Economists and public sector efficiency

How can economists increase efficiency in the public sector? And how can we translate economic theory and ideas into operational practice?

By any relevant measure of performance, productivity in the U.S. public sector has increased and is still improving. By the end of 1996 the share of federal employees in the civilian workforce will be comparable to what it was before the New Deal in the early 1930s. This downsizing comes at a time of enormous growth in the responsibilities of the federal government—in social security, Medicare, Medicaid, and the like. Relative to the economy, the federal government is shrinking. Yet it has become more effective and more efficient in the roles it performs and the services it provides.

Performance is one of the most important measures of efficiency. But performance should be judged not by intermediate products, like reports, but by final output. In the World Bank’s case this final output is development itself. In the U.S. government’s case the final measure of performance is the efficiency of the public sector.

Public sector efficiency can be looked at from three different angles: the way governments function (their operating procedures), the approach to governance (in particular, corporatization or privatization), and through cost-benefit analysis.

Becoming customer-friendly

The first step toward increasing efficiency in the public sector is to internalize externalities (English translation: to be customer-friendly). One difference between governments and markets is that in markets, customers usually have a choice of one firm or another, while governments often have a monopoly over many of the services they provide. As a result governments do not necessarily fully internalize all the costs they impose.

If an airline makes you wait in line too long or serves poor food, you can choose another one, though you will probably have to pay more. You make the tradeoff between price and quality of service. Different people choose different mixes. But if you decide that you do not want to wait in a long line at the social security administration, you cannot go to another social security system. As a result the public sector may not pay sufficient attention to the people it serves. Part of improving service is changing vocabulary—to make government agencies think of the people they serve as clients, or customers, to behave as though their customers had a choice, even though they do not.

Actually, they do have a sort of choice—the political process. A government that does not perform well is not going to get reelected, or people will say that it should be downsized because they are not getting value for their dollar. Although this is not the same as choosing United Airlines over American Airlines, people can exercise a choice. In the United States we have tried to get every government agency to adopt this mentality.

We encouraged each agency to get in touch with its customers, to find out what their problems were, and to try to reform practices.
And in many cases we achieved impressive results. A recent survey rated a range of companies and public and private establishments for their telephone information and helpline service. The social security administration came in first for courtesy, knowledge, and efficiency, beating out some Fortune 500 companies. In short, the public sector can be as effective as private firms.

There are many ways to encourage performance- and market-oriented policies. Consider procurement reform. Previous policies were driven by a desire to make sure that the government got the lowest price and that there was no graft or misuse of government funds. A lot of economists said that competitive bidding was the answer. So we held auctions for everything. That approach sounds very good, and auctions have been very successful. I'm a big fan of auctions—in fact, I even have an idea for auctioning subsidies.

But when the government auctions procurement rights, people have to be bidding on the same item. They have to know exactly what the item is. So if the government needs to procure an item like a t-shirt, it produces 30 pages of procurement specifications to describe a t-shirt. Everyone knows what a t-shirt is. But when a company is making a million of them for the army, it can make a lot more money if it makes them a little bit thinner than the army would prefer. So, indeed, it takes 30 pages of fine print to define what a t-shirt is.

Most companies do not find it profitable to comply with such requirements. They would have to set up special production lines for government t-shirts, which would differ, in one way or another, from commercial t-shirts. As a result, before procurement rules were changed, the government usually only got one or two bidders. So t-shirts that cost $3 at K-Mart or Woolworth's cost the government $6. One of the basic things we know about auctioning is that you cannot get a competitive price with too few bidders.

Examples of the government being penny-wise and pound foolish are legion. The law requires firms with government contracts worth more than $100 million to account for every six minutes of each employee's time. This is to make sure that somebody does not spend too long in the bathroom at government expense. One jet engine firm that supplied the private and public sector had to hire 52 extra people at a cost of more than $13 million to do this monitoring. As a result public sector engines cost about 30 percent more than those for the private sector.

No jet engine company wants to be known for planes that conk out in midair. But there are market mechanisms, through insurance companies and reputation effects, to ensure that engines perform up to standards. There is also a fairly strong liability system in the United States. So customers can be fairly sure about product quality. There is no need for all these regulations on accounting for time to make sure that the government is not being cheated.

Increasing efficiency in the public sector by encouraging performance-based and market-oriented policies also requires developing ways of measuring improved performance—which, in many cases, can also be used as a basis for reward. But measuring performance is often more difficult in the public sector than in the private sector. Take education. Some aspects of performance are easy to measure—reading and simple arithmetic skills, for instance. It is harder to measure cognitive skills and creativity. If you have a system that rewards only performance in basic skills, only basic skills will be taught, and you will short-change creativity and higher-order cognitive skills.

To further encourage performance-based and market-oriented policies, it is often useful to establish norms. Look, for example, at typing, secretarial, and travel services. The private sector can provide norms of how much it should cost to perform these services. These norms provide a basis of comparison against which to measure performance.

Another example of performance-based and market-oriented policies is using markets to elicit information. All kinds of information in markets can be used by government. Consider the U.S. banking system. One of the things it needed was to have premiums on deposit insurance that were related to banks' riskiness. So we developed ways of assessing the risk associated with different portfolios and different banks, and now the premiums
on U.S. deposit insurance are related to a bank’s riskiness. In environmental regulations we introduced tradable permits to move from command and control regulation toward more efficient, market-oriented regulation.

**Corporatize or privatize?**

In recent years the claim has been widely made that the public sector is less efficient than the private sector and that the solution is to commercialize and privatize. But these issues should not be seen as an either-or situation. Because many activities in the public sector are different from those in the private sector, there are some in-between forms of organization. If a government is engaged in the production of, say, steel, that is clearly an activity better left to private production. But in many areas of government activity privatization is not always the answer.

In the United States we are trying to corporatize a lot of public sector activities—or turn them over to performance-based organizations. In England these organizations, called next-step agencies, mix the flexibility of budgeting, procurement, and personnel of private firms with the policy guidance and direction of government enterprises. The key is separating service operation functions from policy.

There are three prerequisites to establishing a performance-based organization. First, output must be defined and measured to reward performance. Second, there must be identifiable user groups, which are important for governance and revenue. Third, there must be no externalities that cannot readily be addressed by an appropriate regulatory structure.

The advantage performance-based organizations have over privatized organizations is that the government retains an important public policy interest in an activity that might later require interventions that are difficult to specify in a contract with a private, regulated firm. An example is uranium enrichment. Uranium enrichment serves two purposes: making nuclear weapons and providing fuel for nuclear power plants. These activities have not been privatized but have been structured as public corporations. Most countries have concerns about transferring these kinds of activities to the private sector. But it is a possibility worth considering, and there is debate in the United States on whether uranium enrichment corporations should be privatized.

The United Kingdom has turned its Patent and Trademark Office into a performance-based organization. The office has a well-defined user group and output and can charge fees and generate revenues from patent applications. But one big issue worries some people: the breadth, novelty, and other characteristics involved in defining a patent. These policy issues are hard to turn over to a private agency. People applying for a patent almost always want it to be as broad as possible. A private entity that sells patents could maximize its income by selling broad patents at a higher price than narrow patents. But doing so may not be in the national interest, because excessively wide-ranging patents may stifle the next round of innovation.

Another point is that many government agencies differ from private firms in that they have a monopoly. If such agencies are privatized, they must be regulated to make sure they do not abuse their monopoly position. How easy is it to regulate a monopoly? A difficult question. Take air traffic control, for instance. There are a variety of users—the large airlines, civil aviation, corporate jets. One political reason it has been hard to corporatize or privatize air traffic control in the United States is that the civil aviation industry is worried that the big airlines will dominate the organization and set an unfair pricing structure.

**Benefits of cost-benefit analysis**

Cost-benefit analysis is an important input to decisionmaking. One of the most useful contributions an economist can make to decisionmaking is to provide rigor and analysis to policymaking. This comes up in many ways.

As part of decisionmaking in government we are supposed to use cost-benefit analysis on all major regulations and investments. One of the first things President Clinton did on taking office...
was to issue an executive order defining how we go about performing cost-benefit analysis and setting out the principles and processes by which it is done. The Council of Economic Advisors was given the task of fleshing out the process to address a range of technical issues. We developed an implementation document that describes how to address a number of issues that are difficult and often very contentious.

We wanted to make sure that government agencies would abide by these principles. To do so, we had to convince a lot of people in all branches of government that this was a useful tool. We did it, though. For each agency we tried to involve a political appointee at the top of the agency as well as a mid-level career person who would be doing the work. It was important to get commitment at the top, but it was also important to convince the people who would be doing the work that it was the right thing to do. So we had committees, representing every agency, go through the issues involved in any practical application of cost-benefit analysis. A lot of these issues were contentious—it took three years to get this document out. It gives you a sense how important the document is to know that these issues were discussed at the cabinet level at one time or another.

Some basic issues and values are involved in this analysis—for instance, in choosing the discount rate, which becomes crucial when dealing with an issue like global warming that has intertemporal tradeoffs over 100 or 200 years. Whether the discount rate is 2, 5, or 7 percent makes a big difference in the decisions that are made. That requires a framework for thinking about these issues intelligently.

In valuing life, for example, there are some interesting issues that people are just beginning to tackle. For instance, do you value lives or life years? Should a child’s life be valued differently from the life of an 80-year-old? Some very difficult resource allocation problems hinge on these issues. For example, 95 percent of men will get prostate cancer if they live long enough. But many of them will get it after the age of 90. Although reducing the incidence of prostate cancer in people that age will save a lot of lives, it will not save a lot of life years. On the other hand, reducing the incidence of diseases like childhood leukemia will save fewer lives but a lot more life years. The question is, how do you make that relative valuation?

There are other big issues in risk analysis. The fundamental issue here is how to determine convolutions of probabilities. That is, how do we assess overall risk while adequately reflecting all underlying associated risks? Many bureaucrats do not think about that issue in their day-to-day life, and as a result a lot of them do not do it right. We must teach them how to do it. Another big issue is non-use values. How do you evaluate the damage of the oil pollution off the coast of Wales, or in Alaska’s coastal waters? The bottom line is that there are many difficult, interesting issues involved in turning cost-benefit analysis into an implemented methodology that really addresses public concerns. But the costs have to justify the benefits, and the benefits have to justify the costs.

I use the word “justify” to remind people that there are a range of benefits and costs that may not be quantifiable and that it may be difficult to integrate important equity concerns into the analysis. You want to quantify the things that you can quantify, but you also want to bring into the analysis some things that may be difficult to quantify, or about which analysts disagree.

Using these analytical tools requires some humility and some recognition of the limits of these methodologies. But it is still a lot better to use them than to ignore them. They can have a big impact in improving the quality of public decisionmaking.

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Prepared for World Bank staff