

# WELFARE ECONOMICS AND SECOND-BEST THEORY: FILLING IMAGINARY ECONOMIC BOXES

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Since the beginnings of the efforts of economists to give their discipline scientific grounding, economists have thought their theoretical efforts had relevance for addressing significant public issues. While the classical economists generally supported what Adam Smith described as the “system of natural liberty,” those economists also weighed in on numerous issues of public discussion. The tenor and substance of those efforts is set forth wonderfully by Lionel Robbins (1952) and Warren Samuels (1966). While the analytical default setting of those economists was to support the system of natural liberty, they also recognized the value of sound public policy in supporting that system. The classical economists thought that there could be publicly beneficial activities that the system of natural liberty would be unlikely to do well in providing. They also thought that there were activities provided through commercial transactions that could wreak significant effects on bystanders to those transactions. The amount of education acquired within a society was one such candidate (West 1965), with the care of the poor being another (Himmelfarb 1983). In such matters as these, the classical economists engaged in strenuous debate and discussion that served as a forerunner to the development of welfare economics during the 20th century.

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As welfare economics developed, it acquired the same formalistic character as the rest of economic theory came to acquire. It is common to describe the growing formalism as reflecting growth in the strength of analytical techniques; however, that growth also narrowed the domain of economic analysis by replacing plausible reasoning with demonstrative reasoning (Polya 1954). With plausible reasoning, models are vehicles to assist thinking about policy issues; however, there is much of relevance to those issues that cannot be collapsed into formal models—particularly judgment, sensibility, and tacit knowledge. In contrast, with demonstrative reasoning the model itself becomes the object of analysis. Policy discourse becomes a debate over models, in contrast to the classical use of models to assist a debate that ramifies well beyond any model. With the shift from plausible to demonstrative reasoning, the classical tradition of policy analysis grounded in a system of natural liberty morphed into policy analysis grounded in a system of unlimited domain for policy action.

That morphing of domains is illuminated lucidly by Meir Kohn's (2004) comparison of value and exchange as providing antipodal orientations for economic analysis, and with Kohn's analysis being examined at length in volume 20 of the *Review of Austrian Economics* (Wagner 2007). In short, Kohn's depiction of the exchange orientation conforms to the plausible reasoning that characterized the classical system of natural liberty.

In contrast, Kohn's description of the value framework conforms to the demonstrative reasoning that characterizes the unlimited domain of contemporary welfare economics. This distinction between orientations corresponds to Peter Boettke's (2012) distinction between the *mainline* of economic theorists that extends back to the classical economists and the *mainstream* that arose late in the 19th century and dominates economic discourse today. The theory of the second best (Lipsey and Lancaster 1956) belongs to this contemporary system of unlimited domain, not to the system of natural liberty, though Davis and Whinston (1965, 1967) seek to locate some point of contact with the system of natural liberty, as does Harberger (1971). John Clapham (1922) explained that the effort to distinguish between industries with increasing returns and those with decreasing returns represented the creation of analytical boxes that could not be filled, and Arthur Pigou (1922) and Dennis Robertson (1924) extended that controversy. When viewed from the mainline of economic discourse, second-best theorizing, along with its welfare

economics parent, is an exercise in trying to fill what are imaginary analytical boxes that cannot be filled in any substantive manner.

## Welfare Economics and the System of Natural Liberty

The system of natural liberty recognizes that people are seldom so innocently engaged as when they are making money and that seldom has much good come out of the efforts of people who claim to pursue the public's good, to recur to Samuel Johnson and Adam Smith as two early proponents of that system. This system by no means entails an absence of policy activity by governments, as Lionel Robbins (1952) and Warren Samuels (1966) explain in careful detail. It does mean, however, that the system has a default setting oriented toward individual liberty. Violations of liberty are the exceptions and not the rule in such a system of liberty and justice. In contrast, such violations have become the norm over the past century or so, as no longer is there any general presumption against the deployment of political power wherever the possessors of that power choose to deploy it. The domain of the political is unlimited in contemporary welfare economics, in contrast to that domain being circumscribed within the classical version of welfare economics. This unlimited domain arises because statements about welfare are governed by presumptions about postulated preferences and not by presumptions about the requisites for human flourishing within a system of natural liberty when people live together in close geographical proximity (Cropsey 1950). Hence, welfare economics, along with second-best theorizing, becomes dominated by the demonstrative concerns of form rather than by the plausible concerns of substance, as Cropsey (1950), Nutter (1968), and Yeager (1978) explain to similar effect.

The classical economists were well aware that there were activities of general value to nearly everyone that were unlikely to be provided through normal commercial transactions. In contrast to contemporary public goods theory with its dichotomy between private and public goods, the classical theorists exhibited more subtlety and nuance in their analytical efforts. They would not, for instance, argue over whether lighthouses were private goods or public goods. While Ronald Coase (1974) described how the provision of lighthouses was organized in Britain from tolls collected from ships that came into harbor, this situation is irrelevant for the contemporary dichotomy between private and public goods. The British scheme for providing

lighthouses neither demolishes ideas about public goods nor does it deny claims about market failure. It is pointless to use lighthouses to make debating points for one side of the contemporary classification or the other. That classification as used in contemporary analysis illustrates the effort to create and fill imaginary analytical boxes.

Of course lighthouses are public goods. Of course lighthouses would not be well provided if they were financed by self-assessment when ships came into harbor. This situation does not, however, signify anything like market failure. If there is any failure, it resides in the elevation of resource allocations over institutional arrangements as the focal point of economic analysis. As Nathan Rosenberg (1969) explains pithily, Adam Smith's focal point was on the institutional arrangements of human governance and not on resource allocations, because allocations were subordinate to and derivative from those institutional arrangements. To assert that something is a public good is simultaneously to imply that entrepreneurial gains potentially exist from developing an organizational arrangement that would accommodate provision of that good. All that the public goods claim accomplishes is to explain that any such arrangement will not take the form of the conventional spot transaction where a customer pays a price and receives the service. But this type of transaction is only one of the numerous forms of transaction that occur continually within societies (Wagner 2012a, 2012b).

Shippers and ship owners have strong interests in having their ships arrive safely in harbor, as do the people who work on those ships and also the people who await the arrival of the merchandise those ships carry. The contemporary dichotomy between private and public goods suggests a binary choice: either accept the failures of ordinary market transactions to provide lighthouses or embrace the provision of lighthouses through ordinary political processes. Coase (1974) did not deny that ordinary market transactions would fail to provide lighthouses. But neither did he embrace direct provision through a Bureau of Lighthouses. At his analytical core, Coase rejected the contemporary focus of welfare economics on resource allocations, as exemplified by the contemporary theory of public goods, and proceeded by recurring to the classical focus on the institutional arrangements through which social interactions are governed.

Within this alternative orientation, a rich menu of possibilities comes into play, all of which transcend the orthodox focus on the

private-public dichotomy. For instance, ship owners could form some club-like arrangement to provide and maintain lighthouses. This arrangement would have problems to overcome, but all human arrangements have problems to overcome. Some working organizational arrangement would have to be developed, and from this arrangement would spring decisions about governance, membership, dues, and other means of financing the organization, about the location and staffing of lighthouses, and about the resolution of disputes among the members, among numerous other decisions. Issues of possible free riding might arise. This possibility points to further issues that would have to be explored in arriving at a workable resolution. For instance, the club of ship owners might also own rights of dockage at harbors and exclude free riders from docking. Some excluded party might object to being excluded and file suit, possibly claiming that harbors should be operated as public utilities. The menu of potential possibilities is manifold, and all these possibilities are in play in actual historical situations. The contemporary dichotomy between public and private goods is of no use either for understanding such situations or for working inside them as participants.

At this point, we arrive at a fundamental dichotomy between the scheme of thought exemplified by the classical theorists of the system of natural liberty and the contemporary theorists of welfare economics and second-best theory. The classical theorists operated through plausible reasoning. In contrast, most contemporary theorists operate with demonstrative reasoning, and with the contrast sketched beautifully and crisply by George Polya (1954). The difference in approach, moreover, resembles the two parabolas  $X^2$  and  $-X^2$  in that they point one's attention in opposite directions despite sharing a common point of origin. Likewise, theorizing from an analytical platform based on a system of natural liberty points analysts in the opposite direction than does theorizing from a platform where the domain for political action is unlimited. Murphy and Nagel (2002) embrace an unlimited domain for the political within society by arguing that private property is a myth because ownership is the rightful province of those who possess political power. Holders of political power might allow ordinary people temporarily to exercise what those people mistakenly describe as private property. Nonetheless, whatever rights a state allows people to exercise at one instant can be taken back at a later instant because all rights of ownership reside in the

state, as distinct from society. In advancing their assertion, Murphy and Nagel are doing little more than reflecting the unlimited domain of contemporary welfare economics, wherein the province of state action is governed by nothing more than some economist's formulation of the necessary conditions for Pareto efficiency.

## Demonstrative Reasoning, Plausible Reasoning, and Policy Analysis

Demonstrative reasoning entails *reduction* of an analytical object to something that can be represented by a theoretical model. If there is anything excluded from the model, it is not of analytical interest. Demonstrative reasoning is the realm of proof, both of demonstrating conditions under which some solution to a stipulated problem exists and of proving that a solution does not exist. When this scheme of thought is applied to the phenomena of the social world, the model and its conclusions and implications end up becoming that world. For instance, an analyst might posit a production function that describes production and cost relationships for a firm. Under some conditions and models, price will equal marginal cost. If generalizable, such conditions will describe a competitive equilibrium as being Pareto efficient. If such conditions are not generalizable, we face the quandary that the theory of the second best is thought to address. But this also becomes a world where nearly anything is possible, depending on the particular assumptions on which a particular model is based. The central feature of demonstrative reasoning in any case is that the model is the phenomenon of interest to the analyst.

In contrast, for plausible reasoning, models are aids for thinking but the object of that thought entails more than the model can contain. The discussion in the preceding section about lighthouses illustrated phenomena suitable for plausible and not demonstrative reasoning. To apply demonstrative reasoning in such circumstances is possible only by denying the relevance of phenomena that cannot be collapsed into the model. The condition that price equals marginal cost is one of the standard necessary conditions for Pareto efficiency. Recognition that those conditions might often be violated leads into the second-best world that is filled with ambiguity, which means there are nearly limitless policy measures that might be advocated by referring to second-best formulations. Yet a scheme of thought that can countenance nearly anything is

surely not much of a scheme of thought for guiding policy action in reality.

Consider the standard analysis of production and cost. Firms are assumed to produce their outputs in least-cost fashion, which means that a cost function is a boundary condition that separates what is possible from what is impossible. It is impossible for a firm to produce below its cost function, but it is possible to produce above that boundary. What is the basis for presuming that production occurs on that border and not somewhere above it? There exists no library of studies similar to the time-and-motion studies of long ago that show myriad instances of production occurring in least-cost fashion. Whether production occurs in least-cost fashion is not demonstrable, but it is open to plausible reasoning. From what we know about human nature, it is reasonable to think that people will exercise more care in organizing production when they hold residual claims over the quality of their judgments than when those residuals are distributed randomly throughout society. Residual claimacy describes private property and the private ordering of economic activity. Yet collective property and political ordering of economic activity has huge presence in contemporary society, and there is no plausible basis, as distinct from assertion, that the same diligence is exercised when people are not responsible for the value consequences of their actions as when they are responsible.

Much of the theory of competitive equilibrium reduces to the injunction to set price equal to marginal cost. Second-best theory can be advanced to explain why particular efforts to set price equal to marginal cost might not be a Pareto improvement in the presence of numerous instances where that equality condition is violated. The condition that price equal marginal cost is a demonstrable feature of a particular theoretical model. That condition is an implication of a model that seeks to minimize the cost of producing any single output. Yet in the world of plausible action there is no observable entity that corresponds to the economic box labeled "marginal cost." Marginal cost is a theoretical construct that pertains to a firm that produces a single product. The number of firms that produce single products might well be zero, and is small in any case.

Even such a simple firm as a small bakery produces many products, and would not reasonably confine its production to a single product. We may grant that a bakery produces bread. Almost surely, that bakery would also produce a variety of flour-based products

including rolls, muffins, and cakes. Moreover, it wouldn't produce just one type of bread, but would offer several varieties. A bakery that produces a single product would almost surely fail in open competition against bakeries that offered multiple breads, as well as complementary flour-based items. In this situation, however, marginal cost becomes an arbitrary matter of how the firm keeps its accounts. Multi-product firms are rife with common and joint costs that can be apportioned among the individual items of production only in some arbitrary fashion. To be sure, it is reasonable to think that the owner of a firm will want to generate as much useful information as economically useful from its accounts, to assist its officers in reaching judgments about whether to discontinue some lines of production or to create new lines. Choices about how to form such judgments will always be present, which means that the theorist's marginal cost does not correspond to what the practitioner might describe as marginal cost, as the essays collected in Buchanan and Thirlby (1973) explain.

## Second-Best Theorizing: Mainstream vs. Mainline Economics

The general theory of the second best, upon which Lipsey (2007) reflects after 50 years, uses demonstrative reasoning to demonstrate the general impossibility of Pareto improvements through piecemeal policy guided by the necessary conditions for Pareto efficiency. While this theory works against the offering of simple policy measures, it also opens into a vast expanse of hypothetical policy measures that feature an expansion in the violations of the conditions for competitive equilibrium as a means for pursuing Pareto efficiency in a second-best world. If reality conforms to all but one condition for Pareto efficiency, removal of the one impediment will be a clear improvement. But if two or more margins of imperfection exist, removing one imperfection can't be demonstrated to be a Pareto-efficient move. Where much policy analysis councils removal of what are claimed to be margins of imperfection, second-best theory can countenance the addition of further imperfections as a corrective movement.

Taxation, trade, and environmental regulation provide much material for second-best analysis. Consider a model where there is a monopolist whose production is a significant source of water pollution, and with it being assumed, as nearly all such models assume, that there is no common-law remedy for pollution. According to the

standard model of competitive equilibrium, the necessary conditions for competitive equilibrium are violated along two margins. One margin is production, where within the standard model of monopoly the monopolist produces at an output where price exceeds marginal cost. The second margin is pollution where the marginal social cost of production is presumed to exceed the marginal private cost. A regulatory policy with respect to monopoly would increase output until price equaled marginal cost. A tax policy with respect to pollution would increase price and lower output. A pollution tax might equalize private and social marginal cost, but would move consumers farther away from optimality. A regulation to force the monopolist to produce the competitive output would bring price into equality with marginal cost, but would also increase pollution damage. It is impossible to demonstrate as a general principle that a corrective policy applied to one margin will bring about global Pareto improvement when there are multiple margins along which the necessary conditions for Pareto efficiency are violated.

In providing a substantive illustration of second-best theory in action, Paul and Joseph Rubin (2014) explain that second-best theory can be used to justify the use of the Export-Import Bank to subsidize American firms engaging in international trade. They recognize that a superficial look would recommend abolition of the Bank because private banks will be able to make better judgments about profitability than a governmental bank. Yet Rubin and Rubin also explain that the American government through its Foreign Corrupt Practices Act makes it illegal for American businesses to pay bribes, which places those businesses at a competitive disadvantage in many parts of the world. An inefficient subsidy might be warranted in light of the inefficiency that arises from restricting the competitive ability of American firms. Following the spirit of second-best theorizing, the injection of a new margin of inefficiency might mitigate the inefficiencies that other policies create along other margins.

Second-best theory challenges the application of policy aimed at increasing the domain over which the conditions of competitive equilibrium pertain. First-best and second-best analyses both adopt the theory of competitive equilibrium as providing a solid point of orientation for policy prescription. This basing point is a feature of the theory of competitive equilibrium formulated in terms of demonstrative reasoning. This theory took its shape with respect to such bizarre assumptions as firms being universal price takers, with products

being homogeneous, and with knowledge being complete as a result of an effort among theorists to demonstrate conditions under which an equilibrium position could be found that would satisfy the law of one price (Stigler 1957). At one time it was thought that a large number of buyers and sellers would be sufficient to establish the law of one price, and with the desire to demonstrate that law being taken not from observation but from theoretical construction. At that point, Stigler explained, Francis Edgeworth pointed out that that large numbers wouldn't be sufficient if those myriad buyers and sellers comprised matched pairs who knew only of each other. In this situation there would exist a large number of bilateral monopolies. The urge to demonstrate the law of one price then led to the assumption of full knowledge of all relevant options, and economic theory gained even greater distance from its classical moorings in plausible reasoning.

Within a scheme of plausible reasoning, the welfare analytics associated with second-best theorizing is largely irrelevant. A theory of competition grounded in plausible reasoning would recognize that competition is a verb and not an adjective (McNulty 1968). Free or open competition is a human activity that entails the creation and execution of commercial plans within a framework of private property and liberty of contract. Such competition bears but faint resemblance to the theory of competition, whether of perfect or imperfect varieties, used within contemporary welfare economics with its focus on various marginal equalities. As already noted, marginal cost is an accounting artifact within actual commercial life, though it is also plausible to affirm along the lines of Alchian (1950) that those firms that hit upon more helpful accounting schemes will fare better than other firms because their economic calculations will provide superior managerial guidance.

Second-best theorizing seeks to fill imaginary economic boxes by adopting models that appear to address reality but actually address only caricatures of that reality. For reality to be addressed, plausible reasoning must be pursued because it is impossible for an external observer truly to know what arrangements will represent improvement for those who must live with those arrangements, as Elinor Ostrom (1990) illustrates through her numerous examinations of common property settings. Models can be significant aids to sound thinking, so long as it is recognized that the answer to whether a policy measure would be an improvement over an existing situation

is something that only the people who reside on the ground, so to speak, can answer. Sound policy within a framework of plausible reasoning entails a utilization of knowledge that is distributed among the members of a society and most certainly is not assembled within some professed expert's models.

## Where Do Policy Analysts Reside and What Does It Matter?

In their survey of the scholarship of Elinor and Vincent Ostrom, Paul Aligica and Peter Boettke (2009) explain that the Ostroms sought to develop analytical frameworks that allowed them to penetrate their material, in contrast to the orthodox efforts of social scientists to stand apart and gain distance from their material. This distinction is fraught with implications for welfare economics and the contemporary analysis of public policy even if it was not so significant at the time the welfare theory of natural liberty took shape. In those earlier times, governments were small, private ordering dominated economic activity, and the franchise was limited largely to property owners. The governance of polities was an activity that engaged the few, not the many. Those who participated in that governance had some emotional and behavioral distance from most of those to whom policy measures would apply. Policy discourse thus had a top-down character.

This top-down character has remained a staple of conventional policy analysis and espousal despite the dramatic change in institutional environment, through which governments became bloated, public ordering became ubiquitous, and the franchise became unrestricted. Within this contemporary institutional environment, policy espousal is a mass activity, not a restricted one, despite the widespread use of theoretical frameworks that remain essentially unchanged from the 19th century. The characteristics of policy espousal should be observed to reflect the different environments in which policy is espoused. Within contemporary environments, policy espousal would take on more of a bottom-up character than a top-down character. This change of character does not deny the presence of expertise in policy espousal, but it has that expertise penetrate into society as a *primus inter pares*, as against standing apart from the mass of society and acting on that society much as a shepherd acts to guide a flock of sheep.

Much policy espousal is conveyed by offering fables about prisoners' dilemmas. The analyst posits a situation where what people can achieve through independent action is inferior to what they could achieve through collective action. This presumption leads instantly to the claim that political action to impose the superior outcome will be beneficial to everyone. This scheme of thought is popular, though we may well wonder why it is so popular. It has no descriptive power because reality never appears in this fashion. It is as if the only option for providing lighthouses is to live with nonprovision through market arrangements or to embrace provision by a Bureau of Lighthouses. Yet this by no means conveys the situation, as was noted earlier. In this respect, it is worth noting that the prisoners' dilemma was originally a three-person and not a two-person game, and with the prisoners being reluctant duelists put in that position by the third player (Ellsberg 1956). In the three-player setting, a district attorney stood apart from the prisoners and imposed policy on them to promote the DA's objective. This is a scheme of thought suitable for a presumptively benevolent monarch shepherding his flock.

For a democratically organized polity, however, there is no monarchical position outside the society. In this setting, there is no meaning to the notion of people being caught in a prisoners' dilemma. People face problems all the time, of course, but there is no benevolent agent who stands apart from society and who possesses the knowledge required to impose improvement on society. There is nothing but the people inside society with their various forms of knowledge and expertise who seek to deal with their various sources of sensed uneasiness. The formalities of welfare economics and second-best theorizing do not speak to the problems of societal living together in close geographical proximity, for they posit an array of analytical boxes that can be filled only in a theorist's imagination. In modern times, that imagination doubtlessly has a veneer of civility about it whereby the wielders of power prefer to use velvet gloves to mask that power as against using mailed fists to show it. Use of the prisoners' dilemma allows power to wear velvet gloves by claiming that advocated measures are for the general good, just as the model shows. That model, however, is a construct of a theorist's imagination, and with that theorist effectively embracing a polity of unlimited domain. The alternative is to embrace the mainline and substantive approach to policy espousal that resides within the domain of plausible reasoning and natural liberty.

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