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SOME COMMENTS ON JOINT VENTURES AND THEIR PROSPECTS IN THE SOVIET UNION

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The 1990's promise to be a continuation, if not amplification, of the technological and market turbulence of the 1980's. To meet these challenges, many corporations are seeking to master new technologies, to shift out of declining industries into growing ones, and to learn how to sell and buy in unknown markets. Yet, these challenges are often past the capabilities of even the largest firms in the world. It is because of this strain on corporate capabilities that many managers are looking toward the use of joint ventures and cooperation with partner firms as the solution.

These challenges are not felt only among firms located in the capitalist countries. The reforms recently inaugurated in the Soviet Union are driven by similar technological forces and needs to understand and serve increasingly differentiated markets. Though the rigidity of the Soviet system no doubt exceeds that of the principal Western economies, the rapidity by which these reforms have been announced and begun rivals the efforts witnessed in any other country.(1)

It is all the more interesting that many of the measures proposed in the Soviet Union are the same solutions being tried in the capitalist industrial nations in response to the above trends. From a Western point of view, one of the more striking changes has been the Soviet Union's willingness to permit foreign investment in the form of joint ventures. This openness has already attracted considerable scrutiny by non-Soviet firms, if not actual investment.

In analyzing joint ventures between the East and West, it is easy to focus on the problems of conducting business at the juncture where different economic and political systems meet. But the obsession with concentrating on these issues often obscures a very simple point. Many of the problems in East-West business differ not in kind, but only in degree from those found in the West.

The following comments are directed, therefore, toward sorting out the characteristics and problems of joint ventures in general from the specific issues that arise in their use in an East-West context. We begin by looking at motives for joint ventures. Then, we turn to data on how long they last. The findings of recent work on the causes of early terminations are summarized. Finally, we turn to the implications of this analysis for joint ventures in the Soviet Union.

The analysis below begins from the observation that a joint venture is cooperation within a competitive context. It is foolish to focus on either the cooperative or conflictual motives in the absence of the other. Indeed, as we will discuss, there is good evidence that competitiveness among the partners is a threat to the success of the venture.

MOTIVES TO JOINT VENTURES

Narrowly defined, a joint venture occurs when two or more firms pool a portion of their resources within a common legal organization. Conceptually, a joint venture is a selection among alternative modes by which two or more firms can transact. Thus, a theory of joint ventures must explain why this particular mode of transacting is chosen over such alternatives as acquisition, supply contract, licensing, or spot market purchases.

There are many reasons given for the choice of joint ventures. They range from the benefits of sharing risk or of exploiting economies of scale and size to the exchange of technologies and differential abilities. In many cases, they are promoted by governments who stipulate shared ownership as the only channel by which to invest in a country.

Joint ventures have an attractive quality in a period of turbulence, for they often serve to reduce or exploit the variance of the market. They reduce variance by stabilizing competition, especially in industries which are marred by excess capacity. Of special interest, they also can be designed as windows on new capabilities and opportunities. When events look promising, one of the partners exercises an option to buy the venture; the other partner walks away with the capital gains. It is this latter use of joint

ventures as options on new developments which, as we will argue, most clearly differentiates their use in the West from that in the Soviet Union.

FEAR

From the long list of reasons which are often given for the use of joint ventures, three fundamental causes can be extracted: fear, profit, and learning.(2) The fear explanation, which is usually labelled as "transaction cost theory", can be boiled down to the following. Whenever two firms transact on a long term basis, problems arise from the difficulty of setting future prices, guaranteeing quality and delivery, and safeguarding technological and strategic resources.

In order to reduce the negotiating (or "haggling") around these issues, contracts can be designed which set pricing rules and ways to monitor quality and technological leakage. In the event of disagreement, clauses regulate the conditions of adjudication and redress.

No matter how well contracts are designed, they may, however, fail to provide effective guarantees. The necessity of stipulating contractual conditions increases, of course, with the complexity of the transaction and the difficulty of observation of behavior. Contractual clauses regulating the development process are particularly troublesome in writing and enforcing. A supplier which gives a low price <u>initially</u> may claim unexpected costs in developing a new process. The fears in relying on an outside supplier increase especially when the buyer must design around the specifications of the sourced component and is, thus, precariously dependent upon the goodwill in the relationship.

For the negotiating parties, there are, then, a few alternatives. One is not to transact at all.(3) The business opportunity is simply allowed to pass. Another alternative is to bring the transaction inside the firm. Fearing a dependence on an outside supplier, a firm may develop an internal source or acquire another company.(4) But internal production or acquisitions are not always possible. The investment may be too large relative to the amount required.

Consider, for example, the case where IBM is a supplier of a critical component. It is not unusual that IBM's scale provides significant cost savings in production. And even if there is fear that once the contract is

signed, future prices might rise, it is unlikely that the acquisition of IBM would be possible.

A joint venture is frequently seen as a solution to this dilemma. By requiring mutual commitment of investment, it provides incentives for both parties to perform according to their obligations. An analogy, which is well-understood in the context of broader East-West relations, is the principle of nuclear deterence, whereby stability is maintained by holding both sides "hostage". Similarly, a joint venture holds each others' investment vulnerable to loss in the case of breach of contract or poor performance.

It is not hard to find examples of "mutual hostage positions" in joint ventures. In pharmaceuticals, a few joint ventures have been between international companies. Sometimes, mirror joint ventures are established in each other's countries, or in each other's principal product markets. Poor cooperation by a partner in one of the ventures can, thus, be reciprocated by the other partner in the mirror investment.

PROFIT

Another reason to joint venture arises not principally out of fear, but out of the pursuit of profit. Increased profitability can be gained by two routes. First, joint ventures between firms in an oligopoly can stabilize competition and improve industry returns. There is considerable empirical research which finds that joint ventures, in fact, often serve this purpose. And if we consider some recent joint ventures in the power generation business, chemicals, and autos, aspects of oligopolistic cooperation are clearly present.

Enhanced profitability can also be derived from a second route through the reduction of costs or the creation of new products and technologies. By reducing costs or developing new innovations, joint ventures can influence the competitive positioning of the partners in their industries. For example, the tie-up between General Motors and its Korean partner (in which it has a minority investment) facilitiates the export of low-cost vehicles from Korea through a well-entrenched distribution network in the United States. But the cooperation between the two companies also serves to slow the penetration of untamed Japanese competitors who are seeking to upgrade their auto lines

into higher segments on the basis of profits earned on their commodity vehicle sales.

Of course, fear and profit are not mutually exclusive. Many of the concerns noted earlier are also relevant when firms cooperate in order to improve their strategic positioning. Two firms can cooperate by contract, by merging, or by frequent lunches between the top management. Yet, if the cooperation entails the revealing of secrets, the transfer of technologies, or the sharing of brand labels, the fear of the misuse of these assets will drive the partners to seek ways to enforce compliance with the agreement. Thus, even in the happy pursuit of profit, fear is an important element in determining why joint ventures are used over other means of cooperation.

ORGANIZATIONAL LEARNING

Amid the dour discussion on the motivation of fear to cooperate, it is important to balance this perspective by considering the role of joint ventures in creating and transferring knowledge among firms. This explanation views joint ventures as a means by which firms learn new, or seek to retain old capabilities. Sharing knowledge is especially important in ventures between firms from different industries who seek to pool their distinct competencies.

An example is the venture between Honeywell and Ericsson in the development of a telecommunications office switch for the American market. Honeywell had considerable in-house expertise regarding the software features desired by the end user, as well as regarding the ability to run a development facility in the United States. Ericsson, in turn, had the switch technology and several years of experience in the international development and sales of the product. The development efforts resulted in a product which is fully adapted to the American market.

Of course, knowledge can be transferred by means other than a joint venture, such as through a license or outright sale. Once again, then, we are confronted with understanding why a venture is a better way to transfer some kinds of knowledge. However, the choice in this case may not be driven by fear but by the difficulty of transferring knowledge which is organizational in character. One reason why joint ventures are commonly used among

firms in international markets is, in fact, to exchange the distinctive managerial skills of countries. This issue is of particular importance to the ventures used in Eastern Europe, for they frequently are vehicles by which managerial and organizational skills are transferred.

HOW OFTEN ARE THEY USED?

Given the wide reasons why joint ventures occur, it is important to consider the evidence on the frequency of their use. There is little data which provides a breakdown of ventures versus all other alternatives. We know from several studies that they occur more frequently in certain industries: basic chemicals, petroleum, and mining.(5) They are uncommon in textiles, agricultural chemicals and paint, and non-electric machinery.

An interesting way to gain some insight into the prevalence of joint ventures in different industries is to look at data on foreign entry into a country. In Table 1, data is presented which compares joint ventures, acquisitions, and start-up wholly-owned investments (greenfield) of non-American companies investing in the United States.(6) Acquisitions are the most common mode of entry. This finding is in accordance with earlier studies which showed that American firms going overseas rely upon acquisitions in the majority of their entries.

This data is not, however, in agreement with the findings described above regarding industry patterns in joint ventures. Rather, joint ventures appear to be extremely high in electrical equipment and transportation, along with petroleum. Acquisitions predominate in services, mining, and mature industries. This difference can be attributed largely to Japanese companies who, until this past year, have relied heavily upon joint ventures and greenfield investments as their dominant mode of entry.

In the studies which I and colleagues have done, a few factors drive the choice of among entries.(7) The most important factor is the relative size of the firms. Large firms rely more heavily on acquisitions, for they have the capital and resources to manage the acquired companies. The larger the size of the investment, the more joint ventures are encouraged.
Technology is also a factor. For American companies in high technology industries, full ownership is encouraged, presumably to protect their R&D

investments. For Euopean and Japanese companies investing in American high growth and technology industries, joint ventures are more likely, probably reflecting efforts to source American technology for use elsewhere in the world. Thus, whereas fear over the loss of technology seems to drive American companies to prefer wholly-owned operations, competitive positioning and learning seems to motivate the European and Japanese investments in the United States.

From Table 1, it can be seen how important is the willingness to permit equity investments in the Soviet Union. Investing in a foreign country is usually accompanied by considerable costs in developing distribution channels and establishing reputations with customers, ministries, and suppliers. No wonder that acquisitions are a preferred means by which to enter developed countries. Yet, as it is very unlikely to imagine acquisitions being allowed at any time in the near future in the Soviet Union, joint ventures can play an especially vital role in the expansion of East-West trade.

HOW LONG DO THEY LAST?

In the popular press, there has been considerable emphasis paid to joint ventures as heralding a new era of cooperation and strategic alliances. To a certain extent, these observations are probably valid for a few industries, especially those which are emergent or impacted by the application of digital and bio-technologies. They also pertain to industries where international competition is forcing national firms to cooperate with foreign partners.

Yet, as the above discussion on motives suggested, cooperation clearly occurs within a competitive context. Not only does a joint venture face the usual competition of the market, but it also is caught in the conflict between the partners. As a result, ventures are unusually fragile.

Some insight into this fragility can be gained from Table 2. This table gives hazard rates for a sample of 92 manufacturing joint ventures located in the United States.(8) A hazard rate is the ratio of those ventures which terminated during a year over those ventures at risk. The number at risk is simply the initial number of joint ventures (i.e., 92) minus those which

terminated earlier and minus those which are still alive but have not yet reached the relevant age.

As can be seen, the hazard rates rise dramatically at age 3 and stay elevated during the subsequent years. Of course, it can be argued that these ventures carry "fuses", and are planned to terminate. Whereas fuses are common, they are rarely set to begin the third year.

A comparison of how the ventures terminate also is of interest. As can be seen, a significantly higher number terminate by acquisitions versus dissolution. Dissolution also seems to peak in the earlier years, whereas acquisition remains steady through the period.

REASONS FOR THEIR TERMINATION

Using the above data, I have been able to investigate the factors which lead to earlier terminations. In this work, a distinction is made between dissolution and acquisition. Dissolutions represent clearly a business failure on the one hand, but also can reflect a fundamental conflict among the partners. Acquisitions suggest that one of the parties or an outside party places a higher value on the venture. It is less a statement about business failure or conflict than differences in valuation.

To test some hypotheses on the causes of termination, I applied a hazard model to the data. A hazard model has been most commonly used in medical studies. These studies ask, for example, how smoking increases or decreases the likelihood of cancer. A similar approach can be made to the study of joint ventures where we ask how the division of equity shares, for example, influences the rapidity by which the ventures terminate. Note that it is assumed that people eventually die of some cause and that ventures eventually terminate. Rather what is being estimated is how much certain factors speed up the process.

Based on this approach, some interesting statements can be made. (9) Acquisitions are more likely to occur under two kinds of industry conditions: few competitors and unexpected growth. In concentrated industries (i.e., industries where a few firms dominate), joint ventures often serve two functions. One is to restrict output and, thus, avoid price wars.

The second function is to allow the continued participation of a firm that can no longer go it alone in the industry, but is not willing to divest entirely.

The Asea Brown Boveri venture with Westinghouse is a good example. The industry is concentrated and mature, and some consolidation is inevitable. Therefore, in the case of termination of the venture, it benefits the industry for one of the parties to acquire the operation rather than for both parties to invest separately in further plant capacity. But more interestingly, the venture contract gives ABB a call option to buy the venture and and Westinghouse a put option to sell it. The joint venture is, then, a probable divestiture on the part of Westinghouse, which has consented to the agreement either because it cannot commit to divest or it provides a hand-holding service until ABB can run the US operations alone.

The option aspect of a joint venture is also apparent in considering the effect of unexpected growth. A statistical analysis of the data shows that acquisitions are more likely to occur when an industry does suddenly better than its historical average. Such a relationship shows that joint ventures are commonly used as options in new markets. Once the business looks promising, then one of the parties acquires the venture and the other party walks away with capital gains and profit.

The analysis of dissolutions presents a radically different profile. A primary deterrent in dissolution is whether or not the parties have other business agreements. Like our earlier discussion on mutual hostage positions, the evidence shows that the ventures are more stable if the threat of dissolution is deterred by the possible impact on other relationships. Stability, in other words, is stronger between partners who have a prior history.

Dissolution is also less likely for joint ventures which have R&D activities and occur in industries which have expenditures for technology. This finding suggests that ventures which appear to be motivated by the creation of new knowledge or the transfer of skills are less vulnerable to rivalry. But the closer the venture comes to serving the market, the more the rivalry increases.

In summary, the results on joint venture termination point to two fundamental properties. First, ventures are often options to divest or to

expand depending on the market. Second, their stability is strongly affected by the familiarity and commitment of the partners.

JOINT VENTURES IN EAST-WEST TRADE

It is important to keep the above points in mind when turning to the question of the use of ventures in East-West trade. In examining the use of joint ventures as a means to invest in the Soviet Union, attention is usually focused on the variability of the political context and the bureaucratic problems associated in dealing with state trade organizations and the related ministries. Recent conversations I have had with business people who have sought and, sometimes, succeeded in setting up joint ventures in the Soviet Union reiterate the conventional wisdom regarding the importance of identifying the right ministry, knowing their agenda, and providing sufficient incentives.

However, rather than concentrate on these problems, I will explain instead why joint ventures in the Soviet Union are likely to have better survival records than suggested by the data in Table 2. It should be pointed out first that the introduction of joint ventures is not simply substituting previous barter trade by investments. The permission to allow foreign companies to own and control the use of transferred technologies and products has widened substantially the attractiveness of the Soviet Union as a business location. For joint ventures will mitigate the fear of technological leaks and provide greater possibilities to control product quality at the plant level.

In previous work, I have emphasized that Western firms will trade with the East, and, for that matter, Eastern firms with the West, only if appropriate mechanisms are created by which peformance on a contract can be guaranteed and enforced.(10) The Soviet Union has historically tried to provide such guarantees by creating impartial bodies of ajudication in the cases of dispute. But even though these bodies have won a reputation for fairness, legal adjudication in any business environment -- capitalist or socialist -- cannot alone provide adequate incentives for performance on contracts involving, in particular, technologies and quality production.

In the absence of allowing foreign direct investment, Western firms either will choose not to trade with the Eastern block or will seek contractual

guarantees which closely replicate the properties inherent in direct ownership. There is some evidence that co-production agreements, for example, tend to replicate equity contracts. To return again to the incentive of fear and hostages, co-production renders both parties hostage to the delivery of the components of the other. In East European countries where joint ventures are allowed, co-production is used less. (See Table 3) Moreover, co-production is often used for the more technologically-sophisticated products.

With the opening of the Soviet Union to joint ventures, Western firms will, thus, be more interested in the transfer of technology -- where legally possible -- and will also rely less on some kinds of contracts which were prevalent before. But to encourage an active use of joint ventures, the Soviet Union must also establish strong provisions which diminish the threat of technological leakage and poor quality(11). The reputation of fairness in legal adjudication is not sufficient.

The only solution is to permit adequate managerial control by the Western party over the operation of the venture itself. The recent relaxation of equity restrictions is a move in this direction by permitting the Western party to hold a majority share. The tolerance of higher foreign ownership, coupled with the discussion over broader legal guarantees regarding technological property, clearly reflect the Soviet Union's recognition that without adequate mechanisms of control, the flow of investments and the transfer of technology will be impeded.

Despite the difficulties in gaining and exercising such control in a country where foreign investment is unknown and bureaucratic intervention is common, there is strong reason to suspect that ventures in the Soviet Union will be more stable. One simple reason is that business failure is unlikely, either because the internal market is guaranteed or because, in the case of exporting ventures, bankruptcy -- at least until recently -- is not possible. But another important reason has been the Soviet emphasis upon dealing with proven parties. While such a policy undoubtedly has had unfortunate effects in closing the market to potentially valuable partners, it also creates an environment of mutual dependence and reciprocity. As in the West, ventures which are embedded in a wider relationship will prove to be more stable.

But, of course, stability as a goal has its costs. It precludes new partnerships and discourages higher risk undertakings. If joint ventures are

also to be used as options on potential market and technological developments, a radical rethinking of the Soviet emphasis on stability is required.

Though the recent discussion on commercializing Soviet technology is promising, the role of joint ventures in encouraging investments in risky projects appears to be neglected. Rather, the Soviet Union's policy is to invite foreign bidding to participate in investments as foreseen by the annual and 5-year plans. For 1989-1990 and the 13th Five Year Plan, some 320 projects are open to foreign participation.(12)

While the invitation for foreign bidding represents a radical change in policy, it is a far cry from utilizing the broader potential of joint ventures to encourage cooperation in risky ventures. To return to our initial point on the attractiveness of joint ventures in times of turbulence, joint cooperation often provides the opportunity to share risks and knowledge in order to build a window on emerging technologies. For this kind of investment, high variance is even desirable if there are investments in place which serve as platforms for expansion if the technology proves to be valuable.

As long as variance is considered to be anathema to Soviet planning, ventures which are essentially options on future developments are not possible. A broader program has yet to be outlined that would permit joint ventures to tap into the entrepreneurial potential of its vast engineering and scientific resources. But the lack of such a program points at a set of issues which extend far past the policy permitting Western equity participation in the economy of the Soviet Union and which lie, ultimately, at the heart of the challenges facing the new reforms.

FOOTNOTES

(1) See Bisignani, 1988.

(2) These points are examined at length in Kogut, 1988a, where extensive references to the literature may be found.

(3) An interesting number would be the calculation of how much trade is lost between the East and West due to the inadequacies of contracts and the absence of alternatives.

(4) If one looks at trends in the Soviet Union and the Eastern European countries, a similar solution to the difficulty of procuring supplies has been to increase internal investment in the manufacture of components and machinery.

(5) See, in particular, Berg and Friedman, 1978.

(6) Table is taken from Kogut and Singh, 1988b.

(7) See Caves and Mehra, 1986, and Kogut and Singh, 1988a and 1988b, for examples.

(8) Table is from Kogut, 1988b.

(9) The following summarizes the analyses given in Kogut, 1988b and 1988c.

(10) See Kogut, 1986, as well as the insightful paper of Parsons, 1985.

(11) The attractiveness of joint ventures will also heavily depend on the ability to repatriate profits, an ability which will be strongly influenced by the availability of commercial credit. See Boffito, 1988, for his interesting comments on this subject.

(12) Cited in the comments of V. A. Mikhailov, Deputy Chairman of the State Committee for Science and Technology, made at the MIT-IRI sponsored conference "Managing the Globalization ofBusiness", held at Capri, October 28-29, 1988.

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Resource	18	35	2	55
Paper	3	26	5	34
Chemical	2	15	3	20
Petroleum	25	35	17	77
Rubber	3	3	2	8
Primary Metal	2	20	6	28
Metal Fabrication	2	8	4	14
Machinery	4	7	0	11
Electrical Equipment	24	14	13	51
Transportation	25	21	13	59
Instrumentation	10	3	10	23
Other	3	10	0	13
Communication	1	4	2	7
Wholesale	8	17	3	28
Financial Services	4	30	0	34
Other Services	12	25	5	42
Total	147	274	85	506

Age

	1	2	3	4	5	6	7	>7
Total Termination	5.4	9.2	15.2	10.4	13.3	11.8	16.6	35.
Dissolution	4.3	3.4	3.8	4.5	6.7	5.9	7.1	12.
Acquisition -	1.1	5.7	11.4	6.0	6.7	5.9	9.5	22.
Number at Risk**	92	87	79	67	60	51	42	31

which survive to that age.

** Number of initial joint ventures minus previous terminations and those still alive but younger than column age.

TABLE 3

Share of the Various Type of Contract in the Total Number of Industrial Co-operation Contracts, with Breakdown by Country (in %)

	Licensing	Buy-Back	Co-Production	Sub-Contract	Joint Venture	Joint Tender	Tripartite Agreement
Bulgaria	- -	- -	63.7	9.1	27.3	- -	- -
Hungary	2.6	1.3	44.7	9.2	17.1	5.2	19.7
Poland	22.2	24.1	37.0	3.8	1.9	7.4	3.7
GDR	- -	71.4	28.6	- -	- -	- -	- -
Romania	- -	3.6	14.3	7.2	67.9	- -	7.1
Czechoslov.	22.2	- -	11.1	- -	66.7	- -	- -
USSR	2.4	27.2	57.4	- -	8.6	3.9	0.8
TOTAL	6.1	17.4	45.2	3.8	16.9	4.2	6.4

Source: Economic Commission for Europe, EAST-WEST INDUSTRIAL COOPERATION, United Nations, New York, 1979.

Joint Ventures included both sales and production agreements. Joint tenders refer to the execution of an investment project by a western and eastern firm.

Tripartite agreement is the same as a joint tender, except that a third partner from a developing country is added.

(Figures derived from a sample of 314 contracts at end of September 1978.)