

# Mastering Leviathan: A Review Article on *Growing the Productivity of Government Services*

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## ABSTRACT

This review article evaluates the book *Growing the Productivity of Government Services* by Patrick Dunleavy and Leandro Carrera, which examines how government outputs can be measured and how the United Kingdom has strived to improve government productivity. The author finds the book valuable, as it shows how methodological advances reported in Sir Tony Atkinson's recommendations on reporting government outputs can be put into practice. Furthermore, documenting how government productivity can be improved in the United Kingdom provides valuable lessons for other countries. The potential of technology to improve government productivity is emphasized in the book, although the author suggests that a more basic role of reporting on government output will spur reform. Strong management skills will be important not only for effective implementation of IT but also for broader improvements in government productivity.

THE IMPACT OF GOVERNMENT on the well-being of citizens is enormous. Most attention is paid to highly visible policies such as interest-rate or tax policies, but a vast array of services are provided by government that affect the daily lives of citizens, ranging from the provision of health care to the collection of taxes and the issuing of passports. The objective of the book under review is to place all of these changes in government services in a wider context through the lens of productivity so that the interaction between citizens and the state can be improved. Monitoring the productivity of providing government services could provide an impetus to improving them.

With the scale of services being provided by government, improving their productivity could have significant positive impacts on living standards. But there is currently no way of tracking any changes that take place, or even to put the size of the challenge in context. These are the direct goals of *Growing the Productivity of Government Services* by Patrick Dunleavy from LSE and Leandro Carrera from the Pensions Policy Institute and King's College: how to measure government productivity in practice, and how it can be improved (Dunleavy and Carrera, 2013). The book does not prescribe in detail what must be done to improve productivity. Instead, what becomes apparent is that measuring the productivity of government services yields insights into

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how to improve government services; provides a benchmark for recording successes and failures; and highlights where policymakers' attention needs to be focused. Even relatively crude measures of government output can be informative. The book effectively refutes the pushback from naysayers that government services are too complicated to be measured.

The book builds on and applies the work of the *Atkinson Review*, which provided guidelines on measuring government output for the National Accounts (Atkinson, 2005).<sup>2</sup> It details the nitty-gritty of measuring the productivity of government services—ranging from levying customs duty to issuing passports—and examines the impact of information and communication technologies (ICT). Concrete lessons are highlighted. All of this is done in the context of a practical discussion of efforts by various government agencies in the United Kingdom to improve their productivity, some of which succeeded while others faced more challenges. Some government services are provided through centralized agencies throughout the United Kingdom; for others, the book focusses on England rather than on the devolved governments in Northern Ireland, Scotland and Wales.

The scale of activities reported in the book suggests that there are real opportunities to improve productivity in government. Much is made of the potential contribution of ICT, but it is noted that investment in ICT requires workplace reorganization to be effective. As is made clear as well, however, policies to improve the operations of government can lead to problems.

The book discusses the delivery of government services rather than the policy choices on which services should be provided. For example, it is the administration of the tax system that is discussed, not the appropriate balance between consumption and income taxes. Implicitly, this approach emphasizes that improving government produc-

tivity should be in the interest of all parts of the political spectrum. The book includes a discussion of measurement methodologies and of economic tools to measure productivity. Essentially, this is a guidebook to productivity in government from the viewpoint of public administration rather. Appropriately, there are no precise recommendations on what should or should not be done. Nevertheless, the authors draw on recent experience on, for example, the outsourcing of government services to explain what problems might arise. This review cannot do justice to all of the intricacies in administrative policies and measurement challenges that are explored, but will instead concentrate on giving a flavour of these issues and discuss potential implications of this valuable work.

This review proceeds as follows. The first section summarizes the content of the book. After introducing the conceptual framework of government productivity used in the book, the productivity performance of individual government departments in the United Kingdom is examined by the authors and policy lessons are summarized. The second section of the review examines issues that reporting government productivity might bring to the fore, including comparing productivity in government and business, and wider issues of controlling and motivating the bureaucracy. The review then concludes by agreeing that government productivity needs to be measured, but that wider changes also need to be fostered beyond investment in ICT before government productivity can be improved.

## Measuring Government Productivity

The current practice in the National Accounts of most countries is to measure the value of government-provided goods and services by their cost of production. As such, the National

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<sup>2</sup> The *Atkinson Review* was summarized and discussed in ab Iorwerth (2006).

Accounts only include inputs into these goods and services. The *Atkinson Review* gave an impetus to measuring directly their output instead. As an example, the input into teaching normally captured in the National Accounts is the salaries of teachers, and the quantity of this input might be hours for which teachers are paid (which may or may not be in front of a class). The suggestion in the *Atkinson Review* was that the number of pupils taught should be an output measure. For health care, the input might be the hours of work by doctors and nurses, but an output measure might be the number of procedures conducted or the number of complete treatments administered. These outputs could then be weighted and aggregated by the unit cost of providing them to obtain a value suitable for the National Accounts. OECD recommendations in these areas are discussed in ab Iorwerth (2012).

In this conceptual framework, it becomes important to distinguish between outputs and outcomes. Outcomes are those results valued by consumers and society at large, such as a healthier individual or a more educated person. Actions by individuals as well as government can contribute to those outcomes, so it is a challenge to appropriately capture the outputs of government that contribute to desired outcomes. Making a distinction between outputs and outcomes becomes important in analyzing government services because it provides a clearer identification of what government does and what it can contribute.

By following this approach, the productivity of government can be measured by comparing outputs and inputs, which then allows for (Atkinson, 2005):

- 1) Better data for macroeconomic management through the National Accounts;
- 2) Assessment of overall economic performance and welfare; and
- 3) Development of government performance targets.

So what happens when government productivity is not measured? The first interesting contribution of this book is in classifying current policy initiatives on improving government performance into their potential impacts on government productivity. Given austerity policies implemented by governments around the world, for example, there is a risk that expenditure cuts may result in a greater decline in output than inputs because measures of outputs are not available.

The first concept that the authors introduce is *effectiveness*. Effectiveness is the level of outcomes per unit of input. Having a healthier person per unit expenditure on healthcare is clearly ideal, but the authors argue that effectiveness is too subjective a measure. In many cases policy effectiveness might be guided by values and beliefs.

*Efficiency* is defined as minimizing the level of resources to achieve a given level of output. Improving efficiency leads to a static view of improving operations as one-off events. Efficiency drives tend in practice to lead to cuts in services or lowering the quality of services, so productivity could decline. A similar result can come from *efficiency dividends*, whereby a department's budget is automatically cut, with revenues reallocated to priority areas.

Governments may also undertake *value for money* audits when external auditors examine whether targets and goals are being met. Although valuable, audits tend to be one-off exercises using ad hoc methodologies that cannot be replicated across departments and do not provide for continuous measurement of productivity.

Many of the austerity policies implemented around the world fall into the categories outlined above, but they do not aim directly at improving government productivity. Some of the authors' concerns about the potential for unintended consequences are reflected in the observations of a Canadian public servant

describing the cutbacks undertaken in Canada during the 1990s: “We did what all good businesses do when they first see the signs of trouble. We focused on the costs of inputs [but we] did not do a rethinking of our business and business processes” (Savoie, 2003:144). Whereas the authors of the book under review would agree with the second part of the quote, they would probably disagree with the first. Concentrating on cutting inputs without knowing what outputs are being cut as a consequence would be a risky proposition in the private sector, but this is what governments generally do.

Accurate measures of output and productivity could inform decisions on where cutbacks might be easier, or at least lead to the appropriate questions. If productivity growth in a government agency was slow over many years, were there inherent reasons for this situation, or was there scope for better performance? A further concern with current approaches is inadequate reflection on the quality of government services. Budget cuts during periods of fiscal retrenchment could be met by diminishing quality of service. Cutting costs through not answering phone calls or not resolving difficult cases is probably not what the architects of austerity have in mind. But this also means that productivity statistics for government need to capture quality, or the decline in output would be understated.

Ideally then, a measure of government productivity would show that cost cutting that leads to a greater-than-proportional lowering of government output would be reflected in lower productivity. Such a measure would integrate some notion of quality if perverse effects are to be avoided. The *Atkinson Review* strongly argued in favour of incorporating quality of outputs.

The authors of this book agree with that recommendation and show how it can be done in practice, along with the risks of not doing it. Although incorporating quality can blur the distinction between outputs and outcomes, the

authors argue that not including quality can lead to many perverse effects.

An example of such unintended consequences is a hospital that processes patients carefully and gives them longer post-operative care so that its success rate with operations is high, whereas another hospital skimps on post-operative care and then needs to re-admit these patients. Measuring output as simply the number of operations would lead to higher output and productivity for the second hospital. Developing a quality-adjusted output measure is therefore necessary to avoid perverse incentives. Despite their concerns, the authors argue that such adjustment needs to be conservative, particularly for public services where there is not much scope for difference in quality. In the case of health services, quality adjustment is required because of the scope for significant variation in quality between providers. However, as not all aspects of quality can be measured, there is a risk of diverting attention from those aspects of quality that cannot be well measured.

In their discussion of measuring the productivity of hospitals in England, the authors delve into the details of how quality adjustment can be done in practice. Aggregate hospital performance is assessed by three quality measures: average patient waiting times, patient satisfaction, and the ratio of complaints resolved in target times divided by total complaints received per year.

The issue of hospital output has recently gained relevance in the United Kingdom where it is speculated that at a hospital in Mid-Staffordshire several hundred more patients died than would have been expected. The alarm was initially raised through analysis of mortality-rate data, suggesting they were abnormally high. Summary Hospital-level Mortality Indicator (SHMI) reports have been available for individual hospitals in England since October 2011. It would have been interesting for the authors to

explore how greater provision of data on the performance of government-provided services could play a role in improving them.

A challenge in incorporating quality measures is identifying the actual elements of government service that citizens really value. The authors highlight two cases where what citizens cared about only became apparent after a crisis. The appropriate screening of passengers at airports turned out to be greatly valued after 9/11, and quality shading in this area was not appreciated. In the delivery of passports in the United Kingdom, it turned out that travellers valued punctuality far more than cost. The agency providing passports had tried to introduce small cost savings in providing new passports, but then bungled the implementation so there were delays of many months in issuing them. There is a risk that government bureaucracies themselves assume what citizens value rather than unearthing the reality; there should be no misalignment between “business” objectives and what citizens actually want.

## Case Studies

The core of the book is a series of case studies of measuring productivity for various government services in England. Each case study outlines the different challenges faced in analyzing and improving productivity. These challenges are introduced through first outlining what the objectives of the organization are, and the history of providing those government services. This context is very detailed—and perhaps too detailed for the general reader or for someone not familiar with the institutions—but it sheds light on why particular choices are made in measuring productivity and what aspects might be relevant in changing productivity patterns.

Table 1 outlines the output measures available for various government services in measuring government output; the cost weights used to aggregate outputs; and the appropriate quality

adjustments (not all of these services are explored in the book). In the case of standardized outputs provided by a single government organization, the authors suggest that no quality adjustments are necessary, although many would debate this conclusion.

By delving into the intricacies of specific cases, the authors also show that productivity can indeed be measured and be informative in government, shedding light on the different opportunities that measuring productivity can bring. If a single agency is responsible for all provision of a service in a country, such as the tax-collection agency, then it is difficult to use the data to compare performance to other organizations (although international comparisons would be interesting). On the other hand, measuring the productivity of a hospital would allow greater within-country comparisons to be made.

Success stories in improving government productivity in the United Kingdom include the assessment of customs duty and the levying of taxes. The process of levying customs adopted automation earlier than other government departments, which the authors trace to its extensive links to business. This interesting comment on the varying responsiveness of government departments is not explored further, but it would have been interesting to find out more. As a result of automation, fewer customs checks were needed and clearance was faster, which the authors estimate to have more than tripled total factor productivity from 1997-1998 to 2007-2008, and increased labour productivity by even more. Because of this increased productivity, resources could be diverted to more strategic risk-based examination of cargo rather than random spot checks.

The authors concur with the managers of the customs agencies in arguing that it is too tricky to control for quality when measuring this output. However, it would be interesting to explore further aspects of quality in this area. This reviewer's expe-

**Table 1**  
**Suitable Output Measures for Productivity Analyses in Public Services**  
**Operated by National Government Departments or Agencies**

Public Service	Activities	Cost Weights	Quality Weights
Social security	Major different social security benefits. The numbers of new benefits claims processed should be separately distinguished from the payment of existing ones (because they are much more expensive)	Unit costs for each benefit	Standardized procedures, so no quality measurement should be necessary.
Tax collection	Tax returns processed for main types of taxes handled by national tax agency, such as income tax, VAT or GST, business taxes, etc.	Share of administration costs published by the tax agency for each type of tax	Same as above
Customs	Total number of import and export declarations	Share of administration costs for processing imports and exports	Same as above
Prison service	Number of total prison population and the numbers of new prisoners admitted	Unit cost per prisoner	Potential indicators include escapes or access to drugs, or degree of overcrowding
Passport issuing	Number of passports issued	Unit costs for different types of passport services	Waiting times could be used as a proxy for service quality
Border protection	Total number of activities in border control, border enforcement, asylum and after-entry managed migration tasks	Unit cost or share of administration costs for each kind of activity	Complex service. Could have an indicator of quality such as proportion of cases appealed.
Driving and vehicle licensing	Total number of vehicle and driver transactions	Unit costs (such as average time taken per transaction)	Routine service

Source: Table 2.1, Dunleavy and Carrera (2013).

rience is that going through customs when entering the United Kingdom on a U.K. passport is straightforward, while entering Canada on a Canadian passport can bring about an experience bordering on harassment, leading one to wonder what the implications of the two systems were. Another interesting question is why passing U.K. immigration controls has been rapidly automated after the introduction of biometric passports, while such automation has lagged in North America.

Rather than the sharp increase in productivity at the customs agency, the tax authorities experienced a more continuous increase in productivity. Labour productivity in central-government taxation increased by about 50 per cent between 1997-98 and 2007-08, but this improvement progressed in fits and starts.

A more depressing picture of government productivity comes from the administration of social benefits. The authors are particularly aggrieved that the responsible organization—the Department of Work and Pensions (DWP)—moved to a telephone-based system just as the world moved to the internet. Furthermore, no electronic-transaction methods were developed for its benefit recipients from 1999 to 2005. According to authors' statistics, 20 years of reform led to zero change in the overall productivity of providing these services. Carrera and Dunleavy (2011) trace this lack of change not only to the frequent change in policy but also to the combination of a lack of IT background in senior management and IT staffers being 'mainframe guys'. Together, these factors lead to organizational conservatism.

There was essentially no increase in productivity in either issuing passports or vehicle licensing, despite these areas being ripe for technological change. The agencies responsible for these tasks seemed to have been a little bit too interested in becoming part of a move to issue identity cards in the U.K., expanding their “market”, rather than in concentrating on their assigned tasks. The incomplete movement of forms online led to higher costs not only for the passport agency, but also for citizens. Filling out forms to obtain a passport became so challenging that the Post Office—a separate agency—offered to check the forms for applicants when they were mailed in (for a fee of course)!

In discussing productivity differences across similar units, Dunleavy and Carrera find, for example, that hospitals in London are less productive than in the rest of England, but are unable to pin down exactly why. By comparing performance across hospitals, they uncover complex relationships between the effect of management practices and ICT on productivity whereby one may offset the weakness of the other, but the benefits decline as the other improves. As the authors note, the research is preliminary but one can see an active and fruitful research path ahead.

## **Policy Lessons for Improving Productivity**

Based on the lessons learned in the United Kingdom, the authors advance key elements to improve productivity growth in government:

- 1) **Keeping continuous focus on productivity:** Rather than occasional step-level changes to productivity, governments should maintain a continuous focus on improving productivity.
- 2) **If services are outsourced to the private sector, it is important to maintain the option of changing suppliers if the first contractor is not up to the job:** Hoping

that government productivity might be improved simply by outsourcing service provision to private contractors may lead to disappointment. These contractors have, in many cases, become so large and entrenched that they are effectively monopolies, no longer given to improving government’s productivity.

- 3) **Greater involvement of public servants in efforts to improve productivity:** The involvement of workers is often central to improving productivity in the private sector. Productivity in Southwest Airlines seems to have benefitted significantly from the suggestions of employees. On the other hand, the authors believe that there is considerably more suspicion of government workers, making leaders in the public sector less likely to involve them in attempts to improve productivity.
- 4) **Not using a large state—and implicitly a less productive state—as a means of combating inequality:** In a critique aimed more at continental European states or the political left, the authors criticize the tendency of using state employment as a means of achieving social goals. The indiscriminate creation of jobs for workers, regardless of skill, would inherently drag down productivity.

## **How Do Productivity Improvements in Government and the Business Sector Differ?**

With the insights gleaned from the authors’ analysis of government productivity, improvements in the private and public sectors can be compared. The first contrast is that innovation tends to be continuous in the private sector. Governments, on the other hand, tend to go for long periods with insufficient attention to gov-

ernment productivity, but then undertake sweeping reforms and deep cuts when there is a change in government. It is interesting to speculate why this might be the case: in the absence of data continuously available for government productivity, does the case for reform have to become obvious before action is undertaken? In determining where to allocate their scarce political capital, does the case for reform have to be so clear—as in the times of fiscal crisis—that politicians usually avoid reforming government services?

The drivers of productivity growth differ between government and the private sector. The failure of business to improve productivity compared to its competitors would ultimately see it go bankrupt, and its more productive competitors gain market share. Such resource reallocation by the market, from less successful to more successful firms, is a large part of ‘automatic’ year-over-year productivity improvements in the business sector (see, for example, Foster *et al.*, 2008). But productivity gains from such reallocation are not available in government because unproductive units are generally not shut down. Although there has been much discussion of allowing parents to choose schools for their children, for example, schools that fail to attract pupils are unlikely to be closed. Consequently, continuous improvement in internal productivity is more important in the government than in the private sector, because reallocation gains are less available in government.

The pattern of productivity improvement in the public sector stemming from the technological revolution wrought by the digital economy seems to have followed the path of the private sector in general. Initially, productivity increased through investments in new computer systems. Financial systems, data collection and transmissions, payment processes, internal communications and human resources management were made electronic so that the internal man-

agement of government could improve. Electronic systems also provided more flexible and convenient services to the public, such as easier filing of tax returns and the streamlining of information delivery. But harder tasks were then faced as businesses processes needed to be changed to maximize the productivity-enhancing potential of information technology (IT), as reviewed by, for example, Draca *et al.* (2009). It is at this stage that government appears to have struggled more than the private sector in improving internal processes, notably because of the sheer scale of government operations and the inadequate management expertise within it.

With the development of large IT systems, governments outsourced many tasks to private providers, which were invariably large corporations that could cope with the scale of conducting government operations. Unfortunately, improvements in government productivity were limited because this transfer was made without any reengineering of IT systems. But moving activities from a government department to a privately-controlled oligopoly is unlikely to drastically improve the quality of services, absent incentives unleashed by competition or an ability to write complete contracts (i.e. contracts that convey all possible contingencies). Private contractors acquired large blocks of work and did nothing to be innovative. As a result, contractors have evolved into a closed oligopoly and government is now overpaying. There are many cautionary tales here for recent Canadian suggestions that improved procurement by government can enhance innovation in the private sector (Industry Canada, 2011; PWGSC, 2013). If Canadian firms can have an easy life through government contracts, then their productivity performance might become even worse; instead, effective government procurement would see government become a demanding client, wanting the best from its suppliers.



The authors point out that, to improve productivity, government is particularly dependent on the “collective capabilities for analyzing what they do and working out ways to do it better.” In other words, people and management matter. Bloom and Van Reenen (2007) have identified successful management practices to enhance productivity in private-sector firms. Hence, there is significant scope for more research on what is required to have continuous improvements in government productivity: are there different types of management skills needed in the public sector? Is their mix the same as in the private sector? How do the levels of management skills compare?<sup>3</sup>

One element that is likely to be key is organizational learning and innovation, as noted by the authors. A learning organization is one that learns continuously and transforms itself. Organizational learning goes beyond individual learning by incorporating collective experience of success or failure in developing new methods to improve the organization’s performance.

In the private sector, a business may learn of mistakes in its manufacturing process from technicians and then disseminate this information to product designers and R&D staff. An interesting example in government service comes from the experiences of the U.S. Army in Iraq (Nagl, 2005). After the initial failure of combat tactics in Iraq, the military had to adapt and learn how to fight using different tactics and spread those best practices quickly. Whereas the incentives to avoid death may be an extreme form of competition leading to better productivity, the need for managers within government to react to failures through learning seems clear.

These differences between productivity performance in government and the private sector reflect the muted power of incentives in government, which leads to the question of whether these incentives could be changed. Simply replicating the salaries and bonus structure of the

private sector would raise legitimate concerns from taxpayers, as the distaste in the United Kingdom over salary payments to BBC functionaries attests. Clearly there are no panaceas, but revealing more information on performance of individual organizations as a matter of course—rather than having to go through freedom of information laws—would likely be a step in the right direction. Not only would greater transparency bring scrutiny, but it would also encourage competition between providers of government services, such as hospitals and universities.

## **The Relationship between State and Society**

The authors have great ambitions for the future of IT to transform relationships between citizens and the state. According to them, citizens and businesses will increasingly co-produce outputs, with government using online electronic processes—such as the interaction between government and business—to hasten passage through customs checks. An analogous argument is that innovation in the service sector is more likely to come from the interaction between producers and their clients, rather than from science-led research and development.

There are obviously social, organizational and hence political implications of these changes. Individuals and businesses must have greater access to information on themselves, and government must be opened up to others and to itself.

But what will happen when citizens realize how much data is held on them by government? The implications of this movement of data online are not discussed in the book. However, there are complex issues regarding government access to data that should be confidential, and risks for government custodians of the data should they be hacked or inadvertently leak the

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<sup>3</sup> Initial work in this area has been started by McConnell *et al.* (2013).

information. In contrast, government could make greater use of the vast troves of data at their disposal. Academics would no doubt be enthralled to gain access to these data for research. Would mining these data—with appropriate safeguards—allow for better policy-making? Exploring the impacts of tax credits using firm-level data could lead to greater insights on what policies work to improve business productivity, for instance.

An aspect not explored in depth by the book is the impact of social media within government. It would seem that such technologies could be further exploited to remove the duplication of roles across departments. For example, having a small group of individuals follow and report on a subject of international negotiations on behalf of an entire government, and disseminating information through Web 2.0 technologies, would seem to be more efficient than having such a group in each individual department in its own silo.

The digital era may also lead to radical changes in the services provided, either by the private sector or by public institutions. A topic currently attracting attention is the possibility of universities facing increased competition from massive open online courses (MOOCs) whereby students anywhere in the world can enroll in online courses developed anywhere else in the world (The Economist, 2013). Although the courses themselves might be free, a business model could be developed by charging the students to take an exam and get certified. With such massive economies of scale, productivity in the education sector could be drastically improved.

### **The Impact of Government Policies on Economy-wide Productivity**

Economists have long complained about niche policies inhibiting the effectiveness of broad-based policies: it is better to broaden the base of a tax rather than have specific tax credits because of

the distortions induced in private-sector choices for investment or employment. Sometimes, additional costs are included, such as the administrative costs of government programs supporting business-sector R&D (Lester, 2012). But the measurement of government productivity means further costs of such policies can be uncovered. One of the targets of the authors' efforts to measure productivity is the administration of the tax system. The United Kingdom introduced a number of tax credits aimed at the poor during the period reviewed by the authors, but these led to chaos in tax administration, and a decline in its productivity. Tax exemptions are complex and require much greater inputs into monitoring, recording and auditing activity; hence, they lower productivity. The cost of proposals for specific tax exemptions in lowering government productivity should be included in any cost-benefit analysis.

### **What Are the Broader Implications of Measuring Government Productivity?**

The authors examine government productivity in considerable detail, but there are broader issues from measuring government productivity.

### **Who Has the Imperative to Change Government Productivity?**

The incentive structure faced by those in government limits their interest in improving productivity. Efforts to improve productivity may be resisted by bureaucrats who could see the importance of their expertise diminished or, indeed, their jobs disappear. Others may feel that they attain greater status by the size of their staff rather than by the effectiveness with which it is managed. Furthermore, managers and politicians may limit the imperative for action since change can be both controversial and risky. So, despite the potential to improve the productivity of government services, an interesting question is from where do the pressures to introduce

change come in government? Without measurement of productivity, any stagnation in service provision may not be apparent although large failures may generate sufficient political problems to encourage change. Do significant policy changes require crises or initiatives from the top? For example, the top-down demand for the digitization of government services seems to have been critical to move government services online in the United Kingdom.

One prospect is the increased use of social media if the public can obtain access to data. Stories abound on the impact that social media is having on politicians in China (Tkacheva *et al.*, 2013), so could a similar effect work with government services in developed economies? Maintaining the centrality of “customers” to hospitals and schools through providing data could limit the potential of disastrous effects such as the recent scandals of premature deaths in hospitals in the United Kingdom. The expectations of citizens are increasing, and with knowledge there would be additional impetus for change. The question then becomes whether government moves ahead of these changes that are probably inevitable, or whether it is dragged along afterwards?

### **Political Control**

A wider concern with the agenda put forth by Dunleavy and Carrera is their light treatment of political control and the doctrine of ministerial accountability. Government services remain services that are mandated by the state and at least partly funded either by the taxpayer or by levies mandated by the state. Although placing responsibility for services in an arms-length agency removes direct political control, the decision to delegate responsibility remains a political act. The inevitability of political oversight remains, so the hopes for dramatic experimentation and innovation in service delivery between bureaucrats and the public without additional mediation by the political system may be misplaced.

Donald Savoie (2003:147) has pointed out that “Public servants operate in a highly politicized atmosphere. Government managers do not enjoy the same kind of privacy or private space that their private-sector counterparts do. Any decision can become the subject of a public debate, a question in Parliament, or a ten-second clip on the television news. The managers who decided, for example, to replace windows at the Department of External Affairs [in Canada] never expected that their action would receive intense media coverage, give rise to questions in Parliament, and move the minister for government services to declare that the decision was ‘stupid’ and that he ‘wanted a full explanation’ since he had never been made aware of the file.” Political control—and its implications in setting incentives for bureaucrats—will remain.

In addition, and although the authors hold out great hopes for a move to a citizen-based, services-based or needs-based foundation of organization to improve government performance, there will be an inherent or even necessary tension between the state and citizens in the provision of some government services. Ultimately, the power of the state is coercive. Although providing welfare payments for the unemployed is a valuable government service, there may also be a valid concern that those on welfare be encouraged to obtain work as soon as possible, as in the Danish workfare program. In these cases, governments providing what “customers” want may not be what the public at large and their democratically-elected representatives have in mind, regardless of the impact on productivity.

### **The Role of Productivity Measurement as a Performance Target**

One of the roles that monitoring government productivity can play according to Atkinson (2005) was as a performance target. Can productivity also play a wider role as a guiding principle

for the organization of government services? Can measuring government productivity break the trade-off between accountability and efficiency? The answers are probably at least a partial yes.

To shed light on these questions, one can turn to the history of how government administration has been organized. Traditionally, government bureaucracies have been hierarchical systems of control, as initially described in 1918 by Max Weber (Weber, 1946). Policy is set at the top through political control, and bureaucrats then operate within a system of rules and regulations. Although the dividing line is murky in practice, the administration of policy should be distinct from the setting of policy. Firm lines of accountability are set, but at the cost of the stultifying effects on bureaucracy, which lower productivity.

An attempt to soften the stark contrast between bureaucracy and markets was the introduction of New Public Management (NPM), which held out the prospect that market-oriented management of the public sector would improve productivity. OECD (2010) summarized the NPM approach as decentralization; management by objectives; contracting out; competition within government; and consumer orientation. Consequently, large bureaucracies were broken into smaller agencies and other activities were outsourced to private firms. NPM tried to increase the efficiency of providing government services, but lines of accountability were less distinct.

Throughout the book, the authors criticize the management philosophy of NPM, as one of them, Patrick Dunleavy, is a well-known opponent (see, Dunleavy *et al.*, 2005, for example). Many arguments against NPM appear valid. The book criticizes facets of NPM such as the outsourcing of IT, which appears to have been badly managed. The introduction of NPM led to the proliferation of agencies with their own accounting, human resource and IT systems that

probably inhibited scale economies from being exploited. This is an aspect that measuring government productivity would be well placed to capture. The authors quote an estimate from Gershon (2004) that cost savings of £20 billion over 4 years could be obtained in the United Kingdom from shifting to smarter procurement across the 270 governmental agencies.

This critique of NPM could have been explained in the book in a more structured way. From an economists' perspective, it is not quite clear why services that are provided by the government—because they were underprovided by the market—would necessarily benefit from increased private-market incentives. Furthermore, since Coase (1937) we have known that transaction costs have important implications for the organization of firms, and these costs seem rife in the provision of government services. These transaction costs imply, for example, that there is an inability to write comprehensive contracts that would lead to private-sector firms under-providing those elements not covered by contracts (see discussion in Hart, 2003, for example). Finally, the vast scale of government operations suggests that fixed costs are important. Large fixed costs with a limited number of firms that could undertake such operations together suggest large barriers to entry and an oligopolistic structure. Because of these failures, and evidenced by the notable failures discussed in the book, a new search should be underway for a guiding principle for government.

So can measuring government productivity help? Pfiffner (2004) outlines three questions that the modern state must answer:

- 1) What shall control policy?
- 2) Who shall implement policies?
- 3) How will performance be measured?

NPM largely answered the first and second questions through delegating power and employment to firms in the private sector in

order to increase the efficiency of service provision. This approach, Dunleavy would argue, has exceeded its limit and so more activities need to be brought back within the state.

The third question is where the measurement of government output and productivity raises tantalizing prospects. Traditional bureaucratic control has concentrated on measuring inputs as a means of measuring performance. As summarized in Pfiffner (2004), 'line-item budgeting' was developed to carefully control for inputs used in government programs. Over time, this was superseded by performance budgeting with a focus on government functions. However, this approach then tended to focus on outcomes, and outcomes are a result not only of government efforts, but also of the efforts of individuals. NPM did introduce a greater focus on outputs, but these outputs tended to be too simple and, consequently, most appropriate for services that were easily reported and monitored, such as janitorial services.

This book highlights how even incorporating measures of output could yield insights into the performance of government agencies and the use of resources.<sup>4</sup> Looking at the number of passports issued by the passport office is a simple measure, but it would at least keep the passport office concentrated on issuing passports. Although bureaucrats may argue that output measures cannot fully capture the breadth of their work, it seems that this relatively objective measure introduces transparency and shifts the burden of proof onto government agencies to justify their performance. On the basis of what gets measured gets done, measuring the productivity of government services would be an important step in improving the performance of the state.

## Conclusion

The book raises many challenging questions. However, the core of the book is the emphasis on assessing and measuring the productivity of government services, and the role of IT in improving them. So can government services be measured, and is the emphasis that the authors based on IT appropriate?

In many cases, government services can be measured, and the book makes a compelling case for measuring many of the services provided by government. Since these make up a sizeable part of GDP, citizens' well-being will increase. For those working in the central agencies of government, such as treasuries or cabinet offices, it may be harder to sum up policy advice into a single service. However, shedding light on all the wider activities provided by government, ranging from providing employment insurance to supporting research in universities, would encourage greater attention to improving these public services. In particular, taxpayers increasingly expect to have greater information on the performance of publicly-funded organizations, including for particular institutions such as 'their' hospital or university.

As for the role of IT, theories of long-term economic growth argue that innovation is critical. Innovation is driven by ideas, from new concepts invented by laboratory researchers to new practices developed by workers on the factory floor—all from the intentional actions of people responding to incentives. Innovation is often embodied in or facilitated by IT, and the willingness of organizations to not only invest in IT but also to reorganize their business processes allows them to make the most of innovation developed by individuals and teams. However,

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<sup>4</sup> The *Atkinson Review* noted that data generated to improve management performance in government services may not always be compatible with data to measure long-term productivity trends. As discussed further in Neuburger and Caplan (1998), data aimed at improving management performance need to be precise, transparent, simple, and not subject to manipulation. There was no requirement for them to be stable, and they could be highly selective. In contrast, data for monitoring productivity can be highly complex, but need to be consistent over time and cover the services provided comprehensively.

the core of innovation remains people's ideas, and so the crux for government will be the encouragement of and receptiveness to ideas, if its productivity is to be improved.

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