

Private Goods, Government Failures

Maybe it's impertinent to ask, but am I the only person to have noticed in recent years that promises made by politicians to lower the barriers to home ownership and to make health care and higher education more affordable have not turned out that well? During the housing bubble, for example, which was caused in large part by policies aimed at reducing the cost of buying a home, average prices more than doubled. As a result many people, especially first-time home buyers, were priced out of the market. Even worse, given the number of homes subsequently lost to foreclosure, many were not. And, as we all know, the U.S. financial system nearly collapsed in the process. In the case of health care and higher education, government programs and subsidies have also failed to achieve their stated goals. Not by accident, the cost of these goods has continued to rise at rates that are well above the overall rate of inflation. This too has created significant problems.

As it happens, the reason that politicians have not been able to make good on their promises is not difficult to understand. The problem, quite simply, is economics. And that's why it was very fortunate this past autumn, when the Nobel Prize was awarded to Elinor Ostrom, who along with her husband created a classification system sometimes called the Ostrom diagram that illustrates the economic principles underlying these issues in a very accessible way. These principles help clarify why government efforts to reduce the price of certain types of goods will almost inevitably impose significant costs on society in terms of waste and even fraud and can also harm many individuals, such as homeowners saddled with mortgages they cannot afford or young people burdened with student loans that will take years to pay down. As will be explained, the insights of the Ostroms build on earlier work by two other economists, who also won the Nobel Prize, Paul Samuelson and James M. Buchanan, Jr. But unfortunately, the implications of these insights are still not adequately appreciated. This is true nationally. It's particularly true here in New York.

The Ostrom diagram classifies economic goods into four different types based on the degree to which they display two independent characteristics. For first time users, the concepts involved may be a little difficult to internalize. The words they use as well as alternatives adopted by others are all a little clunky. But once mastered, these concepts become very valuable tools for thinking about a wide array of public policy issues. According to the Ostrom nomenclature, the two characteristics are "difficulty of excluding potential beneficiaries" and "subtractability of use." The first concept is fairly straightforward. Can a person be excluded or prevented from making use of that good? The second concept is somewhat trickier. Subtractable means that if I enjoy a particular good, someone else cannot. Readers familiar with these issues will recognize that another common term for this concept is rivalrous. Other terms are used as well. An additional point worth emphasizing is that the Ostrom diagram adds the qualifiers "high"

and “low” to indicate that these characteristics may be more or less pronounced depending on the good in question.

So let’s think of examples of different types of goods. One commonly used example is a hamburger. Is a hamburger excludable? The answer, of course, is yes. If I grasp a hamburger firmly enough, no one can take it away from me. The next question is whether a hamburger is subtractable? Again, the answer is yes. If I eat the hamburger, it’s gone and no one else can have it. Therefore, based on the criteria of the Ostrom diagram, a hamburger is a private good. Now let’s consider the opposite situation. Here, a commonly used example is national defense. Is national defense excludable? In other words, is it possible for me to hire the U.S. Army to protect me alone and not my neighbor? The answer, of course, is no. If the U.S. Army protects the nation, it will protect both of us as well. The next question is whether or not national defense is subtractable? In other words, if the U.S. Army is protecting me, does that mean they are not protecting my neighbor? Again, the answer is no. Therefore, based on the criteria of the Ostrom diagram, national defense is a public good. The key distinction here is that in the case of a hamburger, it’s easy to charge someone each time they want one. The result is that a market for hamburgers will develop on its own accord. Government need not and should not interfere. The same is not true in the case of national defense, where a la carte pricing is not feasible. Without some alternative source of funds, national defense would not be provided.

According to the Ostrom diagram, there are also two other kinds of goods. A good can be excludable, for example, but not subtractable. They call this a toll good. An example of this type of good would be cable television or a bus line. The cable company can easily charge each customer, but unlike a private good, when one person is watching television, it does not follow that someone else cannot. Because of the economics of this type of production, a toll good is often a natural monopoly. Sometimes government will provide a toll good. Other times, as with cable television, a private company will provide the good, subject to government regulation. Alternatively, a good can be non-excludable but subtractable. They call this a common pool resource good. Examples of this type of good would be groundwater or global fish stocks. With these goods, there is no pre-existing mechanism to charge people for their use, even though, ultimately, the supply is limited. The tendency, therefore, is for people to over consume these goods, potentially to the point of exhaustion. Ostrom won her Nobel Prize in large part by identifying approaches for dealing with this type of phenomenon, popularly known as the “tragedy of the commons.”

So where do housing, health care and higher education fit into this taxonomy? Are they public goods? Are they private goods? Or are they one of these two other, hybrid goods? Let’s start with housing. Is housing excludable? The answer of course is, yes. It’s called a lock. I can lock my doors and windows to exclude people from coming in. The second question is whether or not housing is subtractable. Again, the answer is yes. If I kick you out of my house or apartment, then it’s mine and not yours. Based on the criteria of the Ostrom diagram, housing is a private good, much like a hamburger or any other consumer item that we purchase for our own use.

So next we turn to health care. Is health care excludable? In this case, the answer is largely, but not completely, yes. Based on the payment terms established, a doctor can choose to accept a patient or not. Emergency room doctors, on the other hand, must accept everyone, who shows up in need of care, regardless of their ability to pay. The second question is whether or not health care is subtractable. Here the answer is clearly yes. If the doctor is seeing me, the doctor is not seeing someone else. There are other elements of health care that obviously are not private, such as efforts to prevent the spread of communicable diseases. But clearly, much of health care does display the characteristics that we associate with private goods.

Now, let's look at higher education. Is higher education excludable? The answer here is obviously yes, as millions of students recognize every year, when they undergo the painful process of applying to college. The next question is whether or not higher education is subtractable. And here the answer is a bit more ambiguous. Obviously, in a small classroom setting such as a seminar, a professor is going to give more attention to individual students than in the case of a large lecture hall. But of course education and learning occur in both settings. Grading, it should be noted, is fully subtractable. All things considered then, education is mostly subtractable but not completely so. In short, higher education is largely a private good.

A leading scholar on these issues over the years has been E.S. Savas, Presidential Professor at the School of Public Affairs at Baruch College. Savas, in fact, edited a book in 1977 entitled *Alternatives for Delivering Public Services Toward Improved Performance* that included a chapter by Ostrom and her husband in which they first published their diagram. An interesting aside is that their insights helped propel Savas into a career of advising governments from New York City under Rudolph Giuliani to the Soviet Union under Mikhail Gorbachev on ways to extract efficiencies through privatization. The types of goods that he helped privatize include toll goods such as mass transit and public goods, such as park services, among many others. In his own writings, Savas has replaced the term "public good" with the term "collective good," because he feels that the word "public" implies government and based on his own experience, he argues that these goods can often be provided more effectively by outsourcing them to private companies.

In his book *Privatization and Public-Private Partnerships*, Savas uses the Ostrom diagram to explain what happens when government chooses to intervene in the production of private goods. In effect, he says, "exclusion has been abandoned" with the result that the market for these goods stops functioning properly and begins to exhibit the characteristics that economists typically refer to as a market failure. "When [goods] are subsidized, underpriced, or given away without charge," he writes, "the demand for them increases and public expenditures increase to supply more of them: free goods can become very expensive." As a result, he continues, these goods "become indistinguishable from common pool goods and are subject to all the inherent problems of such goods: rampant waste, thoughtless consumption, and possible exhaustion." Ignoring economic principles, it turns out, has costs.

In the case of the three goods that we are discussing here, we see obvious parallels to the kinds of problems that Savas describes. Consider housing. With the national push to increase homeownership that the Clinton administration emphasized as part of its triangulation strategy and the Bush administration pursued in the name of promoting an ownership society, financial institutions were strongly encouraged to write mortgages to people, who previously would not have qualified for them. In effect, exclusion was abandoned. The government sponsored enterprises Fannie Mae and Freddie Mac were then marshaled to offload the risk of these mortgages, ultimately as we now know to the taxpayers. Offloading the risk was intended to lower the interest cost associated with these new mortgages, which in turn was supposed to reduce the cost of buying a home. In the event, the opposite occurred as this underpriced housing became, at least for a while, very expensive. Thoughtless consumption became, in effect, a national pastime.

Here in New York, an endless appetite for intervening in the housing market has also created more problems than it has solved. By setting the price of certain housing units artificially low, rent regulations have historically reduced the amount of money available for construction and renovation. Select renters have certainly benefited, but New Yorkers as a whole have not. In the case of public housing, under pricing has long contributed to serious maintenance problems, such as chronically broken elevators that endanger senior citizens and can cause life threatening delays in responding to emergencies. Moreover, because no one really owns public housing, it has always been difficult to keep common areas, such as hallways and stairwells, safe and clean. Again, these are exactly the results than can be expected, when government intervenes into the private goods sector of the economy and tries to prevent exclusion from occurring. The good then becomes a common pool good with all the problems that Savas identifies.

Perhaps the biggest problem caused by government intervention in the private goods sector of the economy is that once begun it becomes very difficult to stop. This is certainly what has happened in the case of the housing crisis, where the federal government has essentially nationalized the mortgage industry. Perversely, from a policy that was originally instituted to reduce the cost of housing, federal officials are now aggressively underwriting mortgages in an effort to prop up prices. The intent, of course, is to discourage people from walking away from their mortgages, which would cause further problems for the banks. In the case of New York, where all sorts of policies continue to prevent the housing market from clearing in a rational way, government perpetually supports multi-billion dollar affordable housing programs that never seem to make housing affordable. Having done so much to create the problems in the first place, government finds itself unable or unwilling to step away.

With health care, we see some of the same cost and price dynamics as with housing. Perhaps the most scandalous example was the astounding level of fraud uncovered by the *New York Times* in its investigation of Medicaid in New York. The poster child for this fraud was a Brooklyn dentist, who billed a total of 991 procedures in one day or more than 100 an hour. According to experts cited, fraud could account for 10 percent of all Medicaid billings here. Additionally, it was estimated, another 20 to 30 percent of

billings could be for services that are not medically necessary. If that is true, the overall cost of fraud and waste in New York's Medicaid program would surpass \$15 billion a year. But it's not just Medicaid or New York. A federal study of Medicare in Fiscal Year 2009, for example, estimated that 12.4 percent of all national Medicare spending was also fraudulent or questionable. Per Savas, once again, we see that free goods are often very expensive.

As health care economists recognize, one reason for the high cost of health care is that we pay for it through insurance. Graphically, it can be shown that this causes what economists refer to as a deadweight loss. Because individuals do not pay for specific medical procedures, there is a natural tendency to consume as much health care as the insurance company is willing to provide. It's not difficult to see here, once again, the importance of exclusion. Where it exists, and goods are subtractable, markets will operate efficiently, while also rewarding those who produce the best products at the lowest prices. Where it does not exist, efficiency will suffer and the cost of achieving equivalent outcomes will rise. Health savings accounts are designed to increase exclusion, by letting patients balance the purchase of health care against the purchase of other goods that they also value. In terms of the Ostrom diagram, they shift health care further into the private goods quadrant and away from the common pool resources quadrant.

What we see in the case of health care, we also see in the case of higher education. Between 1980 and 2008, for example, tuition, room and board at not-for-profit four year colleges in the United States increased from \$13,181 (in constant dollars) to \$30,931. Moreover, according to data published by the Organization for Economic Cooperation and Development (OECD), the average cost of providing a college education in the United States is dramatically higher than in other industrialized countries. According to *Education at a Glance 2009*, the average annual cost in the United States of what they call tertiary education now stands at \$25,109 compared with an OECD average of \$12,336. With costs so high, it's not surprising that the amount that students are forced to borrow has also been increasing. Thus the College Board reports that between 1998 and 2008 average annual debt per student rose (in constant dollars) from \$3,254 to \$5,345, an increase of 64 percent.

The economic dynamics of the increase in the cost of higher education are similar to what we have seen elsewhere. Because of numerous government subsidies, the prices paid for higher education rarely reflect actual costs. As with Medicaid and Medicare, this almost inevitably leads to waste and inefficiency. A further factor driving up the cost of higher education is financial aid, which allows colleges and universities to charge different prices to different people based on the economic status of their parents, a kind of privatized progressive income tax and wealth tax all rolled up in one. The result is that higher education has largely been immunized from the need to control costs and keep prices low. As Thomas Sowell wrote in his book *Inside American Education: The Decline, The Deception, The Dogmas*, "In an academic context, the phrase 'costs have risen' often has exactly the same meaning as the phrase, 'we chose to spend more money.'"

As it turns out, these dramatic increases in the cost of higher education have not gone unnoticed in the marketplace. The result has been a huge increase in the for-profit higher education sector. An industry that barely existed 15 years ago now serves approximately 8 percent of the post-secondary market in the United States, and continues to grow at more than 10 percent a year. Phoenix University is the best known and certainly the largest, with a current enrollment that exceeds 400,000 students. In 2000, it only had 14,000 students. Strayer College, the second largest for-profit company in the sector, has 44,000 students. In 2000, it only had 12,000. Overall for-profit enrollment grew at a compound annual growth rate of 11.1 percent between 1997 and 2007, six times higher than the not-for-profit sector. And strikingly, even as these schools have had to compete against schools which enjoy huge government conferred advantages, they have managed to make a great deal of money for their investors. Thus BMO Capital, which closely follows the industry, reports that an initial investment in its For-Profit Post Secondary Index starting from December 31, 1995 would have increased an incredible 14 times since then.

What particularly stands out with these for-profit schools is their ability to deliver education in a more cost effective way. According to BMO Capital, the average tuition at for-profit schools during 2007-2008 was \$14,908 compared with \$19,047 at not-for-profit (non-public) schools. And, of course, that is just the bottom line figure. Tuition at for-profit schools has to compensate investors, who expect these companies to make money. Industry wide, for-profit schools report profit margins of 18 percent. Tuition also has to cover marketing costs, which are significantly higher at for-profit schools than at their better known counterparts. These typically consume about 25 percent of revenue. Deducting these costs, which in time should decline anyway, it turns out that the cost of education alone is much less than the sticker price would indicate. Higher education may not have to be that expensive after all.

Given these examples, the obvious question is why does government play such an outsized role in subsidizing the production of housing, health care and higher education? There is no simple answer, of course. Various non-governmental institutions have long been involved in providing health care and higher education, for example. But in the realm of economics, a reasonably clear answer may be found by delving into the historical record and seeing how thinking about these different types of goods developed over time. The first person to address these issues was Paul Samuelson in an essay entitled "The Pure Theory of Public Expenditure," which he published in 1954. In that brief essay, he divided goods and services into two basic types. Some goods he called "private consumption goods" and other goods he called "collective consumption goods." He characterized collective consumption goods as those goods "which we all enjoy in common in the sense that each individual's consumption of such a good leads to no subtraction of any other individual's consumption of that good." In this way, of course, he introduced the concept of subtraction. Samuelson did not, however, make any direct reference to the concept of exclusion.

The first person to bring attention to this important concept was Richard Musgrave, best known for his influential work *The Theory of Public Finance*, which he published in 1959. In that book, he wrote, “If a consumer wishes to satisfy his desire for any particular commodity, he must meet the terms of exchange set by those who happen to possess this particular commodity, and vice versa. That is to say, he is excluded from the enjoyment of any particular commodity or service unless he is willing to pay the stipulated price to the owner. This may be referred to as the *exclusion principle*.” But in the case of public goods or what he called “social wants,” the ability to exclude was lacking. He wrote, “People who do not pay for the services cannot be excluded from the benefits; and since they cannot be excluded from the benefits, they will not engage in voluntary payments. Hence the market cannot satisfy such wants.” Had Musgrave simply stopped there, the way that people started thinking about public and private goods might have taken a different trajectory. Goods that were subtractable and excludable would have been considered private. Goods that were not subtractable and not excludable would have been considered public. There would still have been a need for the Ostrom diagram, but it’s hard to imagine that government would have felt as confident as it did, starting in the 1960’s, to take on so many additional responsibilities. But that was not to be.

At the same time that Musgrave introduced the concept of exclusion, he also introduced another concept, far more controversial, that he called “merit wants.” He did not at any point clarify how to define “merit wants.” Rather, he said that they become “public wants if considered so meritorious that their satisfaction is provided for through the public budget over and above what is provided for through the market and paid for by private buyers.” Musgrave makes clear that he takes a very expansive view of these wants, saying that they should be provided “where (1) demand is elastic, and where (2) wants in question are in the nature of merit wants.” He also says “public control may be particularly needed where (3) demand is inelastic and where (4) purchases weigh heavily on the budgets of low income families.” Obviously, these criteria could apply to a large number of goods. Taken to their logical conclusion, they could apply to goods such as an automobile, where demand is elastic and the good could be considered meritorious, since an automobile can be important for going to work. They could also apply to goods such as fuel and electricity, where demand is inelastic and obviously purchases weigh heavily on the budgets of low income people. The concept of “merit wants,” it is clear, was extremely broad.

The next person to enter the debate over the difference between public and private goods was James M. Buchanan, Jr., when in 1965 he published an essay entitled “An Economic Theory of Clubs.” The purpose of this essay, he wrote, was “to move one step forward in closing the awesome Samuelson gap between the purely private and the purely public good.” Buchanan described a good, where exclusion was possible, but consumption by one person would not necessarily reduce the consumption of someone else. One of the examples he used was a swimming pool. “If a single person is required to meet the full costs [of buying a swimming pool] he will not be able to enjoy the full benefits of the good. Any enjoyment of the facility requires organization of some co-operative-collective sharing arrangement.” By combining the two characteristics of Samuelson and

Musgrave in a way that created a hybrid good that was neither public nor private, Buchanan paved the way for the Ostrom diagram, whose singular insight was that all goods could be described by these two characteristics as long as it was understood that these would vary from “high” to “low.” In creating their diagram, the Ostroms changed the name from “club good” to “toll good” on the grounds that many goods that share these characteristics are provided by small-scale public as well as private associations. And they explicitly added a fourth type of good that they called common pool resources. Thus the awesome gap was closed.

As we reflect back on the issues discussed here, it’s perhaps worth remembering that notwithstanding his expansive view of “merit wants,” even Musgrave had his qualms. Thus he wrote, “At the same time, the satisfaction of merit wants remains a precarious task. Interferences with consumer choice may occur simply because a ruling group considers its particular set of mores superior and wish to impose it on others. Such determination of wants rests on an authoritarian basis, not permissible in our normative model based upon a democratic society.” Indeed. As we have seen with the myriad programs to save the banking system and prop up the mortgage industry, as we see with the current debate over health care in Washington, and as we also see with the effort by the Obama administration to nationalize student loans, government provision of private goods can easily become a catalyst for even greater control over the economy than first advertised or even first imagined. Undoubtedly, the off-year election results reflect an inchoate sense by many voters that government is seizing too much power and, presumably, this offends their sense of how democracy should function.

The tremendous appeal of the Ostrom diagram is that it provides a clear framework for helping us think about these issues. It tells us what goods exhibit characteristics that require public financing or some sort of regulation to ensure optimal outcomes. But it also tells us what goods are essentially private and thus, to the extent possible, should be provided through normal market means. In particular, as identified by E.S. Savas, it explains what happens when the concept of exclusion is abandoned and government takes on the responsibility of providing private goods or heavily subsidizing those who do. Some people are clearly helped by these efforts. But as we have seen in recent years, the costs to society can be immense and so can the cost to many individuals. Understanding the proper role of government has always been the great challenge of politics. The Ostrom diagram provides important insights that help us meet that challenge. They are insights we should all keep in mind in the months and years to come.

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