Publisher's Note

Economic Development and the Confucian Ethic

By Naohiro Amaya

ax Weber argued in his epic work that the Protestant ethic was one of the driving forces of capitalism. Yet when we look at the capitalist countries that have made the greatest advances in the latter half of this century, it is the countries of the Far East that stand out-Japan, South Korea, Taiwan, Hong Kong, Singapore, and other countries that are notably non-Christian and whose vitality cannot be attributed to the Protestant ethic.

The commonly accepted explanation for this seeming anomaly is that a Confucian ethic substitutes for the Protestant ethic in the East. a hypothesis with which I basically concur for the following reasons.

1. Instead of a belief in a transcendental god or supernatural power or in a spiritual afterworld, Confucianism preaches an empirical idealism that emphasizes this-worldly success.

2. While Japan, South Korea, China, and the other countries of the Far East each have different forms of social organization, all share the same Confucian rationalization for their pursuit of this-worldly profit. In Tokugawa Japan (17th-19th centuries), the Confucian ethic was epitomized in the institution of the ie (house). Each house was defined by its occupation, assets. and name, and the ethical conduct of its members was judged by the degree to which they fulfilled the responsibilities of the house occupation, increased its wealth, and brought honor to its name. Whether within the feudal context of the Tokugawa period or, though less rigorously applied, within the context of the modern corporation or government body, this ie ethic still prevails in Japan.

While South Korea, China, and the other Far Fastern countries lack institutions comparable to the Japanese ie, they share a cultural emphasis on lineage that has encouraged the development of similar codes of ethics. In these countries, the Confucian ethic is interpreted in terms of reverence for one's ancestors and one's responsibility to contribute to the prosperity of the clan.

3. Confucianism was originally a philosophical and ethical system designed for a paternalistic political elite, and it has done much to mold the quality of Far Eastern leadership.

Clearly, the Confucian ethic is eminently compatible with economic development. Unfortunately, the extreme wariness of all things Western in China, South Korea, and other Fastern countries in the 19th century caused these nations to fall behind in their modernization and opened them to invasion by a more adaptable and aggressive Japan. Since the end of World War II, however, all the nations of the Far East have been making prodigious progress in scientific, technological, and cultural development, and their economies are fast attaining the takeoff stage.

Yet there is one more modernization that needs to be promoted. While a powerful government controlled by a highly capable elite corps may be essential in the early stages of economic development, everything possible should be done to encourage the functioning of natural, uncontrolled market mechanisms once a nation's economy has taken off. Economy and politics alike should be gradually democratized and the government shrunk. South Korea and the other newly industrializing countries of the Far East are now at this critical stage in their development, and they would do well to emulate postwar Japan's successful fusing of Confucianism and democracy.

Accessible and Accurate Information

Only occasionally does a new source of information come along that truly addresses a need in the information-hungry atmosphere of Washington, D.C. The rather rancorous debate on Capitol Hill and in the Administration concerning not only trade with Japan but also Japanese industrial and economic policies needs accessible and accurate information. Otherwise it can be sidetracked into an emotional shouting match. The Journal goes far in providing just such information.

Although articles similar to those in the Journal are sometimes available in the Japanese language, such information presented in English can reach a far broader audience.

Your recent issues, featuring Japan's trade with China and small business in Japan, provided a probing view of these topics not available elsewhere. The interviews with people such as the governor of the Bank of Japan also give a valuable unfiltered glimpse of what Japanese decisionmakers are thinking.

> Richard K. Nanto Economist, Washington, D.C.

Management Attitudes

Your article, "Local Production: U.S. Labor/ Japanese Management" (Nov./Dec. 1985), gave a very clear and convincing picture of the contrasting styles of management and production philosophies of Japanese and U.S. auto manufacturers. It also vindicated the much-maligned American worker-showing

that, with a positive and supportive environment. American workers can produce as well as, if not better than, laborers from any other country.

The overwhelming success of Japanese automakers' U.S. manufacturing operations results from the integrity and resourcefulness of the American worker in a constructive. benevolent management-labor relationship that recognizes and rewards individual effort.

Japanese management understands the need to invest in the local community; to invest in worker training; to maximize the sense of self-determination and teamwork among employees; to instill worker pride with both a sense of belonging and a sense of accomplishment; to guarantee quality by investing in highly sophisticated CAD/CAM systems, factory automation and stringent qualitycontrol procedures; and to accept and plan for the inevitability of change.

In contrast, the old-guard U.S. automotive industry-in line with traditional American business philosophy hell-bent on maximizing immediate profit-often disregards the future with its myopic eye glued to the present. Policies and programs geared to the welfare and training of personnel are often seen as drains on profit, and an adversary relationship between management and labor is characteristic of the industry.

The basis of this rift between management and labor is a class distinction in which management sets itself apart as a special privileged group entitled to amenities and social status denied to the common worker. In American business and management, the privileges of individual management personnel and short-term goals aimed at enhancing individual status are often counterproductive to the overall growth and integrity of the company. To protect the workers from the special interests of management, labor unions have established strong buffers championing the workers' self-interest. Since both sides are selfishly protecting their own interests, it is the company itself that inevitably suffers.

It is interesting to note that labor unions play a marginal role at best in both the Japanese automakers' U.S. operations and their domestic operations in Japan, It is also interesting to note the team spirit, sense of company loyalty, and job satisfaction expressed in the comments from workers in the Japanese automakers' U.S. operations.

More than money motivates the American worker, and a sense of accomplishment, personal contribution, and self-actualization are necessary ingredients for a healthy mental outlook and emotional well-being. It is the ultimate irony that Japanese management rather than American management recognizes the needs and motivations of the American worker. Is it too much to hope that the spoiled, privileged American management class will be able to see beyond its own selfinterest and bring American business back to stable growth and prosperity?

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The Journal welcomes letters of opinion or comment from its readers. Letters, including the writer's name and address, should be sent to: the Editor, Japan Economic Foundation, 11th Floor, Fukoku Seimei Bldg., 2-2 Uchisaiwai-cho 2-chome, Chiyoda-ku, Tokyo, 100 Japan. Letters may be edited

TOPICS

Expanding Foreign Access to Electrical Appliance Market

The government's policy of improving foreign access to the electrical appliance market took another step forward late last year when the Ministry of International Trade and Industry (MITI) agreed to accept foreign inspection and test data for manufacturer's registration and type approvals.

The decision has far-reaching implications for foreign manufacturers. On November 25, for instance, Rexair Inc. of the U.S. was registered on the basis of factory inspection data from Underwriters Laboratories Inc., a U.S. testing organization designated by MITI. This dispensed with the need for an on-the-spot plant inspection by MITI personnel in the U.S.

In approving on December 10 an electric kettle marketed by Canada's Creative Appliance, MITI used safety test data based on a contract between a designated Japanese certification organization and the Canadian Standards Association. This enabled Creative Appliance to sell the kettle in Japan without having to go through testing in Japan.

As these two cases show, the use of foreign test data can help foreign makers secure registration and type approvals from MITI, assuring them of the same advantages as their Japanese competitors.

The certification procedures have been simplified in several ways:

The acceptance of foreign factory data dispenses with on-the-spot inspection by MITI personnel. Since overseas trips by MITI inspectors are not needed, registration fees for foreign makers can be drastically reduced, and the time required for registering greatly shortened.

The acceptance of foreign safety data, meanwhile, makes it almost unnecessary to retest imports in Japan. And since foreign makers can now have their products tested in their own countries, they can consult with domestic testing organizations in their own languages about technical standards and testing methods.

The Japanese certification systems were so complicated that they were regarded as a non-tariff barrier and had a bad reputation abroad. MITI has therefore taken a number of steps to improve these systems. For instance, with regard to electrical appliances it revised the relevant law in May 1983 to permit foreign makers to apply directly for model and

registration approvals. MITI then followed up with the acceptance of foreign factory test data, designation of foreign testing organizations (four in the U.S. so far, one in Britain and one in Canada), and increasing the number of foreign testing bodies to facilitate the use of foreign test data on electrical appliances (one U.S. and one Canadian organization contracted so far, together with another 19, mostly in Europe, through participation in the IECEE*-CB system).

Furthermore, the government Action Program announced in July 1985 calls for the certification system to be so revised by the end of the current fiscal year to empower MITI to designate foreign testing organizations from which test data may be accepted.

As the goal of expanding foreign access to the Japanese electrical appliance market is achieved, electrical appliance exports to Japan are expected to increase.

*IECEE: International Electrotechnical Commission System for Conformity Testing to Standards for Safety of Electrical Equipment.

Foreign-capital Businesses Faring Well

Foreign-capital businesses in Japan have been on a comfortable profit roll fueled by the superior managerial resources of their parent companies.

This high earnings picture is shown in a recent Ministry of International Trade and Industry survey on the business performance of foreign-capital firms in fiscal 1983.

The survey, announced on November 28, 1985, covered 2,162 foreign enterprises with foreign capitalization exceeding 50%. Of the total, 1,021 companies replied to the questionnaires. There were 473 U.S. respondents, or 46.3% of the total, followed by Europe with 394 (38.6%, broken down into West Germany 82, Switzerland 73, Britain 69, and France 43), Asia with 91 (8.9%), and others with 63 or 6.2%.

Many of the U.S.-capitalized firms

High profit ratio attracts foreign firms to Japan.

were manufacturers, while commerce accounted for a considerable portion of the European-capitalized enterprises.

Sales of the enterprises surveyed totaled \(\frac{\pmathbf{\frac{4}}}{3,568.3}\) billion (\(\frac{\pmathbf{\frac{6}}}{67.8}\) billion), up 0.6% over fiscal 1982. They account for 1.5% of the total sales of all Japanese businesses, unchanged from the previous year.

The ratio of sales-to-ordinary profit for the foreign firms, an indicator of corporate earning power, rose to 3.5% from 2.3% in fiscal 1982, far exceeding the 1.8% for all Japanese enterprises.

Their average net-worth ratio was 23.3%, lower than the average 45% in the U.S. and 40% in Britain, and close to the Japanese ratio of 16.6%.

Foreign-capital enterprises operating in Japan had 140,000 persons on their payrolls—22.8% more than in fiscal 1982. This figure corresponds to 0.5% of total employment by all Japanese firms, up from 0.4% a year earlier.

For staffing, foreign firms look to the local community. Staff dispatched from their parent companies account for only 21.2% of their standing officers and 0.5% of their employees.

In the year under review, these foreign businesses had 149 contracts with foreign capital interests for technology imports, accounting for 13.9% of the Japanese total of 1,073. They paid ¥210 billion to foreign interests, including ¥102.9 billion in dividends, ¥91.3 billion in royalties, and ¥2 billion in interest on loans.

The survey put total exports by the foreign-capital companies (except oil products producers) at ¥889.6 billion (\$4.45 billion) and imports at ¥1,566.7 billion (\$7.8 billion), for an import surplus of ¥677.1 billion.

According to a special survey of Japanese subsidiaries of U.S. electric machinery makers, manufacturing subsidiaries recorded an import surplus of ¥89.3 billion, while sales subsidiaries chalked up an export surplus of ¥34.1 billion in their trade with the United States.

The phenomenon suggests U.S. enterprises are trying to make Japan both a





production-export base for global distribution and a center for procuring parts and materials

New Cancer Drugs On the Way

Most anticancer drugs are of the mitomycin, adriamycin and cisplatin (platinum compound) lineage. In Japan. however, the main drugs for fighting cancer are not agents such as these that directly attack cancerous cells, but rather auxiliary chemotherapeutic agents.

Recent progress in diagnostic techniques has greatly increased early discovery of cancer. Visible cancerous tissue can then be removed surgically. The auxiliary chemotherapy is designed to attack invisible, hidden cancerous cells, The drugs used can boost the natural immunity of a living organism, in theory at least, enabling the body to fight back and exterminate the cancerous cells.

The mainstream of such auxiliary chemotherapeutics are drugs of the BRM (biological response modifier) lineage. Among them are bacterial preparations like OK-432 and N-CWS (nocardiarubra-cell wall skeleton), and botanical preparations like PSK. Possible utilization of cancer control substances in the living organism is also under study. Interferon, TNF (tumor necrosis factor). monoclonal antibodies and interleukin fall under this category.

The results of research on and clinical applications of OK-432, PSK, N-CWS and interferon drew attention at the annual meetings of the Japanese Cancer Association and the Japan Society for Cancer Therapy last autumn. Research on TNF, now being hailed as the next generation of cancer drug, was also in the limelight.

TNF is a kind of protein produced by macrophage that attacks only cancer cells. Research is now being stepped up on ways to produce human TNF through genetic engineering. Japan leads the world in TNF production, and phase 1 clinical tests are already under way.

At one recent meeting, Prof. Den'ichi Mizuno of Teikyo University drew attention with his unique research on TNF. Mizuno claimed to have developed a way to produce TNF in the human body, using medicines already on the market. The Mizuno Bioholonics Project which achieved this potential breakthrough is one of the projects for exploratory research for advanced technology undertaken by the governmental Research Development Corporation of Japan.

Mizuno and his team worked on the

assumption that human beings must also have the ability to produce TNF. He and his team used a combination of vaccines like tuberculin and interferon as primers and immunomodulators like OK-432 as triggers. They claim to have succeeded in increasing the amount of TNF in the human body. Mizuno maintains that "immediate clinical application is possible."

TNF is not the only new cancer drug. The ability of Gamma-type interferon to resist cancer is also a focus of research. This interferon is now undergoing clinical tests as a treatment for lung. malignant lymphoma, osteosarcoma and ovary cancers. But scientists still have not overcome the problem of its severe side effects

Equally high expectations are held for monoclonal antibodies and interleukin as immunotherapeutic agents. Research is well under way on possible applications for these agents.

Japanese pharmaceutical companies are now researching dozens of possible cancer drugs. Applications have been filed with the Ministry of Health and Welfare for approval of Schizophyllan. Levamisole, BCG-CWS and Bestatin as cancer drugs, and clearance for some of them is expected soon. In all, about 15 other agents are also likely to win approval in the near future. Phase 1 or phase 2 clinical tests are under way, for instance, on two types of adriamycin derivatives and four types of 5-fluorouracil derivatives.

Advanced countries of the world are now making every effort to exterminate cancer at a tremendous cost. Japan launched a 10-year "fight cancer" program in 1983.

Hopes are growing that surgery, radiotherapy and cancer drugs together will make cancer a curable disease in the years ahead. In particular, further progress in genetic engineering will expedite the mass production of cancer control substances in the living organism and treatment of cancer with such preparations.

Camera War: Market Flooded with New **Products**

For the first time in several years life has returned to the Japanese camera industry. The market, once believed to be fully mature, was flooded with new products in 1985. And virtually all these new cameras have features based on state-ofthe-art technology.

The rush of new products was triggered by the appearance in February 1985 of Minolta's "α-7000," an auto-focus singlelens reflex (SLR) camera. It can be fo-

cused automatically by a combination of a CCD (charge-coupled device) and motor drive. With an outstanding ability to turn out high-quality pictures with maximum ease, the α -7000 caught on fast and enjoyed explosive sales.

Minolta Camera Co. started out producing 30,000 cameras a month, 80% of them for export. But production could scarcely meet demand, and by late 1985 monthly output was up to 60,000. Even now the camera remains in short supply.

The extraordinary popularity of the α-7000 in the United States, where it is known as the "Maxxum," was recognized by Fortune magazine, which named it the "Product of the Year" in its December 9. 1985 issue.

Not to be outdone, Canon, Asahi Optical, and Olympus Optical quickly unveiled new SLRs of their own. The Japan Camera Industry Association (JCIA) estimates domestic SLR shipments in 1985 reached 590,000-the first vear-on-vear increase since 1980.

In addition to top-of-the-line SLRs, the market for popular compact cameras is also booming, spurred on by the debut of cameras with new functions. Among them is Fuii Photo Film's TW-3, nicknamed "Twing," which uses half-size film and is equipped with an easily interchangeable standard lens and 65-mm telephoto lens. In this type of camera, Minolta and Konishiroku Photo Industry are fast catching up. Olympus, meanwhile, unveiled a compact camera with a built-in strobe flash that can be quickly recharged with a lithium battery. Olympus developed this high-performance battery jointly with Matsushita Battery.

Domestic shipments of such compact cameras in 1985 are believed to have totaled 3,850,000, compared with 3,010,000 in 1984.

The average Japanese household now has more than one camera. Yet the market has resumed growing thanks to the new wave of easy-to-handle SLRs and multi-functional compact cameras.

The new camera war in Japan is sparking equally intense competition overseas. The yen's upsurge since last fall has been a drain on Japanese camera makers' export revenues, and to absorb the setback, they are marking up export prices. Canon has raised its North American prices 5-10%. Minolta, with a high ratio of exports, plans to increase its prices by about 5%.

Yet none seem to fear that these markups will dampen purchases of their products overseas. It is a sure mark of their confidence in the latest generation of Japanese cameras.