

## Public Goods

George McDowell and Dixie Watts Reaves

### Public Goods and Private Goods

Why is it that some goods and services tend to be provided by private businesses while others are provided by the government? As citizens of a democracy and a free market economy, most of us, as Americans, are proud of our country. We are especially proud of the right to use our ingenuity and hard work to succeed (or fail) in our attempts to make ourselves better off than we were before. Our government guarantees us these rights and the free, fair, and open markets that make possible our pursuit of the American dream. The assurance of these opportunities by government is one aspect of the “public goods” component of our society. But we place a great deal of value on individual responsibility and hard work. Consequently, we tend to believe that the private sector will usually do things better than the public sector and that the public sector should do as little as possible.

The conventional wisdom is that public goods are those things that the public sector produces, while private goods are the things that the private sector produces. That way of thinking is reinforced by the language of “public” and “private” but is sometimes misleading. In actuality, the private sector produces things that have public good characteristics, and the public sector produces things that have private good characteristics. Indeed, most goods or services produced by either the public or private sectors have both public and private dimensions. We here seek to untangle these concepts, to clarify the role of government in providing goods and services in our society, and to expand on the message of recent *Horizons* (“Rural Development in Virginia—What Can the State Do, If Anything?” Jan/Feb 2004; and “Why Are We Talking about Higher Taxes?” Mar/Apr 2004) that dealt with budgets, taxes, and the need for consistency in funding state programs that have public good dimensions.

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### The Attributes of Things Make a Difference

Steak is one price when sold at the meat counter. It commands another, much higher, price when the same meat is prepared and served with vegetables and fine wine in the comfortable atmosphere of a nice restaurant. The steak has become a steak dinner with very different attributes from the steak itself.

Different things have different characteristics or attributes. Unique attributes make a difference in the way people see the nature of things. The attributes of the things may make a difference in how we organize activities. To illustrate how attributes influence our actions, consider the exchange between a U.S. Navy task force and Canadian authorities off the coast of Newfoundland:

Americans: We perceive we are on a collision course with you and ask that you divert your course 5 degrees to the south.

Canadians: We suggest you divert your course 5 degrees to the north.

Americans: This is a large U. S. naval task force, and we insist you divert your course to avoid a collision.

Canadians: We say again, you divert your course.

Americans: As the Admiral in charge of the largest U.S. task force in the North Atlantic, I insist that you divert your course or counter measures will be taken.

Canadians: We are a lighthouse. Your call.

No matter the authority of the U. S. commander, the attributes of the naval task force and of the lighthouse, respectively, determine the outcome of what needs to be done to avoid a collision. In this case, the attributes of the mobility of ships and the immobility of lighthouses determine the outcome. Similarly, the attributes of goods and services determine whether private businesses or government should provide them to society.

## Public Good Attributes

Children seeking to earn spending money often turn to selling lemonade in the neighborhood on a hot day. Predictably, they will make some amount of money from their sales to sympathetic neighbors or thirsty passersby. And predictably, the same children in the same neighborhood will turn a smaller profit when trying to sell views of their snow sculptures on the days following a major snow storm. The important difference is in the attributes of the lemonade and the snow sculptures, respectively. With the lemonade, no drink is available unless the money is paid. Further, one customer's consumption of lemonade makes less lemonade available for the next customer. Unless a substantial fence hides the snow sculptures from public view, passers by, whether they have paid or not and regardless of their sympathies, will be able to see the children's sculptures. Public or collective goods are goods which have attributes that make it difficult or impossible to exclude non-purchasers from having access to the goods as in a fence to keep non-payers from viewing the sculptures. Another characteristic of this public good is that one person's viewing of the snow sculpture does not diminish the ability of someone else to view the same sculpture (non-rivalry). Thus, two common features of public goods are non-excludability and non-rivalry. The term "public goods" does not mean that the good must be produced by the public sector.

The very special views that exist in our beautiful nation have public good characteristics. The government surrounds some of the most special ones with national parks so that views are always accessible to everyone with the resources to get to the parks. Without the park around the Grand Canyon and with private ownership of the land on the rim of the canyon, views into the canyon would be much less accessible, and the overall view of the canyon might resemble the Myrtle Beach ocean front. The national parks at the Grand Canyon and other natural attractions around the country are examples of things that the public sector must do or else they will not get done.

Free polio shots eliminated the threat of that dangerous disease in the 1950s. Polio as a disease could potentially infect anyone who was unprotected. The cost of obtaining a polio shot from a private physician was the cost of preventing a single person from getting polio. The cost of eliminating polio as a threat to the society was the cost of immunizing everyone, since even a few unprotected people could maintain the disease. If everyone were immunized, not only would those who received the vaccination benefit, but society would also benefit by eliminating the threat of the disease. Private market activities would never provide the coverage to eliminate the threat of polio, small pox, or many other communicable diseases, as the 2003-2004 flu situation made

clear. A private sector, profit-based incentive protects individuals who are willing and able to pay to be immunized. But it provides little or no private incentive to eliminate the threat that requires complete immunization coverage. Thus, for the good of society overall, there must be some public provision of immunizations.

## What Does Government Do and Why?

Many other things that we value as a society have both public and private good attributes and, like the polio vaccination, have both private and public benefits. Very few things are completely private goods or completely public goods. As a society, we struggle with identifying the public or private characteristics of goods, and the balance between public and private benefits when we discuss the role of government, government budgets, taxes, government regulations, and even citizens' rights and obligations.

In addition to the difficulties of identifying public versus private attributes and benefits, another characteristic that influences the level of government involvement in the provision of some goods and services is the lack of a clear boundary or geographic range of certain goods. For example, clean water for drinking is associated with river basins and water sheds. Because the boundaries relevant to clean water are often different from the boundary of any single governmental jurisdiction, multiple governmental jurisdictions must be involved in solving water quality problems.

A discussion of some of the services provided by different levels of government will help us understand the characteristics of things that may require government intervention. In every case, to think about what would happen if the particular area of activity were left to the for-profit, private sector is useful.

**K-12 Schooling:** All parents know the private benefit to a child getting a good education. But Thomas Jefferson set forth the notion that a public benefit is derived from educating all children. Most of the public benefit comes from the economic benefits of an educated work force and of well informed, educated citizens willing and able to participate in our democracy. The need for the effective functioning of a democracy is an important part of the historical rationale for mandatory, public K-12 education.

**Higher Education:** The benefits to society gained from K-12 schooling were extended to higher education by the establishment of the Land-Grant universities and then by the post-WWII GI Bill. The impact of these two major government programs is a significant part of what makes the American economy so very productive. In no other society in the world does as high a percentage of the graduates of

secondary school attain degrees in higher education. America's economic performance in the for-profit, private sector is an important public benefit from public investments in education at all levels.

**National Defense:** As recent events in the U.S. make clear, our national defense is important to our nation's security. For military functions (a standing army, navy, marine corps, and air force, plus all of the other supporting intelligence, communications, and logistical agencies) to be the responsibility of a single state makes little sense. Beyond the actual capacity to wage war or defend against war, many other aspects of our public spending contribute to the public good called national defense. Federal spending on the Eisenhower Interstate Highway System was justified, in part, on national defense arguments. The highway system can contribute to national defense not only by facilitating rapid movement within the country, but also by having major sections of the highway designed as alternative military aircraft runways.

**Military Education:** The major public benefits from military education come through the benefits to supporting national defense and the greater security to the nation as a whole. However, no particular additional improvement in security to the state comes because of its support of military education. For example, Virginia does not benefit from support to military education via Virginia Military Institute by increasing the employment opportunities in military service for Virginia residents. Other specialized educational efforts, such as law and medical schools, are supported for the very same reasons.

**Police and Courts:** Law enforcement and court services are organized at all levels of government (national, state, and local), because laws that define inappropriate behavior are made at all levels of government and must be enforced at those levels. Indeed, the differences between jurisdictions about various aspects of our lives are codified into laws making things legal in some places and illegal in other places: speed limits; alcohol and other drugs; doctor assisted suicide; marriage and civil unions; and various forms of pollution to name just a few. To the extent that one function of government is to provide for personal and residential security in our communities, different approaches reflect community differences. For example, when neighbors look out for each other, a clear impact on crime is evidenced by the effectiveness of neighborhood watch programs. A strong sense of community has public good attributes: efforts that increase the sense of community and neighborhood, such as dollars spent on the support of a community softball league, may do more to improve community security than money spent on additional police patrols.

**Public Health:** Public health is much more than the medical services in disease control. Carriers or transporters of disease—air, water—have public good attributes. Because protecting people from disease and other public health dangers is so complicated, we spend public funds on landfills, garbage collection, school nurses, and other things at the local level. We then spend state and federal funds on water quality, environmental regulations, and disposal of hazardous wastes.

**Social and Economic Safety Nets:** When world markets, natural disasters, or other events expose people or businesses to unpredictable risks that could devastate their lives or businesses, society provides a safety net, because it is in our collective best interest to do so. Thus, we spend large amounts of money on people or businesses in great difficulty. Among the major social safety nets in America are the farm programs, business assistance programs for firms adjusting to foreign trade competition, unemployment insurance, the parts of social security that provide for people with disabilities, workmen's compensation, food stamps, Medicaid, other types of assistance to the poor and out-of-work in our society, disaster assistance and relief, and retirement Social Security. As a society, we do not always agree on how fine the mesh in the various safety nets should be and which nets are the most important. However, we have agreed, as a nation, that they are important to have.

## Conclusion

Some things, like lemonade, can be organized and sold for a profit by private businesses, while other things, like views of the Grand Canyon or pollution control, cannot be left to private businesses. Many things that the government provides are things that the private sector will not produce. Almost all things that government provides have both private and public benefits.

Virginia has just struggled with a public debate over a state budget and the necessary taxes to support the budget. Most of the things provided by state government have public good dimensions. The public good dimensions of those things are often taken for granted. Consequently, those public goods can be lost or destroyed because the threat to them may not be noticed until they are in serious jeopardy. We all know that many of our highways are congested and in disrepair. We all gain a private benefit from having them, but private incentive is not sufficient to repair or improve them. The same is true of our elementary and secondary schools and of public higher education. Organizing and developing an effective public school system is hard work. When schools decline because of a lack of investment in either physical or instructional resources, repairing them is even harder. In the

meantime, the students and their quality of education suffer. And what about the physical and emotional security that comes from living in a community that is safe and secure? One's personal sense of security is very private, but the sense of community that helps to produce that security is very public, very difficult to produce, and very hard to price or value.

As we think about public goods and the things that governments do and how we pay for them, we will be ill advised to expect lighthouses to pay their own way by charging user fees. Surely, we must not ask lighthouses to change course to avoid collisions with naval fleets. To operate the government at any level without adequate and consistent budgets is impossible. If we do not adequately fund government spending, the public goods, which we depend on and which will only be provided by a local, state, or federal governmental entity, will be lost.

Most of us are proud to be Americans! We must also be willing to pay our share for what makes us proud.

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