# The Prospects for Industrial Cooperation Between the United States and Japan

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#### Introduction

As part of an extensive research project on the competitiveness of US and Japanese firms in three key industries (automobiles, semiconductors and pharmaceuticals) the research team undertook an examination of what some consider to be the inverse of competition, the possibilities for cooperation between the US and Japanese industries and firms.

The series of questions that we asked was as follows: is there room for cooperation between US and Japanese companies and/or industries to further the cause of fair competition? Can the energy that is currently being put into breaking down barriers be usefully turned to building bridges?

The thinking behind industrial cooperation, as we termed it, is simple: if competition between US and Japanese industries is intense and highly politicized, perhaps there is a way for industries to bridge that competitive gap through information sharing, training, business alliances and other methods. Our definition of industrial cooperation is simply the conduct of transnational activities between firms, industries or industry associations of different national origin that have a common benefit for both sides or foster a collaborative atmosphere that will lead to future cooperation. Thus cooperation can be either a specific activity or a process with the goal of cooperation in mind.

Industry associations in each national industry, and also internationally, seemed to be the ideal agents for building cooperation between Japan and the US. Industry associations can

be agents of beneficial domestic collaboration between government and industry -- there are numerous examples of this in both countries -- so why not transnationally? We thus set out to study what kind of cooperation currently exists, to make some educated guesses about under what conditions cooperation could expand in the future, and to map the role industry associations play in all this.

# 1. The Configuration of Cooperation

Industrial cooperation relies on two main forces to prompt industries to action: politics and the marketplace. Cooperation is induced by governments (for example) through bilateral negotiated arrangements, informal guidance or collaborative projects. Cooperation is also configured by such key market exigencies as high development costs, global demand, marketing and other factors.

Cooperation's players are firms within the industry, governments, and the other category of business organization that serves as information gatherers and the above-mentioned agents for the overall national industry and the private sector at large, industry associations.

Following a series of interviews with industry analysts and market participants in both countries, as well as industry association representatives in Japan, some interesting themes about industrial cooperation as it is currently practiced in the two countries came to light.

Industrial cooperation in the US-Japan context can be seen as serving a variety of overlapping goals that serve both business and government interests. The primary four are:

- 1) Achieving good will -- accommodating aggressive demands, backing up promises with action. Example: following pledges of increased access to the domestic Japanese market, government and industry associations have jointly sponsored a series of business meetings between US and Japanese firms in the auto and semiconductor industries to encourage immediate business deals.
- 2) Lowering the high profile of industrial competition -- steering the discussions away from what is wrong between the two nations' industries to what is and can be done to make competition fairer. Example: As a consequence of the Structural Impediments Initiative (SII) series of negotiations, a US-Japan working group was set up to coordinate what kind of industry-to-industry cooperation should be encouraged in the auto industry.
- 3) Functional information exchange -- sharing accumulated, non-proprietary knowledge, mostly of a technical nature, which benefits all industry participants. Example: The exchange of necessary, generic (non-proprietary) information like regulatory requirements, environmental impact assessments, safety, and technical standards is recognized as an elemental and sensible form of cooperation that benefits all side. This kind of information exchange often takes place under the auspices of international industry organizations as well

as bilaterally (and sometimes trilaterally) between US, Japanese and European industry associations.

4) Global market advantage -- when the challenges of competing globally or pushing the technological envelope are too costly, transnational cooperation in the form of business alliances are the answer. Example: the long and growing list of US and Japanese firms that have linked forces in global auto manufacture and in chip development are testament that the logic of the market enhances transnational cooperation.

# 2. The Difficulties of Industrial Cooperation in the US-Japan Context

Cooperation between the US and Japan has been widely debated in Japan, spurred on by a 1992 article in <u>Bungei Shinju</u> by Sony founder Akio Morita. Morita proposed that managing Japan's fractious relations with its trading partners would be improved by the adoption of what he termed "kyosei," a term difficult to translate exactly into English, but which roughly means symbiosis. The notion of kyosei quickly became a call for Japanese industries to become global partners with the world, although Morita was actually suggesting that Japanese firms behave more like their Western (read American) counterparts in certain key areas such as emphasizing profitability and becoming more responsive to consumers and shareholders. Around the same time the Ministry of Trade and Industry (MITI) began a campaign to encourage industries and industry associations to implement new bilateral programs under the rubric of global partnership. One of our Japanese interview subjects stated that MITI often submits the concept and the industry associations implement and

create the programs that fit. This apparently was so with the handling of the global partnership theme.

Stripped of its discussion of globally assimilated business practices, global partnership could be perceived as a rather obvious inversion of the kind of industrial aid and assistance the US gave Japan following World War II. The notion has inherent problems, not the least of which is that the American side could perceive Japanese efforts as condescending and an indirect approach to what seem to be relatively concrete problems of market share and access concerning the Japanese market.

From our perspective, since the power equation between the two countries is so much more complex than that of the immediate post-war years, the likelihood of a full scale Marshall Plan of industrial information flowing from Japan to the United States is highly unlikely. This would require a great deal of idealism on the part of the Japanese and much patriotically untainted opportunism on the part of Americans to put into place, and neither side is able to proceed on that basis. Cooperation has to originate from both sides, and probably needs a more natural flow of give and take to succeed.

Two basic asymmetries make the quest for cooperation more complex. First, as well-noted, the US has yet to forge an effective government/business alliance of the kind seen in Japan (and to a lesser extent in Europe.) Second, industry and peak associations, key repositories

and advocates of private sector interests, are highly organized in Japan while in the US their roles are shifting, complex and less structured.

In the United States relations between the public and private domains are generally considered to be adversarial. The private sector has an unprecedented amount of autonomy, but there is also a deep, historically-based mistrust about business, particularly large corporations and conglomerates, held by the general public. Government's role has traditionally been to safeguard the public interest in the face of business' tendencies toward corruption and greed through supervision, regulation and legislative activity. The presumptions against business are best exemplified by antitrust policy in the United States, which actually has served as a model for the antitrust regime in Japan as well.

It is hard to find examples of public/private cooperation in the United States. Examining the few cases of successful cooperation, one analyst has determined that it takes a clearly efficient and fair power-sharing arrangement for a private/public endeavor to work in the United States, but a number of other conditions must be satisfied as well.<sup>2</sup> These conditions include a sense of crisis, the opportunity of a positive-sum game, a coherent strategy implemented by first-rate talent, high-percentage initial steps, an identifiable

<sup>&</sup>lt;sup>1</sup> McCraw, Thomas K. "Business and Government: The Origins of the Adversary Relationship," <u>California Management Review</u>, Volume XXVI, Winter 1984, pp. 33-52.

<sup>&</sup>lt;sup>2</sup> <u>Ibid</u>., McCraw, pp. 47-49.

measure of success other than profit, and some means of controlling the agenda and limiting the number of players.

As the two major US players do not collaborate in a smooth, continuous way, there is rarely an identifiable American side to cooperation. On the other hand, Japan's public/private partnership is characterized by much more information exchange, a collaborative atmosphere that James Abegglen famously labeled "Japan, Incorporated" and a powerful bureaucracy that can wield great formal and informal authority over the private sector.<sup>3</sup> Thus bilateral cooperation's base is clearly not a unified or simple one in terms of government and business and their interrelationships in each country.

There is a second distinct asymmetry. American and Japanese industry and peak associations function differently, although the general tasks they carry out are highly similar in both countries. Industry association activities are various, including: serving as a communications link between government & business; being a source of collective organization and action; undertaking product promotion; managing labor relations; supervising standard setting and data collection; supporting research and development;

See Johnson, Chalmers, MITI and the Japanese Miracle, 1982. Although the argument that MITI and the Ministry of Finance wield unassailable power over business and industry has long been debunked, Johnson's work illustrates specific examples of the extent of government intervention and authority, particularly the practices of administrative guidance and amakudari.

running economic services such as credit bureaus and insurance; educational services; administering conventions and conferences; running public relations.<sup>4</sup>

Japanese industry associations are knit together in a nearly all encompassing hierarchy that, at the top, is very often able to reconcile interests across industries. These organizations have the money and the people to back up the various tasks that need to be done. A recent GAO report confirms that Japanese industry associations are much more effective in achieving their goals than their US counterparts.<sup>5</sup> Although it would be incorrect to overstress the amount of information exchange that takes place across industries, we did discover that limited amounts of consultation between different Japanese industry associations has taken place concerning what kinds of cooperative practices are appropriate under the rubric of global partnership.

In contrast, US associations are disaggregated, frequently disaffected with the larger multiindustry national-level organizations, and have fewer resources to draw upon. Their "interindustry political relations looks a good deal messier" than Japan's.<sup>6</sup> American business is frequently mistrustful about the payoff of collaborative projects, particularly

<sup>&</sup>lt;sup>4</sup> Lynn, Leonard and McKeown, Timothy <u>Organizing Business</u> <u>Trade Associations in America and Japan</u>. Washington, DC: American Enterprise Institute, 1988, pp. 2-3.

General Accounting Office, "Competitiveness Issues in the Business Environment in the United States, Japan and Germany," August 1993, pp. 52-53.

<sup>&</sup>lt;sup>6</sup> Lynn and McKeown, p.83.

government/business cooperation. As one of our American respondents from the semiconductor industry remarked about the government/industry venture SEMATECH, "members in SEMATECH hold back and aren't wiling to share everything."

In sum, seemingly direct counterpart organizations in the US and Japan have rather different working relationships with government, and very different sets of resources to draw upon. These facts along with the genuinely different business environment seen in each country, (composed of differing government policies, legal and regulatory regimes, customs, financial systems, and corporate governance practices) makes the prospects for transnational industrial cooperation seem difficult indeed.

## 3. The Dangers of Cooperation

Ideally, transnational industrial cooperation achieves a measure of harmony, spreads understanding, cools down the politically-induced rhetoric and increases efficiency through information and technical exchange. There is a flipside to the positives, however. Cooperation can all too easily be perceived as meaning accommodation, concession, or collusion by either or both sides.

## Cooperation as Accommodation or Concession

Although cooperation between two sets of national industries is promoted as mainly a desire for increased good will on the part of government and industry association representatives on both sides, it can easily be construed as a series of accommodations and concessions; this is especially true in the case of US pressure on Japanese industry.

Accommodation is literally a reconciliation of differences -- making the atmospherics better, compromising, or adapting to come to an agreement. There is an implication of some free choice available on the part of the accommodating side. A more strained situation is represented by concession, the forced extraction of a settlement, which provides little opportunity for the acceding side to refuse or back away from cooperating. Both situations imply a lack of collaboration and consultation between parties.

In a very frank interview, one Japanese industry official said that the current atmosphere between the United States and Japan suggests that transnational cooperation is tacitly a series of Japanese concessions and compensation in reaction to US demands. He noted that this was above and beyond Japan's international obligations as a member of GATT. He added that Japan did not approach discussions with the US assuming a most favored nation trading (MFN) basis, that is, applying access arrangements with the US to all Japan's trading partners. Japan, he stated, "could not afford to give the same treatment to all countries."

Based on our interviews, we have concluded that if cooperation really means accommodation or concession to Japanese industries, then the cooperation by the Japanese side will continue to be characterized as:

grudgingly given -- always elicited at the insistence of outside forces or the government on behalf of outside forces;

carefully interpreted -- any and all meetings between the two countries and any and all business between them will be interpreted as for the specific purpose of diffusing US pressures; and

non-transferable -- cooperation of this kind will not be expandable to other industry areas and certainly not transferable to other countries.

The inherent danger in the accommodation/concession dynamic is that there is a point reached in which the Japanese industry feels that the required efforts are constant and excessive. Then a backlash or even a defection from the cooperative arrangement can occur. This is not a hypothetical consideration: the irritation level is already high in the Japanese auto industry where years of voluntary exports restraints have been followed by negotiated market share arrangement for US auto parts sales in Japan.

# Cooperation as Collusion

Collusion has two senses: on the part of each national industry and in a pairing of the two countries' industries against the rest of the world.

#### **Domestic Associations**

US anti-trust law, which also served as the model for Japan' anti-trust system which was setup following World War II, is supposed to prevent collusion, ie, concentrations of economic power that would be detrimental to free and fair competition. US law has traditionally been preoccupied with four areas of possible collusive behavior: price fixing, information sharing, standard setting (particularly deciding which firms meet the standards) and defining membership and providing services to members.<sup>7</sup> Persistent federal enforcement of statutory restrictions, as well as the threat of private lawsuits against industry association activity means US businesses act with a great deal of forethought and introspection in all the "gray areas" of collaborative industry activity.

In contrast, the enforcement of Japanese antitrust statutes has a spotty history. The government's supportive policies toward the kind of collaboration that theoretically violates anti-monopoly laws, in particular MITI's activities, have consistently worked against the enforcement mandate of the relatively weak Japan Fair Trade Commission (JFTC), although the JFTC has been particularly active in more recent years concerning the monitoring of antimonopoly activity by industry associations. Public/private consortia for technology development, such as the VLSI project of the late 1970s that supported the rise of the Japanese semiconductor industry, are the most well cited examples of government initiated cooperative projects.

<sup>&</sup>lt;sup>7</sup> Lynn and McKeown, p.46.

<sup>&</sup>lt;sup>8</sup> <u>Ibid</u>., pp. 44-45.

Yamamura, Kozo, "Joint Research and Antitrust: Japanese vs. American Strategies" in Hugh Patrick's <u>Japan High Technology</u>
<u>Industries: Lessons and Limitations of Industrial Policy</u>, Seattle:
University of Washington Press, 1986, pp.181-182.

Cartelization, in fact, frequently exists with explicit sanction from the JFTC. Japan has traditionally made exemptions for depression and rationalization cartels which were widely used during economic downturns like that of the oil shock aftermath in 1975. There have been extensive provisions for restructuring for depressed industries like textiles and steel.<sup>10</sup>

The dearth of private antitrust law suits in Japan and the sense that with MITI approval anti-competitive actions would not be prosecuted by the government made industry associations feel less vulnerable to antitrust restrictions than their American counterparts.<sup>11</sup>

That sense has undoubtedly diminished in recent years, along with a more active and powerful JFTC. Antitrust concerns were mentioned by each industry association official we interviewed. The Japanese Pharmaceutical Wholesalers Association was actually investigated by the JFTC in April 1992, which lead to a review of pricing and distribution systems and a major governmentally-mandated restructuring of the pharmaceutical industry. All the associations we interviewed pointed out that they had been subpoenaed by the US Fair Trade Commission for an investigation of Japanese keiretsu practices, and related the discomfort associated with the attention that legal action might bring to their activities. Each also said that they conscientiously followed anti-monopoly law guidelines, such as

Patrick, Hugh (ed.) <u>Pacific Basin Industries in Distress.</u> New York: Columbia University Press, 1991, pp. 424-432.

<sup>11</sup> Lynn and McKeown, p.50.

making sure legal counsel was present during association meetings, and taking care not to collect industry information from their membership.

Ironically, as Japan's approach has hardened, some softening of the US government's antitrust approach has been discernable in recent years, particularly regarding collective research and export trading arrangements within industries. The National Cooperative Research Act of 1984 and its amendment the National Cooperative Production Amendments of 1993 serve to reassure businesses that enter into joint research and joint ventures for production that there is a process for Justice Department approval. The reasoning behind these acts is that strategic alliances and technology sharing require eliminating the uncertainties of present anti-trust policy.

Intra-industry cooperation and collaboration with government is something that some agencies within the Clinton administration have emphasized, a strong example being the recent announcement of the "new car" initiative: a joint research and development effort using the technology of formerly defense-oriented government facilities and the engineering skills of the Big Three automakers. But only the Justice Department's Anti-trust Division can really sanction collaboration as non-collusive by removing (or making the possibility more remote) of prosecution. Unfortunately, even though the Clinton administration seems to be supporting collaborative intra-industry projects, it is not able to guarantee that policy will continue after this administration's tenure is up. The interpretation of anti-trust policies can vary highly from administration to administration, and the possibility of private lawsuits

remain a very real threat to collaborative activity. These realities continue to create a large disincentive for firms to become involved in long term collaborative projects.<sup>12</sup>

#### **Bi-National Collusion**

Awareness of anti-trust issues as they apply to incidents of purely Japanese or American collusion is high, but the impact of the US and Japan's collaborative effort on third countries or markets is not often raised as an issue. In fact, our research indicates that bilateral concerns rarely raise the issue of multilateral considerations among industry participants and industry associations.

Both American and Japanese industry respondents spoke of third party competition, such as South Korea's rapid ascent in semiconductor manufacturing. But when asked if association to association meetings could turn into trilateral or multilateral ones, Japanese industry association representatives suggested that an agenda would be difficult to determine, that the meetings themselves would be hard to coordinate, and that anti-trust concerns would be activated.

Third parties to bilateral concerns were only seen in this context of the non-transferability of arrangements. Europe's demands for market access and preferential arrangements with Japan were the most frequently mentioned examples of how US demands were not considered to apply outside the bilateral relationship.

<sup>&</sup>lt;sup>12</sup> Yamamura, Kozo, pp.181-182.

Interestingly, the Clinton administration, on paper at least, holds the opposite view: one of the features of its July 1993 bilateral framework for negotiations with Japan is achieving structural and sector specific concessions that will apply to all Japan's trading partners; in other words, negotiations explicitly on an MFN basis.

The impact that bilateral arrangements would have on other markets may be a case of managing perceptions about the exclusivity of these agreements. But to our minds, the lack of awareness on this issue, particularly on the part of Japan, is highly problematic. When working out bilateral cooperation care needs to be taken to avoid anti-competitive or cartellike formation that would encroach on US and Japanese antitrust laws. But even more importantly, the potentially threatening nature of a US-Japan partnership in a key industry to developing countries and other third parties should be considered and addressed.

### 4. Interview and Survey Results

#### **Interview Results**

Cooperation as currently practiced by industry associations involves four categories of activity: information exchange (plant visits, technical consultations); business meetings (government or industry sponsored arrangements conducive to deal making); business alliances (private sector joint ventures of different kinds); and interaction with counterpart organizations internationally.

Japanese industry associations feel they are firmly engaged in cooperative activity. At the time of our interviews in Japan (November 1992) the activities of each of the four industry associations we talked to differed somewhat, but all were aware of the rhetoric of global partnership stemming from the Japanese government and the explicit need to expand their activities with US counterparts.

The major themes running through our interviews were various. Government-induced cooperation was frequently mentioned; the auto and semiconductor industry associations stated that government suggestions explicitly help set their cooperation agenda. There were complaints from these industries, however, that government-sponsored industry discussions actually caused industry representatives to duplicate efforts already underway with their direct industry counterparts in the US. This seemed particularly true in the case of the automobile industry.

The lack of acknowledgement by the U.S. for ongoing cooperative activities by the Japanese was also a frequent complaint. The sheer amount of consultations described by each association, both bilateral and multilateral, imply that Japanese industry associations in general have strong networks with their global counterparts as well as with the international umbrella organizations that exist. This seems to be a prime method of fostering the functional sharing of technical information and know-how, a goal that every association claimed it was dedicated to.

The establishment of one-on-one meetings was considered a chief vehicle of cooperation by both the automobile and semiconductor industries. The primary purpose of these large business meetings is to allow US and Japanese firms to gain exposure to each other and cut deals. Interestingly, at the time of our interviews neither Japanese association conducted an assessment of the success of these matchmaking sessions, although in the case of automobiles the US counterpart association did conduct a study of its results.

Frustration and confusion concerning US antitrust laws and their role in thwarting cooperation were easily discernible in the interviews. Complaints about the vagueness of the laws, the lack of a coherent rationale for exemptions, and questions about how US statutes could be applicable to domestic Japanese activity were voiced.

Also interesting was what was not mentioned. No one in Japan brought up the issue of reciprocity from the U.S. side in exchange for Japanese cooperative efforts. Why exactly this is so can only be speculated about. If may be due to the historical legacy of US-Japan relations discussed previously in this section -- a sense that the US has already given technical and managerial assistance as well as free access to market share, and it is Japan's turn to give. More likely, however, is that the lack of an explicit quid pro quo from the Japanese side makes reciprocity less of an issue. There is an acknowledged dynamic between the two countries consisting of the US pushing and Japan responding with nothing to request in return.

CHECKLIST OF JAPANESE INDUSTRY ASSOCIATION ACTIVITIES

ACTIVITY	AUTOS	SEMI	PHARMS
tours of Japanese facilities	n	·y	n*
technological exchanges	n	y	$\mathbf{n}_{\perp}$
one on one meetings	y	y	n
membership in international umbrella organization	у	n/a	у
regular interaction with US counterpart organization	у	у	у
bilateral information exchange (non-govt)	у	у	у
participation in studies (non-govt)	у	у	у
non-Japanese membership	n	у	у

<sup>\*</sup>planned for 1993

# **Survey Results**

From July to September 1993 the research team conducted surveys of the top five to ten firms in the automobile, semiconductor and pharmaceutical industries in both the US and Japan, for a total field of 49 corporate responses. We also collected survey responses from a number of industry experts in both countries. Respondents were asked two tactical questions about cooperation: specifically, government involvement in competitiveness and the role of alliances.

We asked respondents to rate their firms on a scale of one to seven (one being the highest) regarding the following statement:

This company champions government policies that enhance the competitiveness of this industry.<sup>13</sup>

Building on our observations about the nature of business/government relations in each country, we would assume that Japan's corporations would score themselves higher than their US counterparts on this question. Indeed, the opposite occurred in each of the three industries, and our expert rankings strongly confirmed the view that Japanese companies do not strongly support government competitive moves compared with their US competition.

Of the three industries the automobile companies seemed the most likely to support government policies, while the pharmaceutical companies were less likely to do so. Japanese pharmaceutical companies were, in fact, the least supportive of government policy in comparison to the other industries queried.

<sup>&</sup>lt;sup>13</sup> Experts were asked to rank Japanese companies in comparison to their global competition.

Question: Championing government policies on competitiveness

	MEAN SCORE	
Automobiles		
Experts	4.0	
Japan	2.8	
UŜ	2.0	
Semiconductors		
Experts	4.5	
Japan	2.6	
UŜ	1.7	
Pharmaceuticals		
Experts	6	
Japan	4.3	
UŜ	2.2	
All Industries		
Experts	4.8	
Japan	3.2	
UŜ	1.9	
	,	

Following up on this indicator of US business interest in government policy, we posed the issue point blank in our interviews with American industry representatives: how can government best assist competitiveness abroad? The answers were very consistent: a request for government to stay out except in selected, strategic situations like continuing to push for market access in Japan for US products.

Not surprisingly, as an extension of the national health care debate, the US pharmaceutical companies expressed deep concern about new government policies undercutting their industry's competitiveness. "Listen to the industry's logic: pricing and profits equal R&D,"

said one pharmaceutical executive. "The less government involvement with the industry the better," said another. At the same time, pharmaceutical executives suggested that encouraging global standardization of regulations, such as approval processes, would help the industry.

Automobile executives discussed the role of government in a much less targeted fashion. "We need help gaining access to protected markets like Japan," said one automobile executive, maintaining that US sales in Japan would be possible if the openness of the US market was replicated in Japan. Another executive stressed that Washington could best help industry by controlling the budget deficit and otherwise keeping its fiscal house in order.

Queried on whether the 1992 semiconductor market access agreement had benefitted their companies' sales in Japan, all the US semiconductor representatives interviewed agreed that they had made progress thanks to that government intervention, and that continued efforts to change cultural resistance in Japan to foreign products were needed. "Keep the pressure up with Japan: more of the same," suggested a semiconductor executive. The increase in Japanese purchases are "mostly an accommodation, not necessarily a change of attitudes," said another. Few interviewees expressed much of an interest in government-led efforts such as SEMATECH, claiming that "it isn't really necessary for government to sponsor such a group." as one executive put it.

The second question asked concerned global alliances:

This company enters into alliances -- long term agreements between firms from different nations -- joint ventures, licenses, sales agreements, and supply agreements.

Clearly all three Japanese industries consider themselves active users of alliances, but this view is not as strongly held by expert opinion. US firms in automobiles and semiconductors think of themselves as less alliance-oriented, with the extreme case being the US automobile industry. In pharmaceuticals the opposite seems to hold true, with the US firms more fully exploiting global licensing arrangements and research opportunities. The expert opinion generally supported this assessment.

Question: Entering into Alliances

	<b>MEAN SCORE</b>
Automobiles	
Experts	3.5
Japan	1.4
UŠ	3.3
Semiconductors	
Experts	3
Japan	1.9
UŠ	2.5
Pharmaceuticals	
Experts	4.5
Japan	1.7
US	1.5
All Industries	
Experts	3.7

Japan 1.7 US 2.3

The view on the usefulness and future of business alliances as a mode of industry cooperation was strikingly similar among all respondents in both countries. Both association representatives and industry participants suggested that alliances were absolutely required by the cost of moving to the next stage of development in their industries, whether that next stage be a technological leap or a move to more globalized markets. "Due to the costs of developing new products, this is the only avenue left," stated one semiconductor executive. "For most companies the technological edge is gone that would provide the market share large enough to ensure profitability, so it has become a necessity."

On the other hand, the temporal nature of alliances stemming from the sheer opportunism they represent seemed clear to all. "Alliances are fine if you can guarantee that you are getting more out of it than the other guy," declared a semiconductor executive. One long term observer of Japanese pharmaceutical firms pointed out that joint ventures and other cooperative arrangements were not rewarding in the long term because even though companies might have the same goal "being they are Japanese and American they have completely incompatible ways of getting to [them]." The odd position of being both competitor and business partner also struck the executives as being difficult to maintain. "It's tough on managers because it is difficult to be considering a strategy vis-a-vis a

competitor in the morning in one area, and then sit down with them at the conference table in the afternoon to discuss business" said a semiconductor executive.

## 5. Conclusions: Heading Toward the Future

The various scenarios about the future of competition between the United States and Japan in the automobile, semiconductor and pharmaceutical industries present a the distinct possibility that there will be less competition and bilateral friction concerning automobiles and semiconductors and increased global competitiveness and possibly increased tensions in the pharmaceutical industry.

If this is indeed the case then there is a great deal of energy and thought being expended for perhaps less long term return than imagined by today's policy makers. Perhaps that is inevitable. In the here and now of US-Japan relations the Clinton administration's trade team is preoccupied with standing tough and achieving hard results from negotiations on autos and semiconductors among other areas. At the same time, Japanese government and business intensely searches for new methods of managing bilateral friction and diffusing US demands about trade in these industries. For Japan, transnational industrial cooperation seems to present one real, but difficult avenue for managing the bilateral debate.

In the short term cooperation will continue to mean (primarily Japanese) governmentinduced contacts such as one-on-one meetings, as well as the safe, non-controversial