

America and Research Roulette

This country pioneered television, VCR's and computer chips. But in 1986 America imported more high-tech products than it sold abroad. High-definition television will be the next major advance in consumer electronics but Japanese and European companies are poised to divide the vast American market between them.

To the peril of its defense and its standard of living, America's grasp of technology is slipping dangerously. Vice President Bush expressed interest in science policy during the campaign; he has few more pertinent tasks than to stem the erosion of America's technological pre-eminence.

The principal damage has been done by Mr. Reagan's disastrous experiment with the economy. The high dollar made American products harder to sell abroad and the high cost of capital made long-term investments, like research and development, less profitable. But economic conditions are not the whole story. When those conditions are remedied, America cannot resume making VCR's or computer memory chips if there are no companies left to sell them, or if its consumers believe Japanese products are of higher quality.

The United States still leads in research spending. In 1988, industry and government each invested \$61 billion in R&D. But two-thirds of the Federal share went for military research. Pentagon procurement once helped commercialize jet aircraft, computers and computer chips, but the *recherche* technologies of today's weapons seem to have less commercial relevance.

The \$19 billion that goes for civilian research is too little and too carelessly spent. Civilian R&D spending has been stuck at about 1.8 percent of gross national product for two decades. Meanwhile, rivals have steadily increased theirs, Japan to 2.8 percent, West Germany to 2.6 percent.

Each Federal agency follows its own agenda. NASA is sinking \$3.5 billion this year into projects like its cherished space station. This antique technology will keep the NASA circus flying but does little for industry. The Department of Energy plans a \$5 billion atom smasher, even though it promises few commercial spinoffs and will rob funds from physics research of greater relevance.

Why does this country's research policy remain so incoherent, while Japan targets one high-tech in-

dustry after another and wrests dominance from American competitors? Because American economists believe that governments rarely improve on the wisdom of the marketplace. As they note, Federal attempts to support particular industries typically lead to fiasco. They cite disasters like the \$4 billion nuclear breeder reactor program, canceled in 1983; the crash synfuels program of 1979, and the Department of Energy's horrendous miscalculations in commercial uranium enrichment plants.

But the absence of an industrial policy is a policy too, and one result is that America's best scientists and engineers are lured away from industry and into glamorous Government defense and space projects. Japan, by contrast, concentrates its scientific and engineering talent in industry.

The Japanese Government also supports industry so as to reduce the risk of high-tech ventures, and runs a high-saving, high-investment economy designed to furnish industry with cheap capital. Those are critical inducements to improving productivity; if the American economy offered such cheap capital and incentives for investment, there would be much less nervous worry about Japanese gains at American expense.

Even so, there may be good reason to foster key industrial technologies. The Pentagon's recent support of Sematech, an industry consortium to advance the manufacture of computer chips, is an example that stops short of second-guessing the market. It may be worthwhile for Washington to create an organization to conduct limited, careful experiments to see which criteria make sense in deciding when to support one project over another.

There are also other steps to consider, like better tax incentives for R&D. As the Council on Competitiveness recently noted, some of the 700 Federal laboratories are not pulling their weight and need to be shut down. Many Government activities affect technology, but no one is shaping them to insure the effect is positive.

Mr. Bush promised in the campaign to appoint a science adviser he would listen to. But he needs more than a narrow advocate of more university research. There's a larger mission here: to escape past doctrine, coordinate precious scientific resources and shrewdly test ways for Government to foster industrial innovation — without usurping the free market's better judgment.

12/15 N.Y. TIMES

Maxwell Introduces Europe Daily

RHODES, Greece, Dec. 4 (AP) — Robert Maxwell introduced a 12-page test issue of The European, his daily newspaper, on Friday.

The British publisher promised that the newspaper would promote European unity and would take aim at what he called the "old-fashioned, nationalistic" views of Prime Minister Margaret Thatcher of Britain.

Mr. Maxwell said the newspaper would begin daily sales next May 9, with the goal of eventually achieving a circulation of at least 500,000 copies a day and probably between 600,000 and 650,000 copies.

Speaking at a news conference held to coincide with the meeting of European Community leaders on this Greek island, Mr. Maxwell said his initial investment in the project would total the equivalent of \$37 million to \$55.5 million, with an additional \$18.5 million for promoting the introduction of the newspaper.

He said he was committing himself to investing in the newspaper for three to five years.

Mr. Maxwell criticized Mrs. Thatcher as an opponent of greater European unity in several areas, and singled out her opposition to British entry into the European monetary system as an "idiotic position" for which Britain is paying a "devastating price" in terms of high interest and exchange rates.

"She will fail in making Britain again miss the European bus," Mr. Maxwell said.

Mr. Maxwell said he foresaw a staff of 200 to 250 journalists at The European, with editorial centers in London, Paris, Brussels and Munich. The paper will be published in every nation in which circulation exceeds 30,000 copies.

Maxwell's promotional test issue was a 12-page full-sized daily with news items and features from across Europe, illustrated with black-and-white and color photographs. The issue's editorial reflected Mr. Maxwell's opposition to Mrs. Thatcher's view of European integration.

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