of different programs and organizations (Breul 2007).

Empirically based knowledge of how performance information affects the decision making of elected politicians is limited, however. Previous quantitative work has focused mainly on different types of performance information use or perceptions of the usefulness of performance information (Poister and Streib 1999; Bogt 2004; Melkers and Willoughby 2005; Ho 2006; Pollitt 2006a; Askim 2007; Askim 2009). Again, these studies only tell us whether the information was used, not if or how it affects decision making. Other work has studied the impact of performance scores on subsequent budget appropriations, but with rather mixed findings (Gilmour and Lewis 2006a; Gilmour and Lewis 2006b; Frisco and Stalebrink 2008; Heinrich 2012). The absence of clear impacts of performance information has partly been explained by the ambiguous nature of performance information (Joyce 2008; Moynihan 2006b; Moynihan 2008) and by the contention that politics will continue to undermine systematic performance-based budgeting (Davis, Dempster, and Wildavsky 1974; Radin 2008; Wildavsky 1964).

As illustrated in Figure 4.1, this dissertation contributes to existing work by developing a blame-avoidance model of political responses to performance information that results in novel predictions about that impact of performance information on politicians' attitudes to spending and reform – the two primary concerns in a system of performance-based budgeting. This is pur-

sued in the article "Performance Information, Blame Avoidance, and Politicians' Attitudes to Spending and Reform: Evidence from an Experiment" (Nielsen and Baekgaard forthcoming).

Figure 4.1. Political responses to performance information



Performance information, ambiguity, and political incentives for blame avoidance

By allocating resources according to how well programs and organizations perform, it is argued by some advocates of performance-based budgeting, public resources are spent more efficiently (Gilmour and Lewis 2006b). This perspective on performance-based budgeting offers a clear rationale for how actors should interpret and respond to performance information and in a way reduces performance-based budgeting to a purely technical exercise (Radin 2008). This perspective appears to assume that political actors are primarily concerned with improving the performance and efficiency of public services (Boyne 2002; Breul 2007) or at least that such improvements are means to achieve other goals, such as reelection.

A fundamental challenge to this perspective, however, lies in the fact that the lessons of performance information are inherently ambiguous (Moynihan 2006b; Moynihan 2012a; Nutley et al. 2012; Vakkuri and Meklin 2006). As Moynihan (2006b, 159) notes, "If a program is consistently performing well, does that indicate that it should receive greater resources or that it is already amply provided for? Is the poorer-performing program a candidate for elimination or just in need of additional resources?" It is, thus, not obvious which decision rationales will guide decision makers when responding to performance information.

We argue, however, that precisely because of the ambiguity of performance information, a more general political rationale reflecting efforts to avoid blame and seeking reelection will show through as systematic attitudinal responses to performance information (Charbonneau and Bellavance 2012; Hood 2007). According to blame-avoidance theory, the avoidance of

blame is central to understanding the behavior of elected political representatives, as they seek to avoid negative media coverage that could damage their chances for re-election (Soroka 2006), while also attempting to claim credit for positive events (Brändström, Kuipers, and Daléus 2008; Hood and Lodge 2006; Hood et al. 2009; Sulitzeanu-Kenan 2010; Weaver 1986).

We used this logic of blame avoidance to derive a set of novel hypotheses regarding the impact of performance information on politicians' attitudes to spending and reform within a popular and salient policy area. These hypotheses were tested using a survey-experimental research design targeted at the population of Danish city councilors. City councilors were randomly assigned to treatment and control groups, and only the treatment group received true information about the performance of the public schools located in their municipality, specifically whether the schools were performing above, around, or below average school performance in Denmark when taking socio-economic differences into account. Because of the randomization, we can be certain that any systematic differences in attitudes between the treatment and control groups are caused by the information cue.

Impacts of performance information on attitudes to spending and reform

As described in much greater detail in the article, the results largely corresponded to our hypotheses. Information showing low performance had a positive effect on attitudes to school spending, indicating that punishing low performers in a popular and salient policy area is not politically feasible. High on the agenda, decision makers may have little chance of disassociating themselves and their spending decisions from program performance. As citizens place high demand on the quality of public schooling, a natural reaction to low performance might therefore be to allocate further resources to the policy area in order to strengthen future performance. This finding therefore directly contradicts the alternative reward-punishment mechanism.

Receiving information showing high performance also had a positive impact on spending attitudes compared to receiving no information. This finding is consistent with politicians actively seeking to claim credit for present and future performance by "backing the winner". Surprisingly, information showing average performance had a negative effect on spending attitudes. This is difficult to explain when examined in isolation, but if political decision makers are guided by blame-avoidance and credit-claiming rationales to increase spending in response to both low and high performance

- as confirmed by the findings - the necessary budget response to average performance would indeed be to cut spending because of budget size constraints. The measurement of spending attitudes was designed to draw the respondents' attention to the budget size constraints present in real life budgetary decision processes by also asking about attitudes to spending in other policy areas, so the consistency argument can be a plausible explanation for this otherwise surprising finding.

Concerning politicians' attitudes to reform, neither information showing average nor low performance had a statistically significant impact. In contrast, information showing high performance resulted in a reduced willingness to pursue reform. This is an interesting finding, as it suggests that performance information can be used not only to justify spending cuts and sanctions – something that has been given much attention, not least by many practitioners – but also to shield well-performing programs and organizations against pressures for reform.

Comparing the findings for the two outcome variables, it is particularly worth noticing that information showing high performance appears to increase the likelihood of preferring more spending and to decrease the likelihood of preferring organizational change. High performance is thus associated with more positive attitudes toward a policy area. This is of broader relevance to our understanding of how performance information might alter dynamics in public administration. Blame-avoidance theory typically argues that negativity bias will focus much more attention on negative outcomes than on positive ones (Hood 2011; Lau 1982). Consequently, the impact of low performance or scandals, as well as political behavior aimed at avoiding these, have traditionally been in focus, whereas distinctions between average and high performance have been argued to largely be ignored (Hood 2011). The findings from this study oppose this perspective and instead suggest that the introduction of high-quality performance information to elected politicians creates a greater appreciation of high performance by making performance differences much more visible. In turn, this could potentially alter the incentives for public managers toward not only avoiding blame but also striving for success.

Chapter 5: Performance Management in Context: The Role of Managerial Authority

This third summary chapter discusses the role of context in determining the impact of performance management on organizational performance. Exploring the role of context can help us determine which types of contexts that are conducive to performance management success and which are not, and thus where we might expect the investments in performance measurement and performance evaluation to yield a positive pay-off (Jennings and Haist 2004; Moynihan 2009; Yang and Hsieh 2007). Moreover, studying context might help us explain the widely differing effects of performance management found in existing work, which presents a critical challenge to public management research (Ammons 2002; Moynihan et al. 2011; Swiss 2005; Yang and Hsieh 2007).

In this dissertation, I have focused specifically on the impact of managerial authority. Thus, a fundamental assumption underlying both performance management reform and the broader New Public Management paradigm was that a considerable degree of managerial authority is central for performance measurement and performance management systems to improve performance (Joyce 1993; Kettl 1997; Moynihan 2006a; Moynihan and Pandey 2006; Swiss 2005).6 This suggests a division of labor according to which political attention should be focused primarily on setting and tracking overall strategic goals and holding managers accountable to their performance on these goals. This would be accompanied by an increase in managers' discretion over internal operations, that is, over how these goals are best to pursued, thereby "letting managers manage" (Kettl 1997, 449). Greater levels of managerial authority are thus argued to free managers to exercise their professional expertise and knowledge of local conditions and challenges in pursuit of performance improvement. Performance measurement systems can make managers aware of strategic goals and inform them about their goal achievement, but without managerial authority, managers may have little chance of using this information to initiate performance-oriented changes in

⁶ This is arguably also the case for other output- or outcome-oriented steering tools such as activity-based reimbursements that rely on local adaptation based on financial incentives to achieve efficiency and performance gains (Kettl 1997; Jakobsen 2010).

organizational structures and routines (Joyce 1993; Osborne and Gaebler 1992).

The suggested division of labor predicts a moderating influence of managerial authority on the impact of performance management, but surprisingly no previous studies have examined this assumption. This is pressing concern, however, as several studies have documented that performance management reforms have often neglected to grant managers greater authority over organizational operations (Brudney, Hebert, and Wright 1999; Verhoest et al. 2004; Moynihan 2006a; Moynihan and Pandey 2006; Breul 2007). The resulting pattern of performance management adoption is summarized in Figure 5.1 as a movement from quadrant (1) to (2), while failing to realize the performance management ideal type of quadrant (3). The question of whether managerial authority affects the impact of performance management is therefore addressed in the article "Performance Management, Managerial Authority, and Public Service Performance" (Nielsen forthcoming).

Figure 5.1. Expected implications of limited performance management reform

	Low focus on results	High focus on results	
Low managerial authority	(1) Bureaucratic systems, high focus on inputs, and little incentive or authority to increase technical efficiency.	(2) Pressure for performance, but managers have limited power to engineer change. Lack of authority undermines the scope of performance improvement and potential for results-based accountability.	
High managerial authority		(3) Performance management ideal type: managers have clear goals and authority to achieve goals. Should facilitate manager attendance to program effectiveness, higher technical efficiency, and results-based accountability.	

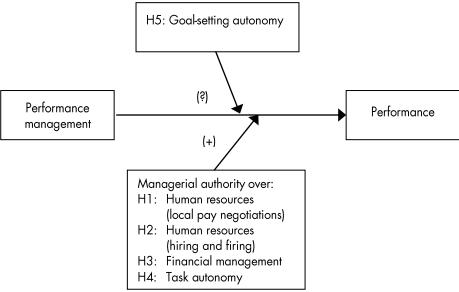
Adopted from Moynihan (2006, 84).

Performance management and the dimensions of managerial authority

Existing literature contains a number of different taxonomies of managerial authority and organizational autonomy (Verhoest et al. 2004; Verhoest et al. 2012). Focusing on managerial authority over organizational subsystems through which performance information can be used to improve performance, Figure 5.2 illustrates the expected moderating relationships (Moynihan and Ingraham 2004).

These hypotheses were examined in the setting of Danish public schools using a combination of administrative register data on student performance and highly detailed socio-economic controls as well as survey data on school management and managerial authority. Exploiting the fact that the data was available over time, the analyses were based on a fixed effects differences-in-differences estimation strategy (Angrist and Pischke 2009). Instead of directly comparing the performance levels of performance management-reformed and -unreformed schools, this strategy instead focuses on the developments in school performance over time of reformed versus unreformed schools. This has the major advantage for making causal inference that it automatically controls for the influence of any and all potential school differences that were constant over the 4-year period of time examined (Allison 2009).

Figure 5.2. Impact of performance management moderated by managerial authority



Interestingly, the findings show that the estimated average effect of performance management on organizational performance is highly insignificant and very close to null. In a way, this result thus confirms the rather mixed findings of previous studies. However, when the effect of performance management is allowed to vary over different levels of managerial authority, important differences in effects appear.⁷

Hypotheses 1 and 2 concerning the level of human resource managerial authority are both supported by the data, suggesting that increases in man-

differences-in-differences model.

⁷ The introduction of interactions between performance management and the different dimensions of managerial authority effectively results in a differences-in-

agerial authority over human resources has a positive influence on the impact of performance management. Conversely, if managers are unable to use human resources to pursue strategic goals, performance management may often fail to fulfill its purposes. The importance of managerial authority over human resource may stem from the fact the productive capacity of schools is predominately based on employee effort and the quality of their human capital, which is a characteristic shared with many other types human service organizations (Moynihan 2006a).

Hypothesis 1 stated that decentralizing pay negotiations positively moderates the effect of performance management. The confirming finding is noticeable, considering the limited sizes of the pay supplements that could be negotiated. Using stronger incentives could possibly have an even more favorable impact on the effect of performance management, but eventually they might risk creating adverse of motivation crowding and other dysfunctional effects resulting from incentive schemes (Andersen and Pallesen 2008; Moynihan 2010; Weibel, Rost, and Osterloh 2010).8

Concerning the authority over hiring and firing employees, human service organizations are dependent on their ability to recruit the employees that best fit the needs of their organizations. Performance management systems allow organizations to better diagnose their specific performance challenges, which can inform managerial decisions about which employees to recruit and lay off. At the same time, it should be acknowledged that Danish schools are bound by a number of general restrictions on the managerial authority over firing employees, so caution is warranted when trying to extrapolate the findings to more extreme "fire at will" approaches, which may risk undermining employee perceptions of procedural fairness, and which could make organizations more vulnerable to poor management (Swiss 2005; Kellough and Nigro 2006).

Turning to hypotheses 3 and 4 on the moderating impacts of financial management authority and task autonomy, neither of these were supported by the findings. This appears somewhat surprising considering their importance to organizational operations, but one possible explanation might be that schools and many other human service organizations are primarily restricted by the level human resource managerial authority. Thus, the budgets of Danish schools are overwhelmingly dominated by human capital ex-

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⁸ School principals' reported actual use of local pay negotiations was used as a proxy for managerial authority. Although actual use of local pay negotiations could only occur if principals had been granted the authority, not all school principals with the authority to do so have chosen to use local negotiations of pay supplements.

penses, so formal authority over the budget could well be severely restricted in practice without considerable managerial authority available over human resources (Moynihan 2006a). Similarly, formal task autonomy could be hampered by frontline bureaucrats who are unwilling or unmotivated to adapt to managerial decisions.

Finally, the decentralization of goal setting (Verhoest et al. 2004; Boyne and Chen 2007) had a strong negative impact on the effect of performance management. Thus, centralized goal-setting appears to be a preferable strategy for increasing performance compared to a decentralized goal setting process aimed at generating local ownership over organizational goals by encouraging local involvement in the goal-setting process (Brehm and Gates 1997; Jennings and Haist 2004; Wright 2004; Yang and Pandey 2009). This dimension therefore works in the opposite direction of the human resource managerial authority. This might well be explained by the fact that a lack of centrally set goals would leave politicians and the central municipal management with little to hold local managers accountable to, which may result in adverse performance effects because of agency loss (Binderkrantz and Christensen 2009; Moe 1984). Additionally, a lack of clearly announced central goals might result in greater goal ambiguity, which is likely detrimental to the success of performance management (Moynihan and Pandey 2005; Moynihan 2008).

A general observation when looking across these findings is that the estimated effect of performance management changes from significantly negative to significantly positive according to the level of managerial authority. This demonstrates the importance of managerial authority, but it also reveals a fundamental characteristic of performance management reform, namely that its impact can be highly dependent on context (Jennings and Haist 2004). This study demonstrates, however, that instead of understanding context as a residual explanation performance management depends on context in predictable ways that are subject to empirical modeling.

Chapter 6: Concluding Discussion: Contributions and Implications

Performance information plays an important role in the current practice of public administration, but it is also a contested policy tool among academics and practitioners alike. While performance information has multiple purposes and potential benefits, not everyone agrees about these purposes and a number of dysfunctional effects of performance information have also been noted. However, despite a growing amount of research during the past two decades, much remains unknown about the role of performance information in government. This dissertation has sought to advance our understanding of performance information by posing new questions, developing novel theory, and undertaking rigorous empirical tests of the theoretical claims. This chapter recaps the dissertation's central theoretical and empirical contributions, discusses how the separate parts are related, and describes some of the methodological strengths and limitations of the dissertation. The chapter concludes by discussing the implications for theory and practice and pointing to areas for future research.

Overview of the theoretical and empirical contributions

The three overall questions pursued in the dissertation were (1) how does performance information affect management decision making, (2) how does performance information affect political decision making, and (3) how does context influence the impact of performance management. Questions (1) and (2) were based on the observation that extant research has been focused primarily on explaining whether performance information is used, whereas little research has studied how it is used and which attitudes and decisions it affects.

The study of management decision making was focused on whether performance information affects how managers prioritize among different goal dimensions. Public service organizations typically pursue multiple and democratically contested goals, so how they prioritize between them helps shape the policy that is delivered at the frontlines of public service provision (Lipsky 1980; Brehm and Gates 1997), which, in turn, may also have broader

distributional consequences. Understanding managerial priorities can moreover be regarded as a form of "super-treatment" that might indirectly affect organizational operations and performance through a host of different organizational decisions concerning, for instance, the intra-organizational allocation of resources, recruitment patterns, and incentive structures. Building on private sector research within the framework of the behavioral theory of the firm, the dissertation has argued that performance information is interpreted by comparing reported performance to reference points or aspiration levels that are construed based on an organization's past performance as well as on the performance of peer organizations. When performance on central goal dimensions falls short of aspirations, managers will increase their priorities of these goals, whereas exceeding performance aspirations would allow managers to broaden their scope of attention to other goal dimensions. Using data on Danish public school performance and the priorities of school principals, the dissertation found evidence that managerial priorities were indeed related to organizational performance in the hypothesized manner.

The second article of the dissertation concerned the impact of performance information on political decision making. Only a small amount of research has sought to trace the impact of performance scores on budget appropriations, and these studies suffer from methodological weaknesses and have failed to provide a satisfactory theoretical framework against which to evaluate the effects of performance information. To remedy these concerns, we used a blame-avoidance theoretical framework to develop novel and hitherto untested hypotheses about the impact of performance information on politicians' attitudes to spending and reform. We then used a survey experimental design to isolate the causal effect of performance information from other factors that - in a traditional cross-sectional setting - might well have biased the estimated effect. The findings largely confirmed the hypotheses by demonstrating that information treatments showing high or showing low performance had a positive effect on Danish city council politicians' attitudes to spending, whereas average performance had a negative impact. This nonlinear relationship directly contradicts the pattern proposed by some proponents of performance-based budgeting, according to which spending should increase proportionately with the level of performance. The findings further revealed that information showing high performance negatively affected the willingness of politicians to initiate organizational reform.

The third article of the dissertation concerned whether and how context moderates or influences the impact of performance management on subsequent organizational performance. Prior effect studies have shown mixed findings, so exploring the role of context is one promising path forward. This dissertation focused on the impact of managerial authority, which by many is regarded as the single most important institutional factor for performance management success, and which also formed a central part of the broader New Public Management movement. Applying a differences-in-differences design to panel data on the management and performance of Danish schools, the findings showed that aspects of managerial authority over human resources (hiring, firing, and pay negotiations) positively influenced the impact of performance management on performance. The results also indicated, however, that decentralizing goal setting negatively influenced the impact of performance management. Importantly, the results also revealed that the impact of performance management on performance changed from significantly negative to significantly positive according to the level of managerial authority.

Roles and incentives, moderators and mechanisms: Relating the separate parts

The three parts of the dissertation have investigated different questions pertaining to the role of performance information in public administration. It is therefore worth considering how the different settings and perspectives relate to each other. Particularly, how do the two types of decision makers differ, and how are they related? And what is the connection between the studies of mechanisms (how) and context (when)?

Integrating the models of performance-oriented managers and blame avoiding politicians

In the study of how performance information affects managerial priorities, managers were portrayed as being generally concerned with improving or sustaining organizational performance. This is partly a consequence of the introduction of performance measurement itself. The dissemination of performance data subjects managers to closer and more performance-oriented scrutiny by their superiors and the broader public. This was indeed one of the

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⁹ It is important to note that the aspiration-based model of performance evaluation does not imply that managers would not want to optimize organizational performance. It only suggests that aspiration-based performance evaluation is necessary for managers to navigate through the uncertain and ambiguous conditions they face in terms of what their real performance potential is and, consequently, how they should prioritize between different organizational goals as well as whether the

primary arguments flowing from rational institutionalist and principal-agency perspectives for introducing performance measurement in the first place (Hood 1991; Kettl 1997; Moynihan 2008). If their organizations fail to perform adequately, managers know that they may be subject to public criticism and be forced to defend themselves publicly against attempts to assign blame to them (Hood 2011; Dixon et al. 2013). Performance information has moreover been noted to influence political processes of budgeting and administrative oversight and regulation (Melkers and Willoughby 2005; Moynihan 2008; Moynihan and Hawes 2012; Nielsen and Baekgaard forthcoming). Organizational performance can therefore be of central importance to securing organizational funding and autonomy, which are traditionally recognized as fundamental and permanent concerns for public managers (Niskanen 1971; Wilson 1989; Carpenter and Krause 2012). Separate from these factors, a growing body of work argues that public service managers and employees are also intrinsically and pro-socially motivated and therefore concerned with performance (e.g., Perry and Hondeghem 2008; Andersen and Pallesen 2008), which has also been argued to spill-over into their use of performance information in decision making (Moynihan and Pandey 2010).

In contrast to this view of performance-oriented public managers, political decision makers were portrayed as primarily responding to political incentives for blame avoidance and credit claiming, ultimately oriented at securing reelection. This raises the question of whether the two actor models are inconsistent or if they can be integrated. The short answer to this question is that blame-avoidance theory offers a framework that can incorporate the motives of both managerial and political decision makers, but that differences in the context and in the roles that managers and politicians assume result in different incentive structures.

Concerning the managers, a considerable body of work has indeed documented different types of blame-avoidance related behaviors and decisions of public managers (Hood and Lodge 2006; Hood 2007; Hood 2011; Moynihan 2012b). The point to make here is that, in a system of performance measurement and information dissemination, motives for avoiding blame will often induce managers to pursue performance and learn from performance feedback. Managers know that they may be held publicly accountable for their performance, which can have consequences for their personal pay and career prospects, but which might also affect their organization's funding and autonomy.

risks and costs associated with initiating organizational changes are balanced against the expected outcomes of the changes (Greve 2003b).

Blame-avoidance theory has traditionally focused primarily on poor performance and outright scandals, because a general "negativity bias" has been argued to focus media and political attention only on negative outcomes, whereas positive deviations from the average tend to ignored (Lau 1982; Soroka 2006). A similar negativity bias arises if political and administrative oversight relies primarily on "fire alarms", that is, on complaints made by citizens, user groups or organized interests who are affected by poor performance or scandals, as suggested by McCubbins and Schwartz (1984). This negativity bias would appear to limit the performance concerns of managers to only avoiding poor performance but not striving for excellence. However, the dissertation's second article about performance information in politics challenges this picture by noting that precisely because performance information makes high performance so directly visible, high performance might also be rewarded. The findings thus showed that performance information showing high performance could potentially both increase organizations' levels of funding and reduce their risks of being subject to reform.

This further implies that the incentives that are in play for public managers are closely tied to the incentives facing elected political officials. Although the blame-avoidance responses of political decision makers are not primarily concerned with performance, these same responses can well force managers to pay greater attention to performance. 10 This perspective also falls in line with work on "public service bargains" suggesting that much recent public management reform can be understood as politicians and managers entering, often implicit, bargains, according to which managers are granted greater autonomy in exchange for accepting the blame risks associated with policy failure (Hood 2000; Hood 2002; Hood and Lodge 2006). By accepting these blame risks, managers will have a strong incentive to avoid or reduce the risks of blame in the first place and therefore to focus on organizational performance. In fact, the prediction of autonomy creating performance-oriented managers is also partially confirmed by the findings in article three on how managerial authority affected the impact of performance management. Nonetheless, as there is often plenty of blame to go

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¹⁰ This is not to suggest that elected representatives are never concerned with public service performance, but rather that securing reelection is also an important concern. As described in Nielsen and Baekgaard (forthcoming), the inherent choice ambiguity in how to relate performance scores to future funding decisions is what creates the political nature of budget responses (Moynihan 2006b). If a purely technical rationale caused full agreement about how to respond to performance information, the blame-avoidance rationale would lose its importance.

around, at least in the eyes of the media, elected politicians will not be exempt from public criticism.

Context, moderators, and mechanisms

The different parts of the dissertation have been framed as studies of context and moderators or of the decision mechanisms through which performance information operates. These two analytical lenses are not unrelated, however. When studying the impact of performance information on managerial priorities, how performance relates to aspirations could also be analyzed as a contextual moderator, though this might primarily be of interest, if managers' exposure to performance information also varied systematically across organizations. More broadly, in studying the impact of performance management on performance, for instance, performance relative to aspirations could similarly be analyzed as a contextual moderator, perhaps with the expectation that performance management has a positive impact on performance when performance shortfalls are diagnosed, whereas performance management would have little or no effect if performance exceeds aspirations, as this might make managers prefer the status quo. Methodologically, such a moderating effect might be difficult to isolate from a pattern of regression-to-the-mean, but considering the contextually determined nature of aspiration levels, performance relative to aspirations might well differ substantially from actual performance differences.

Perhaps more important, the study of conditionality and moderators is not unrelated to the identification of causal mechanisms. Although moderators are different from mechanism, in many cases the detection of moderators informs us about where to look for mechanisms. In the dissertation's third article, managerial authority over human resources and goal setting were shown to moderate the impact of performance management on performance. These aspects are clearly not mechanism themselves, but they nonetheless point to how performance management exerts its influence. The positive moderation by the two aspects of human resource managerial authority suggests that part of the impact of performance management stems from how managers use incentives and recruitment decisions as channels through which they respond to performance management (Moynihan and Ingraham 2004). Similarly, the negative moderation by goal-setting autonomy indicates that performance management also works through the signals that are send from political or administrative superiors about goal priorities and performance targets.

At the same time, however, further study would be required to identify the precise mechanisms in play. For instance, managerial authority over human resources might be important either because performance information is used to inform and improve existing performance-oriented incentive structures and recruitment decisions, or because the introduction of performance management forces managers to pay greater attention to performance concerns in their management of human resources – two causal processes that are clearly distinct from each other.

Methodological contributions and limitations

The empirical contributions of the project are based on the application of different strategies for identifying causal effects. The general ambition behind the chosen research designs has been to closely integrate the theoretical and empirical modeling of the hypothesized relations. In the third article on the moderating influence of managerial authority on performance management, the statistical modeling of interactions were introduced in order to reveal a fundamental characteristic of performance management reform, namely that its effects can differ markedly depending on the context into which it is introduced. This type of conditional thinking and empirical modeling has been present in many other parts of political science (Brambor, Clark, and Golder 2006), as well as in some more theoretically oriented areas of public administration, but it has thus far played a marginal role in empirical effect studies of performance management and broader public management (O'Toole and Meier 2013).

Concerning causal identification, much existing work suffers from serious weaknesses, particularly related to the use of purely cross-sectional research designs and issues of common source bias (Meier and O'Toole 2013). In the two articles based on observational data, this dissertation overcomes the challenges of common source bias by combining administrative data on school performance and controls with survey data on management and priorities. Article three on the impact of performance management moreover exploits the panel structure of the data to apply a differences-in-differences research design, which deals with many of the problems associated with cross-sectional data. Although the first article on managerial priorities primarily relies on cross-sectional data, the nature of the study's independent variables, performance relative aspirations, to some extent remedies the risks of selection effects, as described in this article. The theoretically derived modeling of performance relative to aspirations also sheds important empirical light on the impact of performance information on managerial priorities,

which would have gone undetected (or would probably have been strongly biased) if priorities had been regressed directly on the level of organizational performance or performance information use.

The benefits of a more theoretically guided statistical modeling were also evident in the study of performance information and politicians' attitudes to spending and reform. Whereas previous studies modeling a linear relation between performance scores and budget appropriations have shown mixed findings, we deliberately designed the experimental treatments to differentiate between the impacts of performance information showing different levels of performance. The survey experimental manipulation of the content and presence of performance information additionally avoids the potential endogeneity problems in assessing the impacts of the knowledge and use of performance data on politicians' attitudes.

The research designs also have their limitations, of course. The most general limitation arises from the chosen research settings. The three parts of the dissertation are all based on performance data on Danish public schools. This holds the advantage of allowing the within-sector comparison that was pursued above regarding the responses to performance information among decision makers located at separate hierarchical levels. However, it also raises the question of whether the findings can be generalized to other settings. Although education is a central and important part of modern welfare states, public school organizations have also become a popular area for management studies, because it offers objective and relatively high-quality performance data, and because there are so many of them, which allows for large-N statistical studies. These characteristics separate them from many other organizations, however. In many cases, performance data is much more ambiguous, as output and outcome measures are less valid and reliable and it is more difficult to attribute differences in outcome levels to organizational operations. Schools also have a less ambiguous goal hierarchy than many other public organizations, as academic learning typically stands out as the more important goal. These characteristics would all point to school organizations as a most likely case for detecting substantial impacts of performance information. Nonetheless, studies in other areas have also shown strong, if sometimes dysfunctional, effects of performance measurement, even despite problems of measurement, causal attribution and goal ambiguity. Thus, the impact of performance information not only depends on whether valid performance measurement is possible or useful, but might just as well be caused by organizational decision makers' perceptions of how important performance information is to their political or administrative superiors.

Concerning the role of performance information as a steering tool, it is moreover worth noting that no direct financial incentives were tied to performance levels in Danish public schools, neither concerning budget funds or the personal pay of school principals or teachers. Compared to some other school systems, including the performance regimes present in some US state school systems, regulatory consequences and threats of takeover or closure are also limited. School principals nevertheless appear to pay attention to performance and performance information, which is an indication that the findings of this dissertation are of broader relevance. Yet, at the same time, performance information might also have indirect effects on political budgeting and reform decisions, as suggested in the second article.

Turning to the political level, public school education forms a both highly salient and very popular policy area, both of which might affect political responses to performance information. One of the central claims of the second article was that punishment of poor performers by cutting funding would not be a feasible strategy for politicians having to legitimate their policy positions to a public that demands high-quality public schooling. This might have been easier for less popular spending purposes, where, for instance, a much smaller part of the electorate would be affected by budget cuts. In less salient policy areas, spending cuts might even go unnoticed, which would reduce or eliminate the incentive for blame-avoidance. This would not eliminate the choice ambiguity in how to relate funding to performance scores, however, so it would remain an open question how politicians would respond to performance information in such a scenario. Choice ambiguity is likely to be smaller for other types of decisions, though, so we might expect to see other rationales, such as efficiency and effectiveness concerns, in play in less salient areas concerning such decisions as increasing oversight, changing policy, reorganizing, replacing personnel, or initiating a more thorough program evaluation.

Concerning the study of performance information and politicians' attitudes, a more specific concern relates to the generalizability of the impact of the experimental information treatment on attitudes as well as to what extent changes in politicians' attitudes affect actual policy decisions. The major advantage of the survey experimental design, compared to the vast majority of survey experiments in political science, is that we examine the responses of real political decision makers. Nonetheless, in real settings, politicians often face an overload of information, as multiple interested parties seek to push their different agendas. The presence of alternative sources of information might thus crowd out the importance of performance information. However, considering the high salience of performance measures them-

selves, interested stakeholders will often need to address existing performance information in their communication. Additionally, as performance information in many cases flow from the administrative agencies that also prepare budget proposals and other policy decisions, performance information might well play a part in this preparation (Gilmour and Lewis 2006a; Gilmour and Lewis 2006b).

A separate concern is whether changes in attitudes will translate into policy decisions following the same response pattern. Although the arena of actual politics and political debate differs from responding to a survey, our hypotheses are based on explicitly political rationales of blame avoidance that might well be of even greater importance in real-life decision making.

Theoretical implications and future research

Some of the limitations described above should be addressed in future research. Considering the importance of context documented in the third article, the research questions and hypotheses of the dissertation should be examined in other empirical settings. This involves studying other types of school systems, perhaps particularly school systems in which high-powered incentives are tied to performance achievements. But it also suggests a broadening of the empirical scope to other and very different types of public organizations. From a more theoretical point of view, future studies should theorize about and test the potentially moderating influences of more specific contextual factors, including, for instance, goal clarity, performance measurability, incentives, and leadership (Moynihan and Pandey 2010; Moynihan, Pandey, and Wright 2012). A similar strategy for the study of context might also be extended to the study of public management more broadly (O'Toole and Meier 2013).

Turning to the influence of performance information in political decision making, future research should consider other types of decisions than those regarding spending and reform. Other decision types might not follow the same response pattern, as they differ in their impacts, visibility, as well as in the level of choice ambiguity related to them. Future work should also pay attention to the links between performance scores and actual budget and reform decisions. An important implication from the findings presented here is that the functional form of the relationship should be guided by theoretical considerations rather than simply assuming a positive linear correlation. As already mentioned, the salience and popularity of the policy area under study should also be taken into consideration. Ideally, this would involve direct comparisons made across several types of policy areas.

Finally, the dissertation's study of the role of performance information in public management decision making is among the first of its kind. The proposed aspiration-based model of performance evaluation, and the corroborating findings, suggests that a similar type of model might be applied to the study of a range of other strategic decisions. The past decade has observed an immense growth in studies demonstrating that management matters (Meier and O'Toole 2009), but public administration research has yet to examine more closely how management matters and, specifically, how managers make decisions. In the following two subsections, I will briefly describe examples of how such an agenda might be pursued.

Organizational adaptation through innovation and change – building on existing work

Besides the spread of performance measurement, another central public sector development in recent decades has been the fight against perceived public sector inertia and rigidity in favor of continuous improvement, innovation, and change in response to the changing demands of clients and the public at large (Osborne and Plastrik 1997; O'Toole and Meier 2003). Rather than seeing these two developments as separate, the introduction of performance information in political and management decision making has widely been considered a means to spur innovation and change in order to improve public service performance (Osborne and Gaebler 1992; Moynihan and Landuyt 2009; Walker, Damanpour, and Devece 2011). But how and it what ways performance information affects such adaptive organizational responses has received little attention in existing public administration research, despite its prominence in the study of private business firms (Greve 2003b; Salge 2011).

Thus, most existing work on the antecedents of public sector innovation has focused on identifying general environmental, organizational, or managerial characteristics that facilitate innovation (Kyrgidou and Spyropoulou 2013; Damanpour 1991), investigating which types of innovations that are introduced (Damanpour and Schneider 2009) or understanding how the choice among innovation types and phases are affected by structural and managerial characteristics (Kimberly and Evanisko 1981; Damanpour and Schneider 2006; Walker 2008).

In contrast, the behavioral model of performance evaluation offers a more dynamic perspective, according to which the strategic decision to engage in innovative search depends importantly on feedback about how well the organization is doing. This dynamic perspective arises partly from the

recognition that innovation is costly in terms of time and resources that could have been spent on – or which are taken away from – the regular operations of public service delivery – something that is often ignored by enthusiastic advocates of public sector innovation. Moreover, the uncertain relation between innovative search and the successful discovery and adoption of new innovations make the trade-off between cost and innovative search all the more challenging. A behavioral model of innovative search would suggest that performance feedback plays a key role in resolving this trade-off (Greve 2003a). When organizations perform below their aspirations it signals that the current configuration of organizational resources and procedures is inadequate and should be adjusted, and the question of whether to engage in innovative search therefore becomes a key decision in strategic management.

Similarly, failing to meet performance aspirations sends a powerful signal that some form of organizational change is needed (Greve 1998; Park 2007; Labianca et al. 2009). The direct signal resulting from the awareness of a performance problem is not the only path to change, however. As described, performance shortfalls are expected to increase the level of innovative search, which in turn can deliver input to the decision making process about how to solve performance problems (Greve and Taylor 2000; Greve 2003a). Thus, the availability of solutions that are ready to be implemented increases the probability that organizational change occurs.

Apart from the awareness of performance problems and potential solutions, a key element in whether to pursue organizational change is managers' level of risk tolerance, which might also be influenced by performance information. The decision to initiate organizational change is fundamentally risky, as change outcomes can seldom if ever be known in advance (March and Olsen 1979; March 1981; Greve 1998). Management decision makers therefore face a trade-off between accepting existing outcomes and making risky changes with uncertain outcomes - a trade-off that performance information might help them to resolve. Thus, studies of both individual and organizational risk taking have consistently found that risk tolerance is goaloriented, that is, it is dependent on whether current goals are being satisfied (Levitt and March 1988; Greve 1998). Perhaps the most widely known example of this is the work of Kahneman and Tversky (1979) on individual risk taking. Their psychological experiments involve simple manipulations of aspiration levels and show that perceptions of not meeting aspirations (being in the domain of losses) greatly increases actors' risk tolerance. Studies of managerial decision making have similarly shown that failing to satisfy aspirations induces greater risk taking (Singh 1986; Lant and Montgomery 1987;

March 1988; Wehrung 1989; Bromiley 1991). How organizational performance relates to performance aspirations can therefore be an important factor in management decision making about whether organizational change should be pursued or if risky disruptions should rather be avoided (Greve 1998).

Adjusting to environmental pressures: Stakeholder influence

A possible new path of research would be to apply the aspiration-based model of performance evaluation to other and perhaps more specific public sector phenomena. One such phenomenon is the level of stakeholder influence over public organizations. Engaging with stakeholders and involving them in organizational operations can be an important tool an acquiring different types of resources from the organizational environment, including support and legitimacy as well as alternative channels of funding and information (O'Toole and Meier 1999; Carpenter and Krause 2012; Moynihan and Hawes 2012). However, at the same time, maintaining organizational autonomy is traditionally argued to be a primary concern of public managers (Wilson 1989; Huber 2007; Carpenter and Krause 2012). Again, this appears to produce a trade-off that performance information might help settle.

Particularly, when managers perceive that their organization is performing at a satisfactory level, they will have less need for the resources and support offered by granting stakeholders greater influence. Managers will presumably also be better equipped to fight off external attempts to influence the organization. A growing literature studying the causes and consequences of organizational reputations would thus suggest that a strong performance reputation can be used strategically to defend organizational autonomy (Carpenter and Krause 2012). This literature has primarily focused on long-term reputations, but the availability of performance information might make the central decision makers more attentive to short-term changes in performance as a basis for assessing organizational reputations.

Apart from buffering environmental influences, perceptions of satisfactory organizational performance might additionally affect the extent to which organizations are subject to demands from important stakeholders. Stakeholder environments, unlike individual citizens, are often greatly aware of performance data and use it strategically to advocate for their interests (Moynihan and Hawes 2012). While acknowledging that stakeholders may be concerned with other aspects than performance, the stakeholders surrounding particularly public service organizations are often also interested in securing high performance. Performance information might therefore also

be hypothesized to affect the level of stakeholder influence on internal organizational operations and structures.

Implications for practice

This final section now turns to implications for the practice of performance management and broader public administration. Perhaps the most obvious implications come from the effect study of performance management and managerial authority. Particularly, the findings suggest that performance management can have positive effects, but also that without sufficient managerial authority over human resources, managers will find it difficult to use performance information productively to engineer fruitful performanceoriented changes. This finding is of importance to many public service organizations, including in Denmark, where legislative requirements or collective agreements with labor unions greatly restrict managerial authority over personnel decisions. In fact, changes in collective agreements with school and high school teachers in Denmark earlier this year have already increased managerial authority considerably, but we have yet to see how the labor unions will respond to these changes and if managers possess the abilities and resources necessary to use their increased authority productively. When interpreting the findings it is also important to note that they were based on relatively small levels and differences in managerial authority, so the findings cannot be readily extrapolated to more extreme "fire at will" approaches or to the introduction of high-powered performance-related incentives.

The study of performance information and managerial priorities show that managers do in fact respond to performance data. Performance information thus appears to offer a means to ensure continuous organizational adaptation. However, the importance of reference points to performance evaluation also suggests that managing performance aspirations is an important part of successful adaptation. Prior studies indicate that coercing performance aspirations by setting performance targets can have detrimental effects to performance, not least because centrally decided targets fail to take into account the differences in the performance potentials of different organizations (Bevan and Hood 2006). One alternative to this might be to introduce more elaborate benchmarking schemes that are able to adjust for differences in, for instance, task difficulty and available resources (Ammons 2000; Askim, Johnsen, and Christophersen 2008). This approach might then be combined with performance targets that take these differences into account (Boyne and Chen 2007).

Finally, the study of politicians' attitudes demonstrated that performance information can also play an important role in political decision making. One of the specific findings moreover showed that performance information might help mitigate an otherwise powerful negativity bias by making high performance openly visible. The role of performance information in politics is good news to advocates of performance measurement who argue that performance information is a necessary and powerful tool in the democratic process of voters holding elected officials accountable and elected officials holding the bureaucracy accountable. This positive image of performance information is further supported by the findings in the third article on the moderating role of goal-setting autonomy on the impact of performance management, suggesting that goal setting should not be decentralized to the public service organizations themselves. However, the dissertation has also shown that politicians' responses to performance information can be explicitly political, that is, based on political rationales of blame avoidance rather than on goals of promoting the efficiency or effectiveness of public services. In other words, attempts to rationalize the budget process by introducing performance information do not result in a purely technical exercise, but instead appears to make performance information part of the existing mode of politics. Thus, considering both of these perspectives, in a system of performance management democratically elected representatives still should and, in fact, do play a key role in public administration.

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Summary

Performance information plays an important role in the current practice of public administration, but it is also a contested policy tool among academics and practitioners alike. While performance information has multiple purposes and potential benefits, not everyone agrees about these purposes and a number of dysfunctional effects of performance information have also been noted. However, despite a growing amount of research during the past two decades, much remains unknown about the role of performance information in government.

This dissertation seeks to advance our understanding of performance information by posing new questions, developing novel theory, and undertaking rigorous empirical tests of the theoretical claims. Moreover, the dissertation shows that understanding how performance information shapes political and management decision making can contribute to answering some of the classic and enduring questions of public administration and broader political science, including how we can improve the performance of public services, how organizations prioritize between different goals and tasks, how organizational change comes about, and how elected representatives decide on the allocation of scarce budget funds.

The three particular research questions pursued in the dissertation are (1) how does performance information affect management priorities, (2) how does performance information affect politicians' attitudes to spending and reform, and (3) how does managerial authority influence the impact of performance management? Public service organizations pursue multiple and democratically contested goals, so how they prioritize between these goals helps shape the policy that is delivered at the frontlines of public service provision. Building on behavioral theory, the dissertation shows that performance information is interpreted by comparing reported performance to contextually determined reference points or aspiration levels, and it is this performance comparison that affects subsequent priorities and decision making.

When performance information is introduced into political budget processes, decision makers face strong ambiguities in how to relate budget appropriations to performance scores. The dissertation shows how this ambiguity can result in strictly political budget responses motivated by blame-avoidance rationales rather than a concern for improving public service performance.

Finally, the dissertation shows that the impact of performance management in the public sector depends importantly on the context into which it is introduced, even to the extent that the impact of performance management can change from negative to positive. Particularly, managerial authority over personnel decisions was found to improve the impact of performance management, whereas decentralizing goal setting had a negative influence.

Dansk resumé

Resultatmålinger og resultatinformation spiller en vigtig rolle i styringen af den offentlige forvaltning, men der er samtidig stor uenighed blandt både forskere og praktikere om fordelene og ulemperne forbundet med at måle resultaterne af den offentlige sektors arbejde. På trods af omfattende forskning i effekterne af resultatinformation er der således fortsat mange ubesvarede spørgsmål.

Denne ph.d.-afhandling har forsøgt at fremme vores forståelse af resultatinformation ved at stille nye spørgsmål, udvikle ny teori og foretage grundige empiriske test af de teoretiske forventninger. Afhandlingen viser desuden, at forståelsen af hvordan resultatinformation indvirker på den offentlige sektors ledelse, samt hvordan væsentlige politiske beslutninger påvirkes, kan bidrage til at besvare klassiske spørgsmål inden for offentlig forvaltning og bredere statskundskab, såsom hvordan vi kan forbedre den offentlige sektor ydelser, hvordan offentlige organisationer prioriterer mellem forskellige opgaver og målsætninger, hvornår reformer iværksættes, og hvordan valgte politikere træffer beslutninger om fordelingen af knappe budgetressourcer.

Afhandlingens tre hovedspørgsmål omhandler (1) hvordan resultatinformation påvirker lederes prioriteringer mellem forskellige målsætninger, (2) hvordan resultatinformation påvirker valgte politikeres holdninger til udgifter og reformer, og (3) hvordan graden af ledelsesautonomi påvirker effekten af resultatbaseret ledelse. Offentlige organisationer skal typisk forfølge en række forskellige målsætninger på samme tid, så hvordan ledere prioriterer mellem disse målsætninger er med til at forme den ydelse, der leveres til borgerne. Afhandlingen viser, at resultatinformation fortolkes gennem sammenligning med referencepunkter for, hvad der udgør et tilfredsstillende resultat. Disse referencepunkter er bestemt af den enkelte organisations kontekst, og det er denne resultatsammenligning, der påvirker ledelsens efterfølgende prioriteter og beslutninger.

Når resultatinformation inddrages i den politiske budgetproces, vil de valgte politikere stå overfor en væsentlig usikkerhed eller ambiguitet i forhold til, hvorvidt og hvordan organisationers resultaters skal påvirke deres budgetbevillinger. Afhandlingen demonstrerer, at denne ambiguitet kan resultere i beslutningsbeslutninger, der er motiverede af politiske hensyn frem for af hensynet til at forbedre den offentlige sektors ydelser.

Endelig viser afhandlingen, at effekten af resultatbaseret ledelse på den offentlige sektors resultater kan variere væsentligt, og endda bevæge sig fra negativ til positiv, afhængigt af konteksten. Specifikt viste det sig, at graden

af ledelsesfrihed i forhold til at lede personalet fremmer en positiv effekt af resultatbaseret ledelse, mens decentralisering af målfastsættelsen har en negativ indflydelse.