Letters

Encouraging a True Variety of Viewpoints

When the first issue of the *Journal* crossed my desk, my initial reaction was to dismiss it as a vehicle of Japanese government publicity, even of propaganda in the trade area. I am glad to say I was wrong.

I congratulate the editorial team for having produced, on the contrary, a lively and worthwhile publication that presents a wide variety of analysis and opinion.

One of the articles in your January/February 1984 issue was titled "High-Tech Industries: a Personal View," and I feel the reason that the magazine is of value is summed up in that second phrase. You have generally avoided the "party line," in favor of a whole range of "personal views" and experiences expressed by both Japanese and non-Japanese authors.

I beg you never to forget the importance of this! Your acceptance by non-Japanese readers will continue to depend on your encouraging the expression of a true variety of viewpoints, even if some of these are at variance with the opinions of government agencies.

Andrew Watt
President
Watt International, Tokyo

Closer University/Industry Ties Needed

I thoroughly enjoyed the thoughtful article by Dr. Keiichi Oshima concerning science and engineering education in Japan. Many of us in engineering education in the United States have been examining similar questions about the future of our educational enterprise. It is reassuring to see Dr. Oshima arrive at many of the same conclusions as we. His emphasis on the relation between technological innovation and education is well founded as is his call for additional efforts to enhance creativity, excellence, and fluidity in our educational system. Such emphases would appear to imply, among other things, a strengthening of graduate education in Japan.

In our studies of engineering education at the University of Oklahoma, we have identified two additional factors which we believe will be important in our future and which might bear consideration in the Japanese situation. First, we believe a closer relationship between industry and the university will be necessary to ensure an education for our young people that is up-to-date. The pace of change in technology is quite rapid and often industry leads the university in developing and adapting new technology. The increasingly important role of computers in engineering practice is an important example. A close university/industry linkage will help to ensure that such developments are appropriately integrated into the engineering curriculum. Second, providing students with an education that will allow them to cope with the fast pace of change in technology throughout their careers will require a strong emphasis on the fundamentals of engineering science as well as basic science and mathematics. Careful assessments must be made of what is fundamental and enduring. We in education must reject passing fads. Our goal must be an education that will serve our graduates well for 40 or more years.

The faculties of our colleges bear important responsibilities in addressing these questions. Their answers will likely be better informed if they have opportunities for interaction with industry through sabbatical leave programs, consultancies, and industrial advisory committees.

Martin C. Jischke
Dean of the College of Engineering
University of Oklahoma
Oklahoma, U.S.A.

Letters to the editor, with 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 for reasons of space and clarity.

Editorial Note

Living with Technological Innovation

By Isao Matsumiya

We are today in the midst of a major social transformation equal to the agricultural and industrial revolutions—the technology revolution. This technology revolution, characterized by the amazing and unrelenting scientific advances being made in the industrialized countries, is bringing about changes which are bound to affect not only our material comforts but our very world outlook.

The impact of this technology revolution has already been taken up by numerous thinkers from virtually every aspect, and their conclusions range from abject pessimism to unbridled optimism. However, even the most optimistic hesitate to declare technology a panacea for all which ails modern society. For example, the rapid diffusion of microelectronics and robotics both offers shorter working weeks as more and more labor-saving and automation equipment is installed at the workplace and also carries the threat of Chaplinesque "modern times." Likewise, the development of genetic engineering techniques holds out the promise of significant disease prevention and a solution to mankind's chronic food shortages, yet at the same time is having a profound impact upon the sanctity of life and other traditional family values.

Just as every cloud has its silver lining, so does every pot of gold cast its shadow. The development of nuclear weapons and their threat of global annihilation is but the most obvious example that technology does not necessarily result in improved welfare for mankind. Yet mankind is by nature continuously questing after progress, and it will be difficult indeed to escape our material bent.

It thus becomes incumbent upon us to find some way to secure the benefits of technology without falling slave to technology's genie. This will by no means be easy, yet it seems to me that the job can be considerably facilitated by the institution of public disclosure on the development and application of new technologies, continuous information exchanges among the countries and individuals involved, and some kind of mechanism for international coordination on super-projects.

There is not that much time left to minimize the external costs of the technology revolution, and this must be a major concern of everyone seriously concerned with the future of modern civilization.

*Isao Matsumiya is director of the Overseas Public Relations Office of the Ministry of International Trade and Industry and is a special editorial adviser to the *JOURNAL*.

CURRENT TOPICS

Japan Projects 4.1% Growth for Fiscal 1984

—Fastest in Four Years—

The Japanese economy will recover steadily under the lead of domestic demand in fiscal 1984 (beginning April 1), achieving an inflation-adjusted growth rate of more than 4%, according to projections by the Japanese government and most private research institutes. Behind the envisaged solid economic expansion after three years of lackluster 3 percent-level growth is an expected upturn in private-sector activity—as shown in the government's official economic outlook—led by consumer spending and business capital investment. Private forecasting agencies echo the government in listing private-sector domestic demand as a driving force of growth in fiscal 1984.

According to the fiscal 1984 outlook published by the Economic Planning Agency on Jan. 19, the Japanese economy will grow 4.1% in real terms compared with an estimated 3.4% growth in fiscal 1983. In nominal terms, the growth rate is projected at 5.9% against 4.5% in fiscal 1983. Consumer prices are expected to rise 2.8%, compared with an estimated 2.0% inflation rate in fiscal 1983, while the current account surplus should remain unchanged at some $23 billion.

Most private research institutes and commercial banks predict a growth rate of more than 4% in real terms for fiscal 1984. Private research agencies generally are bullish and banks conservative toward the nation's economic performance in fiscal 1984. The government projection is close to that of the banks.

But the difference in projected growth rates between research institutes and banks is narrower than usual, showing a maximum 1 percentage-point margin. Making the most bullish prediction is the Research Institute of National Economy, which foresees a 4.8% growth rate. Dai-Ichi Kangyo Bank takes the most conservative view—3.8%. The official projection shows that domestic demand will account for 3.6 points of the 4.1% growth rate and exports 0.5 point, clearly indicating a growth pattern led by domestic demand.

In contrast to the generally close growth forecasts, predictions for the size of the current account surplus vary more widely. An Economic Planning Agency survey of 20 forecasting agencies puts the average at $26 billion, $3 billion more than the official $23 billion. One private agency—Mitsubishi Research Institute—predicts as much as $35.4 billion.

The private forecasters expect a larger surplus in the belief that although imports will increase following expansion of domestic demand, exports are likely to rise even faster in the wake of economic recovery abroad, particularly in the United States and Western Europe. In contrast, the government predicts that a slightly faster increase in imports than in exports will leave the current account surplus at the fiscal 1983 level.

Japan Unveils Fiscal 1984 Budget

—Most Austere in 29 Years—

The Japanese government has come up with an unusually austere budget for fiscal 1984, calling for a mere 0.5% spending increase over the original fiscal 1983 budget—the smallest rise in 29 years since a 0.8% decline in fiscal 1955. But the budget for the new fiscal year—starting April 1—permitted a 6.55% growth in defense spending and a 9.7% increase in official development assistance (ODA), reflecting the government's pledge to assume an "appropriate" share of the defense and overseas aid burdens as a member of the Western community.

Of the ¥50,627.2 billion ($210.9 billion) budget, general expenditure—which excludes debt-servicing costs and subsidies to local governments—came to ¥32,585.7 billion ($135.8 billion), down 0.1% from fiscal 1983, the second straight annual decline. Defense spending accounts for ¥2,934.6 billion ($12.2 billion) or 0.99% of the country's gross national product (GNP).

The government set aside ¥543.9 billion ($2.27 billion) for economic assistance to developing countries, up 7.9%. The sum included ¥528 billion ($2.2 billion) for ODA. The steep rise allowed in this category resulted from Japan's growing role as an economic power in the international community.

But appropriations for public works projects, on which high hopes are pinned for backing up economic recovery, were held down to ¥6,520 billion ($27.2 billion) for a 2% drop, the first decline in 28 years. The unusual shrinkage was due to a huge revenue shortage. Coupled with the absence of major projects stimulating economic activity, the decline has left the Japanese economy heavily dependent on the private sector for its sustained recovery.

In the area of energy and industrial policies, emphasis was laid on high-technology projects, with spending for the development of an intelligent "fifth-generation" computer increased by ¥2.4 billion ($10 million) to ¥5.12 billion ($21.3 million) and that for biotechnology projects doubled to ¥1.2 billion ($5 million). Also stressed was the development of new media, such as cable television and satellite communications. The Ministry of International Trade and Industry's new undertakings include preliminary studies at seven places across Japan on "model communities" boasting their own networks of information services on disaster prevention, medical care and other vital local public needs. Appropriations for energy projects were allowed to rise only 0.9% to ¥603.2 billion ($2.51 billion). The

Japan's 1984 budget increased a mere 0.5% over last year's, but permits a 6.55% growth in defense spending.

Economic Projections for Fiscal 1984	Growth rate (%, real terms)	Current account surplus (bil. dollars)
Government	4.1	23.0
Dai-Ichi Kangyo Bank	3.8	23.5
Fuji Bank	4.0	25.9
Sanwa Bank	4.1	27.2
Research Institute of National Economy	4.8	30.6
Nomura Research Institute	4.3	21.0
Mitsubishi Research Institute	4.7	35.4
Fiscal 1983 (estimates)	3.4	23.0

energy program calls for government-financed reserves of oil to be increased by 2.5 million kiloliters to 17.5 million kls—30.7 days' supply—by the end of fiscal 1984.

On the revenue side, income from taxes and stamp duties was put at ¥34,596 billion ($144.2 billion), up 7.1%. This accounts for 68.3% of total budgeted revenue, up from 64.1% in fiscal 1983 but still well below 80%—a level the Finance Ministry regards as a yardstick for healthy financing. The ministry plans to cover a ¥930 billion ($3.88 billion) cut in income and resident taxes with matching increases in corporate, liquor and commodity taxes. It also plans to raise ¥12,680 billion ($52.8 billion) through bond offerings, down ¥665 billion ($2.77 billion) or 5%—way below the ministry's originally planned $1 trillion ($4.17 billion) reduction. The ministry will separately issue new government bonds worth ¥5,360 billion ($22.3 billion) in its first rescheduling program to replace old bonds falling due during fiscal 1984. The total new issue will leave the balance of government bonds at a record high of ¥122 trillion ($508 billion) at the end of the fiscal year.

JAPIC Activates Construction Projects

Huge construction projects without government assistance are being studied by the Japan Project Industry Council (JAPIC) for various parts of the country.

JAPIC has already drawn up a list of the project plans and concepts which it will study for implementation. They include the construction of a bayshore highway along the coast of Tokyo Bay, the concept of putting Tokyo's loop roads No.7 and No.8 undergound, the Kan-etsu Comprehensive Water Resources Development Project designed to make best use of the snow-melted waters of the Shinano River, the concept of a belt of new cities in the Tokai region, the construction of the Chubu International Airport and of a new international airport for the Kansai region, and the technopolis concept.

JAPIC will collect and compile data and information related to these projects and submit reports to the central and local governments.

The biggest problem JAPIC faces now is how to raise funds. It will have to study seriously such important questions as how to utilize private sector money and when to transfer these large-scale projects to third-sector corporations to be operated jointly by the government and the private sector.

JAPIC was established in 1979 to use the vitality and resources of the private sector to undertake large-scale projects without depending on government fiscal outlays. Its president is Eishiro Saito, chairman of Nippon Steel Corporation. At the time of its establishment, the council's membership consisted of six organizations covering five industries—construction, steel, sogo-shosha (general trading companies), cement, and machinery. Today, it embraces 17 industrial associations and 110 major companies.

JAPIC took on prominence when Yasuhiro Nakasone became prime minister in late 1982. In January last year he declared, "The vitality of the private sector should be used to revitalize the Japanese economy. I would like to see the private sector carry out those public projects which are within its capabilities." After upgrading its status to that of a corporate juridical person in April last year, JAPIC stepped up its activities.

JAPIC's work now consists of (1) collecting and compiling data and information needed for promoting various large-scale projects, (2) investigating and studying earmarked projects, (3) submitting proposals to ministries and government agencies, and (4) undertaking public relations activities.

But while the business community has expressed the hope that the large-scale projects currently suspended due to fiscal difficulties will be resurrected by the private sector, President Saito comments, "We are not going to promote large-scale projects as immediate business stimulative measures. Urban development, construction of highways and airports, and regional, ocean and energy development should be viewed from a long-range perspective."

JAPIC's plans include the concept of putting Tokyo's loop roads No. 7 and 8 underground.

Dow Jones Average Tops ¥10,000 Mark

Against the backdrop of the recovery of the world economy and improved business performance of Japanese corporations, the Tokyo Stock Exchange's Dow Jones Average topped the ¥10,000 mark on Jan. 9 this year.

Photo: Asahi Shimbun

The Tokyo Stock Exchange hits fever pitch as the Dow Jones Average climbs to the ¥10,000 mark.

The Dow Jones Average was introduced into Japan simultaneously with the post-World War II reopening of the Tokyo Stock Exchange in May 1949. The first Dow Jones Average was only ¥176. In the 35 years since then, the Japanese economy has risen from devastation in the war, attained miraculous growth and successfully tided over two oil crises.

The latest upswing of the Tokyo Stock Exchange started on Nov. 1, 1982, when the Dow Jones Average recorded ¥6,849, as the world economy, pulled along by American economic conditions, steadily recovered and corporate performances improved. Stock prices, which usually anticipate the business trend six to 12 months ahead, edged up inch by inch in a continuous upward curve. Particularly at the end of last year, following the Dec. 18 general election of the House of Representatives, stock prices climbed at a fast clip. Without losing steam, the market continued its upsurge in the New Year and broke through the ¥10,000 barrier in only five sessions after the Tokyo Stock Exchange reopened following the New Year holidays.

Foreign investors are the principal force behind the current market upswing. On Wall Street, the Dow Jones Average bottomed out in August 1982 and subsequently rose by as much as 65%. As if acting in concert with the New York Dow Jones Average, the Financial Times (FT) Index of London and Frankfurt Commerzbank Index of West Germany rose by big margins, renewing their all-time records. With stocks in other world markets having hit record highs, overseas investors, principally U.S. pension funds, set their eyes on the Tokyo Stock Exchange, which was then lagging behind other world markets. Buying by foreign investors totaled as much as ¥700 billion last year.

Inflation, the bane of stock markets, has been contained in many countries, due to effective inflation-combating measures taken by governments. Partly rescued by OPEC's lowering of the benchmark price of crude oil, the economies of the advanced countries have finally emerged from the long tunnel of simultaneous worldwide recession. Yet, plant and equipment investment in the private sector has lacked vigor. Consequently, surplus funds flowed into the stock market.

The outstanding capabilities of Japanese corporations, which have grown to rank with their European and American counterparts, cannot be overlooked in this respect. The standard of Japanese companies in such high-tech fields as semiconductors, computers, biotechnology and new materials is rated very high. The increase in the number of patent applications, a yardstick of a country's technical development capability, is somewhat slow in Western countries but brisk in Japan. Thus, Japan's potential is attracting worldwide attention.

The Dow Jones Average, after piercing the ¥10,000 level, has been moving steadily upward. A dominant view in the securities industry is that it will move on a zig-zag path to reach the ¥12,000 mark by the end of this year. Stock market conditions are bright, due to the reversion of money to the stock market as a result of the ebbing of inflation and with the growing tendency of foreign investors to invest in Japanese stocks in order to diversify their international investment porfolios. On the other hand, unexpected pitfalls may lie ahead, based on such factors as trade friction and intensifying international tensions.

Also hindering future growth are some inherent chronic problems in the stock market. For example, the ratio of individual stock ownership has fallen below 30% and there are no prospects of braking this continuous decline in ratio. Average return on stock investment is a low 1% or so, and the initiative in setting stock prices is in the hands of overseas investors.

Meanwhile, there are increasing moves to liberalize brokerage on stock transactions and to open up the closed membership of the Tokyo Stock Exchange.

First Official U.S. Trade Mission in Six Years

The first U.S.-government-sponsored trade mission to Japan in six years, aimed at promoting bilateral trade, wound up its visit Jan. 21–26 on a successful note. The delegation of seven administration officials and 16 business leaders held talks with Japanese government officials and businessmen and attended symposiums which drew 200 participants.

The mission, launched at President Ronald Reagan's personal initiative to promote American exports to Japan, asked the Japanese government and the Japan External Trade Organization (JETRO) to send missions to the United States to assist smaller enterprises in selling their products in Japan.

Japan agreed to study the proposal. The two countries also decided to explore ways to promote American exports to Japan through the Commerce Department's Foreign Commercial Service and JETRO.

Prime Minister Yasuhiro Nakasone welcomed the Reagan initiative, and told the visiting U.S. government and business leaders his government will help facilitate imports of American products.

Nakasone emphasized that close trade ties between the two countries, which together account for 35% of the world's GNP, are crucial for the well-being of people around the globe.

James E. Jenkins, deputy counsellor to the president, Richard L. McElheny, assistant secretary of commerce for trade development, and other members of the

delegation said they were encouraged by Japan's readiness to purchase more manufactured products from abroad.

The Japanese also said they welcomed the special mission, which was the first government-sponsored trade promotion mission to be arranged by the Commerce Department since 1978. Then Commerce Secretary Juanita Kreps headed the last official trade mission. President Reagan originally proposed the mission during an official visit to Japan last November.

While the "spokesmen" group of seven U.S. government officials conferred with their counterparts and other influential Japanese, the 16 business leaders were busy attending symposiums and negotiating deals with Japanese concerns. The business leaders represented medium and large construction companies, engineering firms, medical equipment manufacturers, and telecommunications companies with a vested interest in the Japanese market.

The Ministry of International Trade and Industry (MITI), which helped arrange the mission's itinerary, said deals —turnover of one of which amounted to several million dollars—were concluded between American and Japanese firms while the U.S. business leaders were in Tokyo.

A ministry official said Japan is a huge medical equipment market, importing ¥32.5 billion ($135.4 million) worth of medical equipment in 1982. Some ¥20.1 billion ($83.8 million), or about 60% of 1982 imports, were from America.

Analysts say Japan will likely continue to grow rapidly as a medical equipment market, giving U.S. medical equipment suppliers a good chance to expand their market share.

MITI officials said they also expect Japanese and American construction and engineering corporations to cooperate in obtaining contracts in third countries in the Middle East and Southeast Asia as part of bilateral trade cooperation.

Hiroshi Sugiyama, director general of the ministry's International Trade Administration Bureau, stressed during a luncheon held on behalf of the visiting Americans that Japan, contrary to the general perception in the United States, is very receptive to imports.

Officials indicated that Jenkins, McElheny and other mission members would privately brief President Reagan on the outcome of the visit.

The 16 U.S. business leaders represented Bechtel Power Co., Burns and Roe Inc., Dravo Corp., Gilbert/Commonwealth Int'l, Inc., Camelot Overseas Traders, Diasonics Inc., Tago Int'l Inc., U.S. Medical Equipment Inc., Hughes Aircraft, Lynch Communication Systems, Inc., Gulf and Western Corp., IET Industries, Inc., Omega Engineering, U.S. Trading Company, and Powell Farm Co.

Big Hotel Construction Rush

Japan is in the midst of a "hotel rush," with plush lodgings springing up like mushrooms. Between now and 1985, 5,000 to 6,000 rooms will be added to the country's stock of hotel accommodations.

Luxurious skyscraper hotels are scheduled for construction by both Japanese and foreign interests. Even the Japanese National Railways (JNR), a government financed enterprise, is trying to jump on the hotel bandwagon by making use of its extensive holdings of idle land.

In 1982 alone, hotel accommodations climbed by more than 3,000 rooms.

This is Japan's fourth hotel building boom in the past two decades. Earlier construction surges were the natural consequence of increased demand for hotel accommodations due to the expanding national economy. The current rush, however, is partly due to the increase in visitors from abroad following the opening in April last year of Tokyo Disneyland, and partly in anticipation of a big influx of visitors coming to see the 1985 international exposition in the technopolis-designated city of Tsukuba north of Tokyo.

Another factor is a change in lifestyles, as Japanese use hotels more and more frequently for a wide range of activities. The new construction is also attracting attention as the centerpiece of urban redevelopment projects.

In Tokyo, following the opening of the 1,000-room Takanawa Prince Hotel in 1982, plush hotels standing 30 to 40 stories high, such as the Akasaka Prince Hotel (761 rooms) and Imperial Hotel Tower (363 rooms), opened in close succession in 1983, as did the 377-room Yaesu Fujiya Hotel in the Fujiya Hotel chain which opened at Tokyo Station in the heart of the capital.

More recently, Fujita Kanko K.K. opened the Shinjuku Washington Hotel in Tokyo's Shinjuku subcenter last December. Add in smaller hotels, and you get a combined capacity of some 3,000 rooms in new hotels in 1983 alone.

As for foreign-owned hotels, the 858-room Tokyo Hilton International is scheduled to open in the Shinjuku district later this year. Hilton has terminated its business tieup with Tokyu Corporation and is trying to secure a stronghold for its Asian operations in Tokyo. Shinjuku already bustles with high-rise hotels, including the Keio Plaza Hotel, Hotel Century-Hyatt and Shinjuku Prince Hotel.

Meanwhile, the Japanese National Railways, which is trying to diversify its operations to cover ever-increasing deficits in railway operations, has announced plans to construct two high-class membership hotels (812 rooms and 450 rooms)

A Tokyo hotel: symbolizing the hotel construction boom in Japan

in downtown Tokyo. Not to be outdone, All Nippon Airways (ANA), a domestic airline, will build a 30-story Tokyo ANA Hotel with 1,000 rooms in Akasaka, a fashionable downtown area. This ranks as one of the biggest redevelopment projects in Akasaka.

A distinctive feature of the current hotel boom is the attention the new hotels have attracted as the centerpieces in urban redevelopment schemes. This has brought companies other than established hoteliers into the business. The building which will house Tokyo Hilton International, for instance, will be built and owned by Japan Life Insurance Company, while the Tokyo ANA Hotel building will be put up and owned by Mori Building Co., a rental building firm. The buildings will be loaned to Hilton and ANA.

In Osaka, Japan's second biggest city, Japan Air Lines built a 655-room hotel in 1982 and ANA will soon open a 500-room hotel. Plans are also afoot to put up a 150-meter-high hotel on the site of the 1981 Portopia exposition by 1988.

But the current boom has also raised fears in business circles that the hotel business might slip into a recession caused by an oversupply of rooms, as has happened in the past. Hotel operators, however, are generally optimistic about the future of their business. They say the rise in the number of foreign tourists and the increased use of hotels by Japanese has left supply and demand in balance in both Tokyo and Osaka.

In fact, whereas in normal years hotel occupancy falls sharply in July and August, all Tokyo hotels were running at full capacity last summer. Usually, Tokyoites flee to the countryside during the summer holidays to avoid the simmering heat. This traditional pattern changed last summer as more people than ever stayed at hotels in central Tokyo.