One Good Turn Deserves Another: Exchange of Favors within Organizations*

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Because of information costs, accountability rules governing utilization of organizational resources are generally incomplete. This paper analyzes how these resources under incomplete accountability are captured through exchange of favors within organizations. Using game theory, it also explains why more of these resources are not being captured by vertical favor exchanges between the employer and employees and how horizontal favor exchanges among employees may be redirected to enhance economic efficiency.

Utilization of human and material resources hired or purchased by business and government organizations is often governed by specific price or nonprice accountability rules, but there is also residual accountability that is not specified. Although incomplete specification of accountability does not obviate the residual control rights of the organization over these resources (Grossman and Hart, 1986), high costs of complete specification mean that some resources are potentially subject to competitive capture by all members of the organization. The amount of competitively capturable resources varies directly with the information costs and monitoring costs of resource utilization.

If the employer is resigned to existing information costs, these resources will be captured by employees for their benefit. Employees can keep these resources for their consumption, sell them for cash, or exchange them for returned favors. Of these three alternatives, favor exchanges are the most interesting because they provide a sharp contrast to market exchanges. In market exchanges, buyers and sellers can specify the terms of exchange in advance. In favor exchanges, however, favor doers can only hope that their favors will obligate favor recipients to return them in future. Very often, neither the amount (or form) nor the due date of returned favors is (or can be) specified.

Favors need not, of course, be exchanged only among employees. They

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can just as well be exchanged between the employer and employees. The employer can offer side payments to induce employees to reduce information costs. The higher output from greater work efforts thus allows the employer also to capture part of these competitively capturable resources. Indeed, efficient wages (Yellen, 1984) are nothing but formalized favor exchanges between the employer and employees. When extra work efforts for extra compensations are regarded as favor exchanges over and above contractual exchanges of normal work efforts for normal compensations, the role of management in improving efficiency by redirecting the flow of favor exchanges becomes more sharply defined (cf. Akerlof, 1982). It is management which ultimately determines whether exchanges of favors become efficiency-enhancing activities for the whole organization or rent-seeking activities (Buchanan, 1980) for the benefit of special interests within the organization.

Breton and Wintrobe (Breton and Wintrobe, 1982; Wintrobe and Breton 1986) first formally recognized the importance of favor exchanges in their analysis of informal exchanges within bureaucracies. Although they did list some favor-exchangeable resources, they did not specifically relate the origin of these resources to the high costs of completely specifying resource accountability. The analytical origin of favor exchangeable resources can be traced to Hoenack's (1983) concept of divertible resources within organizations, though he was not primarily interested in favor exchanges.

Breton and Wintrobe also introduced the concept of trust to analyze the enforceability of favor exchanges based on diffuse rather than contractual obligations. In addition, they emphasized the importance of distinguishing vertical trust (between the employer and employees) from horizontal trust (among employees) in evaluating the efficiency implications of favor exchanges. However, because the underlying game-theoretic situations were not explicitly considered, they overlooked the complementary relationship between vertical and horizontal trust.

This paper traces the origin of favor-exchangeable resources within organizations and categorizes the favors that these resources support in the informal favor-exchange network. It also examines the economic principles governing the formation and structure of such a network. In addition, it uses the game-theoretic approach to explain the accumulation of trust, and examines the role of trust in setting the direction of favor exchanges and in determining their efficiency. Efficiency of favor exchanges is further explored within the rent-seeking framework by examining the role of informational asymmetry and competitive pressure faced by management. Finally, it explains how favor exchanges make the formal organizational structure operational and viable. The last section of this paper relates the concept of favor exchanges to Coase's theory of the firm (Coase, 1937), Granovetter's concept of cultural embeddedness of economic behavior (Granovetter, 1985), and the issues of contract enforcement and competitiveness.

Origin of Favor-Exchangeable Resources

Although business organizations retain residual control rights over human and material resources they hire or purchase, complete exercise of these rights is often hampered by high information costs. The costs of establishing the most efficient production function between inputs and outputs are usually high even for the employees directly involved in the production line (Hoenack, 1983:32–33). In addition, this information, even if known to employees, will generally not be fully revealed to the employer. Even if this information is available to the employer, it is still nearly impossible to set up specific price and nonprice accountability rules to ensure that all the inputs ae used efficiently to produce only those outputs desired by the employer. Indeed, firms (i.e., business organizations) exist precisely to avoid having to price each of the inputs and intermediate outputs separately (Coase, 1987: Cheung, 1983). The employer is, therefore content with establishing only accountability rules that reduce but do not eliminate employee resource capture. For example, the employer may simple impose an overall output quota with specific guidelines governing the use of selected inputs (Hoenack, 1983:47–67). These incomplete accountability rules thus tacitly recognize the high information costs of monitoring employee resource utilization. They also define the effective (rather than theoretical or legal) property rights of the employer over organizational resources and provide realistic benchmarks on which evaluation of resource utilization within organizations should be based.

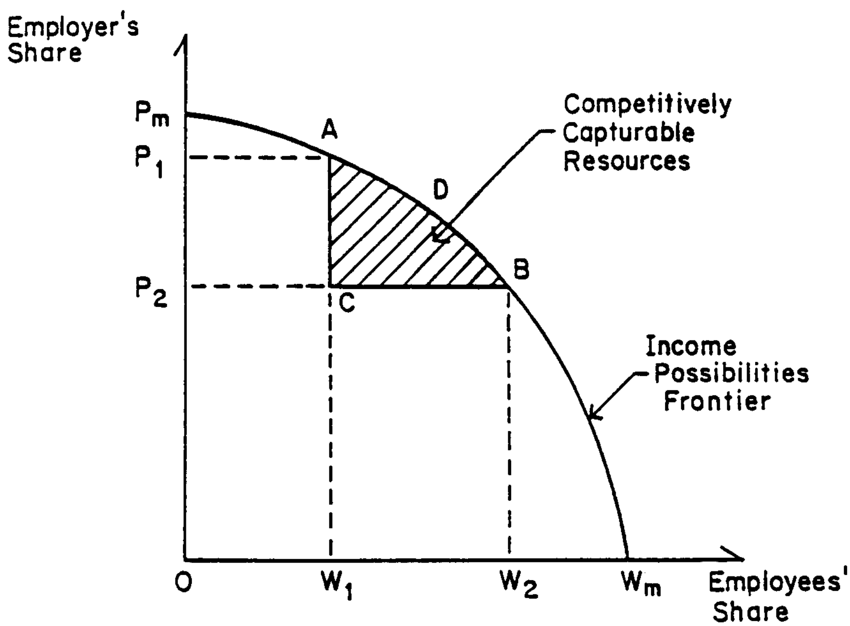
The gap between these effective rights under high information costs and the theoretical property rights under zero information costs defines the upper limit of potentially capturable resources. Viewed from the perspective of theoretical property rights, these resources belong to the employer. Any part of them that is not captured by the employer can be regarded as illegitimate diversion because the employer's theoretical property rights are compromised (Hoenack, 1983:35–36). Viewed from the perspective of effective rights, however, these resources are competitively capturable by anyone within the organization who has lower information costs or cares to reduce the information costs to below the currently accepted level.

From a policy perspective, to regard potentially capturable resources as illegitimate diversion would suggest to management more restrictive accountability rules to increase employer resource capture. This approach may reduce employee resource capture but not all resource diversion because the more restrictive rules may force employees to use resources inefficiently. In other words, what potentially capturable resources that are denied to employees may not be available to the employer as well because the basic problem of information costs remains. On the other hand, to regard these resources as cooperatively capturable would suggest to management means of reducing information costs for mutual benefits. The additional efficiency from this approach may reduce resource diversion as well as increase employee resource capture. In other words, the greater efficiency may generate a large pie of potentially capturable resources that can benefit both the employer and employees.

The difference between these two policy perspectives can be illustrated with the help of an income possibilities frontier, shown in Figure 1. This income possibilities frontier (P_mW_m) is simply a production possibilities frontier where the two outputs are composite goods that augment the employer's or employees' income shares, respectively. Under zero information costs the employer pays employees W_1 and expects as residual claimant to receive P_1. In other words, the employers hopes to be at A on the efficiency frontier. However, because of positive information costs, the employer actually receives only P_2. In other words, information costs keep the organization inside the efficient frontier at C. The employer may regard AC as illegitimate resource diversion and try to reduce or eliminate it. However, if the organization is at C, no resources have been captured by employees although resource diversion is potentially positive (assuming ideal property rights with zero information costs). In reality, point C would only exist if restrictive accountability rules imposed by the employer make it impossible

FIGURE 1

Competitively Capturable Resources



for employees to achieve more efficient resource utilization. Without such rules, employees may capture up to W_2 by achieving efficient resource utilization at B. In other words, if the employer is resigned to accepting P_2, employees become effective residual claimants of the competitively capturable resources. An enlightened management also can redirect part of the competitively capturable resources to itself by working with employees to reduce information costs. For example, point D is collectively and distributively better than C for both the employer and employees.

Furthermore, it is not operational to regard all employee capture of potential resources as illegitimate diversion. The reason is that the concept of divertible resources is defined on the assumption of zero information costs and monitoring costs in resource utilization. Therefore, in actual situations with high information costs, measurement would be impractical. For example, where employees can make improvements due to their information cost advantages about production possibilities or customers' preferences, but fail to do so because of inadequate incentives, the degree of resource diversion cannot be easily determined by the employer. In view of these measurement difficulties, the legal standing of activities not specifically prohibited by explicit accountability rules becomes unclear. This vagueness, however, makes it unnecessary to prejudge the efficiency and distributive implications of unprohibited activities.

Even if information costs and monitoring costs are zero, there are still resources that cannot and should not be fully utilized. when different inputs must be combined in some fixed proportions for effective utilization, any input that exceeds the required proportions with complementary inputs becomes a slack resource. Attempts to increase utilization of these slack resources will only overload the bottlenecks created by the already fully utilized inputs (Goldratt and Cox, 1987:157–58). For example, some employees may be temporarily idle because there is not enough complementary equipment or personnel to work with them. There is, therefore, no sense in establishing or enforcing accountability for slack resources, except to ensure that their unspecified uses do not subtract from the marginal productivity of other fully utilized resources.

While potential resources may be open for competitive capture, not all methods of capture are equally acceptable. Any capture for obvious direct personal benefits probably violates some implicit (i.e., commonly accepted though not explicitly stated) accountability rules and is therefore socially unacceptable. The least socially acceptable is selling the resources for cash within and outside the organization. The term "employee theft" generally refers to these activities as well as keeping organization resources for private uses. The most socially acceptable use is for favor exchanges within the organization. The returned favors are seldom visibly associated with the original favors, and doing favors for others is usually associated with generosity rather than selfishness. It is these uses of competitively capturable resources for favor exchanges that is of interest here. In fact, the direct use of these resources for personal benefits can be viewed as a failure to effect more beneficial favor exchanges.

Exchange of favors need not, of course, be confined to members of the organization or resources generated within the organization. Favors done with organizational resources for some fellow employees can be returned with private resources of the favor recipients. Favors also may be done with organizational resources for outsiders in return for personal benefits that cannot be bartered for within the organization. The more desirable these favors are to outsiders, the more the favor-exchange network would extend outside the organization. For my present purposes, I confine myself to only favor exchanges and favor-exchangeable resources within organizations.

Exchangeable Favors

Favor-exchangeable resources come in many forms in terms of input. They may range from employees' time to insider information, or from office stationery to job promotions. However, when transformed into output for favor exchanges, favors fall under one or more of the following categories: rule characteristics; rule exemptions; exceptional services; unique goods; and social support.

Rule Characteristics. Rules determine entitlements to benefits and transaction costs of exercising these entitlements. When new rules are made to rearrange existing entitlements or to allocate new entitlements, intense negotiations among interested parties are common. Those who are directly involved in negotiations (e.g., members of an advisory committee) can affect the detailed allocation of entitlements and transaction costs of exercising these settlements. These rule-makers are usually targets of intense lobbying efforts because they can grant huge favors by changing their negotiating positions. A slight shift in the assignment of benefits and/or the burden of costs can mean a substantial gain or loss to the affected parties.

Rule Exemptions. Rules are essential to ensuring uniform standards throughout an organization. Rules may be self-enforcing or self-disintegrating depending on the underlying game-theoretic situations. Some rules are self-enforcing because there is no individual advantage in departing from them once they are established. There is, therefore, no advantage in getting exempted from these rules. Because situations that require self-enforcing rules are known as coordination games, such rules can be called coordination rules for my present purposes (Ullmann-Margalit, 1977: chap. 3). For example, if all office secretaries in an organization are trained to use one brand of word-processing software, there is no individual advantage for a new secretary to use a different one.

Other rules are self-disintegrating because there is individual advantage in departing from them even though massive defections would make everybody worse off. Such rules, therefore, serve to stabilize unstable but collectively superior solutions. Because situations that require self-disintegrating rules are known as prisoners' dilemmas (PD), such rules can be called PD rules for my present purposes (Ullmann-Margalit, 1977: chap. 2). For example, if there is a deadline for completing an assignment, those who are granted an extension can gain advantage over those who must meet the deadline (Fung, 1988).

Exceptional Services. Any service above the minimum required by accountability rules can be regarded as exceptional since it would not continue unless additionally rewarded. Exceptional services can be performed by *individual* employees for their co-workers or for their superiors when work efforts among co-workers are not highly interdependent. In PD situation, systemwide exceptional services for the employer are not possible unless a minimum number of employees participates. The more interdependent the work efforts are, the higher this minimum number must be.

Unique Goods. Resources can be considered as unique if (a) they occur infrequently and unpredictably; (b) they disappear very quickly; (c) they may only be useful for a few people with very special needs at that particular time; and/or (d) their existence cannot be legitimately or easily publicized. This uniqueness may only be an incidental feature of a common good that is not completely standardized, and will not diminish even when it does not command any positive value. Because of diseconomies of small scale, there may not be any accountability rules governing the allocation of these unique goods. Such unique characteristics are, however, invaluable to those who happen to need them. Their value can be captured by creating favor credit or in discharging a favor debt.

For example, a secretary may be in charge of scheduling appointments for subordinates to see their superior. Some time slots are more desirable than others for some subordinates. If more than one request is received for a time slot, the one who has done a favor for the secretary naturally gets the choice time slot.

Social Support. Expert advice may be offered by colleagues who are not assigned to give advice. Empathetic ears to personal or professional problems may be lent by colleagues whose jobs are not in therapeutic counseling. Since these and other on-the-job social supports are gratuitous, they are favors that must be returned if they are expected to continue.

The exact content and mix of these five categories of exchangeable favors depend, of course, on the hierarchical ranks of the people who offer them and consequently their access to different favor-exchangeable resources and discretion in appropriating them. For example, these favors may result in significant career advancement if they are offered by one's superiors, or they may simply make one's work life a little more comfortable if it comes from one's colleagues of equal rank.

Creation of Favor Credit and Settlement of Favor Debt

A favor is generated when individuals receive a good or a service that is better than they can normally expect to receive. The person who does the favor thereby earns a favor credit and the person who receives the favor incurs a favor debt. By doing favors, favor doers build up credit that can be used judiciously to enhance the chances of getting the exact goods and services they want in future. By receiving favors, favor debtors are reduced to a position of having to deliver what the creditors demand in future.

However, the absence of an organized market and a commonly accepted unit of account turns the balancing of favor accounts into an art form. Without a commonly known market price, favor exchangers can only evaluate the worth of a favor from their limited knowledge of the overall supply-demand conditions. If favor doers and favor recipients have unequal knowledge about the overall supply-demand conditions, a big favor to one party may only appear as a small favor to another party, and vice versa. For example, if a favor recipient B is unaware of other readily available sources, a favor may appear to be a big one. To favor doer A, however, the favor may only be a small one because there is little competitive demand for it. Favor doer A would be happy to receive a small favor in return from B. This small favor to A may be a big favor because there is intense competitive demand for it of which A may not be aware. If there are market-determined prices for favors stated in a commonly accepted unit of account, market prices alone would determine the values of favors. Individual buyers' and sellers' evaluation of the favors may still differ from this market evaluation, but such difference would only affect the size of buyers' surplus or sellers' surplus. The settlement of transactions itself would not be affected, at least when price discrimination is not involved.

This uncertainty about the market values of favors also may discourage some people from accepting favors because they do not know how much the favor doers think the favors are worth. If favor doers place higher values on the favors than favor recipients, recipients are trapped into a higher favor debt than they intend. The resulting bad feelings from such different valuations may offset any potential gain from favor exchanges.

This difficulty over evaluation is often compounded by the in-kind nature of favors. Since favor debt must be repaid in specific goods and services, the goods and services demanded in return may not be the ones that favor recipients are willing to give. Unless the intention of favor doers is known in advance, favor recipients' integrity may have to be compromised to settle the favor debt.

The favor doers, however, may not have any specific returned favors in mind. They may do favors simply in the hope of getting some returns for spare favor-exchangeable resources. If favor doers have some specified returned favors in mind, they may be reluctant to reveal them in advance lest their favor offers may be rejected prematurely. It may even be bad form to be specific about the terms of favor exchanges. Under these circumstances, it is all but impossible to write legally enforceable contracts (Breton and Wintrobe, 1982: 63). Favor doers must take the risk that their favors may not be returned at all or adequately.

This risk of unsecured returns on the one hand and the risk of unspecified obligations on the other explain why important favor exchanges are usually conducted among people who can trust each other to be reasonable about the unspecified terms of favor exchanges. Although exclusive memberships are characteristics of all sustained favor exchanges, they are more important for favor exchanges within the organization. Because the property rights of the competitively capturable resources are not clearly defined, unspecified obligations are harder to enforce. Exclusive memberships, therefore, increase the chances of secured returns, or at least reduce the chances of threatened exposure by ungrateful favor recipients.

This need for exclusive memberships means that the instrumental benefits of favor exchanges cannot usually be detached from the sources that supply them. For example, although the quality of advice determines its basic value regardless of who furnishes it, advice seekers usually prefer to consult a colleague whose friendly relations with them make it easy for them to do so than a more expert consult whom they hardly know (Blau, 1964: 95). These social considerations may reduce instrumental benefits from existing favor-exchange relations, but there is no built-in tendency to exchange favors with "strangers" to get better yield.

However, if favors are only exchanged with people we know, there may be very few favors to exchange since barter requires double coincidence of wants. What expands the exchange of favors is the transferability of favor credits earned by A to a creditor of A; or a transfer of debts owed to B to a debtor of B. Such transferability, in effect, converts a favor credit into a commonly accepted medium of exchange. The mechanism of transfer is referral. Referrals, however, generally lose their effectiveness when more than three parties (one-step referrals) are involved. With favorable reputation, more parties can be involved.

Without favorable reputation, credit that is earned from more than one party is more transferrable than an equal amount of credit earned from only one party. Pivotal individuals in the exchange network are those who do favors for many different individuals at different levels of their and other departments. Any person who earns credit from these pivotal individuals thus has access to favors of many different kinds through one-step referrals. Pivotal individuals do not merely have more hard (transferrable) credit; they also know who have what favors to offer and the reliability of these favors (cf. coordinating employees in Hoenack [1983:194–97]). Because they are a clearinghouse for the exchange of favors, people with insider information that have no ready direct buyers would find it easy to offer the information to pivotal individuals for credit. Pivotal individuals in turn find buyers for the information. Thus, pivotal individuals serve not only as credit brokers but also information brokers of the organizational grapevine. They are the people who build bridges between otherwise exclusive favor-exchange groups. Such bridges allow more resources to be exchanged for favors by enlarging both the supply of and demand for favor-exchangeable resources (Granovetter, 1973).

So far, it has been implicitly assumed that favor exchangers are only interested in balancing favor accounts over time. Yet some people may do favors to achieve a superior status by obligating favor recipients. If the favor is adequately returned, this claim to superiority is denied (Blau, 1964:108). Indeed, unequal exchange of favors is the basis of the grants economy as popularized by Boulding (1973: chap. 2). Recipients of such grants receive favors for which they cannot fully reciprocate. Instead, they show personal admiration, approval, deference, loyalty, and/or respect to their benefactors. Unequal exchange of favors thus creates a hierarchy of influence statuses in the favor-exchange network.

This hierarchy is, however, not a simple one. Those who hold a positive favor balance need not have a higher influence status. If favor recipients enjoy a monopoly of some resources for which favor doers have an inelastic demand, favor recipients can stay with a negative favor balance without feeling indebted to favor doers. For example, the employer can up to a point exact more and more exceptional services from those employees who are eager to keep their jobs or who aspire to promotions without feeling indebted to them (Salmon, 1986:9–10). Indeed, many new members or insecure members of organizations who are hungry for group acceptance are grateful that they are allowed to do more favors for their established colleagues than they can expect to receive in the foreseeable future. In other words, their positive favor balances merely indicate their inferior status. Thus, a positive favor balance leads to a higher status for favor doers only if favor recipients do not have a monopoly over the resources that the favor doers may seek.

Vertical versus Horizontal Favor Exchanges

The goal of favor exchanges is, of course, to enhance the utility of favor exchangers. Utility can be increased either by a more comfortable work life or by greater career advancement. A more comfortable work life can be obtained largely through exchanges with one's co-workers. However, greater career advancement must be obtained largely through exchanges with one's superiors. Since greater career advancement also can bring about a more comfortable work life and bigger cash income, one would expect that most favor exchanges would be channeled toward one's superiors. Casual observation, however, does not confirm such a tendency. In fact, substantial amounts of exchanges are conducted horizontally with one's co-workers along with vertical exchanges with one's superiors. Why aren't more favor exchanges conducted vertically?

First, vertical exchanges may be hazardous to subordinates. Favors extended to one's colleagues with equal status can be easily withdrawn if they are not returned. The lost opportunity is offset by a gain in wisdom. On the other hand, favors extended to one's superiors cannot be as easily withdrawn. Once superiors are aware of the existence of such resources, they may not treat them as exceptional services. Instead, these services may be regarded as ordinary ones that do not require additional rewards.

Second, vertical exchanges may have low expected returns. Since people higher up in the organizational hierarchy tend to have more discretion (see, however, the sixth point in this section), they can offer bigger favors than those lower down. However, people with more discretion are fewer in number, and their favors are likely to be much sought after. They are likely to charge more for their favors and the chances of getting them are lower than the favors from one's co-workers. Low probability of high payoff equals low expected returns. Therefore, unless the favors required can only come from one's superiors, one usually does not resort to vertical exchanges.

Third, systemwide vertical exchanges may be difficult to arrange. When individual contributions to output are easy to measure and individual effort levels are independent of co-workers, favors are more likely to be exchanged vertically with one's superiors for extra rewards. Most horizontal favor exchanges are then simply means to facilitate vertical favor exchanges. For example, salesmen and university professors who can improve their individual performance with only minimal cooperation from their co-workers are likely to seek vertical exchanges. On the other hand, when individual effort levels are highly interdependent and individual contributions to output are hard to measure, it is difficult for individual employees to engage in vertical exchanges with their superiors. They are better off by observing group norms on work efforts. Such horizontal exchanges are, for example, typical of assembly-line workers who cannot individually speed up joint operations independent of their co-workers' work pace.

The difficulty of effecting systemwide vertical exchanges in such situations can be formalized by the dynamics of a prisoners' dilemma (PD) game. In a PD situation, an escape from a collectively inferior solution is possible only if a viable critical mass of participation can be achieved. A critical mass is viable if the payoff to those who opt for a collectively better solution would at least be as high as their payoff at the previous collectively worse situation. Since it is always individually advantageous to defect from an unstable though collectively better PD solution, such a critical mass of participation may be very difficult to achieve. For example, if employees turn out a better product by exercising greater care in their jobs, the organization may be able to pay everybody more with the higher profit. However, if enough employees exercise greater care, some employees will be individually better off exercising less care. If enough employees withhold their best efforts, the quality improvement and higher pay will not occur.

Fourth, vertical exchanges may not be perfect substitutes for horizontal exchanges. For example, deference and loyalty can only come from one's co-workers through horizontal exchanges.

Fifth, horizontal exchanges can provide cheaper substitutes to vertical exchanges. If a favor can be obtained from different sources, it will be obtained from the cheapest source. Colleagues of equal status are usually cheaper sources of such favors. More of them are likely to be able to help and there is less threat to one's status implicit in asking for help. For example, advice on routine problems is usually sought from one's status equals who may not know much more than one does. Only for really tricky problems would one consult an expert colleague of higher status. Higher costs both in terms of favor debt and status loss must then be paid (Blau, 1955/1963: 127–33).

Sixth, horizontal exchanges also can provide quicker and more direct help because there is no need to take roundabout routes. For example, if one needs to copy an urgent personal letter, either one can go to the head of one's department to ask for permission to use the copier or one can simply ask the operator of the machine to do one a favor. The latter alternative is often much quicker even if one does not mind the high cost of asking for a favor from one's superior.

Although people higher up the hierarchy may have more discretion to offer favors, they may be helpless at a later stage of a problem when formative decisions have been made at a lower level. For example, at the drafting stage, superiors may have more discretion than the subordinates who serve on an advisory committee in affecting the content of a proposed rule change. However, if subordinates are not lobbied to include a suggestion earlier, their superiors may not be able to incorporate it later when all the pieces have been tightly fitted together. Their superiors still have the discretion to reject the whole proposal, but may be powerless to do piecemeal changes. Therefore, even if one is willing to pay a high price to seek help from one's superiors, it is easier to seek help earlier from one's co-workers.

Top-Down Vertical Favor Exchanges

If it is costly to initiate vertical favor exchanges from the bottom up, might it not be easier to initiate vertical favor exchanges from the top down?

To analyze such a possibility, we need to be more specific about the interest hierarchy and the information hierarchy. The simplest hierarchy consists of the principal, the supervisor, and workers. In terms of interest, the principal is at the top of the hierarchy since he is the ultimate risk bearer and residual claimant of profit. The supervisor is supposed to ensure that workers serve the principal's interest. In terms of information control, workers are at the top of the hierarchy since they have the most intimate knowledge of the production function. The principal, being the farthest from the production line, has the least knowledge of the production function. The job of the supervisor is therefore to bridge this information gap.

The goal of top-down vertical favor exchanges initiated by the principal can be twofold. First, the principal can exchange favors with the supervisor at the expense of workers even though total organization output may fall. Second, the principal can exchange favors with the supervisor and workers to increase profit by inducing the supervisor and workers to increase organization output.

The first goal is unlikely to be completely successful in the long run because workers who are hurt would bribe the supervisor not to reveal the true production function. Unless the offer to the supervisor by the principal exceeds the threatened decrease in compensation (official and unofficial) to workers, workers would suffer a lesser decrease in compensation (assuming zero organizing costs among themselves) by beating the principal's offer to the supervisor. This counteroffer effectively limits the extent to which workers' compensation can be reduced to increase the principal's profit. More importantly, if workers' compensation is threatened, they may hide more information about the production function from the supervisor or refuse to improve the production function at all. This will either reduce the existing organization output or prevent the output from expanding. In other words, given the existing information hierarchy, there is a limit to how much the income share of the principal can be increased by reducing favor exchanges among workers and between the supervisor and workers (Tirole, 1986).

If the principal cannot increase his income share by reducing the income share of workers, he can increase his share by rewarding the supervisor and workers for higher output from higher productivity. The role of favor exchanges as additional employee incentives can be strengthened if accountability rules are designed to encourage efficient resource utilization. If accountability rules are designed primarily to reduce employee resource capture, they may unnecessarily reduce efficiency within and among employees' production domains. As a result, the share of the total output going to the employer may not increase even though employee resource capture is reduced. For example, rules that are intended to reduce employee capture of selected visible inputs often leads to inefficient resource allocation. Reduced capture of these selected inputs may simply be offset by increased capture and/or reduced utilization efficiency of other unselected inputs that may be more valuable to the employer but less valuable to employees. On the other hand, if accountability rules are designed to encourage efficient resource utilization, employee resource capture can be increased without reducing the share going to the employer. For example, rules that are concerned with only overall value productivity of employees and not specific uses of particular inputs are more conducive to efficient resource allocation (Hoenack, 1983:37). Since employees can keep what is left over after the overall value quota to the employer is satisfied, they have incentives to achieve maximum efficiency for the resources under their control. If mutually beneficial vertical exchanges can be arranged, both the employer and employees can become residual claimants of this additional efficiency.

There are advantages in offering additional employee incentives as favor exchanges rather than regular compensations.

First, vertical favor exchanges provide more flexible supplementary employee incentives than contractual exchanges. Favors are more flexible incentives for exceptional services because they can be withdrawn more easily if services are no longer exceptional. They are also more flexible because their exact form and amount need not be specified in advance. It is these unspecified obligations in favor exchanges that engender the sense of "family" in the organization. Admittedly, these favor exchanges are easier to arrange between individual managers and their individual subordinates. They are, however, not impossible to arrange between top management as a group and its subordinates as a group if there is enough vertical trust between them, and enough horizontal trust within top management and among subordinates, respectively. The more amiable relationship between management and labor in some organizations may well be the result of favor exchanges in addition to contractual exchanges. The terms of such favor exchanges may be more or less formalized, but as long as rewards and work efforts are above the industry norms, favor exchanges are involved. Indeed, the theory of efficient wages can be viewed as an explanation of such favor exchanges (Yellen, 1984).

Second, favor exchanges may reduce labor turnover. Since it takes time to tap into a new favor-exchange network, the benefits from potential favor exchanges are usually heavily discounted in computing the total compensation of a new job in another organization. On the other hand, the benefits from realized favor exchanges in the current job are, or can be, fully included in computing the total compensation of the current job. This means that unless the cash compensation of the new job exceeds the total compensation of the current job, it does not pay to move to the new job. When one considers that some goods and services obtained from favor exchanges are unique with no cash-equivalent values, this margin of safety may be very substantial. The potential saving in employee training costs resulting from a lower turnover rate could be considerable.

Trust and Favor Exchanges

Since complete accountability of organizational resources is too costly, there will always be resources left over for favor exchanges. The only relevant question is whether favor exchanges enhance organizational efficiency or not.

Because favor exchanges create legally unenforceable obligations, they help build trust among favor exchangers if such exchanges turn out to be successful. Once initial trust is built over small favor exchanges, it can be used to support bigger favor exchanges. If these bigger exchanges are successful, more trust will be built. This accumulation of trust is potentially efficiency-enhancing in PD (prisoners' dilemma) situations where successful exits from collectively inferior solutions depend on achieving a viable critical mass. However, a viable critical mass is difficult to achieve in these situations because of perverse incentives. In PD situations, it is always individually more advantageous to defect from than to conform to a collectively better solution, even though everybody would be better off if nobody defected. If enough trust exists to contain defections, a collectively better solution can then be achieved.

However, a better solution for a special-interest group may be at the expense of interests outside the group. The trust that is accumulated through favor exchanges can be used to enhance organizational efficiency only if it is used to achieve collectively better solutions in PD situations faced by the whole organization. Wintrobe and Breton (1986:532–33) suggested that trust is efficiency-enhancing for the organization only if it consists of vertical trust (i.e., trust between superiors and subordinates). If it consists of only horizontal trust (i.e., trust among subordinates), then special interest will be promoted at the expense of organizational interest.

In light of our game-theoretic approach, some qualifications of Wintrobe and Breton's hypothesis may be useful. First, although their distinction between vertical trust and horizontal trust pointed to an important difference between special interests and general interests in PD situations, Wintrobe and Breton overlooked the complementary relationship between vertical trust and horizontal trust. Specifically, vertical trust would be limited unless it is also supported by horizontal trust. Although subordinates not bound by horizontal trust are less likely to offer organized resistance to the terms of vertical favor exchanges unilaterally imposed by management, they are also less likely to cooperatively enforce conformance to the imposed PD solution. If management relies on subordinates to spy on one another to contain defections, the resulting hostility among subordinates may well offset any potential gain from reducing employee capture of organizational resources. On the other hand, if management wins over an initially hostile group bound by horizontal trust by negotiating with its informal leaders, conformance to the collectively better PD solution can be maintained with little monitoring costs.

Second, horizontal trust among employees is essential when they must be relied upon to design internally their production domains for greater productivity. If the additional productivity from better designed production processes exceeds the additional costs (including favor-exchangeable resources) in generating it and if part of this increased net product is passed on to the organization, the organization gains additional output which otherwise would not have been produced. Therefore, whatever favor exchanges are needed to build horizontal trust for such cooperative efforts will ultimately benefit the whole organization. Stronger vertical trust would, of course, enhance such cooperative horizontal trust. Without vertical trust, most of the increased efficiency from horizontal trust would likely benefit employees at the expense of the organization, as was correctly pointed out by Wintrobe and Breton (1986).

Third, vertical trust is efficiency-enhancing for the organization only if there is horizontal trust within top management. If divergent interests exist within top management, vertical coordination between one faction of top management and its subordinates may enhance only the special interest of that faction of top management. Even if there is agreement within top management, there is still no assurance that vertical trust between top management and employees will enhance the interest of the ultimate funding authority (i.e., the principal). Thus, vertical trust is efficiency-enhancing only if all levels of the organizational hierarchy are involved and there is horizontal trust within each of these many levels.

Are Favor Exchanges Rent-Seeking Behavior?

When compensation from the present job is exactly equal to what can be obtained from the best alternative employment, one is being paid one's opportunity costs. Any compensation over and above opportunity costs is known as economic rent. Economic rent can be natural or contrived. It is natural if it is determined by unrestricted supply and demand conditions. It is contrived if it is artificially created (Fung, 1987). Attempts to capture contrived rent is known as rent seeking. Rent seeking is generally regarded as efficiency-reducing because this activity is purely redistributive and not productive. When favor exchangers divert organizational resources for their benefits by concealing the true production function, are they guilty of seeking contrived economic rent?

Before we can answer this question, we need to clarify two points. First, to the extent that employee resource captures arise from unavoidable asymmetric information between workers and the principal, the captured resources do not constitute contrived rent. It is contrived only if the asymmetric information is artificially exaggerated so that employee resource captures in a particular firm exceed what are normally captured in other firms of the same industry.

Second, if workers are capturing more resources than is justified by their superior information, why hasn't the principal offered the supervisor enough incentives to report such rent-seeking activities? If the supervisor has not reported such activities, may it not be that the bribe offered by workers exceeds the offer to the supervisor from the principal? When the competitive pressure in the industry is strong, the principal will see to it that the supervisor and workers are not paid or do not receive more than the minimum incentive-compatible compensation. When the competitive pressure is weak, however, the principal may simply take the easy course by passing the contrived rent on to the consumers rather than disturbing the peace. So ultimately the principal is responsible for allowing rent-seeking activities to happen once properly defined contrived rent is found to exist.

Favor Exchanges as a Cultural Milieu

Because the favor-exchange network supplements and complements the formal organizational hierarchy and procedures, it is difficult to assess the operational efficiency of a given formal organizational structure without specifying the favor-exchange relations in which it is embedded. Because different favor-exchange pathways may develop from the same formal organizational structure due to history and personalities, two organizations with identical formal structures but different favor-exchange pathways may have very different operational efficiency. Indeed, given the different cultural biases of prevailing favor exchanges in different organizations, the formal structures may well have to be different to achieve similar operational efficiency. This is not, of course, to deny that the favor-exchange culture can be constrained or encouraged by the formal structure, but simply to point out that the favor-exchange culture can compromise or enhance the expected operational efficiency of any formal structure (Granovetter, 1985).

Here again, the game-theoretic situations faced by a formal organization structure are critical. In a coordinating game, the formal structure once established can be relied on to enforce conformance. There is no individual advantage to deviate from the formal structure. In a PD situation, however, the large individual advantage of defection and the high costs of enforcing the formal PD rules constantly threaten the stability of these fragile rules. Whether the rules are viable or not then depends critically on the concrete personal relations and the obligations inherent in the favor-exchange network.

Favor Exchanges as a Buffer

To reduce organizational complexity, the formal organization often has a very limited rank structure and compensation structure for its members. These structures are typically measured in discrete units. Since events in the real world naturally occur in continuous units, the formal ranks and compensations of employees usually do not match their actual job performance in such discrete organizational structures (Goffman, 1959:28). These discrepancies can be and are addressed in the favor-exchange network. Too much or too little rank in the formal structure can be compensated by lower or higher influence status in the informal favor-exchange network. Too much or too little formal compensation in the formal structure can be compensated by fewer or more informal perks in the favor-exchange network.

Similarly, the formal organizational chart can never exactly match the informal pathways through which work flow must be channeled. Where the formal organizational chart conflicts with efficient work arrangements, it will be bypassed by favor exchanges. Without these alternative pathways, the formal organization will be hopelessly mired in a sea of red tape. These alternative pathways may even provide a blueprint for adjusting the formal organizational chart (Davies and Lawrence, 1977).

Summary and Conclusions

Because of high information costs in establishing accountability rules that fully reflect the marginal value of each organizational resource to the employer, employees are usually not held fully accountable for many resources. Even if complete accountability rules exist, strict enforcement is impossible because of high monitoring costs. Resources that are not completely accounted for are potentially available for competitive capture to members of the organization. They can be used, among other things, for vertical favor exchanges between superiors and subordinates, and horizontal favor exchanges among subordinates. Because favor exchanges involve unspecified and legally unenforceable obligations, successful favor exchanges not only can bring about more comfortable work life and greater organizational efficiency, but also can build trust.

Favor exchanges promote special interests at the expense of organizational interests only when there is no vertical trust to direct the building of horizontal trust in PD situations. Complementary vertical and horizontal trust not only reduce the use of competitively capturable resources for special interests but also encourage efficient resource allocation within organizations. More efficient resource allocation, in turn, permits greater organizational output and more favor exchanges.

Efficient favor exchanges can provide flexible employee incentives and reduce labor turnover. However, reliance on diffuse obligations and commitment to the person rather than to the position in favor exchanges mean that favor-exchange networks take a long time to form. Any accumulated trust, either vertical or horizontal, can easily be eroded by turnover of pivotal members of the network. This fragility of favor-exchange networks may explain why formal organizational structure is so essential for continuity and survivability. However, the convenience of interchangeable persons for formal organizational roles often seduces top management into ignoring the importance of informal organizations fostered by favor exchanges.

Favor exchanges also can serve as a buffer for the formal organization. By offsetting the inadequacies of the necessarily discrete and rigid formal structure, favor exchanges stabilize the formal system. Thus, instead of eliminating the favor-exchange network by drying up its resource base, enlightened top management should actively redirect the flow of favor exchanges for the collective good.

The study of favor exchanges focuses our attention on the concrete personal relationships and obligations in which economic behavior is embedded. These personal networks help to explain why different behaviors may result from the same formal structures and economic stimuli. Without an intimate knowledge of the personal relations involved, economists have been forced to resort to ad hoc theorizing when economic behaviors seem to contradict naive individual rationality.

The concept of favor exchanges within organizations perfectly dovetails Coase's (1937) theory of the firm. The same reasons why firms exist also explain why favor exchanges exist within firms. According to Coase, firms exist to reduce transaction costs of using the price mechanism by replacing many intermediate product markets with a few factor markets. Specifically, a factor market reduces the number of transactions consumers must conduct and consequently the number of separate prices they must pay before a final product can be obtained. However, these reductions are possible only if the firm does not have to separately price its inputs and intermediate outputs, or to exactly measure the separate marginal contribution of each input in joint production (Cheung, 1983:1–8). Incomplete pricing of inputs and outputs thus explains why incomplete accountability rules are used to allocate resources within organizations, and incomplete accountability rules give rise to the competitively capturable resources used for favor exchanges.

Because favor exchanges arise to deal with diffuse rather than specific obligations, we can expect that favor exchanges will be resorted to wherever and whenever the terms of contracts cannot be completely specified. In other words, favor exchanges provide indispensable additional incentives against opportunistic contract violations when the costs of contract enforcement are high. Although rearrangements of ownership rights such as vertical and lateral integration (Klein, Crawford, and Alchian, 1978; Grossman and Hart, 1986) can reduce the problem of contract enforcement, they can never eliminate it. Therefore, favor exchanges always have a role to play in contract enforcement of market exchanges.

Since the success of favor exchanges depends on how well the norm of reciprocity (Gouldner, 1960) has been internalized, it is possible that some countries or some ethnic groups within a country may be more adept in setting up efficient favor exchanges than others because of their cultural backgrounds. For example, a culture that heavily discounts future returns would not produce successful favor exchangers as its people cannot tolerate the uncertain returns of favor exchanges. To the extent this is true, the concept of favor exchanges may bear on the issue of an ethnic group's competitiveness in the domestic market or a country's competitiveness in the world market. Although internalized norms cannot be changed overnight, external competition may still provide a selective stimulus toward more efficient favor exchanges within organizations (Hoenack, 1989). For example, labor's recent concessions on work rules in exchange for job security and profit sharing in the U.S. manufacturing sector are formalized favor exchanges necessitated by stiff foreign competition. **SSQ**

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