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Applying Consumer and Producer Surplus Theory to International Business Ethics

by
John Watson

A research paper submitted in fulfillment of the requirements for 1.5 credits, GRADUATE INDEPENDENT RESEARCH PROJECT Fall Term 1996, Professor Fort, Faculty Supervisor

Faculty Comments

This paper is an excellent attempt at applying economic analysis to an ethical dilemma. Little of this kind of analysis is done in traditional business ethics literature, and even in economic literature, commentary tends to narrow the preferences that are being maximized in a utilitarian framework.

John Watson's paper does a good job, however, of taking into account the easily and not-so-easily quantifiable demands of the various stakeholders in international business. He uses Consumer and Producer Surplus Theory very nicely to illustrate a methodology with promise. For purposes of this independent study, he has done exactly what he proposed to do in a meaningful way. This paper has publishing potential if he is able to more thoroughly link up his theory with traditional business ethics literature (such as Werhane, Donaldson, etc.). He does make preliminary linkages in this paper, and the extent to which he does this is fully adequate for the purposes of this study.

Signature of Faculty Supervisor

Ass't Prof

Title

I. Introduction

There are many situations in developing countries in which the ethical behavior of a large, United States based corporation is called into question. These include labor practices, where, for example, a company may build a factory in a developing country to take advantage of the lower labor costs there. While some would argue that this improves the standard of living in the developing country by providing jobs that were not previously available, others argue that by paying wages that are extremely low compared to wages in developed countries, multi-national corporations (MNCs) are exploiting workers. Another similar issue is pollution, for example a case of a company moving operations to a developing country that has less stringent pollution regulations, thus lowering operating costs. Again, some would argue that this is ethical as long as local laws are followed, because the decision-makers in the country feel that the pollution is an acceptable trade-off for the economic development. Others would state that this is again a case of a developing country being exploited, and that companies should not be allowed to pollute in developing countries. A final example is in resource depletion, for example a case where a foreign company enters a developing country to log, mine, or engage in other similar resource extraction projects. Again the MNC may be seen as contributing to the local economy, with an alternate view being that the MNC is taking advantage of the developing country's need for economic development in an unfair way.

Often debates on these issues distill down to an argument where the corporation argues that despite problems, the native country and citizens are better off because of higher wages, economic development, jobs, infrastructure development, etc. Critics argue that the native people are worse off than they could be, that without the influence of the corporation conditions would improve more. Critics may also argue that MNCs take advantage of weakness of a country, and while marginally improving the situation may help perpetuate problems in developing countries such as corrupt governments. Often arguments such as these do not move towards a resolution because either there is no way to resolve these questions of which situation is better, or because participants in the arguments are not familiar with the necessary tools to analyze the situation.

In this paper I will argue that the economic concept of consumer surplus can be applied to analyze a number of business ethics issues. Further, consumer/producer surplus can be tied into another economic concept, Pareto optimality, as well as several ethics theories including utilitarianism and Basic Rights. The use of the concept of consumer surplus has two advantages. First, it allows us to look at ethical issues from a slightly new standpoint not traditionally used by ethicists. Second, it uses a concept familiar to economists and businesspeople, one that they will be more comfortable using to analyze their own situations.

II. Economics and ethics

Pareto efficiency

The concept of Pareto Optimality can be seen as a way to tie together otherwise disparate economics and ethics theories. LaRue Hosmer puts the concept of Pareto Optimality within the larger context of the ethics of microeconomic theory. According to Hosmer, "Pareto Optimality refers to a condition in which the scarce resources of society are being used so efficiently by the producing firms, and the goods and services are being distributed so effectively by the competitive markets, that it would be impossible to make any single person better off without harming some other person." In order to be legitimate and accurate this concept must account for ALL costs and benefits, not just those that are accounted for in the current economic system. In other words, externalities such as environmental degradation and other social costs must be included in the costs.

Pareto Optimality can be seen as a way to connect microeconomic theory and ethics. Economics typically is concerned with maximizing returns to shareholders of a business, and often is not considered to have an ethical component (although a number of economists would disagree). If one sees the goal of an economic system to achieve a condition of Pareto Optimality, where nobody can be made better off without making someone else worse off, then the system can be seen as ethical in a utilitarian sense. An action which is in the direction of Pareto Optimality, for instance that makes someone better off without making anyone worse off, is ethical. An action that makes someone worse off, moving away from Pareto Optimality, is not ethical.

There are clear drawbacks to this approach. Some would argue, as Milton Friedman and other economists have, that corporations should not be concerned with anything other than maximizing return for their own shareholders. In this view trying to achieve Pareto Optimality goes beyond the ethical duties of managers of a corporation or leaders in society. Others would more likely take the opposite approach and argue that Pareto Optimality is not an appropriate ethical approach because it is strictly utilitarian, and does not take into account being and doesn't make anyone worse off, then that action is ethical. In the case of a company logging a forest in a developing country, the company will produce revenue for its shareholders, for the country, and for its workers. If the forest was not currently being used by anyone, then it might be stated that nobody was made to be worse off. Therefore, according to a simple interpretation, the action of logging the forest is ethical. If one looks at the opportunity cost, however, one can argue that there was a better option for use of the forest, possibly as a tourist draw. Over the long term tourism might have made more people better off. Therefore, logging the forest has in fact made people worse off economically *than they might have been otherwise*, and is not an ethical action

Consumer Surplus

The above concepts may be helpful in determining the rightness or wrongness of certain actions, and may be used to guide moral decision-making. I will now move on to a different type of case, and present an economic tool that may help us in determining actions to take.

Consumer surplus and producer surplus are relatively simple economic concepts that build on the basic economic supply and demand curves. The basic supply and demand graph shows, in an idealized and simplified model, the equilibrium price and quantity for a given good or service. As shown in

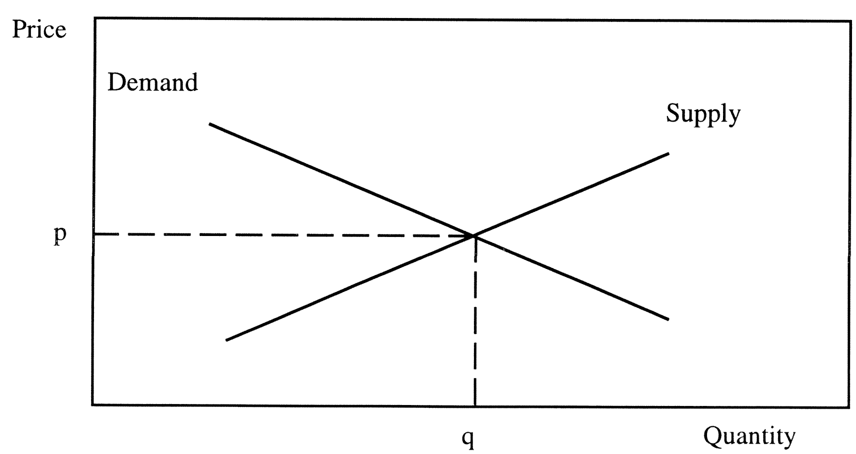

Figure 1. A basic supply and demand graph. As price increases, supply will increase and demand will decrease. The intersection of the two lines shows the equilibrium price and quantity demanded.

Figure 1, where the demand and supply curves meet determines the value for price, p, and quantity, q. Demand curves typically slope down to the right, reflecting greater demand as price drops. Supply curves typically slope up to the right, reflecting greater supply as price increases. The slope of demand and supply curves will vary depending on a number of factors such as the type of product. For example, a good that is necessary for life and cannot be easily substituted will tend to have a much steeper demand curve, showing that a large change in price will have only a small change in quantity demanded, and reflecting that purchase decisions are not heavily based on price (Figure 2)

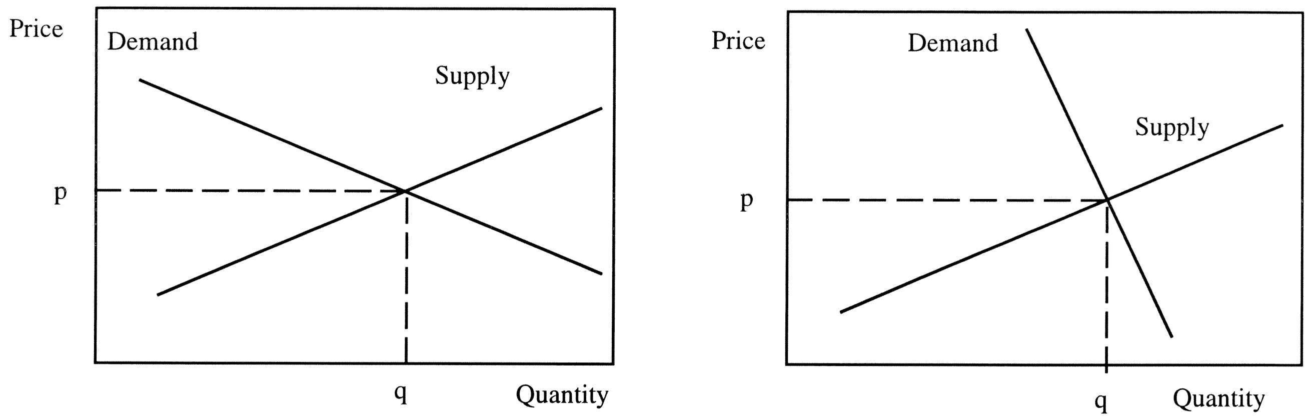

Figure 2. Different goods will have different slopes for their demand and supply curves. The demand curve to the right represents a good that is not very price sensitive, and therefore the demand curve is steeply sloped.

Simple manipulations of the demand and supply lines show what will happen if there is a change in either supply or demand. If demand increases then both price and quantity will increase (Figure 3; p becomes p' and q becomes q'); if supply increases then both price and quantity drop.

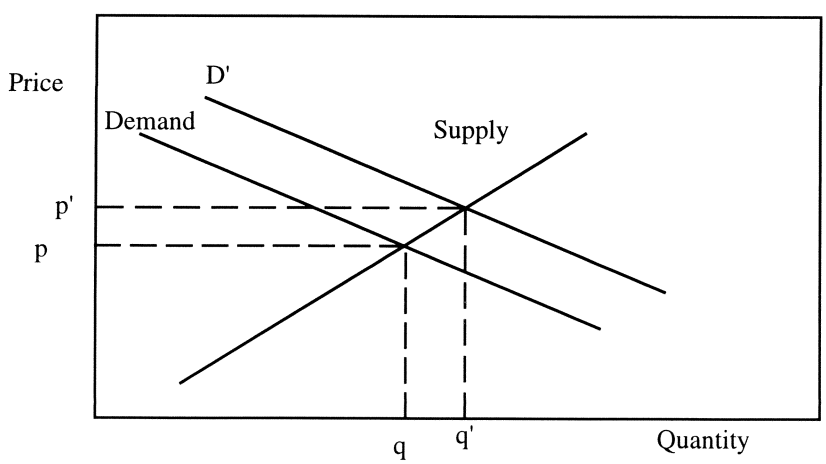

Figure 3. When demand increases both price and quantity increase (to p' and q').

For a given good A, the supply and demand curves meet and define the equilibrium price p and quantity q (Figure 4). In this case the consumer surplus is defined as the area under the demand curve and above the price (shaded area). For a demand curve that represents the aggregate demand across many consumers, the surplus for each discrete unit of a good will be minimized, and the surplus will approach the area under the demand curve. A demand curve reflects the aggregate demand of consumers and therefore the aggregate surplus that accrues to all consumers in a market.

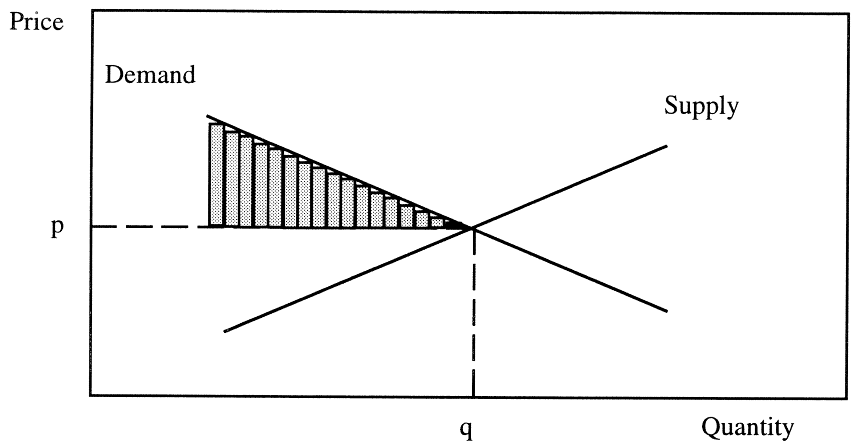

Figure 4: The area under the demand curve but above price is equal to consumer surplus

This concept may be more easily understood as an intuitive concept before examining the graph. Intuitively, consumer surplus can be understood as the difference between what a consumer would be willing to pay for a good and what he actually pays. If I sell you an sandwich for $2, but you would have paid $5, then your surplus is $3, and you are better off by purchasing the sandwich. If I raise the price to $4, then you will still buy the sandwich and still be better off, but by a smaller amount. As price goes up the amount of surplus, or benefit to you, goes down, to the point where the sandwich costs $5 and you are indifferent to buying it or not.

Producer surplus:

Producer surplus is the counterpart to consumer surplus, and is similar to profit (similar but not exactly the same for reasons that are too complex to explain here). In a graph (Figure 5) it is the area above the supply curve and below the price. It can also be explained by the example above. If my cost of producing the sandwich is $2 and I sell it to you for $4, then my surplus is $2. If you are only willing to pay $3, then I will still produce and sell it to you, but my surplus has dropped to $1. If the price you are willing to pay drops to my price of producing the sandwich then I am indifferent to producing it or not.

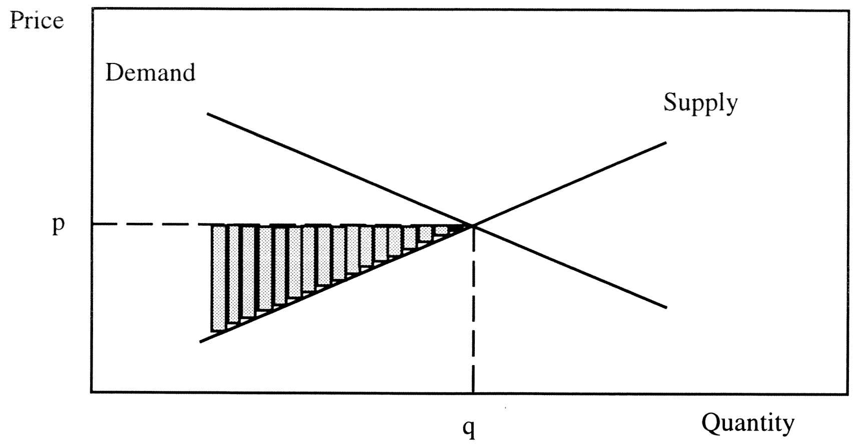

Figure 5: The area above the supply curve but below price is equal to producer surplus

III. Applying the concepts

We now have a new framework with which to examine a simple case. Let us suppose that Corporation X owns and operates a factory in Country Y, producing low cost clothing which is then sold in the United States. Corporation X pays its workers a very low wage by United States standards, which is why it has moved operations to country Y. These wages, however, are 10% higher than the workers could get if the factory was not there. In fact, it is arguable that many of the workers would be unemployed if it was not for the presence of Corporation X. Human rights and labor activists argue that Corporation X should pay higher wages to be fair to the local people and provide a wage they can live on, suggesting that the low wages paid allow the company to exploit the workers and produce high profits . The company responds that it is helping the local economy by paying wages that are higher than the average, that if it was to pull out the people would be worse off, and that in fact its profits are not "unfairly" high.

Given the complexity of this situation, it is not clear if the decision by the company to operate in the developing country is ethical or not. Opponents of this facility say that local workers work long hours and are underpaid. The company replies that it is paying competitive wages, that the local workers are choosing to work at the facility, and therefore must be better off than they would be otherwise.

Traditional ethics approaches

There are a number of traditional approaches that we might take to this issue. These include the following:

(1) Werhane's Basic Rights Theory, which starts with the basis that corporations do have moral responsibilities because they have rights that have been claimed by individuals and affirmed by the courts; these rights necessarily entail moral responsibility as well. Moral responsibility is based on honoring the rights of individuals, which break down into two categories. The first category is "Basic Rights," which are those things that make life tolerable and would include food, shelter, and freedom from physical harm. The second category is "Non-Basic Rights," which are "important" but secondary to basic rights. These would include property rights and the right to an income. In considering an action, a corporation or person must first strive to protect basic rights, then subsequently non-basic rights. In a conflict between two similar rights (both basic or non-basic), the corporation should try to find a compromise that preserves the rights of all parties, and if this cannot be done then the solution should be chosen to minimize harms to the parties. The final step in the decision process is to take a utilitarian approach to maximize benefits to all parties.

Applying Werhane's theory to this case would start with the observation that the issue of the level of wages being paid by the company probably does not involve the violation of any basic rights, assuming that the work is being done voluntarily, that the wages paid at least cover the cost of food and shelter for a person living in the developing country, and that the job does not subject the worker to undue danger of physical harm. The second level of rights, non-basic rights, are probably not being violated either. The final step of this approach, which is utilitarian, suggests that we should maximize benefits accruing to all people, but does not in itself suggest how these benefits should be allocated. Overall, then, applying Werhane's theory leads to the conclusion that the situation is ethical if the above caveats are true.

(2) Boatright's Stakeholder Theory states that in a moral decision all interested parties, the stakeholders, must have a say in the decision. It is likely that in the case of a multinational corporation locating in a developing country that the country's government has a say in the process, but it is less likely that the workers have any input into the decision as to what the wages will be. Therefore, if we assume that the amount of wages being paid is a moral decision, then the decision process is not ethical, and we may assume that the wage level is also not ethical. However, one weakness to applying this theory is that even if the workers are well-paid, which most people would consider an ethical situation, the workers probably still may not have been consulted on the issue. Does the lack of universal participation doom an action to being labelled "unethical" even of all participants *would* agree with the outcome?

(3) Donaldson and Dunfee's Social Contract Theory starts from a basis similar to Stakeholder Theory in that more than simply shareholders must be involved in the decision-making process. Social Contract Theory also shares with Werhane's theory a view of why corporations have moral responsibilities, although in this case they believe that the corporation's moral responsibilities stem from the community, because it is the community that allows the corporation to exist, presumably because the corporation is providing some benefit to society. The Social Contract Theory evaluates moral decisions by looking at community norms, to allow for the differences in values between different societies around the world, and looks at whether the corporation's actions adhere to these community values. In order for these values to be "authentic" they must have the "consent" of the people of the community, which is evident if the people are free to leave the community if they disagree with its values or decision. Also, the theory considers whether the values and norms are legitimate by making sure that they do not conflict with any "hypernorms," which are analogous to Werhane's "Basic Rights." If a moral value or decision based on that value does not violate any authentic community norms, and does not violate any hypernorms, then the decision or action is moral.

Applying this theory to the situation presented requires that we consider the community norms in the developing country, and indeed this is similar to an argument often used by corporations in similar situations. Wages that are considered unfairly low in the United States, for example, may be above average in the developing country and the company argues that based on the community norms the wages are ethical. This approach may, however, overlook two elements. First, in many developing countries the people are not fairly represented by governments that may be incompetent or corrupt. Second, even with the presence of an honest government, the economic situation as driven by international markets may result in wages being lower than what we would consider "fair." Although this argument is hampered by difficulty in defining "fair," most people would probably agree that the wages that exist in some developing countries are unfairly low.

Applying economic concepts

Clearly, in the above section the ethical principles are not applied very rigorously. The intent is only to set a framework for traditional approaches to an issue. In this section I will apply the economic ideas explained earlier to the same situation to show that the economic theories can also be used to approach the ethical issues and to possibly suggest the appropriateness of

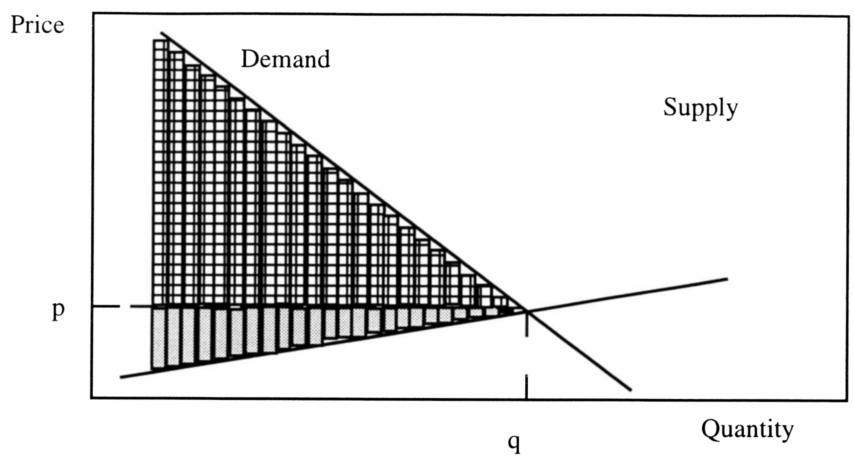

Figure 7: In this case the supply curve has a much different slope, and producer surplus (to the workers) is much less than consumer surplus (to the company)

Recall that the key element of looking at the surplus inherent in a market is the concept that there is a level of surplus that accrues to the participants in a market. The question that we can ask in this situation is "Is the surplus being distributed fairly?" Although in one sense this brings us back to the question of what is fair, in another sense the analysis will help to inform us of the proper answer.

In Figure 6 the total surplus is the area of the triangle formed by the supply and demand curves to the left of the point where they intersect. The triangle is evenly bisected by the price, which is equal to the wage level, so the surplus is accruing evenly to the workers and to the corporation (to the "buyers" and "sellers" of labor). This would likely be considered a "fair" situation by most people. But what of a situation where the surplus does not accrue evenly to both sides? Figure 7 shows a situation where the supply curve has a much different slope than the demand curve. This might be an accurate representation of the situation because there is a difference in the two parties' ability to move out of the market: the corporation simply can choose not to locate there if the cost of wages is too high, whereas the workers are more constrained to stay in the area because of families, lack of resources to move, etc. In this case the surplus is very different, accruing disproportionately to the corporation and away from the workers.

If Figure 7 represents the surplus accruing to the producers and consumers of labor in the simple case presented earlier, then the workers may be considered to be exploited by the company's unethical actions. The efforts of their labor are resulting in far more benefit to the company than to themselves. Furthermore, bringing back in the concept of opportunity cost, this company may be taking the place of a company which would split the surplus more equitably than the present situation. Although workers are getting some benefit presently, they might receive greater benefit in another situation that is precluded by the present situation.

Suggested solutions

The consumer surplus concept can also be used to help determine appropriate policy solutions to the low wage issue. If Figure 6 is an accurate representation of the situation, then an increase in the wage, either through a minimum wage law, public pressure, or other means, will increase the surplus accruing to workers and produce a more equitable split of the surplus. This increase in minimum wage is shown in Figure 8. It is important to note that the redistribution results in some loss of total surplus, so the issue to be considered is whether the loss in surplus is compensated by the shift in distribution to the workers. This would be in keeping with ethics theories stating that when considering an action we must make sure to take care of those who are most disadvantaged, in this case the low wage workers.

It is important to note that the theory does not address who should make these decisions, and therefore who should be taking this type of thinking into account. Ideally, any government, corporation, or non-governmental organization could apply the theory to determining the ethical implications of a policy change. However, determining who would best apply such a theory is beyond the scope of this paper.

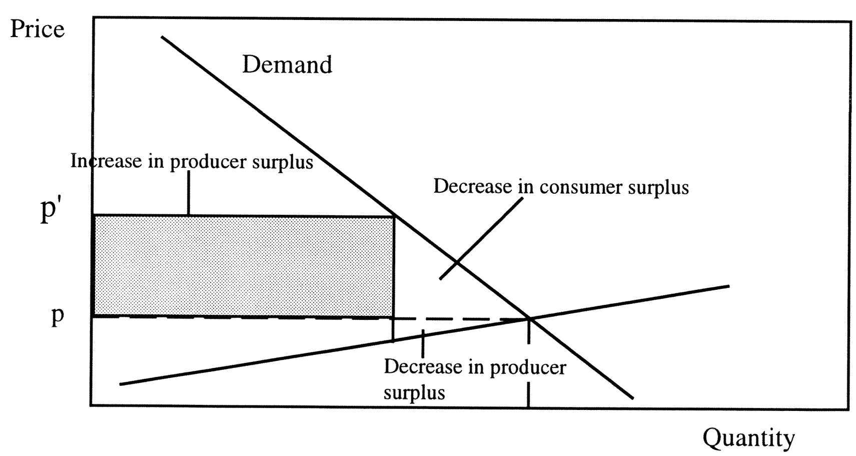

Figure 8. An increase in the wage that is "forced" upon the company by law, public pressure, etc, will result in an overall decrease in surplus but also a redistribution of surplus to producers, in this case workers.

IV Conclusion

The analysis presented in this paper is only preliminary. Questions remain about the applicability of economic theories to ethics; for instance is knowing the consumer and producer surplus in a given situation actually possible? The short answer is yes, but determining an actual curve is a difficult and lengthy process. Even the explanation of how to do so is beyond the scope of this paper.

There is, however, value in understanding these ideas if only because they provide a conceptual framework for quantifying a benefit that flows differentially to people in a given situation, such as the company operating in a developing country. Traditional ethics theories provide us with concepts and frameworks that are generally non-quantifiable. Some of these, such as Basic Rights and Stakeholder theories, do not need quantification in order to be applied. Others, such as utilitarian approaches to ethics, may need some quantification in order to be applied to a real world situation. Economic concepts can provide a process so that we may at least understand how to quantify benefits flowing to participants. This can allow us to not only put ethical issue in terms that can be understood by non-ethicists, but also to measure costs and improvement of different solutions proposed for ethical dilemmas.