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Normative Positions and Market Failures – The Implications of Political Ethics on Cures for Market Failures

Abstract

In this essay I discuss different normative foundations—theories of political ethics, for proposed cures to market failures. In addition to empirically match what cure fit what type of market failure, I posit the notion that the *normative position* of an economist, or policy maker, or of a group, concerned with these problems, delimits the options available for recommending, or analysing, what corrective measures that needs be taken to restore markets to efficiency. Two theoretical normative positions, one *utilitarian* and one *libertarian*, is constructed to argue the point that different normative positions will yield different permissible actions. The analysis is conducted against the background of different rational choice models, i.e., 'thin' and 'thick' rationality, both of which has profound impacts on both the theory of market failure itself, and on the proposed cures.

Keywords: market failure, utilitarianism, libertarianism, political ethics, rational choice

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Introduction

Market failures are considered a hassle. Often they precipitate government interventions, or else other kinds of actions must be taken—to correct them. It is the purpose of this essay to discuss normative foundations for such actions.

The notion of market failure has been hotly debated—some claims have been made questioning the relevancy or the strength of the arguments, and others have questioned the questions. But the theories have stood their ground and are now a common staple within microeconomic theory. Subsequently, ideas on how to neutralize the problem of market failures have flourished. The debate over market failures has mostly been limited to discussing the empirical matters of their nature and what remedies that most efficiently will salvage an economy from suboptimal allocations. The spectrum for debate has often been narrowly confined to the *efficiency criterion*. This essay proposes to go beyond efficiency.

Deciding upon appropriate action for correcting market failures requires a bit of finesse. Interventions are often called for, the state must get involved, and then by default, so must politics. When faced with the prospect of political action normative positions—value-judgments—will ultimately come into play. What actions, if any, should the state take? The short answer is: It depends upon what normative position, what value(s) should be prioritized. Is *efficiency* the overriding value, then certain actions will be desirable, is it *individual liberty*, then perhaps other actions are appropriate.

Using theories of political ethics, discussing what political actions are desirable or justifiable, and applying these to existing economic theories of cures for market failures, I will attempt to sketch out a theoretical framework, which may possibly enhance policy-makers' understanding of their actions when faced with the task of correcting market failures.

Methodological Considerations and Disposition of the Essay

First of all, it is not my intention to offer a new critique, or indeed any deeper examination of the theory of market failure itself. This has been done before (cf. Cowen, 1988; Bator, 1958; Samuelson, 1954). Nor is it my intention to offer an argument for a particular normative position in regards to what actions is desirable when faced with a market failure.

The main purpose of this object is to classify existing remedies for market failures, such as *Pigouvian taxes* for reaching a social optimum in cases where *externalities* are a factor, or *government provision of social security* when cases of *adverse selection* is a factor (cf. Rosen, 2002; Connelly *et al.*, 1999), into different normative theories of political ethics, such as *utilitarianism* or *libertarianism* (both of which I do intend to use) which guides (and indeed delimits) the actions of individuals, groups, or the state. The intention is that this classification will form the beginnings of a theoretical framework for deciding upon desirable ac-

tions when facing market failures. This framework will hardly be exhaustive, and this is not the point. The point is rather to show that different normative positions, i.e., different sets of values inherent to the persons making the decision as to market failure correction, will yield different permissible actions (given that the internal set of constraints set by a particular normative position is not violated). The essay, you might say, is part theoretical study as it seeks to combine a theory of microeconomics and theories of ethics, part research overview as it seeks to categorize, with respects to the different normative positions, previous economic research of solutions to the market failure problem. I will not make use of any empirical material such as a particular incidence of market failure, nor will I study any particular action taken, or advocated, by a real institution or person. This is a case of tool sharpening rather than one of tool use.

A short piece such as this will only represent a modest beginning in this direction. I will not, and cannot, cover in detail, every theorized instance of market failure, or every proposed cure, nor put these into relation to all conceivable normative positions, with the space available. Some cases of market failure and some proposed cures have been excluded in the analysis. I've documented these exclusions in footnotes at appropriate places.

The disposition of the essay is fairly straight forward. I will begin with an exposition of a general theory of market failure, which includes a run-through of the efficiency criterion, followed by a brief excursion into the causes of market inefficiency. I've labelled these sections the *empirical components* of the theory of market failure correction. They will be familiar to those already traversed in basic microeconomic theory.

I will then introduce some theories of political ethics. I will use the two previously mentioned, i.e., *libertarianism* and *utilitarianism* (as to why my choice of these two particular positions, please be patient—I'll get to it further down), as primary examples to illustrate the complexity of political action. I will then finally examine the different proposed cures for market failures and analyse how they relate to the normative positions previously outlined. These sections make up the *normative components* of this theory of market failure correction.

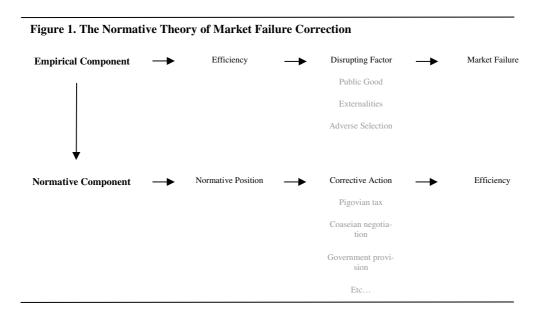
The Theory at a Glance

The *empirical components* of the theory is the conditions of market efficiency derived from the standard set of assumptions of neoclassical microeconomics, i.e., rational utility-maximizing individuals, perfect information etc., and the subsequent breakdowns of the conditions for efficiency—those *disrupting factors* such indivisibility, externalities etc., which cause markets to fail. After establishing a market failure a move from empirical theory to normative theory is necessary for the purpose of deciding appropriate actions for corrections. This is the *normative component*.

The normative component consists of a *normative position* and a *corrective action* (which aside from fitting a particular normative position also has subsequent empirical implications as to how well a particular action performs in correcting the market failure). The *normative position* is a set of constraints, decided by

some value hierarchy, which is then imposed upon the choice of corrective action. For instance, with a *utilitarian* position, one which seeks to maximize the sum good of a society, actions that decrease total social utility must be disallowed. Likewise with a rights-based *libertarianism* (such as it is represented by Robert Nozick) rights act as a constraint upon actions. Any action that is in violation of the rights must be disallowed. The specifics of the normative position will be elaborated upon further down in the text.

In summation, the theoretical framework I'm proposing looks like this:



When the empirical components have been established the normative component becomes relevant as a guide for corrective action. The complete framework then requires not only the empirical component of deciding the nature and circumstance of market failures, but also the normative component which will serve to guide the actions for their correction.

I will assume a state of *laissez-faire* market conditions for any discussion of actions. Hence, any action by the state, whether it be a rearrangement of property rights or government provision of public goods, is to be considered an intervention. It should well advised that not all actions taken to correct market failures discussed in this essay will necessarily originate from the state. Quite possibly action may entail activities undertaken voluntarily, without centralized direction, by individuals or groups in a civil society. Also, some deliberate actions taken by individuals may not be for the specific purpose of correcting market failures, but rather they are actions motivated by different individual's desires (such as utility maximization) that will nevertheless have this effect, or, as some economists like Schotter, Axelrod and Brubaker have suggested, individuals may undertake actions that doesn't cause failures in the first place (Schotter, 1981; Axelrod, 1984; Brubaker, 1975). These are theories based on revised models of rationality which incorporates various cooperative behaviors that possibly debunks the claims of traditional economics and theories of market failure. They may possibly be problematic to label 'actions taken for the correction of market failures', as they are

often not deliberately taken for this purpose. They will nevertheless be discussed briefly as possible alternatives to the traditional measures often suggested. I will primarily discuss these actions in relation to the libertarian normative position, given its specific constraints on the state. Whether or not actions are taken by a state or a civil group or an individual, they are still subject to ethical considerations, and hence it is of worth to both make this distinction, (i.e., state action visà-vis individual actions) and to discuss their implications.

I will now continue to specify this theoretical framework in greater detail, beginning with asserting the *empirical components*.

The Empirical Components

What is a market failure? Very generally one can say that, in a theory of resource allocation, it means, under certain idealized conditions, the failure of a market institution, driven by a price-mechanism, to sustain desirable activities, such as producing a good in demand, in relation to an implied problem of welfare-maximization (cf. Bator, 1958).

In Welfare Economics the theory goes that under certain strong assumptions about individual behavior, producer behavior, technology, tastes, transactions costs, etc., production and exchanges of goods will automatically correspond to the requirements of Pareto-efficiency (cf. Bator, 1958; Rosen, 2002). The market, through Adam Smith's "invisible hand" (cf. Smith, 1970) will automatically allocate resources in an efficient manner. In Welfare Economics this is often called *The First Theorem of Welfare Economics*. Further, the *Second Theorem of Welfare Economics* postulates that with redistribution of initial incomes (in a costless fashion of lump-sum taxes), any allocation, expressed and calculated by a particular Social Welfare Function can be reached.¹

These strong assumptions, of course, exist only in economic models, and in the real world, even 'non-failing' markets are failing when measured against such strong criteria. Due to various reasons, such as market power of firms, public goods and information asymmetries all markets are failures in respect to the strict definition of Pareto-Efficiency. These failures, if not seriously hampering the function of the market, can scarcely be characterized as genuine failures and will not be treated as such here. To fit the definition of a market failure here, said market must be dysfunctional to such a degree that it collapses, or at least functions very badly.

Below we shall examine different kinds of market failures. But first, to fully appreciate what market failures are I shall begin with a simple run through of the Paretian efficiency criterion to see what in theory constitutes the efficient market, with which the different kinds failures can be compared and understood. The section below should be familiar to all who possess basic skills in microeconomics.²

the reader with an extra level of clarity.

² For those who do not. I recommend for i

¹ Some text books, such as (Perman *et al.*, 2003), make a distinction between Pareto-*efficiency* and Pareto-*optimality*, the former being simply an allocation where, in a two-good, two-individual case, neither individual can reach a higher level of utility without decreasing the other's, and the latter being such an allocation in respects to an implied social welfare function. Other textbooks do not make this distinction. I will, in cases where needed, make this distinction as well as it provides

² For those who do not, I recommend for instance, (Parkin, 2000; Levy, 1995; Rosen, 2002; Schotter, 2001)

The Efficiency Criterion

A rigorous proof of the Pareto criteria requires sophisticated mathematics. Luckily, the purpose of this essay is not to conduct a study of criteria itself, we simply need to state it as to have a point of reference for the forthcoming discussions. A simple explanation using a simple model will suffice. This statement essentially follows that of (Rosen, 2002). Other relatively accessible textbook treatments of market efficiency and market failure are, (Schotter, 2001; Munday, 2000) and for a more advanced and thorough exposé of the theory of market failure see (Bator, 1958).

We'll start with the simple 2-good, 2-individual pure exchange economy for the purpose of clarifying the condition of Pareto-efficiency. We will assume well-behaved indifference curves, i.e., convexity, for each individual A and B, covering individual tastes for the two goods in the economy, x and y. Further it is assumed that the goods are completely divisible—the consumption of x and y for individual A has no spillover effects on B and vice versa. Starting from an initial allocation of x and y which is not Pareto-efficient, the individuals can trade, given the above mentioned strong assumptions, until an allocation is reached where at least one is made better off, and neither is made worse off. Such a point would be Pareto-Efficient and it will occur at the equation of both individual's marginal rate of substitution, i.e., at:

$$MRS_{xy}^{A} = MRS_{xy}^{B} \tag{1}$$

Adding a production function for the two goods we can enhance the condition and relate it to a modern economy. Given a certain production possibility frontier we can extract the rate of transformation (RTS) between good x and y. The RTS is given by the marginal cost relations for the production of each good, that is:

$$RTS_{xy} = \frac{MC_x}{MC_y} \tag{2}$$

Given an assumption of perfect competition the relation between the marginal costs equals the relative prices that both individuals face and take as given.

$$\frac{MC_x}{MC_y} = \frac{P_x}{P_y} \tag{3}$$

And hence, we have the condition for Pareto-efficiency with both the production side and the consumption side taken into account, where the two individuals consume, facing the same prices (set by the relation between marginal costs for each good) until their marginal rates of substitution equal each other and the set of relative prices:

$$MRS_{xy}^{A} = MRS_{xy}^{B} = \frac{P_x}{P_y} \tag{4}$$

This represents an allocation point where neither individual can experience any increase in utility without a subsequent decrease for the other, given the production possibilities of the economy. As we shall see, various disrupting factors to this very elegant statement of the functions of a market will cause it to fail. We will now tentatively examine these, and return to them later when discussing the normative components.

Causes of Market Failures

The causes of market failure are many and difficult to categorize with any sense of finality. Certain causes are in fact related to each other, like that of public goods and externalities, which in certain instances, like in the case of positive externalities, make them hard to separate. Any categorization will thus have some level of arbitrariness attached to it. These difficulties aside, I will, in a bid for adding structure and clarity to the essay, attempt a kind of categorization. It largely follows (Rosen, 2002:44), and (Bannock *et al.*, 1998:262-3).

The first category is *externalities*. Certain behavior, by firms and individuals alike, such as polluting, affects the welfare of others outside any existing market. The price system fails to provide correct signals about the opportunity cost of a scarce resource, such as clean air in the case of pollution, causing the social costs to deviate from the private costs. Interventions are frequently advocated to correct this discrepancy. The second category is *public goods* and its related problem of *free-riding*. Public goods, it is often concluded, cannot be produced by private markets and intervention in the form of government provision is a common solution.

The final category I will examine here is that of information asymmetries with the related problems of *adverse selection* and *moral hazard*. These two problems, it is often argued, can lead to a complete collapse of a private market such as one for social insurance. Interventions include compulsory government provided insurance schemes. We'll now study the different types in more detail before moving on to the normative components.

Externalities

Externalities are consequences for welfare or opportunity cost not fully accounted for in the market and price system. When effects on firms and individuals are transmitted via changes in prices market failures need not occur, but when individuals are directly affected in way that is outside the market mechanism, they may. The classic example is that of the polluting factory, with its pollutants affecting the welfare of those who live nearby (negatively, we assume), or that of adjacent factories which might need clean air or clean water in their production. As these third parties are not compensated, i.e., they cannot charge the factory for the loss of welfare, there are costs for production not accounted for in the price system. It is common to express this in terms of a marginal *private* cost, at which the polluting firm maximizes its production, and of a marginal *social* cost, which

takes into account the welfare loss experienced by those affected by the pollution. This results in an actual output that is higher than that which would be optimal from a social point of view.

Various remedies have been suggested: Assigning property rights and enable trade in the externality itself (the *Coase Theorem*), taxation levied on the polluters output to reduce it to the social optimum³, and outright regulation⁴. We will examine all of these and how they relate to the normative position.

Public Goods

The theory of Public Goods is perhaps the most classic example of market failures. A public good, in contrast to a private good, is characterized by two things; non-rivalry in consumption, i.e., once provided the additional cost of another person consuming the good is zero or close to zero (i.e., MC=0), and non-excludability, i.e., it is hard or even impossible to exclude anyone from consumption. In contrast, private goods are both excludable and rival. Possibly, arranging different goods along a divisibility spectrum, as suggested by Buchanan (Buchanan, 1968), is the most fruitful way of classifying the 'publicness' of a certain good, with the extreme cases being $X = x_1 + x_2 + x_3 + ..., + x_n$ for the private good and $X = x_1 = x_2 = x_3 = ..., x_n$ for the purely public good, and impure public goods are arrayed between these two points (cf 'Buchanan's Box' in Buchanan, 1968).

The conditions for Pareto Efficiency with a public good differs from that of a private good (as derived above). With a private good consumption at efficiency occurs when consumers have the same marginal rate of substitution, though they may consume different quantities. With a public good the marginal rates of substitution might differ but everyone must by definition consume the same quantity, with individuals stating their willingness to pay for the public good (cf. Rosen, 2002:62).

The Pareto-efficient allocation of a pure public good (which is say, x, in this case, while y is still a private good) including the production side is then (compare with equation (4) on page 10):

$$MRS_{xy}^{A} + MRS_{xy}^{B} = \frac{P_x}{P_y}$$
 (5)

It has been argued that markets cannot maintain efficient provision of a public good due to the problem of *free-riding*. Efficient production occurs at a point where the marginal valuation of the last produced unit of for each consumer equals the marginal cost. However, since a public good is provided in a fixed

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³ There is also the possibility of paying the polluter not to pollute. This often referred to as a *Pigovian Subsidy*. It works in a similar way as does the Pigovian Tax. It also shares a number of its problems. For the sake of brevity, I will exclude subsidies from the analysis (cf. Rosen, 2002:92).

⁴ In relation to regulatory policies, creating markets for pollution rights has been suggested. Instead of mandating a strict level of allowed emissions, governments may set an emission ceiling for the entire industry. Permits to pollute may then be traded below that ceiling (cf. Rosen, 2002:93). Discussing the former kind of regulation is enough for our purposes so I have excluded tradable permits from analysis.

quantity that is the same for each consumer, and it is impossible to exclude non-paying individuals, each individual has, it has been theorized, an incentive to understate their preference for the good, and hence let other individuals pay for their consumption. This leads to underfinancing and a subsequent suboptimal allocation of the good.

I'll refer to the classic lighthouse example. Each shipping company owner knows that if another company erects a lighthouse, the light from it will effectively serve his ships as well. The owner in question may then decline to pay for his share of the cost for the lighthouse and free-ride of the efforts of others (cf. Coase, 1960; Coase, 1974, for an exposé and a critique of the public goods theory with respect to the lighthouse example). If enough people decide to free-ride perhaps lighthouses will not be erected at all. The market fails.

The suggested solution to the problem of markets and public goods is more often than not government provision. Financing public goods continues to be one of the main arguments for the state. We'll take a look at these arguments with respects to our normative positions.

Asymmetric information

Asymmetric information is simply a case where information in regards to an economic transaction is unequally shared between the relevant parties. The most famous application of this problem is that of Akerlof's used car market where the information about the quality of a used car is unequally shared between seller and buyer, causing the related problem of *adverse selection*, i.e., it makes it more likely that poor-quality cars dominate the market (Akerlof, 1970). Another, perhaps clearer example of this is that of social insurance (this is also a problem many feel is a more imminent).

Consider a private market for health insurance, with a firm selling policies to a group of people. The insurance company, however, cannot separate high risk cases, those with poor health and that run a high risk of needing medical care, from the low risk cases. The theory then goes that those individuals who know they are high risk cases will seek to insure themselves. This will raise the costs for providing the insurance, and hence raise the price of the premium. This will have the affect of pushing low risk cases, who are increasingly disinterested in purchasing insurance as the price increases, out of the market, with only high risk cases remaining. In a worst case scenario the insurance firm will go out of business and no insurance at all will be provided. The market collapses, even though there is clear demand for insurance.

A related problem is that of *moral hazard*, which is the case where an individual who purchases insurance has an incentive to change his behavior after the purchase, incurring costs he does not have to bear. Again, taking the case with social insurance, theory predicts that an individual may not, for instance, seek a job with the same vigor as he would if uninsured, causing an increase in costs for the insurance provider (whether state or private).

These two problems are often cited as the motivation for obligatory socialized insurance.

These three types of market failures can be characterized as social dilemmas (cf. Ostrom, 1997). The term refers to situations like those above, in which individuals make independent choices in interdependent situations. The standard rational choice models underlying neoclassical economic models predict that failures will occur in cases such as those above because the individual is assumed to pursue short-term individual rewards and this will produce a socially suboptimal outcome. Consider the case where a public good, such as neighborhood protection, is to be provided. We have an N-person group and the choice of each individual is to contribute or not to contribute. If everyone contributes they get a net positive benefit, B and all are met with a temptation T to shift from the group who contributes to the one who doesn't. Without explicitly going into the workings of such models, the prediction in neoclassical economics will, in cases like these, be that everyone will shirk contributing and free-ride of the efforts of other, causing the provision of the public good to collapse (Ostrom, 1997; Samuelson, 1954). In game theoretical terms, not contributing represents a Nash Equilibrium. These situations then, are social dilemmas because there is at least one outcome that yields greater benefits for all involved than the Nash Equilibrium.

In the same way externalities and problems of adverse selection and moral hazard represent a social dilemmas because there exists an outcome that is higher than the one resulting from behavior predicted by the standard rational choice models (i.e., compensating for the externality to achieve a socially optimal outcome, and to contribute to the provision of insurance schemes, in cases of adverse selection).

This type of problem is often referred to as a "the tragedy of the commons" which suggests that individuals will be helplessly trapped in social dilemmas. The inference from this has often been that the only way to get a group of individuals to move away from the Pareto-inferior Nash Equilibrium is to apply some external sanctions such as regulatory policies, or to impose enforceable patterns such as mandatory redistribution of wealth (i.e., coerce individuals to contribute to the neighborhood protection).

I will refer the standard model of rationality described above to as *thin rationality*, as opposed to *thick rationality*, which incorporates behavioral and structural variables allowing for individual actions beyond this immediate short term self-interest. The remainder of the essay will focus upon what can be done to solve these social dilemmas from the vantage point of two different normative positions. We will discuss the *utilitarian* position, which appears to fit well with the traditional remedies proposed by economic theory—remedies that don't necessitate a

⁵ For instance, a fourth type of market failure—that of *imperfect competition*, i.e., when a firm acquires market power such that prices may be raised over marginal cost and entry on market is difficult, or even impossible, may not fall into this category so easily. Hence, for continuity, and brevity, I have intentionally left this category outside the scope of the essay. Market power seems not to be connected to individual behavioral parameters in the same way as the other three types, but rather structural parameters (such as production costs and price systems) play a large part. However, imperfect competition could be exposed to the same analysis that I will conduct over the other three types, but that will be left for a future project. For more information about imperfect competition refer to (Rosen, 2002:44; Nicholson, 2001:327 et seq.).

move from thin rationality We'll contrast this with the *libertarian* position in which the normative foundation doesn't permit the same actions as those within *utilitarianism*. While the former seems well suited for an application of different sanctions introduced by an external actor (i.e., a central authority), which involves regulatory policies, taxation schemes, and mandatory participation for provision of public goods, the latter does not. With a libertarian position collective action for solving social dilemmas must be voluntary, something which the thin rational choice model predicts will fail. As Ostrom (1997) points out, this prediction is in many cases contrary to empirical observation and in recent decades research about the assumptions of rational choice models has been modified and refined to include variables allowing for cooperative behavior (such as joint efforts for neighborhood protection). This *thick* rationality and subsequent theories which would permit social dilemmas to be solved without the application of external force will be examined here.

The Normative Components

We have now detailed the Empirical components of market failures. These were those particular facts that, when measured against the criterion of Pareto Efficiency, caused a market to fail. We now turn to that of correcting a market failure, i.e., to those particular actions designed to restore to the market the efficiency criterion, which is so vital to its function.

The question of curing market failures is, I submit, divisible into two separate questions:

Q1 What kind of market failure is at hand?

This question serves to clarify what particular actions are, in an empirical sense, the most likely to restore a failed market to efficiency. We discussed the different types of market failures above; *Externalities*, *Public Goods* and *Information Asymmetries*. Different solutions fit different problems. This *empirical matching* is of course highly relevant, but I submit that it must be second to another question, that of what actions are desirable from an ethical point of view. Ethics imposes constraints on actions in general and will do so also with respects to cures for market failures. For instance, say a particular ethical code exists within a certain group saying that property is an inviolable right. This would make taxation impossible, and hence any correctional action involving taxation, such as a *Pigovian tax*, would be impermissible no matter how fitting it is from an empirical point of view for restoring a market to efficiency. The *empirical matching* is second to normative considerations. Hence, this normative question of what actions are ethically desirable must be answered first, before Q1 may be answered. So:

Q2 What kind of actions are ethically, (or morally) desirable (or even permissible) given a certain foundation of values?

To answer the Q2 above, I propose to formulate the concept of a *Normative Position*, which holds the foundation of values underlying the question of what actions are right or wrong (or ethically desirable or undesirable).

The Normative Position

The question of right and wrong acts is dealt with within the field of *Normative Ethics*. Moral philosophers concerned with this field ideally try to provide some general formula(s) for deciding what actions are right (cf. Snare, 1992). It is, with a minimal definition, an effort to guide conduct by reason, rather than by emotion or intuition (cf. Rachels, 1999: 17 *et seq.*) A possible schema, as Snare suggests, would be something like 'All acts with the property 'P' are right' (Snare, 1992:5 *et seq.*). Different moral philosophers would then substitute 'P' with things like 'adherence to set of rights', or 'maximizing social utility', or 'being commanded by God'. Different ethical theories disagree quite fundamentally, but they are all trying to accomplish the same thing, namely to provide a *general principle* from which actions can be classified into right or wrong.

Further, any theory of normative ethics tries to determine, not only what properties $P_1...P_n$ make a certain act right, but also why property P_i makes an act right, i.e., a normative theory does not analyze what properties $P_1...P_n$ an act that is right happens to have, but what qualities intrinsic to that particular property that de facto makes the act right. The latter is a most complex issue. For instance, in the case of a rights-based ethic, the former criterion would suggest that any action that conforms to the set of rights is right, while the latter would concern itself with the rights themselves. Why are the rights right-making properties?

We will not concern ourselves much with the latter problem as it would require us to pin different values and ethical systems against each other in an openly normative argument. The objective of this essay is, again, simply to sketch out a theoretical frame for the analysis of actions, not to assert what actions are right in any definitive sense. So we will instead define two distinct normative positions, and analyze market failure corrections as actions conforming to the properties inherent to those positions. We will not investigate in much depth as to why those particular properties make an action right, although we will discuss briefly why the proponents of our particular normative positions consider them right-making (i.e., we will not discuss whether they are right or wrong in their conclusions about this). I do maintain, however, that a complete theory of ethics, which seeks to assert what is right and what is wrong, must delve deeply into the question of why certain properties are right-making and others are not.

The normative position then, has two components.

- C1 A general principal must be formulated for the purpose of judging actions.
- C2 Particular actions are justifiable if they conform to the general principal.

The general principal acts as a constraint against which all actions are judged. What exactly this general principal is must be considered a rather open question.

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⁶ As opposed to *meta-ethics*, which seeks to determine, not what is right, but what it means to be right (or wrong), i.e., what is the very nature of rightness? Meta-ethics can be described as the philosophy of science for Ethics (Snare, 1992: 4 *et seq.*)

Perhaps it is Kant's Categorical Imperative (cf. Kant, 1994), or the promotion of the Greatest Happiness, or the promotion of self-interest, or a set of inviolable rights. Keeping it strictly theoretical, there are many proposed schools of ethics such as ethical egoism, various altruistic ethics and rights-based ethics and utilitarianism which we'll use here. Stepping outside pure theory, some might say the normative position is the common foundation of values inherent to a particular group (or society), the common good, or something else entirely. Potentially, the normative position can be any single value, set of values, or extremely complex systems of morals. For instance, real societies, such our own Western Liberal Democracies are perhaps a juxtaposition of many ethical schools, such as traditional Christian ethics, rights (human rights) and utilitarianism among many others. Ultimately, arriving at an actual normative position, whether that of a single individual or a community, is a matter of empirical research.⁷ But whatever the normative position is, it matters for the choice of actions. To illustrate this importance and how it may yield different answers as to what actions are right (or justifiable) as solutions to particular problems we will construct two examples of such normative positions, namely that of *utilitarianism* and *libertarianism*.

Why these two? First, both schools are fairly coherent and the different proposed ethical foundations within the schools themselves, while exhibiting some disparity, are relatively homogenous and easy to summarize into a tangible normative position.

Second, economic theory, to which we are applying this proposed framework, is heavily infected with both, perhaps in particular with *utilitarianism*. Welfare Economics and Social Choice often have a distinct utilitarian bent. The libertarian influence, as I see it, comes mainly from its advocacy of *laissez-faire* market economics, which is prominent in certain circles of economists. Although, it should be noted that the set of rights which is the foundation of much of libertarian theory is seldom considered an end in it self in economics, rather this set of rights, and its subsequent result in a laissez-faire market economy, is considered a means to an end—namely that of promoting the general welfare of a society. (This, of course begs the question if the laissez-faire doctrine in economics originates from libertarianism at all, but rather it might be a variant of utilitarianism. We'll ignore that rather provocative implication in the main text, but confer related issue briefly discussed in *note 10*.)

Third, there is a foundational difference between the two. Utilitarianism is concerned with *consequences* of actions, it is *teleological*. Libertarianism, in the form we shall examine here, is concerned with a principle, such as a promise, or a right, or a contract, or something else, which acts has to conform to *regardless of the re-*

⁷ Ascertaining a normative position of a single individual might not be very difficult, but what about a group such as a community or a large society? As noted by several prominent economists like Kenneth Arrow and Amartya Sen there are considerable (perhaps insurmountable) obstacles to deriving a single coherent normative position for a group. Arrows seminal research on preference aggregation lead to his famous *Impossibility Theorem*, which states that given certain weak constraints it is impossible to aggregate individual preferences into a single social preference. Amartya Sen, on the other hand, claims it might possible. Individuals are roughly similar, he says, and hence interpersonal utility comparisons may yield a social preference, if not a prefect one (Arrow, 1951; Sen, 1999).

sulting consequences, it is deontological. We'll start by digging a little deeper into this fundamental difference before formulating the positions themselves.

Teleological and Deontological Ethics

A lot of different ethical theories count as teleological. What they all have in common is that they all claim that an act is right because of the good (happiness, utility) it creates. Rightness is about consequences (Snare, 1992:36). Only one consequence is relevant, the creation of goodness. The tasks of a teleologist are then two (Snare, 1992). First, he must specify what 'good' is. In hedonistic utilitarianism it is happiness, for a Christian it might be serving God, for others it might be aesthetic experience, for other still it might be success or recognition by your piers. In modern versions of utilitarianism, such as it is often applied in economics, it is simply the satisfaction of preferences. What, exactly these preferences are, is left to the individual. No attempt is made to determine what preferences are good. The particular good, as it is defined, is the ultimate end for all ethical considerations. (The good in economics, i.e., the satisfaction of preferences, is the ultimate end to which all actions serve to fulfill and is often expressed in a social welfare function. We will return to this further down). Second, the teleologist must decide whose good-my own, a certain group's or everyone's? A typical utilitarian would suggest that it is the aggregate good of society that matters.

A deontologist would deny that *consequences* matter for deciding if an action is right or wrong. Typically it is some historical principle that determines the rightness of an action such as a *right*, or a *promise*. Otherwise they might cite some relational issue, such as being a teacher incurs certain obligations towards a student—acts that conform to those obligations are morally justified.

Economic analysis is saturated with teleological concerns—teleology is, I would suggest, the marrow of economics, particularly with the subset of economic theory called *Welfare Economics* (or *Public Economics*) while deontological concerns are rarely discussed at all. In some cases it may superficially seem like economic analysis has deontological flavor. For instance, economists quite unanimously advocate that economic actors ought to honor contracts—breech of a contract is considered wrong. A contract deciding what actions are right (i.e., honoring the contract) is distinctly deontological, but the economists rarely means that honoring contracts is *intrinsically* good, but rather he stresses that it is vital for the function of the market mechanism. So, the economist who at a first sight seemed like a deontologist was really concerned with consequences—he was really a teleologist.

The choice of one teleological and one deontological normative position will only stress the importance of taking ethics into account when deciding what actions to take against market failures. With *utilitarianism* we'll get a chance to discuss traditional welfare economics and the solutions suggested within that field, and with libertarianism we'll see that the same problem requires a radically different approach. This should well illustrate why the framework I'm proposing will be useful.

I will now detail the two normative positions starting with utilitarianism. There is point to this order—libertarianism in its modern form (as represented especially by Robert Nozick) grew very much out of critique against utilitarianism. Although not necessarily the only way to go about this, it seems logical to proceed in this manner. There are also some dispositional advantages as much of libertarian theory relates to utilitarianism and is often presented as an alternative to it.

The Utilitarian Normative Position

Concisely defined, utilitarianism is a political, social and moral theory developed first by Jeremy Bentham and James Mill, and further developed (possibly refined) by John Stuart Mill. It holds (in its original version) as its core an equation between *the good* and *happiness* (cf Bentham, 1994; Mill, 1987; for a lexical definition see Robertson, 1993 or Banncock *et al.*, 1998). It proposes that whatever action taken, whether policy, choice or decision, it should result in a maximization of the positive balance of 'good' over 'bad'.

More precisely, utilitarianism argues the 'principle of utility', which requires that whenever a choice between alternative actions or social policies, the one which results in the best overall, or social, consequences, should be chosen.

In economic theory the *social good* is often represented by the *social welfare function*. Algebraically, if there are n members of a society and the i^{th} individual's utility is represented by U_i , then social welfare is:

$$W = F(U_1, U_2, \dots U_n) \tag{6}$$

It is assumed that an increase in any of the U_i s, ceteris paribus, will increase W (cf. Rosen, 2002:141 et. seq.). The strictly utilitarian position then advocates that any action which leads to a net increase of W is a justifiable action, and one that should be taken. It is further assumed that interpersonal comparisons of individual utility functions are possible. This implies that an action, A, which seems to decrease individual X's utility less than it increases the utility of individual Y, yields a net increase in W. It is against this assumption that some of the hardest criticism against utilitarianism has been levied because it implies that some individuals may be sacrificed for the sake of others.

Consider the following fictitious example by H.J McClosky from the academic journal *Inquiry* in 1965 (reprinted in Rachels, 1999:110): A utilitarian visits a community in which there is a racial strife. A black man rapes a white woman and as a result the white community goes berserk and starts beating up every black man in sight. Suppose that it is certain that the capturing of the man who did the crime would ease the emotions of the mob and end the violence. Our utilitarian sees the event but not who actually did it. As a utilitarian, he would then be advised to lie and bear false witness and bring about punishment against an innocent man (assuming that the mob believes the innocent man is the actual perpetrator). Presumably, the decrease in utility for the one man who is innocently punished is much less than that of the many blacks who would undergo a severe beating by

the mob. Framing an innocent man would, in this case, represent a net increase in W.

The example is extreme, but it clearly demonstrates the principle from which actions are justified in a utilitarian context. The constraint of the utilitarian normative positions is then that any action (taken by an individual, an institution or an organization) must conform with the condition that it *increases the overall social welfare*, W. This is the *general principle* of this ethical theory.⁸

Applying the principle then to the problem of curing market failures will result in justification for the traditional remedies. We'll take a look below, specifying what actions fit to each category, *externalities*, *public goods* and *information asymmetries*, discussed in the previous chapter.

The Utilitarian Position and Cures for Market Failures

Utilitarianism is a calculative ethics. Makers of economic policy, if they are utilitarian, need to look at a particular solution for getting society away from Pareto-inferior outcomes caused by market failures, and calculate the possible effects it has on W. Quite simply, if a particular solution increases W, then the action is justifiable. As discussed above, the thin rational choice models of neoclassical economics predict failure when individuals are left to their own vices when solving market failure situations, (see above on page 14). Typically, a utilitarian (who assumes these models are accurate representations of individual behavior) would conclude that application of sanctions by an external actor in some way is the only option for moving society away from the Pareto-inferior outcomes resulting from individuals acting alone. Inaction, or if you will, leaving the economy in a *laissez-faire* state (assuming, as explained on page 7, that this is our point of origin when considering our actions) can scarcely be an option because it will always bring about failure (and subsequent decreases in W). What actions then would be justifiable from a utilitarian position in the different cases we defined above?

With *externalities*, we have a case where individual behavior causes effects for third parties outside the market mechanism. Pollution, for instance, negatively affects those living in the surrounding area, whereas these parties receive no com-

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Another, less extreme example of more economic character, is that of the utilitarian notion of *distributive justice*. With an assumption of diminishing marginal benefit of wealth it is permissible within utilitarian justice to redistribute wealth in such a way that overall social welfare increases. Optimal social distribution is derived from a particular social welfare function and is then achieved by redistributive measures. In the same way as with the example about racial strife some individuals may be sacrificed for the greater good, which is achieving the Pareto-optimal allocation of wealth decided by the social welfare function. The composition of the social welfare function, i.e., the character of the individual utility functions it is comprised of, is often founded in a normative position about what good society *ought to be* rather than *what it is*, since it is generally considered impossible to actually derive individual utility functions, much less make interpersonal comparisons.

The normative foundation of social welfare functions is a complex issue, and however interesting, a footnote is, alas, all that is devoted to it here. Confer (Rosen, 2002:141 et seq.) for more information about Social Welfare Functions in general. Regarding the normative aspects of social welfare functions confer (Bergh). He points out that economists should remain neutral as to the composition of individual utility functions and that rankings of different Pareto-optimal allocations (for instance a strictly egalitarian distribution) are value-judgments.

pensation for their loss in welfare. This causes a decrease in utility for those individuals (which is assumingly higher than any potential increase the polluter gains from polluting) which in turn causes a net decrease in *W*, which then results in a Pareto-inferior outcome. The task of a policy maker is then to move society away from Pareto-inferiority and achieve a socially optimal situation which will then increase *W*.

One action prescribed by *Welfare Economics* is a *Pigovian tax* (cf. Pigou 1932; Rosen, 2002). This action proposes to tax each unit of production, making production more expensive (i.e., raising the marginal cost of production by adding to the *marginal private cost* the polluter faces, the *marginal social cost*). This will cause the polluter to reduce production to a socially optimal level, which will increase the utility of the individuals who suffer from the pollution, and hence create a net increase in *W*.

Possible problems attached to the *Pigovian tax*, are defining what activities cause pollutions, which pollutants that do harm, what value to attach to them, all which would be necessary for determining the appropriate level of the tax (Rosen, 2002). Failure to accomplish the above may result in the inability to measure changes in *W*, and thus also create problems of justification. A tax that would decrease the level of *W* would have to be considered unethical.

Another often applied cure is that of outright *regulation*. Applying it again to case with pollution, this is the case where a central authority (i.e., a state) enforces a certain level of emissions with the threat of force (legal sanctions). It must be assumed then that the lower level of pollution increases the welfare of those affected by it, and this generates a net increase in *W*, and hence the action is justifiable. However, regulation presents problems as well. It mandates all firms to cut back an equal amount which will lead to some firms producing too much (i.e., the cut isn't sufficient to restore a social optimum in the case of this firm), and some firms to produce to little (the cut is too large in relation to this firm). This obviously has consequences for the utility levels of the firms (or more correctly, to their owners and staff etc.) and those living in the vicinity of the firms. The overall effect on *W* would be hard to predict and justification for regulation hard to establish.

Another possibility for correcting externalities is the concept of *Coasian negations* (Coase, 1960; 1974). This includes the rearrangement and assignment of property rights such that the externality is owned by some part. The parties can then trade for compensation until an efficient solution, a social optimum, is reached. We will discuss this further in the analysis of the libertarian position. As we shall see, this is one of the few remedies available to a libertarian state, and possibly it would not be a utilitarian state's first choice (because it involves a minimum of actions from the perspective of the state and the impact on *W* would hence be very uncertain), such it is more fitting to discuss this within the libertarian position.

Continuing with *Public Goods* we'll return to the classic lighthouse example (Coase, 1974). In the case of a Public Good non-excludability and non-rivalry result in a possibility for some to enjoy the benefits of the good without contributing to its provision. With the lighthouse, the result is that each ship can benefit from

an erected lighthouse without contributing to its costs. The result in the end, according to the assumptions of the thin rational choice model, is that this *free-riding* will collapse the market for lighthouses. No lighthouses will be built. The result is a loss in welfare, a decrease in W, since the lighthouses presumably add to net positive balance of social welfare. How would a utilitarian act in this case? The most cited solution for restoring efficiency to a market of goods that are some extent or other nonrival and nonexcludable in consumption, is to adopt a scheme of government provision with financing through taxation. The loss in W from the taxation is considered smaller (as the burden is spread over many actors, often including those who do not directly benefit from the good in question) than the gain from having a supply of the good. Having a supply is of course also considered a gain over not having one. Again, measuring real changes in W is problematic, and hence, justification hard to establish.

Finally, we take a look at the case of *information asymmetries* and the resulting *adverse selection* or *moral hazard* in cases involving insurance (such as health insurance or social insurance). Here, low risk cases leave the market because high risk cases, who are assumed to be more attracted to the good, drive up the price of the premium. Provisions of such goods are usually recommended to be handled by the government and be made mandatory. This way the insurance can be provided, it is argued, and followed by a subsequent increase in *W*. The welfare losses for those who are coerced to participate in the insurance scheme is considered smaller than the increase for those who wants an insurance and can have it because of provision ensured by government.

In summation, given a strict adherence to the assumptions of the thin rational choice model, which predicts that markets for *public goods*, and markets plagued by *externalities* and *information asymmetries* will fail, a utilitarian normative position, which would require actions to alleviate such failures, will have to conform to the constraint of having to increase overall social welfare. This would entail actions that are normally recommended within the field of *Welfare Economics*. These actions include taxation, or regulation of production to compensate for externalities, and (mandatory) government provision of goods that exhibit nonrivalry and nonexcludability in consumption, and goods plagued by problems of *adverse selection* and *moral hazard*.

We will now continue and contrast *utilitarianism* with the *libertarian* normative position, which will allow for some different measures, but disallow others, such as those presented above. The actions conforming to the constraints of the libertarian position are fundamentally different, as will be apparent. After our discussion, we'll return briefly to the utilitarian position to see how the libertarian cures may relate to the constraint of increasing overall social welfare.

The Libertarian Normative Position

Libertarianism is a social and political theory that holds as its core that individuals have a certain set of inviolable rights which delimits the sphere of actions available to individuals (directed towards other individuals) and to the state. I will here

refer to the particular version of libertarianism represented by Robert Nozick, which has its foundation in the writings of Locke (Nozick, 1974; Locke, 1960).

Libertarianism is the modern variant of nineteenth century liberalism. It grew partially from a critique of utilitarianism, one of which the most prominent feature is that it is an *aggregative* theory. In utilitarianism, increases (or decreases) in overall utility come from adding together each individual's separate utility function. Utilitarians themselves point to this as one of the strongest merits of the theory—it employs a simple model of rationality that works well at the individual level; act so that your own welfare increases. If met by two choices, one of which yields less of an increase in utility than the other, the one which yields the greatest increase should be chosen. Proponents of utilitarianism posit the notion that this rationale can be properly transferred to the social level—act so that social welfare increases. This entails that the interests of some individuals, yielding a lower overall increase in *social* utility, can be forsaken for the interests of others, which yield a higher increase. Some individuals may be sacrificed for the greater good of society (Norman, 1998).

The analogy is fallacious, claims others. As Nozick puts it "There is no social *entity* with a good that undergoes some sacrifice for its own good. There are only individual people, different individual people, with their own individual lives" (Nozick, 1974:33). A social good, according to Nozick, does not exist because societies are only the sum of its individuals. Society is not single agent who can experience good, or make decisions, or bear blame. A person who is overridden in a utilitarian calculus is sacrificed for someone else's benefit, nothing else (Nozick, 1974).

Critics of utilitarianism have therefore looked for some other theory that captures the idea that individuals cannot be sacrificed for other's benefit. One such theoretical idea is that there might exist moral rights—individuals have rights of one form or another, which may not be violated. All actions, all pursuit of goals, whatever they may be, must conform to the set of defined rights that is inherent to each individual. The rights are the constraints of a libertarian normative position. Adherence to a specific set of rights is the *general principle* for a rights-based ethics. What then, constitutes the rights of the libertarian normative position?

In his seminal book *Anarchy, State and Utopia*, Nozick holds basically that each person is a separate individual with the inviolable right to live as he chooses,

See also note 7. (cf. Rosen, 2002: 290; Schotter, 2001: 81 et seq.).

¹⁰ Many libertarian thinkers, such as F.A. Hayek, Milton Friedman, Ludwig von Mises reject rights as the basis for justification and argue for the libertarian position on the basis of its beneficial *consequences*, i.e., that laissez-faire market economies produces the Greatest Happiness. Though not utilitarian in any strict sense, they are decidedly teleological, not deontological. (cf. Friedman, 1962; 1990; Hayek, 1960; Mises, 1949).

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⁹ To this a utilitarian economist might retort by citing the *Kaldor-Hicks Compensation Criteria*. It states that wealth can be redistributed between the 'winners' and 'losers' resulting from a given policy. It is uncertain, however, what utility distribution might result from this and it requires a definition of what 'good' is before it can be redistributed. The Kaldor-Hick Criteria is hence subject to the same problems of preference aggregation as any other derivation of social preferences.

¹¹ All rights-based ethics are not libertarian. For instance, John Rawls devised his *Theory of Justice* based on a set of rights which is not strictly libertarian. Rawls' position is a complex one, and libertarianism, is by comparison, at least in a scaled down form, not equally so (in my opinion), which is why we'll use the libertarian position rather than that of Rawls' (Rawls, 1971).

conditional only upon a respect for other individuals' rights to do the same. These rights include the traditional liberal right to non-interference, to own one's body and mind and to own and use in any way ones legitimately acquired property, and to enjoy the fruits of voluntarily entered contracts.¹² One may enforce these rights against others unless one has voluntarily contracted the rights out. The rights do not include uncontracted right to assistance from others, and correspondingly ones obligations to others are similarly limited (Lacy, 2001:20).¹³ The origin of these rights is uncertain in Nozick's writings, as they are in other libertarian works, but they are seen as preceding political life, not being a product of political process itself.¹⁴

These rights bear implications for the actions of the state. It may not intervene into civil society, for instance to balance the distribution of rights (which is egalitarian; all individuals have these rights), or designate new rights, for instance rights to material welfare such a job, housing or welfare payments to alleviate poverty.¹⁵

The result following the internal logic of libertarian theory is that justification can only be made for the very minimal state, one which is dedicated to protect life and property and to enforce contracts. No redistribution of material welfare and no regulation of economic activities beyond enforcing voluntary contracts is permissible. What actions, then, are possible to undertake to alleviate the effects of

¹² Confer Locke's labor-mixing argument in (Locke, 1960) and Nozick's modified version in (Nozick, 1974:174) for an exposé of what constitutes legitimately acquired property from the original position and Nozick's *Entitlement Theory of Justice* for just acquisition via transfers of property (Nozick, 1974:150: *passim*).

property (Nozick, 1974:150: *passim*).

Libertarianism, unlike utilitarianism, should not be considered a complete theory of ethics, as should not any other ethic based on rights. A set of rights acts as a constraint on *some* actions, i.e., actions that would violate the rights. In other cases, such as situations when the rights are not in danger of being violated, a libertarian ethic will offer no guidance, whereas utilitarian ethics would (act so that social welfare increases). Take the example of helping a poor man on the street. A utilitarian would likely come to the conclusion that helping him with a few coins would increase his welfare more that yours would decrease. A libertarian ethic would in this case offer no guidance, because it recommends nothing when rights are not in danger of violated. The libertarian rights would prevent someone from coercing you to help the man on the street, but as to helping him voluntarily you are on your own. Possibly libertarianism could benefit from other ethical theories in such cases (Norman, 1998:185 *et seq.*; Lacy, 2001; Nozick, 1974).

¹⁴As to different ideas of the origin of rights, Locke claimed they originated from God, given to each man in a state-of-nature, while Ayn Rand claimed they were somehow intrinsic to human nature (hence the term *natural* rights). Nozick treated rights as sort of self-evident, given by the 'separateness' of each individual (Boaz, 1997; Nozick, 1974; Rand, 1963; Rand, 1957; Locke, 1960)

¹⁵ Rights to material welfare are generally referred to *positive* rights, while rights to non-interference is referred to as *negative* rights. Positive rights, it is often argued, would violate the rights non-interference by breaching the property rights of others. Related to the issue of positive versus negative *rights* is the issue of positive versus negative *liberty*. In short, negative liberty refers non-interference, while positive liberty refers to those specific conditions which makes a thing possible to do. For instance creating a good life for one self requires specific conditions such as material welfare. The material welfare is then positive liberty and positive rights is positive liberty given the status of rights, say a right to a job or a house. Rights to negative liberty is the libertarian position (which is then right to non-interference) and there are often substantial clashes between the two concepts. I've dealt with this more extensively in another essay (cf. Hansson, 2004). Of course many philosophers of much higher stature than me have covered these issues including Jan Narveson and Isaiah Berlin (Berlin, 1958; Narveson, 2001).

market failures caused by externalities, public goods and information asymmetries?

It should be clear already that cures such as the *Pigovian tax*, outright *regulation*, and *government provision* of public goods that worked well for the utilitarian will not work here. They would inexorably violate the libertarian rights.

A libertarian normative position could not rely on schemes involving the application of sanctions from an external actor for restoring efficiency, at least not in many situations. There are some though, such as precise definitions of property rights, that could possibly fit within the scope of a minimal state. This can lead to efficient solutions to externalities by making use of *Coasian negotiations*, from Ronald Coases' famous theorem. Other than that, given the assumptions of thin rationality, there seems not to be much a libertarian state can do.

However, a libertarian society must not necessarily live with market failures. There are solutions, but they would require, I would say, a move away from a strict application of thin rationality. Given the thin rational choice model, I am hard pressed to see that any previously submitted cure for market failures would work within a libertarian context (without violating the *general principle* of action).

But a thick model of rationality seems to yield many solutions. Ellinor Ostrom suggests in her presidential address of 1997, *A Behavioral Approach to Rational Choice Theory of Collective Action*, that the standard models need revision. While it returns accurate results in some social environments, such as highly competitive markets, they fail in other setting (Ostrom, 1997:2). Further she claims that the empirical evidence of *free-riding*, and the general inability to solve situations involving market failures are weak. She, and many economists, such as James M. Buchanan (1965; 1968), Andrew Schotter (1981), Earl R. Brubaker (1975), and game theorists like Robert Axelrod (1984) suggest that individuals can learn cooperative behavior and solve these 'social dilemmas' without application of force from an external actor. In the coming chapter we'll first take a look at the Coase Theorem and then on some of these new theories.

The Libertarian Position and Cures for Market Failures

The Coase Theorem, presented by Ronald Coase in 1960, states that economic efficiency will be achieved as long as property rights are fully allocated, and that free trade with all kinds of property rights is possible (Coase, 1960; Bannock et al., 1998). The important conclusion is that it does not matter who owns what initially, but that everything should owned by someone. Assigning property rights to externalities such as pollution (of whatever kind, greenhouse emissions, noise etc.) would make them tradable like any other good, and from this process efficiency could be achieved without interference from the state.

Consider this example. Suppose X likes to play drums and that this produces an externality, noise, which is to the detriment of X's neighbor Y, who enjoys silence. A law is passed giving drummers an absolute right to play as much as they like. The drummer would then be the legal property holder of the noise as well. The major point of the theorem is that it would now be in the interest of Y to offer X

some compensation for reducing his drum-playing, he would be able to buy silence from *X*. A trade with the legal right to play drums could take place until both *X* and *Y* reach an efficient solution (cf. Perman *et al.*, 2003; Rosen, 2002 for other examples).

It should be observed that property rights can be assigned the other way around as well, giving Y the right to silence. X could then compensate Y for using a portion of his silent time to play his drums. Regardless of how the property rights are assigned an efficient solution will occur.

Possibly, the Coase Theorem could correct the problem of externalities without (excessive) interference from the state which would suit a libertarian fine. However, assigning property rights in such a manner might *prima facie* seem simple, but it's not. The social situation of *X* or *Y* would be affected by any rearrangement of property rights as this would incur opportunities for increased wealth, which would in turn give rise to problematic distributional issues. Exactly how such a rearrangement of property rights stands the test of non-interference (of individual rights) is uncertain, and far too complex an issue for us to investigate here. One should, however, keep in mind that a rearrangement of property rights cannot interfere with any previously established rights.

Another possible source of problems is transactions costs. The Coase Theorem will be a viable solution given low transaction costs. In certain situations this might not be the case, such as with large groups with disparate interests. An agreement in such a situation might hard to come by. Consider the example of a polluting firm and the people living adjacent to it. If there is, say, an entire town being submitted to the pollution (and possibly there might be numerous polluting firms) reaching an agreement which is satisfactory for everyone could be hard.

The Coase Theorem presupposes no revisions of the standard models of rationality. Given the assignment of property rights, individuals will trade in their normal self-interested manner, as concluded by the *First Welfare Theorem* (defined on page 9). But from a libertarian normative position this may be the only corrective measure available unless the models are expanded upon. In cases where goods exhibit public characteristics the market will fail and a libertarian state could do nothing. If market failures are to be avoided, corrective actions must be initiated without any kind of coercion by the state.

Substantial criticism has been directed towards basing conclusion about human behavior on the thin rational choice models (cf. Ostrom, 1997; Axelrod, 1984; Brubaker, 1975). Empirical evidence suggests that in cases where a set of individuals face a social dilemma, such as procuring the provision of a public good, they exhibit cooperative behavior unpredicted by the thin model. Markets may not collapse after all.

Hence, the rest of this chapter is dedicated to what I find is the alternatives a libertarian policy maker could resort to for correcting market failures. These would amount to, as seen from the perspective of the state, spontaneous, non-centralized, non-directed actions taken by individuals in civil society. These actions are based on a theory of collective action for solving 'social dilemmas' with a foundation in a *thick* rational choice model, which allows cooperative behavior

to emerge without the presence of sanctions from an external actor (such as a state).

In prehistoric times, writes Ostrom (1997), survival was dependent on both the aggressive pursuit of self-interest and on collective action to solve problems like defense of the community, acquisition of food and raising children (Ostrom, 1997:2). Families and close kin were used to reciprocating cooperative behavior to solve these problems before there was any kind central actor on the scene. As humans settled in larger communities this cooperative behavior spread to include others than the closest kin. Ostrom cites how evolutionary psychology and cognitive science both show that humans have evolved the capacity to develop norm systems that cultivates cooperative behavior (Ostrom, 1997:2).

Ostrom suggests a thick rational choice model in which norms such as *reciprocity*, i.e., returning the favor when met with cooperative behavior instead of pursuing immediate self-interest, is incorporated. Other norms such as *trust* and *reputation* of persons reciprocating cooperative behavior would develop which further enhances a group's ability to handle social dilemmas, particularly if the group is small and shares a common interest (Ostrom, 1997:12).

Consider the example of a small group of farmers sharing a creek for irrigation (cf. Ostrom, 1997:14 et seq.) The creek maintenance (and the creek itself) represents a public good scenario. The farmers face the annual problem of organizing a collective workday to clear out fallen trees and brush from the preceding winter. Each farmer's production is dependent on the condition of the creek. The thin rational choice models would predict failure here as each farmer benefits from free-riding on the efforts of others; his production will not suffer if he doesn't join in the work as long as the other farmers do. Since everyone has this incentive the market for irrigation would fail, leaving each farmer worse off than if everyone cooperated. The thin model solution would then perhaps be to tax the farmers and have some central authority supply maintenance for the creek.

Ostrom (1997) suggests that, when certain structural variables exist the likelihood for cooperation will increase. If the group is relatively small, and the individuals in it have symmetric interests (such as farming), arriving at an agreement on how to supply maintenance for the creek wouldn't be very difficult. The farmers, who have see each other on a daily basis, work together in the future would develop a norm system that would facilitate cooperation. Each farmer knows that if he doesn't reciprocate he will earn distrust from his fellows and see the withering of his reputation as an honest man, but he does reciprocate, he will build trust and further cooperation. This could possibly make a central authority superfluous (Ostrom, 1997).

An argument along similar lines (when public good scenarios are involved) is presented by Brubaker (Brubaker, 1975). He argues that when a private entrepreneur wants to provide a public good, not producing it is always a means of exclusion. The possibility of not producing a good in demand might be sufficient leverage to collect production commitments (say in work efforts, like in the case of the farmers above, or monetary payments for financing). If an individual is guaranteed beforehand that others in the group will also commit he might consider cooperating. Brubaker presents a rival to the free-riding hypothesis called the *golden*

rule of revelation, which states that under pre-contracted group excludability, the dominant tendency for each individual will be to accurately state his preference for a collective good provided he has some insurance that other will as well (Brubaker, 1975). This could possibly make the state superfluous in the case of public goods provision.

James M. Buchanan offers yet another perspective on the public good problem. He asserts that private, voluntary associations, 'clubs', may function very well in providing public goods (cf. Buchanan, 1965; Buchanan, 1968). Trade associations, golf clubs, swimming clubs, condominiums, and shopping malls are good examples of private initiatives to provide goods exhibiting nonexcludability and nonrivalry in consumption. Buchanan's theory focuses on membership conditions and explains the relations for an optimal number of individual members for each club.

Andrew Schotter developed a more general theoretical framework for analyzing the emergence of social institutions without deliberate and planned actions from a central authority (Schotter, 1981). Political science has, he says, depicted the rise of the state as a social contract between free individuals, and as a result they have depicted it as risen from a state-of-nature via spontaneous actions, not subject to any grander and deliberate design. He suggests that social institutions (such institutions that would, for instance, handle the provision of a public goods) arise via invisible hand processes without any agent or group of agents consciously designing it. For instance, with a market failure involving a public good, which is to be provided by a central distributor of some kind or other (but not necessarily a state), where individuals have incentives to lie about their marginal rates of substitution between the public good and some private good (which determines the demand for the public good), from which a suboptimal outcome then is the result, it would be effective for individuals in society to evolve an institution which would alleviate the problem (such as a convention to tell the truth about the marginal rates of substitutions) (Schotter, 1981).

He argues along the lines of F.A. Hayek (and other representatives of the school of "Austrian Economics" such as Ludwig von Mises) who insists that order in a society doesn't need to be imposed by a central authority (Hayek, 1960; von Mises, 1949). Order is created by the spontaneous actions of millions of individuals pursuing their own goals. Both Hayek and Schotter argue that our great institutions, such as money, banks, property rights, competitive markets, insurance contracts and the state, evolved without conscious planning. Their writings seriously challenge the notion that central authorities are essential for human societies.

Closing the category of public goods we'll return to example of the lighthouse. Coase discusses empirical examples of private provision of lighthouses (Coase, 1974). Historically, he said, lighthouses in Britain had been provided by private enterprise and not by government. The problem of nonexcludability and nonri-

the good (cf. Nicholson, 2002:676).

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¹⁶ The problem of truthful preference revelation for public goods is advantageously expressed with the concept of *Lindahl Pricing*. When presented with a proportion of a public good, his tax share would be computed in relation to his demand for the good. The individual, it is argued, then has an incentive to understate his preferences to lower his tax share and still receive the same amount of

valry had been solved by collecting tolls at ports and government activity was limited to protecting property rights attached to lighthouses. Ship owners had, contrary to the predictions of thin rational choice models, recognized the value of the lighthouses and were glad to pay. The lighthouse example, and Coase's debunking the free-rider hypothesis, is perhaps the strongest example of how individuals can handle market failures themselves without the application of sanctions and regulation from a state. Certainly, it is the most famous.

Certain social dilemmas of the public goods type can probably be solved without the state, but can all? Public goods dilemmas requiring major financing and involvement of many people with disparate preferences may not lend themselves to the same type of solutions as with the small community of farmers above. National Defense is a common example, space flight, non-profitable scientific research are others. If such goods are to be produced at all in a libertarian community it would have be done without the use of coercion of any kind. The question remains if that is possible.¹⁷

Finally then, we should say a few words about the case of information asymmetries and related public goods such as insurances based pooled resources. Here the market fails again as individuals, low risk cases, shirk payment for the insurance because high risk cases have driven up the price of the premium, incurring costs for the insurance provider as he cannot tell the two cases apart and resort to a scheme of price discrimination (i.e., charge a higher price for high risk cases to cover the costs they incur, and keep a lower price for low risk cases). The result is a suboptimal production of insurance. A utilitarian could here simply recommend government provision and mandatory participation (if it proved to increase overall welfare more than available alternatives). This solution would be impermissible from the libertarian normative position. Individuals would have to solve these problems themselves in the same fashion as with the creek-cleaning dilemma in our farm community above, or as with lighthouses or swimming clubs. There are some empirical indications that even social insurance matters can be handled without interference from a state.

Libertarians generally refer to these solutions as *mutual aid* (cf. Boaz, 1997). The term refers to individuals banding together in various voluntary organizations to help each other through times of trouble. They can be charitable institutions, of course, but many are not. Rather they are like credit unions. In the African tradition of *susu*, writes David Boaz, people would contribute to a common pot which members subsequently took turns collecting—perhaps someone who had a particular need at a particular time. In Korean tradition a similar thing exists called a *keb* where groups of people meet for socializing, dinner and contribution of money to a common pot which would be given to one participant in need. Such groups, exhibiting the particular norm systems of reciprocity and trust discussed previously with regards to Ostrom, might function as social security, without interference from the state (Boaz, 1997:138 *et seq.*; Ostrom, 1997)

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¹⁷ This might not be as impossible as it first seems. The world has, for instance, seen the beginnings of a private market for space flights despite its gargantuan costs. Already there are several private launch vehicles for smaller satellites and several firms are developing reusable space crafts that may compete with the government (US) funded Space Shuttle Horvath, 2004).

Will any of these non-centralized cures against market failures restore, or even come close to, Pareto-efficient markets? Perhaps there's no way to be sure. If they don't, a libertarian might just have to sacrifice Pareto-efficiency.

The Utilitarian and Libertarian Positions again

It is clear from the analysis of the libertarian normative position that the state has very little room in which to maneuver for correcting market failures. But what about utilitarianism and decentralized individual action? Seen from the perspective of the individual, he can of course act in any way he believes will increase social welfare. Relating such actions to our context he could for instance act in a reciprocal manner towards others in his community. In the community of farmers he could forgo free-riding on creek cleanup day if he thought this would increase social welfare. Or he could contribute to financing a public good if this was thought to do so. The difficulty with this approach is of course the calculative nature of utilitarianism—how does one assess the impact of individual actions upon the entire society? The point is however, that spontaneous individual action, unsupervised or guided by a central authority would be available from the utilitarian positions as well, but its calculative nature bears implications which are difficult to get past.

From the perspective of the state, how does one appraise the actions of uncontrolled individuals? Seen from the state, can spontaneous non-directed individual action be labeled actions at all? A state applying utilitarian ethics would likely have to view such activities as *inaction* rather than *action*. Doing nothing. Of course if a state based on a utilitarian ethics concludes that doing nothing is what will increase social welfare then inaction would be the appropriate choice. The question is perhaps if a utilitarian state would ever come to such a conclusion?

In contrast we must conclude that the measures available to a utilitarian state are not possible from a libertarian normative position because of the constraints imposed by individual rights. We can however, conclude that *Coasian negations* overlap the positions without violating the restrictions either one.

It is perfectly possible for a utilitarian state to assign, or rearrange, property rights and let individuals trade in manner that will increase overall social welfare. The assigning and rearranging of property rights under a libertarian position would likely be a more delicate matter, as the adherence to individual rights sets certain restrictions. For instance, they cannot be rearranged in a manner that violates previously established property rights, whereas a utilitarian may rearrange as he pleases, given that overall social welfare increases.

Conclusions and Summary

We now have all the components of our model of market failure correction with respect to a normative position. We've discussed the empirical components, in which different social dilemmas, externalities, public goods and information asymmetries, caused a market to fail with respect to the criterion of Pareto-efficiency. Corrective actions to these failures were then discussed from the constraints set by ethics in a certain normative position, allowing for some actions to be considered while disallowing others. We exemplified with two specific normative positions, utilitarianism and libertarianism, while still being aware, of course, that a normative position can be composed of other values than those intrinsic to these particular positions. We arrived at a set of permissible actions for each normative position. The results are summarized in figure 2 below.

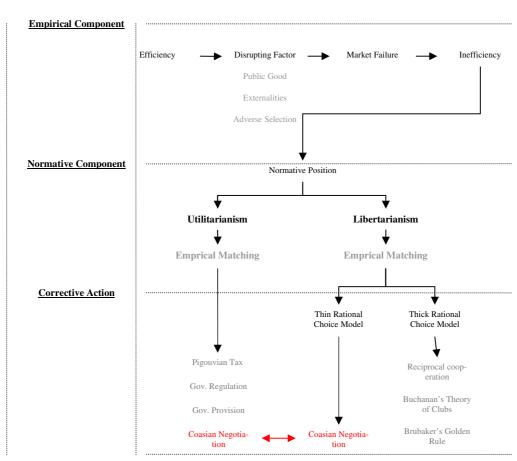


Figure 2 – Implications of the Normative Position on Cures for Market Failures

A solution to a market failure must, in addition, to conforming to a normative position, also be empirically matched to its corresponding failure (i.e., the *Coase Theorem* fits failures caused by *externalities*). Then, within the utilitarian position

we concluded that actions are allowed if they meet the restriction that overall social welfare is increased. Permissible actions were those often discussed within the field of *Welfare Economics*. Actions involving state interventions were not problematic, but individual, non-centralized actions might be due to the calculative nature of the utilitarian position. State actions, because of the state's enormous resources and overall societal perspective, seem to hold greater chances of calculating what actions will increase social welfare than that of disparate individuals and their separate calculations for various actions. There seemed to be no apparent need to modify the thin rational choice models which are the foundation for much of economic theory because of this. The standard model predicts failure in social dilemma type market failures and the guided actions of the state would remedy them.

With the libertarian position we concluded that a modification of the underlying rational choice models were needed to discuss market failure correction except in one instance—that of assigning property rights to externalities and having individual actors trade until a Pareto-efficient outcome was achieved. This solution was also the only solution that seemed to work under both positions. Other solutions from the libertarian position required us to move beyond the standard rational choice models to models which incorporated norm systems such as reciprocating cooperative behavior, trust and reputation among individuals when acting in groups. Certain social dilemmas could then possibly be solved without involving sanctions or regulation from a central authority, notably with groups limited in size and exhibiting similar preferences. The disparity of solutions between the two different positions worked to clarify the point of the essay; ethical systems, norms and values matter for economic theory and policy.

What are the implications of the normative position? The concept of a normative position for market failure correction illustrates that values may be pinned against each other. *Efficiency* is a value, *welfare* is a value, *rights* are values, and they are not always compatible. An economist whishing simply to analyze what type of procedures would save a market from a sub-optimal position can certainly do that, but should perhaps be well advised to consider that there are other values, and possibly if his conclusions are not colored by them. If there are values that are incommensurable, one would have to consider what's more important. Certainly any economist whishing to engage in actual policy recommendations to elected representatives would have to ponder about this before making his recommendations. He would have to consider what values matter to him—what is his normative position?

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