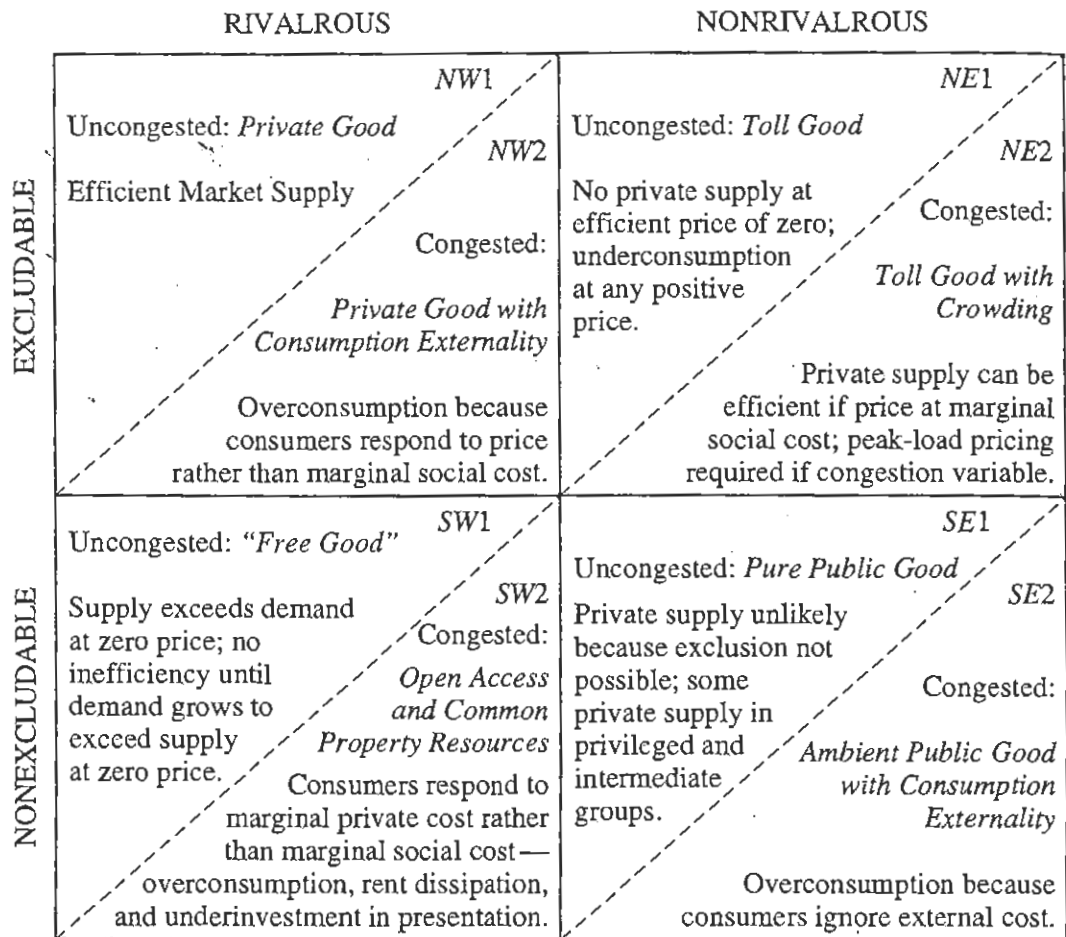| TABLE 1-1	Private Goods and Public Goods	
	No Joint Consumption	Joint Consumption
Exclusion Is Feasible	1 Pure private goods Examples: DVD players, automobiles, houses	2 Toll goods Examples: cable TV services, electrical utilities
Exclusion Is Not Feasible	3 Common pool resources Examples: air, water, grazing land, oceans, fisheries, wildlife	4 Pure public goods Examples: national defense, public parks

	RIVALROUS	NONRIVALROUS

EXCLUDABLE	*NW1*
	
	Uncongested: *Private Good*
	
	Efficient Market Supply
	        NW2
	
	          Congested:
	
	      Private Good with
	   Consumption Externality
	
	     Overconsumption because
	     consumers respond to price
	   rather than marginal social cost.
		NE1
		
		Uncongested: *Toll Good*
		           NE2
		No private supply at
		efficient price of zero; Congested:
		underconsumption
		at any positive *Toll Good with*
		price. *Crowding*
		
		       Private supply can be
		     efficient if price at marginal
		    social cost; peak-load pricing
		   required if congestion variable.

NONEXCLUDABLE	*SW1*
	Uncongested: *"Free Good"*
	
	Supply exceeds demand *SW2*
	at zero price; no
	inefficiency until Congested:
	demand grows to
	exceed supply *Open Access*
	at zero price. *and Common*
	       Property Resources
	      Consumers respond to
	    marginal private cost rather
	    than marginal social cost —
	  overconsumption, rent dissipation,
	  and underinvestment in presentation.
		SE1
		Uncongested: *Pure Public Good*
		
		Private supply unlikely *SE2*
		because exclusion not
		possible; some
		private supply in Congested:
		privileged and
		intermediate *Ambient Public Good*
		groups. *with Consumption*
		        Externality
		
		     Overconsumption because
		   consumers ignore external cost.

Figure 5.2   A Classification of Goods: Private and Public

Table 5.1 *Examples of Externalities*

	Positive	Negative
Producer-to-Producer	Recreational facilities attracting people who purchase from nearby businesses	Toxic chemical pollution harming downstream commercial fishing
Producer-to-Consumer	Private timber forests providing scenic benefits to nature lovers	Air pollution from factories harming lungs of people living nearby
Consumer-to-Consumer	Immunization by persons against contagious disease helping to reduce risk to others	Cigarette smoke from one person reducing enjoyment of meal by another
Consumer-to-Producer	Unsolicited letters from consumers providing information on product quality	Game hunters disturbing domestic farm animals

Table 6.1 *A Summary of Market Failures and Their Implications for Efficiency*

Traditional Market Failures (Chapter 5)	
Public Goods	Pure public goods (undersupply) Open access/common property (overconsumption, underinvestment) Toll goods (undersupply)
Externalities (Missing Markets)	Positive externalities (undersupply) Negative externalities (oversupply)
Natural Monopoly	Declining average cost (undersupply) With costly monitoring (undersupply, X-inefficiency)
Information Asymmetry	Quality overestimation of experience, post-experience goods (overconsumption) Quality underestimation of experience, post-experience goods (underconsumption)

Other Limitations of the Competitive Framework (Chapter 6)	
Thin Markets	Cartelization (undersupply)
Preference Problems	Endogenous preferences (typically overconsumption) Utility interdependence (distributional inefficiency) Unacceptable preferences (overconsumption)
Uncertainty Problems	Moral hazard, adverse selection, unique assets (incomplete insurance) Misperception of risk (violation of expected utility hypothesis)
Intertemporal Problems	Nontraded assets, bankruptcy (incomplete capital markets)
Adjustment Costs	Sticky prices (underemployed resources)
Macroeconomic Dynamics	Business cycles (underemployed resources)