

January 1993

Japanese Industrial Policy: What Is It, and Has It Worked

S. Linn Willams

Follow this and additional works at: <https://scholarlycommons.law.case.edu/cuslj>

 Part of the [Transnational Law Commons](#)

Recommended Citation

S. Linn Willams, *Japanese Industrial Policy: What Is It, and Has It Worked*, 19 Can.-U.S. L.J. 79 (1993)
Available at: <https://scholarlycommons.law.case.edu/cuslj/vol19/iss/12>

This Article is brought to you for free and open access by the Student Journals at Case Western Reserve University School of Law Scholarly Commons. It has been accepted for inclusion in Canada-United States Law Journal by an authorized administrator of Case Western Reserve University School of Law Scholarly Commons.

Japanese Industrial Policy: What Is It, and Has It Worked?

*S. Linn Williams**

In 1840, the first spike for building the B&O Railroad was to be driven, by coincidences, on the same day that the first shovel was to be turned for building the C&O Canal. President John Quincy Adams asked his advisers which event he should attend. He was advised to attend the opening of the canal, because that was where the government would undoubtedly stake its "industrial policy". John Carroll, of Virginia, had the honor of driving the first spike of the B&O Railroad.

John Carroll has a town in Virginia named after him — Carrollton. And John Quincy Adams has two towns in Massachusetts named after him and his "industrial policy" — "Quincy" and "Marblehead".

To a generation of Americans raised after the war, Japan has become identified with successful "industrial policy". This would have surprised Edwin Reischauer, one of America's leading experts on Japan and Ambassador there shortly after the war, when he wrote in 1951 that he doubted the Japanese economy could ever recover from the war because of "structural defects" in Japanese education and industrial organization.

It is also a surprise to me that Japan, rather than Europe, is driving the current debate in this country over an American "industrial policy", when European "industrial policy" is older, better understood and occurring in an environment more like our own. There are relatively few people who know much about Japanese industrial policy, including many who have written about it. Those who know something about it differ sharply in their perceptions of how well it has worked, and even of what it is, contributing to the haze of admiration, distaste and mystery that surrounds the subject.

To make the situation more confused, there are other agendas at play in the U.S. — protectionism and big government, to name two. And there is always the temptation to attribute something one does not understand to the peculiarities of Japanese "culture". Indeed, in order to keep foreigners at a distance, Japanese officials themselves reinforced until recently the notion that "Japan is different".

* Partner, Jones, Day, Reavis & Pogue, Washington, D.C. Former Deputy United States Trade Representative.

The following text was compiled from the transcript of the remarks made by Mr. Williams at the Conference.

I. INDUSTRIAL POLICY

“Industrial Policy” can cover a multitude of potential sins. The current literature favors a broad definition, although, if any policy affecting industry is an “industrial policy”, one does not leave out much.¹ I think the discussion of “Industrial Policy” would be more useful if the definition were restricted to something like “targeting”: the allocation of resources by the government to favored sectors, mostly as an expression of economic nationalism. To get a feel for the issue as it involves Japan, however, I think one has to use a broad definition. I shall discuss macroeconomic policies, sectoral policies and, what I call, structural policies.

Macroeconomic policies affect industries indiscriminately and indirectly. These include things like saving rates, interest rates, education and training, taxation and public infrastructure. Sectoral policies bestow special benefits on some industries and not others — including import restrictions, loans and loan guarantees, subsidies and government-funded research. Structural policies regulate, induce or tolerate private business practices and become imbedded in the ways in which businesses interact with one another and with the public. These include things like antitrust, investment and shareholders’ rights.

II. MACROECONOMIC POLICY

A. *What is it?*

Japanese macroeconomic policies have tended to support industrial production over private consumption in an effort to create an environment favorable to all industry. Those biases were most effective in the 1950s and 60s, when the government had maximum control over the economy. Although the government’s tools are substantially reduced, much of the government still has those biases and exercises them when it can.²

Japanese macroeconomic policy has had several components. The most important of which were keeping the public sector small, maintaining low taxes, taxing consumption rather than income, designing a financial system to get low-cost funds into banks and to industry, keeping interest rates low, and supporting industrial infrastructure over improved quality of life.

¹ A broad view of industrial policy also infers that Marx may have been right, and recent events are supposed to have proven that Marx was wrong.

² The recent “stimulus” packages primarily encourage industrial investment rather than private consumption, by propping up land and stock asset values.

Government Sector

- During the high-growth period of the 1950s and 60s, the government consumed only twenty percent of GNP (compared to thirty percent in the U.S.), freeing up resources for private sector growth and keeping the government from “crowding out” private investment during a period of serious capital shortage.
- For the past ten years, the public sector has consumed roughly thirty-three percent of GNP; about the same as in the U.S. Although there is pressure from business to reduce that percentage, it is unlikely to go down because an increasingly older population will need to be taken care of. The government has also run a surplus for ten-fifteen years, adding to overall national savings rather than subtracting from it, as in the U.S., but that trend may be changing after SII and recent “stimulus” budgets.

Tax Policy

- Japanese tax rates were low during the growth period of the 1950s and 60s. Interest on savings was not taxed until recently and is taxed now at a lower rate than other income; capital gains are still not taxed.
- Credits and special allowances, however, have been less generous in Japan than in other industrialized countries, including the U.S. Japanese corporate tax rates are currently higher than those in the U.S.³

Financial System

- When Japanese companies needed capital in the 1950s and 60s, they looked to banks because of the underdeveloped state of the equity and bond markets. Government policy directed private savings into bank accounts at low cost by limiting the alternatives and skewed bank loans away from the person sector by using the central bank’s discount rate.
- Financial controls have been substantially reduced, but not eliminated. Cash and bank deposits still account for a much higher percentage of personal assets in Japan than in the U.S. Although this is now probably attributable less to policy than to aversion to risk and debt and to high capital outlays required for housing and education.

³ The bias for production over consumption remains, however. When the government wanted money four years ago, it raised taxes on consumption, not income, and home mortgages and interest on personal debts have never been deductible.

Interest Rate Policy

- During the 1950s and 60s Japanese policy controlled interest rates at levels that may or may not have been lower than rates in other countries, but were lower than supply and demand in Japan would have decreed.
- International capital movements and interest rates have been largely deregulated, and it is an excess of savings over investment that has helped to keep interest rates generally low.

Education Policy

- The postwar educational system was developed to support the economic needs of industry. The greatest contrast with the U.S. is through high school. Japanese children go to school longer than American children; they study more science and math; and they graduate with a high standard of literacy and technical competence. On the other hand, aside from some support for engineering during the 1960s and 70s, the system has provided little graduate education and unrigorous undergraduate education, reflecting the strong role of corporate training.

Public Infrastructure

- Spending on public infrastructure, or to use the politically correct word, "investment", has been biased towards industry and away from public amenities. Japan has fewer parks, roads, sewer systems and other standard public infrastructure than most other industrialized countries.
- That is changing and, ironically, it is now foreigners who want more public expenditures on industrial infrastructure, like airports, that could aid imports.

B. Has Macro Worked?

Whether macroeconomic policies have worked depends on the meaning of "worked" and how much importance can be attributed to the policies as contrasted to other factors.

Japan's macroeconomic policies have been, in the view of most economists, the most important non-market factor in Japan's post-war national growth because they enhanced a generally favorable business climate for all industry. Savings rate have been consistently higher than in other industrialized countries. Although, overall tax rates are roughly the same as the pre-Clinton U.S. rates; a greater percentage comes from taxes on consumption. Japan's literacy rate is among the highest in the industrialized world, and its training programs are ri-

valed only by Germany's. Japan has run a current accounts surplus of between one percent and two percent of GNP for almost a decade, and its interest rates have been consistently lower than in other industrialized countries, both due in some measure to appreciation of the Yen in the mid-1980s.

On the other hand, public infrastructure still lags behind other industrialized countries, even though it is improving. Land prices are extraordinarily high, and rising once again. The average Japanese house is one-half the size of the average American house, and the standard of living of the average Japanese is one-third lower than the standard of the average American. Japanese policy did not prevent Japanese banks from entering into billions of dollars' worth of non-performing loans.

The policy bias towards production over consumption reinforced cultural values and has to some extent become imbedded in patterns of behavior. Consumption still accounts for just over half of GDP in Japan, by contrast to about two-thirds of GDP in the U.S. and Europe, even though there is growing public pressure to shift more of the country's GDP into consumption.

III. SECTORAL

A. *What is it?*

The principal focuses of Japanese sectoral industrial policy have been restructuring, technological development in the field of "knowledge intensive" industries and energy saving.

The government, mainly through Ministry of International Trade and Industry ("MITI"), was able to direct sectoral development in the 1950s and 60s through an elaborate system of laws and regulations governing foreign trade and international financial transactions. Officials had direct control over foreign exchange and imports of raw materials and capital equipment and, as a result, substantial influence, if not control, over the level and direction of domestic industry. Government officials decided, based upon their interpretation of the national interest, which industries or, in some cases, which companies got priority.

Quite by coincidence, that period of maximum government control coincided with the most rapid period of growth in output and trade ever recorded. Thus, Japanese industry enjoyed the double benefits of a rapidly expanding closed domestic market and a rapidly expanding open world market.

By the mid-1970s, direct administrative control over foreign exchange and trade and investment policies designed for "infant industries" became unjustifiable, and pressures for behavior consistent with developed country status, primarily from the U.S., began. There was internal ferment within the government and within MITI; but, with the

“shocks” of oil, exchange rates and soybeans, nothing much changed. For similar reasons, the liberalization of Japan’s capital markets and capital account transactions began around 1967, but proceeded very slowly.

MITI was reorganized during the period to include so-called horizontal bureaus, covering broad policy areas, in addition to the traditionally powerful vertical, or industry, bureaus. The aim was to promote greater consistency within MITI and among ministries. More important, for the longer term at least, were the formulation and publication of broad-based MITI plans for industrial shifts away from basic manufacturing and towards so-called knowledge-intensive industries, meaning those with higher capital per worker requiring and permitting higher skills and ages. These plans were made public in various policy papers or “visions” produced either by MITI or by public/private advisory groups, most notably the Industrial Structure Council. There was no effort to hide these “visions”; to the contrary, they were, by and large, translated into English and discussed within the OECD.

There is very little mystery about Japan’s sectoral “industrial policies”. They are relatively classic mercantilism. Europe uses them; so do India, Brazil and Peru. The major tools available to implement sectoral policies include subsidies, R&D assistance, lending, special tax benefits and restrictions on foreign competition.

Subsidies

The Japanese government uses few direct subsidies. MITI’s budget, for example, has never been more than two percent of the total. Even in shipbuilding and other substantial “restructuring,” direct subsidies were modest.

Research and Development

The Japanese government supplies only about thirty percent of Japan’s R&D, by contrast to fifty percent in the U.S. and Europe.⁴ When given, R&D subsidies have generally been more than matched by the private sector, and have usually been directed towards generic, precompetitive research, not applications. It is normal procedure, however, that, in strategic areas, and in accordance with long-term targets, the responsible government agencies join with the main industrial companies to conduct joint research.

⁴ Much of the U.S. R&D budget has been military, but that is not true in Europe.

Lending

“Fiscal Investment and Loan Program”

Rather than relying on bond issues to fund government expenditures, Japan raises funds through a postal savings system. These and some other funds, like government pensions, are funneled through the Fiscal Investment and Loan Program (“FILP”) to government institutions or expenditures. FILP is no small fund, with eighty percent invested in housing-based infrastructure and small businesses; less than three percent is invested in “industry”, and that appears to be in “basic”, not high-tech.

“Japan Development Bank”

The Japan Development Bank (“JDB”) was established in 1954 to support domestic industry. It does not disclose its loans to individual companies, and some loans — to buyers in order to purchase robotics, for example — reflect a sectoral policy. However, the studies do not show a pattern of lending to new industries but rather to public infrastructure and a limited number of industries that have been supported since JDB was founded such as steel, petroleum and chemicals. Transportation and public utilities, for example, received seventy percent of JDB’s funds in 1961, more than fifty percent in 1991. By contrast, machinery received four percent of JDB’s funds in 1961, less than one percent now. JDB’s interest rates, moreover, must be higher than its cost of funds (usually FILP); and for most of the 1980s and 90s, the rate was equal to the long-term prime rate.

Tax Benefits

Thirty years ago, tax benefits, mainly accelerated depreciation, were used to support “important industries”. The robotics, semiconductor equipment and computer industries have benefitted recently from special depreciation allowances. On the whole, however, Japan uses fewer credits and special allowances than do other industrialized countries; and the list of tax beneficiaries now includes mostly social concerns such as facilities employing the handicapped, for example, small business and agriculture.

Restrictions on Imports and Foreign Investment

The studies show that import and investment restrictions have been the most effective sectoral policy by far. It is not an overstatement to say that, without protection of the domestic market in some fashion, most sectoral targeting would not have worked. Import protection was broad-based in the 1950s and 60s, and was steadily reduced thereafter.

Reductions were timed to help some sectors, like machine tools, although there is little evidence of a careful, pre-planned shift from mature to newly-emerging sectors.

Foreign investments still require approval by the Ministry of Finance ("MOF") and are still subject to special, discriminatory review by the Japan Fair Trade Commission ("JFTC") for compliance with the Anti-monopoly Act. MOF has not rejected an investment in twenty years, but the JFTC's review has been used to improve the position of the Japanese party.

B. *Has Sectoral Worked?*

Although any single measure may have only a small impact, no one can deny that, taken as a whole, Japanese sectoral policies have been important to the development of some industries. On balance, however, the most that can be said is probably that sectoral policies have had positive effects on Japan's overall industrial structure, which is not much different from that of other countries. Moreover, whether the policies were "successful" depends upon what one means by "success", and it is difficult to identify the extent to which sectoral policies affected even a given sector let alone the economy as a whole. For example, I would think that "success" would require an industry to become free-standing after a period of sectoral policy; if the industry requires more-or-less continuous subsidies or protection, it is hard to argue that the sectoral policies have been a "success".

If "success" means *jobs*, it is true that Japan's official unemployment rate is low, and workers in many sectors — distribution, steel, shipbuilding, computers, semiconductors, machine tools — may owe their jobs at least in part to sectoral policies. But Japanese have also kept roughly half the population, women, out of the workforce. It is generally conceded that compensation is relatively low overall and that underemployment is high in office jobs and in the distribution, service and retail sectors. Also, it is sectoral policies that actually caused overcapacity that later resulted in the loss of jobs in steel, shipbuilding, coal and oil, and this may also come to pass in computers and semiconductors.

If "success" means *wages*, it is true that the average Japanese earns, by some measures, more than the average American now, and some sectors, like shipbuilding and steel, have been artificially propped up. But the standard of living of the average Japanese is also one-third lower, in part because of high prices engendered by sectoral policies.

If "success" means *export markets*, Japan has been very successful. But Japan's two leading export industries, automobiles and electronics, owe relatively little to sectoral policies apart from import restrictions in the 1960s. In fact, MITI pressured the Japanese automobile industry to merge into a single company, actively opposed

Honda's entry into autos and thought Sony's electronics ideas a dead end.

If "success" means *technology*, Japan has, again, been very successful. But it is not at all clear that Japanese sectoral policies have been responsible. Many Japanese sectoral policies for "high-tech" sectors have been failures and even those considered "successful" are probably better described as "mixed". Of six high-tech sectors targeted by MITI during the 1970s — pharmaceuticals, office automation, semiconductors, aircraft, satellites and computers — four have been outright failures, and the jury is still out on computers and semiconductors.

MITI targeted aircraft thirty years ago, but Japanese industry has been able to produce only one unsuccessful commercial transport. As a result, MITI is now simply encouraging Japanese participation in international consortia.

Over the past ten years or more Japanese computer and semiconductor companies have owed much more to design, cost and quality control than they have to sectoral policies. But both industries certainly owe much of their early establishment and success to sectoral policies. The Japanese government funded R&D, provided tax incentives and lease financing, realigned companies in order to prevent "unnecessary competition" and most importantly, protected them from foreign competition in their early years through tariffs, quotas, investment restrictions and licensing requirements.

After almost twenty years of industrial policy, Japanese computer products have little demand outside the sheltered domestic market, and Japanese semiconductor companies may be trapped in the high-cost, low-margin end of the market. U.S. companies dominate world markets in computers and recently took back the lead in world markets in semiconductors. Even in Japan, American companies have between thirty-five percent and fifty percent of the private mainframe market and, led by aggressive price-cutting, have recently taken significant market share in personal computers. Moreover, most industry analysts believe that the key to the future of the computer industry is with software, which American companies continue to dominate despite yet another targeting by MITI. The so-called fifth generation project, for example, which was to produce "artificially intelligent" computers after its ten-year targeting, has fallen far short of its objectives, produced no fundamental technical advances or marketable products and is now being phased out. Japanese semiconductor companies invested heavily in capital-intensive, high-volume products, which they lead. They also lead in enhancements of those products by miniaturization and the use of new materials. But they are being chased from behind by the Koreans, and American companies are now back in the market, perhaps more as a defensive measure, but still there. Also, there is only so much one can

put on a chip, whatever the material, and American companies have clear leads in software logic and enhancers, said to be the way of the future for the industry, and dominate the microprocessor market.

The Japanese government targeted High-Definition Television twenty-five years ago. In 1991 and more than one billion dollars later, NHK (Japan Broadcasting Corp.) shoved the world's first working system into operation. It now appears, however, that Japan's analog technology is inferior to digital technology developed by an American consortium last year. Digital technology that has been accepted by Europe, grudgingly, for its "industrial policy" was also working on an analog system, as the standard for its industry.

As an aside, I recall that, at the beginning of the Bush Administration in 1989, we were told that we had to invest \$1.5 billion right away, or HDTV and its spinoffs would be lost forever. I was told last year in a study group, by the small company that developed the digital technology, that it would not have been included in the group that would have received the U.S. government's \$1.5 billion, and, more importantly, would not have tried to develop the digital alternative if the U.S. had invested in the analog system as requested.

Sectoral "readjustment" policies for heavy industries have been no more "successful" on the whole than the high-tech sectoral policies. Japanese steel is a world leader, but sectoral policies for the oil and chemical sectors were costly and ineffective. The Japanese national railway lost five times as much per passenger as any other railway before it was privatized. Shipbuilders have become virtual wards of the state, surviving principally on the Japanese market, in which purchases are funded by the JDB.

IV. STRUCTURAL

A. *What is it?*

"Structural" policies have regulated, induced or tolerated the way businesses relate to one another and the way government relates to industry. The principal structural policies concern antitrust, investment and the administrative procedures of the government. The effect of structural policies has been to tolerate collusion and lack of transparency.

Antitrust, Investment

Historically, the most effective sectoral policy has been restricting foreign competition. Formal restrictions are now low, but foreign competition is still restricted. This suggests continuing old-style industrial policy, but is probably the imprint of structural policies on private behavior, particularly in the areas of antitrust and investment.

Japanese antitrust laws, although similar to those of the U.S. and

Europe, are weaker, and their enforcement has been, by international standards, ineffective. This structural policy reinforces patterns of behavior. Routine meetings among competitors, often with the government, to discuss forecasts, set policy, agree on regulations and the like, create a climate in which collusion is tolerated more than it would be in other industrialized countries.

Although, as noted, there are few formal restrictions on investment in Japan, when the capital markets were liberalized in the 1970s the government encouraged cross-shareholding as a structural way of preempting foreign ownership of Japanese companies. Partly for that reason, and partly for reasons of private preference, only about twenty-five percent of the shares of companies listed on the Tokyo stock exchange are actually traded; the rest are held by so-called "safe shareholders".⁵

Lack of Government Transparency

Government policy is routinely made by "administrative guidance" that is not public, accountable or appealable. Ministries can, and do, delay or even deny licenses, information or other assistance unrelated to the issue at hand, in order to impose "industrial policy" on unwilling companies, mostly Japanese. Three successive advisory groups have recommended greater transparency, in the form of a U.S.-style administrative procedure act, but to no avail. It is highly unlikely that this form of "structural industrial policy" could be effective if the government's actions were held to an international standard of transparency.

B. Has Structural Worked?

It is impossible to prove widespread illegal collusion. One can say, however, that investigations and penalties for antitrust violations in Japan lag far behind those of other industrialized countries, and there are numerous complaints by American and European companies of anticompetitive practices and restricted markets.

Foreign investment in Japan is inhibited by a number of things that have nothing to do with government policy, high cost being the most obvious, but structural policies have had some effect in minimizing foreign investment. The U.S. is host to thirty-five percent of the World's foreign direct investment, Europe to forty percent and Japan to less than one percent. Japanese companies make lower profits and pay out a lower percentage of them in dividends, without fear of effective shareholder dissatisfaction.

⁵ Cumulative voting and other shareholder protections were phased out or made optional at about the time the capital markets were liberalized, again reducing the incentive to buy into Japanese, and one's influence if one does.

V. CHARACTERISTICS

What are some of the lessons one can extract from Japanese industrial policies?

1. Market Factors are More Important Than Industrial Policy

High levels of economic growth were the most significant factor in the development of Japanese industry. Japanese macroeconomic policies enhanced that growth but did not create it; and the oil shocks that worked their way through the Japanese system in the 1970s, for example, had far greater impact on Japanese industry than the government's sectoral policies for energy conservation.⁶

Japanese industry also owes more of its recent success to its own efforts at training, inventory control, management-labor relations, quality control and industry-funded R&D, and to cultural values of hard work, community support and education.

2. The Japanese Economy is not Centrally Planned

Although Japanese bureaucracies are more powerful and independent than U.S. bureaucracies, the economy is not centrally controlled. A sectoral policy is developed by one agency to protect "its" constituents, and a campaign is then waged against other bureaucracies, particularly the Ministry of Finance, to bring the policy into effect. Indeed, one cannot understand Japan at all until one understands that the principal motivating force in any Japanese bureaucracy is its relationship to other Japanese bureaucracies. One astute "popular" observer of Japan noted that the problem of Japanese bureaucracy was not that there was too much central control, but that there was too little. The last thing that Japanese government wanted in the mid-1980s, for example, was a massive dumping of semiconductors into the U.S. market, but they were powerless to stop it.

The Economic Planning Agency, a serious agency of very good economists, does produce long-range plans, but it would be unrealistic to attach too much importance to them. They tend to be devised to fit reality, rather than the other way around; moreover, a review of all six post-war plans gives comfort to those who worry that Japan plans too well.

3. Japan is "Industry Friendly"

Business considerations are routinely given priority in Japan. Regulatory agencies have often seen themselves as protecting the regulated

⁶ Initial rises in energy prices were passed along to consumers much more quickly than in the U.S., and companies themselves instituted sweeping energy conservation measures.

industry more than the consumer. Although social and health consciousness is growing, product liability, handicapped access, striker replacements, and until very recently, environmental protection, are done in a more business-oriented way than in the U.S. As another example, the U.S. Financial Accounting Standards Board just required that U.S. banks book their assets at market value; Japanese accounting authorities delayed a similar rule, allowing banks to continue to book their assets at historical cost.

4. The “Successes” of Sectoral Policy Have Been in Catching Up, Not in Breaking New Ground

This is not to say that Japanese can copy but cannot create — I do not think that is accurate anyway — but to say that the government is much more likely to be able to play an effective role in copying than it is in creating. Sectoral policies for automobiles, computers and semiconductors, for example, can be considered, at least in part, “successes”, and those policies were, not to put too fine a point on it, to copy and make better. By contrast, sectoral policies for the “fifth generation” project, HDTV and software were “greenfield”, and were failures.

5. Protection of the Domestic Market from Foreign Competition was the Most Effective Sectoral Policy

It may come as a disappointment to the new industrial policy types that the most effective sectoral policy was an old mercantilist one. But the studies show that this was the most significant government policy in the development of the Japanese computer and semiconductor industries, and the only significant one in the automobile industry. The failure of two high-profile targeted sectors, aircraft and satellites, can be explained by the fact that they were not protected against foreign competition. Basically, Japanese buyers would not wait to buy the domestic aircraft, and Japanese manufacturers could not compete despite other industrial policies. Domestic production of satellites virtually disappeared, despite R&D and other sectoral policies, when governmental and quasi-governmental entities were no longer required to buy Japanese.⁷

⁷ As an aside, when I negotiated the agreement that ended the target program for satellites in 1990, two of my most important constituents were NTT and NHK, quasi-government entities that wanted to buy the better, less expensive American satellites, as their private sector competitors were doing.

6. Cooperation and Consensus are Uniquely "Japanese" Characteristics of Japanese Industrial Policy

Japanese companies and Japanese industry and government have shown a unique capacity to act cooperatively. This is partly cultural and partly the imprint of other industrial policy. When the Japanese government engages with industry in "forecasts" of supply and demand, for example, and in extensive consultations before a new law or regulation is proposed, Japanese companies have some assurance that they and their competitors are operating from the same premises, even though not compelled or even asked to. Similarly, consultation and consensus-building intend, by their nature and through the lengthy procedures involved, to create a climate in which all concerned agree on objectives and their implementation. Formal laws and regulations are more likely to follow this process than to precede it, and to provide the supportive framework rather than to assert direct influence.

Japanese companies, with or without the government, routinely cooperate to fund basic R&D up to a certain level — something that many students of American business have been encouraging American businesses to do. Until very recently, most American companies, even when the law permits, have been reluctant to enter into ventures with their competitors.⁸

7. Japanese Industrial Policy has had its Cost

Japanese industrial policies have been implemented at the expense of start-up and smaller Japanese companies, the Japanese consumer and foreign exporters and investors. Companies have been coerced or jawboned into combining, becoming part of a *Keiretsu* or getting out of product lines. "Rich Japan, poor Japanese" has become a Mantra among Japanese *Salarimen* and housewives, who now question, polls show, the fairness and wisdom of an "industry friendly" environment.

The global trading system is also under the greatest strain it has experienced since the war, much of that a reaction against Japanese industrial and trade policy. As noted, absent a protected market, Japanese industrial policy would almost certainly have failed; but the global system cannot tolerate increases in external trade barriers, and must actually begin to reduce internal ones.

⁸ Recent joint ventures by automobile, computer and semiconductor companies, however, may signal a change in that attitude.