Post-print

Rajala, T., Laihonen, H., & Vakkuri, J. (2018). Shifting from output to outcome measurement in public administration arguments revisited. In E. Borgonovi, E. Anessi-Pessina, & C. Bianchi (Eds.), Outcome-based performance management in the public sector (pp. 3–23). Cham, Switzerland: Springer. https://doi.org/10.1007/978-3-319-57018-1_1

Shifting from Output to Outcome Measurement in Public Administration - Arguments Revisited

Tomi Rajala, University teacher, Ph.D. student

University of Tampere, School of Management, FI-33014 University of Tampere, Finland email tomi.rajala@uta.fi

Harri Laihonen, Research director

University of Tampere, School of Management, FI-33014 University of Tampere, Finland email harri laihonen@uta.fi

Jarmo Vakkuri, Professor

University of Tampere, School of Management, FI-33014 University of Tampere, Finland email jarmo.vakkuri@uta.fi

Corresponding author: Tomi Rajala, University of Tampere, School of Management, FI-33014 University of Tampere, Finland, email tomi.rajala@uta.fi

Abstract

Moving to outcome-based measurement systems in the public sector has been difficult. In this article, we examine the contingent decision-making arguments stimulating output instead of outcome measurement in public management. Based on an argumentative literature review, we conclude that there exist several contingent arguments encouraging politicians and public managers to stick with outputs while ignoring outcomes in performance measurement. Mapping out these arguments contributes to understanding the difficulties in implementation of outcome-based measurement and management systems. This understanding is highly useful in performance management research and policy practice. We also suggest that these contingent arguments may be considered proposals for the future research in the area of public financial management and public sector performance measurement.

Keywords: Outcomes, Outcome-based performance measurement systems, Politicians, Public managers, Contingent arguments

1.1. Introduction

Outcome information is relevant to the public sector because it reports whether or not public services are producing desired outcomes to the society (Hatry 2005). This information is important to public managers seeking to improve performance as well as to other stakeholders such as voters and politicians aiming for a better societal welfare. However, it has remained extremely complicated to establish an

outcome-oriented measurement system for public sector purposes and practices. Governmental organizations continue to use output measures more often than outcome measures (Ferlie et al. 2005). This study aims to explore contingent arguments as to why output measures are sometimes preferred over outcome measures in the public sector.

There are many contingent arguments intrinsic to public sector behavior and performance measurement that have been acknowledged and addressed by the previous research literature (e.g., Smith 1996). However, the previous research has not been able to systematically and comprehensively understand contingent decision-making arguments for resisting the shift from an output-based to an outcome-based measurement system. Our study aims to fill this research gap by gathering these arguments together and presenting them under two topics: (1) pursue of value for money (second section) and (2) control of legitimacy (third section). In the value for money section, we are searching for arguments indicating that output information would provide more value for money than outcome information because the costs are bigger and/or benefits are not so evident in the latter. In the chapter, dealing with control of legitimacy, we are looking for arguments implicating that output information would provide more control over legitimacy than outcome information. Since legitimation (Bouckaert 1993) and value for money (Jackson 2012) are important parts of performance information use, this approach can be seen as justified.

The research follows constructivist epistemology (e.g., Guba and Lincoln 1998) and the logic of abductive reasoning (e.g., Peirce 1998). The contingent arguments are constructed from scientific arguments presented in performance management literature. As an example of our method, consider the following scenario: "scientist x has noted in her research that outcome measurement is not supported by the current entity-based information systems, and scientist y has stated that the current information systems support output measurement." From these statements, we form a contingent argument stating that current information systems support output measurement and do not support outcome measurement. By forming this argument, we would create one possible answer to our research question. In the conclusion section, we place all these arguments under broader categories constructed in this study.

We conducted an argumentative literature review in order to construct these arguments. An argumentative literature review examines literature selectively in order to support an argument already established in the literature. The aim of this type of literature review is to develop a body of literature that establishes a contrarian viewpoint (Kennedy 2007). The contingent arguments presented in this article form a contrarian viewpoint to outcome measurement advocates listing the benefits of outcome measuring (see, e.g., Hatry 2005) compared to output measuring. These arguments describe mental models that argue against the use of outcome measures and favor output indicators. By "contingent" it is indicated that the truth value of every argument is contextual, not universal. Furthermore, these

arguments are not meant to be normative in any way, and their truth value may even be untrue. The point of this article is to raise discussion on whether or not outcome measurement can have negative effects in public sector.

As a main theoretical contribution, this research gathers together the dispersed arguments describing the possible reasons why output measuring is often more established than outcome measurement in the public sector. These reasons are described in the contingent arguments, and they can be understood as problems and limitations that incentivize public sector actors not to adopt outcome measurement. Understanding of these reasons is one of the first steps in better comprehending non-use of outcome measurement. The second significant theoretical contribution is the recognition of the future research questions proposed in this study. We are hoping that future research would examine empirically whether or not these arguments are capable of explaining why the implementation of the outcome measurement has been difficult.

Figure 1.1 depicts the structure of this article. Following the introduction, first, we examine whether or not outcome measurement provides less value for money than output measurement. Second, we investigate how legitimacy is affected by these two types of measurement. The final part includes conclusions and future research questions.

1. Introduction

The research gap and question: what are the contingent arguments that favor outputs instead of outcomes in performance measurement?

2. Value for money -

output versus outcome measurement

Discusses the following questions:

- 2.1 How difficult is the conceptualization, measurement, and interpretation of outcomes compared to outputs?
 - 2.2 How useful is outcome information in budgeting and performance management compared to output information?
 - 2.3 To what extent does outcome information satisfy the information need compared to output information?

Controlling legitimacy -

output versus outcome measurement

Discusses the following questions:

- 3.1 How can outcome or output results be controlled?
- 3.2 Can the distribution of output or outcome information be controlled and is outcome information riskier than output information?

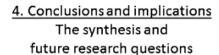


Fig. 1.1 The overall structure of the research

1.2 Value for Money—Output Versus Outcome Measurement

Value for money refers to the ideal combination of whole-life costs of public services and fitness for the purpose of meeting the user's requirements (Jackson 2012). Both the outcome and output measurement have a purpose and cost. The important question in the context of this article is whether or not output measurement could provide more value for money than outcome measurement. More value for money would here indicate that output measures are cheaper to produce and/or they offer more fitness for purpose than outcome measures according to scientific arguments. Thus, in this section, we are displaying arguments presented in the literature which state that the costs of outcome measurement can be high. We are also representing previous academic statements asserting that the costs of output measuring are often low. In addition, we present ideas expressing that it might not be possible to determine the purpose of producing outcome information, or the fitness for purpose may be lacking

when outcomes are attached to the performance management system and budgeting system. Thus, the use of outputs can seem more favorable in these situations to public managers and politicians.

1.2.1 Outputs Versus Outcomes: The Conceptualization, Measurement, and Interpretation

As noted by Hatry (2006), two different types of outcome exist: intermediate and end outcomes. Intermediate outcomes lead to the ends desired, but they are not ends in and of themselves. The end outcomes are the desired results of the program according to the program customers and citizens (Hatry 2006). Vedung (1997) identifies an additional outcome type: immediate outcomes. These outcomes happen right after the actions are taken, whereas intermediate outcomes occur in the causal chain following immediate outcomes (Vedung 1997). However, in Hatry's (2006) typology, immediate outcomes can be placed under the concept of intermediate outcomes without breaking any theoretical assumptions of intermediate outcomes.

Vedung (1997) has also recognized more comprehensively the complex nature of outcomes, naming several different outcome types as follows:

- 1. Outcomes for customers and society.
- 2. Quantitative and qualitative outcomes.
- 3. Subjective and objective outcomes.
- 4. Short- and long-run outcomes.
- 5. External outcomes and internal outcomes.
- 6. Positive and negative outcomes.
- 7. Expected and unexpected outcomes.
- 8. Intended and unintended outcomes.

Yeung and Matheison (1998) identify six different areas where outcomes can appear: economic performance, competitiveness, education, health, environment, democracy, and freedom. Outcomes can also occur at the program/service level, the agency/organizational level, the state/community level, or any combination thereof (e.g., Martin 1997). Thus, some outcomes for public sector bodies may occur at a societal rather than at an organizational level (McGill 2001).

The public sector has multiple outcomes at different hierarchical levels; meanwhile, different units on the same hierarchical level can consider different outcomes to be important to them. Ideally, a goal congruency exists among these different goals set by units within the public sector organization, but this might not always be the case. For example, the General Accounting Office (1997, p. 6) has reported that "mission fragmentation" is common at the federal government level in the USA, and it is difficult to get stakeholders to think beyond their own program operations to the diversity of activities related to the common outcome.

The complex nature associated with conceptualizing the outcome becomes evident when all of these outcome categories and areas are combined in the public sector's hierarchical and horizontal dimensions. Bounded rationality and lack of know-how can magnify the complications associated with outcome definition. For example, researchers have documented problems in understanding the difference between outputs and outcomes (e.g., Dugan and Hernon 2002). As Hogwood and Gunn (1992, p. 17) point out, the distinction between outcomes and outputs is often blurry in practice.

Outputs describe what the public sector does (Rosen 1993), whereas outcomes describe the effects that have been caused directly and indirectly by the outputs (e.g., Talbot 2010). The decision considering outputs of a program boils down to the following question: What are the goods and services the public sector wants to produce? No matter what the output is, all the different kinds of outcomes listed above in various areas can occur. By comparing one output to another output, only two things are compared. However, whenever the possible outcomes of the two outputs are compared, the comparison becomes far more complex. Identifying all the relevant outcomes can take more time and effort than the output identification. Value for money may not be achieved because the cost of conceptualization is too high in outcome measurement.

If outcomes cannot be defined, they cannot be measured. A key question is whether or not decision-makers agree on which types of outcomes are the most optimal and which ones can be ignored. In the public sector, a high level of subjectivity often relates to outcomes, and thus, even reaching consensus on outcomes can be difficult (e.g., Kurunmaki and Miller 2011) because outcomes can be multi-dimensional, qualitative by nature, and impossible to represent as a single quantitative measure (Carlin and Guthrie 2003). The difficulties in defining the outcomes are well known in different countries (e.g., Carlin and Guthrie 2003). For instance, Heinrich (2002) learned that federal managers in the USA considered the outcome-based performance management systems to be conceptually and practically one of their most difficult tasks to complete. By comparison, outputs often are easier to identify (e.g., Bandy 2011, p. 76). Moreover, usually outputs have to be defined because public sector produces outputs. However, it is not required to identify and name the important and unimportant outcomes in order to get the public production up and running.

It is common that different political parties strive for different societal outcomes (e.g., Spoon and Kluver 2014). Political outcome goals may inhibit outcome measuring if these outcome goals are contradictory. The inconsistency between the policy objectives set by politicians and the goals of executive agencies also creates problems in the public sector (e.g., Smith 1995). The policy objectives are contested both among politicians as well as between politicians and managers (Agranoff and McGuire 2001). There is often little consensus as to what constitutes outcome because the large number of diverse stakeholders in the public services holds different expectations toward these services (Smith 1996). The complex nature of outcomes can intensify this rivalry whenever outcomes are policy objectives instead of

outputs. The increased number of options in conceptualization simply offers more possibilities for disagreement. Investing resources in outcome measurement can lead to conflicts and inefficient resource use if outcomes cannot be defined or measured. If this scenario occurs, the purpose of outcome measurement cannot be identified properly.

Contingent argument: outputs are easier, cheaper, and less time-consuming to define and conceptualize than outcomes (nature of outcome, nature of output, and conflict orientation).

1.2.1.1 Technical Aspects of Measurement

Measuring outcomes can be astonishingly difficult (Smith 1996), and on the other hand, calculating outputs is usually fairly straightforward (Newcomer 2007). Obtaining information about the intervening variables affecting outcomes causes problems (Miller and Fox 2007), whereas variables that influence output production can be monitored and detected more easily in many cases. The problem with intervening variables in the context of outcomes is related to the problem of monitoring citizens and societal activities round-the-clock holistically. Anthony and Young (1988, p. 608) summarize this common problem that plagues many outcome performance measures (here "social indicator" means "outcome"):

A social indicator is a broad measure of output which significantly reflects the work of the organization. Unfortunately, few social indicators can be related to the work of a single organization because in almost all cases they are affected by exogenous forces; that is, forces other than those of the organization being measured. The crime rate in a city may reflect the activities of the police department and the court system, but it is also affected by unemployment, housing conditions, and other factors unrelated to the effectiveness of these organizations... Social indicators are so nebulous, so difficult to obtain on a current basis, so little affected by current program efforts, and so much affected by external influences that they are of limited usefulness in day-to-day management...

In public and private contexts, some outcomes cannot be measured directly, and some outcomes are not measurable at all (e.g., van der Valk and van Iwaarden 2011; Newcomer 2015). In such cases, output measurement has to suffice (Cunningham and Harris 2001). In addition, factors related to the reliability, validity, and accuracy of the measurement may favor output instead of outcome measurement. As Mcphee (2005) points out, the reported information on output tends to be better than for outcomes because output indicators are often more appropriate and the method for output measurement is usually more robust and reliable than for outcomes. Outcomes are often encompassed by values of quality and satisfaction (e.g., Chalmers 2008). They are considered to be more difficult to measure than outputs (Curristine et al. 2008), which are often more quantitative by nature. As a consequence, outcomes are not utilized nearly as often as outputs in practice (e.g., OECD 2013).

One permanent problem with outcomes is that the impact of any governmental action requires information about what would have happened to citizens if those actions were not executed (e.g.,

Heinrich 2002). When assessing the effectiveness of government actions, it is difficult to isolate and measure the real difference between doing something and doing nothing. Again, unmeasured intervening variables and moderator variables can explain outcomes better than measured ones. On the contrary, doing something and doing nothing can be seen rather easily on production volumes (e.g., Rosen 1993).

Outputs are usually cheaper to measure (e.g., Marks 2005). In contrast, measuring all the relevant aspects of the outcomes would normally require rigorous quantitative and qualitative methodology with subjects over prolonged time periods (Schalock 2001). In such cases, outcome measurement can require extensive resources or tunnel vision focusing on some aspects while ignoring other critical aspects associated with outcomes by reducing the number of indicators used to track outcome development in the name of measurement efficiency (Lowe 2013). If extensive outcome measurement is chosen, frontline workers will often have to devote more time to reporting and less time to service production (e.g., Keevers et al. 2012). The question here might simply be whether we want to focus on reporting or on the actual service production.

Conflicts about the usefulness of different approaches to public sector performance measurement do exist (Harrison et al. 2012). Agreeing on appropriate performance measures has proven difficult in hybrid organizations (Kurunmaki et al. 2003). Performance measures are generally not neutral in the public sector context (e.g., Van de Walle and Van Dooren 2010), and there exist divergent opinions about the right performance indicators among politicians and between politicians and managers (Agranoff and McGuire 2001). The development of political debate dictates the assessment of public sector performance (Stewart and Walsh 1994). Because there can be a lack of consensus regarding the right indicators, performance measurement can cause dysfunctional effects (van Thiel and Leeuw 2002).

According to Chan (2004), outcome measures often are more difficult to define than output measures. Lack of consensus from the right outcome measures often occurs (Newcomer 2015). Again, the complexity of outcomes offers more possibilities to measure, meaning that there are more alternatives from which to choose the performance indicators. The diversity of preferences typical to public sector can utilize these alternatives to create conflicts. These conflicts can induce more costs and mean that the purpose of outcome measurement cannot be defined.

Contingent argument: outcome measurement causes more costs and conflicts about the right measures than output measurement. Meanwhile, outcomes cannot be measured comprehensively, whereas outputs can be (nature of outcome, nature of output, and conflict orientation).

1.2.1.2 Interpretation Problems in Outcome Results

The analysis of causes explaining the outcomes is often more complicated than the analysis of the activities producing the outputs (e.g., Pollitt and Bouckaert 2004). The linkage and interaction between

outcomes, outputs, intervening variables, and/or moderator variables makes the interpretation of outcome results considerably more difficult (e.g., Mascarenhas 1996). How different policies, programs, and agencies contribute to outcomes is often unclear (Newcomer 2015). The fact that a perception in a complex issue depends on when, where, and who is making the interpretation does not help in outcomes analysis (e.g., Kunda 1990; Van Maanen and Schein 1979). These complications in detecting the causes explaining the outcomes are called "the attribution problem" in the previous literature, and several researches have addressed this problem (e.g., Taro 2015).

Complex outcomes may cause information overload for politicians and public managers and therefore deteriorate the quality of decisions (c.f. Hahn et al. 1992). For this reason, simpler output information may seem a better choice (e.g., Chaston 2011). Kristensen et al. (2002) point out that politicians and public managers can devote focused attention to only limited areas at a time, and these actors have constraints on how much information they can utilize in their decision-making. If the outcomes form from complex processes, the decision-maker may not be able to utilize all of the information relating to the outcome achievement. Outcome measurement may not provide sufficient value for money if it deteriorates the quality of decisions or the information remains unused because we cannot interpret it properly or without conflicts and debates.

Contingent argument: interpretation of outcomes is more difficult and more prone to produce conflicts than interpretation of outputs (nature of outcome, nature of outputs, and conflict orientation).

1.2.1.3 Output as a Reflection of an Outcome

When outputs reflect outcomes reasonably well, the value of producing additional outcome measures can be very low. It is therefore important to analyze how well current outputs can approximate outcomes of a public organization (e.g., Smith 1996). For example, in the private sector, there often is no need to measure customer outcomes because the customers' valuation of the products and services reflects their willingness to pay for them (Smith 1996). In a similar fashion, the willingness to use, for example, the public sport facilities or the public parks can tell us something about the customer valuation placed on these types of goods and services.

Contingent argument: outputs reflect outcomes adequately and accordingly; there is no need for outcome information (nature of outcome and nature of output).

1.2.2 How Outputs and Outcomes Connect to Budgeting and Performance Management

The budget demonstrates whether or not there is political and managerial demand for outcome measurement (c.f. Greenwood et al. 1977). The budget process reminds us that there are opportunity costs for measuring outcomes. The interesting question in the resource allocation context is what makes

output measurement more desirable than outcome measurement. The answer is threefold, relating to costs, current information systems, and the purpose of such systems.

From the perspective of budgetary allocations, the decision-making problem is about comparing uses of resources to the added value of measurements. Assuming that the added value is perceived to be similar between the two types of measurement, cost of measurement defines the choice. Performance information often focuses on output levels because these are easy and less costly to define, measure, and analyze. By comparison, program outcomes tend to be much more difficult to identify, measure (e.g., Robichau and Lynn 2009), and analyze (e.g., Mascarenhas 1996). For these reasons, outputs may be preferred. If the outcome information is more expensive than output information, the former would have to provide more value than the latter in order to be the first choice of the decision-maker when these two types of measurement are competing on the same resources.

Contingent argument: From the budgetary perspective output measurement may provide more value for money because the nature of outcomes is problematic and more expensive to measure and analyze comprehensively (opportunity costs/competition for resources).

The necessity of coupling the budget process to outcomes may be one reason explaining why output measuring is preferred over outcomes in the public sector. As Kristensen et al. (2002) stated government budgeting and financial systems may currently only be capable of generating rudimentary matches of resources and outcomes. It is difficult to put a price tag on outcomes (e.g., Midwinter 2009). In contrast, calculating the cost of achieving required output levels is a rather established procedure (e.g., Anderson et al. 2000). There is thus a twofold problem with connecting outcomes to budgets. The problem with cost calculation is more fundamental because it has to be solved before any information system can be built. However, the problem involving information systems should not be understated either. Performance measurement in the public context is often based around the traditional vertical hierarchies of government departments and developed within individual legal entities (e.g., Ryan and Walsh 2004). Outputs are often created in these entities, whereas end outcomes are not (e.g., Mayne 2007). Systems supplying information on the costs and benefits of working across accounting entities would be needed in order to do pooled budgets that assign resources to service outcomes, for instance (Hodges 2012). Thus, information systems may not support outcome measurement.

Contingent argument: outcome measurement requires too many investments in information systems, while output measurement does not (information system).

Difficulties in cost calculations mostly relate to the fact that outcomes may not be as accurately specified and measured as outputs. Also, the causal link between inputs and outcomes is often more difficult to perceive than the link between inputs and outputs. Thus, uncertainty may arise over how changes in resource levels may affect overall performance (Kristensen et al. 2002). This problem causes

difficulties, especially at the state and community level. Connecting resources and outcomes to the change in indicator values in the state and community level is difficult at best, and it raises validity issues that are not encountered at the other levels (Rossi 1997). As stated by Kristensen et al. (2002), outcome budgeting raises many difficult questions. For instance, who should estimate the resources needed for outcomes that are a result of cross-sectional government operations? And should outcome targets be set first and then resources after the targets or vice versa (Kristensen et al. 2002)? These quite practical questions demonstrate the challenging problems outcome budgeting can generate (e.g., Grizzle and Pettijohn 2002).

Timeliness is an important feature of the performance management system (Heinrich 2002). The ability to provide timely feedback to public managers creates opportunities for performance improvements and for adjustments in budget allocations, service contracts, management practices, and training strategies. The challenge here is to provide outcome information in a timely manner so that it can be connected to day-to-day performance management. If outcome information cannot be used in operational performance management, the purpose of providing such information becomes compromised.

According to Heinrich (2002), federal agencies in the USA have found it particularly difficult to transform their long-term missions or strategic goals into annual performance goals. These federal agencies have also found predicting the level of performance results attained over a shorter term to be particularly challenging. For this reason, short-run rather than long-run measures are normally used in performance standards systems (Heinrich 2002). The indication here seems to be that outcomes cannot be utilized if they require long-run measures, as they often do. A longer time frame is usually needed because evaluating how the programs have affected the outcome takes time (Bovaird 2014). Outputs, on the other hand, are more suitable for those performance management systems that aim to provide feedback with minimal lag from actual performance because outputs can usually be detected, measured, and reported more instantly and easily than outcome information. Outputs also can be used to control work more efficiently because, by defining outputs, the public managers and politicians actually define what is done at the operating level (e.g., Snell 1992). Outcomes, on the other hand, may provide more freedom to the frontline workers. For instance, it does not matter what precise actions are taken as long as customers are satisfied.

Contingent argument: it is difficult to do budgets for outcomes and use outcome information in day-to-day performance management whereas outputs can be more easily connected to budgeting and performance management processes (nature of outcomes and nature of outputs).

1.2.3 The Information Need

According to Dervin's (1983) sense-making approach, information needs arise from the gap that exists between the current situation and the desired situation, from the process that tries to make sense of the

current gap and from the efforts to bridge that gap. Put simply, information needs are conceived as individual attempts to answer questions and to make sense of a gap in order to move from the current situation to the desired situation (Dervin 1983).

If low information need causes problems for the adoption of outcome measurement, the politician or public manager fails to see outcome information as beneficial for four reasons. Firstly, outcome information perhaps cannot help the politicians and public managers to understand which outputs will produce certain outcomes. In this situation, the outcome information does not provide enough data on how to change the current system; therefore, this information does not lead to action. The lack of mutual congruence in the results analysis may also mean that the information would remain unused. Secondly, it might be that the political system and public managers cannot agree on what the desired situation, or outcome, should be. Thus, there exist multiple views on the situation, which leads to an inability to determine the kind of information is needed collectively in order to improve the quality of life in society. Thirdly, the lack of know-how in performance measurement can lower information needs if it is acknowledged that these limitations could deteriorate the quality of the information to a level where it is no longer useful. Finally, the information can be seen as a blame attractor and as uncontrolled risk if outcomes are not in control and transparent information is needed for the sake of legitimacy.

Contingent argument: outcome information is costly to produce and the value to the decision-maker is equal or less than output information, which is why output information is preferred (information need).

1.3 Controlling Legitimacy—Output Versus Outcome Measurement

It has been stated that the main motivation for the use of performance information is legitimacy-seeking rather than efficiency maximization (Modell 2001). For example, in symbolic use, the information can be used for legitimation purposes (Van de Walle and Van Dooren 2008). Thus, legitimacy can be considered an important aspect of the implementation of performance measurement, and therefore, it is justified to look how produced output and outcome information can be managed and controlled in order to gain legitimacy. Suchman (1995, p. 574) describes legitimacy as "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions." To Zimmerman and Zeitz (2002), this social system is a very broad concept that includes the operating environment in which the organization functions and which it needs to demonstrate consistency. Legitimacy can also mean the congruence between the organization's activities and outcomes and society's values, norms, and expectations (Ashforth and Gibbs 1990). In order to understand how legitimacy can be managed, it is important to take a more detailed look at the ability to control the output and outcome achievement, as well as the distribution of the performance information describing these achievements.

1.3.1 Controllability of Results

Gaining, maintaining, and repairing legitimacy may be more problematic when outcomes are reported instead of outputs. This difficulty rests in the fact that outputs often have higher controllability than outcomes (Irwin 1996).

Contingent argument: due to higher controllability earning legitimacy with output rather than outcome information renders more control (control of legitimacy).

Lack of control also leads to problems in accountability. It seems that using outputs in performance management could lead to situations where the government has fewer difficulties holding an agency accountable for delivering the agreed-upon outputs (Mayne 2007). Outcome measures, on the other hand, may be subject to multiple determinants, with the budget holder's activities representing just one. It is harder for the government to hold the agency accountable for outcome achievement if an agency has only partial control over outcomes (Mayne 2001). In a similar fashion, ministers cannot be held accountable if the outcomes are not within their control (e.g., Irwin 1996). In addition, the time frame related to outcomes is troublesome because there can be extensive time lags between resource use and performance outcomes (e.g., Bovaird 2014). Consequently, the attribution problems not only make it difficult to interpret outcome results but also produce problems to accountability (Mayne 2001).

Attribution of responsibility for outcomes becomes even more problematic when the services are supported by multiple funding sources or various providers, such as health service providers, measures are affected by so many determinants that change in outcomes cannot be attributed to the effectiveness of a specific program alone (U.S. Department of Health and Human Services 1997). The uncontrolled nature of outcomes can also raise another challenging question: whether or not it is politically or professionally wise to promise to deliver outcomes instead of outputs. It can be daunting to manage efforts to achieve outcomes that require actions across different agencies or will be achieved by more than one hierarchical level of government (Kristensen et al. 2002).

Contingent argument: while outputs are under control, politicians or public managers have only partial control over outcomes and only partial accountability for the results. Thus, outcomes may offer less tools for principals to control performance (control of accountability).

1.3.2 Controllability of Information

Van de Walle and Van Dooren (2010) note that information relates to power structures because any new information about the performance of organizational departments may have a significant effect on future budgets or staff allocations. Even the survival of the department within the wider organization can depend on performance information. It is therefore in organizational actors' interests to control information flows (Van de Walle and Van Dooren 2010).

If government agencies were to focus on outcomes, the stakeholders should understand that the agency is only one of many factors likely to affect outcomes (e.g., Schalock 2001). This recognition would explicitly indicate that public agencies have only partial control and, therefore, only partial accountability, according to the stakeholders (Hatry 1997, p. 2). Without this recognition from stakeholders, blame games and blame avoidance strategies will most likely play a role in performance management. However, the opposition versus government setting can prevent such recognition because political opposition can do little other than generate blame. They cannot hope to have an effective voice in the process of policy formulation so long as there is a majority government in the parliamentary system (e.g., Weaver 1986). Thus, whenever there exists opposition, there may also exist a need to control information.

It is an interesting question whether or not there is a larger need to control outcome information than information that describes outputs. To answer this question, we need to ask: What do the outcome and output information tell us, exactly? If the output goals are not met, it indicates that the government is not operating efficiently. However, it cannot be inferred from output levels that the government is doing the wrong things. Failing to achieve outcome goals more directly raises the question of whether or not the government is actually doing the wrong things. Thus, the comparison between output and outcome measurements relates to the comparison between efficiency and effectiveness, where efficiency is "doing things right" and effectiveness is "doing the right thing" (e.g., Gleason and Barnum 1982).

Doing the wrong thing is a more severe error than doing the right thing inefficiently. Taking the wrong actions not only wastes public resources but can also lower citizens' well-being. Thus, outcome indicators have the potential to show more fundamental problems in government operations than output indicators. Moreover, doing the wrong things demonstrates problems in the political system and in the current government's visions. For politicians and public managers, the rationale may be to think that nothing is worse than providing outcome information demonstrating that public sector is doing the wrong things. However, it is uneasy to demonstrate that the government is actually doing the wrong things because of the inherent ambiguity analysis of outcomes.

From the perspective of accountability, outputs provide no justification for failures. This observation could indicate that the agent accountable for the outputs would have a greater stake because no excuses for failure would be available when output levels are not achieved. If the existence of blame avoidance is assumed, there is a need to control output information. Outcomes, on the other hand, offer only partial control over results; however, this partial control also offers justification to fail. Understanding the nature of outcomes would therefore diffuse the blame, avoiding the need to use blame avoidance strategies. Thus, it is unclear which type of information can be a bigger threat to legitimacy. Ultimately, if people react to reality as they perceive it and not to reality itself (Lewin 1936), then the need to control different information types depends upon stakeholders' reactions. In general, citizens tend to attach

outputs and outcomes to specific programs (Taro 2015). If so, then we are back to comparing the harmful consequences of effectiveness and efficiency information.

According to Wholey and Hatry (1992), public managers fear that elected officials, interest groups, and the media may use outcome information as fodder for attacks. The possible misuse of negative findings is a risk that comes with performance information (Wholey and Hatry 1992). This fear is not unjustified because it is a common phenomenon in politics (and in human behavior) that negative information produces more activity and impact than positive information (Rozin and Royzman 2001). This negativity bias encourages the avoidance of bad publicity and can influence the willingness to provide performance information.

Because outcomes are not under the control of politicians and public managers, transparency can generate bad publicity and adverse effects by putting poor results in the spotlight every time a partially uncontrollable outcome goal is not achieved. The effects of poor results depend on whether the public sector is applying full transparency (c.f. Rousseau 1772), direct transparency (c.f. Bryan 2010), or indirect transparency (c.f. Hood 2007). For these reasons, the ability to control information is linked closely to the chosen state of transparency.

Information can be controlled in two ways: by inhibiting information production or by controlling what information is delivered and to whom. The inability to determine who gets the information may lead to situations where outcome measuring will be inhibited because this is the only way to ensure that information about the negative results does not end up in the hands of opponents.

Contingent argument: outcome information may expose more severe errors in public sector actions than output information. The inability to control the distribution and production of the outcome information in a transparent setting may attract too much blame and trigger dysfunctional behavior, conflicts, and blame games (controllability of information and conflict orientation).

By evaluating the credit-claiming and blame-avoiding opportunities in different situations, it becomes apparent that politicians or public managers may choose to be loss averse, risk averse, risk neutral, or risk seeking. Depending on this choice, the arguments introduced in this research can be valued differently. For example, a risk-seeking politician might not care about the possibility of outcome measurement producing bad publicity or conflicts in the institution; by comparison, loss-averse politicians may care a great deal and make a choice accordingly. Typically, people are more loss averse (Tversky and Kahneman 1992), and politicians often choose to be risk averse (Weaver 1986). The constituencies and beneficiaries may also prefer that the results of the government program go unmeasured because this measurement could demonstrate that the program has actually been ineffective, of little value, or unimportant in achieving the desired effect or impact in the society (Kristensen et al. 2002).

Contingent argument: loss-averse politicians and public managers try to avoid conflicts, professional and political disasters, resource wasting, and legitimacy losses. They will not promise to deliver outcome information because outcome results may be ticking time bombs that are beyond their control, at least partially (loss aversion).

1.4 Conclusions and Implications

As a main contribution, we found several contingent arguments relevant to politicians and public managers. These arguments can be examined when the transition from output to outcome measurement is undermined (see Fig. 1.2). The arguments are linked to each other, and together, they form a complex network of issues that may influence the decision-makers to reject or resist outcome-based performance management.

We organized the wide array of arguments under two more general topics. We looked at whether or not outcome measurement provides value for money and improves legitimacy. However, we are fully aware that the arguments could have been organized differently. In order to develop our theoretical—conceptual framework, we now reorganize all the contingent arguments presented in Fig. 1.2 under broader categories:

- 1. Information (information need and information system).
- 2. Controllability (controllability of results and information).
- 3. Legitimacy.
- 4. Nature of outcome measurement (nature of outcomes).
- 5. Political conflict (competition for resources, conflict orientation, and loss aversion).

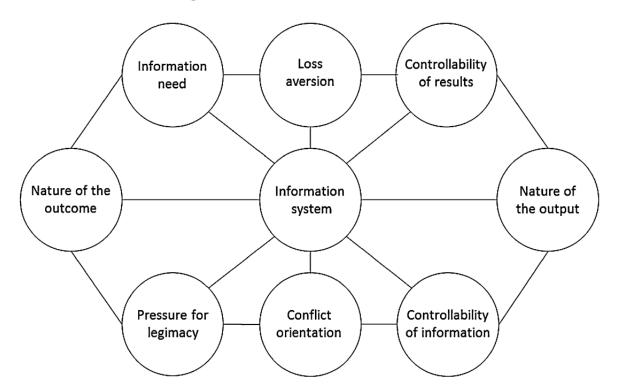


Fig. 1.2 The contingent arguments to ignore outcome measurement

These categories can be used to assess relevant contingent arguments that may inhibit the development of outcome measurement. Past and future research on outcomes can also be classified according to the above categories.

We do not assume that all the contingent arguments are present or assessed at the point of decision-making. In fact, it is probably more likely that some arguments are not even recognized by the decision-maker. We only assume that if at least one contingent argument is acknowledged and considered by politicians or public managers, outcome measurement may be rejected. We also acknowledge that these arguments can be valued differently by various politicians and public managers, and this valuing most likely varies among different decision-making situations. We also do not exclude the possibility of emergence: The whole could somehow differ from the parts (c.f. Morowitz 2002), and the final decision may deviate from the decision made purely based on weighting and calculating all the arguments, either favoring or opposing outcome measurement.

Finally, these contingent arguments can potentially enrich our theoretical and analytical view of the institutional practices and problems of developing outcome measurement in public administration. Therefore, we suggest that these contingent arguments be taken as proposals for the future research endeavors in the area of public financial management and public sector performance measurement (see Table 1.1). If these contingent arguments are supported by the empirical evidence in future research, they can be obstacles preventing the implementation outcome measurement. Taken into consideration the importance of outcome information to the stakeholders of the public sector, this threat cannot be taken lightly.

Future research questions

What type of information need can the outcome information satisfy, and how should the use and context of use be designed based on this need? (**information need**)

How would the current information systems have to be expanded or transformed if cross-sectional outcome measurement is to be connected to day-to-day management? (**information system**)

Do voters, political opposition, and other stakeholders understand that the government has only partial control over the outcomes, or do they exploit bad outcome results in order to gain advantage in elections and political decision-making by using blame games? (controllability of results)

Does transparency positively or negatively affect incentives to measure outcomes? (controllability of information)

Are voters, politicians, and public managers attaching outcome measurement to legitimacy in general? (control of legitimacy)

Do politicians, public managers, and voters recognize the complexity of outcomes and the political power associated with outcome measurement? (nature of outcome)

In which situations can outputs reflect outcomes adequately and accordingly? (nature of outputs)

How high is outcome measurement in the hierarchy of needs when resource allocations are considered by politicians and public managers? (**opportunity costs/competition for resources**)

How does a conflict-oriented environment affect incentives to measure outcomes? (conflict orientation)

Are public managers and politicians risk averse, loss averse, risk neutral, or risk-loving when it comes to deciding whether or not to implement the outcome measurement? (loss aversion)

References

Agranoff, R., & McGuire, M. (2001). American federalism and the search for models of management. Public Administration Review, 61(6), 671–681.

Anderson, G. F., Hurst, J., Hussey, P. S., & Jee-Hughes, M. (2000). Health spending and outcomes: Trends in OECD countries, 1960–1998. Health Affairs, 19(3), 150.

Anthony, R. N., & Young, D. W. (1988). Management control in nonprofit organizations. Homewood, IL: Irwin.

Ashforth, B. E., & Gibbs, B. W. (1990). The double-edge of organizational legitimation. Organization Science, 1(2), 177–194.

Bandy, G. (2011). Financial management and accounting in the public sector. Abingdon, OX: Routledge.

Bouckaert, G. (1993). Measurement and meaningful management. Public Productivity and Management Review, 17(1), 31–43.

Bovaird, T. (2014). Attributing outcomes to social policy interventions—'Gold standard' or 'fool's gold' in public policy and management? Social Policy and Administration, 48(1), 1–23.

Bryan, F. M. (2010). Real democracy: The New England town meeting and how it works. Chicago: University of Chicago Press.

Carlin, T., & Guthrie, J. (2003). Accrual output based budgeting systems in Australia The rhetoric-reality gap. Public Management Review, 5(2), 145–162.

Chalmers, D. (2008). Indicators of university teaching and learning quality. Canberra: Australian Learning and Teaching Council, the Australian Government Department of Education.

Chan, Y. C. (2004). Performance measurement and adoption of balanced scorecards: A survey of municipal governments in the USA and Canada. International Journal of Public Sector Management, 17(3), 204–221.

Chaston, I. (2011). Public sector management: Mission impossible? Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.

Cunningham, G. M., & Harris, J. E. (2001). A heuristic framework for accountability of governmental subunits. Public Management Review, 3(2), 145–165.

Curristine, T., Park, C. K., & Emery, R. (2008). Budgeting in Portugal. OECD Journal on Budgeting, 8(3), 7.

Dervin, B. (1983). Information as a user construct: The relevance of perceived information needs to synthesis and interpretation. In S. Ward & L. Reed (Eds.), Knowledge structure and use: Implications for synthesis and interpretation (pp. 153–184). Philadelphia: Temple University Press.

Dugan, R. E., & Hernon, P. (2002). Outcomes assessment: Not synonymous with inputs and outputs. The Journal of Academic Librarianship, 28(6), 376–380.

Ferlie, E., Pollitt, C., & Lynn, L. E. (2005). The Oxford handbook of public management. Oxford: Oxford University Press.

General Accounting Office. (1997). Managing for results: Opportunities for continued improvements in agencies performance plans. Washington, DC: Government Printing Office. GAO/AIMD-99-215.

Gleason, J. M., & Barnum, D. T. (1982). Toward valid measures of public sector productivity: Performance measures in urban transit. Management Science, 28(4), 379–386.

Greenwood, R., Hinings, C. R., & Ranson, S. (1977). The politics of the budgetary process in English local government. Political Studies, 25(1), 25–47.

Grizzle, G. A., & Pettijohn, C. D. (2002). Implementing performance based programme budgeting. A System-Dynamics Perspectives, Public Administration Review, 62(1), 51–62.

Guba, E. G., & Lincoln, Y. S. (1998). Competing paradigms in qualitative research. In N.K.

Denzin & Y.S. Lincoln (Eds.), The Sage handbook of qualitative research (3rd edn., pp. 191–215). Thousand oaks: Sage Publications.

Hahn, M., Lawson, R., & Lee, Y. G. (1992). The effects of time pressure and information load on decision quality. Psychology and Marketing, 9, 365–378.

Harrison, J., Rouse, P., & De Villiers, C. J. (2012). Accountability and performance measurement: A stakeholder perspective. Journal of Centrum Cathedra: The Business and Economics Research Journal, 5(2), 243–258.

Hatry, H. P. (1997). Where the rubber meets the road: Performance measurement for state and local public agencies. New Directions for Evaluation, 1997(75), 31–44.

Hatry, H. P. (2006). Performance measurement: Getting results. The Urban Institute: Washington, DC.

Hatry, H. P. (2005). Results matter: Suggestions for developing country's early outcome measurement effort. In A. Shah (Ed.), Handbook on public sector performance review. Washington, DC: World Bank.

Heinrich, C. J. (2002). Outcomes—based performance management in the public sector: Implications for government accountability and effectiveness. Public Administration Review, 62(6), 712–725.

Hodges, R. (2012). Joined-up government and the challenges to accounting and accountability researchers. Financial Accountability and Management, 28(1), 26–51.

Hogwood, B. W., & Gunn, L. A. (1992). Policy analysis for the real world. Oxford: Oxford University Press.

Hood, C. (2007). What happens when transparency meets blame-avoidance? Public Management Review, 9(2), 191–210.

Irwin, T. (1996). An analysis of New Zealand's new system of public sector management. Public management occasional papers no 9. Performance management in government. Contemporary Illustrations. Paris: Organisation for Economic Co-operation and Development.

Jackson, P. (2012). Value for money and international development: Deconstructing myths to promote a more constructive discussion. Paris: Organisation for Economic Cooperation and Development.

Kennedy, M. M. (2007). Defining a literature. Educational Researcher, 36(3), 139–147.

Kunda, Z. (1990). The case for motivating reasoning. Psychological Bulletin, 108, 480–498.

Keevers, L., Treleaven, L., Sykes, C., & Darcy, M. (2012). Made to measure: Taming practices with results-based accountability. Organization Studies, 33(1), 97–120.

Kristensen, J. K., Groszyk, W., & Bühler, B. (2002). Outcome-focused management and budgeting. OECD Journal on Budgeting, 1(4), 7–34.

Kurunmaki, L., Miller, P., Keen, J., & Institute of Chartered Accountants in England and Wales. (2003). Health act flexibilities: Partnerships in health and social care. London: Centre for Business Performance.

Kurunmaki, L., & Miller, P. (2011). Regulatory hybrids: Partnerships, budgeting and modernizing government. Management Accounting Research, 22(4), 220–241.

Lewin, Kurt. (1936). Principles of topological psychology. New York: McGraw-Hill.

Lowe, T. (2013). New development: The paradox of outcomes—the more we measure, the less we understand. Public Money and Management, 33(3), 213–216.

Marks, M. M. (2005). In S. Mathison (Ed.), Encyclopedia of evaluation (287). Thousand Oaks, CA: Sage.

Martin, L. L. (1997). Outcome budgeting: A new entrepreneurial approach to budgeting. Journal of Public Budgeting, Accounting and Financial Management, 9(1), 108.

Mascarenhas, R. C. (1996). Searching for efficiency in the public sector: Interim evaluation of performance budgeting in New Zealand. Public Budgeting and Finance, 16, 13–27.

Mayne, J. (2001). Addressing attribution through contribution analysis: Using performance measures sensibly. The Canadian Journal of Program Evaluation, 16(1), 1.

Mayne, J. (2007). Challenges and lessons in implementing results-based management. Evaluation, 13(1), 87–109.

McGill, R. (2001). Performance budgeting. International Journal of Public Sector Management, 14(5), 376–390.

McPhee, I. (2005). Outcomes and outputs: Are we managing better as a result?. In CPA National Public Sector Convention, 20.

Miller, H. T., & Fox, C. J. (2007). Postmodern public administration. New York: M.E. Sharpe.

Midwinter, A. (2009). New development: Scotland's Concordat—An assessment of the new financial framework in central–local relations. Public Money and Management, 29(1), 65–70.

Modell, S. (2001). Performance measurement and institutional processes: A study of managerial responses to public sector reform. Management Accounting Research, 12(4), 437–464.

Morowitz, H. J. (2002). The emergence of everything: How the world became complex. Oxford: Oxford University Press.

Newcomer, K. E. (2007). Measuring government performance. International Journal of Public Administration, 30(3), 307–329.

Newcomer, K. E. (2015). From outputs to outcomes. In Guy & Rubin (Eds.) Public administration evolving: From foundations to the future (pp. 125–158). New York: Routledge.

OECD. (2013). Together for better outcomes: Engaging and involving SME taxpayers and stakeholders. Paris: Author.

Peirce, C. S. (1998). The essential Peirce selected philosophical writings. Bloomington, IN: Indiana University Press.

Pollitt, C., & Bouckaert, G. (2004). Public management reform: A comparative analysis. Oxford: Oxford University Press.

Robichau, R. W., & Lynn, L. E., Jr. (2009). The implementation of public policy: Still the missing link. Policy Studies Journal, 37(1), 21–36.

Rosen, E. D. (1993). Improving public sector productivity: Concepts and practice. Newbury Park, CA: Sage Publications.

Rossi, P. (1997). Program Outcomes: Conceptual and measurement issues. In E. Mullen & J. Magnabosco (Eds.), Outcomes measurement in human services (pp. 20–34). Washington, DC: NASW Press.

Rousseau, J. J. (1772/1985). The government of Poland, translated, with an introduction and notes by Willmoore Kendall, Indianapolis: Hackett Publishing Co.

Rozin, P., & Royzman, E. B. (2001). Negativity bias, negativity dominance, and contagion. Personality and Social Psychology Review, 5(4), 296–320.

Ryan, C., & Walsh, P. (2004). Collaboration of public sector agencies: Reporting and accountability challenges. International Journal of Public Sector Management, 17(7), 621–631.

Schalock, R. L. (2001). Outcome-based evaluation. New York: Kluwer Academic/Plenum Publishers.

Smith, P. (1995). On the unintended consequences of publishing performance data in the public sector. International Journal of Public Administration, 18(2–3), 277–310.

Smith, P. C. (1996). Measuring outcome in the public sector. New York: Taylor and Francis.

Snell, S. A. (1992). Control theory in strategic human resource management: The mediating effect of administrative information. Academy of Management Journal, 35(2), 292–327.

Spoon, J. J., & Klüver, H. (2014). Do parties respond? How electoral context influences party responsiveness. Electoral Studies, 35, 48–60.

Stewart, J., & Walsh, K. (1994). Performance measurement: When performance can never be finally defined. Public Money and Management, 14(2), 45–49.

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. Academy of Management Review, 20(3), 571–610.

Talbot, C. (2010). Theories of Performance: Organizational and service improvement in the public domain. Oxford: Oxford University Press.

Taro, Kulli. (2015). The attribution problem in performance measurement in the public sector: Lessons from performance audits in Estonia. Tallinna: TUT Press.

Tversky, A., & Kahneman, D. (1992). Advances in prospect theory: Cumulative representation of uncertainty. Journal of Risk and Uncertainty, 5(4), 297–323.

U.S. Department of Health and Human Services. (1997). Strategic Plan. Washington, DC: Author.

Van Dooren, W., & de Walle, Van. (2008). Performance information in the public sector: How it is used. Basingstoke, Hampshire: Palgrave Macmillan.

Van de Walle, S., & Van Dooren, W. (2010). How is information used to improve performance in the public sector? Exploring the dynamics of performance information. In K. Walshe, G. Harvey, & P. Jas (Eds.), Connecting knowledge and performance in public services: From knowing to doing (pp. 33–55). Cambridge: Cambridge University Press.

Van der Valk, W., & Van Iwaarden, J. (2011). Monitoring in service triads consisting of buyers, subcontractors and end customers. Journal of Purchasing and Supply Management, 17(3), 198–206.

Van Maanen, J., & Schein, E. H. (1979). Toward a theory of organizational socialization. Cambridge, Mass: M.I.T.

Van Thiel, S., & Leeuw, F. L. (2002). The performance paradox in the public sector. Public Performance and Management Review, 25(3), 267–281.

Vedung, E. (1997). Public policy and program evaluation. New Jersey: Transaction Publishers.

Weaver, R. K. (1986). The politics of blame avoidance. Journal of Public Policy, 6(04), 371–398.

Wholey, J. S., & Hatry, H. P. (1992). The case for performance monitoring. Public Administration Review, 52, 604–610.

Yeung, O. M., & Mathieson, J. A. (1998). Global benchmarks: Comprehensive measures of development. Washington, DC: Brookings Institution Press.

Zimmerman, M. A., & Zeitz, G. J. (2002). Beyond survival: Achieving new venture growth by building legitimacy. Academy of Management Review, 27(3), 414–431.