

# Markets, Hierarchies, and Status Orders: Wherein lies the control?\*

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## MARKETS, HIERARCHIES, AND STATUS ORDERS: WHEREIN LIES THE CONTROL

This paper highlights the significance of status to control in both markets and hierarchies. In so doing, it takes issue with the conventional view that markets and hierarchies represent alternative control structures. Implications for Williamson's (1975, 1985, 1991) transaction cost framework are discussed.

### INTRODUCTION

Economists and sociologists have long regarded the problem of adaptation as a central problem of economic organization (Selznick, 1948; Hayek, 1949). However, despite their agreement on the importance of the problem, economists and sociologists have typically focused on alternative structures as solutions to the problem of adaptation. Economists have historically looked to the market as a solution, while sociologists have traditionally focused on formal organizational mechanisms.

One of the few notable attempts to synthesize economic and sociological approaches has been the work of Oliver Williamson (1975, 1985, 1991), who argues that the solution to this problem of adaptation lies in a sensitivity to the markets-hierarchies continuum and to the costs associated with transactions at different positions along this continuum. Which organizational form is most efficacious in a given circumstance is contingent upon which solves this problem of adaptation at the lowest transaction costs.

An important assumption of Williamson's work is that markets and hierarchies constitute distinct forms of control, where control can be defined in terms of the ability of an actor or actors to anticipate and formulate coordinated responses to unforeseen contingencies that emerge from the

environment (cf. White 1992).<sup>1</sup> If markets and hierarchies do not constitute distinct forms of control, if they do not provide distinctive modes of adaptation to unforeseen contingencies, then the choice that Williamson presents is ultimately a false one. In this paper, I would like to challenge this fundamental assumption. While it would be difficult if not impossible to completely undercut the *prima facie* validity of the distinction between markets and hierarchies as modes of control in the confines of one paper, I would like to make the distinction slightly more controversial by drawing attention to the status ordering of actors as a control structure that permeates both markets and hierarchies. My central claim is that the status of actors provides the fundamental basis for control in both markets and hierarchies, and to the extent that Williamson's framework ignores the importance of identities as mechanisms of control, it misses a crucial aspect of the control dilemma confronted by economic actors.

### WILLIAMSON'S SOLUTION TO THE CONTROL DILEMMA

We begin with the two alternative control structures that constitute the poles on Williamson's market-hierarchy continuum. Fredrich Hayek was, if not the first, at least one of the strongest and most eloquent advocates of the market as a mechanism of control. According to Hayek

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<sup>1</sup> In effect, an actor possess control to the degree that he or she solves the problem of adaptation. This sociological definition of control is closer to the economic conception of governance than to the economic conception of control, which typically refers to an actor's ability to ensure that another's activity is directed toward a pre-defined set of goals. Both the sociological conception of control and the economic conception of governance can be defined independently from the realization of specified ends since they refer to abilities, structures, and mechanisms that set parameters for action independent of the specific ends toward which that action is directed.

(1949), freely floating prices generate spontaneous coordination and adaptation. They are signals that guide behavior. For example, if an innovator commands a high price in the market for an innovation, this price is a signal to other potential and actual producers that there is a set of consumer preferences that the innovation addresses. The producers are thus able to match their production capabilities to these preferences. This example of an innovator is an important one because it shows not only that prices effectively disseminate information on consumer preferences, prices also respond extremely rapidly to changes in those preferences. If producers – actual and potential – observe a fall in the price for a series of related goods, they are able to adjust their output and perhaps over the long term their products to reflect these changing preferences. Through exerting an influence on prices, a consumer can communicate information to a producer without the producer talking to the consumer, without knowing the consumer, or even being remotely connected to the consumer.

For Hayek, the proof that control comes coupled with a freely operating price mechanism is revealed in a comparison of market-based and centralized economies. The attempts of socialist economies to impose order through administrative fiat actually undercut the orderly operation of economic life because it reduces the information contained in prices. In the absence of the guidance yielded by prices, there is a much less coherent arrangement of producer-consumer pairs. The absence of a freely operating pricing mechanism leaves producers without reliable information as to how these consumer preferences could be satisfied. Control, for Hayek, thus comes coupled with prices generated by free competition, not with centralized authority.

In direct contrast, Weber (1978) argues that a centralized bureaucracy is the most effective means of solving the problem of adaptation to uncertain contingencies. The centralization of administrative prerogative in the hands of one or a few individuals allows an organization to react quickly to changes in the environment. According to Weber, incoherences, inconsistencies, ambiguities, and conflicts between actors are the primary threats to coordination and adaptation, and bureaucracy – through its clear demarcation of responsibility and authority – is the most effective resolution to these threats to control.

The tension between Weber's and Hayek's views should be evident. Whereas Hayek believed that control was inversely proportional to

the centralization of administration in an economy, Weber argued just the opposite. In Weber's view, control comes coupled with centralized authority, not with the diffusion of responsibility among autonomous actors.

Williamson's great contribution has been to provide a resolution to the inherent tension between these two views. Williamson argues that both hierarchy and a freely floating price mechanism are efficacious means of control, but the transaction costs of one will – depending on the circumstances – be higher than the transaction costs of the other and thus a less efficient mode of control. To be specific, as asset specificity, environmental uncertainty, and frequency of transactions between two exchange partners increase, hierarchy becomes a less costly and thus more efficient mode of control relative to the market. Conversely, as asset specificity, environmental uncertainty, and frequency of transactions decrease, the market becomes more efficient than a hierarchy.

In seeking to specify the conditions under which the market or hierarchy is the more efficient mode of control, Williamson transforms a control question into a boundary question. The question is no longer what mechanism or mechanisms engender control; the question now becomes one of where ought the boundaries between forms of organization be drawn so as to minimize transaction costs.

Nevertheless, while Williamson perceives control possibilities in both markets and hierarchies, Williamson (1975) is extremely skeptical of the control possibilities provided by another economic arrangement – the informal work group. Williamson conceptualizes the informal work group as a dense network of communication flows, as in figure 1. Williamson argues that such a group possesses certain advantages above a reliance on isolated individuals in a market context. First, he argues that by bringing everyone into the same location and providing them with the same facilities, one can create a commonality of interests that would be lacking if one simply subcontracted out the components to isolated individuals. Second, Williamson argues that the informal work groups are superior to isolated individuals if membership provides work guarantees and thus reduces the risk that each individual faces from not receiving work. For example, consider a group of five accountants. Each faces a greater risk of attracting no clients in isolation than attracting no clients as a group. Of course, one trades the smaller losses for smaller gains, but the point is

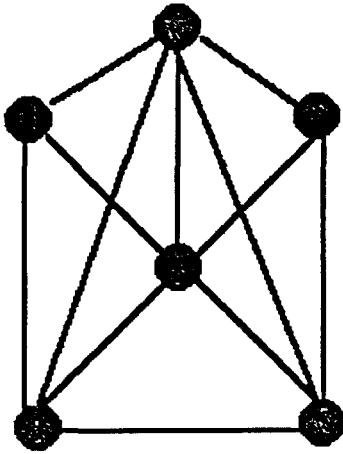


Figure 1.

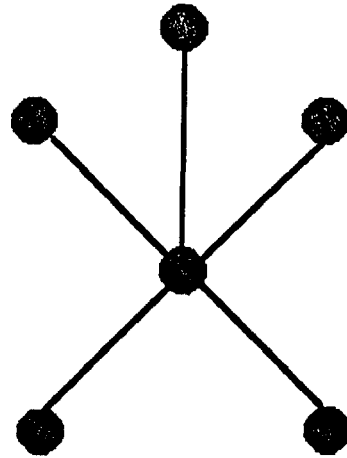


Figure 2.

that the collective pooling of individuals can minimize expected losses to a greater degree than if they were individuals. Finally, Williamson argues that there are simply associational gains from informal groups. Some individuals may simply like companionship.

Nevertheless, despite these advantages that accrue from groups, there are disadvantages as well. First, there is the classic free rider problem. But perhaps even more importantly, Williamson argues that the complex web of interactions in an informal network is decidedly inefficient in decision making. He writes:

Consider the problem of devising access rules for an indivisible asset which can be utilized only by one or a few of the group members at a time. Although any number of rules might be efficacious, agreement on one must be reached. While a full group discussion might permit one of the efficient rules to be selected, how much simpler if instrumental rules were to be imposed authoritatively. (Williamson, 1975, p. 46)

Williamson, in effect, suggests a reorganization of the group through the formal designation of a group leader. Williamson argues that a formerly structured interaction system would provide many – if not all – of the advantages of an informal group, while being much less susceptible to the disadvantages. For example, suppose we formally structure interaction patterns as in figure 2, where all communication must go through a central node, and we give the individual at the central node administrative fiat in resolving disputes on procedures. Such a collection of indi-

viduals would possess all of the advantages of an informal work group. There would still be the indivisibility of assets to foster collective interests; there would still be the reduction in risk from the pooling of assets, and there would still be the associational gains from group contact. However, the granting of formal authority to one individual and the centralization of communication flows would solve the free rider problem and reduce the inefficiencies in decision making. Thus, for Williamson formal organization will always dominate the informal work group in terms of control possibilities.

### STATUS PROCESSES IN HIERARCHIES

Williamson's view would be compelling were it not for the fact that examinations of formal organization reveal control processes that rely more on informal networks of relations than on the exercise of administrative fiat. As an example, consider Blau's (1955) observations of a federal bureau whose purpose was to audit firms to insure compliance with two federal laws. The bureau consisted of 18 individuals: 1 supervisor, 16 auditors, and 1 clerk. The supervisor determined which auditors would be assigned to which cases. Each audit involved interviews with the employer and a sample of employees, an examination of firm records, the determination of the degree of compliance with the laws, and (if the firm did not meet the requirements of the laws) negotiations with the employer as to what type

of action ought to be taken to insure reparations and compliance. Most audits were relatively straight forward, requiring no more than a few days. Indeed, the average time spent on an audit was 17 hours. However, some audits could be more complicated and involved, sometimes taking several months.

Regardless of how complicated a case might be, the supervisor would never assign more than one person to the case. An extensive set of legal rules and court decisions provided guidance for the auditor. Indeed, the constant source of reference for each agent was a 1000 page manual of regulations. Should that manual not suffice, the agent then turned to two shelves of "administrative explications" and court opinions. If the written material did not afford the agent a satisfactory solution, the agents were not supposed to turn to other agents for advice, but were supposed to consult the supervisor directly. The supervisor told Blau, "They are not permitted to consult other agents. If they have a problem, they have to take it up with me."(p.127)

A couple of features of the situation are worth noting. First, while most cases are probably quite routine, a substantial minority are quite complicated. Since the complexity of a case is not revealed until the audit begins, the agency cannot reliably anticipate the difficulty that a case will present. The agency is thus confronted with a control problem: how to best coordinate activities and anticipate uncertainties that confront the agency. The supervisor's solution to the control problem conforms exceptionally closely to the vision of hierarchy put forth by Williamson. In refusing to allow auditors to consult among themselves, the supervisor formally designates a pattern of communication much like that in figure 2. All communication must flow through the central node, and final authority lies with the individual at this central node. The supervisor thus decides that the best way to coordinate activity and respond to unforeseen contingencies is to formally designate a hierarchy in the agency with the supervisor himself as the central node of that hierarchy.

Nevertheless, from his observations of the agency, Blau observes that on average an agent had five contacts per hour with his colleagues, and while some of these conversations were personal in nature, many were related to work. These work-related interactions ranged from queries that could be answered in one simple sentence to prolonged dialogues over highly complex cases.

If hierarchy and the market were the only alternative forms of control, then such consultation patterns would represent a lack of control. However, a close observation reveals an intricate pattern of interactions that facilitate coordination and adaptation. As Blau observes, the pattern and content of communication is far from random; rather, it is reflective of an underlying status order among those in the auditing group.

Control comes coupled not with price, not with administrative fiat, but with identity. Agents solve the problem of control by using the status of counterparts as signals of the value of their advice much like Hayek viewed price as signal of value in the market place. Conversely, just as agents rely on identities of others as a guide to action, so they rely on their own identity as a guide to appropriate behavior. Middle- to low-status actors refrain from making novel suggestions because such suggestions will be either ignored or ridiculed by the group. High-status actors, however, are willing to introduce innovative ideas to the group because their status is a cue to others that they ought grant approval to the idea. To be clear, there is an element of hierarchy in this system, but it is not the hierarchy associated with administrative fiat; it is hierarchy that emerges endogenously from the status-based interactions of individuals.

Goode (1978) generalizes the status-related observations of Blau and others such as Whyte (1943) to develop a model of control that is premised on the identity of actors. Through the conferral or withdrawal of esteem, a group exerts control over individuals. As each individual becomes aware of the behaviors that are likely to lead to an increase or decrease in status, the individual adapts his or her behavior accordingly. Like Williamson, Goode perceives a dichotomy between two systems of control. Yet the dichotomy is not between a market, on the one hand, and a hierarchy defined as administrative fiat, on the other. Rather, the dichotomy is between a market and hierarchy defined as a prestige or status ordering.

## STATUS PROCESSES IN MARKETS

Yet just as Blau sees control coupled with identity in the organizational context, so it is possible to see control coupled with identity in a market context. It is noteworthy that in his essay "On the Meaning of Competition," Hayek (1949) observed that:

In actual life the fact that our inadequate knowledge of the available commodities or services is made up for by our experience with the persons or firms supplying them – that competition is in large measure competition for reputation or good will – is one of the most important facts that enables us to solve our daily problems. The function of competition is here precisely to teach us who will serve us well: which department store or hotel, which doctor or solicitor, we can expect to provide the most satisfactory solution for whatever personal problem we have to face...

With this observation, Hayek draws attention to the importance of identities, rather than prices, as signals that guide behavior. Once there is any qualitative variation among producers in the market, prices cease to be sufficient statistics for guiding behavior, and the identities of actors become more relevant.

In earlier work (Podolny, 1993), I expand on this insight and develop a status-based model of market competition. The model is premised on three assumptions:

Assumption 1. The quality of a producer's product is unobservable prior to the consummation of the transaction.

Assumption 2. Status is a signal of the underlying quality of that producer's product.

Assumption 3. A producer's relations with others in the market mediate the relationship between status and quality by creating inertial tendencies in the formation of exchange relations and by biasing evaluations in the direction of those to whom the producer is tied.

The first assumption amounts to the proposition that a consumer cannot know the quality of a product prior to the experience with or use of the product. If we draw on Spence's (1974) formal definition of signals, the second assumption implies that the marginal cost or difficulty of acquiring status must be nonzero and inversely correlated with the quality which the signal is supposed to represent. Spence argues, for example, that education can be seen as a signal of 'productivity' because the difficulty of obtaining a given level of education is inversely associated with the productivity of the individual. Similarly, the difficulty of obtaining a given level of status in the market is inversely correlated with the quality of the product which the actor brings to market.

Importantly, the assumption that status is a signal of quality does not imply that status is perfectly correlated with quality. Assumption 2 implies only that the actual distribution of a producer's quality must be equal to the distribution of quality that constituents expect on the basis

of the signal *in equilibrium*. But we need not make the assumption that the market is in a state of equilibrium. Indeed, there are a variety of factors that undercut this equality between the actual and expected distributions and thus engender a *loose linkage* between a signal and that which it is supposed to represent.

The loose linkage between status and producer quality originates from four causes: (1) the necessary time lag between changes in quality and changes in perceptions, (2) the stochastic nature of the link itself, (3) the nature, content, and extent of a producer's relations with others in the market, and (4) the second-order nature of status.

Factors (1) and (2) are general causes that would be relevant to any signal. The third contributing factor – the nature, content, and extent of a producer's relations with others in the market – is specified in assumption three. Support for this assumption comes from much work in social exchange theory and sociology more broadly. Social relations mediate the relationship between status and quality because status flows through the connections between actors (Goode, 1978; Blau, 1964). Ties to higher status actors enhance how one is viewed, while ties to lower status actors detract from how one is viewed (Faulkner 1983). Consequently, the formation and dissolution of a producer's relations with others in the market – either visible consumers, mediators of exchange such as retailers, or even other producers – affects the producer's status.

The fact that status flows through exchange relations implies that these relations can be seen as "intermediate signals" within the larger signal of status. To whom a producer is tied impacts on how the producer is perceived. This observation that ties represent an intermediate signal in turn suggests the fourth and final reason for the loose linkage between status and quality. Status is a composite signal, based in part on other first order signals.

This decoupling of quality from status has several important implications. First, just like a high-status group member receives a different level of esteem for a given idea than a low-status actor, so a high-status producer receives a different reward for producing a given quality product. The fact that the higher status producer is perceived to be of higher quality increases the potential rents that the producer can derive from the product. Perhaps even more importantly, status lowers the transaction costs associated with the exchange of a given quality good; implicit or

explicit promises of quality are more likely to be believed if made by a high-status producer than a low-status producer.

If changes in quality could be easily observed, then such differential advantages would not be realized. Consumers would immediately update their priors to acknowledge the change in quality, and a producer's status would change accordingly. But the less observable is quality, the greater the loose linkage between status and quality, and the more that a producer's identity confronts the producer as something external to itself. In effect, the producer's identity becomes a feature of the producer's environment, which affects the actions that the producer can effectively undertake.

The cost and revenue advantages that accrue to the higher status producer for producing a good of a given quality constitute a significant constraint on the lower status producer seeking to enter the niche of that higher status producer. The fact that the higher status producer obtains revenue and possibly costs advantages means that it should effectively be able to underbid the lower status producer for the business associated with its niche. However, just as there are constraints on the lower status producer's ability to enter the high status niche, so it should be clear that there are constraints on the higher status producer's ability to enter the lower status niche if we recall the third assumption of the model, that there is a relational basis to status. To the extent that the higher status expands its presence downward into the market, such action necessarily undercuts the source of its initial status. By entering into exchange relations with those associated with this lower status niche, the producer reduces the degree to which it is perceived to be high status and thus its ability to compete in those niches in which it is associated.

Just like the administrators in Blau's federal bureaucracy rely on their own identity to guide their behavior in the market, so producers rely on their identity. As Leifer and White (1987) observe, a producer's identity provides a more tangible basis for decision making than speculation about unobservable demand curves. Thus, while the cost and revenue advantages of status may engender greater benefits for the higher status producer, both high- and low-status producer benefit from a knowledge of their position in the status ordering because this knowledge reduces the uncertainty that they confront in trying to decide upon an appropriate course of action in the market.

Yet, as should be clear, these identities are guides to action not only for the producers, but for the consumers as well. Just like the identities of the actors in Blau's federal bureaucracy are signals of the underlying quality of their comments, so the identities of the producers are signals of the underlying quality of their products. In effect, identities facilitate control in the market context by providing a tangible guide for action.

As an example of how they do so, I would like to draw on some empirical work that I conducted on the United States investment banking industry. In U.S. primary securities markets, investment banks serve as underwriters between corporations and governmental agencies desiring to raise capital and individuals or institutions with financial capital to invest. In other words, investment banks purchase securities issued by the corporations or governmental agencies, and they sell these securities to the investors at a slightly higher price. Despite intense competition among investment banks for the opportunity to manage an underwriting, investment banks frequently do not underwrite an entire security offering by themselves. Rather, they form and lead a syndicate that typically consists of at least ten or twenty other banks.

Consider the perspective of a bank that has been asked to participate in a syndicate for a corporate offering. The offering represents a source of some uncertainty. How financially sound is the corporation issuing the security? How much demand actually exists for this security at a given price? The bank will investigate the financial soundness of the corporation in what are called due-diligence meetings, and the bank can seek to test for demand by making inquiries of investors, but the more meetings that must be conducted, and the more inquiries that must be made of investors, the higher the costs of placing the security.<sup>2</sup> If the transaction costs became too high, it would simply be unprofitable to participate in the syndicate. However, the identities of the lead managers mitigate against this uncertainty by providing a signal of the quality of the offering, and in so doing, facilitate the adaptation of potential syndicate members to the sources of uncertainty in the market. As the head of a middle-sized investment bank commented,

2 Due-diligence meetings are held by the issuing corporation and the lead investment bank and attended by syndicate members as a way for the underwriting banks to maintain their fiduciary responsibility to investors.

Typically, if you hear that Goldman Sachs or Salomon or whatever is doing an underwriting, they usually have pretty stringent requirements, and it is usually a plus for the company that they are doing work for that Goldman Sachs wants to be their investment banker or underwriter or whatever, [that is] a plus with reference to the market place. Half the time, if Goldman Sachs calls or Salomon calls us and says [they] are going to be an underwriter for Ford Motor or whatever and asks, "Do you want to be part of the underwriting group?" we almost don't have to do any diligence; you just say yes. On the other hand, if a smaller firm which just doesn't have the credentials calls us, we will probably do more diligence and will probably be less likely to follow suit.<sup>3</sup>

Just like cases represent a source of uncertainty as they flow into Blau's federal bureaucracy, so an issuer represents a source of uncertainty as it enters the market. In both cases, the status of relevant actors mitigate against this uncertainty. What emerges in both hierarchies and markets is a system of control premised on the identities of the market actors. These identities facilitate coordination and adaptation by providing a tangible guide for action. The shortcoming of Williamson's view of informal work groups is that it simultaneously understates the control possibilities that emerge from the social interaction of actors and overstates the exercise of formal authority. Control comes from the attempts of actors to develop distinct status positions. The cultivation and reproduction of status is the source of control in both hierarchical and market contexts.

## CONCLUSION

Sociologists have long criticized Williamson's framework for the lack of attention to the social underpinnings of economic action. These critiques have usually taken one of two forms. Either they have argued that the market-hierarchy continuum does not fully represent all forms of economic organization, or they have argued that Williamson's vision of markets and hierarchies is dramatically undersocialized. Powell (1990) exemplifies the first critique; he argues that Williamson's dichotomy between markets and hierarchies understates the importance of a third form of control, the network form of control. Accord-

ing to Powell, even Williamson's hybrid form – combining elements of markets and hierarchies – fails to capture the distinctive features of the network form of organization. Granovetter (1985) exemplifies the second critique when he claims that Williamson's visions of markets and hierarchies understate the importance of social relations in both contexts.

There is a tension between the two critiques. If Williamson's conception of markets and hierarchies is undersocialized, the network form does not constitute a distinct form of economic organization. Conversely, if the network form is distinctive, then markets and hierarchies must be less social by comparison.

But more important than this tension is the fact that neither view offers a positive alternative to Williamson's conception of control. It may be true that social networks are a component of some or all forms of economic organization, but unless we can specify how networks contribute to the adaptation and coordination of a community of economic actors, then the observation that economic action is embedded seems of little theoretical utility.

In this paper, I have tried to provide such an alternative conception of control by subordinating the discussion of networks to a discussion of status processes in markets and hierarchies. In so doing, I have implicitly taken Granovetter's position that all forms of economic action are embedded, but in drawing attention to the status ordering underlying market and hierarchical contexts, I have attempted to describe with greater specificity precisely how this embeddedness affects control processes. Networks are not relevant to control simply because they exist, but because they define status positions, which in turn provide tangible guides to economic action. Through a reliance on these status positions, economic actors are able to solve the problem of adaptation that they confront in market and hierarchical contexts. This claim does not imply that transaction costs are irrelevant to control in markets. As noted in the discussion of status processes in the market, the status order reproduces itself in large part because of transaction cost advantages that accrue from status. However, what we have seen is that their relevance to control does not necessarily imply a transformation of the control question into a boundary question. By disassociating the two questions rather than replacing one with the other, we can hopefully expand upon our understanding of control in economic organization.

<sup>3</sup> Goldman Sachs and Salomon Brothers are two of the highest status firms in the U.S. investment banking industry.

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