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Organizing public good provision: Lessons from Managerial Accounting

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ABSTRACT

This paper applies ideas and findings from Managerial Accounting to the problem of public good provision. It first links the problems of traditional bureaucracies with those of "discretionary expense centers", which are characterized by poor user and supplier incentives as well as overproduction. It then describes alternative hybrid organizations that delegate authority and provide incentives on some dimensions, while maintaining control on others. Finally, it illustrates the ideas with several cross-country case studies on public registries, illustrating that such hybrids may provide a superior, if imperfect, solution to the problems that governments face when lacking sufficient information to directly control the activities of public goods' providers.

1. Introduction

The narrative for justifying government production of goods and services has its roots in external effects. When parties outside a market transaction experience some positive or negative payoff from its execution, even perfectly competitive markets cannot deliver efficient outcomes because the price at which trade occurs no longer reflects all social benefits/costs. So, for example, the reason that governments provide fire services is that any one individual's valuation of purchasing fire services in a market is less than the social value, which would also include the benefit to his neighbors. Other classic examples of services with positive external effects that government generally provides are the courts, the police, and the army.

While the rationale for government provision of public goods is well known, how to *organize* their production is less well understood. Once the government takes over the provision of a public service, it still must decide how to deliver it. For the most part, governments themselves do not directly deliver any services; they instead tend to delegate delivery to departments within the civil service (or sometimes outside contractors), which themselves must decide how to allocate resources to provide the service. Questions such as how much discretion to allow government departments, and how to motivate their managers and staff, must be answered.

Failure to effectively organize public good provision is common and substantially decreases efficiency. A typical solution is to adopt a command-and-control bureaucratic structure in which providers have little discretion and no incentives, which, we show, can lead to serious problems. At the same time, for the reasons sketched above, relying on the opposite extreme of a pure market with full discretion and powerful price-based incentives is suboptimal in a public-good setting.

The primary goal of this paper is to show that these "corner" solutions are only two possibilities among a range of organizational types that restrict providers' discretion on some dimensions while allowing freedom (with appropriate incentives) on others. In other words, we conceive of public-good provision as consisting of multiple tasks (e.g., what price to set or what quality level to provide), some of which can be bureaucratically controlled and some of which can be left in the hands of providers. We will refer to an organization that adopts such a mixture as *hybrid*.

While this point is often overlooked (or at least not explicitly recognized) in discussions of bureaucratic reform, the Managerial Accounting literature has long observed that divisions within companies have discretion on some dimensions and not on others, and that the degree of decentralization is inseparable from the problem of how to effectively motivate good performance. The second goal of the paper, therefore, is to put forth a framework based on Managerial Accounting principles to think about the tradeoffs among

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different kinds of organizations. Our aim is not to provide a new theory of public management, but rather to highlight that standard frameworks in the Managerial Accounting literature can be used to analyze the costs and benefits of various forms of public sector organization. More concretely, we identify a variety of organizational types between pure bureaucracy and pure markets that can be used in the public sector, and discuss their typical advantages and disadvantages.

This exercise is valuable because, while the problems associated with traditional bureaucracies are often apparent, how to address them is a source of perennial confusion. A case in point is the National Health Service (NHS) in the UK. By the 1980s observers recognized that the NHS was suffering from inadequate organization. For example, wages were independent of performance, there was no attempt to measure costs, and the central government decided on all human resource policies. Enthoven (1991) summarized the then prevailing philosophy:

> The normal assumption in the public sector—including the NHS—is that the output cannot be defined and measured, so the producers cannot be held accountable for it. So, in a manner typical of the public sector, producers are held accountable for the use of inputs by budget-line items, such as nurses' salaries, building repairs, and disposable services. Then the focus of accountability is not, "Did you produce the greatest output possible with these resources?" but rather, "Did you operate within these budget limits?"

These apparent distortions initiated a period of reform in the NHS that continues to this day. However, the approach of successive UK governments to NHS organizational reform could fairly be described as unfocussed; every few years new and costly initiatives are proposed, debated, and put in place, only to be changed again shortly thereafter. While this endless tinkering may in part reflect the political election cycle, the lack of a coherent and unified way to think about public sector organizations is likely a contributing factor. Our paper provides a starting point for this challenge.

Since the goal of the paper is ultimately policy-oriented, the third contribution is to illustrate the application of the Managerial Accounting framework to the organization of public goods. Relying on a case study of different registries, we link the advantages and disadvantages of alternative organizational structures predicted by the theory to real-world outcomes, thus demonstrating the challenges and tradeoffs governments have faced in designing effective organizations for the provision of public goods.

2. Public good provision and Managerial Accounting

In the context of private sector multi-division companies, the Management Accounting literature distinguishes among alternatives according to how their performance is evaluated and which are their managers' decision rights—see Kaplan and Atkinson (1989); Jensen and Meckling (1998); and Brickley et al. (2007), for example. While this theory was developed to study tradeoffs among different ways of organizing the production of private goods, we argue that it also provides a useful framework for understanding the organization of the public sector. This section provides a brief overview of the relevant ideas from the literature before we proceed to apply them in our empirical analysis.

2.1. Classic bureaucracy as an expense center

The Managerial Accounting literature denotes as a "discretionary expense center" (or "expense center", for short) any department that receives a fixed budget that it uses to supply a service, often at no cost to users, who have no choice from which center to consume. The pay of expense center managers and employees is generally independent of the center's performance. The main rationale for this type of center is to respond to a situation in which output is subjective so that establishing performance benchmarks is impossible. When the organization designer cannot evaluate the cost of producing output or the value to users, a natural response is to eliminate all incentives. Typical examples of expense centers within business firms are human resource and public relations offices.

In the public sector, expense center organizations are quite common. For example, many countries have primary education systems that provide free schooling from a centralized budget. Children are assigned to schools on the basis of their residence, and teachers, who are paid with fixed salaries, de facto enjoy permanent employment as civil servants. This is an expense center insofar as there is no user choice, supplier incentives are weak to non-existent, and an education authority fixes the budget from above.

The main decision variable for controlling an expense center is the size of the budget. In what follows, we will refer to the "government" as the budget allocator, and consider as an expense center a particular government department. Of course, expense centers can themselves be part of larger expense centers, and the government as a whole might itself be considered such a center, as assumed by Niskanen (1968). We shall return to some of these complications in the case study below.

The absence of incentives in expense centers leads to predictable negative consequences. On the supply side, a natural assumption is that suppliers' objective is to maximize the budget size because of the power and prestige attached to receiving more funds; because their compensation is positively linked to the funds they receive; or because receiving more funds allows them to siphon some off for private consumption. Moreover, the absent link between pay and service quality means that the center will not undertake costly activities to improve quality.[1] Moreover, if users pay no fees, they will demand the service until their marginal benefit is zero and not internalize production costs.

The fact that suppliers and users both have a stake in large budgets combined with the government's lack of information about user preferences and supplier technology means that the most likely outcome of expense centers is overproduction of low-quality output. Indeed, this description fits well with the associations many people have with the very word bureaucracy.

Some public sector reforms maintain the expense center organization, and attempt to correct its distortions without changing incentives. One obvious way of dealing with bloated budgets is to reduce them through cuts, but this creates numerous practical problems. Given its lack of information, it is difficult for the government to identify which parts of the public sector generate the most waste. Rather than base budget cuts on any concrete measures of efficiency or performance, they are often applied across the board, eliminating both wasteful and valuable programs at the same time.

Even if governments did attempt to introduce differential budget cuts for departments on the basis of their inefficiency levels, such as in "zero-base" budgeting exercises, their judgments would be subjective and seriously constrained by information asymmetries. In this case, a main danger is that public sector managers engage in lobbying and other wasteful influence activities to persuade the government not to reduce the funds allocated to their respective divisions (Milgrom, 1988). Suppliers can also use their

[1] Our characterization of expense centers is abstract, and we do not analyze potential mitigating forces. For example, it is also possible that bureaucrats have non-monetary incentives that lead them to provide quality, such as Weberian "public-spiritedness." Also, observability may be greater in the long term than in the short term, and incentive intensity adapted accordingly.