

## **Team Production and Fiduciary Duties in Corporations**

by  
Margaret M. Blair  
Georgetown University Law Center

*Presentation to the Fourth International Symposium on  
Catholic Social Thought and Management Education:  
Rethinking Wealth Creation and Distribution in the Jubilee: A Double  
Challenge for Catholic Social Thought and Management Education  
July 14, 2000  
Universidad Iberoamericana  
Puebla, Mexico*

It is an honor to be here in the beautiful city of Puebla with you for this Fourth International Symposium on Catholic Social Thought.

Being the final speaker is a challenge. I have read many of the papers, and, although I did not get here until Wednesday night, I sat in on as many sessions as I could yesterday.

I hear many of you asking very big questions and struggling with very big problems. And as you talk, it sometimes seems to me that there are two separate conversations going. The first is among the ethicists and theologians and philosophers, emphasizes that people, not property, should be the focus of economic activity, and that, even though the right to hold private property is respected by the Church, property should be thought of as being held in trust, for the common good. Meanwhile, another conversation is going on, among some of you here, and among economists, finance theorists, and even some management specialists and policy makers, in which the starting assumption is that human greed and financial incentives are what drive innovation and wealth creation. This latter group tell us that the profits belong solely to shareholders, and that managers have a duty to maximize those profits.

Jeff Gates told us yesterday that we simply have to quit listening to that second conversation. I have spent much of my career as an economist trying to convince economists that they need to expand their models so that they do a better job of taking into account real people, not just the caricatures of people represented by so-called "economic man": a creature who is merely a hyperindividualistic utility maximizing machine.

But in this group, I don't need to tell you that. Instead, I will say, don't throw away economic models and economic reasoning. The models are flawed, but they are worth fixing, because they can, if used right, force us to think logically and be realistic.

I heard many of you talking about very big ideas for solutions to the big problems you are struggling with. I must confess, I'm somewhat in awe of your willingness to take on the big problems in that way. I won't attempt to put on a grand finale here with any more big ideas. Instead, I want to talk this morning about two small ideas that I think might be helpful to you in bridging the gap between the conversation the ethicists and theologians are having, and the other conversation that economists and finance theorists are having. These ideas come out of my work as an economist, in which I have used economic models and reasoning to analyze the role of corporations and corporate governance mechanisms. They may also help bridge the gap in rhetoric between the language of efficiency and incentives used by economists, and the language of justice, fairness, human dignity, and the common good used by ethicists and theologians. The two ideas I want to talk about are "team production" and "fiduciary duties." Both ideas, I believe, are useful in thinking about economic organizations in general, but they are absolutely essential to understanding the economic function played by corporations in modern economies.

I will talk about team production first since this idea is important for understanding the role of fiduciary duties. But before I talk about team production, I need to lay a little groundwork.

The "team production" idea comes out of work I have been doing for the last six or seven years on the theory of the firm. What is a corporation? How are we to understand this dominant institution of capitalism?

As many of you know, for at least the last 20 to 30 years, economists and legal theorists who have written about corporate law, corporate governance, or corporate finance, have generally had in mind a theory or model in which the firm is viewed, essentially, as a bundle of assets that belongs to the shareholders. In Economics 101, the section on the "theory of the firm" utilizes a production function model in which an entrepreneur with a machine, or a fixed set of productive assets, hires employees to work on those machines. The application of labor to capital, in these models, transforms raw materials into finished goods. The "firm" is equated with the fixed assets and the technology or the recipe by which the entrepreneur/owner decides how to combine labor with capital to produce goods and sell them, in such a way that maximizes profits. In these models, the entrepreneur/owner is understood to have all the decision and control rights over those assets.

Legal scholars and corporate governance theorists have basically adopted the same model, though in their models the jobs of "owner" and "manager" have been separated, and a group of anonymous investors or shareholders have been substituted for the "owner." These scholars have explored at length the implications of this separation of ownership and control. In particular, they have focused on what they call the "agency costs" that arise as a result of separating ownership from control. The essence of the problem, as economists see it, is how do shareholders get the managers to manage the firm in the interests of shareholders? Many leading finance and legal theorists view the so called "agency problem" as the central problem of corporate governance:

Finance theorists have likewise adopted the bundle of assets view of firms, focusing on the returns from the assets in the bundle. They have explored how the risks and returns associated with the bundle of assets can be unbundled and recombined into different kinds of securities, and they have explored how the assets themselves might be unbundled and recombined to enhance their value.

All of these ways of analyzing corporations treat them as little more than bundles of assets that belong to shareholders. And all imply or support a norm of shareholder primacy in corporate governance.

But modeling a corporation as a bundle of assets, a piece of property, is a serious misconception, I believe, and very misleading in its implications. This approach is neither consistent with economic theory, as I will demonstrate, nor with the law. A corporation is better understood as a human institution, an association of human beings who have come together, or contributed resources, in order to pursue some economic enterprise. People are not just undifferentiated units of labor to be added to machines up to the point where the marginal revenue from the last unit of labor hired is equal to the marginal cost of adding that last unit. Even on its own purely economic terms, this metaphor or model is misleading because so much of the value creation in modern corporations comes from intellectual capital and human capital.

Team production analysis provides an alternative way of understanding what a corporation is that puts the human participants at the center of the model, but doesn't require us to abandon economic reasoning.

"Team production" refers to productive activities that have two central characteristics. First, the productive activity requires the inputs of two or more individuals. And second, the output is non-separable. "Non-separable" means that one cannot say after the fact who is responsible for what proportion of the output. It was a joint effort. Each person's contribution was necessary to the final output. We can all think of numerous examples of team production. Think about two people trying to move a piano up two flights of stairs to an apartment on the third floor. The task simply can't be done by one person working alone.

Now suppose we add to the basic idea of team production the further complication that the productive activity itself is very complex, such that each person's inputs to the production process is impossible to specify in advance, and very difficult or impossible to measure precisely even after the fact. Some examples of complex team production involve a single project, such as co-authoring a paper, or building a dam, or making a movie, or developing a new drug. Other examples involve ongoing productive operations such as operating an airline, or generating electricity and delivering it to homes, offices, and factories, or building and marketing automobiles.

Team production processes present very interesting contracting problems. A group of people may want to come together to undertake some joint productive activity, which none of them could do by themselves. But who is supposed to get what share of the

output, and how do they decide? It's the kind of contracting problem that economists love to think about, because, from an economists' point of view, in which all of the team members are assumed to be completely rational and self-interested, there seems to be no way to accomplish the task. Let me walk you through the problem the way an economist would think about it:

Suppose, for example, that there are ten team members, that some of them are providing technical expertise, some are providing organizational or management expertise, or financial expertise, some are providing financial capital. Suppose that the inputs provided by each team member, once they have been committed to the joint enterprise, cannot be withdrawn and redeployed elsewhere. Once committed, they are stuck there, so that the only way any given team member can get anything back for her contribution is by sharing in the output that results from the joint enterprise.

One possible solution is that the team members could agree to divide up the output evenly, however much it turns out to be. This solution is neat and clean, but economists have explored at length the supposedly perverse incentives it creates for team members. They point out, for example, that, under such an arrangement, each team member would have an incentive to shirk, because each would get 1/10th of the net output, regardless of how much effort he actually expends and regardless of the quality of the work that he does or the magnitude of the contribution he makes. Economists therefore predict that such an arrangement would not be likely to survive and prosper.

In practice, this particular solution to the team production problem, however, is something we actually observe in the world in the form of cooperative enterprises. Economists may be right, however, that it is difficult to make them work. The fact is that true cooperatives are not a common way of organizing work, especially large scale operations.

Another contracting approach that has been proposed to solve the team production problem is the "all or nothing" contract. The way this works is that team members set a target output level that they believe can only be reached if all of them work really hard. If any of them shirk, however, they will not reach the target. Then they agree that if they reach the target, they will split the proceeds from the productive effort evenly. On the other hand, if they don't reach the target, that is a sign that at least one person was shirking, and no one will get anything. Instead, the output will be thrown away, or given away to some outsider. With this kind of contract, if anyone shirks, all are punished. Supposedly this will motivate all to work hard.

But think about the perverse incentives associated with this solution. The outsider who is supposed to get the output if it falls short of the target will have an incentive to try to bribe one of the team members to shirk just a little bit. I have been unable to think of any real life examples of this kind of contract.

Yet another possible solution to the team production problem is that the team members could agree to let one of the team members be the "owner" and hire all the other team

members. The "owner" would work out contracts with everyone else. The owner might arrange to pay each team member his opportunity cost, for example, or might work out some formula that ties their compensation to some measure of their individual performance. The "owner" would oversee all the contracts, and monitor the other participants to make sure they do not shirk. Once the work is done, the "owner" would pay each team member according to his or her contract, and would keep the "residual" or what is left over.

This model is a much more useful model in the sense that we see these kinds of arrangements often. In fact, the model is a reasonable description of the way entrepreneurial firms actually work. In the last 15 or 20 years, economist Oliver Hart, alone and with co-authors, has elaborated on these ideas, noting that property rights over the assets used in production help to solve the contracting problem by giving one team member -- the owner -- both the decision rights and the residual claim rights. Property rights, hence, play a role of filling in the gaps in the incomplete contracts among the team members by giving one team member control rights, plus an incentive to see that the property is used efficiently and that all team members work hard.

This idea has been very popular among economists, finance theorists and legal scholars, many of whom have now adopted this line of reasoning as basis for thinking about corporate governance questions. One reason for the popularity of this idea, I suspect, is that it, once again, reduces a corporation to a bundle of assets that belongs to and is controlled by one of the members. Hence the model feels like a simple extension of their familiar old production function models.

But, unfortunately, this model does not describe the way corporations and other large-scale organizations actually work. Most large scale productive enterprises do not have a single owner who has all the decision rights. In fact, the logic of the property rights model of the firm as a solution to the team production problem falls apart as soon as there is more than one "owner," since then you're right back to the problem of contracting among multiple team members. Moreover, in complex modern enterprises, is it really sensible to imagine that a single owner could draft complete contracts with all the other input providers, specifying exactly what they are to provide and how their performance will be measured?

There is another solution to the team production problem, which has only recently been discussed in the economics literature, but, when you think about it just a minute, should sound very familiar to you. The idea is that team members could solve their contracting problem if they all agree to give up control rights over the joint enterprise to a trusted outsider. Team members might say hey, we're all good friends, we respect each others' capabilities, and we can probably work out the details along the way about who is supposed to do what, and who gets what reward. But if we get stuck, if we can't decide among ourselves, we want to have a decision-making mechanism in place that is not too cumbersome and that we all trust. That decision-making mechanism that we all agree on is the management hierarchy, headed by a board of independent directors.

The legal process of incorporating a business sets up precisely this kind of arrangement. In work I have done collaboratively with Prof. Lynn Stout of Georgetown University Law Center, we note that, under the law, a corporation is not a piece of property, but a legal device for organizing and governing relations among a group of people who have agreed to work together on a common business enterprise. This is why, with all due respect to your plenary speaker yesterday morning, I cringe at the use of the word "owner" in describing corporations. Shareholders own their shares, which constitute a particular kind of claim against the collective output of the enterprise. But they do not own the corporation itself, nor any of its assets. Indeed, a corporation is not something that can be owned. But by creating a separate legal entity to own the assets used in the enterprise, the law facilitates the creation of a decision-making structure other than ownership to govern the relationships, or if you will, to fill in the gaps in the incomplete contracts among the participants in the enterprise.

Let's look at how this works by considering briefly what corporate law accomplishes.

At the time the corporation is formed, a separate legal entity comes into being. That separate entity has the authority to own property and write contracts with all of the human participants. One of the first tasks that the law demands of the team of people who form the corporation -- indeed, it is a prerequisite for creating the separate legal entity -- is that the team name a board of directors. The board of directors, then, is given all the authority to act in the name of the corporation, and to make decisions on its behalf.

In other words, the key legal fact is that the original team members all agree to give up control rights over the specialized inputs they contribute to the enterprise, and over the outputs generated by the productive activity of the team. Control rights are granted to an internal hierarchy, headed by the board of directors. The board enjoys the ultimate decision-making authority, to determine the use of corporate assets, to determine payouts to the various participants, and to serve as an internal 'court of appeals' to resolve disputes that may arise among team members. The board may include several team members, but it may also include, and in fact, generally does include a number of outsiders.

Although directors are granted many of the most important control rights, clearly they are not the "owners". On the other hand, none of the other participants may tell directors what to do. Directors have very wide discretion under the law in the way they exercise that control. But, and this brings me to the next idea I want to talk about, they also have fiduciary duties of loyalty and care in their roles as directors. These legal duties mean that directors cannot personally appropriate the assets of the firm to their own use.

So the point I want to make here is that the corporate form, which may be the single most important institution of modern capitalism, relies not primarily, as traditional economic theory would have you believe, on property rights and financial incentives for its effectiveness in organizing human productive endeavors. Rather, the central feature of the corporate form is that it sets up a hierarchical decision-making body, headed by a board of directors with fiduciary duties.

Ok, what are fiduciary duties? And, importantly, to whom are directors' fiduciary duties owed?

The answer to these questions, I think, form the connection point between the economic tools of analysis, which, as professors in schools of management you must teach your students, and the discussion of ethical norms and Christian values that, as scholars committed to Catholic social teaching, you also must provide for our students.

My law dictionary notes that a fiduciary is "a person having a legal duty, created by his undertaking, to act primarily for the benefit of another in matters connected with his undertaking." Now the whole idea of fiduciary duties makes no sense if you buy into the basic assumptions about human nature that economists adopt. In fact, if you accept the basic model of human behavior drawn by economists, telling people that the law says they should act primarily for the benefit of others would have no more effect than telling a pack of wolves that, according to the law, they ought to be vegetarians.

In another project that Lynn Stout and I are doing together, we have been looking at the evidence from studies by psychologists, sociologists, and other social scientists about whether people are really as irredeemably self-interested in their behavior as economists assume. The research we are looking at involves so-called "social dilemma" games. In social dilemma games, people are put into situations in which they must choose from two, or sometimes more courses of action. The dilemma arises because the choices that most benefit the individual players tend to be bad for the group as a whole. In these games, everyone is better off if everyone else chooses the cooperative course of action, but each individual can always make herself better off by choosing not to cooperate. However, everyone is worse off if they all choose not to cooperate.

The research we looked at uses highly artificial situations, designed to carefully control for a number of factors that might influence behavior other than the purely economic incentives.

The findings, based on dozens of studies of hundreds of such games, point to a conclusion that is consistent with Catholic Social Teaching and that therefore won't surprise you: People are not irredeemably self-interested and uncooperative. In fact, although not everyone is cooperative all the time, the average person seems to want to cooperate, so that experimenters have to make the costs of cooperating, or the benefits of not cooperating, quite high to get most people to not cooperate.

Moreover, the evidence suggests that cooperation rates can be manipulated using purely non-economic factors. In fact, what seems to matter most with people is how they perceive the situation. If they are told that the game is supposed to be competitive, and that they should look out for their own interests as they make their choices, most of them will do so. If, on the other hand, they are told that the game is a cooperative game, and that they should try to figure out a way to work together to achieve the highest group outcome, most of them will do so. This is true even if the purely economic payoffs to the individual players are the same as between the two games!

In other words, rhetoric and moral authority count in eliciting cooperative, group-oriented choices by individual players. And they seem to count quite a bit.

This is good news for the idea that the critical factor that makes the corporate form work as a mechanism for organizing and encouraging productive economic activity is the perception on the part of the participants that the executives and directors who are authorized to make decisions for the organization are trustworthy, that they can be counted on to be good fiduciaries.

It is also good news for the way the law of directorial fiduciary duties actually works. In the U.S., at least, courts do not attempt to tightly control director behavior. In fact, the courts give directors extremely wide discretion, and even if a director engages in some activity or transaction that is negligent or self-serving, the courts rarely impose penalties that have serious financial costs for directors. Rather, the courts make high-sounding pronouncements about the moral duties of directors and the special social and moral expectations imposed on them. And when a director crosses a line, the rhetorical response from the courts seems designed more to shame them than to financially penalize them.

In other words, we think fiduciary duty law is designed not to impose tight constraints on corporate directors and managers, but to appeal to that part of their human character which understands itself to be rooted in community, and that wants to participate cooperatively in a joint human enterprise.

This leads to the final point I want to discuss, which is the question of who, under the terms of corporate law in the U.S., is supposed to be the beneficiary of directors' fiduciary duties. You often find business and legal scholars stating in an almost offhand way that fiduciary duties are owed to shareholders. But this is not completely accurate. Under the law, directors and officers of corporations owe their fiduciary duties first and foremost to the corporation itself. This makes sense because, in all other legal contexts, fiduciary duties are invoked in situations in which the beneficiaries of, say, a trust or guardianship are not in a position to look after their own interests. They may be minors, or mentally incompetent for example. The corporation itself, since it is not a human person, is obviously not in a position to look after its own interests, so directors are charged with making decisions for it, and their fiduciary duties run to the corporation itself.

Now if we think a corporation is merely a bundle of assets that belongs to shareholders, we might easily conclude that the interests of the corporation are identical to the interests of shareholders, and, hence, that fiduciary duties of directors must run to shareholders.

But this argument is simply not tenable once we understand corporations as legal structures for governing the relationships among all of the team members. To be sure, shareholders in publicly-traded companies may deserve special protections because they have turned over their assets to the corporation and have so little in the way of direct control rights. But that is not the same as saying that shareholders should be the exclusive beneficiaries of directors' fiduciary duties. And when you look at the kind of decisions

that courts have actually handed down in fiduciary duty cases, it becomes abundantly clear that the courts believe that there is a distinct corporate interest, separate from the interest of shareholders, that must be protected. The interest of the corporation, then, must be understood as a proxy for the mutual interest of the team members. And directors are clearly protected under the law when they make decisions that are aimed at protecting this mutual interest, rather than at enriching shareholders at the expense of other stakeholders.

So let me quickly summarize with four key conclusions or implications:

- 1) Corporations are not just bundles of assets that belong to shareholders, but rather, they are remarkable social and legal innovations that have enabled people to channel vast quantities of financial resources and human energies into creative, joint productive activities. They have been a powerful force for creating wealth, and for distributing it, for most of the last century and a half.
- 2) Corporations are able to organize and channel a vast array of inputs from numerous participants because the law creates a decision-making body – the management hierarchy headed by a board of directors – and gives it control over the inputs and wide latitude in how it uses them.
- 3) The individual decision-makers in this corporate hierarchy, in turn, owe fiduciary duties to the corporation as a whole, meaning, in the words of one famous court case, "the community of interests" involved in the enterprise. Fiduciary duties, in turn, are enforced primarily (although not exclusively) by appealing to the moral instincts and consciences of the fiduciaries.
- 4) Thus, in management education, we cannot and should not separate the moral and ethical education from the economic, finance, marketing, or management training. Indeed, even if we start from a purely economic perspective in thinking about how the institutions of capitalism work, we are led to the conclusion that moral and ethical leadership are at the heart of the most important and pervasive of those institutions.