

Partial Interests in Land

Land ownership is sometimes considered to imply the right to do whatever a landowner wishes with his or her land. Much of the popular debate about property rights appears to be based on this supposition. In fact, the reality of land ownership is considerably more complicated.

Land ownership consists of a “bundle of rights,” not all of which are necessarily held by the landowner. The uses that a landowner may make of his or her land depend on who holds what rights within the bundle that constitutes ownership. The public and its representatives, including the U.S. Government, have long made use of this fact to influence public and private land use in ways that accomplish public objectives. To understand how this influence is exercised, we need to consider what is meant by property and ownership.

Property and Ownership

Property and ownership are legal concepts rooted in social institutions. They refer not simply to material objects but to the relations between individuals and society that govern access to material objects. “The legal concept of property does not denote the tangible or intangible objects that are termed property in common speech. Rather, property as a legal concept refers to rights and interests in such objects” (Youngman, 1993).¹

Real property refers specifically to interests in land, such as rights to draw water, graze livestock, grow crops, or build houses. As Coase writes,

We may speak of a person owning land and using it as a factor of production but what the land-owner in fact possesses is the right to carry out a circumscribed list of actions. The rights of a land-owner are not unlimited... [For example,] it may or may not be possible to erect certain types of buildings or to grow certain crops or to use particular drainage systems on the land. This does not come about simply because of Government regulation. It would be equally true under the common law. A system in which the rights of the individual

were unlimited would be one in which there were no rights to acquire (1960: 137).

In this report, we consider these legally defined rights and interests in land from an economic perspective. Seen from such a perspective, interests in land represent expectations about what uses will be legally permissible over time, as well as expectations about the returns that those uses will generate. Returns may be derived from farming, development, extraction of mineral resources, as well as recreation and a variety of other uses. Land values reflect these alternative current and potential uses, and will change over time as expected returns to these uses change. For example, figure 1 illustrates the volatility of U.S. farm real estate values between 1910 and 1995, rising dramatically in the 1970’s and fluctuating by 10 percent or more in many years.

The importance of considering legally defined interests from an economic perspective becomes critical in the context of the current debate over private property rights. Legislation being considered by Congress requires that private property owners be compensated not only when a legally defined interest is taken from them, but whenever government actions diminish property values. Because such values incorporate expectations not only about permissible uses but also about potentially volatile returns to those uses over time, interests in land require careful economic as well as legal consideration. (See the section “Valuation of Partial Interests in Land” for more detail.)

Partial Interests

There are typically many partial interests in even a single parcel of land, including rights to produce commodities, graze livestock, extract minerals, dispose of waste materials, and develop the land. Interests may arise from custom or tradition, they may be defined by government regulation, as in the case of zoning, or they may be negotiated between private parties, as in the case of lease agreements. Interests may be specified for a finite period, they may be open-ended, or they may run in perpetuity.

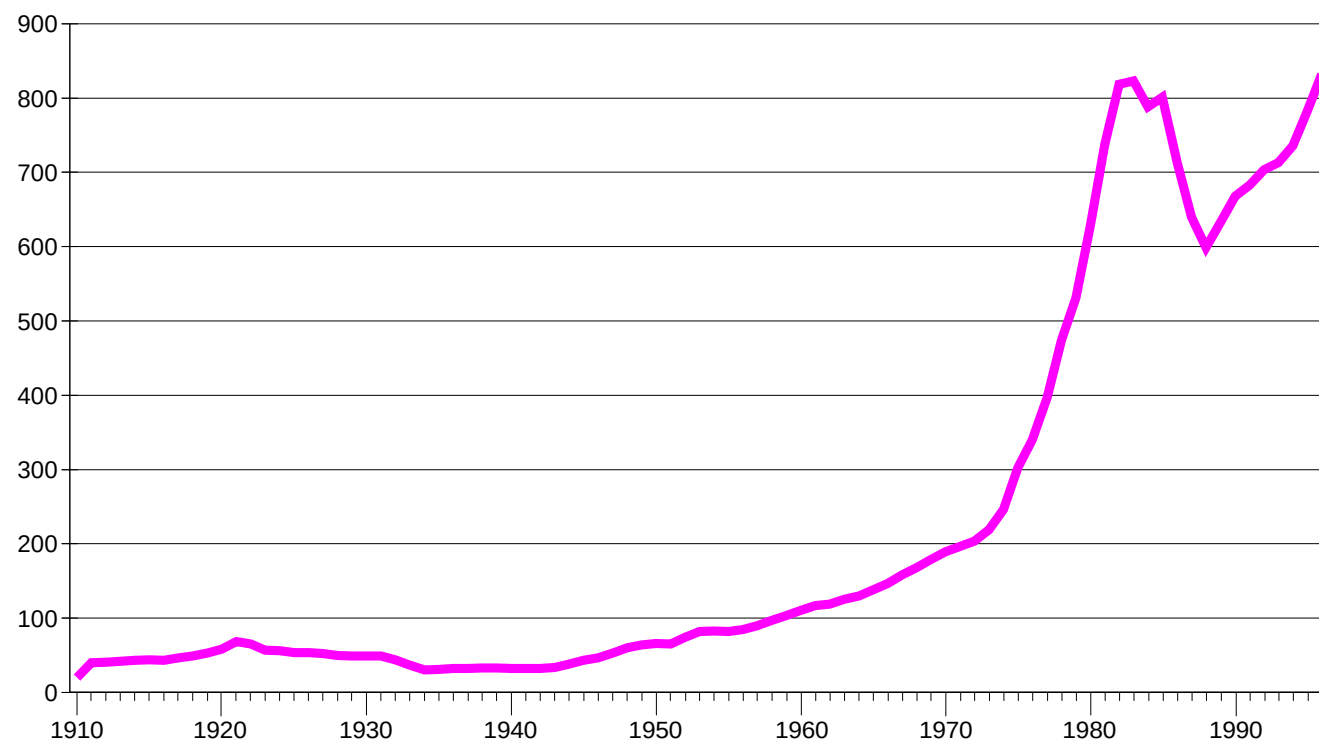
The bundle of rights and responsibilities that comprise land ownership may remain intact, as when a landowner retains all partial interests, or they may be allocated among multiple parties, both public and private. For example, a farmland owner may rent land to a farm operator. The farm operator then holds the

¹Names in parentheses refer to sources listed in the References at the end of this report.

Figure 1

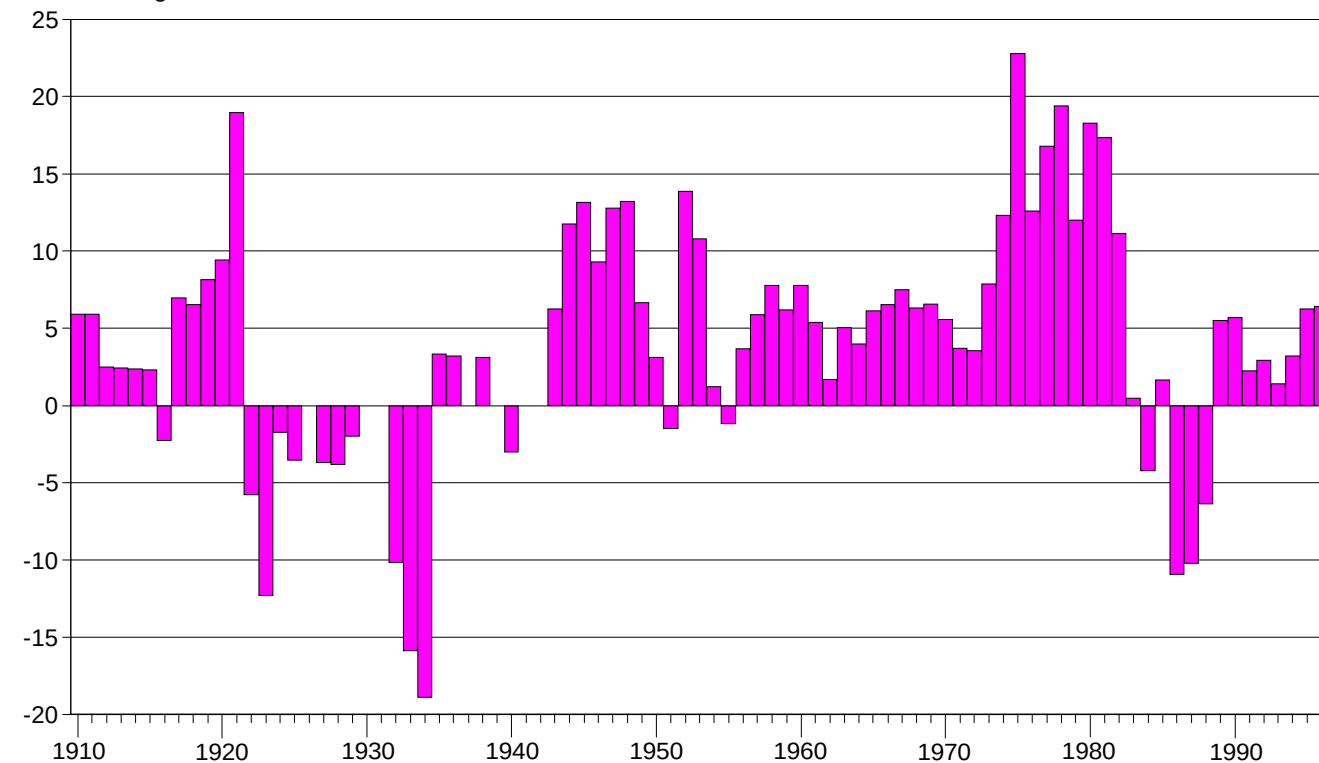
Average nominal value per acre of farm real estate in the U.S., 1910-95

Dollars



Percent change in average nominal value per acre of farm real estate in the U.S., 1910-95

Percent change



Source: Economic Research Service.

right to use the land for agricultural production for a specified period, while the farmland owner retains the underlying title and the right to use the land as he or she chooses in subsequent periods. The same farmland owner may sell drilling rights on the same parcel of land to an energy company, which then holds rights to extract oil and natural gas. These are fairly straightforward examples. Other interests in land are less well understood, but are becoming increasingly important. If a parcel of undeveloped land has potential for conversion to residential, commercial, or industrial use, the owner holds “development rights” that may be highly valued by developers, government agencies, and conservation organizations. (“Development rights” will be discussed in greater detail in the following sections.)

Even on privately owned land for which no interests have been rented out or sold, a single owner does not hold all interests. To protect the interests of other members of society, various levels of government generally reserve the rights of taxation, eminent domain (the right to acquire private property for public purposes, with compensation), police power (the right to prevent actions that harm others), and escheat (the right to take possession of land left by a person who dies without heirs) (Renne, 1993; Closser, 1993).

Likewise, private citizens or corporations may hold certain interests in publicly owned land, such as rights of way, oil and gas leases, and mineral leases (Laitos and Westfall, 1987). The distribution of interests across multiple holders thus blurs the conventional distinction between what we think of as “public” and “private” land.

In sum, landownership consists of multiple interests that are generally held by more than one agent. Land use decisions depend on how these partial interests in land are distributed among public and private individuals and agencies.

Policy Tools for Resource Use and Conservation

Partial interests shape the use of private and public land in the United States. This section introduces three forms of partial interests in land. The first, private interests in public land, typically allow specified resource uses for public and private benefit. The second, conservation easements, represent the use of partial interests in land to encourage the conservation or

preservation of privately owned land for public benefit. Conservation easements are typically long term (for example, 30-year) or perpetual interests in private land that are acquired by government agencies or non-profit organizations. While they are, in a sense, mirror images of one another, both cases represent an effort to balance public and private objectives in resource use and conservation. The third form of partial interests in land, options, are primarily a means of conveying other interests in land, but they can also be used to restrict land use over short periods of time.

Private Interests in Public Land

The Federal Government once held most of the present area of the United States. Millions of acres have since been transferred to private ownership through grants and sale to individuals and corporations (U.S. Dept. of the Interior, Bureau of Land Management, 1994). Even on land remaining in Federal ownership, private individuals and corporations today hold a variety of partial interests, including rights of way, mineral leases, and oil and gas leases (Laitos and Westfall, 1987). By contrast, grazing permits and livestock-use permits are revocable licenses and “convey no right, title, or interest held by the United States in any lands or resources” (U.S. Dept. of Agriculture, Forest Service, 1991). Privately held partial interests in public land are introduced here by way of contrast, but the remainder of this paper focuses on partial interests in private land.

Conservation Easements

Like privately held mineral leases on Federal land, conservation easements are partial interests in land, but the two types of partial interests differ in many ways. While mineral leases represent the acquisition of partial interests in public land by private individuals to allow resource use, conservation easements represent the acquisition of partial interests in private land by government agencies and nonprofit organizations for conservation purposes.

Easements have been recognized as legitimate interests in land for centuries. “An easement is a limited right, granted by the owner of real property, to use all or part of his property for specific purposes” (Small, 1990: 2-5). Traditionally, an easement was “affirmative” (that is, carrying rights to specified actions) and “appurtenant” (that is, attached to a neighboring parcel of land). For example, one landowner might hold

an easement in the land of a neighbor, allowing him or her to cross the neighbor's property or draw water from the neighbor's well.

The use of easements for conservation purposes is a relatively recent phenomenon. In contrast to conventional easements, conservation easements are generally "negative" (that is, prohibiting specified actions) and "in gross" (that is, they may be held by someone other than the owner of a neighboring property). While a conventional easement involves the conveyance of certain affirmative rights to the easement holder, "an easement for conservation or preservation purposes involves the relinquishment of some of these rights (i.e. the right to alter or demolish a building or to cut down a forest) and the power in the new holder of the rights to enforce the restrictions on the use of the property" (Small, 1990: 2-6). This is a critical distinction: the landowner relinquishes the right to develop the land, but that right is not conveyed to the easement holder. That particular right (to develop the land) is extinguished. What the easement holder does acquire is the right to enforce the land-use restrictions (Powell, 1989). Consider the following analogy:

Say I own a car. I keep the car (with the ignition key), but give a neighbor my only key to the trunk. I have relinquished my ability to carry luggage in the trunk, but I have not given that ability to my neighbor. (No one has that ability now, since it requires possession of both the car and the key to the trunk.) What my neighbor has acquired is the ability to prevent me from carrying luggage in the trunk. What I retain is the car and the ability to drive the car and carry passengers.

When a landowner conveys a conservation easement to a government agency or a land trust, the landowner relinquishes his or her right to develop the land, but the landowner has not given that right to the land trust. What the land trust has acquired is the right to prevent the landowner from developing the land. What the landowner retains is the land and the right to use the land for less intensive purposes, such as agricultural production.

This issue is clouded because conservation easements are commonly said to represent "development rights." When a landowner conveys a conservation easement to a land trust, he or she does convey the development rights to the land trust. But these development rights

themselves do not give the land trust the right to develop the land. They are like the key to the trunk—necessary but not sufficient for development. Just as possession of both the car and the key to the trunk are required in order to carry luggage, possession of both the land and the development rights are required to develop the land. When these are separated, the right to develop the land is extinguished. (And just as the key to my trunk doesn't fit my neighbor's car, the development rights conveyed do not generally permit development of another parcel of land either, except under a transfer-of-development-rights program.)

Conservation easements have been used to protect a variety of land resources and characteristics, including farmland and other open space, wildlife habitat, erodible soil, and wetlands. A common feature of such resources is that their full value to society may not be reflected in the stream of returns considered by private landowners when choosing among alternative land uses. Wetlands, for example, provide benefits in terms of groundwater quality and recharge, floodwater retention, fish and wildlife habitat, and recreation. Of these benefits, however, only habitat and recreation are likely to afford income-generating opportunities to private landowners, and returns to these activities may be small in comparison with alternative land uses like agricultural production or urban development (Wiebe and Heimlich, 1995).

Conservation easements offer a way by which public interests in such resources can be formally established and acquired on a voluntary basis in order to ensure desired resource protection. Conservation easements are attractive as a policy tool because they "represent a mid-point between outright public ownership of significant property on one extreme and government land-use regulation on the other" (Land Trust Alliance and the National Trust for Historic Preservation, 1990: 2). As such, they can be used to help balance public resource use and conservation objectives while avoiding some of the financial costs of outright public ownership of land and some of the political costs of land use regulation—advantages that are particularly meaningful in the current climate of budget constraints and property rights considerations.

The National Park Service was one of the first public agencies to use easements when it preserved scenic views along the Blue Ridge Parkway in North Carolina and Virginia and along the Natchez Trace Parkway in Mississippi, Alabama, and Tennessee in

the 1930's and 1940's (Ward and others, 1989). The Fish and Wildlife Service acquired refuge and flowage easements in Minnesota, North Dakota, and South Dakota in the 1930's (Powell, 1989). The use of conservation easements by nonprofit organizations and government agencies has increased rapidly in recent decades. Table 1 suggests the variety of agencies involved in the acquisition of conservation easements.

Options

Options are themselves assets, but they are most commonly thought of as a means of buying or selling other assets. In a standard call option, an agent pays a premium for the option to buy an asset within a specified period at an agreed-upon price (the exercise price). If the actual value of the asset exceeds the exercise price within the specified period, the agent can exercise the option and buy the asset at the exercise price (and then realize a profit by re-selling the asset for its actual value). If the actual value of the asset does not exceed the exercise price within the specified period, the agent need not exercise the option. The premium depends on the value of the underlying asset (for example, land), the exercise price, the maturity of the option, the volatility of the value of the underlying asset, and the risk-free interest rate (Black and Scholes, 1973).

Real estate options can serve both as a means of acquiring the rights necessary to permit development and as a means of acquiring the rights necessary to prevent development. Consider a parcel of farmland, the value of which is made up of the value of the agricultural use rights and the value of the "development rights." An agent must hold both rights in order to develop the land. A developer might thus acquire an

option to buy a parcel of land for development within a certain period. To prevent development, a land trust or government agency might acquire one of the following assets prior to the developer's acquisition of the option:

- (1) a conservation easement (that is, the development rights),
- (2) the land itself (that is, both the development rights and the agricultural use rights), or
- (3) the agricultural use rights.

Holding any one of these assets would be sufficient to prevent development of the land for the period over which the various rights are specified.

Alternatively, the land trust or government agency could also prevent development by acquiring one of the following assets, each of which is an option on one of the assets listed above:

- (4) an option to buy a conservation easement,
- (5) an option to buy the land, or
- (6) an option to buy the agricultural use rights.

Although none of these options would convey the underlying assets themselves (unless and until the option is exercised), each would be sufficient to prevent development for the duration of the option.

An example of option (4) is found in Pennsylvania, where the Lancaster County Agricultural Preserve Board (LCAPB) and the Lancaster Farmland Trust

Table 1—Agencies involved in conservation easement acquisition

Type of agency	National	State & local
Public	Federal Government agencies (for example, the Natural Resources Conservation Service, the Forest Service, the Fish and Wildlife Service, and the National Park Service)	State & local government agencies (for example, the Maryland Agricultural Land Preservation Foundation and the Lancaster County Agricultural Preserve Board)
Private	National nonprofits (for example, The Nature Conservancy, the Trust for Public Land, the Conservation Fund, and the American Farmland Trust)	Land trusts (for example, the Trust for New Hampshire Lands, the Iowa Natural Heritage Foundation, the Maine Coast Heritage Trust, and the Montana Land Reliance)

Source: USDA/Economic Research Service.

recently acquired an option to buy a perpetual conservation easement on the farm where the movie “Witness” was filmed (Daniels, 1994; *Lancaster Farmland Trust News*, Dec. 1994).

While options constitute an interesting example of a partial interest in land, they are not commonly used as policy tools for resource use and conservation. As a result, this paper focuses on conservation easements.

The Federal Role in Partial Interests as Policy Tools

The Federal Government’s role in the use of partial interests as policy tools depends on how the partial

interests are conveyed. In the case of conservation easements, the Federal Government plays both a direct role and an indirect role. The direct role involves easement acquisition by Federal agencies—as in the case of the Wetlands Reserve Program. (The Conservation Reserve Program does not strictly acquire easements, at least in the legal sense, although the interests acquired are closely analogous in economic terms.) The indirect Federal role takes the form of Federal income and estate tax benefits that are available to landowners who donate conservation easements to qualified nonprofit organizations. These Federal roles are discussed in greater detail in the sections that follow.