

XXXVI. On Competitive Market Efficiency

- A. The point of departure for most defenses of markets and for many efforts to regulate markets is the "First Theorem of Welfare Economics." That is to say, if market outcome X is a Walrasian Equilibrium (and there are no externalities) then outcome X is Pareto Efficient.
- In a Walrasian context, firms can not be made to produce goods and services more efficiently--there are no wasted inputs anywhere in the system.
 - In a Walrasian context, consumers can not reallocate their resources in a way that can make themselves better off.
 - Resources through out the economy are directed to their highest valued uses in these sense that
 - the marginal rate of technological substitution between every two goods equals the marginal rate of subjective substitution between those goods.
 - Or equivalently, the output of every market is that which maximizes consumer surplus. Outputs are produced at the level where the marginal benefit (value) of further production exactly equals its marginal cost (fundamentally in terms of reduced output of other valued outputs).
 - Neither super production experts nor consumer lifestyle experts could do "it" better.
- B. There is clearly no scope for Pareto improving public policies at the Walrasian competitive equilibrium. Patterns of consumption and production at the level of individual firms and consumers, and at the level of the market as a whole can not be altered to make someone better off without making someone else worse off.
- C. Opponents of market regulation often base their opposition to specific regulations on "B." The market result is already efficient, so no regulations are required.

XXXVII. On the Economic Grounds for Regulation: Antitrust

- A. Somewhat surprisingly, proponents of market regulation often base their support on the Walrasian logic. That is to say, they point to a condition of Walrasian equilibrium that is violated, and attempt to use regulation to move us toward a "proper" if no longer "spontaneous" Walrasian equilibrium.
- B. Perhaps the least controversial example would be regulations that reduce information costs about prices and the quality of goods and services, and laws the punish those who drive up information costs by intentionally misleading their customers about the quality and or cost of their goods and services.
- Regulations that reduce information costs, by for example defining terms, or requiring minimal labeling of contents and properties of the car, may in principle move us toward Walrasian equilibrium by reducing information costs and thereby the number of *mistakes* made by consumers and firms, and consequently reducing the extent of *ex post regrets* by market transactors.
 - Of course even such policies have costs associated with them. It takes resources to determine the properties of the products sold, and even some minor costs for creating informative labels. [Do such regulations cost too much? Explain. If markets are perfect in the Walrasian sense, wouldn't all useful information be produced up to the point where $MC^e = MB^e$?]
 - Other regulations and policies that reduce transactions costs can be similarly defended and attacked.

XXXVIII. On Antitrust Law and Economic Analysis

- A. Laws designed to promote open competition predate modern microeconomics and welfare analysis, and also Walras's important contributions at the turn of this century.
- B. However, modern antitrust law has to a significant extent been influenced by the results of micro-economic analysis of the effects of market structure and concentrated ownership developed during the last hundred years or so.
- Partly this reflects the evolution of case law which is influenced by economists because they often provide "expert" testimony in "anti trust" cases.
 - As might not be too surprising, both sides of these legal contests in the US pay economists to serve as expert witnesses--not because they necessarily want the truth but because they want the best scientific defense of their client that money can buy.
 - This commingling of personal economic interest has promoted the development of increasingly sophisticated analyses, critiques, and defenses of market structures that violate some of the assumptions of perfect Walrasian competition.
- C. Many areas of law that explicitly address "*monopoly practices*" are clearly efforts to move markets towards the Walrasian ideal.
- Antitrust law will attempt to break up cartels to promote competition by units with less market power, that is to say *less price setting ability*.
 - In cases where markets are too small to support more than a hand full of efficiently sized firms, various price regulations are often proposed with the stated aim of causing firms with monopoly power to behave a price takers not price makers.
- D. [The usual *monopoly pricing diagrams* can be used to show the dead weight loss of monopoly practices and the mutual advantage that can potentially be secured by breaking up monopolies and/or regulating prices in those markets.]
- E. [These diagrams unfortunately rarely examine the political process by which such benign policies might actually be implemented.]

XXXIX. On the Economic Importance of Civil Law (Law and Economics)

- A. The primary purpose of civil law, from an economics point of view is that it facilitates the development of markets by reducing transactions costs.
- Examples of such laws include those specifying damages from accidents (torts), trespass, contract breach and fraud.
 - Because of the enforcement of these laws, a complete incentive compatible contract need not be worked out for every market transaction.
- B. Much of criminal law serves a similar purpose, insofar as against theft and violence increase certainty and allow resources to be diverted from defensive to more productive uses (see Tullock, 1967 *Ec Inq*, or Congleton, 1997, *Kyklos*).
- C. Becker (1968, *JPE*) characterized both a model of criminal behavior and the optimal extent to which resources should be devoted to policing crime. He points out that the optimal level of crime is not zero, because crime is costly to control.

XL. The Economics of Environmental/Externality Regulation

- A. In cases where externalities exist, the Walrasian equilibrium is no longer generates a Pareto Efficient outcome.

- i. In such cases, marginal social cost or marginal social benefit, to the extent that these are meaningful concepts are no longer the same as individual marginal costs and benefits.
 - ii. Consequently, the results of private optimization in those cases do not assure Pareto efficient outcomes. (Note that inefficiency really depends on the existence of external costs or benefits at "the margin" at the market outcome Q^*)
 - iii. [Partial Equilibrium Figure to Illustrate private versus collective net benefit maximization. Also, PD game representation.]
- B.** The failure of "ordinary" markets to maximize net benefits is the principle economic justification for government intervention.
- i. One of the more popular methods among economists for dealing with externalities is the Pigovian Tax (or subsidy).
 - ii. It attempts to transform an externality setting back to ones that more closely resemble the Walrasian setting by "internalizing" the spill over costs or benefits generated.
 - iii. A Pigovian tax (or subsidy) is set at the level which equals the marginal external cost (or benefit) at the Pareto Efficient level. (Pigovian analysis has no implications for inframarginal tax rates.)
- C.** The Coase theorem suggests that externality problems can also be solved via voluntary contracts in cases where transactions costs are relatively low.

XLI. On the Directly Productive State: Public Goods

- A.** There is a class of goods called public goods (Samuelson, 1955 *REStat*) which are very unlikely to be produced at optimal levels in ordinary private markets.
- i. The reasoning is a direct extension of the externality argument.
 - ii. Pure public goods are often non-excludable (some times used as a definition) and therefore every time someone produces such a good, it confers benefits on others that are not accounted for by the producer.
 - iii. "Free riding" on the provision of such activities is the predicted consequence, thus *public goods are under produced* by private markets.
- B.** The existence of public goods problems implies that individuals may agree to create a coercive entity to produce desired goods..
- i. Such an entity may (coercively) raise revenues via taxation to fund a legal system, pass laws to reduce externality problems, and provide public goods.
 - ii. Because of the free riding problem, it is argued that voluntary exchange is not possible and consequently, coercive taxation is accepted as a necessary evil to fund the productive activities of the state.
 - iii. [Whether state activities will really be productive or not is mostly left to our second level classes on Public Choice.]
- C.** Lindahl suggested a way for taxes to be set so that Pareto efficient levels of goods and services are desired by all in the polity, and therefore unanimous agreement could be reached on output levels.
- i. He suggests that (1) taxes for each individual be set so that the marginal tax price exactly equals the marginal benefit received by the individual, that (2) output be set at Pareto efficient levels, and (3) that inframarginal tax rates be set just sufficient to cover the cost of production.
 - ii. Note that these conditions are very similar to those required in Walrasian Equilibrium.

XLII. On Taxation

- A.** The impact of other less perfect forms of taxation on the economy are often similar to those of monopoly.
- i. Most taxes cause market outputs to be below Pareto efficient levels.
 - ii. Even very general and uniform taxes tend to have effects on the supply of labor (because leisure is not taxed) or on savings rates and thereby a dead weight loss.
- B.** Optimal tax theory addresses the question of how this excess burden can be minimized.
- i. Ideally, taxes would have no excess burden. (As is sometimes argued to be the case for lump sum taxes. Less ideal "Ramsey" taxes attempt to minimize excess burden by having highest tax rates for goods with lowest price elasticity, and vice versa.)
 - ii. Others argue that a tax system should be neutral. That is to say the impact of the tax system itself is minimized. Either both lump sum and neutral taxation, private markets move towards Walrasian equilibrium.

XLIII. Market Failure and Government Failure

- A.** *Governments* may be said to fail, too, to the extent that they *fail* to adopt efficiency enhancing property rights assignments or regulations, or set Pigovian taxes and subsidies at suboptimal levels.
- i. For example, a government that fails to enforce property laws or to "properly" define the property laws that it does enforce may cause crime to rise, investments to fall, and may actually create commons problems.
 - ii. [The potential productivity of the law, of antitrust law, and externality regulation all suggest that collective action through governmental entities can be a jointly productive activity. That is "governments" might be productive entities, but then again the possibility of government failure suggests that they may not be productive in this economic sense.]
- B.** There are many **Public Choice** models of political decision making that imply various degrees of market failure as well as ones that suggest Pareto Efficient outcomes that are relatively unattractive from the point of view of other normative theories.

XLIV. The Politicized selection of policies

- A.** Economic / Public Choice models can be used to analyze incentives for affected groups to lobby for preferential treatment under government policies.
- B.** If begins with a Walrasian equilibrium, then government policies might appear to be necessarily redistributive. At best one moves along the Pareto frontier. From this perspective, politics is entirely about redistribution.
- C.** On the other hand, as noted above, many productive policies are also possible.
- i. But even in these policy areas, alternative ways of solving externality and public goods problems may have different effects on individuals.
 - ii. The economic impact of these alternative policies becomes part of the explanation for the policies that ultimately come to be adopted.
 - iii. The relative impact of politically active interest groups who lobby within the legislature and bureaucracy and voters who simply turn up on election day to cast votes will depend upon the institutional framework that determines how collective choice are made. (This is, of course, another topic for your public choice course, but still one with a micro economic foundation.)