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# **Author**

Shishido, Zenichi

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Monitoring, Incentives, and Cooperation: The Strategy behind the Organizational Game

#### Zenichi Shishido

#### I. Introduction

Doing business with a partner always carries the risk that your partner will not keep her promises. The breach of promise, termed opportunistic behavior by Williamson, will distort the incentive to cooperate. Grossman & Hart developed the property rights approach by focusing on the predictable opportunism, because they assume that the two parties are both rational and farsighted. In their model, hold-up will occur ex ante because you can rationally expect the ex post opportunistic behavior of your partner. In this article, the breach of promise is not necessarily predictable nor measurable. I am interested in the ways of minimizing the loss in case where the partner does not necessarily behave rationally.

There are two different types of unpredictability which will cause the distortion of incentive to cooperate. One is the unpredictability about exclusion, which concerns being excluded from management and profit. The other is the unpredictability about cooperation (the reliability of promise to cooperate), which concerns the fellow partner's non-cooperation.

The joint venture or venture business usually takes corporate form, but the relationships between partner-shareholders are very contractual. Even after the initial monetary investment and creation of the joint corporation, a partner needs the continued cooperation of his fellow partners with whom he may have conflicting interests. The partners organize the corporation through contracts to maintain a

<sup>&</sup>lt;sup>1</sup>Oliver Williamson, The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting (1985).

<sup>&</sup>lt;sup>2</sup>See David M. Kreps, A Course in Microeconomic Theory 760 (1990).

<sup>&</sup>lt;sup>3</sup>Sanford J. Grossman & Oliver D. Hart, The Cost and Benefit of Ownership: A Theory of Vertical and Lateral Integration, 94 J. Political Economy 691 (1986).

cooperative relationship. I term this type of corporation a "contractual organization."

Consider two partners, A and B, who create a contractual organization between themselves. The premise is that both partners are indispensable, so cooperation is necessary for the success of the project. A and B are the promisor and the promisee respectively and monitor each other. The objects of monitoring and the methods of monitoring in the contractual organization are more complicated than in spot transactions for two reasons: not all promises can be written as the contingent contract, and the partners must care for the fellow partner's incentives.

The game in the contractual organizations is how to achieve the situation where the partner can, reciprocally, monitor the fellow partner's promise to cooperate and, at the same time, will not distort the fellow partner's incentive to cooperate.

The promise to cooperate is further divided into two promises: the promise to invest their human capital without reservation and the promise to renegotiate if necessary. Renegotiation will, however, induce a hold-up problem. Because the result of renegotiation will depend on the ex post bargaining power of the parties, a party may fear exploitation

<sup>&</sup>lt;sup>4</sup>Strictly speaking, they are not really indispensable because there are usually some substitutes. We could, however, realistically hypothesize that A provides unique services which are valuable to B and finding a substitute is costly.

<sup>&</sup>lt;sup>5</sup>The perfect contingent contract actually cannot be written even in a spot transaction. See Benjamin Klein, Transaction Cost Determinants of "Unfair" Contractual Arrangements, 70 Am. Econ. Rev. 356 (1980).

 $<sup>^6\</sup>mathrm{See}$  Bengt Holmstrom, Moral Hazard and Observability, 10 Bell J. Econ. 74 (19 ).

<sup>&</sup>lt;sup>7</sup>Although there is a tendency for business people to renegotiate contracts when unforeseeable contingencies arise (see Stewart Macaulay, Non-contractual Relations in Business: A Preliminary Study, 28 Am. Soc. Rev. 55, 64 (1963); Lisa Bernstein, Opting out of the Legal System: Extralegal Contractual Relations in the Diamond Industry, 21 J. Legal Studies 115, 138 (1992)), they would never legally promise to renegotiate ex ante. The "promise" to renegotiate is not the legal contract but the implied obligation to renegotiate.

<sup>&</sup>lt;sup>8</sup>Oliver Hart, Firms, Contracts, and Financial Structure 78 (1995). Klein, supra note 5, at 356.

by the other party and be reluctant to fully invest in the specific relationship. It is therefore a puzzle that renegotiation is indispensable and at the same time impedes successful contractual organization. 10

The primary way to monitor the promisor's promise to cooperate is through legal enforcement, which is only available when the contract is clear and its breach verifiable by a court. It is, however, impossible to write all promises in the contractual organization as such legally enforceable contingent contracts.

Although the partner's overall bargaining power in relation to the other partner may still enforce the promise, unpredictability remains. To decrease the unpredictability about cooperation, the partners may use some "threat of exclusion" in the contractual organization. Threats of exclusion use a combination of equity and monitoring contracts to exclude from business decision making the party that failed to keep its promise. 12

The strongest threat of exclusion is usurping the majority stock holding. In the usual corporation, the party who owns the majority stock controls the corporation and can exclude minority shareholders from management. In the contractual organization, however, the principle of the stock

 $<sup>^{9}</sup>$ Hart, supra note 8, at 26-27.

<sup>&</sup>lt;sup>10</sup>The prospect of contract renegotiation has been examined by Oliver Hart & John Moore, Incomplete Contracts and Negotiation, 56 Econometrica 755 (1988), and Philippe Agihion, Mathias Dewatripont, and Patrick Rey, Renegotiation Design with Unverifiable information, 62 Econometrica, 257 (1994).

<sup>&</sup>lt;sup>11</sup>Bargaining power is determined by such characteristics as the scarcity of human capital and the reputational bond.

<sup>12</sup>Threat of exclusion is a wider concept than the "threat of termination" of the business relationship by Professor Klein. He raised an excellent question: "How much of the hold-up problem can be avoided by an explicit government-enforced contract, and how much remains to be handled by an implicit self-enforcing contract." Klein, supra note 5, at 358. According to my categorization, the explicit government-enforced contract seems to be the contingent contract and the implicit self-enforcing contract, such as the threat of termination, seems to be bargaining power. However, not only contingent contracts and bargaining power, but also equity, monitoring contracts, and reputational bond could mitigate the hold-up problem.

majority is usually contractually modified. The minority partner contractually retains vetoes on certain important decisions. With the vetoes, the minority partner can, at least, block a decision unfavorable to her. Even a "dissolution-at-will" clause is sometimes used. I will call these contracts "monitoring contracts," to distinguish them from contingent contracts.

Threats of legal enforcement and exclusion not only monitor the promisor but also decrease the unpredictability of the promisee. I will call these monitors "sanction-supported monitoring. "Unfortunately, this one-way monitoring distorts the other partner's incentives to cooperate. If A's monitoring power is strong enough to exclude B from management, A could just do so whenever A thinks B has breached a promise to cooperate, even if a third party, presumably a court, could not verify the breach. 15 The strength of A's monitoring power creates the unpredictability about exclusion for B, who now hesitates to invest her human capital to the project if she considers her position fragile. Therefore, A must consider how to increase B's incentive to cooperate for the success of their cooperative project. I will call these methods to encourage the partner to cooperate "incentive-supported monitoring."

In this article, I will analyze the joint venture and the venture business, as examples of contractual organization and illustrate how the game of allocating unpredictability is played.

Section II introduces the practice of joint ventures and venture businesses and shows the similarities and the differences between these two types of contractual organizations. Section III develops the framework of the game

<sup>&</sup>lt;sup>13</sup>Professors Aghion, Dewatripont, and Rey take "at-will contracts" as examples of the "renegotiation design," by which the underinvestment problem can be overcome. Aghion, Dewatripont, and Rey, supra note 10, at 257, 258.

<sup>&</sup>lt;sup>14</sup>According to the categorization by Professor Bernstein, the threat of exclusion is not the "relationship-preserving norm," but the "end-game norm." See Lisa Bernstein, Merchant Law in a Merchant Court: Rethinking the Code's Search for Imminent Business Norms, 144 U. Pen. L. Rev. 1765, 1796 (1996).

<sup>&</sup>lt;sup>15</sup>On the distinction between observable and verifiable information, see Bernstein, supra note 14, at 1791. See also, Aghion, Dewatripont, and Rey, supra note 10, at 257.

in the contractual organization and provides analytical tools. Section IV categorizes the joint venture and the venture business by the typical equity allocation patterns of each. This section then uses game theory to explain what we view in practice and the implications for the business planning of the contractual organization. Section V provides concluding remarks.

#### II. Contractual Organizations

Initially, let us limit the scope of the contractual organization to a corporation of two shareholders, whom I call partners. I define the contractual organization as the corporation in which 1) both partners have substantial equity; 2) both partners participate in the management; 3) the stock majority rule is modified by contracts; and 4) each partner must care for the fellow partner's incentive to cooperate.

Although many types of corporations can be categorized as contractual organizations—such as the partnership type closely held corporations—in this article, I will address the joint venture and the venture business as typical examples of the contractual organization.

#### A. Joint Ventures

The joint venture is a form of enterprise that is preverent in the history of world business<sup>16</sup>. In this form two or more independent enterprises (partners) invest, and all partners participate in its operation. A major advantage of joint ventures is the synergistic effect from partners' cooperation. A disadvantage of joint ventures is the inherent conflicts of interest which makes the necessary cooperation difficult.<sup>17</sup>

Joint ventures, like closely held corporations, generally have no market for their stock, which means minority or equal partners cannot easily liquidate their investments. Joint ventures thus struggle to resolve disputes or deadlocks similar to those of a closely held corporation. 18

A joint venture is distinct from the typical closely held

<sup>&</sup>lt;sup>16</sup>Zenichi Shishido, Conflicts of Interest and Fiduciary Duties in the Operation of a Joint Venture, 39 Hastings L.J. 66 (1987).

<sup>&</sup>lt;sup>17</sup>Shishido, supra note 16, at 63.

<sup>&</sup>lt;sup>18</sup>Shishido, supra note 16, at 69.

corporation, however, because the principle of stock majority is typically modified in the following three ways. First, in a joint venture, board member seats are allotted to partners by special agreement in proportion to their shares. Second, a minority partner, by virtue of an express pre-agreement, generally has a veto power in important decisions, whereas minority partners in a closely held corporation generally do not. Third, the bargaining power of a minority partner will modify the principle of stock majority (as discussed in Chapter IV). 19

In sum, even if one partner owns more than fifty percent of the joint venture's equity, that partner is not necessarily guaranteed full control. Correspondingly, there is less need to protect the minority shareholders of a joint venture than there may be for those of a closely held corporation.<sup>20</sup>

The conflicts of interest inherent to a joint venture create fiduciary duty problems both for directors and partners. These can be divided into three categories: self-dealing, corporate opportunity, and disclosure. Although the legal liability of directors and partners for violation of their fiduciary duties can be avoided by contracts, the contractual scheme is no panacea. Dissatisfied partners could potentially force a buy-out or refuse to cooperate in operating the joint venture. Dissatisfied partners could potentially force a buy-out or refuse to cooperate in operating the joint venture.

The purpose of creating a joint venture is to maximize the long-term interests of each partner through cooperation with the other partner. Therefore, throughout the creation and operation of a joint venture, A should deal with and monitor B to maximize A's own long-term interests which may differ from A's short-term interests. A may damage its long-term interests by pursuing short-term interests in a specific conflict of interests situation.<sup>23</sup>

#### B. Venture Businesses

The term "venture business" is generally used for the young enterprise which is launched as a risky business, particularly in the area of new technology. In this article, I will use the term more limitedly. The venture business will be

<sup>&</sup>lt;sup>19</sup>Shishido, supra note 16, at 69-70.

<sup>&</sup>lt;sup>20</sup>Shishido, supra note 16, at 71.

<sup>&</sup>lt;sup>21</sup>Shishido, supra note 16, at 75.

<sup>&</sup>lt;sup>22</sup>Shishido, supra note 16, at 122.

<sup>&</sup>lt;sup>23</sup>Shishido, supra note 16, at 122-123.

defined as the corporation which is financed by venture capital—in particular, the specialized investor in early stage companies.

To simplify the discussion, consider only a venture business with two shareholders: a founder-entrepreneur and a venture capitalist. In practice, there are often more shareholders, such as co-founders, employee-shareholders, and plural venture capitalists.

In practice the contracts drafted between the founder and the venture capitalist, particularly in Silicon Valley, are not secret. They are filed in a book entitled "Venture Capital and Public Offering Negotiation" which every practitioner in Silicon Valley uses as the model contract. I will draw from the model case in this book to introduce the practice of the venture business.

Usually, the transaction between the founder and the venture capitalist is a second stage financing. The venture capitalist invests in a company with a history of business, and the company issues new stock to the venture capitalist—typically preferred stock which is convertible into common stock. The preferred stock is issued, for example, at a price of \$2.00 per share to the venture capitalist, while the price of the common stock issued to the founder was \$.10 six months ago. The preferred stock provides for (1) noncumulative dividends, (2) a liquidation preference equal to the original issue price, (3) mandatory redemption, (4) voting rights equivalent to those of the common stock, (5) convertibility into one share of common stock, (6) antidilution protection, and (7) automatic conversion into common stock upon certain public offering. Expression into common stock upon certain public offering.

The most important point in these arrangements is that in allocating equity the parties exchange the capital contribution of the venture capitalist and the non-capital contributions of the founders. Because preferred stock is automatically converted into common stock upon the public offering—the common goal for both parties—the common stock and the preferred stock have comparable value, although the

<sup>&</sup>lt;sup>24</sup>Micnael J. Halloran, Lee F. Benton, Rovert V. Gundeson, Jr., Keith L. Kearney, and Jorge del Calvo, Venture Capital and Public Offering Negotiation (2nd ed. 1995 Supplement) (hereinafter VCPON).

<sup>&</sup>lt;sup>25</sup>VCPON, supra note 24, at 5-2.

 $<sup>^{26}</sup>$ VCPON, supra note 24, at 5-5, 5-9.

preferred stock has some seniority before the public offering. Therefore, the deal looks like the venture capitalist invests money and the founder invests human capital including technology and labor--an observation that is basically correct, but still oversimplified.

First, the venture capitalist provides not only money but advisory services and reputation, enhancing the credibility of the venture business to third parties. <sup>27</sup> Second, the venture capitalist usually obtains equity and control rights, which are costly to the founder because the venture capitalist can fire the founder from the CEO position any time. <sup>28</sup>

Why does the founder transfer control rights to the venture capitalist when it is so costly to her? One explanation is that the parties share the common goal of public offering, giving the founder an incentive. Another explanation is that the venture capitalist's concern for a good reputation in the marketplace prevents abuse of control rights.<sup>29</sup>

The model case in VCPON supposes that the founder owns 40% equity and the venture capitalist 60%. The holder of the preferred stock (the venture capitalist) has the right to elect three board members out of five, and the holder of common stock (the founder) can elect the remaining two. So in the model case, the venture capitalist obtains majority stock and both partners get board seats in proportion to their equity holding.

Even if the venture capitalist has less than a majority of the voting power, the contract often provides the right to

<sup>&</sup>lt;sup>27</sup>Ronald J. Gilson & Bernard S. Black, Venture Capital and the Structure of Capital Markets: Banks Versus Stock Markets 9 (Working Paper, July 14, 1996).

<sup>&</sup>lt;sup>28</sup>The founder has the risk of his managerial quasi-rents being expropriated. See Erik Berglof, A Control Theory of Venture Capital Financing, 10 J. Law, Econ. & Org. 247, 248 (1994). See also, Gilson & Black, supra note 27, at 19.

<sup>&</sup>lt;sup>29</sup>See Gilson & Black, supra note 27, at 25. Professors Gilson & Black explain, "the prospect of an IPO exit if the company is successful gives the entrepreneur something of a call option on control." Gilson & Black, supra note 27, at 21.

<sup>&</sup>lt;sup>30</sup>In VCPON, the founder is actually founders and employees, and the venture capital is the lead investor and the second investor. VCPON, supra note 24, at 5-7.

 $<sup>^{31}</sup>$ VCPON, supra note 24, at 5-14, 7-30.

name a majority of the board members. Board control gives the venture capitalist direct power to replace the founder as chief executive officer if performance is poor. And even where the venture capitalist has less than the majority board seats, the contract frequently provides veto power over much board action through a number of negative covenants. 33

Another interesting practice is the so-called "voting switch," only used if the venture capitalist is merely entitled to elect a minority of board members. The voting switch provision gives the holder of the preferred stock (the venture capitalist) the right to elect a majority of the board members upon the occurrence of specified events, such as a missed redemption, a missed dividend payment (or a string of missed dividend payments), insolvency, bankruptcy, the failure of the company to satisfy the terms of any covenants, or the failure of the company to meet specific financial tests. The founder maintains control only under good behavior.

The venture business is similar to the joint venture in the sense that both partners (the founder and the venture capitalist) make substantial investment and participate in the management. As in the joint venture, the stock majority rule is also modified by contractual schemes, usually more so in venture businesses.

The venture business is, however, distinct from the joint venture in three ways. First, in the venture business the term of the partnership, which is the term of the venture capitalist financing, is usually shorter than in the joint venture. In the venture business it is typically around five years, whereas the term of financing in a joint venture is usually not limited.<sup>35</sup> Second, partners will liquidate investment differently. In the joint venture, almost the only way the retiring partner liquidates investment is by selling to the fellow partner. However in a venture business, partners

 $<sup>^{32}\</sup>text{Gilson}$  & Black, supra note 27, at 11.

<sup>&</sup>lt;sup>33</sup>Gilson & Black supra note 27, at 11.

 $<sup>^{34}</sup>$ VCPON, supra note 24, at 7-34, 7-36.

<sup>&</sup>lt;sup>35</sup>The average term of venture capital investment is said to be less than five years (William Sahlman, The Structure and Governance of Venture Capital Organizations, 27 J. Fin. Econ. 473 (1990)) or four to seven years (Gilson & Black, supra note 27, at 22). Long-term venture capitalist investment is not efficient because once a founder gains its own experience, the experience of the venture capitalist declines in relative value. Gilson & Black, supra note 27, at 14.

understand from the beginning that either a public offering or a merger and acquisition will be the means of liquidation. Third, the repetitiveness of investment is different. For the partners of a joint venture, investment in the joint venture is not necessarily a repeated endeavor, it may be a one-time deal. In a venture business, the venture capitalist repeatedly invests in many venture businesses, although the founder is usually a first time entrepreneur. Therefore, the difference in relative bargaining power depends upon the business experience of the venture capitalist versus the technology of the founder. In addition, the venture capitalist, because he repeatedly invests must be concerned with his reputation.<sup>36</sup>

III. The Game of Allocating Unpredictability and Analytical Tools

The game for the partner-shareholders in the contractual organization is to try to maximize their long-term benefits given two types of unpredictability. One type of unpredictability concerns exclusion (being excluded from management and profit) and the other concerns cooperation from your partner (the reliability of promises to cooperate). With contractual organizations, only cooperation maximizes benefits, and those two types of unpredictability will both distort the incentive of each to cooperate. Thus to maximize benefits, a partner must not only decrease her own unpredictability, but also her partner's unpredictability.

Although the unpredictability about exclusion will distort the incentive to cooperate, it will also monitor the promise to cooperate. Without any monitoring contract, the minority partner will not only have the unpredictability about exclusion, but also have the unpredictability about cooperation because she can use no threat of exclusion for monitoring the majority partner's promise to cooperate. The majority partner who has no unpredictability about exclusion can decrease his unpredictability about cooperation by using the threat of exclusion as the monitor, but he cannot entirely eliminate the unpredictability about cooperation.

Methods to decrease the unpredictability are limited: equity, monitoring contracts, reputational bonds, bargaining power, and contingent contracts.

<sup>&</sup>lt;sup>36</sup>On how reputations provide an enforcement mechanism, see Benjamin Klein & Keith B. Leffler, The Role of Market Forces in Assuring Contractual Performance, 89 J. Political Economy 615 (1981).

Contingent contracts, accompanied by the legal enforcement, can decrease the unpredictability about cooperation. The comprehensiveness of contingent contracts depends on the nature of the transaction. <sup>37</sup>

The usefulness of the reputational bond and the bargaining power, which will work to decrease the both types of unpredictability, are fixed depending on the partners' relationship.  $^{38}$ 

Therefore, the only alternatives which the partners negotiate ex ante are equity and monitoring contracts, which I will call the threat of exclusion. The threat of exclusion directly affects the unpredictability about exclusion, and as a monitor, indirectly affects the unpredictability about cooperation. The threat of exclusion is a scarce resource, so the partners must share it. The game is how to share the threat of exclusion to achieve the optimal allocation of unpredictability.

Consider an example of how one partner trades away a threat of exclusion for a decrease in the both types of unpredictability. Suppose A has 60% equity and B has 40% equity. Without any monitoring contracts, A has an almost complete threat of exclusion. In this case B may fail to cooperate due to the significant unpredictability he faces. A could allow B some vetoes on certain decisions to decrease B's unpredictability about exclusion. Giving the minority the vetoes, on the other hand, will increase the unpredictability about cooperation for the majority for two reasons. The minority may use the vetoes arbitrarily, and A will loose some threat of exclusion. In this sense, the threat of exclusion is a scarce resource.

Granting substantial equity to another partner is the most common method to increase cooperation incentives. The equity holder has, as the residual claimant, the incentive to increase the value of the company.<sup>39</sup> To increase the value of

<sup>&</sup>lt;sup>37</sup>In practice, however, all possible contingent contracts are not necessarily written. See Bernstein, supra note 7, at 134. Rather, business people seek the value-maximizing combination of legal and extralegal terms. See Berstein, supra note 14, at 1770.

<sup>&</sup>lt;sup>38</sup>On reputational bond, see Bernstein, supra note 7, at 138.

 $<sup>^{39}</sup>$ See Hart, supra note 8, at 50.

the contractual organization, the partners must invest in the relationship and renegotiate if necessary.

#### IV. Examples of The Game in the Contractual Organization

#### A. Joint Venture with 50%-50% Partners

I will begin with the simplest form. The equally shared equity is the most popular in joint ventures and very rare in venture businesses.

In cases of equally shared equity, both partners have a perfect veto without any monitoring contract. Each partner knows that any decision cannot be made without her consent, and at the same time, nothing can be done by herself. Such a situation is described as no unpredictability about exclusion for both partners.

Although there is no unpredictability about exclusion for both partners in the joint venture with 50%-50% partners, the unpredictability about cooperation remains. Contractual arrangements for the partner to exit the joint venture, such as the right of first appraisal, the right of first option, and the "Russian roulette," will decrease the latter unpredictability as monitoring contracts.

Bargaining power and reputational bond would also decrease the unpredictability about cooperation. In joint ventures, bargaining power is usually more important than reputational bond. Because most companies creating joint ventures are not repeat players in the venture market, the mechanism of reputation does not necessarily work.<sup>41</sup>

<sup>&</sup>lt;sup>40</sup>The Russian roulette is an arrangement between two partners where the partner who would like to quit must set a price at which the other partner can choose between buying her partner's share or selling her own to her partner. See Aghion, Dewatripont, and Rey, supra note 10, at 258.

<sup>&</sup>lt;sup>41</sup>Although Professor Halonen shows that joint ownership can be the first best solution when there is incomplete information due to the need of agents to protect their reputation, the theory is not adaptable to many joint ventures. See Maija Halonen, A Theory of Joint Ownership, University of Bristol Department of Economics Discussion Paper Series (March 1997). See also, Gerald T. Garvey, Why Reputation Favors Joint Ventures over Vertical and Horizontal Integration: A Simple Model, 28 J. Econ. Behav. & Org. 387 (1995).

#### B. Joint Venture with 60%-40% Partners

Another type of joint venture is the form with the majority partner and the minority partner. Let us say the majority owns 60% and the minority owns 40%.

Without monitoring contracts, the majority partner will have the residual right and, of course, no unpredictability about exclusion. On the other hand, the minority partner will have only a minority shareholder's right granted by the corporation law. She has nearly 100% unpredictability about exclusion, even if she invests as much equity as 40%.

No rational person or company will make such a minority investment and risk being squeezed out. In fact, in every joint venture with majority and minority partners, monitoring contracts are made to modify the stock majority rule. Board members are usually shared proportionally, such as the majority has three board seats and the minority has two board seats, and the minority partner will have vetoes against certain important decisions, such as the issuing of new stock and the substantial borrowing of money.

With such monitoring contracts, the unpredictability about exclusion for the minority partner decreases, and likewise, the unpredictability about cooperation for the majority partner increases for two reasons. The majority partner looses some threat of exclusion, and the minority partner may use the vetoes arbitrarily.

When there is a difference in the level of unpredictability faced by the partners, they then will have differing investment incentives. The partner with greater unpredictability will tend to underinvest. One factor which can mitigate this underinvestment is bargaining power. If the partner with greater unpredictability holds more technology or know-how, this position increases her bargaining power and can close the gap in unpredictability. Otherwise, opportunistic behavior will ruin the cooperation as seen in many real world examples.

If the bargaining power of the managing partner is not strong enough to fill the unpredictability, then it is in her interest to have the majority position. An additional benefit of giving the managing partner the majority position is that it increases the expected payoff to the non-managing partner as well. This position is especially desirable when the

bargaining power of the non-managing partner is stronger than that of the managing partner.

C. Venture Business with Founder 60% - Venture Capitalist 40%

When a venture capitalist invests in a venture business, the first major issue is: Who takes the majority of equity? In either case, the venture capitalist and the founder often write a monitoring contract which is quite unusual in joint ventures. They share the board members inversely to the equity share. If the founder has 60% stock and the venture capitalist 40%, the latter will have three board members and the former will have two. Even without majority stock, if you have the majority board seats, you could control the company.

With such arrangements the venture capitalist, the minority shareholder, has not only vetoes but also control which can be used for monitoring the founder, the managing partner. The founder may be fired from the CEO position if the venture capitalist considers him to be ineffectual as the CEO. Therefore, under this structure the venture capitalist has no unpredictability about exclusion. In fact he has enough threat of exclusion to monitor the founder. The founder, on the other hand, has the unpredictability about exclusion.

In the venture business, the founder, as the managing partner, needs incentive to invest his human capital, which will be distorted by the unpredictability about exclusion. The venture capitalists, as the non-managing partner, needs monitoring schemes and, at the same time, has to avoid distorting incentive of the founder.

These arrangements look rational. The venture capitalist can monitor the founder. Both partners as substantial equity holders have incentive to cooperate to pursue the initial public offering. Therefore, the unpredictability about cooperation is minimized for both partners. Although there is a problem that the unpredictability about exclusion may distort the incentive of the founder, the unpredictability can be decreased by the reputational bond of the venture capitalist.

For the venture capitalist, investing and participating in the management of venture businesses is a repetitive transaction and the source of reputation--once tainted, fewer future founder will ask for her investment. The founder can rely on this reputational bond. On the other hand, the founder

usually transacts with a venture capitalist only once in her business life. The reputational mechanism is not reciprocal in eliminating unpredictability.

D. Venture Business with Venture Capitalist 60% - Founder 40%

As the business expands, the venture business needs more money. At a certain point, it is almost inevitable that the venture capitalist obtains the majority stock and the only remaining question is whether the venture capitalist will also hold the majority of the board seats.

In the first case, where the venture capitalist holds a majority of equity and board seats, the situation of unpredictability is close to the case of the joint venture with 60% and 40% partners. The difference is that the founder will fill the unpredictability about exclusion with reputational bond instead of bargaining power.

In the second case, where the venture capitalist holds majority equity but allows the founder a majority of board seats, another monitoring contract could be used. They could arrange that if the company fails to pay dividends, which indicates that the founder has poorly managed business, the venture capitalist shall be entitled to elect majority board seats (which is called "voting switch"). 42 With this monitoring contract, the venture capitalist has the threat of exclusion as the last resort and the founder has the minimum stable position. The possibility of being excluded from management is predictable.

#### V. Conclusion

Joint ventures and venture businesses are not only practically important but also theoretically intriguing. Theoretically, they are wonderful examples of the incomplete contract for economists and the relational contracts for legal scholars. Also as corporations, they are addressed by economists who propose the property rights approach.

Although the property rights approach introduces valuable insight into the contractual relationship, it tends to tell

 $<sup>^{42}</sup>$ See VCPON, supra note 24, at 7-34, 7-36.

<sup>&</sup>lt;sup>43</sup>See Alan Schwartz, Relational Contracts in the Courts: An Analysis of Incomplete Agreements and Judicial Strategies, 21 J. Legal Studies 271 (1992).

the story as all or nothing. The party who has ownership obtains the residual right and has incentive to invest, while the party who does not have ownership inevitably has distorted incentives to invest. 44 Much theoretical work regarding incomplete contract that has addressed either joint ventures or venture businesses tends to stress only the reputational mechanism to explain the practice. 45

Neither ownership nor reputation, however, tell us the whole story of the contractual organization. Two crucial elements are lacking in previous works. One is what type of relationship is required to make an incomplete contract feasible. The other is how to use the monitoring contract, which is distinguished from the contingent contract, to make such a relationship.

I suggest viewing the practice of joint ventures and venture businesses as a game. The purpose of the partners who join the contractual organization, either the joint venture or the venture business, is to maximize their own long-term interest through cooperation with other partners. The game is played between two partners who try to achieve cooperation in the face of unpredictable promises to cooperate.

Unpredictability is the key to this game. There are two different types of unpredictability. One concerns exclusion and the other concerns cooperation. Both will distort the incentive to cooperate. Therefore, a partner must consider not only how to decrease her own unpredictability but also how to decrease her fellow partner's unpredictability in order to generate the necessary synergy.

Methods to decrease the unpredictability are limited. I defined them as contingent contracts, bargaining power, reputational bond, equity, and monitoring contracts. The degree to which unpredictability can be reduced either by contingent contracts or by bargaining power and reputational bond is fixed before the game starts. Therefore, the game is on how to use equity and monitoring contracts to generate cooperation.

Use of equity and the monitoring contract, which I called the threat of exclusion, is a scarce resource. The threat of exclusion works as a monitor for a partner, while it will

<sup>&</sup>lt;sup>44</sup>Grossman & Hart, supra note 3, at 691, 716.

 $<sup>^{45}\</sup>mathrm{See}$  Garvey, supra note 41, at 387; Halonen, supra note 41, at 1.

increase the unpredictability about control for another partner. A decrease in the unpredictability about exclusion for the minority partner by giving her vetoes, increases the unpredictability about cooperation for the majority partner. Therefore, the game is how to share the threat of exclusion for achieving the optimal allocation of unpredictability.

Comparison between the practice of joint ventures and that of venture businesses gives us insight into the game. Although they share the basic characteristics there are curious differences in their practices, especially in the combination of equity and monitoring contracts. These practices show us how the partners seek the optimal allocation of unpredictability by sharing the threat of exclusion given their relationship.

Although the game of the contractual organization is too complicated for the current game theory to produce a closed-form solution, viewing the practice in the contractual organization as a game will motivate an explanation of the practice and promote optimal business planning.