



Strategizing, Economizing, and Economic Organization

Author(s): Oliver E. Williamson

Source: *Strategic Management Journal*, Vol. 12, Special Issue: Fundamental Research Issues in Strategy and Economics (Winter, 1991), pp. 75-94

Published by: John Wiley & Sons

Stable URL: <http://www.jstor.org/stable/2486435>

Accessed: 12/08/2009 04:29

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=jwiley>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit organization founded in 1995 to build trusted digital archives for scholarship. We work with the scholarly community to preserve their work and the materials they rely upon, and to build a common research platform that promotes the discovery and use of these resources. For more information about JSTOR, please contact support@jstor.org.



John Wiley & Sons is collaborating with JSTOR to digitize, preserve and extend access to *Strategic Management Journal*.

<http://www.jstor.org>

STRATEGIZING, ECONOMIZING, AND ECONOMIC ORGANIZATION

OLIVER E. WILLIAMSON

Walter A. Haas School of Business, Economics Department, and Law School, University of California, Berkeley, California, U.S.A.

This article argues that strategy, like charity, begins at home. Specifically, economy is the best strategy. That is not to say that strategizing efforts to deter or defeat rivals with clever ploys and positioning are unimportant. In the long run, however, the best strategy is to organize and operate efficiently.

Business strategy is a complex subject. It not only spans the functional areas in business—marketing, finance, manufacturing, international business, etc.—but it is genuinely interdisciplinary—involving, as it does, economics, politics, organization theory, and aspects of the law. Business strategy has become increasingly important with the growth of the multinational enterprise and of international trade and competition.

Although several different approaches to the substantive aspects of business strategy can be distinguished, the main contestants cluster under two general headings: strategizing and economizing. The first of these appeals to a power perspective; the second is principally concerned with efficiency. Both of these orientations are pertinent to the study of business strategy, but power approaches have played a role in the recent business strategy literature that belies its relative importance.

Partly that may be because the analysis of efficiency is believed to have reached such an advanced state of development that further work of this kind is not needed. Economizing is important, but we know all about that. What we

don't understand, and need to study, goes the argument, is strategizing. Not only is strategizing where many of the novel practices and new issues are said to reside, but the pressing realities of foreign competition are first and foremost of a strategizing kind.

I take exception with arguments of both kinds. Thus, although it is true that efficiency analysis of the firm-as-production function genre has reached a high state of refinement, that does not exhaust all that is relevant to the assessment of efficiency. Efficiency analysis properly encompasses governance costs as well as production costs, and the analysis of comparative economic organization (governance) is still in early stages of development.

I furthermore aver that, as between economizing and strategizing, economizing is much the more fundamental. That is because strategizing is relevant principally to firms that possess market power—which are a small fraction of the total (ephemeral market advantages ignored). More importantly, I maintain that a strategizing effort will rarely prevail if a program is burdened by significant cost excesses in production, distribution, or organization. All the clever ploys and positioning, aye, all the king's horses and all the king's men, will rarely save a project that is seriously flawed in first-order economizing respects.

Key words: Strategizing, economizing, economic organization

Accordingly, I advance the argument that economizing is more fundamental than strategizing—or, put differently, that *economy is the best strategy*. That is the central and unchanging message of the transaction cost economics perspective. Among other things, emphasis on economizing restores manufacturing and merchandising to a place of importance within the business firm and on the academic research agenda.¹

To be sure, economizing and strategizing are not mutually exclusive. Strategic ploys are sometimes used to disguise economizing weaknesses. (Lee Iacocca has tried this.) More often, strategic ploys can be used to promote economizing outcomes. Pricing with reference to learning curve costs is an illustration. 'Techno-structure' (Galbraith, 1967) and related theories of the firm that hold that the imperatives of strategic planning carry the day have turned out, however, to be unserviceable. The beguiling language of strategizing—warfare, credible threats, and the like—notwithstanding, students of economic organization are better advised to focus on more mundane issues of an economizing kind—of which harmonizing, credible commitments, adaptation, and discriminating alignments are examples. Here as elsewhere, the need is to get and keep the priorities straight.

This paper is organized in four parts.² The first section sketches what I take to be the principal efficiency approaches to strategy and sets out the rudiments of the transaction cost economics approach. Applications of transaction cost economics to the governance of contractual relations are treated in the next section. An economizing interpretation of the Japanese cor-

poration is advanced in the third section. Concluding remarks follow.

ECONOMIZING, GENERAL

The leading efficiency approaches to business strategy are the resource-based and the dynamic capabilities approach. These two approaches have been developing very rapidly³ and, as described by Mahoney and Pandian (1990), blend into each other. Penrose's early work on the growth of the firm (1959) and more recent work by Barney (1991), Montgomery and Wernerfelt (1988), Ouchi (1981), Peteraf (1990), Teece (1982), Wernerfelt (1984), and others have been especially influential to the resource-based perspective. The dynamic capabilities approach takes its inspiration from Schumpeter (1942) and has been successively elaborated by Dosi (1982), Nelson and Winter (1982), Prahalad and Hamel (1990), Rumelt (1984), Teece (1986), Winter (1987), and others.

It is not obvious to me how these two literatures will play out—either individually or in combination. Plainly, they deal with core issues. Possibly they will be joined. As matters stand presently, these two literatures offer general frameworks and provoke insights to which added structure is needed.

As I have discussed elsewhere (Williamson, 1975, 1985), transaction cost economics is inspired by the work of Commons (1934), Coase (1937), Barnard (1938), Hayek (1945), Simon (1947; 1962), Chandler (1962), and Arrow (1962; 1969). Whether this approach can help to explicate the strategic issues that the resource based and dynamic capabilities approaches have raised remains to be seen. Be that as it may, my treatment of efficiency is predominantly informed by the transaction cost economics perspective.⁴

That has both advantages and disadvantages. On the one hand, the efficiency approach to business strategy is sorely in need of a well-focused perspective. On the other hand, business strategy has a broad mandate. A narrow lens

¹ This is broadly consonant with the Hayes and Wheelwright perspective (1984: 27):

The notion that manufacturing can be a competitive weapon, rather than just a collection of rather ponderous resources and constraints, is not new, although its practice is not very widespread. Even in many well-managed firms, manufacturing plays an essentially neutral role, reflecting the view that marketing, sales and R and D provide better bases for achieving a competitive advantage.

But the argument extends beyond manufacturing to core businesses of every kind. Thus Sears is reported 'finally [to be] focusing on [its] biggest problem. Its costs are among the highest in retailing (Schwadel, 1990: B1).

² The Conference version of this paper, which is published in Rumelt, Schendel and Teece, (1992), includes a section on organization form and its relation to the modern corporation.

³ The recent Mahoney and Pandian (1990) review lists over 100 books and articles of these kinds.

⁴ Pertinent contributions include Williamson (1975; 1985; 1991), Klein, Crawford and Alchian (1978), Alchian (1984), Teece (1982; 1986), Grossman and Hart (1986), and Masten, Meehan and Snyder (1991).

cannot be expected to inform all of the relevant strategy issues. I submit, however, that transaction cost economics illuminates a wide range of issues of an economizing kind. If, as I argued at the outset, economy is the best strategy, then this view deserves to be heard.

First-order economizing

Although the need to get priorities straight is unarguably important, first-order economizing—effective adaptation and the elimination of waste—has been neglected.

*Adaptation*⁵

Hayek insistently argued that ‘economic problems arise always and only in consequence of change’ and that this truth was obscured by those who held that ‘technological knowledge’ is of foremost importance (1945: 523). He disputed the latter and urged that ‘the economic problem of society is mainly one of rapid adaptation in the particular circumstances of time and place’ (Hayek, 1945: 524). Of special importance to Hayek was the proposition that the price system is an extraordinarily efficient mechanism for communicating information and inducing change (Hayek, 1945: 524–527).

Interestingly, Barnard (1938) also held that the main concern of organization was that of adaptation to changing circumstances. But whereas Hayek was concerned with adaptation in markets, Barnard’s concern was with the adaptation of internal organization. Confronted with a continuously fluctuating environment, the ‘‘survival of an organization depends upon the maintenance of an equilibrium of complex character.... [This] calls for readjustment of processes internal to the organization.... [whence] the center of our interest is the processes by which [adaptation] is accomplished’’ (Barnard, 1938: 6).

The apparent conflict notwithstanding, I submit that adaptability is the central problem of economic organization and that both Hayek and Barnard are correct. The two of them are referring to adaptations of different kinds, both of which are needed in a high-performance system. The adaptations to which Hayek refers

are those for which prices serve as sufficient statistics. Changes in the demand or supply of a commodity are reflected in price changes, in response to which ‘individual participants...[are] able to take the right action’ (Hayek, 1945: 527). I will refer to adaptations of this kind as adaptation (A), where (A) denotes autonomy. This is the neoclassical ideal in which consumers and producers respond independently to parametric price changes so as to maximize their utility and profits, respectively.

That would entirely suffice if all disturbances were of this kind. Some disturbances, however, require coordinated responses, lest the individual parts operate at cross-purposes or otherwise suboptimize.

Recourse to a different mechanism is suggested as the needs for coordinated investments and for uncontested (or less contested) coordinated realignments increase in frequency and consequentiality. Adaptations of these coordinated kinds will be referred to as adaptation (C), where (C) denotes coordination. The conscious, deliberate, and purposeful efforts to craft adaptive internal coordinating mechanisms were those with which Barnard was concerned. Complex contracting and internal organization are implicated.

Bureaucracy and waste

Bureaucracy and waste are irrelevant if firms can be assumed continuously to be operating on production functions and maximizing profits. Alas, that is an egregious oversimplification.⁶ As Hayek remarked (1945: 523):

...the task of keeping cost from rising requires constant struggle, absorbing a great part of the energy of the manager. How easy it is for an inefficient manager to dissipate the differentials on which profitability rests, and that it is possible, with the same technical facilities, to produce at a great variety of costs, are among the commonplaces of business experience which do

⁵ This subsection is based on my treatment of these issues in ‘Comparative Economic Organization’ (1991).

⁶ To be sure, the literature on X-efficiency is concerned with many of the salient issues. That literature, however, has never developed a positive research agenda. It operates at a very high level of generality and has never identified the appropriate unit of analysis. Among other things, issues of remediable and irremediable X-inefficiency are never faced. Irremediable flaws—that is, those that cannot be remedied with net gains (Coase, 1964)—are operationally irrelevant.

not seem to be equally familiar in the study of the economist.

Relatedly, Frank Knight expressed concern over the neglect of waste (1941: 252):

...men in general, and within limits, wish to behave economically, to make their activities and their organization 'efficient' rather than wasteful. This fact does deserve the utmost emphasis; and an adequate definition of the science of economics...might well make it explicit that the main relevance of the discussion is found in its relation to social policy, assumed to be directed toward the end indicated, of increasing economic efficiency, of reducing waste.

Or consider Oskar Lange's argument that *'the real danger of socialism is that of the bureaucratization of economic life, and not the impossibility of coping with the problem of allocation of resources'* (1938: 109; emphasis in original). Inasmuch, however, as Lange believed that this argument belonged 'in the field of sociology' he concluded that it 'must be dispensed with here' (1938: 109). Subsequent informed observers of socialism followed this lead. With the benefit of ensuing experience, it is now evident that the preoccupation of socialist economic theory with marginal cost pricing principles and activity analysis missed much of the crucial economic action. More fundamental (managerial or administrative) issues of first-order economizing, with respect to waste and bureaucracy, were disregarded.⁷

One way of interpreting waste, bureaucracy, slack, and the like is that these are sources of managerial utility (Williamson, 1964). I want here, however, to argue a different position: these cost excesses contribute negligibly to utility but are principally due to inferior organization and maladapted operations. That the profits

differ in two firms in the same industry using the same technology selling to the same customers is not because the managers in the one are working harder than managers in the other. Instead, managers in the two firms are working equally hard but one is working smarter—better organization form; better internal incentives and controls; better alignment of the contractual (interfirm and intrafirm) interfaces.

The differences between first- and second-order economizing can be illustrated with a simple partial equilibrium welfare economics setup. Thus consider an industry that is selling product q_1 at a price p_1 and is just covering its average, but bloated, costs, which are given by $c_0 + b$ —where c_0 is the minimum average costs at which product q_1 can be supplied and b represents the bloat (excess bureaucratic costs or waste). Suppose now that the bloat is removed by a reorganization that eliminates unneeded bureaucrats and wasteful bureaucratic practices. But suppose that the price remains at p_1 . Substantial social gain nonetheless results from waste elimination—the cost savings being measured by the rectangle $W = bq_1$ (where W denote waste) in Figure 1. Assume now that price is reduced to the new level of costs, whence $p_2 = c_0$. Added allocative efficiency benefits—given by $L = \frac{1}{2}b\Delta q_1$ (where $\Delta q_1 = q_2 - q_1$ and L denotes deadweight loss)—thereby result. Albeit important, this price induced (second order) efficiency gain is small in relation to the first

⁷ Instead, the efficacy of socialism was judged in terms of whether the enterprise could be expected to combine factors of production in a least-cost way and set output such that price equals marginal cost (Bergson, 1948: 432–33). Bergson's (1948) sanguine assessment of socialism was based on the application of marginalist principles to the socialist program and carried the day. Abba Lerner was so confident of the theory of efficient resource allocation in the socialist state that he 'went to Mexico to see Trotsky to persuade him that all would be well in a communist state if only it reproduced the results of a competitive system and prices were set equal to marginal cost' (Coase, 1988: 8).

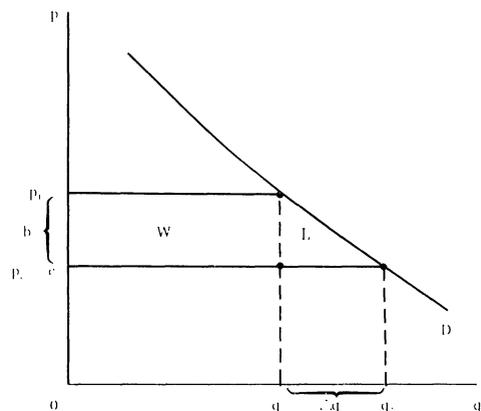


Figure 1. Efficiency losses.

order efficiency gain (from waste elimination). Indeed, the ratio of W to L , which is given by $2q_1/\Delta_q$, can easily be of the order of 10:1.

The message here is plain: the principal action is in the first order efficiency rectangles (the base and height of which are q_1 and b , respectively) rather than in the second order efficiency triangles (the base and height of which are Δ_q and b , respectively). What may have been obvious to Knight and was intuited by Lange, however, did not carry the day: economists have mainly assumed the problem of waste away and have concentrated attention on the triangles. Little wonder that the welfare consequences of monopoly, which focus on second order price distortions, are held to be negligible (Harberger, 1954).

Transaction cost economics

The main hypothesis out of which transaction cost economics works is this: *align transactions, which differ in their attributes, with governance structures, which differ in their costs and competencies, in a discriminating (mainly, transaction cost economizing) way.* This economizing orientation notwithstanding, transaction cost economics does not assert, much less insist, that economic organization is relentlessly taut.⁸ To the contrary, if economic organization is formidably complex, which it is, and if economic agents are subject to very real cognitive limits, which they are, then failures of alignment will occur routinely. Excesses of waste, bureaucracy, slack, and the like are mainly explained, I submit, by failures of alignment. The reason why transaction cost economics is pertinent to the study of business strategy is precisely because first-order economizing alignments are not always obvious and/or sometimes are at variance with managerial preferences.⁹ It is therefore important to examine the microanalytics of organization and explicate which alignments go where and why.

The transaction cost economics program has

⁸ One informed student of economic organization has remarked that Alfred P. Sloan, Jr was relentlessly given to profit maximization. Sloan was also an organizational genius. He is perhaps the exception who proves the rule.

⁹ The waste consequences of managerial preferences—say, in favor of vertical integration—are assumed greatly to exceed the managerial utility gains (to which salary or other reductions in the managerial compensation package could be ascribed).

been set out elsewhere (for recent summaries, see Alchian and Woodward (1987) and Williamson 1989)). I focus here on four features: (1) the behavioral assumptions, (2) the dimensionalization of transactions, (3) the key features of governance, and (4) the concept of incomplete contracting in its entirety.

Behavioral assumptions

Transaction cost economics aspires to describe 'man as he is' (Coase, 1984: 231) in cognitive and self-interestedness respects. It works out of two key behavioral assumptions: bounded rationality and opportunism. The first of these implies that behavior is 'intendedly rational, but only *limitedly so*' (Simon, 1947: xxiv), while opportunism has reference to self-interest seeking with guile.

The principal ramifications of these behavioral assumptions for economic organization are these: (1) all complex contracts are unavoidably incomplete and many complex incentive alignment processes cannot be implemented (because of bounded rationality); (2) to rely on contract-as-promise is fraught with hazard (because of opportunism); and (3) added value will be realized by organizing in such a way as to economize on bounded rationality and to safeguard transactions against the hazards of opportunism. Hypothetical contracting modes (Arrow-Debreu; mechanism design) and hypothetical reputation effect mechanisms (Fama, 1980) are disallowed by the first of these. Ideal (utopian) forms of organization are disallowed by the second. Transaction cost economizing is implicated by the third.

Unit of analysis

Transaction cost economics regards the transaction as the basic unit of analysis (Commons, 1925; 1934) and maintains that the principal dimensions (in transaction cost economizing respects) with respect to which transactions differ are frequency, uncertainty, and asset specificity (Williamson, 1975; 1979; 1983), to which ease of measurement should probably be added (Barzel, 1982; Kenney and Klein, 1983; Alchian and Woodward, 1987; Holmstrom, 1989). Of these four, asset specificity—which has reference to the ease with which an asset can be redeployed

to alternative uses and by alternative users without loss of productive value (Williamson, 1971, 1975, 1979; Klein, Crawford and Alchian, 1978)—has had the greatest significance for examining the governance of contractual relations.

Governance

Whereas noneconomists have long been persuaded that the 'micro-forces within organizations' matter, economists have only recently conceded that proposition. So long as organization form was believed to have only third-order economizing effects, then the firm-as-production-function carried the day.

A rather cautious version of the micro-forces argument is as follows (Kreps and Spence, 1985: 374–75):

...if one wishes to model the behaviour of organizations such as firms, then study of the firm as an organization ought to be high on one's agenda. This study is not strictly speaking, necessary: one can hope to divine the correct 'reduced form' for the behaviour of the organization without considering the micro-forces within the organization. But the study of the organization is likely to help in the design of reduced forms that stress the important variables.

Because divination is in short supply, transaction cost economics takes the stronger position that knowledge of the microanalytics of organization, with special reference to their transaction cost economizing properties, is *vital* to the design of reduced forms that stress the important variables. A key step in this exercise is the identification of the performance attributes with respect to which governance structures differ. As described above, adaptations of autonomous and cooperative kinds (types A and C, respectively) are centrally implicated. Autonomous adaptations are those for which prices are sufficient statistics and markets excel (comparatively). Cooperative adaptations are those for which coordinated responses are required and hierarchies excel (comparatively). The argument extends, moreover to include hybrid modes—long-term contracts, franchising, joint ventures, and the like—that are located between markets and hier-

archies.¹⁰ Mixed adaptation (A/C) obtain for these.

Efficiency and power

Power of two kinds is usefully distinguished within the strategic arena: market power and resource dependency. Transaction cost economics cautions against the over-use of power arguments of both kinds.

Temporary market advantages excepted, most firms lack market power of the kind that is routinely assumed by the strategizing literature. It is fatuous to ascribe strategic importance to temporary market advantages. But even significant market advantages of a more durable kind are often undone by Schumpeterian 'handing on' (Schumpeter, 1947: 155), according to which prices fall to the new level of costs wherever rivals are alert to the new opportunities and are not prevented by purposive (especially political) restrictions from responding to them.

That power of a resource dependency kind does not play a larger role in the transaction cost economics scheme of economic organization is both because initial endowments are ordinarily taken as given and because the contracting process is examined in its entirety. To be sure, taking endowments as given does not mean that initial conditions are beyond question. But it is necessary to start somewhere.

One possibility is to begin with the initial conditions, ask if they are objectionable, and, if they are, propose a remedy. Objectionable initial conditions, however, are sometimes irremediable—in that they cannot be corrected in a way that yields expected net gains (Coase, 1964). Assume, *arguendo*, that the obvious net gain opportunities have been exhausted and consider the ramifications of examining the contracting process in its entirety.

The standard transaction cost economics assumption that parties to a transaction adopt a relatively far-sighted approach (or quickly learn from mistakes, including the mistakes of others) has power-mitigating/vitiating effects. Such par-

¹⁰ The aforementioned condition of asset specificity is largely determinative of which type of adaptation is most needed. The upshot is that markets align to autonomous adaptation, hierarchies to bilateral adaptation, and hybrids service mixed adaptation (A/B).

ties anticipate potential dependency conditions and organize with respect to them from the outset. Accordingly, dependencies that come as a surprise to unwitting victims under a resource dependency setup are priced out and elicit safeguards and related organization responses under an approach in which the contracting process is examined in its entirety.¹¹ The types of power arguments that are featured by the resource dependency literature are significantly relieved in the process.

More generally, transaction cost economics holds that price, technology, and governance structure are determined simultaneously. Thus, consider the supply of a good or service and assume that specialized technologies yield production cost savings, but pose contractual hazards (because of asset specificity). Such transactions will carry a hazard-premium (reflected in the price) unless integrity-infusing safeguards are provided (governance structure). Sometimes net gains are realized by shifting a transaction from one mode of organization to another. Sometimes hazards are mitigated by enlarging the transaction. Transaction cost economics addresses both.

COMPARATIVE CONTRACTING

It is not only possible but customary to study the modern corporation by examining alternative forms of administrative organization. This entails making comparisons *within* a generic form of governance—namely, hierarchy. Transaction cost economics maintains, however, that comparisons *between* alternative generic modes—markets, hybrids, and hierarchies—are at least as important, if not more so. Many of the errors of myopic strategic reasoning¹² can be avoided by approaching the problem of economic organization as one of incomplete contracting in its entirety. As discussed above, parties to an incomplete contract are assumed to behave perceptively with respect to present and prospec-

tive benefits and hazards, whence they decide *simultaneously* on (1) the technology to be employed, (2) the price under which a good or service will be transferred, and (3) the governance structure within which a transaction is located.

As set out below, transactions cost economics is pertinent to questions of the following kinds:

1. When can forward integration into distribution be used to deter entry and when will such efforts predictably fail? (The attempt by American Sugar Company to drive out its competitors by buying into wholesale and retail distribution predictably ended as a miserable failure.)
2. When does lateral integration offer added value and when does it represent a misuse of corporate resources? (The acquisition of Reliance Electric by the Exxon Corporation was arguably of the latter kind and could have been so identified at the outset.)
3. Why is the acquisition of one firm by another always attended by the loss of incentive intensity? (The incentive failures of Series E and Series H stock issues by General Motors (following the acquisition by GM of EDS and Hughes Electronics, respectively) were the predictable consequences of the 'impossibility of selective intervention.')
4. What additional factors need to be considered when contracting under a weak property rights regime? (Both marketing channel and technology transfer decisions are pertinent.)
5. Is there an efficient choice of debt and equity, and how does this relate to the use of leveraged buyouts and management buyouts?
6. Should membership on the board of directors be shared among interested stakeholders or should it be concentrated on a particular group?
7. What types of businesses are well-suited for the partnership form, and what happens if a mismatch occurs? (The decision of Booz-Allen to go public is an example of a mismatch that was subsequently reversed.)
8. Given the intertemporal propensities of bureaucratic forms of organization to ratify and renew earlier decisions, what counterbiasing checks should be made? (The obvious check is to require all new projects to cross a very high threshold for approval.)

¹¹ Repeated application of the discriminating alignment hypothesis to intermediate product markets, labor markets, capital markets, regulation/deregulation, corporate governance, etc discloses that a wide range of economic phenomena can be interpreted as variations on the same transaction cost economizing theme. The predicted regularities, moreover, are borne out by the evidence.

¹² See the discussion of resource dependency above.

Uses of transaction cost economics to deal with strategic issues of the above-described kinds are developed elsewhere (Williamson, 1985, 1988b, 1989). It being beyond the scope of this paper to explicate all of these strategic uses here, I merely sketch two: (1) the organization of intermediate product markets (under both strong and weak property rights regimes); and (2) the discriminating use of debt and equity, including assessments of corporate governance and the partnership form of organization. The main purpose is to give an idea of how transaction cost economics reconceptualizes the issues. Interested readers are encouraged to examine the pertinent references for more expansive treatments. Note in this connection that all of the above-described strategic issues can be recast as variations on the basic transaction cost economizing theme set out above. (I furthermore conjecture that further and deeper uses of transaction cost economics to address strategy are in prospect.)

Intermediate product market transactions

The mundane issue of make-or-buy not only goes to the essence of transaction cost economizing, but also poses interesting strategic issues. The rudiments are sketched here. Both strong and weak property rights regimes are considered.

Strong property rights

Although there are a variety of factors that bear on vertical and lateral integration—economies of scale, taxes, quotas, monopoly power included—transaction cost economics focuses on the attributes of the transactions and asks which governance structures are best suited to organize which transactions and why. The issues here have been developed at length elsewhere (Williamson, 1971, 1975, 1979; Klein *et al.* 1978; Riordan and Williamson, 1985; Grossman and Hart, 1986). The basic argument hinges on the condition of asset specificity and the main results are these: (1) market procurement has the advantage over internal organization when the condition of asset specificity is negligible, the reason being that markets have exceptional incentive intensity features (which elicit autonomous adaptation) and each party to a nonspecific transaction can go its own way at little cost to the other; (2) hierarchy is favored as the condition of asset

specificity becomes great, the reason being that the high-powered incentives of markets are maladaptive, as compared with unified ownership and the attendant use of fiat, for the purposes of harmonizing an exchange relation where bilateral adaptation needs are ascendant; and (3) hybrid forms (such as long-term contracts or franchising, which include safeguards against defection) are best suited to manage transactions with an intermediate degree of asset specificity, intermediate degrees of incentive intensity and mixed adaptability (A/C) being most cost effective under these circumstances.

More generally, let $M = M(k)$, $X = X(k)$, and $H = H(k)$ be reduced form expressions that denote market, hybrid, and hierarchy governance costs as a function of asset specificity (k). Assuming that each mode is constrained to choose the same level of asset specificity,¹³ the following comparative cost relations obtain: $M(O) < X(O) < H(O)$ and $M' > X' > H' > 0$. The first of these two sets of inequalities reflects the fact that bureaucratic costs vary inversely with incentive intensity. The intercept for market governance is thus lower than is the intercept for hybrid which in turn is lower than the intercept for hierarchy. The second inequality reflects the marginal disability of markets as compared with hierarchies in adaptability respects as asset specificity, hence bilateral dependency, becomes more consequential. As shown in Figure 2, these reduced form expressions (for appropriate parameter values) yield a three-part region for efficient supply: I, use markets for $k < \bar{k}_1$; II, use hybrids for $\bar{k}_1 < k < \bar{k}_2$; and III, use hierarchy for $k > \bar{k}_2$.¹⁴

Note that the usual strategic approach assesses the private net benefits of integration as positive—because integration is believed to be the source of

¹³ To be sure, this oversimplifies. For one thing, the condition of asset specificity is a design variable rather than a given, whence the value of asset specificity and the type of governance are determined simultaneously rather than sequentially (Riordan and Williamson, 1985; Masten, 1982). Also, there are sometimes advantages in both making and buying, in that each mode disciplines the other. But these are merely to elaborate transaction cost arguments in transaction cost terms. The underlying logic is unchanged.

¹⁴ This assumes that $X(O)$ is less than $H(O)$ in nontrivial degree, since otherwise $X(k)$ could intersect $H(k)$ from below at a value of $k < \bar{k}$ —in which event the hybrid mode would be dominated throughout by the least cost choice of either market or hierarchy.

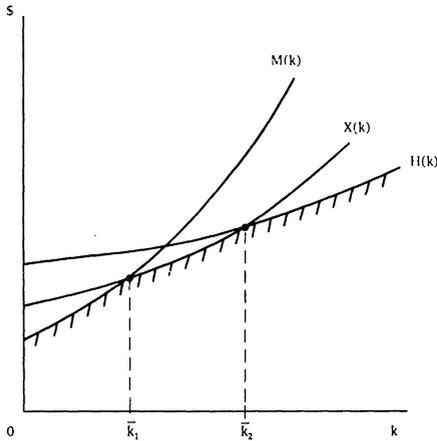


Figure 2. Comparative governance costs.

added power.¹⁵ Accordingly, absent diseconomies of scale or unexplained capital constraints, the orthodox make-or-buy decision is easy: integrate! By contrast, transaction cost economics regards vertical integration that is not attended by transaction cost economies as a source, not of power, but of weakness.¹⁶ That is because internal organization always experiences a loss of incentive intensity and added bureaucratic costs as compared with markets and hybrids. If, therefore, there are not compensating gains (bilateral or multilateral adaptability advantages), integration is the source of cost without benefit. Firms that mindlessly integrate weaken themselves in relation to nonintegrated rivals.

Indeed, the usual strategic preference for vertical or lateral integration is reversed by the transaction cost economics approach to the issues. Vertical integration is the organization form not of first but of last resort—to be adopted when all else fails. Try markets, try long-term contracts and other hybrid modes, and revert to hierarchy only for compelling reasons. Absent pre-existing monopoly power, in the event of which strategic considerations can arise,¹⁷ the logic of transaction

cost economizing reserves integration for those transactions for which the condition of bilateral dependency is substantial.

Weak property rights

The foregoing treatment of vertical and lateral integration assumes that property rights are well-defined and easy to enforce. 'Problems' are experienced by markets because contracts are incomplete and transactions get out of alignment under conditions of bilateral dependency. Therein resides the main incentive to resort to more complex forms of governance under a strong property rights regime.

Added incentives to introduce contractual safeguards to deter loss of intellectual property rights arise under a *weak* property rights regime. David Teece (1986) has advanced the argument that innovators may be induced to integrate into related stages (backward, forward, lateral) if such integration serves to mitigate contractual hazards under 'weak regimes of appropriability.' If contracting with related stages runs the risk that valued know-how will leak out, and if firms operating in related stages possess specialized assets, then effective control over innovations may inadvertently pass into the hands of others.

To be sure, integration into related stages can operate in the service of trade secrecy whether the newly integrated assets are specific or not. The denial of know-how to specialized stages is especially important, however, where asset specificity has cost reducing effects. If *de facto* control of the innovation accrues to those who *combine* know-how with asset specificity, then the leakage of know-how will be deterred by integrating into co-specialized stages of production and distribution (Teece, 1986).

It is relevant in this connection to distinguish between the licensing problem and the franchising problem. Both pose leakage hazards, but whereas the franchisee can be deterred from dissipating quality by (1) requiring him to make nonredeployable investments in the franchise and (2) imposing a termination-at-will clause (Klein, 1980), this same strategy will not work for licensing. That is because termination is of no concern to the licensee, once he has acquired the relevant know-how. Accordingly, the licensing agreement needs to be embedded in a larger contractual relation in which penalties other than

¹⁵ For a recent assessment of the market power consequences of integration in a 'double duopoly' context, see Hart and Tirole (1990). Also see Salop and Scheffman (1983) on 'raising rival's costs.'

¹⁶ That assumes away the incentives to integrate discussed in note 13, *supra*. It furthermore assumes strong property rights. As discussed below, weak property rights can sometimes induce integration as a protective measure.

¹⁷ See Williamson (1985: 100) and note 15, *supra*. See also the following section.

termination have integrity infusing properties. Some of the pertinent issues have been addressed by Contractor (1981) in the context of the multinational enterprise. Absent the ability to effect deterrence—by the credible threat of enforcing trademarks more vigorously, using politics to limit foreign market access to domestic markets, restricting access to proprietary technical improvements, etc.—and assuming that direct foreign investment is prohibitively expensive, transaction cost economics predicts that licensing will take the form of a one-time, lump sum fee rather than a royalty agreement.¹⁸

A related, but different, argument has been advanced by Heide and John (1988), who are concerned with intertemporal hazards that sometimes arise in distributing a good or service. They consider a manufacturer that has developed a new product and needs specialized distribution to get it to market. The manufacturer could make these investments himself or could employ manufacturers' agents, who already know the market and can service it more cheaply. These agents will be leery, however, of deepening their investments if the success of their marketing efforts invites the manufacturer to bypass the agents and sell directly.

In effect, there are three scenarios to be evaluated: (1) the manufacturer sells directly from the outset, its disadvantages in this respect notwithstanding; (2) the manufacturer initially uses an agent to sell to the market and subsequently enters if the agent's efforts are successful, but not otherwise;¹⁹ and (3) the manufacturer uses an agent but is deterred from subsequent entry by the use of linking investments made by the agent. Farsighted agents under the last scenario recognize that their market development efforts will be expropriated by the manufacturer unless they are able to develop ties to the customers that preclude the second scenario from materializing. Which scenario is the most cost effective will vary with the circumstances. As Heide and John argue, linking investments is often the most effective way to go.

¹⁸ This last is a 'node B' transaction cost argument (Williamson, 1985: 32–35).

¹⁹ There are two variants of the second scenario: the manufacturer could offer to compensate the agent for any specialized investments should the manufacturer decide to integrate, or the manufacturer could refuse to compensate. I assume the latter, there being many problems in establishing

Corporate finance and corporate governance

*Debt and equity*²⁰

Debt, equity, leasing, etc. are more than financial instruments. They are also instruments of governance. Just as there is a rational basis to choose between whether to make or to buy a component, so is there a rational basis upon which to finance an asset. In order of complexity, lease (rent) is the simplest form of governance. Debt finance for self-owned assets comes next. Equity is the most intrusive and complicated form of governance. Since governance is costly, the general rule is reserve complicated forms of finance for complicated investments. Expressed in terms of asset specificity, fungible assets can be leased, semi-specific assets can be debt financed, and equity is the financial form of last resort—to be used for assets of a very nonredeployable kind.

Whereas most earlier treatments of corporate finance work out of an undifferentiated or composite capital framework,²¹ transaction cost economics examines the asset attributes of individual investment projects. Thus, suppose that a firm wishes to operate a fleet of trucks, build or otherwise have the use of a general purpose factory, acquire inventories, install equipment, procure dies, and the like. Assuming that the trucks are of a general purpose kind, such durable assets on wheels are ones for which leasing is a feasible form of finance. (To be sure, user costs and preventive maintenance are concerns; but rules and standards governing these can often check egregious abuses.) Repossession and redeployment of these assets by a specialized owner (lessor), who buys in quantity and services a broad market, is easy in the event that payments are late or other problems intrude. Assuming that the factory is located in a population center, the factory building is also a highly redeployable asset. Renting extant space is one possibility. Buying the property with debt secured by a mortgage is another. Loans can also be easily arranged for inventories of raw materials that

value for the former (for a discussion, see Williamson (1985, Chapter 13)).

²⁰ The argument in this subsection is based on Williamson (1988b).

²¹ For a discussion of composite capital, see Williamson (1988: 576–579).

are unspecialized and easily liquidated. Suppose, however, that lenders are now asked to supply funds for assets that are much more highly specialized. Is debt financing equally well-suited to these?

Assume, for this purpose, that debt is defined as a rules-governed structure whereby (1) fixed interest payments must be made at regular intervals, (2) the business must continuously meet certain liquidity tests, (3) principal must be repaid at the loan expiration date, and (4) in the event of default, the debt-holders will exercise pre-emptive claims against the assets in question. If everything goes well, interest and principal are paid on schedule. In the event of default, however, debt-holders will realize differential recovery in the degree to which the assets in question are redeployable. As the degree of asset specificity deepens, the value of a pre-emptive claim declines, whence the terms of debt financing will be adjusted adversely.

Confronted with the prospect that specialized investments will be financed on adverse terms, the firm might respond by sacrificing some of the specialized investment features in favor of great redeployability. But might it be possible to invent a new governance structure to which suppliers of finance would attach added confidence? Suppose, *arguendo*, that a financial instrument called equity is invented and assume that equity has the following governance properties: (1) it bears a residual claimant status to the firm in both earnings and asset liquidation respects; (2) it contracts for the duration of the life of the firm; (3) a board of directors is created and awarded to equity that (a) is elected by the pro-rata votes of those who hold tradable shares, (b) has the power to replace the management, (c) decides on management compensation, (d) has access to internal performance measures on a timely basis, (e) can authorize audits in depth for special follow-up purposes, (f) is apprised of important investment and operating proposals before they are implemented, and (g) in other respects bears a decision review and monitoring relation to the firm's management.

An *endogenous response* to the governance needs of suppliers of finance who are asked to invest in nonredeployable projects has thereby resulted. These suppliers bear a residual claimant status to the firm and are awarded 'control' over the board of directors in exchange. Note that

equity in this scenario comes in late. It being a relatively cumbersome form of finance, equity is the financial instrument of *last resort*.

Expressed in terms of markets and hierarchies, debt is the market-like form of organization. That works well as long as assets are redeployable. Markets (rules) give way to administration (discretion; hierarchy) when assets become highly specific, however. The argument tracks that in intermediate product markets: equity, like vertical integration, is reserved for transactions that are subject to market breakdowns. That reverses the power orientation, which regards vertical integration and equity as the more muscular and hence favored forms of organization and finance, respectively.

Stakeholder participation on the board of directors

Worker participation can take many forms and many of these are productive (Levine, 1990). Participation can yield both direct (private) benefits and indirect (social) benefits. Above some threshold level, added participation usually comes at a cost. The nature of these costs and benefits varies with the task, the group, and the context.

My concern here is strictly with participation on the board of directors and I address this matter entirely with respect to the composition of one-tier boards. The modern manufacturing corporation is considered first. The organization of professional firms follows.

Stakeholder approaches to corporate governance in the modern manufacturing corporation take a variety of forms. One variant of 'interest group management' would award seats on the boards of directors to 'one-third representatives elected by employees, one-third consumer representatives, one-third delegates of federal, state, and local governments' (Dahl, 1970: 20). The view is that it is ungenerous, antidemocratic, and antiproduative to deny workers, consumers, the public, and other interested stakeholders from representation on the board of directors.

Transaction cost economics aspires to assess the contractual relation between each constituency and the enterprise symmetrically. The general argument is that each input will contract with the enterprise in a discriminating way. Specifically, inputs that are exposed to contractual

hazards will either devise a contractual safeguard or the input will demand and receive a risk premium. Assuming that corporate governance matters, in that awarding corporate control to the wrong constituencies introduces added risk—which in turn will be reflected in the costs of organization, the first and simplest lesson of transaction cost economics is that corporate governance should be reserved for those who supply or finance specialized assets to the firm. Large numbers of nonspecific groups with which the firm has contracts are thus eliminated from potential stakeholder status immediately.

Among those who qualify as stakeholders in asset specificity terms, the key issue is how best to secure that stake. The possibility of using the board of directors as a security instrument for some or all of these constituencies warrants consideration. There are several options: (1) mixed boards, in which all constituencies that make specific investments are awarded a pro-rata stake; (2) specialized boards, whereby the contractual relation with all types of stakeholders but one is perfected at the contractual interface, the board being awarded to the stakeholder whose contractual relation to the firm is most difficult to perfect (and thus has the status of a residual claimant); and (3) specialized boards in which one stakeholder group is dominant but where provision for others is made by awarding them observer status, thereby to permit their specialized advice and/or to satisfy their informational needs.

These issues are discussed elsewhere (Williamson, Chapter 12, 1985, 1989). Suffice it to observe here that constituencies that have a well-defined contractual relation to the firm will benefit by tuning up the contractual interface in a well-defined way. Not only is the board of directors a diffuse and cumbersome, rather than a well-defined instrument, but such protective powers as it possesses are compromised by inviting broad participation on the board. Residual claimant status is at best risky and is made all the more so if the claims of many constituencies are subject to *ex post* bargaining at the board level. In effect, broad participation on the board invites two bites at the apple (get your full entitlement at the contractual interface; get more in the distribution of the residual). Confronted with added risk, those who are the 'natural' residual claimants in the nexus of

contracts will adjust the terms under which they will contract adversely. If, as is typically the case in manufacturing (declining industries being a possible exception), equity is the natural residual claimant, the cost of equity would increase if the interest group management model of the board (or some variant thereof) were to be adopted.

The contrast between boards of directors in manufacturing firms and professional firms (law firms, accounting firms, and the like) is striking. The boards of directors in professional firms are entirely made up of the employees (managing partners). Why the difference?

Two things are very different. First, the physical assets in these professional firms are very generic and redeployable—hence can be leased or financed by debt. Outside equity is unneeded—indeed, is contraindicated, since to use equity finance for such assets is to incur costs without benefits. Having financed these assets with debt (or by the membership), the assets at risk, for which added protection is needed, are the human assets and the reputation of the firm. Control and residual claimancy is appropriately assigned to the key employees who have a stake in developing and preserving the value of these assets. Hansmann agrees and observes that

The only important industries in the United States in which worker-owned firms are clearly the dominant form of organization are the service industries, such as law, accounting, investment banking, and management consulting, where partnership and professional corporations (that is, corporations in which shareholding is confined to professionals practicing in the firm) are the typical form of practice (1986: 54).

Interestingly, the transaction cost logic of economic organization not only supports this general result, but furthermore helps to explain organizational differences within the partnership form. Thus Gilson and Mnookin (1985) examine compensation practices in law firms—the leading payment alternatives being equal shares to senior partners vs. a marginal productivity payment scheme—and advance a rationale in which differential transaction-specific values (between clients, lawyers, and law firms) figure prominently. *Ceteris paribus*, sharing arrangements among partners are favored, which is to say that high-powered incentives are disfavored, as the relation between clients and law firms deepens.

The central message of this section and these brief examples is that there is a logic to economic organization that (1) turns on a few key transaction cost economizing principles, (2) deals with comparative economic organization at a microanalytic level, (3) has wide application, (4) can be adapted to address anomalies (weak property rights; professional firms), (5) can be communicated to and explicated for managers, and (6) violations of which are the source of avoidable costs (competitive *disadvantages*). Although transaction cost economizing does not exhaust all that is germane to business strategy, it fundamentally implicates and gives predictive content to the proposition that 'economy is the best strategy.'

THE JAPANESE CORPORATION

One reason for extending the argument to consider the Japanese corporation is because it is impossible to discuss the matter of business strategy long without the issue of Japanese economic organization surfacing, if not dominating, the conversation. My main reason, however, is that I argue that the Japanese firm is distinguished not merely by different attributes but by a *syndrome* of attributes. This last pushes the analyst to consider systems considerations that do not arise when contractual relations are examined one at a time.

A variety of explanations have been advanced to explain why Japanese firms have been so successful in international competition. One of the leading explanations is that the Japanese employment relation (lifetime employment; seniority promotions) is different. Another is that Japanese industry has been the beneficiary of planning and targeting by the Ministry of International Trade and Industry. Relatedly, Japanese firms engaged in sharp, possibly predatory, business practices in which the home market is protected (and organized as a cartel) while foreign markets are subject to dumping. Cultural differences, including legal differences, purportedly contribute to the differential success. Also, extensive subcontracting is believed to be a contributing factor; Japanese banking, finance, and control are different; and the Japanese have been unusually clever in hiring the marketing

expertise and subverting the political process in foreign countries to promote their economic interests.

There plainly is no lack of explanatory factors. The more favored explanations, at least in the popular press, are of a strategizing kind. I submit, however, that the Japanese have long been aware that economy is the best strategy. The main explanation for their success is that first-order economizing has been assiduously pursued.

My arguments rely in significant degree on the recent survey and assessment of the Japanese firm by Aoki (1990). The basic argument (which I believe is consistent with, but is nevertheless different from Aoki) is this: (1) three key factors—employment, subcontracting, and banking—are fundamentally responsible for the success of the Japanese firm; (2) the efficacy of each of these rests on distinctive institutional supports; and (3) the three key factors bear a complementary relation to each other.

The employment relation

As Aoki puts it, the 'mystifying notion of 'lifetime' employment and the 'seniority' system tells only half of the truth,' and even that fraction has been declining in later years (1990: 12). Not only does the Japanese firm use rank hierarchy as an incentive system, but 'The existence of a credible threat of discharge when the employee does not meet the criteria for continual promotion' buttresses the rank hierarchy (Aoki, 1990: 12).²²

What I would like to emphasize here is that the administration of rank hierarchies in the Japanese firm relies on two crucial *institutional* supports. The first of these is the elevation of the personnel department within the firm. The second is the enterprise union.

The personnel department administers the rank hierarchy in the Japanese firm in a much more comprehensive, career-oriented manner than is attempted by the usual U.S. corporation. Added confidence is infused in the rank hierarchy by transforming the relation between superiors and subordinates. As compared with most U.S. firms,

²² Note that Aoki expressly takes exception with the prevailing U.S. view that Japanese wages are tied more closely to seniority than are U.S. wages. Contrast Blinder (1990: 21) with Aoki (1988, Chapter 3).

immediate superiors in Japanese firms have much less control over the destiny of subordinates. If the career tracks of both superiors and subordinates are administered 'on the merits' by the same personnel department, then endemic problems of corporate politicking are arguably relieved.

To be sure, there are trade-offs between current, local knowledge (where immediate superiors have the advantage) and overall career performance (where the personnel department has the advantage). Conceivably, however, the allocation and professionalization of the personnel department in the Japanese firm has had effects not unlike those that Chandler ascribed to the M-form structure: managers at every level relate to their jobs in a more objective way (Chandler, 1966: 382–383; 1977: 460). If so, the Japanese personnel department is an organizational innovation of real importance.

Additionally, as compared with a craft or industry union in the U.S., the enterprise union in the Japanese firm both relates to the purposes and needs of the firm in a more nuanced way and serves as a more effective check on and voice with respect to the integrity of the personnel department. Being an enterprise union, its purposes are more narrowly focused on the economic needs of the enterprise and its workers. The more general political purposes to which industry unions relate are therefore less apt to intrude; and the needs of distant firms and workers, which are often very different, do not need to be factored in. To be sure, there is always a hazard that local union leadership will be bought off or will be ineffectual. Here as elsewhere, credible checks against opportunism (Williamson, 1983) are not only vital but will frequently be in the long-term interests of workers and firms alike (indeed, union integrity is one manifestation of 'enlightened management'—which is too often an empty slogan under U.S. personnel administration).

Taken together, the deepening and more effective deployment of firm-specific human capital is promoted by these twin institutional supports for the employment relation.

Subcontracting

Large Japanese manufacturing firms are much less integrated than their U.S. counterparts. In terms of the intermediate product market schema

described earlier, Japanese manufacturers rely much more extensively on hybrid contracting. In effect, the locus $X(k)$ in Figure 2 is lower among Japanese than among U.S. firms—whence the value \bar{k}_2 is pushed to the right and a larger amount of activity that would be organized under hierarchy in the U.S. is organized under the hybrid mode in Japan.

The contracting mystique is that the Japanese have a greater propensity to cooperate (Aoki, Chapter 8, 1988). Ethnic homogeneity and long-experience with the sharing of water rights are believed to be contributing factors. As with the employment relation, however, investments in specialized assets for which bilateral adaptability is needed will be promoted by crafting supporting governance structures and providing added safeguards.

Again, contracting mystique gives way to the logic of economic organization. At a very general level, Japanese and U.S. procurement practices are alike. Thus, strategic investments and those of a highly specific kind are undertaken by the prime contractor. Vertical integration is used for these. At the other end of the spectrum are generic items. Classical market procurement is observed for these. The question, however, is what supports the broader band of hybrid contracting.

Asanuma (1989) develops a seven-part scale to characterize outside contracting and uses four measures of relation-specific skills to describe Japanese buyer–supplier relations. As Asanuma observes and interprets Japanese contracting practices, contracts vary systematically with (1) the nature of the part to be supplied, (2) the history of the contractual relation, (3) the maturity of the industry, and (4) supplier ratings on each of the relation-specific skills. An economizing orientation informs the entire procurement exercise (Asanuma, 1989: 29). This is done, moreover, in a highly individuated way: 'core plants in the electric machinery industry purchase both [generic] parts...and [specialized] parts' from the same supplier but contract differently for parts of each kind (Asanuma, 1989: 13).

Suppliers are graded A through D. Suppliers of grades A and B are cultivated, grade D suppliers are eliminated, and grade C suppliers are used to buffer variations in demand (Asanuma, 1989: 17–18). Even grade A and B suppliers are subject to competition at contract renewal

intervals (the period of which varies with the nature of the part in question) (Asanuma, 1989: 4,8). Relations of trust notwithstanding, bilateral monopoly conditions are avoided: 'Whenever feasible, [core firms] endeavor to correct the situation by developing alternative qualified sources' (Asanuma, 1989: 26).

There is nothing romantic or soft-headed about Japanese contracting practices. What seems to distinguish these practices is that they have been raised to a higher level of refinement than are observed elsewhere. Partly that may reflect the Japanese understanding that vertical integration is the organization form of last resort. As discussed below, systems considerations are pertinent to both the attractions and successes of Japanese subcontracting.

Banking

Individual banks in Japan are permitted to hold stocks in nonfinancial companies up to a maximum of 5 percent. But combinations of banks can own more, and do: 'Financial institutions as a whole (including insurance companies) own about 40 percent of the total stock outstanding of listed companies' (Aoki, 1990: 14). What is additionally interesting, moreover, is that banks behave collectively: one 'main bank' is assigned to each company. Aoki describes the relation as follows (1990: 14):

The main bank plays the role of manager of a loan consortium when a group of banks extends major long-term credit to the company, and it is responsible for closely monitoring the business affairs of the company. If the company suffers a business crisis, the main bank assumes major responsibility for various rescue operations, which include the rescheduling of loan payments, emergency loans, advice for the liquidation of some assets, the facilitation of business opportunities, the supply of management resources, and finally reorganization, to secure the claims of the consortium (Sheard, 1989). In the normal course of events, however, the main bank exercises explicit control neither in the selection of management nor in corporate policy making.

One of the interesting questions is whether the main bank will refuse to discharge its responsibilities during a business crisis. I submit that this is an example of collective organization

where reputation effects can be expected to operate with usual reliability. Failure by a main bank to discharge its assigned function virtually guarantees that it will be punished by others in the banking group of which it is a member. Furthermore, other groups will observe and record this behavior, regard it as an unacceptable breach, and will themselves refuse membership. The would-be defector is thus faced with massive reputation effect penalties.

Another interesting feature of this bank ownership system is that the managements of Japanese firms are insulated from takeover raids through the open market (Aoki, 1990: 14). Management displacement, if it occurs, is orchestrated by the main bank (Aoki, 1990: 15).

Systems effects

Each of these Japanese practices is interesting in its own right. Moreover, some can be and have been imitated by U.S. corporations—who now, for example, are much more aware of the potential cost-saving merits of hybrid contracting.

What I want to emphasize here, however, is that these three practices are linked. In particular, the efficacy of Japanese employment practices is supported both by extensive subcontracting and by banking control.

As previously remarked, transaction cost economics maintains that all long-term contracts are unavoidably incomplete and pose contractual hazards. Lifetime employment is an especially long-term contract. Hazards of four kinds are posed.

For one thing, firms that assume this obligation are potentially subject to severe strain if they are beset by economic adversity—due, say, to periodic drops in demand. Secondly, workers in core firms may treat the job as a sinecure and shirk their duties. Third, the workers who specialize their productive talents to the needs of a particular firm may find that the agreement is breached—possibly through takeover. Finally, not all workers in the firm may bear the same important relation to the enterprise, yet demands for equalitarian treatment are hard to resist. Accordingly, life-time guarantees are awarded to all. I will hereafter refer to these as adversity, shirking, breach, and equalitarianism.

I contend that the institutional matrix within which core firms operate relieve these hazards.

For one thing, the Japanese personnel office in combination with enterprise unions significantly relieve shirking and help to relieve equalitarianism. If subcontractors are less constrained in life-time employment respects than core firms, then extensive subcontracting helps to relieve adversity. But there are added benefits. Extensive subcontracting simplifies the personnel administration and enterprise union operations in the prime contractor by homogenizing the work force. There being less variety, the task of personnel administration, which is incredibly ambitious, is significantly reduced in scope. Also, wage disparities within the membership of the enterprise union are reduced. In effect, variety is removed to the subcontractors (each of which is relatively homogeneous), which relieves equalitarianism. The system as a whole supports variety, but each of the parts is relatively homogeneous. But for this simplification, the Japanese employment system would experience much greater strain.²³

Hazards of breach that arise because incumbent managements have been displaced by new owners (takeover) are arguably reduced by the Japanese main bank ownership scheme. To be sure, the so-called 'breach of trust' that Shleifer and Summers (1988) have ascribed to takeover are, I think, exaggerated (Williamson, 1988c). To the extent, however, that life-time employment arrangements are in place, this hazard is greater and added protection is warranted.

The upshot is that the hazards associated with life-time employment are mitigated by the combined forces shown in Figure 3. More generally, the set of connections that join the Japanese employment relation, banking, and subcontracting go beyond those shown in Figure 3 to encompass the wider set of forces shown in Figure 4. Arguably, this network of relations has value-infusing consequences—which is to say that

the whole is larger than (and more difficult to replicate) than the sum of the parts.²⁴

CONCLUSIONS

Peter Drucker wrote an important book on *The Concept of the Corporation* in 1946. That book had significant ramifications for an understanding of the headquarters unit in a multibusiness firm. Alfred Chandler's *Strategy and Structure* was published in 1962 and Alfred P. Sloan's *My Years with General Motors* in 1964. Both of these significantly advanced our knowledge of the purposes served by the headquarters unit of a multibusiness firm. My own understanding of and approach to the modern corporation and the purposes served by organization form was massively influenced by Chandler.

The elemental foundations for the approach to business strategy proposed here goes back, however, to a much earlier contribution: Ronald Coase's prescient article on 'The Nature of the Firm' (1937) together with the related literature that I refer to in the first section is where I suggest that the study of business strategy should begin. The proposition that economy is the best strategy needs to be related to those foundations.

What is missing in business strategy, but is desperately needed, is a core theory. To be sure, game theory provides the requisite needs for the strategizing branch of strategy.²⁵ But strategizing is pertinent for only a small subset of transactions, whereas economizing is relevant for all. A core theory to anchor economizing is the pressing need.

My argument is that the microanalytic, comparative institutional, economizing orientation of transaction cost economics deals with many of the key issues with which business strategy is or should be concerned. With effort, moreover, extensions and refinements can be made which extend the reach, sharpen the analysis, and make the approach even more germane. As I have observed elsewhere (Williamson, 1990b

²³ As Aoki observes, 'the differentiation of employment status with a single firm is not easy to administer from the industrial relations point of view. Also, under the institution of enterprise-based unions organized on the union-shop principle, it may become difficult for the union to represent the divergent interests of different groups of employees fairly.' These considerations encourage firms to 'spin off or subcontract those activities which require qualitatively different working conditions.' A 'relatively undifferentiated employment structure' results (Aoki, 1984: 27–29).

²⁴ Japanese economic organization continues, however, to evolve. The role of banks has been less significant since 1984–85 than it had been previously. The possibility that the interpretation of the Japanese corporation set out here will be obsolete and mainly of historical interest cannot be dismissed (Emmett, 1991: 36–40).

²⁵ See Shapiro (1989).

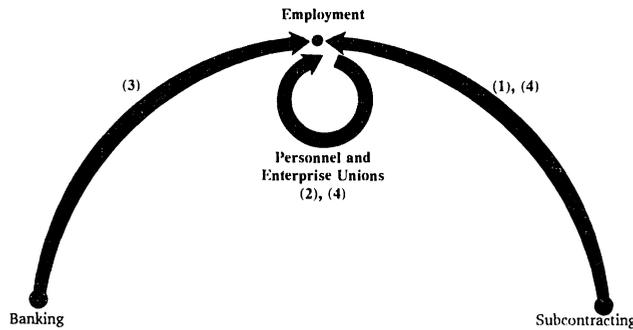


Figure 3. Supports for life-time employment.
 (1) Adversity; (2) Shirking; (3) Breach; (4) Equalitarianism.

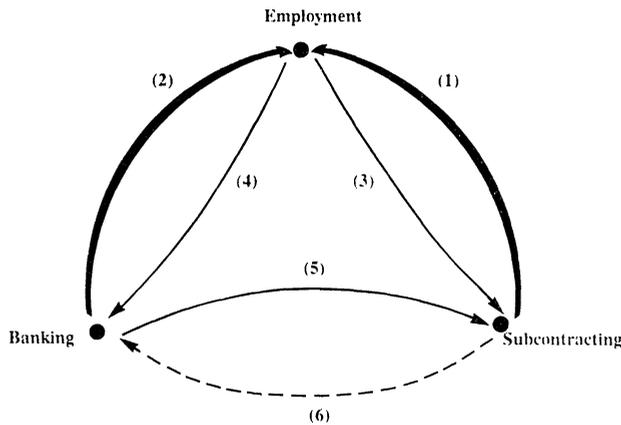


Figure 4. Japanese corporate connectedness.

→, Denotes strong support; →, denotes support, ->, denotes weaker support. (1) Greater homogeneity; (2) greater contract stability; (3) feedback stability; (4) reliably responsive to adversity; (5) financial planning (convergent expectations); (6) no surprises.

unpublished), the 1990s is the decade when the new science of organization will come of age. The economizing approach to strategy should both contribute to and be the beneficiary of these developments.

ACKNOWLEDGEMENTS

The helpful comments of David Levine, Vai-Lam Mui, David Teece, and other participants in the Institutional Analysis Workshop at Berkeley are gratefully acknowledged.

REFERENCES

Adelman, M. A. 'The antimerger act, 1950-1960', *American Economic Review*, **51**, May 1961, pp.236-244.
 Alchian, A. 'Specificity, specialization, and coalitions', *Journal of Economic Theory and Institutions*, **140**, March 1984, pp.34-49.
 Alchian, A. and S. Woodward. 'Reflections on the theory of the firm', *Journal of Institutional and Theoretical Economics*, **143** March 1987, pp.110-136.
 Aoki, M. *The Economic Analysis of the Japanese firm*, North-Holland, New York, 1984.
 Aoki, M. *Information, Incentives and Bargaining in the Japanese Economy*, Cambridge University Press, New York, 1988.
 Aoki, M. 'Toward an economic model of the Japanese

- firm', *Journal of Economic Literature*, **28**, March 1990, pp.1-27.
- Arrow, K. J. 'Economic welfare and the allocation of resources of invention'. In National Bureau of Economic Research (ed.) *The Rate and Direction of Inventive Activity: Economic and Social Factors*. Princeton University Press, Princeton, NJ, 1962, pp.353-358.
- Arrow, K. J. 'The organization of economic activity: Issues pertinent to the choice of market versus nonmarket allocation'. In *The Analysis and Evaluation of Public Expenditure: The PPB System*. Vol. 1. U.S. Joint Economic Committee, 91st Congress, 1st Session. U.S. Government Printing Office, Washington, DC, 1969, pp.59-73.
- Asanuma, B. 'Manufacturer-supplier relationships in Japan and the concept of relation specific skills', *Journal of Japanese and International Economics*, **3**, March 1989, pp.1-30.
- Ashby, W. Ross. *Design for a Brain*, John Wiley & Sons, New York, 1960.
- Barnard, C. *The Functions of the Executive*, Harvard University Press, Cambridge, MA, (fifteenth printing, 1962), 1938.
- Barney, J. 'Firm resources and sustained competitive advantage', *Journal of Management*, **17**, 1991, pp. 19-120.
- Barzel, Y. 'Measurement cost and the organization of markets', *Journal of Law and Economics*, **25**, April 1982, pp.27-48.
- Bergson, A. 'Socialist economies'. In H. Ellis (ed.), *Survey of Contemporary Economics*, Blakiston, Philadelphia, PA, 1948, pp.430-458.
- Berle, A. A. and G. C. Means, Jr. *The Modern Corporation and Private Property*, Macmillan, New York, 1932.
- Blinder, A. 'There are capitalists, then there are the Japanese', *Business Week*, October 8, 1990, p.21.
- Brown, D. 'Pricing policy in relation to financial control', *Management and Administration*, **1**, February 1924, pp.195-258.
- Chandler, A. D., Jr. *Strategy and Structure*, MIT Press, Cambridge, MA, 1962. Subsequently published in Doubleday & Co., New York, 1966.
- Chandler, A. D., Jr. *The Visible Hand: The Managerial Revolution in American Business*, Harvard University Press, Cambridge, MA, 1977.
- Chubb, J. and T. Moe. *Schools, Politics, and Markets*, Brookings Institution, Washington, DC, 1990.
- Coase, R. H. 'The Nature of the Firm', *Economica N.S.*, **4**, 1937, pp.386-405. Reprinted in G. J. Stigler and K. E. Boulding (eds.), *Readings in Price Theory*. Richard D. Irwin, Homewood, IL, 1952.
- Coase, R. H. 'The regulated industries: Discussion', *American Economic Review*, **54**, May 1964, pp.194-197.
- Coase, R. H. 'The new institutional economics', *Journal of Institutional and Theoretical Economics*, **140**, March 1984, pp.229-231.
- Coase, R. H. 'The nature of the firm: Influence', *Journal of Law, Economics, and Organization*, **4**, Spring 1988, pp.33-47.
- Commons, J. R. 'Law and economics', *Yale Law Journal*, **34**, 1925, pp.371-382.
- Commons, J. R. *Institutional Economics*, University of Wisconsin Press, Madison, WI, 1934.
- Contractor, F. 'The role of licensing in international strategy', *Columbia Journal of World Business*, Winter 1981, pp.73-83.
- Dahl, R. A. 'Power to the workers?' *New York Review of Books*, November 19, 1970, pp.20-24.
- Dosi, G. 'Technological paradigms and technological trajectories', *Research Policy*, **11**, 1982, pp.147-162.
- Debreu, G. *Theory of Value*, Wiley, New York, 1959.
- Drucker, P. *The Concept of the Corporation*, John Day, New York, 1946.
- The Economist*. 'Chrysler and Mitsubishi Motors', April 20, 1991, p.71.
- Emmett, W. 'International finance: Gamblers, masters, and slaves', *The Economist*, April 27, 1991, pp.5-52.
- Fama, E. F. 'Agency problems and the theory of the firm', *Journal of Political Economy*, **88**, 1980, pp.288-307.
- Galbraith, J. K. *The New Industrial State*, Houghton-Mifflin, Boston, MA, 1967.
- Gilson, R. and R. Mnookin. 'Sharing among the human capitalists: An economic inquiry into the corporate law firm and how partners split profits', *Stanford Law Review*, **37**, January 1985, pp.313-397.
- Grossman, S. J. and O. D. Hart. 'Corporate financial structure and managerial incentives', In J. J. McCall (ed.), *The Economics of Information*, The University of Chicago Press, Chicago, IL, 1982, pp.107-140.
- Grossman, S. J. and O. D. Hart. 'The costs and benefits of ownership: A theory of vertical and lateral integration', *Journal of Political Economy*, **94**, August 1986, pp.691-719.
- Hansmann, H. 'A general theory of ownership', unpublished manuscript, 1986.
- Harberger, A. 'Monopoly and resource allocation', *American Economic Review*, **44**, May 1954, pp.77-87.
- Hart, O. and J. Tirole. 'Vertical integration and market foreclosure'. In Martin Neil Bailly and C. Winston (eds.), *Brookings Papers on Economic Activity: Microeconomics*, Brookings Institution, Washington, DC, 1990, pp.205-276.
- Hayek, F. 'The use of knowledge in society', *American Economic Review*, **35**, September 1945, pp.519-530.
- Hayes, R. H. and S. Wheelwright. *Restoring Our Competitive Edge: Competing Through Manufacturing*, John Wiley, New York, 1984.
- Heide, J. and G. John. 'The role of dependence balancing in safeguarding transaction-specific assets in conventional channels', *Journal of Marketing*, **52**, January 1988, pp.20-35.
- Holmstrom, B. 'Agency costs and innovation', *Journal of Economic Behavior and Organization*, **12**, December 1988, pp.305-327.
- Holmstrom, B. and P. Milgrom. 'Regulating trade among agents', *Journal of Institutional and Theoretical Economics*, **146**, March 1989, pp.85-105.
- Kenney, R. and B. Klein. 'The economics of block

- booking', *Journal of Law and Economics*, **26**, October 1983, pp.497-540.
- Klein, B. 'Transaction cost determinants of 'unfair' contractual arrangements', *American Economic Review*, **70**, May 1980, pp.356-362.
- Klein, B., R. A. Crawford and A. A. Alchian. 'Vertical integration, appropriable rents, and the competitive contracting process', *Journal of Law and Economics*, **21**, October 1978, pp.297-326.
- Knight, F. H. 'Review of Melville J. Herskovits', 'Economic Anthology', *Journal of Political Economy*, **49**, April 1941, pp.247-258.
- Kreps, D. 'Corporate culture and economic theory', unpublished manuscript, 1984.
- Kreps, D. M. and M. Spence. 'Modelling the role of history in industrial organization and competition'. In George Feiwel (ed.), *Issues in Contemporary Microeconomics and Welfare*, Macmillan, London, 1985, pp.340-379.
- Lange, O. 'On the theory of economic socialism', In Benjamin Lippincott (ed.), *On the Economic Theory of Socialism*. University of Minnesota Press, Minneapolis, MN, 1938, pp.55-143.
- Levine, D. 'Employee involvement efforts', unpublished manuscript, 1990.
- Mahoney, J. and J. R. Pandian. 'The resource-based view of the firm', unpublished manuscript, 1990.
- Mason, E. S. 'Preface', to C. Kaysen and D. Turner, *Antitrust Policy*, Harvard University Press, Cambridge, MA, 1959, pp.xi-xxiii.
- Masten, S. 'Transaction costs, institutional choice, and the theory of the firm'. Unpublished Ph.D. dissertation, University of Pennsylvania, 1982.
- Masten, S., J. Meehan and E. Snyder. 'The cost of organization', *Journal of Law, Economics and Organization*, **7** Spring 1991, pp.1-25.
- Milgrom, P., D. North and B. Weingast. 'The role of institutions in the revival of trade', *Economics and Politics*, **2**, March 1989, pp.1-24.
- Montgomery, C. and B. Wernerfelt. 'Diversification, Picardian rents, and Tobin's q', *Rand Journal of Economics*, **19**, 1988, pp.623-632.
- Nelson, R. and S. Winter. *An Evolutionary Theory of Economic Change*. Harvard University Press, Cambridge MA, 1982.
- Ouchi, W. G. *Theory Z*. Addison-Wesley, Reading, MA, 1981.
- Pelikan, P. 'Evolution, economic competence, and the market for corporate control', *Journal of Economic Behavior and Organization*, **12**, December 1989, pp.279-304.
- Penrose, E. *The Theory of Growth of the Firm*, John Wiley & Sons, New York, 1959.
- Peteraf, M. A. 'The cornerstone of competitive advantage: A resource-based view', Discussion Paper No. 90-29, Kellogg Graduate School of Management, Northwestern University, 1990.
- Prahalad, C. K. and G. Hamel. 'The core competence of the corporation', *Harvard Business Review*, **68**, 1990, pp.79-91.
- Riordan, M. and O. Williamson. 'Asset specificity and economic organization', *International Journal of Industrial Organization*, **3**(4), 1985, pp.365-378.
- Rumelt, R. 'Towards a strategic theory of the firm', In R. Lamb (ed.), *Competitive Strategy Management*, Prentice-Hall, Englewood Cliffs, NJ, 1984, pp.556-570.
- Rumelt, R. 'Theory, strategy, and entrepreneurship', In D. Teece (ed.), *The Competitive Challenge*, Harper and Row, New York, 1987, pp.137-158.
- Rumelt, R., D. Schendel and D. Teece (eds.), *Fundamental Issues in Strategy*, Harvard Business School Press, Boston, MA, 1992.
- Salop, S., and D. Scheffman. 'Raising rival's costs', *American Economic Review*, **73**, May 1983, pp.267-271.
- Schumpeter, J. A. *Capitalism, Socialism, and Democracy*. Harper and Row, New York, 1942.
- Schumpeter, J. A. 'The creative response in economic history', *Journal of Economic History*, **7**, November 1947, pp.149-159.
- Schwadel, F. 'Sears's Brennan faces facts about costs', *Wall Street Journal*, August 10, 1990, p.B1.
- Shapiro, C. 'The theory of business strategy', *RAND Journal of Economics*, **20** (Spring) 1989, pp.125-137.
- Sheard, P. 'The Main Bank System and corporate monitoring in Japan', *Journal of Economic Behavior and Organization*, **11**, May 1989, pp.399-422.
- Shleifer, A. and L. Summers. 'Breach of trust in hostile takeovers'. In A. Auerbach, (ed.), *Corporate Takeovers: Causes and Consequences*, University of Chicago Press, Chicago, IL, 1988, pp.33-56.
- Shleifer, A. and R. Vishny. 'The Takeover Wave of the 1990s', W. P. 288 (unpublished manuscript), 1990.
- Simon, H. *Administrative Behavior*. Macmillan, New York, 1947, 2nd ed, 1961.
- Simon, H. 'The architecture of complexity', *Proceedings of the American Philosophical Society*, **106**, December 1962, pp.467-482.
- Sloan, A. P., Jr. *My Years with General Motors*, MacFadden, New York, 1964.
- Teece, D. J. 'Towards an economic theory of the multiproduct firm', *Journal of Economic Behavior and Organization*, **3**, March 1982, pp.39-64.
- Teece, D. J. 'Profiting from technological innovation', *Research Policy*, **15**, December 1986, pp.285-305.
- Wernerfelt, B. 'A resource-based view of the firm', *Strategic Management Journal*, **5**, 1984, pp.171-180.
- Williamson, O. E. *The Economics of Discretionary Behavior: Managerial Objectives in a Theory of the Firm*. Prentice-Hall, Englewood Cliffs, NJ, 1964.
- Williamson, O. E. *Corporate Control and Business Behavior*, Prentice-Hall, Englewood Cliffs, NJ, 1970.
- Williamson, O. E. 'The vertical integration of production: Market failure considerations', *American Economic Review*, **61**, May 1971, pp.112-123.
- Williamson, O. E. *Markets and Hierarchies: Analysis and Antitrust Implications*, Free Press, New York, 1975.
- Williamson, O. E. 'Transaction-cost economics: The governance of contractual relations', *Journal of Law and Economics*, **22**, October 1979, pp.233-261.
- Williamson, O. E. 'Credible commitments: Using

- hostages to support exchange', *American Economic Review*, **73**, September 1983, pp.519–540.
- Williamson, O. E. *The Economic Institutions of Capitalism*, Free Press, New York, 1985.
- Williamson, O. E. 'The economics and sociology of organization: Promoting a dialogue'. In G. Farkas and P. England (eds.), *Industries, Firms, and Jobs*, Plenum, New York, 1988a, pp.159–185.
- Williamson, O. E. 'Corporate finance and corporate governance', *Journal of Finance*, July 1988b, pp.567–591.
- Williamson, O. E. 'Breach of trust in hostile takeovers: Comment'. In A. Auerbach (ed.), *Corporate Takeovers*, University of Chicago Press, Chicago, IL, 1988c, pp.61–67.
- Williamson, O. E. 'Transaction cost economics', In R. Schmalensee and R. Willig (eds.), *Handbook of Industrial Organization*, Vol. 1., North-Holland, Amsterdam, 1989, pp.135–182.
- Williamson, O. E. 'Markets, hierarchies, and the modern corporation: An unfolding perspective', unpublished manuscript, 1990a.
- Williamson, O. E. 'Chester Barnard and the incipient science of organization', In O. Williamson (ed.), *Organization Theory: From Chester Barnard to the Present and Beyond*, Oxford University Press, New York, 1990b, pp.172–206.
- Williamson, O. E. 'Comparative economic organization: The analysis of discrete structural alternatives', *Administrative Science Quarterly*, **36**, June 1991, pp.269–296.
- Winter, S. 'Knowledge and competence as strategic assets', In D. Teece (ed.), *The Competitive Challenge*, Harper & Row, New York, 1987, pp.159–184.