

8.3 UTILITY AND PARETO OPTIMALITY: THE ORTHODOX ECONOMIC VIEW OF SOCIAL WELFARE

LEARNING OBJECTIVES

By the end of this section, you will be able to:

- Define Pareto optimality
- Explain how orthodox determines the conditions for societal well-being to be maximized.
- Analyze the ethical issues surrounding Pareto optimality.

For orthodox economists the ideal outcome for an economy is an outcome in which Pareto optimality is achieved. The concept of Pareto optimality owes its origins to a 19th century Italian mathematician Vilfredo Pareto. Stated simply, the Pareto criterion for determining whether an economy has produced the “best” or “ideal” outcome is fulfilled when economic outcomes are such that there is no way to make any one or many people better off without making any one person or many worse off.

On its own the Pareto criterion for social well-being is an attractive proposition. After all if someone is harmed in order to improve the plight of someone else or many others, then it appears obvious that someone is being granted preferential treatment at the expense of someone else or many others. The granting of preferential treatment hardly seems fair or equitable. In this context, the utilization of the Pareto criterion eliminates the need to make those choices.

Additionally, the granting of preferential treatment opens the door to a long series of ethical questions that can be avoided by applying the Pareto criterion. On what basis is the decision to harm or benefit being made? How or when are interventions that inflict harm or bestow benefits decided? If an intervention does take place, who is making the decision to inflict harm or bestow benefits? What is the degree of harm or benefit triggered by an intervention? What is the ethical basis for intervening? In many ways, whenever a government must make budgetary decisions, it is asking and answering these questions. For example, perhaps government policymakers would like to expand the size of the military. Expanding the size of the military requires that the government finance the expansion of the military. Financing military expansion may require that other government spending programs be reduced. Alternatively, perhaps taxes will be raised to pay for the military expansion. Either way, whomever is responsible for financing the military expansion is directly paying for someone else to benefit. In defense of expanding the military, policymakers may have to justify to the public why the public will, presumably, benefit from the expansion of the military. The Pareto criterion appears to clearly answer these questions. If a society knows when it is in a position of maximum benefit, then,

on the basis of the Pareto criterion, no justification can be made to either harm or benefit anyone, causing all of the above questions become moot.

Something important has now been revealed. The Pareto criterion only becomes applicable when there is a measure of what it means for someone, or many, to benefit and for someone, or many, to be harmed. If some kind of metric exists, then, once measured, a society will know when no one person or many can be made better off without someone or many being harmed. Therefore, what is essential to the Pareto criterion is the mechanism a theorist uses to measure and determine a society's overall well being. For orthodox economists, the measure of individual and social well-being is the amount of utility that individuals and society has derived.

UTILITY MAXIMIZATION AND PARETO OPTIMALITY: ETHICAL IMPLICATIONS

Given the nature of utility maximization, human social interaction is reduced to exchange between individuals. Clearly the utility assumption generates a distinct depiction of human beings, human needs, and human society. The utility maximizing assumption also generates a specific conception of what is an economically "just" society. In other words, orthodox economics has a specific view of what it believes is the best way for society to be organized economically.

The orthodox worldview can be neatly summarized. If people desire utility, then people can acquire utility by exchanging with others. Once people exchange with others, the act of exchanging makes them better off. Once all exchanges are complete, all people are as well off as they can become economically. If everyone is as well off as they can become, then no one, or many, can be made better off without someone, or many, being made worse off. As far as orthodox economics is concerned, society has reached its ideal, Pareto optimal, outcome because people were free to make choices within an economy that facilitates exchanges, namely a market based economy.

At this point it should be clear that utilitarianism provides the philosophical foundation supporting orthodox economics while Pareto optimality represents the final outcome of the orthodox social welfare theory. If utility is the initial proposition on which orthodox theory is built, and Pareto optimality is the culmination of orthodox economic theory, then the utility and Pareto optimality must be intrinsically linked.

The dilemma for orthodox economics is that by accepting the utility theory of value and adopting the Pareto criterion as a social welfare measure, orthodox economics produces a very specific, and ethically limited, framework. For example, by focusing exclusively on the point of exchange, orthodox economics tends to ignore situations in which people are in disagreement with one another, circumstances of conflict. The reason why conflict is generally ignored is because the conditions of exchange are assumed in advance. For orthodox economics, the institutions of exchange, such as markets, contract law, and contract enforcement, are assumed to be in place prior to economic agents exchanging. Additionally, by assuming that initial endowments are given, orthodox economics assumes the existence of income on the part of trading parties, but generally fails to recognize where income originates.

The trouble for orthodox economics is that it is not hard to imagine a world in which one's income is affected by discriminatory factors such as racism, sexism, sexual orientation or any other divisive perception. In fact, imagination is not necessary, as the real world is filled with examples of discrim-

ination and exploitation. Regardless of form, the outcome of discrimination is the same, some are able to exploit others by virtue of their power to discriminate. Or, in another example, it is clear that conditions of inequality can empower some relative to others. People that disproportionately benefit from economic outcomes are endowed with more income and have the power to acquire resources. In instances in which the acquisition of resources becomes concentrated in the hands of a small number of people, those with great wealth and/or income may have the power to exploit their positions of power at the expense of others. Of course, with exploitation, conditions of inequality may be worsened allowing unequal situations to become further entrenched.

Conscientious observers of a capitalist market system, including utilitarians, are aware that situations of exploitation are not only present, but virtually unavoidable. Given the existence of conflict and inherent disparities of power, it is easy to imagine that someone might want to intervene in economic affairs in order to level the playing field. For example, someone might advocate to pass laws to penalize discriminatory behavior so as to reduce its prevalence, or others might seek to impose taxes on some so as to redistribute income or wealth in the hopes of reducing inequality. The interventions in questions would certainly be designed to make someone, or many, better off at the expense of someone else, or many others. As a result, no matter how justified the interventionist actions may be, and they are certainly justifiable in the examples provided above, within the utilitarian and Pareto criterion context the interventionist actions cannot be supported!

If the significance of utilitarianism and the Pareto criterion remains obscure, then perhaps less abstract and much more obvious examples may be useful. The following situations, using subjective measures of utility, are Pareto sub-optimal and cannot be justified:

1. The defeat of Nazi Germany because Adolf Hitler was made worse off.
2. The end of slavery in the American South because slave owners were made worse off.

Clearly, to any reasonable observer the defeat of Nazi Germany and the end of slavery in the American South are justifiable as they ended horrible chapters in human history. However, by following the utilitarian belief and coupling it to the Pareto criterion, orthodox economics cannot really make any argument to defend the destruction of Nazi Germany and the conclusion of slavery in the American South. Subjectively speaking, Hitler's loss of utility may have more than offset the world's gain in utility and thus made the world worse off. Or, subjectively speaking, the loss of utility to slave owners in the South may have more than offset the gain in utility experienced by the former slaves. After all, if no quantifiable measure is possible it is actually impossible to know whether or not total utility has become larger or smaller so there is no way for a utilitarian to justify an intervention in the above, albeit extreme, cases. Additionally, any intervention in the above cases required someone or many being made worse off in order to make some or many better off. The utilitarian tradition has no adequate way of applying anything more than some kind of hedonistic, happiness seeking, value judgment to human action. Obviously, there are serious moral and ethical weaknesses associated with the acceptance of utilitarianism.

In summary, the significance and value-laden implications of accepting utility, appears to elude most orthodox economists. In neoclassical theory price and utility are equalized, specifically price and marginal utility. Therefore, price equals value and this concludes the story. The neoclassical oversimplification of value theory, which treats value and price as synonyms, fails to recognize that by believing in utility, the orthodox economist is believing in a set of pre-ordained value judgments. The importance of this point cannot be overstated. Observe the significance of prices in a capitalist econ-

omy as described in this textbook. Marveling at how fluidly consumers and producers respond to price changes in markets the textbook states:

“...adjustments in response to price changes happen all of the time in a market economy, often so smoothly and rapidly that we barely notice them...For both the U.S. economy and the world economy as a whole, markets – that is, demand and supply – are the primary social mechanism for answering the basic questions about what is produced, how it is produced, and for whom it is produced.” (pg. 71)

Because prices send the signals that determine the allocation of resources in a market economy, and the allocation of resources has tremendous social ramifications, then the question of whether or not the allocation of resources is “socially just” must be addressed. Because value theory provides the foundation for which the quantitative origin of prices, it is value theory then that also provides the basis for the normative criterion from which prices and the allocation of resources may be interpreted. Clearly, the choice of value theory is extremely important.

Unfortunately, for orthodox economics, the normative implications of the utilitarian assumption generally lay dormant.

As non-orthodox economists are well aware, value theory acts as a cohesive, it is the glue that connects economic theory to a society’s moral and ethical norms. Any complete theoretical depiction of economic interaction necessarily requires a theory of value. As such, it is important to self-reflect on what values have been adopted by a theory and how those values impact how economic outcomes are interpreted. Given the importance of value theory, the one dominant proposition presented throughout this paper is that it is absolutely necessary for any economic theorist to anchor their theoretical ideas to a theory of value. Within this context, however, the utility theory of value presents orthodox economists with a dual horned dilemma. To accept utility as the basis for their analysis means that orthodox economists are implicitly valuing any and all market driven economic outcomes, regardless of the negative impacts that those outcomes may have on large segments of the society. To the contrary, to argue against any and all market outcomes as just, an economist, orthodox or otherwise, necessarily must begin their theorizing applying a different set of values outside of the value of endless hedonism that is central to utilitarian beliefs.

8.4 ABANDONING THE NORMATIVE CONSTRAINTS OF UTILITARIANISM

LEARNING OBJECTIVES

By the end of this section, you will be able to:

- Explain the basic elements of Amartya Sen's Capabilities approach
- Define capabilities and functionings
- Explain the Marxian Labor Theory of Value and its implications

Given the limitations and challenges associated with utilitarianism, many students of economics seek out alternative approaches for measuring economic well-being and interpreting the societal implications of economic outcomes. The following describes, two alternative, heterodox, approaches for interpreting economic conditions.

TWO NORMATIVE EXAMPLES FROM HETERODOX ECONOMICS

Abandoning Utility: The Capabilities Approach the Ethical Considerations of Amartya Sen

Where do the seeds of discontent sprout? In 1998 Amartya Sen was awarded the Nobel Prize in economics. Sen is a fascinating case study as he provides an example of an economist who is not a utilitarian. Early in his career Sen had abandoned utilitarianism. What prompted Sen to abandon utility as a first principle? The answer to this question can be found at the beginning of Sen's career when Sen encountered a utilitarian tradition in economics that had shed nearly all the conventional characteristics of ethical analysis. While the early 19th century utilitarian thinkers such as Bentham had identified and described some of the ethical issues surrounding the idea of diminishing marginal utility, by the late 20th century utilitarianism in economics had been reduced to revealed preference theory. For Sen, utilitarianism provides entirely too-narrow an assessment of what it means to be a person. The result is that there are far too many limits associated with utilitarianism for the utilitarian to be able to make effective, and informed, moral evaluations.

Taken further, Sen also recognizes the link between the moral vacuum produced by utilitarian philosophy and the neoclassical application of the Pareto criterion. For Sen, utilitarianism and the Pareto criterion are like a form of normative handcuffs. Neither the distribution of income nor initial utilities factor in to the choice making, exchange story, promoted by orthodox economics. By ignoring the initial endowments of income or utility, Sen argues that a condition of Pareto optimal may also be

one of deep inequality and hardship. Those without property and with little income often times find themselves without property and little income even though they have engaged in market exchange.

Admittedly, a person's actual freedom to exchange may provide a person with a degree of additional utility. Clearly being free to make choices is empowering and valuable to individuals. However, one's freedom to act does not mean that a person is in a remotely decent position in the market. The fact is, a market outcome can be Pareto optimal and still be less than socially optimal. For example, instead of demanding change people in poor situations often simply adjust to their negative circumstances. The deprived find some area of existence that gives them pleasure and make do. The result is a disadvantaged yet acquiescent populace that not only continues to function, but may be falsely perceived as happy or not too sad. In this example, utilitarianism generates a persistently unfair outcome within a population of people ill-equipped to effectively do anything to alter that outcome. This utilitarian picture highlights a tendency to under-estimate the plight of people in negative circumstances and causes Sen to conclude that neoclassical welfare economics is incapable of addressing the ethical issues that accompany the existence of poverty and oppression.

In terms of the problems associated with the distribution of utilities, Sen criticizes the utilitarian notion that every action in life is based on pleasure or happiness. There is no equality to be found in adding up everyone's utility to find a sum of total utility. It is possible for a maximum of total social utility to be generated under a circumstance in which one person receives the largest share of the available utility while many others receive very little. Further, it is not feasible to correct for an unequal distribution of utilities generated by market outcomes. The only way to rectify the impasse requires that the theorist be able to engage in interpersonal comparisons of well-being. In other words, people need to be able to compare how well off they are relative to other people. Relative comparisons are not something to which utility is adept at explaining. Given all of the problems Sen identifies, he departs from utilitarian precepts and develops an alternative measure of economic well-being.

The Capabilities Approach

The capabilities approach represents Sen's alternative to the neoclassical welfare model. The capabilities approach is a theoretical device that allows for interpersonal welfare comparisons, while also maintaining the ability and freedom of people to make choices. For Sen, the interpersonal comparisons of well-being should be based on a group of what Sen calls "functionings."

Functionings – Represents a state of being for an individual as well as the collection of all things an individual can be doing. Functionings can be as basic as being well-nourished and properly sheltered to as challenging as flying an airplane.

In turn, the measure of social welfare is the "capability" of people to access and develop their "functionings."

Capability – Is the availability of functionings coupled with the ability of the individual to achieve a combination of functionings.

The combination of functionings that are available and the ability of an individual to achieve a combination of functionings is the measure of an individual's well-being. Consider the following table.

| | Limited Capabilities | Greater Capabilities |
|----------------------|----------------------|----------------------|
| Limited Functionings | Low Welfare | Moderate Welfare |
| Greater Functionings | Moderate Welfare | High Welfare |

Based on the capabilities approach, having many options available, such as states of being or activities to pursue, and then having the freedom to pursue those options is the ideal. The highest social welfare is achieved when a society produces an environment that meets basic needs while also provide people with ample opportunities to pursue challenging and life enriching activities. To the contrary, having limited access to functionings, and limited freedom in the pursuit of those functionings is the least advantageous position. In the case of moderate welfare outcomes, either individuals have many possible functionings available, but a limited freedom to pursue those functionings, or a limited set of available functionings but substantial freedom to pursue those goals.

BREAKOUT BOX – CAPABILITIES AND FUNCTIONINGS EXAMPLES OF

WELFARE OUTCOMES

Limited Functionings/Limited Capabilities

Represents a case in which a person or a group of people are living with clearly definable limits to their **functionings** as defined by abject poverty, malnourishment and/or starvation and with little to no medical care. In this scenario the person or people are simply seeking to survive from one day to the next, there is little to no long term planning or goals. Possibly the result of social and political unrest such as a civil war (the current situation in Syria for example), or a weather calamity such as a drought, or a socioeconomic order such as the slave economy of the pre-Civil War American South.

Given the horrendous living conditions and limited functioning, any person living under these conditions would likely attempt make changes in their lives in order to try and reduce their immediate suffering. The ability to make changes, their **capabilities**, may not be possible as they may be living under conditions of political, military, and economic repression. Absent the freedom to maneuver, the person or people in this circumstance are rendered virtually helpless to the situation in which they have befallen. For example, unless the slave is freed, as property, the slave simply cannot pursue other options

Limited Functionings/Greater Capabilities

Represents a case in which a person or people are again deeply limited in terms of having basic needs and few wants met. In this instance, however, the person or people in this circumstance have some options to escape their plight. For example, consider the scenario of political unrest, if greater capabilities are present, the person or people can possibly vacate the region in which the unrest is unfolding. Evacuation of refugees to other more stable regions of the world create capabilities for the now displaced residents from a place devoid of functionings to places with both functionings and resources to expand capabilities. Another example could be the freeing of slaves in the American South during the post-Civil War period.

Greater Functionings/Limited Capabilities

Represents a case in which a person or people have their basic needs and wants met, while enjoying the luxury of having

many other possible functionings available within the society such as educational, health care, and employment opportunities. In this instance, however, the person or people in this circumstance do not have options available to access the abundance of functionings. For example, consider the scenario of repressive political forces that are the result of situations of patriarchal social structures, or general totalitarian principles. A society characterized by repressive political regimes will restrict the freedom of its populace to enjoy the varied functionings that exist. A historic example would be the Jewish population that was subjected to the ruling principles of Nazi Germany.

Greater Functionings/Greater Capabilities

Represents a case in which a person or people have their basic needs and wants met, while enjoying the luxury of having many other possible functionings available within the society such as educational, health care, and employment opportunities. In this instance, however, the person or people in this circumstance also have a great many options available to access the abundance of functionings. For example, consider the example of the majority of people living in economies characterized as advanced developed economies with largely democratic political institutions. Certainly there remain conditions of repression such as discrimination, sexism, racism, and any number of limiting conditions. However, given democratic political structures and civil society outlets, people are able to continue to press for ever-expanding capabilities.

The capabilities approach then is not just a story of the freedom to pursue well-being, such as is the case in the story provided by orthodox economics. Instead, the capabilities approach is asking questions about initial endowments, available functionings, as well as the distributional outcomes associated with the pursuit of those functionings. Given the capabilities approach, the social welfare analysis of economics is no longer reduced to the action of choice making, but rather to both the conditions preceding choice as well as the outcomes associated with choices. While functionings can vary for different people across social circumstances, as well as time and place, so long as people have the ability to obtain the outlined functionings then they have an opportunity to elevate their well-being. Clearly, the capabilities approach represents for Sen, and others, a framework capable of generating more ethically pleasing results than that of the utility-tainted Pareto criterion.

In conclusion, Sen has managed to escape the ethical handcuffs of utilitarianism. The capabilities approach offers Sen, and other economists interested in exploring the capabilities approach, a new ethical theory. Sen has clearly avoided the fate of many neoclassical economists, i.e. being able study economics absent ethics.

The Marxian Approach and the Labor Theory of Value

Another approach to applying normative reasoning toward economic phenomena is the Marxian labor theory of value. In stark contrast to the utility theory of value, the preanalytic vision associated with the labor theory of value produces a view of humanity and human need that is virtually antithetical to the utilitarian depiction. Rather than experiencing social interaction through exchange, within the labor theory of value human beings are presented as engaged in the act of production.

The basic proposition on which the labor theory of value is constructed is the idea that before something can be exchanged it must be produced. As a result, the value of products is generated at the point of production, where the products are created. At the point of production, labor is the essential component of production processes. While machines can enhance the productivity of human labor,

machines only exist as a result of the collective accumulation of human labor over time. Importantly, machines themselves do not create labor. After all, a nail cannot hammer itself. The implication is that the process of production has always required human labor power as even the most sophisticated machines require human operators.

Additionally, production has always been a social endeavor as human beings work with one another to produce those things that satisfy the material wants of people. Consider, for example, a loaf of bread that you see on a grocery store shelf. The production and distribution process necessary to bring the loaf of bread to the grocery store shelf is extensive, requiring the contribution of a great many people. For starters, the agricultural process that provides the wheat, and/or oats, and/or grains that are the primary ingredients for making bread have to be grown by farmers. The number of farmers involved may number in the hundreds or thousands. Additionally, the farmers will use tools and other inputs provided to them by other producers. Those producer, the producers of farm equipment, will also bring together laborers and equipment in a manufacturing process that will build farm equipment. By continuation, the tools and equipment used in the manufacturing process that builds farm equipment will also have to be produced by laborers using other tools and equipment in other production processes, and so on and so forth. On the other end of the production process, after harvesting, the basic agricultural inputs used in making bread will be transported to processing facilities. The act of transportation requires that laborers operate transportation equipment like trains and trucks. Just as was the case with farm equipment, transportation equipment will be made by many laborers that will be utilizing many machines that will have been produced by many other laborers using many other machines, and so on and so forth. Of course, transportation equipment generally requires fuel. If the fuel is a petroleum byproduct, then the extraction of petroleum will once again require many laborers using significant amounts of equipment through many stages of production until a fuel is available that will be used to operate the transportation equipment. Over and over again, each element of production requires many other laborers in many other production processes in a seemingly endless and nearly incomprehensible scale of human interaction. Clearly, production is an inherently social process that only takes place when human beings apply themselves to a multitude of production processes

Because the sole universally necessary element in the production process is labor, labor becomes the only true and relevant source of value. Human history demonstrates that human survival necessitates that human beings engage first and foremost in the process of providing for material needs. If human beings exchange, it is only because they first produced an excess that they are willing to exchange. Exchange is not a necessary condition for human survival, whereas production is required for human existence.

When juxtaposed, the differences between the vision generated by the utility theory of value and the labor theory of value could not be more visible. Let's examine four primary differences.

First, orthodox economics downplays any necessary human social relationships, as individuals are viewed as isolated utility maximizers within orthodox economic thought. To the contrary, adherents to the labor theory of value see human behavior itself, including exchange relationships, as being the result of social relationships. By continuation, a strong argument can be made that there are also important historical understandings and divisions between the two value theories. For utility theorists, because human behavior is perceived as a universal constant across time, understanding economic history is not a necessary component of their theory. Labor theorists, however, must

study history closely in order to attempt to understand and identify the important changes in social arrangements that have historically arisen in different socioeconomic systems.

Second, due to the fact that exchange is a voluntary form of social interaction, harmonious outcomes appear normal within utilitarian thinking. To the contrary, since labor is the source of value and production, if there are class differences in a society, those class differences will inevitably end in conflict. The result is that conflict, not harmony, is front and center for labor theorists.

Third, while neoclassical economists take as given individual preferences, and by implication assert that the act of choosing is always efficient, labor theorists argue that preferences arise from social relationships and social interactions. As such, adherents to the labor theory of value do not accept the choice-driven revealed preference argument on social welfare.

Fourth, whereas orthodox economists identify individual incomes as originating through a voluntary process of exchange between individuals whose preferences are given, the labor theorist argues that the income that flows to non-laboring classes is the byproduct of a process of **exploitation**.

Exploitation – The idea that a producer or producers of a product receive compensation that is less than the value of what the producer or producers contributed to the production process.

Clearly the utility theory of value and the labor theory of value yield two different and competing conceptions of human existence, producing two different normative criteria for evaluating human interaction.

It would appear that the choice of value theory and recognition of its normative impact should be of the utmost importance to a theorist. This is not always the case. Perhaps due to the obscure relationship between price and value in neoclassical theory, there are many neoclassical theorists who directly violate the philosophical foundations of their accepted theory of value and do so by attempting to temper the less-than-savory ethical outcomes present in a capitalist market system. Alternatively, while most heterodox thinkers openly challenge the ethical outcomes of the market system and the conclusions brought about by the use of utility, many very prominent heterodox thinkers also either reject the need for a theory of value or do not explicitly endorse a formal theory of value. Sen falls under the latter category. In both instances value theory's importance is being inadequately recognized. While continued criticism of neoclassical theory is undoubtedly warranted, heterodox economists, regardless of their lofty accomplishments, prestige, and respectability, should not be absolved of deserved criticism. Within this premise, an evaluation of the relationship between value theory and Sen's important contribution to the critique of neoclassical welfare economics will be the focus of the remainder of this paper.