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Value Creation by Business Lawyers: Legal Skills and Asset Pricing®

Ronald J. Gilson+

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What do business lawyers really do? Embarrassingly enough, at a time when lawyers are criticized with increasing frequency as nonproductive actors in the economy, there seems to be no coherent answer. That is not, of course, to say that answers have not been offered; there are a number of familiar responses that we have all heard or, what is worse, that we have all offered at one time or another without really thinking very hard about them. The problem is that, for surprisingly similar reasons, none of them is very helpful.

Clients have their own, often quite uncharitable, view of what business lawyers do. In an extreme version, business lawyers are perceived as evil sorcerers who use their special skills and professional magic to relieve clients of their possessions. Kurt Vonnegut makes the point in an amusing way. A law student is told by his favorite professor that, to get ahead in the practice of law, "a lawyer should be looking for situations where large amounts of money are about to change hands." Though this advice is hardly different from standard professional suggestions about how to build a practice, the reasons offered for the advice lay bare a quite different view of the business lawyer's function:

In every big transaction [the professor said], there is a magic moment during which a man has surrendered a treasure, and during which the man who is due to receive it has not yet done so. An alert lawyer will make that moment his own, possessing the treasure for a magic microsecond, taking a little of it, passing it on. If the man who is to receive the treasure is unused to wealth, has an inferiority complex and shapeless feelings of guilt, as most people do, the lawyer can often take as much as half the bundle, and still receive the recipient's blubbering thanks.⁴

Clients frequently advance other more charitable but still negative views of the business lawyer that also should be familiar to most practitioners. Business lawyers are seen at best as a transaction cost, part of a system of wealth redistribution from clients to lawyers; legal fees represent a tax on business transactions to provide an income maintenance

^{1.} See Bok, The President's Report to the Board of Overseers of Harvard University for 1981-1982, reprinted in 33 J. LEGAL EDUC. 570 (1983); Morita, Do Companies Need Lawyers? Sony's Experiences in the United States, 30 JAPAN Q. 2 (Jan.-Mar., 1983); Fried, The Trouble with Lawyers, N.Y. Times, Feb. 12, 1984, § 6 (Magazine), at 56.

^{2.} When I was still in practice, I thought I knew the answer: Business lawyers made an excellent living. On reflection, however, I realized that this was a supply-side explanation and that what was really at issue was the demand-side: Why were my clients willing to support me in the style to which I had become accustomed? This article is, in one sense, an effort to answer that question.

^{3.} I should be clear at the outset that I have no ambitions here to inquire into what *litigators* really do. The existence of a rapidly growing literature on alternative methods of dispute resolution is suggestive of an answer.

^{4.} K. Vonnegut, God Bless You, Mr. Rosewater 17-18 (1965).

program for lawyers. At worst, lawyers are seen as deal killers whose continual raising of obstacles, without commensurate effort at finding solutions, ultimately causes transactions to collapse under their own weight.⁵

Lawyers, to be sure, do not share these harsh evaluations of their role. When my question—what does a business lawyer really do—is put to business lawyers, the familiar response is that they "protect" their clients, that they get their clients the "best" deal. In the back of their minds is a sense that their clients do not appreciate them, that clients neither perceive nor understand the risks that lawyers raise, and that as a result clients do not recognize that it is in their best interest when lawyers identify the myriad of subtle problems unavoidably present in a typical transaction.

A more balanced view is presented in the academic literature. Here the predominant approach has been functional. The lawyer is presented as a counselor, planner, drafter, negotiator, investigator, lobbyist, scapegoat, champion, and, most strikingly, even as a friend.⁷ Certainly this list of

^{5.} See J. Donnell, The Corporate Counsel: A Role Study 57-58 (1970); A Businessman's View of Lawyers, 33 Bus. Law. 817, 821-22, 825-26 (1978) (comments of J. Harris, partner, Salomon Brothers and D. Kelly, President, Esmark, Inc.). A lawyer-turned-journalist has captured the criticism nicely:

What happens between lawyer and client today goes something like this: The lawyer sits at the elbow of the businessman while contracts are being negotiated, that is, while a deal is being made. Then, once the principals feel an agreement has been concluded, the lawyers assure them it has not. After much further negotiation, the lawyers "draft a contract"—reduce the deal to written law—and pass it back and forth accompanied in each passage by increasingly minute argumentation (e.g., "We believe in all fairness that the law of Luxembourg should govern in the event of non-performance under Para. V(c)(ii)" etc., etc.). Once they have decided that neither party can be further hoodwinked or bullied, the typist prepares many copies to make "doubly sure" (making doubly sure in this special fashion is 28 per cent of law practice), and the clients sign all of them. Then they smile at each other and shake hands, while glancing sidelong at their lawyers, who are still scowling (it's part of the fee-action). This little drama, in numerous manifestations, is the beginning of law—perhaps, even, the final heart of it as well.

Bazelon, Clients Against Lawyers: A Guide to the Real Joys of Legal Practice, HARPER'S MAG., Sept. 1967, at 104.

^{6.} See Mindes & Acock, Trickster, Hero, Helper: A Report on the Lawyer Image, 1982 Am. B. FOUND. RESEARCH J.-177, 193-98.

^{7.} See, e.g., L. Brown & E. Dauer, Planning by Lawyers: Materials on a Nonadversarial Legal Process (1978) (planning and counseling); Q. Johnstone & D. Hopson, Lawyers and Their Work: An Analysis of the Legal Profession in the United States and England 77-131 (1967) (litany of tasks performed by lawyers); Fried, The Lawyer as Friend: The Moral Foundations of the Lawyer-Client Relation, 85 Yale L.J. 1060 (1976) (analogizing lawyer-client relation to friendship); Pashigian, Regulation, Preventive Law, and the Duties of Attorneys, in The Changing Role of the Corporate Attorney 3, 28-41 (W. Carney ed. 1982) (comparing attorneys' duties as defined by Code of Professional Responsibility, court decisions, and SEC proposals); Redmount, Humanistic Law through Legal Counseling, 2 Conn. L. Rev. 98, 98-99 (1969) (lawyer as counselor (or hallucinogenic drug): "The counselor is an enabling agency of skill whose intuitive, reflective and prescriptive powers tend to move the party from a state of uncertainty or disagreeability to one of comparative, maximal or optimal well-being."); Simon, Homo Psychologicus: Notes on a New Legal Formalism, 32 Stan. L. Rev. 487 (1980) (criticism of psychological counseling approach).

functions rings true enough. An experienced practitioner can quickly recall playing each of these roles.

Despite the surface dissimilarity of these characterizations of what a business lawyer does, they do share both an important similarity and a common failure. To be sure, the unfavorable views ascribed to the client reflect the view that business lawyers reduce the value of a transaction, while both the quite favorable view held by business lawyers themselves and the more neutral but still positive view offered in the academic literature assume that business lawyers increase the value of a transaction. But both sides do seem to agree on the appropriate standard by which the performance of business lawyers should be judged: If what a business lawyer does has value, a transaction must be worth more, net of legal fees, as a result of the lawyer's participation. And the common failure of all of these views is not their differing conclusions. Rather, it is the absence of an explanation of the relation between the business lawyers' participation in a transaction and the value of the transaction to the clients. In other words, precisely how do the activities of business lawyers affect transaction value?

I recognize that I may appear to have shifted the focus of my inquiry—from what business lawyers really do to whether whatever they do increases the value of a transaction. But this emphasis on the business lawyer's effect on transaction value should not shift attention from examination of the particular activities in which business lawyers engage. Rather, my goal is to develop a mode of analysis that allows identification of those activities that have value; in the absence of a tie to transactional value, a particular legal function is simply besides the point.

I am now some distance analytically from where I began. The unstructured inquiry into what a business lawyer does has been narrowed to the question of how to identify what part, if any, of what a lawyer does has the potential to be of value. And the standard that controls the answer to that question has also been identified: Transaction value must be increased. It remains to answer the question and, in so doing, to delineate those activities in which business lawyers engage which meet that standard. In Part I, I develop the content of the transactional-value standard in greater detail and confront the issue, which I expect has already come to most readers' minds, of whether the standard can actually be applied. In Part II, I build on capital asset pricing theory to develop a hypothesis concerning how business lawyers might create value: business lawyers as transaction cost engineers. I then evaluate that hypothesis in Part III by examining a typical corporate acquisition agreement, among the highest forms of the business lawyer's craft, to see whether the agreement reflects the types of techniques my hypothesis predicts. I conclude that the role of the transaction cost engineer does have the potential to create value and that the terms of the corporate acquisition agreement demonstrate that business lawyers do play the role. This theory of what business lawyers do leads, in turn, to a corresponding theory of the function of different portions of the acquisition agreement that has normative implications for how such agreements should be thought of and negotiated.

Armed with a view of the way in which a business lawyer can add value to a transaction, I consider in Part IV the implications of this view not only for understanding the relationship between what is typically seen as "lawyers' work" and the transactional functions typically assigned other professions, but also for improving the competitive position of business lawyers in the scramble among the professions for a larger piece of the action. In Part V, I examine the equally interesting, at least to a teacher of business law, implications of my approach for the structure of business law education. In Part VI, I return to my starting point to reconsider the current round of criticism of lawyers in light of a transaction cost approach to value creation.

I. THE IDEA OF VALUE CREATION

My simple assertion—that what business lawyers do has value only if the transaction on which the lawyer works is more valuable as a result—requires both clarification and some means by which the lawyer's performance can be measured against the standard. Because clarification of the standard is by far the more straightforward of the two problems, I begin there.

A. Conceptual Clarification

My point in clarifying the value creation standard is to make it significantly more difficult to meet. I have in mind two familiar functions—distributive bargaining and manipulation of a regulatory system—which, depending on your perspective, support an argument that business lawyers create value. For each function, however, the potential for value creation depends on a critical assumption. In the case of distributive bargaining, it depends on the assumption that lawyers will be used at all; in the case of manipulating a regulatory system, on the assumption that such a system exists. Examining each situation will clarify the rigorous standard I set: Can business lawyers create value even when use of their services is truly voluntary, when there is nothing that, in effect, artificially requires the use of a business lawyer?

Consider first the case of distributive bargaining. Imagine that a client has had the good fortune to retain a very talented business lawyer when

the other party is represented by a dullard. Assuming that the lawyers can have any impact on the value of a transaction, we might anticipate that it would be to alter the allocation of gains from the transaction between the parties. Here the claim would be merely that one lawyer's greater skill in distributive bargaining results in that client's receiving a greater share of the gain than would have been the case if the lawyers were more evenly matched. One might then argue that the performance of the talented lawyer meets the value-creation standard. From the perspective of that lawyer's client, the transaction is worth more than if that lawyer had not participated.

One reaches a different conclusion if the transaction is viewed from the perspective of both clients. Then the value of the transaction has not changed as a result of participation by business lawyers; rather, resources have been expended to alter the distribution of gains that, by definition, would have been forthcoming even without the lawyers' participation. And for purposes of evaluating whether the participation of business lawyers increases the transaction's value, the appropriate perspective is not that of the client with the more talented lawyer, but the joint perspective of both clients.

As in many other areas, evaluating whether a practice is beneficial depends on whether the issue is evaluated ex post or ex ante. If the evaluation is ex post—that is, if the transaction is one in which it has already been determined that both sides will retain a lawyer¹⁰—then a lawyer whose skill in distributive bargaining results in his client receiving a larger portion of the gain from the transaction will be perceived as having increased the transaction's value to that client. If, however, the evaluation is ex ante—before either side has decided whether to retain a lawyer—the result is quite different. In this situation, clients would determine jointly whether to retain lawyers for the transaction, recognizing that if either retained a lawyer, so would the other. From this perspective, there is little doubt that, if all a business lawyer offers is skill in distributive bargaining, the clients' joint decision would be to hire no lawyers at all because,

^{8.} My assumption is that, pursuant to the fundamental theory of exchange, voluntary trade is mutually beneficial, and results in a surplus that is subject to division between the parties. Note that, at least for now, there is no claim that any part of this surplus results from lawyers' participation.

^{9.} I mean here to distinguish between distributive bargaining in which the size of the pie is by definition fixed and any gain by one party comes at the expense of the other, and what may be called joint problem solving in which, through cooperation, the size of the pie, and hence the size of the piece received by each party, can be increased. See R. FISHER & W. URY, GETTING TO YES: NEGOTIATING WITHOUT GIVING IN (1981); H. RAIFFA, THE ART AND SCIENCE OF NEGOTIATION (1982). The dichotomy, while quite helpful, cannot be taken literally; any gain from cooperation must still be distributed between the parties.

^{10.} As long as one side has a lawyer, the other side also will get one if a lawyer can strengthen the hand of one party in distributive bargaining at the expense of the party who was not represented.

net of lawyers' fees, the surplus from the transaction to be divided between the clients would be *smaller* as a result of the participation of lawyers, rather than larger. Only a client who believed that its lawyer would be better than the other party's with sufficient frequency that the expected gain from better distributive bargaining exceeded the cost of *both* lawyers would still use lawyers in the transaction. Given any reasonable assumption about the availability and distribution of legal talent among lawyers, this disparity is unlikely to exist with any frequency.¹¹

We can thus add one condition to the proposition that business lawyers have potential to add value to a transaction: The increase must be in the overall value of the transaction, not merely in the distributive share of one of the parties. That is, a business lawyer must show the potential to enlarge the entire pie, not just to increase the size of one piece at the expense of another.

A business lawyer's skill at negotiating a regulatory system presents a more compelling case for value creation. In these settings, the business lawyer's function is to convince the regulatory authority that the client's activities are not subject, or only minimally subject, to the regulatory system. Because compliance is typically costly, the lawyer's effort may well increase the value of the transaction in precisely the sense that the value-creation standard contemplates.¹²

I suppose no one would be surprised if clients greeted this explanation with little enthusiasm. A client suspicious of the lawyer's role in the first place may not be reassured by the explanation that lawyers minimize regulatory interference with the client's activities. The same client may also have noticed, with some justification, that lawyers are often the source of much of the current regulatory jungle confronting those doing business.

^{11.} This conclusion is limited, of course, to situations in which both sides of the transaction have the financial ability to hire the same quality lawyer. For most business transactions, this seems to be a reasonable assumption, although there are a large number of situations—consumer transactions and landlord-tenant matters come to mind—where it would not necessarily be appropriate.

^{12.} This would be the case so long as the savings in regulatory cost exceed the legal expenses, a measure that often allows for substantial legal fees. An extreme example is the value created for his client by the lawyer who secured a ruling from the IRS that treble damages paid as a result of the electric generating industry price-fixing conspiracy were deductible. It should be stressed, however, that determining whether value has been created in a regulatory context is simple only if the social costs and benefits of the regulatory system are ignored. On the one hand, private lawyers may impose social costs if their activity on behalf of their clients reduces the effectiveness of a well-designed regulatory system. On the other, private lawyers may create social benefits by helping to reshape a poorly designed regulatory system by negotiating appropriate exceptions, lower cost compliance techniques, and so on. From this perspective, the agency-industry relationship over time resembles negotiation between private parties.

^{13.} This role for the business lawyer—that of facilitating the client's personal autonomy in an increasingly regulated world—suggests the moral justification for preferring one's clients to others. See Fried, supra note 7.

From this perspective, a client may be less than grateful for salvation from the very problems the savior originally created.¹⁴

Moreover, even if we ignore the lawyer's original sin with respect to the imposition of regulation, the regulatory explanation remains unsatisfactory. A more important failing of the regulatory justification for business lawyers is that it simply does not get us far enough. Although it may help explain the potential for Washington lawyers, or regulatory lawyers generally, to create value, business lawyers frequently function in a world in which regulation has made few inroads. For these lawyers the critical rule of law is that a court will enforce whatever the lawyer writes. Thus the hard problem that remains, my principal focus here, is to determine whether these business lawyers can meet the value-creation standard. Can business lawyers create value even when there is virtually no law to apply? Is there a purely private ordering role for business lawyers?

B. Measurement Problems

Having eliminated the obvious situations where it easily can be said, without the need for a careful analytic framework, that what business lawyers do cannot increase the value of a transaction, we now confront an important conceptual difficulty: Where there is no regulatory problem whose potential cost can serve as a benchmark against which to measure the value of the business lawyer's participation, how can we tell whether a transaction would have been more valuable if a lawyer had participated? A truly empirical approach to measuring the impact of a business lawyer's participation seems impossible for a number of reasons. It is unlikely that we could find data covering both a sample of transactions in which a business lawyer did participate and a control group of transactions which were accomplished without a lawyer. Even if the data-collection problem could somehow be solved, serious methodological problems would none-theless remain. While we might know the dollar value attached to par-

^{14.} I am reminded of the story about a tax lawyer who vigorously supported reform efforts directed at closing tax loopholes. When asked whether her activities would negatively affect her practice, the lawyer responded that the impact would be precisely the opposite. So long as the tax laws were changed in any direction, her work would increase; only stability resulted in stagnation.

^{15.} See generally Pashigian, The Market for Lawyers: The Determinants of the Demand for and Supply of Lawyers, 20 J.L. & Econ. 53 (1977) (empirical finding that changes in the number of lawyers in the United States are best explained not by increases in regulatory activity but by changes in the level of economic activity as measured by changes in national income); Pashigian, The Number and Earnings of Lawyers: Some Recent Findings, 1978 Am. B. FOUND. RESEARCH J. 51 (same).

^{16.} For the difficulty in developing useful data bearing on what lawyers do, see Pashigian, A Theory of Prevention and Legal Defense with an Application to the Legal Costs of Companies, 25 J.L. & ECON. 247 (1982).

^{17.} Occasionally, researchers are fortunate enough to find actual settings where history has provided both the control group and the sample necessary to evaluate the impact of a single factor. Thus, for example, the simultaneous operation of both mutual and stock forms of savings and loan associa-

ticular transactions by the participants, we would still face overwhelming problems in determining whether the transactions were really so comparable that any difference in value could be ascribed to the business lawyer's participation.

A second standard approach to isolating the impact of a particular factor will also not work here. Recently, there have been a number of efforts to test the accuracy of microeconomic propositions by creating an experimental setting in which the relevance of a particular factor can be observed. Despite the limitations of the laboratory setting as an abstraction of the real world, this approach offers much more control over the creation of samples and control groups and over the factors that are allowed to enter into the setting to be studied.18 It is not clear, though, that traditional experimental approaches—using students and nominal amounts of money¹⁹—can serve as a proxy for the behavior of trained professionals playing a high stakes game.20 Moreover, such an experiment requires a theory of the relationship between what a business lawyer does and transaction value, the validity of which the experiment is designed to test. Yet I began this effort by establishing that the common explanations of what a business lawyer really does are unsatisfactory precisely because they offer no tie between their description of a business lawyer's function and the value of the transaction on which he or she is working. Thus, even if it were feasible to design an experimental setting in which to examine the impact of a business lawyer on transaction value, we would first need a theory of what that impact should be.

That leaves me with the task to be undertaken in the next Part: to develop a hypothesis that describes the relationship between the particular tasks performed by business lawyers and the value of a transaction.

tions has allowed empirical study of the impact of form of ownership on performance. See Nicols, Stock Versus Mutual Savings and Loan Associations: Some Evidence of Differences in Behavior, 57 Am. Econ. Rev. (Papers & Proceedings) 337 (1967); O'Hara, Property Rights and the Financial Firm, 24 J.L. & Econ. 317 (1981); see also Davies, The Efficiency of Public versus Private Firms: The Case of Australia's Two Airlines, 14 J.L. & Econ. 149 (1971) (comparison of performance of state and privately-owned Australian airlines); Davies, Property Rights and Economic Efficiency—The Australian Airlines Revisited, 20 J.L. & Econ. 223 (1977) (same). Even then, however, it is still difficult to control for the impact of other factors. For example, while we can identify some states in which lawyers perform the title search in connection with real property transfers, and others in which title insurance companies provide this service, other differences between the states make it hard to isolate the role of this particular difference. See Fisher, Multiple Regression in Legal Proceedings, 80 Colum. L. Rev. 702 (1980).

^{18.} See Hoffman & Spitzer, The Coase Theorem: Some Experimental Tests, 25 J.L. & ECON. 73 (1982); Plott & Sunder, Efficiency of Experimental Security Markets with Insider Information: An Application of Rational-Expectations Models, 90 J. Pol. ECON. 663 (1982).

^{19.} See Plott & Sunder, supra note 18, at 666.

^{20.} Even if professionals could be persuaded to participate, it would remain difficult to generalize from their behavior in a game with artifical stakes to their behavior in real transactions in which both their client's money and their professional reputations are on the line.

II. THE RELATIONSHIP BETWEEN LEGAL SKILLS AND TRANSACTION VALUE

Framing a hypothesis that explains the relationship between the participation of business lawyers in a transaction and the transaction's value requires recognition that the subjects of these transactions are typically capital assets: assets whose value is determined solely by the income, whether in cash flow or appreciation, they are expected to earn.²¹ What we normally think of as a transaction, then, is simply the transfer of a capital asset from one party to another.²² Characterizing transactions as the transfer of capital assets is important, because over the last fifteen years, financial economists have developed a substantial body of theory to explain how capital assets are valued. If capital asset pricing theory can identify the factors that determine transaction value, then these factors can be examined to determine whether business lawyers can influence them in a way that will alter transaction value. And if the systematic application of legal skills can affect transaction value, then two important results follow. First, I should be in a position to examine what business lawyers really do and determine if their activities are such that they could bear on transaction value. That is, it would be possible to inquire positively into the efficiency of the common "lawyer." This is the focus of Part III. Second, and perhaps more importantly from my perspective as a business law teacher, it would also be possible to make normative statements about what business lawyers should do in order to increase the value of a transaction, i.e., to create value. Here the prospect is quite exciting: Theory will have been brought to bear not merely to criticize doctrine or urge reform, but also as a tool to improve the quality of legal practice. This effort is the object of Part IV.

^{21.} This definition, while standard, is quite limited. In particular, any asset that has consumption value, i.e., its owner holds it for reasons other than its potential for generating income, falls outside the definition. A familiar example would be a work of art that might be purchased in anticipation of appreciation, but that would still be enjoyed in the meantime. The exclusion, however, has broader application. For example, a sole proprietorship, clearly an income-producing asset, may also have significant consumption value: the psychic value of being your own boss may explain why many owners of small businesses continue in their vocation even though the businesses earn less than the market value of their owners' services plus a return on invested capital.

^{22.} This is readily apparent in the simple case of a transaction consisting of the sale of assets, for example, an apartment building. Then the value of the transaction is clearly the value of the asset transferred. The point remains equally valid, however, if the asset transferred is more ephemeral. In a lease or a joint venture, the asset transferred—the right to use real or personal property or the right to participate in an ongoing relationship—may be more difficult to visualize, but it still has value only because it has the potential to produce income.

A. Capital Asset Pricing Theory²³

The modern development of capital asset pricing theory began with the insight of Harry Markowitz that risk-averse investors²⁴ will always hold a diversified portfolio of capital assets.²⁵ This conclusion follows from two premises: that investors prefer more return to less, given the same level of risk,²⁶ and that investors prefer less risk to more given the same level of return. By holding a number of assets—a portfolio—an investor can reduce risk without reducing return. A rational investor thus will select the portfolio of assets that offers the most return for the desired level of risk.

The next step in the theory's development is a closer look at what kind of risk is reduced by diversification, i.e., by holding a portfolio of assets as opposed to a single asset. The risk consists of two components: unsystematic and systematic risk. Unsystematic risk is that associated with holding a particular asset. For example, if the capital asset in question is a specialized machine tool, the risk of a reduction in the demand for the particular product it makes is unsystematic. In contrast, systematic risk is that associated with holding any asset. For example, increases or decreases in GNP or changes in the level of inflation affect the value of all assets, and thus present systematic risk. Diversifying one's portfolio eliminates unsystematic risk; as long as the investor holds a sufficient number of assets, the impact of one event on a particular asset will be balanced both by that event's different impact on other assets in the portfolio, and by the occurrence of other events affecting other assets in the portfolio. On balance, the value of the portfolio as a whole will be unaffected. Thus, a diversified portfolio is not subject to unsystematic risk.²⁷

The only risk that remains in a diversified portfolio, then, is systematic risk: the risk of events that will alter the value of all assets. And the final step in the development of capital asset pricing theory is the recognition that investors will not be paid to bear risk that can be avoided by diversification. As a result, the return on, and therefore the price of, a capital asset depends on how much systematic risk is associated with it. If an

^{23.} This discussion draws heavily on the description of the development of capital asset pricing theory in Gilson & Mnookin, Sharing Among the Human Capitalists: An Economic Inquiry into the Corporate Law Firm and How Partners Split Profits, 37 STAN. L. Rev. (forthcoming, Jan. 1985).

^{24.} An investor is risk averse if, between two outcomes with identical expected returns, he or she prefers that with the lowest variance, *i.e.*, the least dispersion of returns around the expected mean. See W. SHARPE, PORTFOLIO THEORY AND CAPITAL MARKETS 25-26 (1970).

^{25.} Markowitz, Portfolio Selection, 7 J. Fin. 77 (1952).

^{26.} Risk is defined in this context as the likelihood that an actual outcome will vary from the expected outcome. See R. Brealey & S. Myers, Principles of Corporate Finance 119-26 (2d ed. 1984). It is typically measured by variance or the related concept of standard deviation, see supra note 24.

^{27.} See, e.g., R. Brealey & S. Myers, supra note 26, at 123-28; Modigliani & Pogue, An Introduction to Risk and Return, Fin. Analysis Mar.-Apr. 1974, at 68, 73-76.

asset is subject to a great deal of systematic risk, an investor will require a higher return, and the asset will sell at a lower price, than would be the case with a less sensitive asset.²⁸ As long as the capital market is relatively efficient in informational terms,²⁹ arbitrageurs who identify an asset whose market price is different from what would be expected based on the asset's systematic risk would push prices toward the predicted level.³⁰

Although there have been important criticisms of this formulation of capital asset pricing theory, ^{\$1} they do not blunt its central insight for our purposes: In a world in which assets are valued according to any version of capital asset pricing theory, there is little role for business lawyers. Because capital assets will be priced correctly as a result of market forces, business lawyers cannot increase the value of a transaction. Absent regulatory-based explanations, the fees charged by business lawyers would decrease the net value of the transaction.

The matter, of course, cannot be left there. Simple principles of survivorship require a more positive role for business lawyers. Identifying it, or at least establishing its absence, requires another look at capital asset pricing theory.

Like many economic models, capital asset pricing theory can be derived only after a number of important simplifying assumptions are made. The reason for such assumptions in economic models is straightforward enough: Reality is too complicated and admits of too many interactions to be modeled. The assumptions function to eliminate those complications

^{28.} Put somewhat more technically, the returns on an asset will bear a linear relationship to its systematic risk. This formulation of capital asset pricing theory reflects the standard two-parameter capital asset pricing model (CAPM) in which the only factors that bear on value are risk and return.

29. See generally Gilson & Kraakman, The Mechanisms of Market Efficiency, 70 VA. L. Rev. 549 (1984) (concept of informational efficiency).

^{30.} Gilson & Mnookin, supra note 23, use the issuance of stock on the basis of competitive bids to illustrate this point. In such an auction, the highest bid, i.e., the lowest return to the bidder, will succeed. Suppose there were two bidders, one that held a diversified portfolio and one that did not. Because the diversified bidder would receive the same return as the undiversified bidder but would bear less risk, the stock would be worth more to it and a higher bid would result. Asset value is thus set competitively, based on value to a diversified investor. As a result, an undiversified investor will receive no return for bearing unsystematic risk.

^{31.} The two-parameter capital asset pricing model has been criticized from two separate directions. First, it has been argued that the tests of the CAPM do not establish that risk and return are the only factors that determine asset value. See T. COPELAND & J. WESTON, FINANCIAL THEORY AND CORPORATE POLICY 204-09 (2d ed. 1983); Ross, The Current Status of the Capital Asset Pricing Model, 33 J. FIN. 885 (1978). Second, Richard Roll has questioned whether the two-parameter CAPM can be empirically tested at all. Roll, A Critique of the Asset Pricing Theory's Tests, 4 J. FIN. ECON. 129 (1977).

The particular value of the two-parameter model is that it is normative: It describes why the factors it specifies should count. If this normative aspect is given up, then other approaches, which respond to deficiencies in the two-parameter model by expanding the number of factors to which the price of an asset will be linearly related, are possible. See J. Cragg & B. Malkiel, Expectations and the Structure of Share Prices (1982) (diversification model); Ross, The Arbitrage Theory of Capital Asset Pricing, 13 J. Econ. Theory 341 (1976). The critical difference is that, as yet, the multiple factor approaches cannot specify what additional factors should bear on asset price.

not critical to understanding the relationship under study. To be sure, when one makes these assumptions, the examined relationship no longer corresponds exactly to the real-world relationship, curiosity about which originally gave rise to the inquiry. The value of the model, however, rests not on how well it describes reality, but on whether it allows us better to understand it.³² And as has been the case with capital asset pricing theory, the effect of relaxing the assumptions can also be modeled once the structure of the simple relationship is understood.

The difference between the simple world of capital asset pricing theory and the complex world in which transactions actually take place provides the focus for developing a hypothesis concerning the potential for a business lawyer to increase a transaction's value. In the world described by capital asset pricing theory's simplifying assumptions, the lawyer has no function; in my terms, the business lawyer really *does* nothing. What happens, however, when we relax the assumptions on which capital asset pricing theory is based? Is there a role for the business lawyer in this less orderly world?

At this point we need to look more carefully at the assumptions on which capital asset pricing theory is built. Of particular importance to our inquiry are four:

- 1. All investors have a common time horizon—i.e., they measure the return to be earned from the asset in question over the same period of time.
- 2. All investors have the same expectations about the future, in particular, about the future risk and return associated with the asset in question.
- 3. There are no transaction costs.
- 4. All information is costlessly available to all investors.³³

^{32.} This is a rather different statement than the positivist approach typically associated with the views of Milton Friedman—that the measure of a theory is purely its ability to make accurate predictions. See M. Friedman, The Methodology of Positive Economics, in Essays in Positive Economics 3 (1953); Gibbard & Barian, Economic Models, 75 J. Phil. 664 (1978). In the context of asset pricing theory, substantial questions exist about how, or even whether, the predictions of the two-parameter CAPM or the alternative arbitrage pricing theory can be tested. See Dhrymes, Friend & Gultekin, A Critical Re-Examination of the Empirical Evidence on the Arbitrage Pricing Theory, 39 J. Fin. 323 (1984); Roll, supra note 31 (testability of two-parameter CAPM); Shanken, The Arbitrage Pricing Theory: Is It Testable?, 37 J. Fin. 1129 (1982). In this setting, empirical testing of predictions necessarily must be supplemented with subjective tests of the fit between theory and reality.

^{33.} These assumptions are common to both the CAPM and the Arbitrage Pricing Model (APM). See Ross, supra note 31. Thus, the distinctions between the two are not critical for purposes of my analysis.

There are additional assumptions not listed in the text which are necessary to derive the two-parameter CAPM, such as the ability to borrow and to lend at the same rate, no differential taxes, risk aversion, normal distribution of returns, and risk measured by standard deviation, not all of which are necessary to derive the APM. These, however, can be relaxed without invalidating the approach. See J. VAN HORNE, FINANCIAL MANAGEMENT AND POLICY 64-71 (6th ed. 1983). In any

These assumptions, of course, do not describe the real world. Investors do not have the same time horizons; indeed, it is often precisely because they do not—for example, an older person may wish to alter the composition of his portfolio in favor of assets whose earnings patterns more closely match his remaining life span-that a transaction occurs in the first place. Similarly, investors do not have homogeneous expectations; the phenomenon of conflicting forecasts of earnings or value even among reputed experts is too familiar for that assumption to stand. Transaction costs, of course, are pervasive. Finally, information is often one of the most expensive and poorly distributed commodities.⁸⁴ In short, the world in which capital assets are priced and transactions actually carried out differs in critical respects from the world of perfect markets in which capital asset pricing theory operates.

For a business lawyer, however, the unreality of these perfect market assumptions is not cause for despair. Rather, it is in the very failure of these assumptions to describe the real world that I find the potential for value creation by lawyers. When markets fall short of perfection, incentives exist for private innovations that improve market performance. As long as the costs of innovation are less than the resulting gains, private innovation to reduce the extent of market failure creates value. 35 It is in precisely this fashion that opportunity exists for business lawyers to create value.

B. A Hypothesis Concerning Value Creation: Business Lawyers as Transaction Cost Engineers

The basic assumptions on which capital asset pricing theory is built can be reduced to the simple statement that there are no costs of transacting; there are neither informational disparities between the parties nor any of the more traditional forms of transaction costs. In such a setting, even one unfamiliar with capital asset pricing theory hardly would be surprised that assets would be correctly priced. In this Coasean world, private outcomes are always optimal, 36 and capital asset pricing theory is no more

event, their role is not important to my analysis.

^{34.} See Gilson & Kraakman, supra note 29, at 594-613.35. This point is made with respect to externalities genera This point is made with respect to externalities generally in Dahlman, The Problem of Externality, 22 J.L. & Econ. 141 (1979), and with respect to information costs in Barzel, Measurement Cost and the Organization of Markets, 25 J.L. & ECON. 27 (1982), and Gilson & Kraakman, supra note 29, at 595-98.

^{36.} See, e.g., Calabresi, Transaction Costs, Resource Allocation and Liability Rules-A Comment, 11 J.L. & Econ. 67, 68 (1968) ("[A]ll misallocations . . . can be remedied by the market, except to the extent that transactions cost money"); Dahlman, supra note 35, at 142 ("[I]f there were no costs of transacting, then the potential Pareto improvement could be realized by costless bargaining between self-interested economic agents."). Such a world, of course, is quite unfamiliar.

than the inevitable result of the investor's ability costlessly and thoroughly to diversify his portfolio in a frictionless world.³⁷ The accuracy of capital asset prices, however, is reduced to the extent there are deviations from capital asset pricing theory's perfect market assumptions. For assets to be correctly priced, the real-world deviations from these assumptions must be constrained. This insight is the first step toward a hypothesis explaining how business lawyers might create value.

The next step, then, is to focus on the mechanisms which reduce real-world deviations from the capital asset pricing theory's central assumptions. From this perspective, the variance between assumption and reality is, in effect, a form of market failure. My concern here is with the character of the market response to that failure. Just as competitive conditions create incentives that encourage reduction of production costs, the market also encourages private efforts to reduce transaction costs. A service that reduces the net cost—transaction or other—of a good will earn a positive return. To the extent that private economizing successfully reduces transaction costs, the deviation between the real world in which assets are transferred and the frictionless world of the capital asset pricing theory is minimized. The continued presence of a voluntary social convention—for example, the pervasive use of business lawyers—raises an inference that it is a cost-saving, in my terms value-creating, phenomenon. The continued presence of a voluntary social convention—for example, the pervasive use of business lawyers—raises an inference that it

Formulating a hypothesis about how business lawyers create value, however, requires more than establishing the importance of private innovation as an important method of reducing transaction costs. Two steps are necessary: the specification of precisely how business lawyers can re-

George Stigler puts the point nicely:

If this [world] strikes you as incredible on first hearing, join the club. The world of zero transaction costs turns out to be as strange as the physical world would be with zero friction. Monopolies would be compensated to act like competitors, and insurance companies and banks would not exist.

Stigler, The Law and Economics of Public Policy: A Plea to the Scholars, 1 J. LEGAL STUD. 1, 12 (1972).

^{37.} Diversification requires the existence of markets, the creation of which is itself costly. See Barzel, supra note 35.

^{38.} This point has been well developed with respect to information costs, see Barzel, supra note 35; Barzel, Some Fallacies in the Interpretation of Information Costs, 20 J.L. & Econ. 291 (1977); Gilson & Kraakman, supra note 29, at 595-609.

^{39.} This inference is strengthened by casual empiricism. In many situations business lawyers no longer provide a service they once did; they have been supplanted by lower-cost providers of the service. Title searches are increasingly the function of title insurance companies; much routine tax work is now done by accountants; and, increasingly, pension and profit-sharing plan design is being handled by non-lawyer consultants. The last example suggests a pattern: Lawyers may well have created the very techniques which make them unnecessary. Once the lawyers solved the technical "legal" problems growing out of ERISA, the implementation of the solutions could be handled more cheaply by other professionals.

For a discussion of the use of evidence of survival in economic theory, see Jensen, Organization Theory and Methodology, 58 ACCT. Rev. 319, 331-33 (1983).

duce transaction costs, and the tie between their activities and transaction

It is useful at this point to return to the idea that a business transaction is the transfer of a capital asset in which the central aspect of the transaction is the asset's valuation. And the role of the business lawyer is precisely as Vonnegut described it: to look "for situations where large amounts of money are about to change hands."40 The lawyer places himself strategically in the transfer of valuable assets so as to control the process. He will survive economically—be allowed to take a little of the treasure before passing it on—as long as the gains to the parties exceed his fees. Completing the hypothesis of how business lawyers create value now requires only specifying where these gains come.

I suggest that the tie between legal skills and transaction value is the business lawyer's ability to create a transactional structure which reduces transaction costs and therefore results in more accurate asset pricing. Put in terms of capital asset pricing theory, the business lawyer acts to constrain the extent to which conditions in the real world deviate from the theoretical assumptions of capital asset pricing. My hypothesis about what business lawyers really do—their potential to create value—is simply this: Lawyers function as transaction cost engineers, devising efficient mechanisms which bridge the gap between capital asset pricing theory's hypothetical world of perfect markets and the less-than-perfect reality of effecting transactions in this world. Value is created when the transactional structure designed by the business lawyer allows the parties to act, for that transaction, as if the assumptions on which capital asset pricing theory is based were accurate.

The central role of transaction cost economizing in private ordering is, by now, no longer surprising.41 What has received less attention is the link between capital asset pricing theory and transaction cost economics, and the institutional framework in which transaction cost economizing takes place. My hypothesis—the business lawyer as transaction cost engineer-thus asserts the dual claim that skilled structuring of the transaction's form can create transaction value and that business lawyers are primary players at the game. 42 In the next two Parts, I test the hypothesis

^{40.} K. Vonnegut, supra note 4, at 17.
41. Oliver Williamson put the matter aptly: "The overall object of the exercise essentially comes down to this: for each abstract description of a transaction, identify the most economical governance structure—where by governance structure I refer to the institutional framework within which the integrity of a transaction is decided." Williamson, Transaction-Cost Economics: The Governance of Contractual Relations, 22 J.L. & ECON. 233, 234-35 (1979).

^{42.} The role of other professionals can also usefully be analyzed by reference to the impact of their skills on capital asset prices. For an analysis of this sort with respect to the role of accountants, see Ramakrishnan & Thakor, Moral Hazard, Agency Costs, and Asset Prices in a Competitive Equilibrium, 17 J. FIN. & QUANTITATIVE ANALYSIS 503 (1982). The relation of my analysis of the role

and respond to a question that I suspect has already come to mind. Even if there is a role for a transaction cost engineer, it is not, intuitively, a legal role. Why, then, do lawyers play it?

III. TESTING THE HYPOTHESIS: EXAMINATION OF THE WORK PRODUCT OF BUSINESS LAWYERS.

Stating a hypothesis concerning what business lawyers really do brings me back to the problem that I raised earlier but postponed: How can a hypothesis concerning the efficiency of a social institution be tested? Because study of historical experience does not seem promising—the necessary data is unlikely to be available—and because the creation of a laboratory experiment also seems unpromising, I will use an analytic technique that is akin to discovering who was present at a meeting by reading the tracks that were left. If the tracks are observable and have some distinctive character that allows identification of their maker, our inability to observe who was actually present at the meeting, while unfortunate, does not prevent us from learning something about the actual attendance. If my hypothesis, that business lawyers constrain the divergence between the perfect market assumptions of capital asset pricing theory and the imperfections of the real world, is correct, then we should be able to find "tracks" of this activity in their transactional behavior.

This approach is particularly promising in our setting because business lawyers acting for clients typically leave a wide array of tracks. Anyone who has attended the closing of a major transaction has witnessed the avalanche of paper exchange that accompanies-indeed, actually constitutes—the closing. Examination of these tracks should reveal whether the posited tie between legal skills and asset value exists. More specifically, I intend now to examine a standard form of corporate acquisition agreement. If the hypothesis is correct, the traditional contractual approaches reflected in the agreement should be explainable by their relation to one or more of the perfect market assumptions on which capital asset pricing theory is based. And if major elements of a corporate acquisition agreement can be understood by reference to their impact on these assumptions, then this discovery would constitute substantial empirical evidence of business lawyers' potential to create value. Moreover, we would not only better understand the function of different portions of the agreement but also be better able to draft and negotiate them.

Before examining a standard form of acquisition agreement, I should explain briefly why I selected this form of transaction for study in prefer-

of the business lawyer to the role of other professionals is considered in Part IV(A), infra. 43. See supra pp. 248-49.

ence to, for example, a complex real estate transaction or joint venture formation. First, a corporate acquisition is obviously the transfer of a capital asset; indeed, the valuation of corporate securities—the indicia of ownership of a corporation—has dominated the empirical tests of capital asset pricing theory. Second, the business lawyer's role in corporate acquisitions is pervasive. This pervasiveness gives the lawyer the opportunity to play the hypothesized role, and also makes the strongest case for the inference that because the lawyer's role in the transaction has survived, it serves a useful function. Third, negotiation and preparation of the acquisition agreement is the lawyer's principal charge in the transaction. There is thus a fairly complete set of "tracks" of the lawyer's activity. Finally, but of at least equal importance, I have experience as a practitioner in this form of transaction. While I do not want to overemphasize the importance of actual experience in understanding a business lawyer's function, such experience is helpful to understand why a business lawyer believes he is doing something even if the point is to formulate a more comprehensive explanation of the behavior. It is simply helpful for an entomologist, seeking to explain some aspect of an insect's behavior, to have once been a beetle.

A. An Overview of the Acquisition Agreement

Using an acquisition agreement as the data sample for my examination is desirable not only because it covers a form of transaction particularly appropriate to the lens of theory through which I view the problem, but also because of the very development of a *form* of agreement. Without having become boilerplate⁴⁴—enormous amounts of time still are spent on their negotiation—the general contents of the agreement have by now become pretty much standardized.⁴⁵ This is not to say that the distributive consequences of acquisition agreements are likely to be the same. Rather, it is that the problems confronted and the mechanics of the solutions

^{44.} This is not to say that boilerplate, because it is not negotiated, is unimportant. Rather, it represents the adoption of a standard solution with respect to important problems for the precise purpose of reducing transactions costs. See Gilson & Kraakman, supra note 29, at 615-616.

^{45.} James Freund, a leading practitioner in the mergers and acquisition area, makes this point explicitly: "[M]ost agreements utilized in the merger and acquisition field do manage to cover pretty much the same ground and contain relatively similar provisions. I'll go further; there are abundant instances of nearly identical words, phrases and clauses, suggesting that respectful plagiarism is indeed the order of the day." J. Freund, Anatomy of a Merger: Strategies and Techniques for Negotiating Corporate Acquisitions 140 (1975) (footnote omitted). The similarity can also be seen by comparing a number of agreements contained in form books. See 3 Business Acquisitions 55-60, 84-165, 240-343 (P. Gaynor 2d ed. 1981); California Continuing Education of the Bar, Drafting Agreements for the Sale of Businesses—Supplement (1983) [hereinafter cited as Drafting Agreements Supp.]; 4 West's Legal Forms (P. Lieberman 2d ed. 1982).

adopted are similar, even if the impact of the specific application of the solution to the parties will differ from transaction to transaction. Because the overall approach and coverage of typical acquisition agreements, and the types of contractual techniques they contain, are largely the same, they can be taken fairly to reflect not merely an individual lawyer's inspired response in a particular situation, but the collective wisdom of business lawyers as a group. This representative character, of course, is central to my inquiry. If I can establish the potential for value creation by reference to a typical acquisition agreement, then the conclusion cannot be dismissed as mere anecdote, the idiosyncratic result of the presence of a particularly talented business lawyer. Rather, I can fairly claim to have identified a more general phenomenon with important insights for understanding the role played by most business lawyers.

A description of the subject necessarily precedes an examination of the functional significance of its parts. A skeletal outline of the form of a typical agreement provides a representative picture.

Description of the Transaction. The initial, and usually most straightforward, portion of the agreement provides an overall description of the transaction. The parties are identified, the structure of the transaction—for example, a purchase of stock or assets, or some triangular variation—is described, and details concerning such matters as the timing and location of the closing of the transaction are set forth.

Price and Terms of Payment. The next portion of the agreement typically focuses on the price to be paid and the medium and timing of payment. The text is most straightforward when the medium of payment is cash and the entire amount is to be paid on closing. But where the transaction contemplates other than immediate payment of the entire purchase price, the document inevitably becomes a great deal more com-

^{46.} Freund also captures something of the process by which the pattern of practice develops: "I freely confess, in small point, to having lifted from the drafts of my friends and adversaries a number of valuable nuggets for future utilization." J. Freund, supra note 45, at 140 n.2. The existence of commercial form books, see supra note 45, as well as the conscious practice of law firms to create and urge the use of in-house form files, see J. Freund, supra note 45, at 140-41, also reflect the systematization of the process.

^{47.} For analogous uses of a different type of "form" document—American Bar Foundation, Commentaries on Indentures (1971) [hereinafter cited as Commentaries]—see Leftwich, Accounting Information in Private Markets: Evidence from Private Lending Agreements, 58 Acct. Rev. 23 (1983); Smith & Warner, On Financial Contracting: An Analysis of Bond Covenants, 7 J. Fin. Econ. 117 (1979).

^{48.} There are complications, however, even in an all-cash transaction. For example, if the purchase price is not literally to be paid in cash, but by the transfer of bank funds, then specification of the character of the funds to be provided—e.g., Clearinghouse Funds, same-day funds—can affect the availability of overnight investment, the interest on which can be a substantial amount in a major transaction.

plicated. For example, at the time the agreement is prepared, it may be possible to describe the purchase price only by reference to a formula because its amount depends on the performance of the business over some period following the agreement's execution. As I discuss shortly, the need to specify the appropriate performance measure and to protect against manipulation of the indicia of performance makes for a more expansive discussion in the document. Similarly, when the medium of payment is other than cash, the need to address valuation issues—for example, if the consideration will be shares of the buyer's stock, how the effects of pre-closing changes in the market price of the stock will be shared—also expands the document's text. Of course, if the timing of the payment will be delayed—for example, if the medium of payment will be the buyer's note—the agreement must cover what is, in effect, an additional transaction: a loan from the seller to the buyer.

Representations and Warranties. The next major portion of the agreement consists of representations and warranties made by the seller and, typically to a much lesser extent, by the buyer. These provisions consist of a series of detailed statements of fact concerning the relevant business. The seller commonly will warrant, inter alia, the accuracy of its financial statements; the absence of any liabilities for taxes or other mat-

^{49.} If the period extends beyond the closing of the agreement, as well as beyond its execution, the technique is commonly referred to as a contingent-price formula or simply as an "earnout." This technique is considered in detail *infra* pp. 262-65.

^{50.} Suppose that the acquisition agreement provides that the consideration for the purchase of the seller's assets will be one million shares of the buyer's common stock that, at the time of the agreement's execution, trade for \$50 per share—a \$50 million transaction. If the price of the buyer's stock changes during the post-execution/pre-closing period, however, the value of the transaction will change accordingly. Thus, the acquisition agreement typically will allocate the risk of such price fluctuation between the parties. There is typically not a parallel problem with movements in the price of the seller's stock because the potential for arbitrage will cause its value to be a function of the value of the buyer's stock unless there is a possibility either that the transaction will not occur, or that a higher offer for the seller will be made. In those cases, the price of the seller's stock would likewise reflect these possibilities through the action of risk arbitrageurs. See 1 M. LIPTON & E. STEINBERGER, TAKEOVERS AND FREEZEOUTS 19-20 (1978).

^{51.} Thus, matters such as the interest rate, security, payment schedule, and acceleration terms must all be negotiated just as in a transaction involving only a loan. Where the note is big enough (a rather frequent occurrence in the increasingly common divestiture transaction where the subject of the acquisition is a division of a larger company) the transaction may make the divesting company one of the buyer's major creditors with the same need for protection as other major lenders. As a result, one would expect the acquisition agreement to contain the same type of detailed operating covenants as a standard institutional loan agreement. See Commentaries, supra note 47, at 312-473.

^{52.} The asymmetry between the extent of the buyer's and seller's representations and warranties results from the different character of their roles in the transaction. At the extreme, in an all-cash transaction that is both executed and closed at the same time, the only fact concerning the buyer that will be of interest to the seller is that the check be good. As the time between execution and closing grows, and as the character of the consideration moves from cash to a form like stock or debt, the value of which depends on the future performance of the buyer, the seller begins to take on some of the attributes of a buyer and the asymmetry in the extent of representations and warranties is reduced.

ters accruing after the date of its most recent audited financial statements including, most importantly, the absence of contingent liabilities; the ownership and condition of various assets of importance to the operation of the seller's business; the existence of litigation against the seller, whether actual or threatened; and the extent to which the seller's operations are unionized. Thoroughly done, this portion of the acquisition agreement paints a detailed picture of the seller—the capital asset that is being acquired.

Covenants and Conditions. The two final steps in our survey of the major portions of a typical acquisition agreement result from the fact that many acquisition transactions contemplate a significant gap between the date on which the acquisition agreement is signed and the date on which the transaction is closed. Whether delay is caused by regulatory necessity, such as the requirement that a proxy statement seeking the approval of the transaction by the seller's shareholders be filed and reviewed by the Securities and Exchange Commission, by regulatory convenience, such as the need for an Internal Revenue Service ruling as to the income tax consequences of the transaction, or simply by the buyer's need for additional time to complete its investigation of the seller, the temporal gap

Available data suggest that the cancellation of a friendly acquisition by the buyer after initial announcement of the transaction is not an isolated phenomenon. According to one study of all announced mergers among New York Stock Exchange listed companies from 1971 through 1977, 36% were cancelled by the buyer prior to their consumation. Dodd, Merger Proposals, Management Discretion and Stockholder Wealth, 8 J. Fin. Econ. 105 (1980). Thus, the buyer's post-announcement investigation seems to be of major importance.

^{53.} See Drafting Agreements, supra note 45, at 53-182; Drafting Agreements Supp., supra note 45, at 45-64; J. Freund, supra note 45, at 248-53; J. McGaffey, Buying, Selling, and Merging Businesses 37-41 (1979); Weinreich, Contract of Sale, in 1 Business Acquisitions 145, 170-86 (J. Herz & C. Baller 2d ed. 1981).

^{54.} Freund & Greene, Substance Over Form S-14: A Proposal to Reform SEC Regulation of Negotiated Acquisitions, 36 Bus. Law. 1483 (1981), provides an excellent review of the regulatory delays resulting from federal securities law depending on the form of the transaction. Other regulatory regimes, including most notably the pre-merger notification requirements of Section 7A of the Clayton Act, 15 U.S.C. § 18a (1982), also impose a delay before closing.

^{55.} The critical role of the investigation that occurs in the post-agreement/pre-closing period is illustrated by the course of the recent transaction in which American Express Co. purchased Investors Diversified Services, Inc. ("IDS"), the principal subsidiary of Alleghany Corp. On July 13, 1983, American Express announced the transaction, at a purchase price of \$1.01 billion in American Express common stock. Alleghany to Sell Most of Its Assets for \$1.01 Billion, Wall St. J., July 13, 1983, at 3, col. 1. By August 12, 1983, the intensive investigation of IDS by American Express had raised doubts about whether American Express would actually proceed with the transaction. Some Officials at American Express Fear Problems if IDS Purchase Goes Through, Wall St. J., Aug. 12, 1983, at 3, cols. 2–3. These doubts proved correct when, on August 17, 1983, American Express announced that it would not proceed with the acquisition of IDS "after a review of the company disclosed potential problems in absorbing it." American Express Abandons Plan to Buy Alleghany Assets After Operations Check, Wall St. J., Aug. 17, 1983, at 3, cols. 2–3. Abandonment proved only temporary as by late September American Express and Alleghany had renegotiated the transaction at a price of \$773 million, some \$237 million lower than the original price. Alleghany to Sell IDS to American Express Co., Wall St. J., Sept. 27, 1983, at 2, col. 2.

between execution and closing requires contractual bridging. This is accomplished by two complementary techniques: covenants governing the operation of the business during the gap period, and conditions which, if not satisfied, relieve a party of its obligation to complete the transaction. Typically these two techniques combine with the representations and warranties to operate as a unit, providing a hierarchy of obligations and the potential for a hierarchy of remedies if one or more of the other party's obligations are not met. 56 Thus a covenant may require that the seller maintain working capital above a specified level pending closing. At the same time, the seller may also have warranted that working capital was, and at closing will be, above the specified level, and the buyer's obligation to close the transaction may be conditioned generally on the accuracy of the seller's representations and warranties as of the date of closing, on the seller's satisfaction of all covenants during the pre-closing period, and, specifically, on the required level of working capital at the closing date. A failure to maintain adequate working capital will then constitute both a breach of warranty and a violation of a covenant, as well as providing the buyer with a number of justifications for not completing the transaction.⁵⁷

In formal terms, then, the acquisition agreement is simply a more complicated version of what one would expect in any sales agreement: It states the form and terms of the transaction, describes the asset to be transferred, and specifies the manner in which the asset will be preserved pending the completion of the transaction. The possibility that this contractual structure has the potential to create value, however, arises not from a formal overview, but from the manner in which different elements of the agreement respond to the problem of constraining the effect of real world deviations from capital asset pricing theory's perfect market assumptions. For this purpose, it is necessary to focus attention directly on the assumptions themselves, particularly the assumptions that all investors have homogeneous expectations, that they share a common time horizon, that information is costlessly available to all, and that there are no other transaction costs.

There also are other non-regulatory reasons for a delay between execution of an agreement and the closing of the transaction. For example, where the seller's lease or contract rights require consent for assignment or assumption, these must be secured during the period.

^{56.} The importance of the interaction of these elements of the agreement is thoughtfully canvassed in J. FREUND, *supra* note 45, at 153-61. Freund's discussion also incorporates the role of indemnification provisions, an issue that, for ease of exposition, I prefer to put off for a time. *See infra* pp. 281-86.

^{57.} Having alternative and, indeed, cumulative remedies for a particular event can be of substantial benefit to a buyer. For example, the failure of a condition would provide only an excuse not to close. A breach of warranty or a violation of a covenant would additionally give rise to a damage action for expenses if the decision were made not to close and, depending on the terms of the agreement, perhaps a damage action for the reduced value of the seller even if the buyer went forward with the acquisition. See J. Freund, supra note 45, at 287-89; Dillport, Breaches and Remedies, in 2 Business Acquisitions, supra note 53, at 1249.

It is in response to the potential impact of this unholy host that my hypothesis holds out the potential for a value-creating role for business lawyers.

B. The Failure of the Homogeneous-Expectations Assumption: The Earnout Response

I want to begin with the assumption that can be most clearly examined from my perspective: The assumption that all investors have homogeneous expectations. The critical place in asset pricing theory of the assumption that all investors share the same beliefs about the future risk and return associated with owning the asset in question, in our case a business, is obvious: As long as we all agree about the future income stream associated with owning the business and about the systematic risk associated with that income, there is no reason to expect potential buyers and sellers of the business to disagree about its price. But it is also obvious that buyers and sellers often do not share common expectations concerning the business future.

Imagine a negotiation between the presidents of a buyer and seller concerning the price at which the transaction will take place. Imagine further that the negotiations have progressed to the point where agreement has been reached on an abstract, but nonetheless important, pricing principle, that the appropriate way to value the seller's business is \$1 in purchase price for each \$1 in annual sales.⁵⁸ The critical nature of the homogeneous-expectations assumption should be apparent. Even after agreement on a valuation principle, the parties will agree on price only if they share the same expectations about the seller's future sales. The problem, of course, is that they will not. The negotiating dance that results is familiar to practitioners.

Now suppose that the buyer's president, having done his homework, believes that there is a 50% chance the seller will do \$10 million in sales next year and a 50% chance that it will do only \$5 million. The expected value of the alternatives is \$7.5 million⁵⁹ which the buyer's president of-

\$10 million x .50 = \$5.0 million 5 million x .50 = 2.5 million \$7.5 million

^{58.} The example could be restated directly in the terms of capital asset pricing theory without much difficulty. Suppose that we could establish the systematic risk associated with the seller's business. This would allow us to determine the return which the market deems necessary to bear such a risk. The purchase price would then represent the capitalized value of that return. The issue in doubt would remain, as in the text, whether the seller's future performance would generate the necessary results. For discussions of the use of capital asset pricing theory in capital budgeting decisions, see R. Brealey & S. Meyers, supra note 26, at 117-94; Mullins, Does the Capital Asset Pricing Model Work?, HARV. Bus. REV., Jan.-Feb. 1982, at 105. 59. The calculation is:

fers as the purchase price which the agreed-upon valuation principle dictates. The president of the seller, not surprisingly, has different expectations. He is much more optimistic about the probabilities associated with next year's sales. His homework suggests an 85% chance of \$10 million in sales and only a 15% chance of sales as low as \$5 million. These figures yield an expected value, and a purchase price under the agreed valuation principle, of \$9.25 million. The result is inaccurate pricing at best and, because of the resulting conflict over the purchase price, at worst no transaction at all if the parties are unable to resolve their differences.

It is important to emphasize at this point that the problem which "kills" our hypothetical deal is not distributional conflict—disagreement over sharing the gains from the transaction. The distributional principle in the form of a valuation formula has already been approved. Rather, the problem is an example of the failure of the homogeneous- expectations assumption: The parties simply have different expectations concerning the future performance of the business. If this problem could be solved, a deal could be made. Tautologically, the value of the transaction would be increased. And if my hypothesis about what business lawyers do is correct, a particularly inviting opportunity then exists for value creation by a business lawyer. The lawyer can increase the value of the transaction if he can devise a transactional structure that creates homogeneous expectations.

As my hypothesis predicts, there is a familiar remedy, commonly called an "earnout" or "contingent price" deal, for this failure of the homogeneous-expectations assumption. It is intended, as a prominent practitioner has put it, to "bridge the negotiating gap between a seller who thinks his business is worth more than its historical earnings justify and a purchaser who hails from Missouri." The solution that business lawyers resort to for this problem is one that economists refer to as state-contingent contracting. Its central insight is that the difference in expectations between the parties as to the probabilities assigned to the occurrence of future events will ultimately disappear as time transforms a prediction of next year's sales into historical fact. If determination of the purchase price can be delayed until next year's sales are known with certainty, the deal can be made. The solution, therefore, is to formulate the purchase price as an

^{60.} The calculation is:

^{\$10} million x .85 = \$8.5 million 5 million x .15 = \$0.75 million \$9.25 million

^{61.} J. FREUND, supra note 45, at 205.

^{62.} See K. Arrow, Essays in the Theory of Risk-Bearing 121-43 (1971); O. Williamson, Markets and Hierarchies: Analysis and Antitrust Implications 21-23 (1975). The idea is that a contract will specify a different result for each possible outcome of an uncertain future event. The result called for by the contract is thus contingent on the actual outcome of the uncertain event—i.e., which "state" of the world actually occurs.

the parties as to the probabilities assigned to the occurrence of future events will ultimately disappear as time transforms a prediction of next year's sales into historical fact. If determination of the purchase price can be delayed until next year's sales are known with certainty, the deal can be made. The solution, therefore, is to formulate the purchase price as an initial payment, here \$7.5 million, to be followed by an additional payment at the close of the next fiscal year equal, in this case, to \$1 for each \$1 of sales in excess of \$7.5 million. The problem of non-homogeneous expectations is avoided by making the failure irrelevant. Only uncertainty concerning the future forced the parties to rely on expectations about the future; the earnout solution allows the purchase price to be set after that uncertainty has been resolved. That is, each party is allowed to act as if his expectation were shared by the other. In effect he bets on the accuracy of his expectation, with a settling up only after the uncertainty has been eliminated and the parties really do have homogeneous beliefs concerning the matter.

The business lawyer's traditional response to failure of the homogeneous-expectations assumption can thus create value by allowing a transaction to go forward that might otherwise not have occurred. But the technique's potential for value creation is greater than just allowing the deal to be made; it also may increase the total value of the deal beyond that which would have resulted even if the parties were capable of compromising their differences. Recall that under capital asset pricing theory the value of the business turns on both the expected return—the weighted average of the possible sales for the next year in our hypothetical—and the systematic risk associated with that return. The effect of the contingent price arrangement is to reduce the buyer's risk by transforming the price from a function of expected—risky—returns to one of certain returns. Thus, the buyer should be willing to pay a higher price per unit of sales because there is no risk associated with that return. 63

Thus far, my hypothesis about what business lawyers do and how they create value seems confirmed. At least with respect to the failure of the homogeneous-expectations assumption, business lawyers create a transactional structure which bridges the gap between the perfect market assumptions of capital asset pricing theory and the imperfect reality of transacting.

^{63.} The seller also benefits because the seller is inevitably better informed than the buyer about its prospects and, as a result, is better able to "price" the risk associated with its future sales. Thus, the seller is likely to be the best risk bearer. This need not, however, always be the case. Where the seller is more risk averse than the buyer, as frequently may be the case in the acquisition of a privately held company by a publicly held company, and where the seller's future depends on information to which the buyer has better access—the potential for synergy comes to mind as an example—it becomes more difficult to determine the party best able to price and bear the risk.

C. The Failure of the Common-Time-Horizon Assumption: Conduct of the Business During the Earnout Period

The failure of a second assumption—this time that investors measure risk and return over the same period—provides an additional opportunity for business lawyers to create value. This can be seen most easily by pursuing discussion of the earnout solution just considered. The earnout concept responds to the failure of the homogeneous-expectations assumption. Efforts to make the concept operational, however, highlight the absence of a common time horizon and the resulting potential for strategic, opportunistic behavior. Where the parties do have different time horizons, each has an incentive to maximize value in the period relevant to it, even at the expense of a decrease in value in the period relevant to the other party. This conflict reduces the value of the transaction.⁶⁴

Consider first what behavior we would expect during the earnout's one-year measuring period if the seller's original management were allowed to run the company for that time. From the seller's perspective, the earnout formula reduces to one year the relevant period over which asset value is to be determined; at the end of that year the seller's shareholders will receive whatever payment is due under the earnout formula. At least for them, the asset will cease to exist. To the seller's shareholders, therefore, the asset is worth only what it can earn for them in a year's time. Their goal is to maximize value over that short period. The buyer, in contrast, is concerned with the value of the business over a much longer period: the entire time it expects to operate the seller's business. Accordingly, the buyer's behavior will differ substantially from that which would be dictated by the seller's short-term orientation.

Returning to the terms of the hypothetical earnout formula—an additional \$1 in purchase price for each \$1 in sales over \$7.5 million—the seller would maximize sales during the one-year measuring period. For example, prices might be cut and advertising expenditures substantially increased, even if these actions meant that the company actually suffered a loss. In contrast, the buyer, which would ultimately bear the loss because it continues to own the company after the one year period, has a very different interest. And the conflict is not merely the result of a poorly specified earnout formula. Stating the formula in terms of profits rather

^{64.} I am taking some liberties in my treatment of this assumption. The requirement that investors maximize end-of-period wealth results in a one-period model that avoids difficult statistical problems associated with compounding returns over multiple periods. See Merton, An Intertemporal Capital Asset Pricing Model, 41 ECONOMETRICA 867 (1973). In the absence of an impersonal market, as in a corporate acquisition, a shift to a multi-period setting, where buyers and sellers may maximize over different periods, also causes serious strategic problems. These, rather than the statistical problems, are the object of my concern here.

than sales, thus eliminating the seller's incentive to maximize sales at the expense of the buyer's long term interest in earnings, would be a possible improvement. But even then the different time horizons would create an incentive for the seller's management to behave opportunistically. Short-term profits could be maximized by eliminating research and development expenditures, cutting maintenance, and, in general, deferring expenses to later periods.

This failure of the common-time-horizon assumption reduces the value of the transaction. So long as the buyer anticipates that the seller's management will behave opportunistically—which hardly requires a crystal ball—it will reduce its offer accordingly. The business lawyer then has the opportunity to create value by devising a transaction structure that constrains the seller's ability to maximize the value of the business over a period different from that relevant to the buyer. The typical earnout agreement responds to precisely this challenge.

Stated most generally, a complete earnout formula is a complicated state-contingent contract that, by carefully specifying in advance the impact on the purchase price of all events that might occur during the earnout period, substantially reduces the incentives and opportunity for the parties to behave strategically. For example, the perverse incentives growing out of a formula specifying either earnings or sales as a sole measure of performance might be reduced by a measure that combines them: e.g., a \$1 increase in purchase price for each \$1 increase in sales provided that profits remain above a specified percentage of sales. Similarly, where the earnout period is greater than one year, incentives to manipulate the year in which particular events occur can be minimized by provisions which specify whether shortfalls or overages in one year carry forward or backward to other years.

A thoroughly specified earnout formula is extraordinarily complex and,

^{65.} The problem is not avoided if the buyer undertakes to operate the business. Rather, the opportunity to behave strategically merely shifts to the buyer. From its perspective, value is maximized by deferring sales or earnings to the following year, thereby reducing the purchase price of the business. This behavior, of course, would be anticipated by the seller and, unless the behavior were prohibited by contract, would alter the terms on which it would be willing to sell the business.

One might argue that if the buyer could fully take into account the seller's opportunistic behavior in setting the purchase price, no potential for value creation would exist because the net purchase price to the buyer—the reduced purchase price plus the cost of the seller's opportunistic behavior—would remain the same, i.e., it would be a zero-sum game. In fact, the game is negative-sum in the absence of a transactional structure that responds to the failure of the common-time-horizon assumption. First, it is likely to be quite difficult to estimate the cost of allowing the seller to behave opportunistically: The lack of precision results in greater risk for the buyer and a lower value for the transaction. Second, the seller's or buyer's short-run behavior may result in a decrease in the value of the business. For example, if research and development is deferred, opportunities may be lost that cannot be recovered. Although the buyer may not be cheated—the price of the business would be reduced to reflect the reduction in value—the business would be worth more to both parties if a transactional structure could be designed that prevents value-reducing behavior.

in any event, cannot entirely eliminate the potential for strategic behavior. To be fully effective, a formula would have to specify not only the complete production function for the business, but all possible exogenous events that might occur during the earnout period and the impact of such events on the formula. Neither, of course, is possible. Moreover, the cost of detailed contracting—not just in lawyers' fees, but in the time and goodwill of the parties—will be substantial and in many cases prohibitive. There will be times, then, where the gain in transaction value resulting from ameliorating the failure of the homogeneous-expectations or common-time-horizons assumptions will be outweighed by the cost of the cure. But this possibility merely constrains, rather than eliminates, the potential for value creation by business lawyers. That transaction costs are, at some level, irreducible hardly diminishes the value of efforts to keep costs at that level. It is value creation of the sort that reflects what I understand clients to mean by the comment that a particular lawyer has good "judgment," to know when the game is not worth the candle. 66

D. The Failure of the Costless-Information Assumption: Representations, Warranties, Indemnification, and Opinions

Perhaps the most important assumption of all is that information is costlessly available to all parties. Its central importance derives in part because it is, in a sense I will consider shortly, a master assumption that controls the other assumptions we have considered, and in part because it is in response to its failure that business lawyers have been most creative.

The relation between the costless-information assumption and the homogeneous-expectations assumption illustrates the central role for information problems in our analysis. For our purposes, information is data that can alter the parties' beliefs about the price of an asset. But it is also useful to characterize information in terms of a second attribute: to distinguish between the "hard" information of known "facts" and the "soft" information of forecasts and predictions.

This fact/forecast dichotomy rests on the simple difference between the

^{66.} There has been a spate of recent continuing education programs, including two designed by Professor Robert Mnookin and me, emphasizing the cost-effective use of lawyers. See R. Gilson & R. Mnookin, The Cost Effective Use of Counsel: Strategies for Controlling Your Company's Legal Costs (June 24, 1982) (unpublished manuscript on file with author); R. Gilson & R. Mnookin, Reducing the Cost of Outside Counsel: Strategies for Controlling Your Company's Legal Costs (June 5, 1981) (unpublished manuscript on file with author). A central theme in this movement is that the quality of legal services cannot be evaluated in the abstract, but only in a particular context. Thus, careful and detailed contract drafting or litigation discovery is "good" work only if the matter warrants the expense. In this sense, clients increasingly seem to be equating a lawyer's judgment with the wisdom of knowing when not to "over-lawyer" a transaction or lawsuit. Cf. Shavell, The Design of Contracts and Remedies for Breach, 99 Q.J. Econ. 121 (1984) (costs of contracting must be incorporated into a model for determining optimal contractual provisions).

fixed past and the uncertain future, a distinction that Reinier Kraakman and I have elsewhere illustrated by reference to a hypothetical fully informed trader. Imagine a trader who has knowledge of all past events—"hard" information because it concerns events that have already occurred—relevant to pricing an asset. Even so thoroughly endowed a trader would still lack a type of information critical to asset pricing. Because asset value ultimately depends on predictions of *future* earnings, hard information about *past* events alone is insufficient for accurate pricing. Soft information—forecasts of future events—is also necessary.

The homogeneous-expectations assumption considered earlier is thus really an assumption that all parties have the same soft information. Understanding the relation between soft and hard information then should also disclose the relation between the homogeneous-expectations assumption and the costless-information assumption. The critical point is that our forecasts of the future are based, in significant part, on our knowledge of the past; if we know, for example, that high interest rates adversely affected performance of a company in the past, our prediction of future performance will be substantially influenced by that fact. Changes in hard facts will change soft projections.

So understood, a major part of the reason for the failure of the homogeneous-expectations assumption—potential buyers and sellers having different soft facts—is that they base their expectations on different hard facts. In this sense, the costless-information assumption might be rephrased as the assumption of homogeneous retrospection. The assumption of homogeneous expectations would require that the parties share common soft facts; that of homogeneous retrospection would require common hard facts. And if acquisition of hard facts is not only costly, but differentially so, the impact on asset pricing is clear: There will be greater disagreement about the price of an asset, and the resulting pattern of prices will be suboptimal.

The business lawyer's response to the failure of the homogeneous-expectations assumption has been to devise a structure—state-contingent pricing—which does not *eliminate* the parties' differences in expectations, but merely reduces the *impact* of the disagreement. Because the disagreement in significant measure results from differences in the hard information held by the parties, efforts to constrain the extent of the conflict in expectations (in contrast to efforts to minimize the impact of the conflict) respond to the failure of the costless-information assumption. And because

^{67.} The discussion of the character of information that follows in the text is based on Gilson & Kraakman, supra note 29, at 560-564.

^{68.} There also may be differences in forecasting ability, because of differences in training or in inherent ability of the forecasters, even given identical hard facts.

these differences result from differential information costs for the buyer and seller, if business lawyers do function to alleviate failures of the perfect market assumptions underlying capital asset pricing theory, we would then expect the typical corporate acquisition agreement to contain provisions designed to reduce the extent of information asymmetry—information differences between the buyer and seller.⁶⁹

The portion of the acquisition agreement dealing with representations and warranties—commonly the longest part of a typical acquisition agreement and the portion that usually requires the most time for a lawyer to negotiate⁷⁰—has its primary purpose to remedy conditions of asymmetrical information in the least-cost manner. To understand the way in which the device of representations and warranties operates to reduce information asymmetry between the buyer and seller, it is helpful to distinguish between the costs of acquiring new information and the costs of verifying previously acquired information. I consider first the contractual response to information-acquisition problems.

1. Costs of Acquiring Information

During the negotiation, the buyer and seller will face different costs of information acquisition for two important reasons. First, as a simple result of its prior operation of the business, the seller will already have large amounts of information concerning the business that the buyer does not have, but would like to acquire. Second, there usually will be information that neither party has, but that one or both would like and which one or the other can acquire more cheaply. The question is then how both of these situations are dealt with in the acquisition agreement so as to reduce the informational differences between the parties at the lowest possible cost.

At first, one might wonder why any cooperative effort is necessary. Assuming that the seller did not affirmatively block the buyer's efforts to acquire the information the buyer wanted (and the seller already had), nothing would prevent the buyer from independently acquiring the desired information. Similarly, assuming both parties had the opportunity to

^{69.} If information costs were not different, then the parties would hold the same facts and, subject to the conditions of the previous note, reach the same predictions. To be sure, they would still be less accurate than if information were costless, but then the role of the business lawyer would be to lower the cost of information generally, rather than, as the discussion *infra* pp. 270-73 emphasizes, to reduce the cost differential between the parties. While the lawyer can accomplish this with respect to particular types of information, *see infra* pp. 274-75, this function is likely to be best performed by a different professional—the accountant. *See infra* pp. 298-99.

^{70.} James Freund's observation mirrors my own experience: "There are no known statistics on the subject, but I'm willing to bet my briefcase that lawyers spend more time negotiating 'Representations and Warranties of the Seller' than any other single article in the typical acquisition agreement." J. FREUND, supra note 45, at 229.

acquire the desired new information, nothing would prevent both parties from independently acquiring it.

Actually, however, it is in the seller's best interest to make the information that the seller already has available to the buyer as cheaply as possible. Suppose the seller refused to assist the buyer in securing a particular piece of information that the seller already had. If the information could have either a positive or negative value on the buyer's evaluation of the worth of the business, a rational buyer would infer from the seller's refusal to cooperate that the information must be unfavorable. Thus, the seller has little incentive to withhold the information. 71 Indeed, the same result would follow even if the information in question would not alter the buyer's estimate of the value of the business, but only increase the certainty with which that estimate was held. 72 Once we have established that the seller wants the buyer to have the information, the only issue that remains is which party can produce it most cheaply. The total price the buyer will pay for the business is the sum of the amount to be paid to the seller and the transaction costs incurred by the buyer in effecting the transaction. To the extent that the buyer's information costs are reduced, there simply is more left over for division between the buyer and seller.

Precisely the same analysis holds for information that neither party has yet acquired. The seller could refuse to cooperate with the buyer in its acquisition. To do so, however, would merely increase the information costs associated with the transaction to the detriment of both parties.

There is thus an incentive for the parties to cooperate both to reduce informational asymmetries between them and to reduce the costs of acquiring information either believes necessary for the transaction. As a result, we would expect an acquisition agreement to contain provisions for three kinds of cooperative behavior concerning information acquisition

^{71.} See Grossman, The Informational Role of Warranties and Private Disclosure About Product Quality, 24 J.L. & Econ. 461, 479 (1981); Grossman & Hart, Disclosure Laws and Takeover Bids, 35 J. Fin. 323 (1980). The analysis becomes more complicated, however, if disclosure imposes other kinds of costs on the seller-for example, disclosure of some accounting data might provide to competitors insights into the seller's future strategy, and disclosure of product information might allow competitors more easily to duplicate the seller's product. Where there are such proprietary costs to disclosure, the signal conveyed by nondisclosure becomes "noisy": Non-disclosure may mean that the information kept private is negative; less ominously, it may mean that disclosure of the information would be costly. The result would be an equilibrium amount of non-disclosure. R. Verrecchia, Discretionary Disclosure, Working Paper No. 101, Center for Research in Security Prices (August, 1983) (unpublished manuscript on file with author). While Verrecchia's argument has important insights for the issue of voluntary disclosure in the setting of organized securities markets, it seems to me much less relevant in the acquisition setting. There the opportunity for face-to-face bargaining allows the use of techniques such as confidentiality agreements, see 3 Business Acquisitions, supra note 45, at 399-401 (form of confidentiality agreement), that can substantially reduce such proprietary disclosure costs and, as a result, reduce any noise associated with failure to disclose.

^{72.} In other words, the new information would not alter the mean estimate of value but would reduce the variance associated with the distribution of possible values.

costs. First, the agreement would facilitate the transfer of information the seller already has to the buyer. Second, the agreement would allocate the responsibility of producing information that neither the seller nor the buyer already has to the party who can acquire it most cheaply, thereby both avoiding duplication of costs and minimizing those that must be incurred. Finally, the agreement would try to control overspending on information acquisition by identifying not only the type of information that should be acquired, but also how much should be spent on its acquisition.

a. Facilitating the Transfer of Information to the Buyer

In the course of negotiating an acquisition, there is an obvious and important information asymmetry between the buyer and the seller. The buyer will have expended substantial effort in selecting the seller from among the number of potential acquisitions considered at a preliminary stage⁷⁸ and, in doing so, may well have gathered all the available public information concerning the seller. Nonetheless, the seller will continue to know substantially more than the buyer about the business. Much detailed information about the business, of interest to a buyer but not, perhaps, to the securities markets generally, will not have been previously disclosed by the seller.⁷⁴

It is in the seller's interest, not just in the buyer's, to reduce this asymmetry. If the seller's private information is not otherwise available to the buyer at all, the buyer must assume that the undisclosed information reflects unfavorably on the value of the buyer's business, an assumption that will be reflected to the seller's disadvantage in the price the buyer offers. Alternatively, even if the information could be gathered by the buyer (a gambit familiar to business lawyers is the seller's statement that it will open all its facilities to the buyer, that the buyer is welcome to come out and "kick the tires," but that there will be no representations and warranties), it will be considerably cheaper for the seller, whose marginal costs of production are very low, 75 to provide the information than for the buyer

^{73.} For the importance of search costs in the acquisition context, see Easterbrook & Fischel, Auctions and Sunk Costs in Tender Offers, 35 STAN. L. Rev. 1 (1982); Gilson, Seeking Competitive Bids Versus Pure Passivity in Tender Offer Defense, 35 STAN. L. Rev. 51 (1982).

^{74.} For example, the potential for synergy between the seller's business and that of a potential buyer will become of interest to the market only at the point where the possibility of the acquisition comes to the market's attention.

^{75.} The costs are still not zero. While the information exists, there are still costs associated with finding out where within the seller's organization the information is located, putting it in a form that is useful to the buyer, and verifying it. As a result, even some information that already exists may not be worthwhile to locate and transmit. See infra pp. 278-80 (limitations on for what, and how hard, to look). Additionally, there will be situations where a third party will be able to produce the information even more cheaply than the seller. See infra pp. 274-76 (lawyers' opinions). This qualification, however, does not alter the absence of conflict between the parties.

to produce it alone. From the buyer's perspective, the cost of acquiring information is part of its overall acquisition cost; amounts spent on information reduce the amount left over for the seller.

This analysis, it seems to me, accounts for the quite detailed picture of the seller's business that the standard set of representations and warranties presents. Among other facts, the identity, location and condition of the assets of the business are described;76 the nature and extent of liabilities are specified;⁷⁷ and the character of employee relationships—from senior management to production employees—is described. 78 This is information that the buyer wants and the seller already has; provision by the seller minimizes its acquisition costs to the benefit of both parties.

What remains puzzling, however, is the apparent failure by both business lawyers and clients to recognize that the negotiation of representations and warranties, at least from the perspective of information acquisition costs, presents the occasion for cooperative rather than distributive bargaining.⁷⁹ Reducing the cost of acquiring information needed by either party makes both better off. Yet practitioners report that the negotiation of representations and warranties is the most time-consuming aspect of the transaction;80 it is termed "a nit-picker's delight, a forum for expending prodigious amounts of energy in debating the merits of what sometimes seem to be relatively insignificant items."81 And it is not merely lawyers who are seduced by the prospect of combat; sellers also express repugnance for a "three pound acquisition agreement"82 whose weight and density owe much to the detail of the article titled "Representations and Warranties of Seller." As a result, sellers' lawyers are instructed to negotiate ferociously to keep the document-especially the representations and warranties—short. Increased information costs needlessly result. Indeed, a business lawyer's inability to explain the actual function of these provisions can often cause the buyer incorrectly to attribute the document's length to its own lawyer's preference for verbosity and unnecessary com-

^{76.} See, e.g, Drafting Agreements, supra note 45, at 81-94 (warranties disclosing identity and condition of real property and leases; compliance with zoning; composition, condition, and marketability of inventory; personal property and condition; accounts receivable and collectability; trade names, trademarks, and copyrights; patent and patent rights; trade secrets; insurance policies; and employment contracts).

^{77.} Id. at 76-81, 94-96, 118 (warranties concerning undisclosed liabilities, tax liabilities, compliance with laws, accuracy of financial statements, and pending or threatened litigation).

^{78.} Id. at 93 (disclosure of all employment, collective bargaining, bonus, profit-sharing, or fringe benefit agreements).

^{79.} I mean to put off for the moment the question of what happens when one of the seller's representations and warranties turns out to be incorrect. I will take up the issue of indemnification for breach of warranty in connection with the verification function. See infra pp. 281-87.

^{80.} See supra note 70.

^{81.} J. FREUND, supra note 45, at 229. 82. Id. at 233.

plexity. This failure to explain can prevent recognition of value-creating activity even when it occurs.⁸³

b. Facilitating the Production of Previously Nonexistent Information

A similar analysis applies when the buyer needs information that the seller has not already produced. For example, the buyer may desire information about aspects of the seller's operation that bear on the opportunity for synergy between its own business and that of the seller and that, prior to the negotiation, the seller had no reason to create. Alternatively, the buyer may be interested in the impact of the transaction itself on the seller's business; whether the seller's contracts can be assigned or assumed; whether, for example, the transaction would accelerate the seller's obligations. Like the situation in which the buyer has already produced the information desired by the seller, the only issue here should be to minimize the acquisition cost of the information in question.

While the analysis is similar to the situation in which the seller had previously produced the information, the result of the analysis is somewhat different. Not only will the seller not always be the least-cost information producer, but there will also be a substantial role for third-party information producers. Returning to the synergy example, a determination of the potential for gain from the combination of the two businesses requires information about both. The particular character of the businesses, as well as the skills of their managers, will determine whether such a study is better undertaken by the seller, which knows its own business but will be required to learn about the buyer's business, or by the buyer, which knows about its own business and is in the process of learning about the seller's.⁸⁴

The more interesting analysis concerns the potential role for third-party information producers. This can be seen most clearly with respect to information concerning the impact of the transaction itself on the seller's business. As between the buyer and the seller, the seller will usually be the least-cost producer of information concerning the impact of the transaction on, for example, the seller's existing contracts. Although there is no

^{83.} Freund, as usual, is not guilty of this failure. His explanation for the phenomenon differs from mine, however. See J. FREUND, supra note 45, at 230-34.

^{84.} The least-cost producer typically will be the buyer. Although the buyer will already know something about the seller, the seller will have had little reason to learn about the buyer's business prior to initiation of negotiations. As a result, the amount that still must be learned about the other party's business in order to evaluate the potential for synergy is likely to be smaller for the buyer than for the seller. This yields a prediction that should be subject to empirical testing. If my hypothesis is correct, I would expect to find few representations and warranties by the seller that could be understood to speak to conditions directly related to the manner in which the two entities could be combined. The absence of a representation by the seller, of course, leaves the information-production function with the buyer.

reason to expect that either party routinely will have an advantage in interpreting the contracts, it is predictable that the seller can more cheaply assemble the facts on which the interpretation will be based. The real issue, however, is not whether the seller is the lower-cost producer out of a group of candidates artificially limited to the seller and buyer. Rather, the group of candidates must be expanded to include third parties.

The impact of including third-party information production in our analysis can be seen by examining the specialized information production role for lawyers in acquisition transactions. Even with respect to the production of information concerning the seller's assets and liabilities, the area where our prior analysis demonstrated the seller's prominence as an information producer, there remains a clear need for a specialized third party. Production of certain information concerning the character of the seller's assets and liabilities simply requires legal analysis. For example, the seller will know whether it has been cited for violation of environmental or health and safety legislation in the past, but it may require legal analysis to determine whether continued operation of the seller's business likely will result in future prosecution.

The need for third-party assistance is even more apparent with respect to information about the impact of the transaction itself on the seller's business. Again, however, much of the information requires legal analysis; there exists a specialized information-production role for third parties. For example, it will be important to know whether existing contracts are assignable or assumable: The continued validity of the seller's leasehold interests will depend on whether a change in the control of the seller operates—as a matter of law or because of the specific terms of the lease—as an assignment of the leasehold;⁸⁵ and the status of the seller's existing liabilities, such as its outstanding debt, will depend on whether the transaction can be undertaken without the creditor's consent.⁸⁶

In both cases, the seller's lawyer appears to be the lowest-cost producer of such information.⁸⁷ As a result, I would expect typical acquisition

^{85.} For example, would a general clause prohibiting assignment of a lease by a corporate tenant prohibit the sale of all the tenant's stock, or a merger of the tenant, or even the dissolution of the tenant and the succession to the tenancy by the tenant's shareholders? See 1 M. FRIEDMAN, FRIEDMAN ON LEASES 244-52 (2d ed. 1983).

^{86.} Loan agreements typically limit a debtor's freedom to merge or sell its assets without the creditor's consent. See Commentaries, supra note 47. From the creditor's perspective, such protection is critical. The interest rate charged a debtor depends on the risk associated with the debtor's business. If the business becomes substantially more risky after the credit is extended, the interest rate charged, in effect, is reduced. The consent requirement is designed to prevent a creditor from altering the risk of its business after the fact through acquiring, or being acquired by, a company with a riskier business. See Smith & Warner, supra note 47, at 126-27.

^{87.} The seller's lawyer will likely have been involved in the original preparation of the documents and, as a result, will have much better information concerning their contents and the context in which they were negotiated.

agreements to assign lawyers this information-production role.⁸⁸ And it is from this perspective that important elements of the common requirement of an "Opinion of Counsel for the Seller" are best understood.

Any significant acquisition agreement requires, as a condition to the buyer's obligation to complete the transaction, that the buyer receive an opinion of seller's counsel with respect to a substantial number of items. Consistent with my analysis, most of the matters on which legal opinions are required reflect the superiority of the seller's lawyer as an information producer. For example, determination of the seller's proper organization and continued good standing under state law, the appropriate authorization of the transaction by seller, the existence of litigation against the seller, the impact of the transaction on the seller's contracts and commitments, and the extent to which the current operation of the seller's business violates any law or regulation, represent the production of information which neither the buyer nor the seller previously had, by a third party—the lawyer—who is the least-cost producer.

Just as was the case in our examination of the function of representations and warranties, this focus on the information-production role for lawyers' opinions also provides a non-adversarial approach to resolving the conflict over their content. Because reducing the cost of information necessary to the correct pricing of the transaction is beneficial to both buyer and seller, determination of the matters to be covered by the opinion of counsel for seller⁹¹ should be in large measure a cooperative, rather

For present purposes, there is no need to distinguish between outside counsel and lawyers employed full time by the seller. The issue of whether a particular staff function, like legal work, should be handled inside the firm or acquired in market transactions from outside providers is an issue of vertical integration that does not bear on the question of whether lawyers—inside or outside—serve a valuable function. The distinction will take on importance, however, with respect to the verification function. See infra pp. 289-93.

^{88.} The information-production role for lawyers described in the text is not in itself sufficient to respond to my overall question of whether business lawyers can create value. The larger question, it will be recalled, focused on whether business lawyers had the potential to create value even in those situations where there is no traditionally "legal" role. Because the information-production role involves interpreting government regulations and construing the meaning of contracts—functions which are not responsive to the more difficult question with which I am especially concerned—they do not provide an easy way out.

^{89.} There is a substantial practical literature. See A. JACOBS, OPINION LETTERS IN SECURITIES MATTERS: Text—Clauses—Law (1983); Babb, Barnes, Gordon & Kjellenberg, Legal Opinions to Third Parties in Corporate Transactions, 32 Bus. Law. 553 (1977); Bermant, The Role of the Opinion of Counsel—A Tentative Reevaluation, 49 Cal. St. B. J. 132 (1974); Committee on Corporations of the Business Law Section of the State Bar of California, Report of the Committee on Corporations Regarding Legal Opinions in Business Transactions, 14 Pac. L. J. 1001 (1983) [hereinafter cited as California State Bar Report]; Committee on Developments in Business Financing, Legal Opinions Given in Corporate Transactions, 33 Bus. Law. 2389 (1978); Fuld, Legal Opinions in Business Transactions—An Altempt to Bring Some Order Out of Some Chaos, 28 Bus. Law. 915 (1973); Special Comm. on Legal Opinions on Commercial Transactions, N.Y. County Lawyers' Association, Legal Opinions to Third Parties: An Easier Path, 34 Bus. Law. 1891 (1979).

^{90.} The opinion of counsel also serves an important verification function. See infra pp. 290-93.
91. Typically there will be occasions that call for an opinion of buyer's counsel as well. Consistent

than a competitive, opportunity. Debate over the scope of the opinion, then, should focus explicitly on the cost of producing the information. For example, where a privately owned business is being sold, the seller often retains special counsel to handle the acquisition transaction, either because the company has had no regular counsel prior to the transaction, or because its regular counsel is not experienced in acquisition transactions. In this situation, recognition of the informational basis of the subject matter usually covered by legal opinions not only suggests that a specialized third-party producer is appropriate, but also provides guidance about whose third party should actually do the production.

From this perspective, seller's counsel typically will be the least-cost producer of the information in question. Past experience with the seller will eliminate the need for much factual investigation that would be necessary for someone who lacked a prior professional relation to the seller. Similarly, seller's counsel may well have been directly involved in some of the matters of concern—such as the issuance of the securities which are the subject of an opinion concerning the seller's capitalization, or the negotiation of the lease which is the subject of an opinion concerning the impact of the transaction on the seller's obligations. Where the seller has retained special counsel for the transaction, however, the production-cost advantage in favor of seller's counsel will be substantially reduced, especially with respect to past matters. In those cases, focus on the cost of information production provides a method for cooperative resolution of the frequently contentious issue of the scope of the opinion. 92

c. Controls Over What Information to Look for and How Hard to Try

Emphasis on the information-production role of the seller's representations and warranties and the opinion of counsel for the seller leads to the conclusion that determination of the least-cost information producer provides a cooperative focus for negotiating the content of those provisions. The same emphasis on information production also raises a related question. The demand for information, as for any other good, is more or less

with an information-cost analysis, the scope of the opinion of buyer's counsel increases as information about the buyer becomes important to pricing the transaction. This would be the case, for example, where the two parties are so close in size that the transaction is really a merger, or where the consideration to be given by the seller is the buyer's stock. In virtually all transactions, the opinion of the buyer's counsel will be required with respect to the impact of the transaction itself, such as proper authorization of the transaction by the buyer.

^{92.} The role of information-producer also may be played by another third-party specialist: the public accountant. The accountant typically also renders an opinion concerning the transaction—the cold comfort letter—and easily can be imagined having an information-production role. The common presence of an internal accounting staff within the seller, however, persuades me that the transactional function of the public accountant is one of verification. See infra pp. 290-93. Whether or not there is also an information-production role for the public accountant depends on the comparative information-production costs of the public accountant and the seller's internal accounting staff.

price elastic. Information production is costly even for the most efficient producer, and the higher the cost, the less the parties will choose to produce. Thus, some fine tuning of the assignment of information-production roles would seem to be necessary. We would expect some specific limits on the kind of information required to be produced. And we would also expect some specific limits on how much should be spent even for information whose production is desired.

Examination of an acquisition agreement from this perspective identifies provisions which impose precisely these kinds of controls. Moreover, explicit recognition of the function of these provisions, as with our analysis of representations and warranties and opinions of counsel, can facilitate the negotiation of what have traditionally been quite difficult issues.

Consider first the question of limiting the type of information that must be produced in light of the cost of production. To put the problem in a context, we can focus on the standard representation concerning the seller's existing contracts. The buyer's initial draft typically will require the seller to represent that an attached schedule lists "all agreements, contracts, leases, and other commitments to which the seller is a party or by which any of its property is bound." In fact, it is quite unlikely that the buyer really wants the seller to incur the costs of producing all the information specified. In a business of any significant size, there will be a large number of small contracts—for office plant care, coffee service, addressographs, and the like—the central collection and presentation of which would entail substantial cost. Moreover, to the extent these contracts are all in the normal course of the seller's business, the information may have little bearing on the pricing of the transaction. As a result, it would be beneficial to both parties to limit the scope of the seller's search.

It is from this perspective that the function of certain common qualifications of the representations and warranties of the seller are best understood. The expected response of a seller to a representation as to existing contracts of the breadth of those mentioned would be to qualify the scope of the information to be produced: to limit the obligation to only *material* contracts.⁹³ If the contracts themselves are not important, then there is no reason to incur the cost of producing information about them. Variations on the theme include qualifications based on the dollar value of the contracts,⁹⁴ or on the relationship of the contracts to "the ordinary course of business."⁹⁵

^{93.} See J. FREUND, supra note 45, at 272-74.

^{94.} See 3 Business Acquisitions, supra note 45, at 96-97 ("Set forth as Schedule G hereto are complete and accurate lists of the following: (i) all arrangements of the Seller, except for purchase and sales orders that involve future payments of less than \$250,000").

^{95.} See Drafting Agreements, supra note 45, at 94 ("Neither corporation nor subsidiary is a party to, nor is the property of either bound by . . . any agreement not entered into in the ordinary

A second common form of qualification—a limit on the information costs to be incurred—is best understood as an instruction concerning how hard to look for information whose subject matter cannot be excluded as unimportant ahead of time. Here the idea is to qualify not the object of the inquiry, but the diligence of the search. Consider, for example, the common representation concerning the absence of defaults under disclosed contracts. While it might involve little cost to determine whether the seller, as lessee, has defaulted under a lease, it may well be quite expensive to determine whether the lessor is in default. In that situation, the buyer might consider it sufficient to be told everything that the seller had thought appropriate to find out for its own purposes, without regard to the acquisition, but not to require further investigation.

This type of qualification, limiting the representation to information the seller already has and requiring no further search, is the domain of the familiar "knowledge" qualification. In form, the representation concerning the existence of breaches is qualified by the phrase "to seller's knowledge." In function, the qualification serves to limit the scope of the seller's search to information already within its possession; no new information need be sought. 98

Recognizing the function of the knowledge qualification also raises an-

course of business . . . except the agreements listed in Exhibit _. . . . ").

^{96.} This analysis, and that concerning the object of the inquiry, applies as well to the role of third-party information producers.

^{97.} See, e.g., DRAFTING AGREEMENTS, supra note 45, at 94 ("There is no default or event that with notice or lapse of time, or both, would constitute a default by any party to any of these agreements.").

^{98.} James Freund identifies another function for representations and warranties that suggests a different role for the knowledge qualification. Freund points out that an unqualified representation serves, in effect, as an insurance policy. Thus, an unqualified representation may be made even though the seller is aware of a possibility that the representation is incorrect, because the parties have determined that the seller should bear that risk and the absolute representation serves to allocate that risk to the seller. J. Freund, supra note 45, at 247-48. From an information perspective, however, Freund's point is part of an approach to dealing with the problem of information asymmetry. Suppose both the buyer and the seller are aware that certain of seller's trade secrets may be subject to a misappropriation claim, and that such a claim, if successful, would reduce the value of the seller's business by \$1,000,000. It would hardly be surprising if the buyer and the seller had different estimates of the probability of a successful misappropriation claim; after all, the seller has vastly more information concerning the circumstances in which the trade secrets were developed than does the buyer. Suppose further that the buyer, based on its information, estimates the probability of liability at .5, and therefore argues that the purchase price should be reduced by \$500,000. The seller, however, based on its information, estimates the probability at only .15, which would justify only a \$150,000 reduction in the purchase price. The effect of the seller's making an unqualified warranty concerning ownership of trade secrets is to allocate the risk of liability to the seller, the party with the best information and, therefore, the party best able to price the risk. From the buyer's perspective, the risk has been eliminated. From the seller's perspective, \$350,000 has been gained: The expected value of the purchase price-total price less expected liability-is \$350,000 higher than if the buyer's estimate was used. Thus, unqualified representations and warranties can serve, as Freund perceptively suggests, as insurance policies. However, the determination of which party should be the insurer turns on the determination of which party has better information and, as a result, is better able to price the

other question concerning the variation in form that the qualification takes in typical acquisition agreements. In fact, the knowledge qualification—the limit on how hard the seller must search for information—comes in a variety of forms. Often within the same agreement one will see all of the following variations:

"to seller's knowledge";

"to the best of seller's knowledge";

"to the best of seller's knowledge and after diligent investigation."

What seems to be at work, at least implicitly, is the creation of a hierarchy of search effort that must be undertaken with respect to information of different levels of importance.⁹⁹

This result is perfectly consistent with a view of the business lawyer as a transaction cost engineer, and with a view of representations and warranties as a means of producing the information necessary to pricing the transaction at the lowest cost. However, it also raises the question of whether implicit recognition of the information-cost function of these qualifications might not facilitate the design of more effective cost reduction techniques. Although this is not the occasion to detail the changes in the form of acquisition agreements that might result from conscious attention to issues of information cost, it seems quite clear that once we understand more precisely what it is we are about, we should be able to do a more effective job.

Consider, for example, the qualifications that we have just discussed concerning how hard the seller must look. Given our understanding of their purpose, the problem of limiting the scope of the seller's investigation might be better approached explicitly, rather than implicitly through a variety of undefined adjectives. If, for example, the concern is whether the lessor of a real estate lease, under which the seller is lessee, has breached the lease, why not specify the actual investigation the seller should make? Do we want the seller merely to inspect the premises to insure that the lessor's maintenance obligations have been satisfied? Do we want the seller to go directly to the lessor to secure a statement by the lessor as to the lessor's satisfaction of its obligations? Different levels of cost obviously are associated with the different inquiries; specificity about the desired level of cost, however, should allow further minimization of

100. If information is too costly to produce, the issue shifts to who is best able to price and bear the risk, again information-cost issues.

^{99.} This proposition—that different forms of qualification reflect the different levels of intended search effort—also may be subject to empirical evaluation. If one of the parties to an acquisition agreement is a reporting company under the Securities Exchange Act, its Form 10K Annual Report typically would contain the agreement as an exhibit. Thus, one could gather a substantial sample of acquisition agreements to analyze whether there was a pattern to the types of information subject to qualification and to the form of qualification used.

information costs. To make the point in a slightly different way, is it possible to say with any assurance which of the forms of qualification listed above imposes an obligation to inspect the premises, but no obligation to inquire directly of the lessor?

2. Costs of Verifying Information

Problems of information cost do not end when the information is acquired. Even if cooperative negotiation between the buyer and seller minimizes the costs of reducing the informational asymmetry confronting the buyer, another information-cost dilemma remains: How can the buyer determine whether the information it has received is accurate? After all, the seller, who has probably provided most of the information, has a clear incentive to mislead the buyer into overvaluing the business.

Just as the market provides incentives that offset a seller's inclination to withhold unfavorable information, the market also provides incentives that constrain a seller's similar inclination to proffer falsely favorable information. If, before a transaction, a buyer can neither itself determine the quality of the seller's product nor evaluate the accuracy of the seller's representations about product quality, the buyer has no alternative but to treat the seller's product as being of low quality, regardless of the seller's protestations. To avoid this problem, a high quality seller has a substantial incentive to demonstrate to a buyer that its representations about the quality of its product are accurate and can be relied upon. And because it is in the seller's interest to keep all information costs at a minimum, there is also an incentive to accomplish this verification in the most economical fashion. 103

Verification technniques, then, are critical means of reducing total information costs. Like efforts to reduce acquisition costs, verification techniques can be implemented both by the parties themselves and through the efforts of third parties. It is helpful to consider each approach to verification separately.

^{101.} In the absence of some method by which the seller of a high quality product can demonstrate to potential buyers that its product is in fact of high quality, the seller may have no incentive to provide a high quality product at all. If a buyer cannot tell a good product from a bad one, all products will be treated, and priced, as if they were of low quality. The result is the standard "lemon problem": Poor quality products drive higher quality products from the market. See Akerlof, The Market for "Lemons": Quality Uncertainty and the Market Mechanism, 84 Q.J. Econ. 488, 489-90 (1970); Grossman, supra note 71; Wilson, The Nature of Equilibrium in Markets with Adverse Selection, 11 Bell J. Econ. 108 (1980).

^{102.} See supra pp. 269-71.

^{103.} See Barzel, supra note 35; Gilson & Kraakman, supra note 29.

a. Economizing by the Parties

Perhaps the cheapest verification technique is simply an expectation of future transactions between the buyer and seller. When the seller's misrepresentation in one transaction will be taken into account by the buyer in decisions concerning future transactions, whether by reducing the price to reflect lowered expectations, or, at the extreme, by withdrawing patronage altogether, the seller will have little incentive to mislead. In a corporate acquisition, however, the seller has no expectation of future transactions; for the seller, a corporate acquisition is, virtually by definition, a one-shot transaction. Thus, the expectation of future transactions is simply not available as a constraint on the seller's incentive to misrepresent the information provided. In the seller's incentive to misrepresent the information provided.

Nonetheless, the insight gleaned from understanding how an expectation of future transactions serves to validate a seller's information can be used to create an inexpensive verification technique that will work even in the one-period world of a corporate acquisition. The expectation technique works because of the existence of additional periods; the insight is simply to devise what Oliver Williamson has called a "hostage" strategy, 106 i.e., an artificial second period in which misrepresentations in the first period—the acquisition transaction—are penalized. If any of the seller's information turns out to be inaccurate, the seller will be required to compensate the buyer; in effect, the seller posts a bond that it has provided accurate information. This technique has the advantage of being quite economical: Beyond the negotiating cost involved in agreeing to

^{104.} The expectation of future transactions can serve as a means to facilitate low-cost verification even if the seller has no reason to believe that it will deal with a particular buyer again. So long as any discrepancy between the represented and actual quality of a seller's product can be easily communicated to potential buyers by a buyer who has been misled, a seller can effectively signal to potential buyers that it is a high quality producer—that the disclosed information concerning product quality is correct—by making investments in form-specific capital, like reputation and advertising, that would be lost if the seller's product turned out to be of lower quality than represented. See Klein & Leffler, The Role of Market Forces in Assuring Contractual Performance, 89 J. Pol. Econ. 615 (1981).

^{105.} Final-period problems of the sort described in the text may still be present even in the unusual situation when the seller in an acquisition transaction in fact can be anticipated to engage in future transactions. Suppose a seller is engaged in a divestiture program, trying to shed previously acquired businesses that have not worked out. While a misrepresentation in a particular transaction may make it more expensive for a seller to verify the quality of its information in a subsequent transaction, the extent of the constraint is limited for a number of reasons. First, the misrepresentation may not become known before the seller has completed the divestiture program, after which point the seller can no longer be penalized through future transactions. In this sense, a final period may be long enough to shelter a number of transactions. Second, the transactions may not be of equal magnitude. A successful misrepresentation in a particularly large transaction may more than offset the resulting penalty with respect to a number of small transactions.

^{106.} Williamson, Credible Commitments: Using Hostages to Support Exchange, 73 Am. Econ. Rev. 519 (1983).

make the buyer whole, there is no cost to the seller unless the information proves inaccurate. 107

This technique is among the most common approaches to verification that appear in corporate acquisition agreements. The seller verifies the accuracy of the information it has provided through its representations and warranties by agreeing to indemnify the buyer if the information turns out to be wrong, *i.e.*, if a breach of a representation or warranty occurs. And the hostage metaphor rings especially true because the seller's promise to indemnify the buyer is frequently backed by the buyer's or a neutral third party's retention of a portion of the consideration as a fund to assure the seller's performance of its indemnification obligation.¹⁰⁸

Emphasis on verification costs also highlights that indemnification, like the seller's representations and warranties, ultimately works principally to the seller's advantage. As long as the seller recognizes that the perceived quality, as well as the amount, of the information provided by the seller will be reflected in the price the buyer is willing to pay, the subject provides the opportunity for cooperative, rather than merely distributive, bargaining. 109

The common appearance of seller indemnification against inaccuracies in the information contained in the seller's representations and warranties is persuasive evidence of the information-cost basis for the technique. But it is also true that use of the technique is not universal. There are a significant number of acquisitions containing no contractual provision for indemnification. Even more troubling, its presence or absence follows a predictable pattern: Indemnification is typically used if the seller is a private company, but not if the seller is a public company. A complete informa-

^{107.} Williamson provides a number of other examples of how this approach has been used. Id. at 532-33. Additional examples can be found in Knoeber, An Alternative Mechanism to Assure Contractual Reliability, 12 J. LEGAL STUD. 333, 337-38, 342-43 (1983).

^{108.} See J. Freund, supra note 45, at 363-88; Weinreich, Contract of Sale, in 1 Business Acquisitions, supra note 53, at 191-94 (discussion of escrow arrangements).

It should be noted that the negotiation of indemnification and "hold back" funds is quite complicated. See J. Freund, supra note 45, at 383-84. Nonetheless, the common elements out of which a solution is built—for example, "baskets" that require a minimum amount before any claim can be made and "cut-offs" that limit claims to breaches discovered during a specified period—have become standard.

^{109.} It is hard to know what to make of the anecdotal evidence that can be marshalled in response to the claim that indemnification presents a seller with the opportunity for cooperative bargaining. Practicing business lawyers will recount that the price is set by the clients long prior to the negotiation over whether there will be indemnification; as a result, they may argue that the presence or absence of provisions for indemnification have no effect on the price of the transaction. Evaluation of the argument requires information about the expectations of the buyer when the price was negotiated and about whether price and other provisions were negotiated at the same time by sophisticated clients. In any event, the core of my argument, see infra pp. 301-06, is that understanding the function of such provisions can make for different and better results.

^{110.} See J. Freund, supra note 45, at 160. Indemnification is absent if the seller has specifically stated that the seller's representations and warranties do not survive the closing of the transaction. See

tion-cost explanation for indemnification in acquisition agreements thus also must explain why indemnification provisions are rarely, if ever, used when the seller is a public company. And the range of possible explanations is limited in an important respect: There is no reason to believe that the need for verification is any less significant when the seller is a public rather than a private company. The real task is to identify the alternative means of verification that are available in the acquisition of a public company and to understand why their comparative cost advantage does not extend to private companies.

Two significant differences seem to account for the absence, in the acquisition of public companies, of the dominant verification technique in acquisitions of private companies. First, less costly verification techniques are available in the public setting but unavailable in a private transaction. Second, the indemnification technique is more costly to implement in a public than in a private transaction.

Consider first the verification techniques that are available to public, but not to private, companies as alternatives to indemnification. One, which functions to reduce the incentives of the seller's management to provide misleading information in the first place, is not an innovative contractual technique that cleverly alters incentives. Rather it simply reflects that the differences in transactional setting and in the cast of characters between the acquisition of a public and a private company result in different incentives with respect to the provision of inaccurate information by the seller. Here the critical players are the seller's management, who will negotiate the transaction and actually provide the information whose verification is required. And the central point is that the managers' incentives to give accurate information differ critically depending on whether the seller is privately or publicly owned. Where the seller is private, management is typically dominated by the principal shareholders who also will receive the lion's share of the proceeds from the acquisition. The transaction enables these individuals to diversify their previously undiversified portfolio. Prior to the transaction, most of their wealth was tied up in their private company;111 after the transaction, their wealth has been transformed into either cash or the publicly traded stock of the buyer, either of which allows portfolio diversification. To be sure, these owner-

Weinreich, Contract of Sale, in 1 Business Acquisitions, supra note 53, at 187.

^{111.} The critical financial characteristic of private corporations is that the absence of a public market prevents their owners from achieving optimally diversified portfolios by selling off a portion of the ownership of the private company. As a result, the company may well be worth more to a publicly held acquiring company, whose shareholders can optimally diversify, than to the private owners of the company. See E. Fama & M. Jensen, Organizational Firms and Investment Decisions 11-14, Working Paper No. MERC 84-02, University of Rochester Managerial Economics Research Center (Jan. 1984).

managers will also have an undiversifiable human capital investment in the company they manage, and this investment may remain after the transaction through a post-acquisition employment relationship. But this benefit will constitute so small a portion of the total benefits from the transaction that the owner-managers will see the transaction as a one-time event that presents the incentives to mislead associated with any final period situation.

Separation of ownership and management in public companies puts management of a publicly held seller in a quite different position. Even if these employee-managers have some ownership position in the seller as a result of stock option or bonus plans, their principal investment in the company is typically their human capital. As a result, a post-acquisition employment contract is of much greater importance both in absolute terms and, because their human capital investment cannot be diversified, in relative terms as well. 112 These factors combine to create an interesting verification technique. For the employee-managers, the acquisition transaction is a two-period rather than a single-period game. During the first period, in which the actual transaction takes place, the employee-managers provide the buyer with information bearing on the seller's value. However, their compensation from the transaction, post-transaction employment contracts, unlike the compensation of the shareholders of the seller, comes not in the first period but later, as payments are received under the employment contracts. These second-period payments serve as a bond of the accuracy of the information provided by the employee-managers in the first period: If misrepresentations are discovered, their employment can be terminated. 113 Precisely because post-transaction employment is substantially less valuable to owner-managers, this verification technique is sim-

^{112.} The employee-managers' undiversifiable investment in their human capital makes them more conservative than would otherwise be optimal with respect to investment decisions bearing on that investment. This tendency for employee-managers to be overly risk averse has been suggested as a partial explanation for patterns of acquisition activity by publicly held companies as opposed to companies dominated by a small number of shareholders. See Amihud & Lev, Risk Reduction as a Managerial Motive for Conglomerate Mergers, 12 Bell J. Econ. 605 (1981). Risk aversion is also part of the problem to be overcome in designing optimal incentive contracts for managers of publicly held companies. See Beck & Zorn, Managerial Incentives in a Stock Market Economy, 37 J. FIN. 1151 (1982); Diamond & Verrecchia, Optimal Managerial Contracts and Equilibrium Security Prices, 37 J. FIN. 275 (1982).

^{113.} This verification technique is also used in other settings. An important part of an investment banker's role in an acquisition is that of information seller; the information sold is the acquisition opportunity. As such, a verification problem is presented: How can the investment banker convince its client that the information offered—the valuable acquisition opportunity—is accurate. See Gilson, supra note 73, at 57-59. One method of reducing the client's verification costs is to allow the client to pay some portion of the price of the information—the investment banker's fee—by channeling some of the client's post-acquisition ordinary investment banking business to the information seller. If the information turns out to be inaccurate, the client can penalize the information seller by then obtaining these services from another source. Id. at 59. And because the services are routine, the client incurs few costs in shifting its business.

ply not available to private companies¹¹⁴ which, as a result, must rely on indemnification.

Some evidence supports this explanation of the different transactional structures found in the acquisitions of public and private companies. A familiar type of company is neither truly public nor truly private. Such a company is public in that its stock is freely traded on a national securities exchange or in the over-the-counter market, but private in that there is a single dominant shareholder, or group of shareholders, whose own situation is much closer to that of the owner-managers in the prototypical private company than to that of the employee-managers in a truly public company. Because the operative factor in my analysis is the character of the managers' portfolios—the public/private distinction is only the common shorthand characterization—one would expect buyers of these quasipublic companies to treat them more like private than like public companies. This prediction appears to be correct. The literature treats the situation of a public company with a dominant shareholder as an exception to the general rule that indemnification is not appropriate in the acquisition of a public company: An explicit agreement by the dominant shareholder of a quasi-public company to indemnify the buyer for breaches of representations and warranties is a quite familiar transactional structure. 115

The second verification technique that is uniquely available in the acquisition of a public company results from the continuing disclosure obli-

^{114.} This analysis suggests that employment arrangements of this type that are called "golden parachutes," see, e.g., Profusek, Executive Employment Contracts in the Takeover Context, 6 CORP. L. REV. 99 (1983) (surveying employment security agreements for executives); Riger, On Golden Parachutes—Ripcords or Ripoffs? Some Comments on Special Termination Agreements, 3 PACE L. REV. 15 (1982) (attacking corporate justifications for special termination agreements), create a perverse incentive in addition to the one that has been commonly recognized. Golden parachute arrangements-employment agreements that give the management of a publicly held seller the right to substantial termination benefits if the termination, even if voluntary, occurs after a change in control-are commonly justified as reducing the conflict of interest between employee-managers and shareholders with respect to acquisition offers by providing a benefit to management that offsets the loss of management's control if an acquisition takes place. But it also has been recognized that too high a payoff under the arrangement creates a moral hazard: The employee-manager may be better off if an acquisition takes place even on terms that make the shareholders worse off. The conflict of interest has not been eliminated; it has merely been reshaped. Golden parachute arrangements thus can interfere with the verification technique of reducing information costs. The engine that drives that technique is the risk that the value of the employee-manager's most important asset—his posttransaction employment relationship—will be reduced if he is discovered to have made misrepresentations to the buyer. But that risk can be eliminated, and the effectiveness of the information-cost reducing technique impaired, if the manager acquires a hedge—another asset that will increase in value as a result of the same event that causes the decrease in the value of the employment relationship. A golden parachute arrangement provides precisely such a hedge. It pays off only on post-transaction termination, precisely the event that reduces the value of the manager's employment relationship. Golden parachutes, then, should increase a buyer's verification costs even in friendly transactions.

^{115.} See J. FREUND, supra note 45, at 161, 365. It is also true that the presence of a dominant shareholder reduces the significant collection costs that would be associated with indemnification by public shareholders. See infra pp. 286-87.

gations imposed by the Securities Exchange Act of 1934¹¹⁶ only on public companies. In the course of compliance with its regulatory obligations, the seller will previously have disclosed substantial amounts of the information covered by the representations and warranties contained in the acquisition agreement. The critical point, however, is not that the information was previously produced—I have already argued that the seller is typically the least-cost information producer—but that it was produced subject to a powerful verification technique. Material misrepresentations and omissions in disclosures made pursuant to 1934 Act requirements subject both a company and its management to potential civil and criminal penalties.¹¹⁷ This potential liability serves further to bond the accuracy of the representations made by employee-managers and, thus, further to reduce both the incentives and the opportunity to mislead the buyer. In this sense, the 1934 Act serves to collectivize the verification problem.¹¹⁸

The operation of these two verification techniques in the acquisition of a public company thus goes a long way toward explaining why indemnification, the central verification technique in the acquisition of a private company, is not observed in the public setting. An additional point should also be made, however, bearing not on the availability of alternatives to indemnification as means of verification, but on the differential costs of using indemnification in acquisitions of public, as opposed to private, companies. An indemnification arrangement is costly to administer. If a claim of breach of warranty arises, it must be resolved. This resolution, whether by litigation or some alternative method of dispute resolution such as arbitration, is expensive. Moreover, there are significant col-

^{116. 15} U.S.C. § 78m (1982). The obligation to file periodic quarterly and annual reports under § 13 of the Securities Exchange Act, 15 U.S.C. § 78m (1982), is triggered either by registration pursuant to § 12, 15 U.S.C. § 78l (1982), or by the filing of a registration statement under the Securities Act of 1933, pursuant to § 15(d), 15 U.S.C. § 78o(d) (1982).

^{117.} In addition to standard civil remedies, § 32(a), 15 U.S.C. § 77ff(a) (1982), provides for fines of up to \$10,000 and imprisonment for up to five years (although § 32(b), 15 U.S.C. § 77ff(b) (1982), reduces the maximum penalty for failure to file, as opposed to filing an inaccurate report for companies whose reporting obligation arises under § 15(d), 15 U.S.C. § 79o(d) (1982)).

^{118.} The idea of legislation serving as a collective response to problems of verification cost is developed in Gilson & Kraakman, *supra* note 29, at 605. It should be stressed that employee-managers are likely to be quite risk averse with respect to incurring such penalties. The simple fact is that most of the benefits from "successful" violations go to the shareholders, while the costs of getting caught are borne more than proportionally by the managers, absent an effective indemnification arrangement. For a comprehensive analysis of the impact of managers' attitudes toward risk on corporate compliance with regulatory obligations, see Kraakman, *Corporate Liability Strategies and the Costs of Legal Controls*, 93 YALE L.J. 857 (1984).

^{119.} The existence of a public market for the seller's stock also serves as a verification technique. The price of the seller's stock, prior to public announcement of the transaction, is in effect a check, implemented by the various mechanisms that cause the market to be efficient, on the buyer's judgment as to the value of the seller, in light of the then publicly available information. The various ways in which the market serves to reduce verification costs are surveyed in Gilson & Kraakman, supra note 29, at 603-07.

lective action problems: Someone must act on behalf of the seller in responding to the buyer's claim. Where the seller is privately held, the collective action problem is minimal; the shareholder group is small enough that it can play that role directly. Where the seller is publicly held, however, the collective action problem is quite real. Dispersal of ownership among numerous shareholders dilutes the incentive for any single shareholder to monitor the indemnification process; a collective solution is required to overcome the free-rider problem. Thus, a trustee, typically a commercial bank, is appointed. The cost of this arrangement includes not merely the amount the trustee must be paid, but also the dilution of incentives to oppose a buyer's claim that results from the inevitable divergence in interests between the seller's shareholders and the appointed trustee. The cost of the seller's shareholders and the appointed trustee.

In short, an information-cost approach to the problem of verification explains a good deal about the presence or absence of indemnification provisions in acquisition agreements. But the range of verification techniques available is not limited to those involving participation only by the buyer and seller. 122 Just as with the production of the information in the first place, there are verification techniques that depend upon participation by third parties. And these also help to demonstrate the information-cost basis for additional provisions of the typical acquisition agreement.

^{120.} J. FREUND, supra note 45, at 387.

^{121.} The agreement with the trustee typically holds the trustee harmless from the claims by the seller's shareholders, as long as the trustee has acted in good faith. Additionally, the trustee's fee is usually fixed, although all costs—especially attorney's fees in the event of litigation—are reimbursed. The result is that the trustee bears a significant portion of the cost of resisting, through the extra work for its personnel, while the seller's shareholders receive all the benefits. The divergence in interests creates a clear bias on the part of the trustee in favor of early settlement.

Just as was the case with respect to the differential impact of post-acquisition employment on the incentives of seller management to misrepresent depending on whether the seller is publicly or privately held, the intermediate case of a publicly held company with a dominant shareholder is more like the privately held company than the publicly held company with respect to the need for a third party to monitor the indemnification process. The concentration in holdings represented by the dominant shareholder overcomes the free-rider problem inherent in diverse public ownership. Again, the result is to suggest a greater role for indemnification in this setting. See supra p. 285.

^{122.} There is also an important role for direct buyer verification: post-agreement investigation carried on by the buyer itself. I have, elsewhere as here, argued that buyer verification is the most costly verification technique. See Gilson & Kraakman, supra note 29, at 603. There, however, we were considering a situation in which there were numerous buyers so that, absent coordination, buyer verification would inevitably result in duplication of effort. Where there is but a single buyer—as in an acquisition—there is a much greater role for the technique. The recent American Express acquisition of IDS is a good example. Direct investigation by American Express resulted in a significant reduction in the acquisition prices. See supra note 55.

b. Third-Party Verification Techniques

Regardless of whether the seller is a public or private company, there is a common limit on the effectiveness of all of the verification techniques discussed thus far; the possibility of misleading statements remains. Consider first the limits on the verification techniques associated with the sale of a public company: Senior management may not expect their misrepresentations to be discovered at all; they may be far enough along in their careers that they expect to retire before discovery; golden-parachute agreements may have reversed senior management's incentives; and, ultimately, the possibility remains that the particular misleading disclosure, or failure to disclose, masks information which is so damaging that senior management is better off with misleading disclosure even in the face of possible future penalties.¹²³

Even the more direct verification technique associated with the sale of a private company—indemnification arrangements backed by the withholding of a portion of the purchase price—will not be completely effective. The indemnification obligation often is limited to an amount lower than the purchase price. Moreover, the obligation is typically limited in time; a contractual statute of limitations limits the period in which claims for indemnification may be asserted. If the reduction in value resulting from complete disclosure exceeds the limit on indemnification, then indemnification operates not as bond, but as bait; a piece of the proceeds is given up in order to increase the net take. Most troubling to a potential buyer, the balance of incentives facing owner-managers of a private seller favors misrepresentation or nondisclosure in precisely those situations where the information in question would result in the greatest downward adjustment in the purchase price. Verification fails in the situation where it is most needed.

Ultimately, all of these verification techniques are imperfect because

^{123.} The analysis can be generalized. Most unfavorable disclosure reduces the value of the seller by shifting the buyer's estimate of the probable distribution of future earnings. For the seller, the disclosure calculus compares the certain reduction in value that results from disclosure (the buyer's expected value is lowered), with the penalty for making a misrepresentation or non-disclosure discounted by the possibility that the actual result will still fall on a part of the probability distribution that exceeds the buyer's uncorrected expected value, and by the possibility that the misrepresentation or nondisclosure will remain undetected. From this perspective, for example, the decision by senior management of National Telephone Co. not to disclose the company's violation of its loan agreements may be understandable. See In re Carter, [1981 Transfer Binder] Fed. Sec. L. Rep. (CCH) \$82,847 (S.E.C. Admin.). Alternatively, the size of the penalties that can be imposed may be bounded because of bankruptcy or retirement or, as in the Equity Funding scandal, see Dirks v. S.E.C., 103 S. Ct. 3255 (1983), because the fraud is so large as to dwarf the potential penalties, i.e., the penalties are insufficient to eliminate the final period problem by creating an artificial second round.

^{124.} It is not uncommon to limit the seller's total exposure for indemnification to the amount of the purchase price that has been withheld as a hostage. J. Freund, supra note 45, at 385-86. 125. Id. at 386.

they do not entirely eliminate the potential for opportunism inherent in one-time transactions. The techniques examined—indemnification, employment contracts, liability under the Securities Exchange Act—operate to reduce final-period problems by adding an artificial second round to the transaction. For this reason, all share a common limit on their effectiveness: As long as the gain from cheating in the first round can exceed the penalties if caught in the second—whether because the probability of detection is less than 1.0, or because the financial risk borne by the seller in the second round is too low, since the solutions to other kinds of problems conflict with what would be the optimal resolution of the verification problem¹²⁶—the buyer lacks the assurance that the information provided by the seller can be entirely trusted.

At this point, further efforts at verification by the buyer or seller are unlikely to be successful.¹²⁷ A critical role is thus created for third parties to act to close the verification gap left by the seller's residual final-period problems. Suppose one could discover what can be called a reputational intermediary: someone paid to verify another party's information.¹²⁸ When residual final-period problems prevent a seller from completely ver-

The noisiness of the signal of inaccuracy also suggests that some of the costs to seller's management from misleading disclosure are not scale related. If any misrepresentation signals that the information provided is inaccurate, but without providing guidance as to the extent of the problem, there will be a greater incentive to tell only the "big lie." Put differently, there may be economies of scale in misrepresentation.

^{126.} One response might be that any reluctance by the seller to take full advantage of available verification techniques—for example, by attempting to limit its indemnification obligation to an amount less than the total proceeds to be received-would be understood by the buyer as a signal that the seller's information was inaccurate, and would result in an equivalent reduction in the offered purchase price, thereby eliminating any gain to the seller from the gambit. The problem, however, is that the information content of the signal—in my example, the seller's desire to put a ceiling on the indemnification obligation—is noisy. If reasons other than the inaccuracy of the information could explain why the seller might want to limit indemnification, then the buyer will have difficulty sorting out how much of a price reduction is warranted. See Verrecchia, supra note 71. For example, the seller might want to limit the indemnification obligation because of a fear that the buyer will behave opportunistically with respect to claims of breach, i.e., if the business performs poorly after the transaction, the buyer may claim that the poor performance resulted from facts that were not disclosed—the buyer's probability distribution of future performance was skewed because of misleading disclosure-rather than from the mere bad luck of ending up on an unfavorable portion of an accurately disclosed probability distribution. Alternatively, the seller may want to keep the size of the holdback low, even though this may be seen by the buyer as an effort to limit the "real" exposure for indemnification and, therefore, as a negative signal about the accuracy of the information, in order to allow desirable diversification of what had previously been an undiversifiable investment. Where there is this kind of noise surrounding a signal, it can be expected that a full discount will not occur: that is, there will be some equilibrium amount of misleading disclosure. Id. at 18.

^{127.} The seller has already pledged all of its assets—both tangible physical property and the intangible values associated with the reputations of its managers—so little else can be done in the absence of inventive means to reduce the noise associated with the seller's signals. See supra note 126. Cf. Thakor, An Exploration of Competitive Signaling Equilibria with "Third Party" Information Production: The Case of Debt Insurance, 37 J. Fin. 717 (1982) (problem of additional verification when issuer of debt has already pledged its assets to repay).

^{128.} The concept of a reputational intermediary is developed in Gilson & Kraakman, supra note 29, at 604-07, 618-21.

ifying the information it provides, a third party can offer its reputation as a bond that the seller's information is accurate. The value of the transaction then increases because information costs are reduced, and the reputational intermediary is paid some portion of the increase as compensation for the pledge of its reputation.

The third party's role will be successful, however, only if there are no final-period problems associated with its verification. The intermediary is paid only because its reputation renders it trustworthy in circumstances when a party to the transaction could not be trusted. Unlike the seller, the intermediary expects future transactions in which it again will pledge its reputation. If the intermediary cheats in one transaction—by failing to discover or disclose seller misrepresentations¹²⁹—its reputation will suffer and, in a subsequent transaction, its verification will be less completely believed. The result will be a smaller increase in the value of the subsequent transaction because of the intermediary's participation and, in turn, a lower payment to the intermediary.¹³⁰ And as long as the intermediary will be penalized in subsequent periods for cheating in this period, there will be no final-period problems to dilute the intermediary's signal of accuracy.¹³¹

In fact, lawyers and accountants commonly play the role of reputational intermediary. And once we think of them as being in the business of selling—more accurately, renting—their reputations, ¹³² a number of exam-

^{129.} The intermediary can cheat in two quite different ways. First, the intermediary may discover that the seller's information is misleading, but because of payments received from the seller, may not disclose to the buyer. In this setting it is the buyer who is being cheated. Second, the intermediary may simply shirk its responsibilities to investigate the accuracy of the seller's information. In this setting both the buyer and seller are being cheated, the buyer because it has been misled about the accuracy of the seller's information by the behavior of the intermediary, and the seller because it has paid for verification that was not actually performed, with the resulting risk that it will be blamed by the buyer for future failures of the business. The latter conclusion is limited to cases where the loss to the seller resulting from the risk of future blame exceeds the gain to the seller from the non-disclosure.

^{130.} The intermediary may pledge more than its reputation depending on whether it also incurs liability if the seller's information behind which it has stood proves inaccurate. The liability standards with respect to lawyers are considered infra note 142. For discussion of liability for accountants acting as reputational intermediaries, see Fiflis, Current Problems of Accountants' Responsibilities to Third Parties, 28 Vand. L. Rev. 31 (1975); Gruenbaum & Steinberg, Accountants' Liability and Responsibility: Securities, Criminal and Common Law, 13 Loy. L.A.L. Rev. 247 (1980).

^{131.} To say that there are no final-period problems is something of an overstatement. The analysis is really an application of the Klein & Leffler insight, see supra note 104 and accompanying text, that when product quality is difficult to determine ex ante, as here with the verification role of an intermediary, but easy to determine ex post, as here when the passage of time will demonstrate whether the seller's information was inaccurate, the provider of the good or service will make investments in firm-specific capital—like reputation—that will be devalued if actual quality turns out to be lower than that represented. Cf. DeAngelo, Auditor Size and Audit Quality, 3 J. ACCT. & ECON. 183 (1981) (value of audit depends on size of investment in firm-specific assets made by particular auditor; larger accounting firms offer a more believable signal of accuracy to third parties than smaller firms).

^{132.} The role of lawyers as reputational intermediaries is considered in Gilson & Mnookin, supra note 23. For evaluation of the verification role of investment bankers, see Gilson, supra note 73, at 58-59; Gilson & Kraakman, supra note 29, at 616-21.

ples readily come to mind in which this phenomenon seems to be at work. Practicing lawyers will recall instances when, having been advised that they were to represent their client in a transaction with an unfamiliar party on the other side, their initial question to their client concerned the identity of the other side's lawyers. Implicit in the question is that the identity of the lawyer conveyed information about the lawyer's client; i.e., a reputable business lawyer would not risk his reputation by representing an untrustworthy client. 133 Similarly, it is a common occurrence for companies about to make an initial public offering to switch to a Big Eight auditor.134 Since the previous audit firm apparently satisfied management's need for information, the discovery of systematic switching when the company is, in effect, to be sold to the public, strongly suggests a reputational explanation. 135

It is from this perspective that an important part of the role for lawyers and accountants described in the acquisition agreement can best be understood. As already discussed, 136 acquisition agreements commonly require that an opinion of the seller's counsel be delivered to the buyer as a condition to the buyer's obligation to complete the transaction. It is also common further to condition the buyer's obligation on receipt of an opinion of the seller's independent accountant—the "cold comfort" letter. 187 While this is not the occasion to examine the entire range of third-party opinions given in acquisition transactions, 138 a particular opinion often required of the seller's lawyer and the accountant's cold comfort letter most prominently highlight the reputational intermediary role played by both professionals.

The opinion commonly requested from the seller's lawyer that "we are not aware of any factual information that would lead us to believe that the agreement contains an untrue statement of a material fact or omits to state a fact necessary to make the statements made therein not misleading,"139

^{133.} See Gilson & Mnookin, supra note 23.

^{134.} Carpenter & Strawser, Displacement of Auditors When Clients Go Public, 131 J. Accr., June, 1971, at 55; cf. DeAngelo, supra note 131 (verification-based explanation for phenomenon).

^{135.} See Gilson & Kraakman, supra note 29, at 619-21 (beneficial role for reputational intermediary in an initial public offering, with emphasis on function of the investment banker). The reputational role of public accountants generally is discussed in a substantial literature, with particular emphasis on the need and function of the independence requirement. See Benston, The Market for Public Accounting Services: Demand, Supply and Regulation, 2 Acct. J. 2 (1979); DeAngelo, supra note 131; Watts & Zimmerman, Agency Problems, Auditing, and the Theory of the Firm: Some Evidence, 26 J. L. & Econ. 613 (1983); R. Watts & J. Zimmerman, The Market for Independence and Independent Auditors, Working Paper No. GPB 80-10, University of Rochester Center for Research in Government Policy & Business (Mar., 1981); Wilson, Auditing: Perspectives from Multi-Person Decision Theory, 58 ACCTNG REV. 305 (1983).

^{136.} See supra p. 275.
137. See J. Freund, supra note 45, at 301-04.
138. For a sample of the literature on lawyer's opinions, see supra note 89.

^{139.} See Bermant, supra note 89, at 190; California State Bar Report, supra note 89, at 1012.

and the cold comfort opinion typically requested of the seller's accountant to the effect that there have been no changes in specified financial statement items since the last audited financial statements, have a common conceptual underpinning that is reputationally based. The central characteristic of both opinions is that neither alters the total quantity of information that has been produced for the buyer. Rephrased, the lawyer's statement is simply that a third party who has been intimately involved in the seller's production of information for the buyer does not believe the seller has misled the buyer. It is quite clearly the lawyer's reputation to diligence and honesty—that is intended to be placed at risk. Similarly, the cold comfort adds no new facts to those that have already been produced by means of the seller's representations and warranties; the

Similarly, where the seller's counsel wishes to deliver the opinion of another lawyer, as with respect to a matter governed by the law of a foreign jurisdiction, the buyer often will require either that seller's counsel nonetheless render his opinion, albeit with explicit reference to reliance on the supplemental opinion, or give the opinion that the buyer is justified in relying on the supplemental opinion. See J. Freund, supra note 45, at 310-11. Here the underlying assumption seems to be that an out-of-state lawyer is not likely to be a repeat player in the buyer's state and, thus, has not really put his reputation at stake. This analysis would suggest that when a "national" firm renders a foreign law opinion, the buyer would not require a covering opinion by the seller's counsel.

^{140.} Prior to 1971, the language of the accountants' cold comfort letter was quite similar to that of the lawyers' opinion: Based on a limited review, nothing had come to their attention that gave them reason to believe that there had been any material adverse change in the company's financial position. This correspondence changed with the issuance of Statement on Auditing Procedures No. 48 (October, 1971) codified as American Institute of Certified Public Accountants, Statement on Auditing Standards § 630 (1973), which limited the letter to identifying decreases in the amounts of specified items—such as net current assets, net sales and net assets. See J. Freund, supra note 45, at 302-03.

^{141.} For a discussion of the information-production function of third-party opinions, see *supra* pp. 274-76.

^{142.} There is also a small risk of liability based on the rendering of an incorrect opinion. The standards for the imposition of liability to third parties based on incorrect legal opinions are discussed in, e.g., California State Bar Report, supra note 89, at 1006-07; Fuld, Lawyers' Standards and Responsibilities in Rendering Opinions, 33 Bus. Law. 1295 (1978). It is also interesting that the legal profession has developed ethical prohibitions barring misrepresentation of facts by lawyers. See MODEL RULES OF PROFESSIONAL CONDUCT ¶4.1 (1983) (a lawyer shall not knowingly make a false statement of material fact to a third person or fail to disclose a material fact when nondisclosure would be equivalent to a material misrepresentation). This prohibition may be best understood as an effort to extend a reputational role to lawyers generally, by reducing the incentives for a lawyer to free ride—by making misrepresentations to help a client—because he did not bear the full cost of the reduction in the profession's reputation that would result from his action.

^{143.} The importance of the lawyer's reputation in shaping the character of the expected opinion can be clearly seen in the familiar debate over from whom the buyer will accept an opinion on behalf of the seller. For example, buyers will frequently object to receiving the opinion of the seller's inhouse counsel with respect to certain items. Identifying the matters for which the buyer will or will not accept the opinion of the seller's in-house counsel is a good way to distinguish those aspects of the opinion of counsel that serve primarily an information-production from those that serve primarily a verification function. In-house counsel will often have a cost advantage with respect to the information-production function because of their more intimate knowledge of their client. With respect to the verification function, however, the ability to serve as a reputational intermediary requires a sufficient diversity of clients such that a penalty will be imposed in future dealings if the intermediary cheats. See Gilson & Mnookin, supra note 23. As a result, opinions that serve a verification function are largely limited to outside counsel, while those that serve an information-production function are often accepted from in-house counsel.

accountant's letter adds only the imprimatur of a respectable third party by attesting to the accuracy of the information produced by the seller. 144

The care with which both of these third-party opinions are qualified further demonstrates their information-verification function. The lawyer's opinion typically will state explicitly that the firm has made no independent investigation of the facts—i.e., that it has engaged in no information production concerning the accuracy of the information provided by the seller. 145 The accountant's opinion, in turn, will set out in detail the procedures that were undertaken, and stress that they are far more limited than what would be required for an audit. 146

E. Summary and Evaluation

The analysis of a typical acquisition agreement in this Part was intended to provide some empirical verification for the hypothesis that business lawyers serve as transaction cost engineers and that this function has the potential for creating value. If business lawyers do act to bridge the gap between the perfect market assumptions of capital asset pricing theory and the drastically less-than-perfect market conditions of the world in which transactions actually take place, this activity should be visible from examination of a by now standardized document—the acquisition agreement—that creates the structure for the transfer of a significant capital asset. From this perspective, the traditional contractual approaches reflected in the agreement should act to ameliorate the failure of one or more of the key perfect market assumptions.

Although my examination of the contents of a typical corporate acquisition agreement has not been exhaustive, and although aspects of the agreement can be explained in terms different from mine, I think the core of my hypothesis has been established: Important elements of the acquisition agreement serve to remedy failures of the perfect market assumptions on which capital asset pricing theory is based. Earnout or contingentpricing techniques respond to the failure of the homogeneous expectations assumption; controls over operation of the seller's business during the period in which the determinants of the contingent price are measured respond to the failure of the common-time-horizon assumption; and the panoply of representations and warranties, together with provisions for indemnification and other verification techniques, respond to the failure of the costless-information, or as I have characterized it, the homogeneousretrospection assumption.

^{144.} See supra note 135 (reputational role of accountants).

^{145.} See California State Bar Report, supra note 89, at 1012.
146. See American Institute of Certified Public Accountants, Statement on Auditing Standards ¶ 630 (1973).

One aspect of my hypothesis, however, remains to be considered. Although I have demonstrated the importance of the transaction cost engineer role, I have not yet discussed why business lawyers, instead of other professions or the client itself, should play that role. This question is considered in the next Part, together with the implications of my hypothesis for the allocation of transactional functions among lawyers and other professionals, and for the future success of business lawyers in the competition to play the role of transaction cost engineer.

IV. WHY LAWYERS? IMPLICATIONS OF THE HYPOTHESIS FOR THE LEGAL PROFESSION.

I have argued that the business lawyer is a transaction cost engineer, whose role is to design a transactional structure that allows the parties to act, with respect to their transaction, as if the perfect market assumptions on which capital asset pricing theory is built were accurate. In this Part, I will argue that recognition of what business lawyers really do has important implications for the legal profession, both as an object of academic study, and as a participant in a competitive market where entry barriers may be lower than commonly thought. The tone of the discussion is perhaps best set by noting, at the outset, that the role for business lawyers that I have identified is not, almost by definition, a traditionally legal one. Indeed, when lawyers play this role well, the courts, and formal law generally, shrink dramatically in importance.

Interestingly, even an observer as astute and as attuned to the importance of the individual transaction as a focus for study as Oliver Williamson seems to have missed the role business lawyers actually play. Noting that most analyses of contractual relations assume the existence of both efficient legal rules and efficient courts to enforce them, Professor Williamson commented on the importance of these assumptions for what lawyers and other professionals do:

These assumptions are convenient, in that lawyers and economists are relieved of the need to examine the variety of ways by which individual parties to exchange "contract out of or away from" the governance structures of the state by devising private orderings. A division of effort thus arises whereby economists are preoccupied with the economic benefits that accrue to specialization and exchange, while legal specialists focus on the technicalities of contract law.¹⁴⁷

The conclusion that follows from my inquiry into what business law-

^{147.} Williamson, supra note 106, at 520.

yers do is strikingly different. They are, in fact, engaged in developing approaches to private ordering of precisely the sort that Professor Williamson thinks important. The shortcomings he notes, it seems to me, are more appropriately laid on the doorstep of the academics—legal and economic—who write about contracts, rather than participating as principals or agents in their creation. The interests of the two groups may not be the same. To return to an earlier metaphor, it is at least as important to study the work of the beetles themselves as it is to study the work of the entomologists.

Recognition of this role for business lawyers—a role which Williamson urges prescriptively and which I argue is already the fact—does not, however, end the inquiry. There is nothing traditionally "legal" about the role I have described business lawyers as playing, nor are there any special requirements peculiar to lawyers necessary to play this role. One need not be able to recite ancient Latin incantations to bless the union of the parties' interests through exchange148 and, as I will argue in the next Part, there is precious little in traditional legal education that gives lawyers any obvious competitive advantage in assuming this role. The question then naturally arises: Why lawyers? And this question, in turn, decomposes into two different lines of inquiry. From an academic perspective, it is important to understand why lawyers seem to have dominated the transaction cost engineer role over the years. And if this is the legal role, what roles remain for other professionals—such as accountants and investment bankers—and how do the roles of the various professions mesh? From the perspective of the legal profession, a different kind of inquiry assumes importance. How does the profession remain competitive in a world where traditional distinctions between professions, largely formal, have begun, and are likely to continue, to break down?149

^{148.} One might, however, need a license; legislation providing that only a lawyer can provide a specified service may result in lawyers providing the service in question even though non-lawyers could also provide it. See Rhode, Policing the Professional Monopoly: A Constitutional and Empirical Analysis of Unauthorized Practice Prohibitions, 34 STAN. L. REV. 1 (1981). Yet the very fact that non-lawyers could provide the service belies the idea that it is peculiarly legal. In any event, such restrictive licensing regimes have not, as yet, been the basis for direct protection of the lawyer's role as transaction cost engineer and, as such, are not of direct concern to me here.

^{149.} James Freund has noted this blurring of professional roles in the acquisition setting: There is a great intermeshing of disciplines in connection with a merger negotiation. My experience is that everyone else involved—accountants, businessmen, investment bankers—contributes ideas that could be termed "legal," while the lawyer himself is frequently pointing out considerations that could be considered "accounting" or "business" or "financial."

J. FREUND, supra note 45, at 4-5.

My interest in the competitive future of the legal profession is not based entirely on efficiency grounds. To be frank, I also am concerned with the success of a particular guild. I have no difficulty, however, in justifying my attention to the matter. I am a lawyer. I know and like many lawyers. Perhaps most important, I make my living training them, and I understand the concept of derived demand.

A. The Academic Perspective: Understanding the Allocation of Professional Roles

My concern here is both to explain the lawyer's historical primacy in structuring private relations, and to offer insights into the distribution of transactional roles among the professions. But to do so, I must relax an assumption I made when explaining what business lawyers really do. In order to isolate and highlight the business lawyer's purely private ordering role, I assumed that the only relevant law was that a court would enforce whatever the lawyer wrote. It is not that lawyers do not also serve to facilitate private ordering in a world in which regulation of private behavior is pervasive; it is merely that I wanted to consider the more difficult question of whether lawyers could create value even in the absence of a regulatory crutch. Now, however, I want to explain a real-world phenomenon—legal domination of the structuring of transactions in which capital assets are transferred—in light of real-world institutions: A number of other professions play some role in the transfer and, at least hypothetically, could play much larger roles. For this purpose, I need to reintroduce the existence of regulation. Not surprisingly, this makes understanding the historical dominance of lawyers a great deal easier.

In our society, the transfer of significant capital assets is surrounded by substantial regulatory structures. As seemingly straightforward a transaction as the simple transfer of real estate must be effected through a regulatory system that, in essence, actually determines ownership of the property. A more complex transaction, like a corporate acquisition, touches a host of different regulatory systems, each of which can have an important impact upon the form taken by the transaction. Tax law, antitrust law, labor law, products liability law, ERISA, securities

^{150.} See Baird & Jackson, Information, Uncertainty and the Transfer of Property, 14 J. LEGAL STUD. 299 (1984).

^{151.} For an indication of the complications arising from only one piece of legislation, the Tax Equity and Fiscal Responsibility Act of 1982, Pub. L. No. 97-248, 96 Stat 324, see Ginsburg, *Taxing Corporate Acquisitions*, 38 Tax L. Rev. 171 (1983) (142 page article).

^{152.} While substantive antitrust law may not influence the form that an acquisition takes, the premerger reporting requirements of Title II of the Hart-Scott-Rodino Antitrust Improvements Act, 15 U.S.C. § 18a (1982), which vary depending on the formal structure of the transaction, do have influence. See S. Axinn, B. Fogg & N. Stoll, Acquisitions Under the Hart-Scott-Rodino Antitrust Improvements Act (1979).

^{153.} See Silver, Reflections on the Obligations of a Successor Employer, 2 CARDOZO L. REV. 545 (1981).

^{154.} See Phillips, Product Liability of Successor Corporations: A Corporate and Commercial Law Perspective, 11 HOFSTRA L. Rev. 249 (1982); Heitland, Survival of Products Liability Claims in Assets Acquisitions, 34 Bus. Law. 489 (1979).

^{155.} See Brecher, Lazarus & Gray, The Function of Employee Retirement Plans as an Impediment to Takeovers, 38 Bus. Law. 503 (1983); Emering, In a Merger, Consider All Employee Benefit Funding, 60 Harv. Bus. Rev., Jan.-Feb. 1982, at 46; Reichler, Handling Significant Benefit Plans in Mergers and Acquisitions, in 2 Business Acquisitions, supra note 57, at 831.

law, 156 and corporate law 157 do not exhaust the spectrum of regulatory oversight that may influence the format of a particular acquisition. And it is the existence of these regulatory influences on the structure of a transaction that seems to me to explain a significant part of the dominance of lawyers as transaction cost engineers.

Most regulatory systems express the boundaries of their application and the detail of their requirements in formal terms: Transactions which take a particular outward form are covered. So, for example, Subchapter C of the Internal Revenue Code treats a corporate acquisition that takes the form of a statutory merger differently than one that takes the form of a sale of assets, 158 and many state corporation laws draw a similar distinction. 159 This approach to regulation inevitably draws a response. Capital assets, in the end, are only generic streams of future income with a particular systematic risk. 160 So long as actual cash flows are not altered, the formal trappings of the transaction can be altered almost endlessly without altering its financial substance. The regulatory system itself then serves as an invitation to the targets of the regulation to structure transactions so that their form falls outside the terms of the regulation. This eternal triangle is completed by the courts which, in the end, must determine whether to credit the form in which the parties cast a transaction, or look beyond the formal terms of the regulatory structure to its purpose, and through the formal structue of the transaction to its financial substance. Indeed, I would argue that this tension—between transaction form and regulatory purpose—is really the central dilemma for most traditional business law; the form versus substance doctrine in tax law161 and the de facto merger doctrine in corporate law162 are only the most familiar examples.

The critical importance of transactional structure for purposes of regu-

^{156.} See Freund & Greene, supra note 54.

^{157.} See Schulman & Schenk, Shareholders' Voting and Appraisal Rights in Corporate Acquisition Transactions, 38 Bus. Law. 1529 (1983).

^{158.} For example, Internal Revenue Code § 368(a)(1)(C) requires that essentially only voting stock be used as consideration in a "C" reorganization (an asset acquisition) while § 368(1)(A) puts no limit on the form of consideration that can be used in an "A" reorganization (a statutory merger), and even Internal Revenue Service ruling standards require that, for a merger to qualify as a reorganization, only 50 per cent of the consideration be voting stock. Rev. Proc. 77-37, ¶ 3.02, 1977-2 C.B. 568. Where either the buyer or the seller wishes to use some amount of cash as consideration, the difference is critical. It is also true that largely formal considerations determine whether a transaction will receive reorganization or non-reorganization treatment.

^{159.} In Delaware, for example, shareholders of a corporation acquired in a merger typically have appraisal rights while those in a corporation that sells substantially all of its assets do not. Del. Code Ann. tit. 8, § 262 (Supp. 1982).

^{160.} See supra pp. 249-50.

^{161.} See Chirelstein, Learned Hand's Contribution to the Law of Tax Avoidance, 77 YALE L.J. 440 (1968).

^{162.} See M. Eisenberg, The Structure of the Corporation 224-35, 250-51 (1976).

lation provides the core of an explanation for lawyers' domination of the role of transaction cost engineer. Because the lawyer must play an important role in designing the structure of the transaction in order to assure the desired regulatory treatment, economies of scope¹⁶³ should cause the nonregulatory aspects of transactional structuring to gravitate to the lawyer as well. Knowledge of alternative transactional forms and skill at translating the desired form into appropriate documents are as central to engineering transactions for the purpose of reducing transaction costs as for the purpose of reducing regulatory costs; indeed, if these purposes in one or another way conflict, facility at both tasks should result in more optimal trade-offs between them. Viewing the matter from this perspective, it would have been surprising if lawyers had not dominated the field.

But if transactional structuring became the province of lawyers, what was left for the other professions? While a careful examination of the functional role of accountants and investment bankers—two other professionals commonly found, along with lawyers, hovering about as wealth changes hands—would lead me too far afield, a transaction costs approach seems likely to shed some light on this question as well.

Accountants are trained, it seems to me, largely as specialists in information production. Emphasis is placed on designing systems that generate information (the accounting-systems function), determining whether an information system is producing information in the desired amounts and of the desired quality (the auditing function), and communicating the information produced in an effective manner (the financial accounting function). The tie among these functions is apparent: Reducing information costs bearing on determination of the risk and return associated with a capital asset will result in a more accurate asset price. 164 And the accountant's role is entirely compatible with the transaction cost engineer's role that I have described for the business lawyer. The information-production and verification aspects of the transactional structure designed by the business lawyer serve to constrain opportunism in the context of a particular transaction. 165 The accountant, in contrast, creates systems that produce a continuous flow of information, without the necessity of a transactional trigger, and that provide a continuous constraint on opportunism in the

^{163.} In contrast to the more familiar concept of economies of scale, which describes the reduction in the costs of producing a *single* product that result from an increase in the volume of production, economies of scope reflect the reduction in production costs that result from the joint production of a number of different products. See Teece, Towards an Economic Theory of the Multiproduct Firm, 3 J. Econ. Behav. & Org. 39 (1982).

^{164.} Cf. Ramakrishnan & Thakor, supra note 42; Ramakrishnan & Thakor, The Valuation of Assets Under Moral Hazard, 39 J. Fin. 229 (1984) (more accurate information about performance of managers reduces agency costs).

^{165.} See supra p. 255.

day-to-day operation of the company. 166 Stated briefly, lawyers design the transactional structure, and accountants contribute significantly to the design of the operating structure. 167

That leaves me to speculate on the function of investment bankers. I have argued elsewhere that they serve as information sellers in some acquisition contexts, 168 and as reputational intermediaries in another context, the initial public offering, that is closely analogous to an acquisition. 169 Here I want to focus on a different role for investment bankers: the design of innovative financial arrangements. Recall that asset value depends on systematic risk and return, rather than on the peculiarities of either the particular assets in question, or the parties contemplating the transaction: Risk peculiar to the asset—unsystematic risk—can be eliminated by diversification, and the individual tastes of the parties can be met by each independently through the composition of their individual portfolios.¹⁷⁰ Note, however, that both the opportunity to diversify and the ability to tailor one's own portfolio to one's own tastes depends on how complete the available markets are. If the particular risk that you wish to avoid cannot be hedged in available markets, then you can be made better off by the design of a new financial product that makes markets more complete. This is a role for investment bankers which reflects their particular training.

An example helps clarify the point. Suppose you are the Vice President-Finance of an insurance company with \$100,000 to invest. Your actuaries tell you that five years from now you must have on hand \$190,000 to pay anticipated life insurance claims. A borrower then comes to you and offers to borrow that \$100,000 for five years, with annual interest payments at 14%. A standard computation of the terminal value of the loan tells you that the transaction will be worth approximately \$192,541 in five years, 171 just what is needed to meet your expected

^{166.} See supra p. 298 and sources cited supra note 164.

^{167.} The most explicit use of accounting systems as a check on the behavior of management is found in the Foreign Corrupt Practice Act of 1977, Pub. L. 95-213, 91 Stat. 1494 (codified at 15 U.S.C. §§ 78m, 78dd-1, 78dd-2, 78ff (1982)), which requires corporations subject to its terms to "(A) make and keep books, records, and accounts, which, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the issuer; and (B) devise and maintain a system of internal accounting controls. . . . " 15 U.S.C. § 78m(b)(2).

^{168.} Gilson, supra note 73, at 57-59.

^{169.} Gilson & Kraakman, supra note 29, at 616-21.

^{170.} This is the separation theorem. See J. VAN HORNE, supra note 33, at 54. 171. The formula for calculating terminal value is:

 $TV = (x + r)^n$ where TV = terminal value

x = principal

r = interest rate

n = the number of periods

See J. VAN HORNE, supra note 33, at 14.

claims. What keeps you from leaving the office for a weekend at the beach is the knowledge that, even if there is no credit risk with respect to the borrower, a substantial risk nonetheless remains that you will not have on hand in five years the amount necessary to meet anticipated claims. The reason is that the terminal value calculation assumes that the annual interest payments can be reinvested at the same 14% rate. The risk is that this assumption will prove wrong. If interest rates drop sometime during the five years, your actual reinvestment rate will be lower than 14% and your company will be insolvent when the anticipated claims are presented for payment in five years.

Recently, investment bankers have designed a new financial instrument intended to eliminate this risk: a deep discount or zero coupon bond. Instead of annual interest payments, this bond would contemplate the loan of \$100,000 against a promise to repay \$192,541 dollars in five years with no annual interest payments. The effect is that annual interest payments are reinvested, rather than paid, at the required 14%; and the risk of a pre-maturity change in interest rates is eliminated. By making the market more complete, the investment banker allows the insurance company to reduce the risk associated with the loan and thereby increase its value.

To relate this function to those I have described for lawyers and accountants, it is necessary to recognize that incomplete markets result from transaction costs; in the absence of information costs and the costs of setting up markets, complete markets would exist by definition. The functions of all three professions thus serve the same end: to reduce the discrepancy between the perfect market assumptions underlying capital asset pricing theory and the real-world conditions confronting those engaged in the transfer of capital assets.

The picture I have painted of the roles of the three professions is really one in which all have the same generic function—the reduction of transaction costs—but each has a particular area of expertise, a particular sphere of influence, where it dominates. These spheres of influence, however, overlap. For example, lawyers and accountants both hold themselves out as expert in structuring a transaction to achieve the best tax results; lawyers and investment bankers both claim the quarterback's role in structuring the attack and defense in hostile tender offers. It is in these areas of overlap that the competition between professions primarily takes place, and it is in the potential for increased competition between professions that I find important my hypothesis for the legal profession.

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The calculation in the text is as follows:

TV = \$100,000 (1 + .14)^{8}
= \$100,000 (1.92541)
= \$192,541
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B. The Professional Perspective: Lessons for Lawyers

Recognition that business lawyers play the role of transaction cost engineers, and that their historical domination of that role rests neither on its inherently legal character nor, as I will argue in the next Part, on skills acquired through traditional legal training, yields two visions of the future. In one, the legal profession continues to play a central role in designing the structure of business transactions. In the other, however, the profession's transactional role is reduced from engineer to draftsman, at the expense of lawyers' prosperity and the intellectual interest of their work.

The potential for a sharply reduced role for business lawyers results from the substantial growth in competition for transactional responsibility—not among lawyers, although that, to be sure, has also grown¹⁷²—but with other professions. Increasingly, other institutions, like investment banking and public accounting firms, are recognizing that positions of primacy in some areas which have been historically ceded to the legal profession are contestable. Even if the imprimatur of a lawyer remains necessary to convince the client that all bases have been touched, lawyers can be employed by investment banking and accounting firms without fear of being charged with unlawful practice; keep in mind that these contestable markets do not involve legal work, whether defined traditionally or in terms of training. 178 Moreover, the increasingly multidisciplinary character of the legal profession's most serious competitors threatens to overcome the economies of scope that have provided the profession its historical protection. Investment banking and public accounting firms now commonly employ not just corporate finance specialists and accountants, but lawyers, economists, and consultants as well. The potential for creating economies of scope within these organizations that are competitive with those enjoyed by lawyers is apparent.¹⁷⁴ While a lawyer may still participate in the

^{172.} See Bachman, Battle for Clients is Heating Up: How Competition Will Alter the Big Firms, NAT'L L. J., Feb. 21, 1983, at 14, col. 1; Lewin, A Gentlemanly Profession Enters a Tough New Era, N.Y. Times, Jan. 16, 1983, § 3, at 1, col. 2; Brill, Surviving the 80's Shakeout, Am. Law., Nov. 1982, special section.

^{173.} For example, in the area of corporate acquisitions, Bruce Wasserstein, formerly a lawyer at Cravath, Swaine & Moore, heads First Boston's mergers and acquisitions department. Bruce A. Mann, once a partner at Pillsbury, Madison & Sutro; Charles Nathan, until recently a partner at Cleary, Gottlieb, Steen & Hamilton; and Allen Finkelson, until December, 1983, a partner at Cravath, Swaine & Moore, hold similar positions at L.F. Rothschild, Unterberg, Towbin, A.G. Becker Paribas, Inc., and Lehman Brothers Kuhn Loeb, Inc. Lempert, Business Lures Lawyers From Law, Legal Times, Mar. 5, 1984, at 1, col. 6.

^{174.} Indeed, the potential for economies of scope may be even greater than for law firms because there appears to be less reluctance to expand the organization's range of activities beyond those traditionally associated with its core function. There is some indication that law firms are also beginning to understand the problem, as evidenced by the recent acquisition of a lobbying firm by a major law firm. See Frank, Law-Lobby Union: California Firms Merge, 70 A.B.A. J., May, 1984, at 31 (merger of Lillick, McHose & Charles, fifth largest firm in California, and General Consulting Co., a public relations and lobbying firm).

transaction cost engineering function as part of a multidisciplinary firm—by helping to solve regulatory problems and by evaluating and responding to strictly legal issues posed by the transaction¹⁷⁶—the legal *profession* will have lost its commanding position in engineering the transaction.¹⁷⁶ Regardless of the social welfare consequences of a shift of responsibility between professions, the impact is obviously unfavorable from the perspective of the legal profession.¹⁷⁷

The same analysis that identifies the threat to the business lawyer's transactional role also identifies what must be the profession's competitive response. Competing successfully for the role of transaction cost engineer requires something that I believe business lawyers, as a group, have lacked: a self-conscious understanding of the function they really perform. To put the point as straightforwardly as possible, if business lawyers understand their function better, they will be better at it and, as a result, more successful in competing with other professions for the same work.¹⁷⁸

I do not mean this as an empty exhortation by an academic cheerleader to go out there and be better lawyers. Rather, I think that theoretical developments of the sorts I have discussed here are capable of informing and improving the skills that practitioners bring to bear on a problem. Throughout the discussion of the acquisition agreement in Part III, I suggested ways in which recognition of the business lawyer's transaction cost engineering role and its theoretical underpinnings can make devising and negotiating responses to market imperfections easier and more effective. My claim is that approaching transactions such as acquisitions by identifying and responding to the failures in homogeneous expectations, common time horizons and costless information that will be present in every transaction, has the potential to make us significantly better at what we

^{175.} I do not mean to denigrate the importance of these tasks. Put in the language of capital asset pricing theory, better knowledge of the legal risks associated with a transaction—for example, what damages are recoverable if the transaction goes badly, what is the likelihood that particular aspects of the transaction will violate a specific statute—reduces the uncertainty, and therefore increases the value of the transaction. The difference is that the lawyer's role has been reduced to one among a number of staff functions *supporting* the engineering function.

^{176.} This is a different conflict than that which is typically the subject of the corporate counsel/outside counsel debate. The issue is no longer which lawyer plays the role in quesion but, rather, whether the role is any longer perceived as one limited, or even specially suited, to lawyers. Indeed, one would expect the same competition between professions to play itself out within the corporation as different staff functions—finance, strategic planning, accounting, legal—contend for influence.

^{177.} The deregulation movement also represents a threat to the legal profession because it has the potential of reducing the economies of scope that protected lawyers from competition with respect to non-legal work like transaction cost engineering.

^{178.} There is an obvious parallel between the change I have predicted in the competitive environment of the legal profession and the radical change that has already occurred in the financial services industry. As a result of recognition of the generic similarity of the variety of services offered by theretofore seemingly distinct industries and, to be sure, spurred on by deregulation, industry boundaries collapsed and the relevant market for competitive analysis expanded to include banks, savings and loans, broker-dealer firms, insurance companies, and a host of others.

already do. It is this ability to offer a better product that seems to me to hold the business lawyer's hopes for competitive success.¹⁷⁹

V. WHY IS BUSINESS LAW EDUCATION SO BAD? IMPLICATIONS OF THE HYPOTHESIS FOR THE LAW SCHOOL

Suggesting that the competitive future of business lawyers depends on their becoming better at what they do shifts the focus of the discussion back to what, for me, is home. If business lawyers systematically fail to understand fully their real function, and if the application of theory can, as I argue, improve things, the search for an explanation for this failure quickly points to the law school. If my analysis is correct, then why have law schools done so bad a job in training business lawyers?

That is, I think, precisely the right question. As my analysis of the contents of an acquisition agreement demonstrated, the fact is that, under the circumstances, business lawyers have done an awfully good job at something that law schools did not and, for the most part, still do not teach: helping people arrange their relationships in the absence of governmental intervention; facilitating *private ordering*. Whatever objections practicing business lawyers may raise to other parts of my analysis, I am confident that there will be broad agreement that law school—their corporations course, for example—taught them little about important aspects of

A second point should also be stressed. I have focused here on the value of capital asset pricing theory in an acquisition context. My position with respect to the importance of bringing theory to bear on practice, however, is limited neither to that aspect of capital market theory, nor to that application. For example, the concept of diversification, see supra p. 250, has important applications with respect to the design of security interests insuring performance of an obligation. Suppose the seller of a business agrees to take an installment note as part of the consideration to be received. How does his lawyer determine what kind of security best protects the seller against the risk of default? I suggest that considering the problem as one of portfolio diversification facilitates design of an appropriate transactional structure. The seller in the first instance holds a portfolio composed of a single asset: the buyer's note. I would pose the analytic problem as one of devising additional assets that can be added to the portfolio so as to cause its value to be invariant to the buyer's default.

^{179.} While this is not the place to catalogue the myriad ways in which this approach might alter the manner in which practicing lawyers analyze and implement a proposed transaction, one impact of bringing theory to bear on practice can be noted. Theory is an extremely efficient way of conveying and storing information. For example, one approach to analysis of a transaction would be to first categorize it—as a corporate, or real estate, or venture capital deal—and then look to the alternative structural techniques available in the relevant category. Because this approach treats each technique as unique to a category-solutions used in venture capital deals-it requires a lawyer to learn and retain an amount of information equal to the sum of the number of categories of transactions multiplied by the number of techniques available in each category. The application of capital asset pricing theory that I have described collapses the number of categories to one, the transfer of capital assets, and defines techniques in a way-as responses to failure of perfect market assumptions-that they are applicable to all transactions. One thus analyzes a transaction by first locating the inevitable information-cost problem and then selecting an information-cost technique to solve it, rather than by pigeonholing the transaction and then limiting the techniques considered to those traditionally associated with the particular category. Not only does this approach make it easier to teach new lawyers how to analyze a transaction, but also it facilitates creative responses to new forms of transactions that do not fit within any of the traditional categories.

what they now do in the practice of law. It is both interesting and instructive to consider the reason for so pervasive an educational failure.

Identifying the source of the failure, it should be noted, is quite different from assigning blame. The difference appears from considering the limited alternatives that have been commonly available to an academic charged with designing a business law curriculum. One approach, motivated by a desire to train lawyers in the skills they will need after law school, would be to teach practice skills: for example, how to draft; how to negotiate; the form that different types of agreements commonly take. Among a number of problems with this approach is that most legal academics are not really competent to teach these skills; the career patterns of teachers at leading law schools typically do not reflect sufficient time in practice to have themselves perfected the skills that this approach to business law education would require. Moreover, there is substantial reason to believe that the educational effort would be ineffective even if sufficient numbers of academics with real professional training in business law practice could be found. Law firms and real practitioners, through some form of apprenticeship, 180 are likely to do a far better job than any law school for a number of reasons. 181 Indeed, it is precisely the sense of futility that arises from recognizing that law schools cannot teach practice that seems to me to have motivated the suggestion, originating in the law schools, that the traditional three year course of study be reduced to two, thereby letting practitioners begin their training of would-be practitioners a year earlier.

The alternative to teaching practice, of course, is teaching theory. This approach to business law education, however, has had its own serious problem. There has been no theory to teach. Until quite recently academics really had no theory—positive or normative—that dealt with private ordering. Business law teachers thus fell back on what had passed for theory in law schools since Langdell introduced the idea of a science of law: doctrinal analysis developed through the medium of case law. The focus on courts and case law is peculiarly ironic here. Because the object of study in business law courses thus explicitly became the output of government involvement in private arrangements, the business law curricu-

^{180.} For this purpose, it is unimportant whether the practical training comes during law school through, for example, an intensive semester in a law firm, or as a required post-graduate activity as is the case with the Canadian Bar or, as in many states, to complete the process of certification as a public accountant.

^{181.} The central problem with clinical teaching, whether of litigation or business skills, seems to me to center on the enormous expense of doing it well. The point is not simply to let students act like lawyers, however much they may enjoy the change from the classroom, but to teach them to function as lawyers. The difficulty, however, is that this task requires very careful supervision of the student and review of the student's work. My limited experience in trying to teach drafting skills suggests that the faculty-student ratio necessary to accomplish this is very high and, as a result, very expensive.

lum, like the rest of the law school curriculum, became an inquiry into a form of *public* ordering. But since the practice of law, and especially that aspect of concern to me here, involves significant emphasis on *private* ordering, the mismatch of business law education and business law practice was inevitable: Each was interested in a different phenomenon.¹⁸²

The opportunity now exists to change this unfortunate state of affairs and to cause business law education, for the first time, to link theory directly to practice. Recent developments in two areas of economics—finance and transaction cost economics—now provide the tools necessary for serious inquiry into a theory of private ordering and for bringing that theory to bear not on criticizing public policy, or case law, or particular regulatory regimes, but, at last, on understanding how people order their relationships in the absence of regulatory interference, and on helping them improve their performance. Finance provides a means of specifying how individuals can maximize the value of their assets; transaction cost economics, in turn, focuses on the barriers to successful maximization. Together they provide a structure that makes it possible, as I have tried to demonstrate here, actually to teach about private ordering in a fashion that is particularly suited to the academy, and that would be quite difficult for practitioners to teach neophytes by apprenticeship. This is, I should stress, a far grander claim than that which has characterized much of the law and economics movement in recent years—that microeconomic analysis can be applied either to justify or criticize particular judicial doctrines or legislation. While interesting, this single-minded emphasis on public ordering is subject to precisely the objection raised by Oliver Williamson that I quoted earlier: 183 The focus of attention is on the rules, not on what people do. What I have in mind is the use of theory not to

183. See supra p. 294.

^{182.} This is not to say that there have been no innovations in business law education in the last thirty years. I am prepared, however, to defend the proposition that only two have been significant, and that even these reflect the misplaced emphasis on public ordering described in the text. The first innovation was David Herwitz's pathbreaking effort, which stressed that a client's problems do not come neatly packaged into the doctrinal boxes of a law school curriculum, and that solving real world problems inevitably requires integrating the conflicting demands of a variety of concerns growing out of tax law, corporate law, securities law, and accounting. See D. HERWITZ, BUSINESS PLANNING: MATERIALS ON THE PLANNING OF CORPORATE TRANSACTIONS (1966). The result was a course organized around business problems, rather than around the traditional single academic subject mater. But while the emphasis on integration was important, a heavy emphasis on public ordering remained; much less attention was paid to client needs unrelated to regulatory structures, and to techniques by which those needs might be met.

The second innovation was Victor Brudney and Marvin Chirelstein's CASES AND MATERIALS ON CORPORATE FINANCE in 1972. Here the innovation was bringing the newly resurgent discipline of financial economics to bear on legal problems. Again, however, their emphasis was on public ordering. New tools were used to evaluate the performance of various regulatory regimes, including corporate reorganization, securities law and corporate law, and the performance of those agencies, especially but not exclusively the courts, charged with administering them. While real theory was drawn upon for the first time, its application was largely limited to problems of public, not private, ordering.

criticize doctrine, but to facilitate practice, a partnership between academics and practitioners that holds promise for an important role for the former and better performance by the latter.¹⁸⁴

The analysis I have offered of the opportunity for a value-creating role for business lawyers, the evidence I have marshalled that business lawyers in fact play this role, and the potential I have described for law schools to make important contributions in training business lawyers for this role, combine to present a fairly optimistic picture of the future of this component of the legal academy and profession. This image, however, stands in stark contrast to the image with which I began: lawyers under a new round of intense criticism that explicitly advances the claim that they are, in fact, an impediment to the economy's functioning. It is appropriate to conclude by briefly considering this "new wave" of criticism.

VI. THE NUMBER OF LAWYERS IN JAPAN AND THE DIFFICULTY OF CROSS-CULTURAL COMPARISONS: IMPLICATIONS OF THE HYPOTHESIS FOR THE CURRENT ROUND OF CRITICISM

We now come full circle. I began this Article by referring to a new wave of criticism of lawyers and arguing that evaluating the power of these charges required a more comprehensive understanding of what business lawyers do. With that analysis behind me, I now want to return to this criticism and, in particular, to the cross-cultural comparisons on which it is based.

Spurred by the specter of declining American success in the international economy, and focused by the remarkable success of Japan in the same arena, this generation of criticism has been strikingly different in character from earlier waves. Derek Bok's recent Report to the Board of Overseers of Harvard University¹⁸⁵ is both illustrative of the approach and its most prominent example. Noting that the total number of lawyers in Japan is less than one-half of the number of lawyers that graduate

^{184.} There is evidence that at least some law schools have begun to see the light. The joint appointment of Myron Scholes, one of the most prestigious financial economists in the United States, to the faculties of the Stanford Law School and the Stanford Graduate School of Business, and that of Oliver Williamson, the leading figure in the transaction-cost economics field, to the faculties of the Yale Law School and the Yale School of Organization and Management, herald a more serious interest in private ordering than has been evidenced before. In addition, Stanford Law School's development of a course in financial economics for first year students as the foundation course for the rest of its business law curriculum suggests that progress may be underway. Indeed, we may have already witnessed the opening shots in a major curriculum revolution.

The recent work of William Klein deserves particular mention in the context of curriculum reform. Klein has made a major effort to bring finance theory to bear on understanding consensual—private—business arrangements. While his approach differs from mine in important respects, we seem to have reached many of the same conclusions. See W. KLEIN, BUSINESS ORGANIZATION AND FINANCE (1980).

^{185.} Bok, supra note 1.

from law schools each year in the United States, 186 and that Japan annually trains 30 percent more engineers than does the United States despite a population only half its size, 187 Bok concludes that the United States' overinvestment in a nonproductive profession has a negative impact on the American economy: "As the Japanese put it, 'Engineers make the pie grow larger; lawyers only decide how to carve it up." This crosscultural comparison then serves as the springboard for a wide-ranging indictment of our legal system and of traditional American legal education.

Despite the attention it has received, Bok's specification of the particular ailments of our system—in contrast to his comparative methodology—is not of special interest to me here. Like so many commentators on lawyers and the legal profession, Bok displays a myopic fixation with litigation—its frequency, complexity, expense, and unequal availability—and with what law schools can do about it: clinical training, attention to methods of delivery of legal services, emphasis on the administration of justice. He leaves business law, however, entirely unaddressed. Interestingly, this single-minded emphasis on litigation is not shared by at least one foreign comparativist critic. Akio Morita, the Chairman of the Board of Sony Corporation, made essentially the same comparison of American and Japanese investments in legal and engineering training in a speech at the Harvard Business School approximately one year before Bok's Report. 189 Morita's criticism of American legal practice, however, while also relying on a comparative approach, focused on the function of the business lawyer.

The core of Morita's analysis is an implicit comparison between Japanese and American approaches to contracting. Describing the American approach, he summarizes what American business lawyers do in a manner at least descriptively consistent with the approach to an acquisition agreement that I emphasize:

A lawyer's job is to anticipate legal problems. When a contract is drawn up, lawyers recommend provision after provision until the contract is as thick as a book and difficult to understand. 190

This view contrasts with what Morita describes as the essence of the Japanese approach to contract, one that, at least implicitly, eliminates the

^{186.} *Id.* at 573-74. 187. *Id.* at 573.

^{188.} Id. at 574.

^{189.} Morita, supra note 1. The article is a revised version of an extemporaneous speech given at what the publication refers to as the "Kennedy School of Business, Harvard University." I have assumed, without confirming, that the reference is to the Harvard Business School rather than the Kennedy School of Government Policy.

^{190.} Id. at 3.

need to anticipate all possible problems ahead of time. All Japanese contracts, Morita explains, contain a provision to the effect that "in the event of disagreement, both parties to the contract agreed to sit down together in good faith and work out their differences."¹⁹¹

What is most striking about Morita's description of the core of a Japanese contract is how very closely it parallels Oliver Williamson's description of the simple form of contract that would be sufficient in a world where, somehow, opportunism was not possible: "A general clause, to which both parties would agree, to the effect that 'I will behave responsibly rather than seek individual advantage when an occasion to adapt arises,' would, in the absence of opportunism, suffice." The identity between what Morita describes as the Japanese approach and what Williamson suggests would prevail if human beings could take advantage of neither each other nor changed circumstances suggests a simple and straightforward response to the new comparative critics. The Japanese do not behave opportunistically vis-a-vis each other; Americans do. Each country has thus adopted an approach to contracting that best fits its national character. From this perspective, it cannot be seriously advanced that the function played by business lawyers is anything more than one of many manifestations of this fundamental difference. But, like most simple and straightforward explanations of social patterns, this explanation seems to me fundamentally incomplete.

First, and perhaps most important for my concerns here, this explanation simply ignores the issue of whether business lawyers have the potential to create value—to make the pie grow larger rather than merely to help to carve it up—that is really at the heart of both my analysis and the criticism itself. Second, and of critical methodological importance, this explanation simply assumes that opportunism does not exist in Japan. In fact, the evidence—different approaches to contracting—is equally consistent with the more intuitively sensible conclusion that the Japanese are also prone to self-interest, but that mechanisms other than contractual techniques and business lawyers serve as the predominant constraints. And, if this is correct, then the most important part of evaluating the comparativist criticism of business lawyers yet remains: The mechanisms used to constrain opportunism in Japan must be identified and the effectiveness of those mechanisms compared to the use of business lawyers in the United States. From this perspective, the central problem with the comparativist critique of American business lawyers is that business law-

^{191.} Id. This is consistent with the common observation that Japanese contracts are typically much shorter than their American counterparts.

^{192.} Williamson, Transaction Cost Economics: The Governance of Contractual Relations, 22 J.L. & Econ. 233, 241 (1979).

yers are compared to the *wrong* thing. The relevant comparison is not between American lawyers and Japanese lawyers, but between American lawyers and whatever mechanisms serve to constrain opportunism in Japan.

This is not the occasion to develop and evaluate a detailed hypothesis of how opportunism is constrained in Japan. I will, however, offer a quite speculative hypothesis that may be worthy of further investigation and, in any event, serves to illustrate how very difficult this kind of cross-cultural analysis is likely to be. My focus is on one of the especially distinctive characteristics of the Japanese economy—the Nenko system, which includes, in addition to the by now familiar idea of lifetime employment, both seniority-based promotion and seniority-based wage increases. This combination creates a system in which age is an important determinant of decision authority. If this is coupled with a relatively smaller economy than the United States, and fewer large companies, the stage is set for a quite effective, albeit entirely informal, means of constraining opportunism.

The picture I offer is of individuals in one company compelled to deal with the same individuals in other companies over their entire professional lives. Indeed, the Nenko system not only results in a continuity of contacts across companies, but also ensures that by the time a manager has reached the stage in his career when he has significant transactional authority, he will have dealt with his counterparts at other companies for a long period of time. This, together with the anticipation of repeated dealings with the same parties over an entire career, puts each manager in a situation where a significant penalty can be imposed if that individual behaves opportunistically. During the period in which a manager accrues the seniority necessary to a position of major transactional responsibility, repeated dealings with cohorts in other companies on smaller transactions result in an individual's developing a substantial stake in his own reputation for cooperative behavior. If the individual behaves opportunistically in one transaction, his credibility in future transactions with the same parties, and therefore the value of his human capital—his value to his employer—is reduced. The result is that a manager can expect personally to bear the cost of his opportunistic behavior, and the incentive to take advantage of a situation is therefore drastically reduced. The individual's long-earned

^{193.} For an interesting description and evaluation of the Nenko system from the perspective of human capital theory, see Hashimoto, Bonus Payments, On-the-Job Training, and Lifetime Employment in Japan, 87 J. Pol. Econ. 1086 (1979).

^{194.} Ability is also determinative but, at least as the popular literature reports, within an age cohort.

reputation functions, in effect, as a bond that is forfeit if misbehavior occurs.

This analysis substantially complicates Morita's simple statement of the Japanese approach to contracting. While his description of the commitment not to take advantage of the other side as a result of changed conditions remains accurate, an implicit penalty term must be added: If any individual breaches this commitment, a heavy penalty is imposed.

While I have no evidence of how much of the Japanese approach to contracting my analysis might explain, I find some support in the fact that, in those business settings in the United States where conditions resemble those in Japan, the approach to contracting is also somewhat similar. One example that comes to mind is Stewart Macaulay's classic study of the importance of the terms and conditions printed on the backs of purchase orders and acceptances to the way sellers and buyers behaved when a dispute arose. 196 Macaulay concluded that the formal terms had little impact; the parties worked out their problems in light of the conditions then existing largely without reference to the pre-existing formal agreement. My own anecdotal experience suggests that the point can be generalized. The lengthy, detailed documents Morita associates with the American approach to contracting largely involve situations, like an acquisition, where there is little anticipation of future transactions between the parties-where, in other words, final-period problems will exist in the absence of the transactional engineering of an artificial second round and other contractual restrictions on opportunism. In contrast, where repeated future dealings are anticipated, as in the small world of Macaulay's Wisconsin businessmen, patterns of transacting more closely resemble the Japanese approach. 196

^{195.} Macaulay, Non-Contractual Relations in Business: A Preliminary Study, 28 Am. Soc. Rev. 55 (1963).

^{196.} This analysis is consistent with recent theoretical inquiries into the circumstances under which contracts will be self-enforcing, i.e., when the parties have sufficient incentives to fulfill their obligations even in the absence of the system of formal legal enforcement. See Klein & Leffler, supra note 104; Telser, A Theory of Self-Enforcing Contracts, 53 J. Bus. 27 (1980); Townsend, Optimal Multiperiod Contracts and the Gain from Enduring Relationships under Private Information, 90 J. POL. ECON. 1166 (1982). These models depend explicitly on the anticipation of repeat plays as the mechanism of self-enforcement. That is not to say, however, that some elements of self-enforcement may not be at work even when there will not be repeat transactions between the particular parties. If the experiences of those who have previously dealt with a party can be effectively communicated to those who are considering doing so, self-enforcement is still possible. See Klein & Leffler, supra note 104. Its effectiveness, in comparison to situations where there will be repeat plays between the same parties, will depend on the speed and accuracy of the transfer of information between past and future transactors.

This explanation of the Japanese "cooperative" approach to contracting is consistent with Robert Axelrod's explanation for the evolutionary development of cooperation. R. AXELROD, THE EVOLUTION OF COOPERATION (1984). As an effort at simulating the development of cooperation, Axelrod held a tournament seeking the most effective strategy for maximizing outcomes in repetitive two-person Prisoners' Dilemma games. In this game, cooperation yields the best joint outcome, but the

If for present purposes we accept as accurate my description of the conditions necessary for the operation of the self-enforcement mechanism that I suggest underlies the Japanese approach to contracting, the crosscultural efficiency comparison on which the Bok and Morita criticisms rely becomes very difficult indeed. The Japanese system constrains opportunism by a system that, apparently, reduces the use of business lawyers and thereby frees resources that can be used for "productive" purposes, like training and employing engineers. But the system is not costless. To the extent that it forces wages and promotions to depend upon seniority, it eliminates incentives for entrepreneurial activity; the Silicon Valley phenomenon, for example, seems inconsistent with a *Nenko* system. The American approach, in contrast, incurs the costs of formal constraints, but is free of the costs that result from the rigidity that, under my analysis, is inherent in the Japanese system.

Even if taken only this far, efficiency comparisons between the systems become indeterminate. And if the purpose of the exercise is to yield normative recommendations, efficiency comparisons may simply be impossible. Most importantly, the conditions necessary for the Japanese system to operate may not be achievable in the United States even if an initial comparison suggested that it was desirable. Beyond the problem of scale associated with the different absolute sizes of the two economies, Morita considers it important that "Japan is a homogeneous society, while the United States is not." Certainly the reputation-based explanation I have suggested depends on a broad consensus concerning what type of behavior is acceptable and on the ability to evaluate accurately whether the behavior of others meets the standard. Is interesting that at least

first player to cheat on the agreement to cooperate does better in that single transaction than he would have under the cooperative solution. Cheating, however, results in the absence of cooperation, with each player anticipating cheating by the other and selecting a strategy less beneficial than mutual cooperation. The most successful strategy was what Axelrod calls "tit-for-tat," in which a player begins by cooperating, but any opportunistic behavior by the other player in one game was immediately penalized by the first player in the next game. What is critical is that in Axelrod's analysis, as in the self-enforcing contract literature and in my analysis in the text, the anticipation of future dealings is a necessary condition to cooperative behavior.

^{197.} Morita, supra note 1, at 3.

^{198.} Others have pointed to this information-based approach as an explanation for why particular business activities are dominated by a single ethnic group. See Carr & Landa, The Economics of Symbols, Clan Names, and Religion, 12 J. LEGAL STUD. 135 (1983); Landa, A Theory of the Ethnically Homogenous Middleman Group: An Institutional Alternative to Contract Law, 10 J. LEGAL STUD. 349 (1981).

Similarly, Robert Mnookin and I have recently argued that a seniority-based system of income sharing and promotion within corporate law firms has strong efficiency characteristics, but that certain shared beliefs—in addition to formal monitoring and incentive techniques—are necessary for the system to function. Gilson & Mnookin, supra note 23. Our colleague Thomas Heller has pointed out how strongly that system resembles the Nenko system, a resemblance that is reinforced by Morita's stress on Japan's homogeneity and by our discussion of the importance for a sharing law firm of hiring only people who have a common set of attitudes toward work.

some businesses where these conditions are met and which seem to evidence an approach to contracting closely akin to that of the Japanese, like the diamond trade in New York, are also ethnically homogeneous. This, in turn, suggests that while the potential for opportunism may be universal, the efficiency of a particular solution in large measure may be culturally and historically determined. If this is the case, then our critical efforts may be better directed at the design of more effective constraints on opportunism, rather than selective envy of isolated aspects of other approaches. On the approaches.

That brings me back to the comparativist criticism of business lawyers and to the potential for business lawyers to create value. The foregoing discussion demonstrates that once it is recognized that business lawyers function as transaction cost engineers, cross-cultural efficiency comparisons become indeterminate. An elaborate formal transactional structure constrains uncertainty-based opportunism in a large heterogeneous economy; the Japanese approach also constrains opportunism, but is suited to a very different set of conditions. In either event, though, the act of reducing uncertainty—reducing risk in the language of capital asset pricing theory—is value creating however it is accomplished. And the problem with Bok's metaphoric dichotomy between making the pie bigger and carving up what is already there is that it assumes only a one-period model. Once the pie is baked, the manner in which it is carved has no impact on the size of that pie. However, the manner in which the pie is carved can have enormous impact on the number of pies that are baked in the future. The decision to invest in the next pie's creation depends not just on the size of the pie in the abstract, but on the piece that the investor actually receives. The greater the assurance that the piece of the pie the investor receives will be the same size as he expects, the greater the likelihood that there will be funds for the baker to bake pies, and the larger the number and size of pies that will be baked. In a world with positive infor-

^{199.} I do not understand my claim of economic "cultural relativism" to be inconsistent with the notion that a Darwinist survivorship principle operates to push economic arrangements toward efficient outcomes. See Jensen, supra note 39, at 331-33. Survivorship operates within a context determined by other influences. To use an extreme example, the rise of mammals does not demonstrate that mammals are superior to dinosaurs in all possible states of the world, but only that they were superior in a state of the world in which, to choose one among a number of competing hypotheses, sunlight was blocked for a significant period by debris thrown into the atmosphere as a result of a large asteroid striking the earth. Similarly, cultural and geographical conditions constrain the context in which economic natural selection operates.

^{200.} This is not, however, to argue that business lawyers cannot improve their performance, nor that our society cannot become less opportunistic. It may be that lawyers overestimate the amount of opportunism in our society and, as a result, increase transaction costs by over-structuring a transaction. Alternatively, it may be that we are stuck in some sort of Prisoners' Dilemma loop and need a technique to reduce the level of opportunism found in our society. In either event, cross-cultural criticism is hardly useful unless it includes instructions on how to emulate the more successful culture.

mation and transaction costs, developing transactional structures that reduce uncertainty concerning pie division results in more and larger pies. And business lawyers who design those structures create value.