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The Limitations of Markets: Background Essay

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The Limitations of Markets: Background Essay

Neva Goodwin

There are a number of ways in which economic theory affects both the study and the practice of business. Economic theories may be offered to explain how businesses operate; students and teachers of business generally ignore some of the less realistic portions of these explanations, while making use of the more practical aspects. Economic theories are also used as justification for government policies that regulate or otherwise affect business.

There is an especially relevant part of economic theory that describes how socially optimal results can come about through perfect markets that allocate resources according to society's most preferred uses. This theory is important because it is the theoretic underpinning for policies and prescriptions that have significantly shaped the modern world. Recommendations to reduce trade restrictions – to privatize utilities, prisons, or water distribution – to reduce regulations on businesses – and generally to get the government “out of the way” of the free operation of markets – all are supported by the theory of perfect markets.

Business leaders and voting citizens as well as policy makers are influenced in their decision-making by the idea that a “perfectly free” market can produce a social optimum (a “best of all possible worlds”). Because this idea is so influential, it is important to understand the conditions that must be met for the theory to work. The theoretic prediction of the optimality of market outcomes presupposes a number of requirements, which can be grouped into three broad categories: (1) the assumption of perfectly functioning markets; (2) market-oriented patterns of motivation and behavior, on the part of both individuals and firms; and (3) the universal existence and scope of markets.

This essay will begin with an emphasis on (1). We will then touch briefly on the second and third requirements, and end with (4) a comment on the important issues that are buried in the concept of the “most preferred” uses for resources (referred to, above, in the statement that “socially optimal results can come about through perfect markets that allocate resources according to society's most preferred uses”).

1) THE ASSUMPTION OF PERFECTLY FUNCTIONING MARKETS

The predictions of standard economic theory – the expectation that freely operating markets will produce a certain kind of optimality – only hold good as long as the markets are not marred by serious imperfections. Such imperfections, sometimes referred to as **market failures**, include situations in which markets are affected by a number of issues. These issues, including public goods, externalities, transaction costs, and market power, will be described below.

In concluding the discussion of each of the topics in this section we present a short description of “solutions.” As we put forth suggestions for how to rid the market of imperfections, we also discuss reasons why some market failures are likely to endure. As the different kinds of market imperfections are described below, you should ask yourself: How often does this issue arise in the real world? How important is it? and, How should it affect my understanding of business policy, and of public policy?

Public goods

Some goods cannot, or would not, be well-provided by private individuals or organizations acting alone. A **public good** is one where the use of it by one person does not diminish the ability of another person to benefit from it (technically called “nondiminishing” or “nonrival”), and where it would be difficult to keep any individuals from enjoying its benefit (“nonexcludable”).

For example, if a local police force helps make a neighborhood safe, all the residents benefit. Public roads (at least those that have no tolls) are also public goods, as is national defense. Publicly-provided education and quality childcare are public goods because everyone benefits from living with a more skilled and socially well-adjusted population. A system of laws and courts provides the basic legal infrastructure on which all business contracting depends. Environmental protection that makes for cleaner air benefits everyone.

“In a community where public services have failed to keep abreast of private consumption.... in an atmosphere of **private opulence and public squalor**, the private goods have full sway. Schools do not compete with television and the movies...”

“A community decision to have a new school means that the individual surrenders the necessary amount, willy-nilly, in his taxes. But if he is left with that income, he is a free man. He can decide between a better car or a television set. The difficulty is that this argument leaves the community with no way of preferring the school.”

(John Kenneth Galbraith, *The Affluent Society* (Mariner Books, 1998, 40th Anniversary Edition.) The first quotation is from p. 191; the second from p. 198.)

Because it is difficult to exclude anyone from benefiting, public goods cannot generally be bought and sold on markets. Even if individual actors would be willing to pay if necessary, they have little incentive to pay because they can’t be excluded from the benefit. The term **free riders** is applied to people who seek to enjoy a benefit without paying for it. Because of the problem of free riders, it often makes sense to provide public goods through government agencies, supported by taxes, so that the cost of the public benefit is borne by the public at large.

Solutions: By definition, the only broadly applicable way to make public goods available is to supply them through some kind of collective action. Often this implies

government, but the collective action could also be on the level of a family or an industry group. Disagreements around this subject are generally not about what kind of institutional response is required when something has been identified as a public good. Rather, disagreements tend to revolve around whether something is a public good; and, if it is, how much of it the society is willing, collectively, to provide.

Externalities

Markets are sensitive only to benefits or costs that can be translated into willingness to pay on the part of buyers, or into costs incurred by sellers. An economic choice or action by one economic actor that affects the welfare of others who are not involved in that choice or action is called an **externality**. In defining externalities we focus on effects that impinge on third parties through non-market channels. More specifically:

- * A **negative externality** (sometimes referred to as an “external cost”) exists when an economic actor produces an economic cost but does not fully pay that cost. A well-known example is the manufacturing firm that dumps pollutants in a river, decreasing water quality downstream.
- * A **positive externality** (sometimes referred to as an “external benefit”) exists when an economic actor produces an economic benefit but does not reap the full reward from that benefit. Positive externalities are less well-known, but can be vitally important to individual and societal well-being. Examples include parents who, out of love for their children, raise them to become decent people (rather than violent criminals). In so doing they also create benefits for society at large. Similarly, when one person gets vaccinated against a communicable disease, she not only protects herself, but also others around her, from the disease’s spread. In both cases there are social benefits from individual actions: Well-educated, productive citizens are an asset to the community as well as to their own families; and disease control reduces risks for everyone.

When a market transaction affects the welfare of third parties who are not involved in the transaction, the market behavior of the economic actors will not reflect all the preferences of, or all the costs to, everyone affected. This is because the costs or benefits affecting the particular actors differ from the costs or benefits to society as a whole. For example:

- * If the cost of polluting is not borne by the polluters, they will not feel an economic motivation to reduce their creation and discharge of wastes.
- * If employers do not benefit in full from the cost of providing training to their employees, they are likely to provide less of that training than is socially desirable.
- * If the price of water or of petroleum is set below the true cost to society of using these resources, this will produce an incentive to use too much of them.

In general, each of these examples involves a situation in which there is a difference between private and social costs (or benefits); as a result, the monetary incentives of the marketplace encourage socially undesirable behavior. If all of the things that flow through an economy are paid for according to their full social as well as private value (including things that have negative value), this will provide the motivation for these things to be produced in proportions that correlate precisely with their full value. That is a good first approximation for a definition of economic efficiency. If economic activities affected only the actors directly involved in decision-making about them, we might be able to think about economic activity primarily in terms of individuals making decisions for their own benefit. But we live in a social and ecological world, in which actions, interactions, and consequences are generally both widespread and interknit. If decisions are left purely to individual self-interest, then from a societal point of view too many negative externalities will be created, and too few positive externalities: The streets might be strewn with industrial wastes, while children might be taught to be honest in dealings within their family, but not outside of it. Market values and human or social values do not always coincide.

Environmentalists and economists are often on different sides of policy questions. The concept of externalities is one on which they could be expected to agree, at least, in concept; it is unfortunate, therefore, that environmentalists so often misunderstand what this term means to economists. Environmentalists may say (and they often do), “When economists use this term it shows how little they care about the environment; they dismiss it because it is ‘external’ to the economy.” This is a misunderstanding: in fact, if economists sometimes prefer not to recognize serious externalities this is not because they do not matter; rather it is because externalities matter so much that they can upset the whole apple-cart of mainstream economic theory.

Some of the most important externalities have to do with the economic activity of resource maintenance¹: Relying on markets alone to coordinate economic activities allows many activities to happen that damage or deplete the natural environment, because the damage often does not carry a price tag, and because people in future generations, who will be most affected, are not direct parties to the decision-making.

Solutions: The standard economic response to this topic is “Internalize the externalities!” For example, find ways to charge businesses the full cost for the pollutants they emit, or raise the price of coal, gasoline, etc. to represent the full cost of the increased risks to the economy from global climate change, as well as the health and environmental damages from burning fossil fuel. One economist has made the rather

¹ Contextual economics (as formulated, for example, in the introductory textbook, “*Microeconomics in Context*”—Houghton Mifflin, 2005) identified four basic economic activities. These include production, distribution, consumption, and resource maintenance.

extreme suggestion of tying retirement benefits to the earnings of each person's children.² There are many cases where intelligent and imaginative means can be found to internalize externalities, but the difficulties are also many, including the following:

- * The actors who impose negative externalities on society often do so with impunity because they possess political and economic power. For example, some automobile manufacturers and some firms in the petroleum industry are worried about results that might show that their products are posing a serious danger to society. While other firms in these industries have addressed the dangers of global climate change in constructive and creative ways, the less progressive firms have funded scientists to dispute the findings of the far more numerous and well-reputed scientists who put out the reports of the Intergovernmental Panel on Climate Change (IPCC), and have used the results to support massive lobbying of governments to prevent action being taken to tighten automobile emissions standards³.
- * Defining the precise cost or benefit in question is difficult, can be costly, and, again, is complicated by interests. Who is in a position to perform such calculations? Whose figures can be trusted? While cost-benefit analysis is often touted as the solution to these problems, it is often marred by data inconsistency, by difficulties in quantifying values that may be unquantifiable (such as the value of a life), and by the motivations of those collecting and evaluating the data. As has been noted by Frank Ackerman and

2 The justification for this idea, put forth by Shirley Burggraf (*The Feminine Economy and the Economic Man: Reviving the Role of Family in the Post-Industrial Age*), is that it is costly to raise children; those who have none have more opportunities to save for their own retirement, and parents who have given up such savings opportunities should be rewarded by the state. One questionable assumption (among several) in this proposal is that better parenting produces children with higher earnings.

3 The website www.exxonsecrets.org provides a comprehensive list of organizations that Exxon-Mobil has funded since 1998, indicating "how Exxon-Mobil funds climate change skeptics." The site lists 125 organizations. Greenpeace also reports on Exxon-Mobil's attempts to prevent climate change action. See "A Decade of Dirty Tricks" (2002) at http://www.stopesso.com/pdf/Dirty_Tricks.pdf and "Exxon's Weapons of Mass Deception" (2002) at http://a520.g.akamai.net/7/520/1534/release1.0/www.greenpeace.org/multimedia/download/1/50571/0/exxon_long.pdf, which provides some details of the links between Exxon-Mobil and organizations attacking the climate change consensus.

In recent decades General Motors has led the effort to fight against increased emissions standards; GM's political successes have probably contributed to its loss of economic competitiveness against foreign competitors, such as Honda, which are, instead, preparing for a world in which more externalities, such as the environmental impact of carbon emissions, will be internalized. A Dec. 8, 2004 article in the NY Times mentions that GM (along with seven other automakers) filed suit against the state of California over the state's law to regulate greenhouse gas emissions (see <http://www.nytimes.com/2004/12/08/business/08auto.html?ex=1260248400&en=7e162bf9a583e2a5&ei=5088&partner=rssnyt>). The Union for Concerned Scientists recently criticized an ad campaign by the Auto Alliance, an automaker lobbying group that includes GM, Ford, BMW, Toyota, and others. See http://www.ucsusa.org/clean_vehicles/avp/automaker-v-the-people-alliance-ad-fact-sheet.html. For a March 22, 2005 NY Times article on the ad campaign, see <http://www.nytimes.com/2005/03/22/business/media/22adco.html?ex=1269147600&en=70d951945fa991fe&ei=5090&partner=rssuserland>. This article notes that Honda is not a member of the Auto Alliance and recognizes that "CO₂ emissions remain a significant contributor to global warming trends." Honda also got the highest ranking by the UCS in their evaluation of emissions by different automakers (GM ranked the lowest), see <http://www.climateark.org/articles/reader.asp?linkid=37091>.

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In practice, most cost-benefit analyses could more accurately be described as ‘complete cost-incomplete benefit’ studies. Most or all of the costs are readily determined market prices, but many important benefits cannot be meaningfully quantified or priced, and are therefore implicitly given a value of zero. Thus [this methodology] systematically disfavors protection of goods that, like health and environmental protection, are priceless. (*Priceless: on knowing the Price of Everything and the Value of Nothing*. New York: The New Press, 2004; p. 40)

- * Intelligent institutional design can sometimes overcome the obstacles of politics and measurement, to create laws or regulations that do successfully internalize externalities. Markets for trading emissions permits provide some good examples. However, it is highly unlikely that the functions of creating or maintaining such systems can be internal to any market system. The internalization of externalities requires an external force – usually government – to set and enforce rules.

Transaction costs

Transaction costs are the costs of arranging economic activities. In many standard economic models – as distinct from the thinking that goes on in actual firms – transaction costs are assumed to be zero. If a firm wants to hire a worker, for example, the academic economist may assume that the only cost involved is the wage paid. In the real world, however, the activity of getting to a hiring agreement may involve its own set of costs. The firm may need to pay costs related to searching, such as placing an ad or paying for the services of a recruiting company. The prospective worker may need to pay for preparation of a resume and transportation to an interview. One or both sides might hire lawyers to make sure that the contract terms reflect their interests. Because of the existence of such costs, some economic interactions that might lead to greater efficiency, and that would occur in a transaction-cost free, frictionless idealized world, may not happen in the real world.

Solutions: The increased availability of information on the Internet is an example of a technology breakthrough that can provide good solutions to a market failure; web-savvy individuals and firms are increasingly able to shorten the time and decrease the cost of finding a good fit between skills and job requirements. While this may increase the “digital divide” between individuals who can, and those who cannot, use this resource, one can imagine a future in which web-literacy is raised to the level of old-fashion reading literacy. Other ways of reducing transactions costs include programs to provide legal and other assistance to less-well-resourced individuals and firms. Some such programs are charitable, such as the Service Corps of Retired Executives (<http://www.score.org/>). Others are run by governments, at various levels, and others are initiated by businesses.

Market power

In the standard economic model all markets are assumed to be “perfectly competitive,” such that no one buyer or seller has the power to influence the prices or other market conditions they face. Since perfect competition is central to the conception of perfect markets, it has been extensively analyzed. There are a number of conditions that are required in order for perfect competition to exist, to wit:

- Each market must involve trading in one **homogeneous good**, so that price, rather than other considerations, is the overwhelming influence on consumer choice. That is, any one unit of the good must be virtually identical to any other.
- Each market must have **no significant barriers to entry**, including no brand-name loyalties, and no need for high levels of advertising, as well as no technological and financial barriers to entry.
- There must be **no increasing returns to scale**, because increasing returns create barriers to entry. If the technology of production allows vastly lower costs to larger producers than to smaller ones, then the industry will come to be dominated by a few large firms, creating an oligopoly (or even monopoly) rather than perfect competition.
- **All factors of production must be mobile**. That is, labor, capital, and raw materials must be able to be moved from one location to another, rather than being at the mercy of a single local firm or industry.
- There must be **numerous, small buyers and sellers**, all of whom are compelled to be **price takers** since they cannot acquire significant market power.
- **Information about the market must be freely and equally available** to all actual and potential market participants. That is, everything one needs to know about prices, quantities, and qualities of goods and services for sale must be public, or readily accessible, knowledge.

These assumptions imply additional features of perfect competition. For example, consider the assumption that a perfectly competitive industry is made up of numerous small firms and consumers, all of them price takers. This implies that the market plans of each buyer and seller are independent, and that collusion between firms or consumers to influence prices is impossible (since there are so many other participants in the market).

While competition does exist in the real world, and is, indeed, becoming increasingly fierce through the combined forces of globalization and the information revolution, nevertheless many firms do have market power. For example, when there is only one firm (a monopolist) or a few firms selling a good, they may be able to use their power to increase their prices and their profits. A large multinational corporation with the ability to place large orders with suppliers anywhere in the world has considerable power over the terms on which its suppliers can sell to it. Workers may also be able to gain a

degree of market power by joining together to negotiate as a labor union. A government, too, can have market power, for example when the Department of Defense is the sole purchaser of military equipment from private firms.

Perfect competition also assumes that there is a homogeneous product, made by numerous firms that are small relative to the market. Indirectly, this implies that there are no significant economies of scale, nor advantages of bigness in general; for if there were, a few firms would be able to become large, drive others out of business, and dominate the market. However, economies of scale are widespread in production and distribution. So, too, is product differentiation. Under these circumstances, firms will not all stay small. Some will produce enough to benefit from economies of scale, lowering their costs and enabling them to force others out. Some brands will become well-known and sought after, whether for reasons of social status or technical characteristics.

Indeed, as firms become bigger, it appears that they gain some organizational advantages, perhaps going beyond the technical economies of scale in production. That is, there may be some advantages to bigness in general. Many corporations now function internationally, and have revenues in the tens of billions of dollars. The decisions of individual large corporations can have substantial effects on the employment levels, economic growth, living standards, and economic stability of regions and countries. Governments may need to factor in the responses of powerful business groups in making their macroeconomic decisions. National leaders may fear, for example, that raising business tax rates or the national minimum wage may cause companies to leave their country and go elsewhere. Many corporations have the ability to influence government policies directly, through lobbying, campaign contributions, and other methods.

Solutions: There is a long literature on monopoly, oligopoly, and how to protect a market from such imperfections.⁴ It is well recognized that free market forces, unhindered, will inevitably produce concentrations of power. Government actions, such as the granting of patents and other forms of monopoly rights, can also contribute to the creation of market power. Proposals to restrain market power run the gamut from active enforcement of anti-trust law to new suggestions for funding research and development in order to replace a patent approach to intellectual property with other mechanisms.

4 Any policy- or business-oriented “Principles of Microeconomics” textbook will discuss at greater length the legal and other means available to restrain market power and preserve market competition. Historical and political overviews of antitrust policies in the United States are provided in

- “Policy Watch: Developments in Antitrust Economics” by Jonathan B. Baker, American University, *Washington College of Law Journal of Economic Perspectives*, Vol. 13, No. 1, 1999
- “Antitrust Policy: A Century of Economic and Legal Thinking” by WE Kovacic, C Shapiro (*Journal of Economic Perspectives*, 2000). This may be viewed at <http://econwpa.wustl.edu:8089/eps/le/papers/0303/0303006.pdf.gz>.

Some other aspects of this subject are available in books such as:

- *American Agriculture and the Problem of Monopoly: The Political Economy of Grain Belt Farming* by Jon Lauck (University of Nebraska Press; 2000)
- *Rebalancing the Public and Private Sectors: Developing Country Experience* by O. Bouin, Ch.A. Michalet (A publication of the OECD – Organization for Economic Co-operation and Development; 1991)

(2) MARKET-ORIENTED MOTIVATION AND BEHAVIOR

In addition to the presence of perfectly competitive market structures, the prediction of socially optimal results in the standard economic model also assumes particular patterns of motivation and behavior. Both firms and individuals must conform to defined standards of economic rationality – firms by maximizing profits, and individuals by making well-informed market choices that maximize their own wellbeing.

To use a common phrase for this pattern, participants in the market must behave as *homo economicus*. This means that individual economic agents look only to their own self-interest, seeking to maximize only their own individual well-being. References to such behavior as "rational" unfortunately seem to imply that economists consider anything other than pure selfishness to be somehow silly, or irrational.

There are many reasons why this simplified view of human motivations, while covering a lot of circumstances, is nevertheless often inadequate. Humans (like other animals) have, to be sure, evolved with a strong instinct to do what it takes to survive. People are born with a range of characteristics, including greater or lesser tendencies to greed and aggressive competition. But the range of common human characteristics also includes responsiveness to expectations, a desire to cooperate, empathy, and concern for those in need. Sometimes concern to protect others, or for an ideal, or for how one is perceived, can even be stronger than the survival instinct.

The standard economic model abstracts to a highly simplified view of human nature that assumes only one basic drive: the drive to get what one wants. We all know that models must be simpler than the real world; what is the importance of the particular kind of simplification put forth in the neoclassical economic model? One answer is that day to day business activities depend as much on cooperation as on competition. In work groups, and in other coordinated activities within a firm, competition is a constructive driver of some behaviors, but the enterprise would likely fall apart if the sense of cooperative endeavor towards a common goal were entirely replaced by individual striving for personal advantage. Business management has much to do with motivating people, from managers to the shop floor. While it is rarely safe to rely solely on good intentions, the opposite assumption, of purely self-interested behavior, tends to be a self-fulfilling prophecy.

Another problem with the basic neoclassical model, in which purely decentralized decisions lead to efficient outcomes, is the assumption that people have easy access to all the information they need to make good choices. This static analysis ignores the time it might take for a person to make a decision, or the time it might take for a factory to gear up to produce a good. In the real, dynamic, world, getting good information may be difficult, and planning for an uncertain future is a big part of anyone's economic decision-making.

A manufacturing business, for example, might be considering whether or not to borrow funds to build an additional factory. If the company's directors were able to know in advance exactly what demand for its products will be like in the future and what interest rates will be – along with additional information about things like future wages, energy costs, and returns on alternative investments – the decision would be a simple matter of mathematical calculation. But the directors will have to guess at most of these things. They will form expectations about the future, but these expectations may turn out to be correct or incorrect. If their expectations are optimistic, they will tend to make the new investment and hire new workers. As is well known, optimism can be contagious; if a lot of other business leaders become optimistic, too, then the economy will boom. If, on the other hand, people share an attitude of pessimism, they may all tend to cut back on spending and hiring. Since no single business wants to take the risk of jumping the gun by expanding too soon, it can be very difficult to get a decentralized market economy out of a slump. This illustrates one manner in which human behavior that is different from the model of *homo economicus* can affect the macroeconomy.

Information and expectations can also affect the interactions of individuals and firms at the micro level. Asymmetrical information frequently goes along with – and helps to foster – asymmetrical power. Newspapers in recent years have carried many stories about insider trading – the situation in which stock-brokers, individuals inside companies, or others, have special information about what some firm is about to do, or problems it is about to encounter. It is often illegal for these insiders to decide to buy or sell stocks based on such “insider” knowledge, as this is seen to confer an unfair advantage. With reference, again, to the theory of perfect markets, when there is such an asymmetry of information prices are not set in a manner that will bring about “the best of all possible worlds.”

As mentioned earlier, the expansion of market information on the web is helping to remove some of these asymmetries; a small avocado producer in Latin America can now find out enough about prices around the world to improve her bargaining position vis-à-vis the local single purchaser. Nevertheless, those with large resources still can know much more about the worlds of finance and business than those with fewer resources.

Thus, to the extent that the formal expectation of socially optimal results depends on the existence of idealized market, the reality of individual, not-perfectly-rational (in the sense of entirely self-interested), and not-perfectly-informed human action may create market failures.

3) THE EXISTENCE AND SCOPE OF MARKETS

In addition to asking whether markets are functioning perfectly – or are close enough to perfection to support standard policy conclusions – we have to ask about whether markets exist at all. There are plenty of places where they do not: In the United States we do not have formal, efficient markets for husbands, for body parts (though there

are illegal, international markets for some organs), or for the probable future earnings of a child who is learning to play the violin.

The free market model assumes that *markets exist for, and are used to allocate, everything that affects economic wellbeing*. That is, it is assumed that society relies completely on the market for all economically relevant resource allocation. This general statement has a number of more specific implications. Total reliance on the market implies that there are no free goods or services. Everything of value that a wife does for a husband, a father for his children, or a friend for another friend, is paid for according to a price that has been determined through the market.

Full scope for the market implies a definite, and limited, role for the government. In negative terms, the government must avoid any distortion of prices, or any actions that would undermine market mechanisms. There must be no subsidies, price supports, price controls, or taxes or tariffs on particular goods. And the government must certainly avoid direct, nonmarket distribution of particular commodities to individuals. At the same time, the government must ensure that contracts and property rights are enforced, creating the legal and political environment within which the market economy can function.

While this is not quite a call for total inaction, it implies a smaller role for government than exists in virtually all nations today. It also suggests some logical inconsistencies. For example, the government's role in creating the framework for the market may need to include the creation of policies to address environmental and other externalities. However, it is often impossible to implement such policies without having some distorting effect on prices.

Finally, if the market economy is to make an optimal choice between present and future consumption, there must be markets existing today for future investments and future consumption of particular goods. Here the theoretical requirements become somewhat esoteric, calling for a complete set of futures markets in which commodities are traded across time periods. For example, in addition to ordinary markets for refrigerators and cars, there must be markets in which consumers can buy options to purchase refrigerators and cars five years from now, at prices that are specified today. The same must be true for all other goods and all time periods. In reality, futures markets are well established only for bulk agricultural and industrial commodities and for some types of financial investments; for other goods and services, futures trading is the rare exception, not the rule.

There is much fungibility between paid and unpaid economic activity. An individual can receive comfort at a time of stress or bereavement from a friend or from a paid counselor. People who are sick or disabled can be cared for by family or by paid nursing staff. The elderly can live at home, with paid or unpaid help, or in special facilities. Such facilities may be entirely marketized, or may include a component of charity, such as volunteer work. If, as we assume, *the ultimate goal of any economic system is human well-being, in the present and the future*, then it is important to continue the debate over which approach, or combination of approaches, ultimately works out best

for all concerned (recognizing that there may be some irresolvable conflicts; what is best for A may simply not be the same as what is best for B). But standard economic analysis only looks at that part of the world that operates through markets. This is one reason that its optimality predictions and prescriptions may not address the realities of the world we live in.

4) HUMAN NEEDS AND EQUITY

There is another, deeper reason why standard economic prescriptions may not, in fact, lead to a social optimum.

We began with the statement that economic theory describes how socially optimal results can come about by freeing up markets to allocate resources according to society's most preferred uses. In concluding this essay we address the issue of how we can define and identify "*society's most preferred uses.*"

"Value" in economic terms is synonymous with price. The social preferences that are visible to standard economic analysis are what economic actors in a society are able and willing to pay for. Demand is ultimately dependent on consumer demand; that is, firms may demand parts and other inputs from suppliers, and raw materials from primary industries, but they only do so on the expectation that the final products will be bought by consumers. The only consumer demands for goods and services that are visible to the standard economic model are those that are backed up by a consumer's ability to pay. This has several implications.

The model does not take into account non-marketed production, such as the care given to children, the sick and the elderly by family and friends. There is nothing in standard models that assures that these sorts of production will be supplied in adequate quantities and quality.

There are important categories of people – especially, but not only young children – whose preferences are either not taken into account by the market (because they are not in a position to make market decisions), or whose uninformed preferences are heavily manipulated by market forces.

There is nothing in the model that assures that resources are distributed in such a way that people can meet their basic human needs. If a few rich people have a lot of money to spend on mac-mansions while many poor people lack the money to pay for basic health care, free markets will motivate producers to respond to the demand for mac-mansions, but not to the need for basic health care.

The standard model claims a kind of justice, in that people are paid in some relation to the value of what they produce. This claim is open to a number of arguments. Production is normally a cooperative affair, so that it is hard to determine precisely what portion of the output is due to the efforts of which worker – or supervisor, or CEO. The

allocation of income among workers in an enterprise has much to do with power: it is easy to find instances where a CEO is able to keep his income and bonuses rising even while the firm is declining in profitability and workers' pay and pensions are being cut. Moreover, the value of the product depends entirely on the composition of demand. In a highly unequal society where the poor have little money to buy bicycles while the rich are spending millions for yachts, incomes will reflect a "value" of the product that is very different from the well-being value.

All of these issues relate to the point raised at the beginning of this section: "Value" is a word that has important meanings in most human discourse, but these meanings are very different from the economic equation: value=price.

Clearly, although market systems have strong advantages in some areas, they cannot solve all economic problems. To some extent private non-market institutions may help remedy the market failures that result, for example, from the inability of markets to supply enough public goods, or to prevent the production of negative externalities. For instance, a group of privately-owned factories located around a lake may voluntarily decide to restrict their waste emissions, because too much deterioration in water quality hurts them all. Or a widespread custom of private charitable giving may enable poor people to turn some of their needs (e.g., for food) into effective market demand. But sometimes the problems are so large or widespread that only governmental, public actions at the national or international levels seem to offer a solution.

Real-world choices are not limited to either (a) a system where a centralized government exerts total control or (b) the radically "free market" system described in the standard economic model. Because of the existence of public goods, externalities, transaction costs, market power, questions of motivation, information and expectations, and concerns for human needs and equity, economic systems cannot rely on "free markets" alone if they are to generate human well-being. Actual market-oriented economies always include a mixture of decentralized private decision-making (regarding actions that do, and that do not, operate through markets) along with more public-oriented decision-making.

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REFERENCES

Note: The Featured Collection on Market Failure, within which this essay is embedded, offers a wide range of references and cases on the topics discussed here. The following references are merely intended to supplement these.

Everything for Sale: The Virtues and Limits of Markets by Robert Kuttner (Chicago: University of Chicago Press; 1999). The BOOK points out several industries (including health care, education, and telecommunications) where unregulated markets fail to produce optimal results.

A related ARTICLE by Kuttner was published in *The American Prospect*. It is available at <http://www.prospect.org/print/V8/31/kuttner-r.html>.

The Limits of Market Organization, Richard Nelson, ed. (New York, Russell Sage Foundation; 2005). The BOOK includes chapters by 12 different authors, divided into sections on the following areas where markets alone cannot adequately organize an economy: infrastructure, natural monopoly and equitable access; human services; science and technology; and protecting the public and the state.

“What Money Can’t Buy: The Moral Limits of Markets,” by Michael Sandel; LECTURES from 1998 that discuss problems with commodification; this may be found at www.tannerlectures.utah.edu/lectures/sandel00.pdf.

1995 TESTIMONY before the International Congress of Advertising and Free Market on market failures in advertising may be found at <http://www.ftc.gov/speeches/azcuenaga/lima.htm>.