POLICY REPORT

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TECHNOLOGY AND THE THIRD WORLD—p. 6

Industrial Policy, Business Failures, and Economic Evolution

by Tom G. Palmer

A centerpiece of most proposed interventionist industrial policies is the resurrection of the New Deal's tarnished Reconstruction Finance Corporation, dissolved in 1953 amid charges of cronyism, fraud, and corruption. An Industrial Finance Administration, as recently proposed by financier Felix Rohatyn, AFL-CIO President Lane Kirkland, former duPont Co. Chairman Irving Shapiro, Senator Edward Kennedy, and other business, union, and government leaders, would be granted lending and borrowing authority by the federal government to aid financially troubled firms. Central to the program's rationale is fear of the effects of business failures.

Proponents often nod in the direction of so-called "sunrise industries," which utilize new technologies. As AFL-CIO spokesman Rudolph Oswald told the Joint Economic Committee, a new RFC "would develop a balanced economic program to insure the revitalization of the nation's sick industries and decaying communities, while at the same time encouraging the development of new industries with promise for the future." But little funding can realistically be expected to go to new firms just entering the market (or to those which have not yet even been organized). Already existing firms with large numbers of voting employees and enjoying established positions can be expected to extract the lion's share of politically distributed funding. Indeed, since the AFL-CIO represents those employed in existing firms, one might question the sincerity of assurances that "at the same time" that failing firms are subsidized the new RFC's funding would be allocated to newly emerging presently nonexistent firms.

There is no reason to believe that the "targeting" of government funding would follow any criteria other than political gain. As Nolan Bushnell, founder of Atari, said of the so-called Atari Democrats, "I guarantee you that no government agency can target the right industry; in fact, I'll almost guarantee they'll target the wrong one." Explained Bushnell, "The targeting role belongs to the entrepreneur. The problem is that these Atari Democrats would never have targeted Atari." Further, the much-vaunted "targeting" role of the state in economic activity might profitably be judged on the basis of past experience. The Economic Development Administration was formed in 1961 to distribute loans for infrastructure improvement to economically depressed areas of the country. In 1961, 15% of the nation's counties qualified for EDA assistance; by 1976 that number had reached 85% and was 93% by the end of the Carter administration. So much for "targeting."

"The progressive worsening of the recessions of the last decade is not evidence of the limited nature of fiscal and monetary policies; it is the result of those policies."

Tom G. Palmer is an associate policy analyst of the Cato Institute.

Business Failures

Industrial policy advocates point to the recent high rates of business failure and assert that such failures are a sign of a sick economy in need of new medicine. In 1981, according to Dun and Bradstreet's survey, there were 16,794 commercial or industrial enterprises involved in court proceedings such as bankruptcy or court action involving loss to creditors. That number had jumped to 25,346 in 1982 and 23,052 in 1983. (This survey does not include all filings of bankruptcy, nor does it include most sole proprietorships.)

But do these numbers alone show anything about the vitality, in the long or short terms, of the economy? No. For one thing, they follow a tremendous surge in new business incorporations in recent years, reaching record highs. And, according to various studies from the Economic Development Administration and other agencies, approximately one-third of all new business ventures fail in the first year, with about 50% failing in the first two years.

Indeed, high rates of business failure may reflect a dynamic and productive economy, in which entrepreneurs are willing to take risks by starting new enterprises—often failing in the process. David Birch of MIT's Program on Neighborhood and Regional Change examined business failures regionally and concluded, "The more dynamic the local economy (e.g., Houston) the greater the risk-taking and the greater the proportion of firms that fail. It could easily be argued (without being facetious) that one of our greatest strengths as a nation is our capacity for failure—the grace and even enthusiasm with which we accept those who try and fail and come back to try again. . . . *The reality is that our most successful areas are*

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Hunger Task Force Misses the Point

by David Lampo

The national debate on hunger in America, sparked by Edwin Meese's comments on the subject last December, heated up again with the release of the official report of the President's Task Force on Food Assistance. The 13-member task force was convened in August to explore the extent of hunger in the United States.

While the report recommended no major changes in federal food programs, opting instead for streamlined administration and minor cuts in some outlays, some of its recommendations provoked controversy. The report concluded that while there are "pockets" of hunger in America, there is no widespread hunger among the nation's poor: "The recent budgetary changes have not reduced the availability of the major federal food assistance to Americans with incomes at or below the poverty line."

The report was denounced as a whitewash of the Reagan administration's earlier cuts in child-nutrition programs. Critics charged that in spite of falling unemployment and record levels of spending on government and private food programs, hunger is widespread and growing.

Unfortunately, both sides in this debate seem to be missing a crucial point. While there may be disagreement over the pervasiveness of hunger in the United States, the most important task at hand is to identify the cause or causes of hunger in a land of plenty.

Tragically, the federal government shares a large part of the blame. Under the guise of helping the farmer, this nation's agricultural and dairy programs are explicitly designed to generate high food prices. The cost of these programs to the taxpayer is a national scandal. Perhaps even worse, however, is the effect they have on the amount of food available to the consumer and the prices he or she has to pay for it.

Government regulation of the dairy industry is a perfect case in point. The production of milk and milk products in this country is controlled by a cartel of dairy cooperatives sponsored and enforced by the United States Department of Agriculture. The government not only decides how much milk and dairy output will be allowed, but also what the prices will be. The result of this is higher prices for dairy products, and a huge surplus stored by the government at taxpayer expense. The amount of dairy products the federal government stores is staggering. In 1983, over 11.4 *billion* pounds of milk were in storage, as well as 1.5 billion pounds of other dairy products. Is it any wonder that even with unprecedented dairy production, we are witnessing a continuing decline in per capita milk consumption, from 38 gallons in 1964 to 24 gallons in 1978? Dairy farmers were enriched by about $3 billion last year by this process, at the expense of both consumers and taxpayers.

How much lower dairy prices would be without this federal intervention is a matter of speculation. But Robert Gnaizda, a public-interest lawyer from San Francisco who testified before the task force, stated that American cheese sells for about twice the world market price. He testified that ending dairy price supports would cut cheese prices to 83 cents per pound. Imagine the effect the lower prices would have on low-income people. "Ending the subsidy will finally make cheese affordable to the poor," he said. "This is the way to solve hunger consistent with free-market principles and dignity for all." Unfortunately, Gnaizda's well-reasoned plea seems to have fallen on deaf ears.

But dairy products aren't the only ones regulated by the Department of Agriculture. Many fruits, nuts, and vegetables are regulated by government marketing orders, which do everything from setting production quotas for individual farmers to setting minimum grades and sizes. Marketing orders are designed to sharply limit the amount of produce available to the consumer—and they do. This USDA-imposed scarcity only drives prices up.

The spectacle of tons of California oranges rotting in the sun by the mandate of the federal government is a tribute to the effectiveness of the system. Crops restricted by marketing orders include hops, almonds, filberts, walnuts, raisins, certain types of cherries, and all California and Arizona oranges and lemons. Again, an administration supposedly committed to free-market principles has done virtually nothing to end this consumer rip-off.

The prices of other food staples, as well, have been driven up by federal farm policies. In *The Governing of Agriculture* economist Bruce Gardner reported that in 1979 alone, federal controls on wheat, corn, barley, sugar, peanuts, and cattle cost consumers almost $4 billion in higher prices. The cost to taxpayers of federal price supports on 27 different farm products jumped from about $4 billion in 1981 to over $21 billion in 1983. All these programs, of course, have a disproportionate effect on the poor, who spend a greater percentage of their income on food.

While the cost of food is only one of several causes of hunger, it is certainly an important one. By abolishing federal price supports and marketing orders, the government could take an important and immediate step toward eliminating hunger by making food more affordable, and saving the taxpayer billions of dollars. ■

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those with the highest rates of innovation and failure, not the lowest." (Emphasis in original.)

Business failures are part of the evolutionary process of mutation (entrepreneurial innovation), selection (profit and loss), and genetic memory (learning) whereby economies grow and advance. Any attempt to intervene coercively in this peaceful evolutionary process in order to keep unprofitable firms from failing will have at least two disastrous consequences: 1) it will provide opportunities for exploitation (political rent-seeking) through the government, skewing the selection process in favor of firms with political pull rather than alertness to and ability to satisfy consumer desires; and 2) it will suppress the development of new ideas and production processes, replacing the flexible and creative elements of the current system with rigidity and unresponsiveness.

Rent-Seeking

Industrial policy advocate Robert Reich recently wrote of the workings of industrial policy, "As America's industrial base dramatically transforms itself with government help, the stakes for both winners and losers grow significantly larger. Thus the process by which industrial policy is formulated raises anew one of the most perplexing issues of political legitimacy. How can we insulate it from the predations of narrow interest groups and the vagaries of partisan politics while ensuring that it is democratically accountable?"

The answer is easy: You can't. The power of government to use coercion and the threat of coercion to force some to subsidize others is a valuable economic good, one for which entrepreneurs will bid in the political marketplace. The greater the power of the state, the more political entrepreneurs ("narrow interest groups") will bid for its use. The recent upsurge in campaign contribution levels, lobbying, and other socially unproductive activities attests to the ability and willingness of entrepreneurs to seize on perceived opportunities for profit through the political process (rent-seeking).

These politically generated rents, or income in excess of opportunity costs, attract capital and entrepreneurs to invest in redistributive activities rather than wealth-producing activities, in the process diminishing the size of the "pie" to be divvied up. It is a negative-sum game. In any kind of democratic political system, such rent-seeking is inevitable and can be expected to increase or decrease in response to the extent (and hence value) of the state's control over resources. (Non-democratic political regimes, such as the Soviet Union, generate their own forms of entrepreneurial rent-seeking, with the ever-present bidding process usually labelled "corruption.") The answer to Robert Reich's question: A coordinated industrial policy will increase, not decrease, special interest predation.

Economic Evolution

Attempts by political authorities, whether democratically accountable or not, to keep failing firms from going under will stifle the creativity of the market process. By centralizing economic authority (as in an Industrial Finance Administration) and by thwarting the market process of selection, the process of progressive evolution will be significantly hindered. A look at the process of biological evolution might help to explain why. The great Russian geneticist S. S. Chetverikov demonstrated the necessary role of isolation and decentralization of freely crossing gene pools in the differentiation of species, or speciation. Analogously, the fragmentation of authority in a system of private property and voluntary exchange, in which different firms provide the testing grounds for selection, fosters the selection of beneficial economic mutations (innovations).

Centralization of economic decision-making tends to diminish (or eliminate) the independence of firms as places for innovation and selection. Going back to biological evolution, we know that most genetic mutations are harmful to a species; as Chetverikov observed, "The living organism in its normal habitat represents an extremely fine, complex and perfect mechanism, adjusted to all the varied requirements which are demanded from it by this habitat. To 'injure' such a mechanism is very much easier than to 'improve' it." Similarly, "new ideas" are more likely to be harmful than beneficial if implemented. Social and economic arrangements represent in their structures the result of a

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long evolutionary process, embodying the experiences of previous generations; the challenge of the process is to find out how beneficial new ideas are selected.

The market process of free competition generating profits and losses provides the most effective (from the standpoint of general prosperity) selection mechanism to weed out the bad and advance the beneficial, nicely complementing the multiplicity of firms arising from the decentralization of economic decision-making. The market process does not represent a completely Darwinian selection process, however, as the possibility of emulation and learning among humans allows new ideas and forms to be acquired by competitors, thus distributing the benefits of innovation more widely. In this

"High rates of business failure may reflect a dynamic and productive economy, in which entrepreneurs are willing to take risks."

the market process more closely resembles the evolutionary theory of Darwin's predecessor, the French naturalist Jean Baptiste Lamarck.

But this process is undermined to the extent that political authorities intervene, using their taxing powers to prop up old production processes located in failing firms, thereby keeping them from being weeded out and replaced by better processes. And by seizing funds from private entrepreneurs and capital markets, such interventions diminish the chances for survival of other firms not favored by the *political* selection process, keeping them from sustaining themselves in or even entering the *voluntary market* selection process. Inefficiently utilized capital is not freed up for use by others with different plans. Thus, the total amount of business failure (both "seen" and "unseen") is not reduced by political intervention. Rather, the *incidence* of failure changes, with the more politically adept entrepreneurs prospering at the expense of the less politically adept. Unlike the market process of voluntary exchange, this political process is a negative-sum game.

Evolutionary process is gaining ground in economics as a conceptual tool to rival the notion of equilibrium derived from classical physics. The recent book *An Evolutionary Theory of Economic Change* by Richard R. Nelson and Sidney G. Winter is helping to revive the evolutionary tradition of social theorists (to be distinguished from the crude "Social Darwinism" that envisioned selection in terms of individuals rather than in terms of ideas and social structures) begun by the Scottish moralists and refined in this century by such "Austrian" and market process theorists as F. A. Hayek and Joseph Schumpeter. In this view, the role of business failure is seen as central to a progressive and dynamic society and economy, and attempts to use coercion to thwart it as reactionary and harmful.

Is Our Economy Sick?

While the mere existence of business failure is no justification for attempts to use the coercive apparatus of the state to prop up failing firms, and is not even an unequivocal sign of a sick economy, many industrial policy advocates voice legitimate concerns about the recent performance of the American and worldwide economies. Each recession in recent years has produced progressively higher rates of unemployment: 6% in 1970, 8.2% in 1975, and 10.8% in 1982. The December 1983 unemployment rate, following a year-long recovery, stood at 8.2%, the same as during the height of the recession of 1974-1975. Further, inflation rates prior to each recession (as measured by the December to December changes in CPI) have reached ever higher levels: 6.1% in 1969, 12.2% in 1974, and 13.3% in 1979.

Industrial policy advocates consider this evidence of the limited capabilities of macroeconomic policies to remedy alleged market failures. They turn, therefore, to a systematic program of microeconomic interventions, specifically and explicitly affecting particular firms rather than merely the climate within which these firms produce and compete. But the failure of the macroeconomic policies they now consider "limited" in effect is precisely a failure of *microeconomic* policy. Fiscal and monetary policies cannot avoid having microeconomic effects entailing differential impacts on firms, industries, regions, and economic agents. Strictly speaking, the division between microeconomics and macroeconomics is quite arbitrary. The progressive worsening of the recessions of the last decade is not evidence of the limited nature of recent fiscal and monetary policies; it is the *result* of those policies. The inflationary policies of the monetary authorities, through their microeconomic distortion of capital and labor markets, have accelerated the cyclical

"Unlike the market process of voluntary exchange, the political selection process is a negative-sum game."

progression of the American economy, and thereby of the ever more integrated worldwide economy. The orthodox "cure" for economic cycles is in fact their cause.

What is needed to cure our "sick" economy is not another layer of political interventions into the marketplace, generating additional rent-seeking and thwarting the market process of progressive evolution, but the removal of the system of interventions responsible for the distortions and capital and labor idleness of the past decade. The acceleration of the cyclical process has led us to the absurd position of hailing 8.2% unemployment as a recovery. And current high deficits and levels of debt monetization (only 1978 has seen greater debt monetization than 1982 and 1983) promise more of the same cyclical progression. The economy is indeed sick, but the illness is iatrogenic: It is caused by the "doctor." ■

Industrial Policy and Japan's Success

by Scott D. Palmer

How did Japan recover from its devastation of 1945 to become the second largest economy in the West, with productivity and research gains that now threaten U.S. leadership as an industrial power? Was this recovery accomplished through a cunning "national industrial policy" in which Japan's government directed the nation's resources toward the most profitable goals? Or is Japan's success due to sound business practices and the free market?

The answer is crucial, because advocates of a U.S. industrial policy constantly point to Japan as proof that government is more efficient in the direction of the economy than are the free choices of businessmen and consumers. A comparison of business environments in the U.S. with those in Japan reveals that, far from being a result of government control, "Japan's economic miracle is the outgrowth of policies that are anathema to the advocates of industrial policy" low taxes, balanced budgets, and minimal government interference in the economy.

In Japan, people save more than three times as much of their income as we do in the United States—20 percent vs. 6 percent. Hence, more capital is available at lower interest rates for Japanese firms to invest in advanced equipment, new production capacity, and technological research.

Why is there such a difference? In the first place, the rewards of saving and investment are heavily taxed in the U.S., while they are virtually tax-free in Japan. The first $61,000 saved by Japanese citizens is tax-exempt each year, compared to rates of taxation as high as 50 percent in the U.S. Japan has no capital gains tax, compared to a tax of 20 to 50 percent in the U.S.; Japan also avoids double taxation of corporate income, which is still a burden on American business. Second, the Japanese government provides no "Social Security" type retirement program, so citizens must save for their own retirement, strengthening the Japanese economy in the process.

In addition to lower taxes, the Japanese government also gives business many freedoms that are denied to firms in the United States. Antitrust laws are less strict, so Japanese companies can enter into joint research projects and "business groups" to lower their costs and spread risks. A recent study found that this factor alone reduced Japanese capital costs to between one-third and one-fourth of the costs faced by U.S.

"Japan's economic miracle is the outgrowth of policies that are anathema to the advocates of industrial policy."

firms.

But if the Japanese are so devoted to free enterprise, how did all this talk about "Japan, Inc.," government subsidies to businesses, and unfair trade practices get started? Japan, just like the U.S., *does* engage in some anti-competitive trade practices, but these unfair practices are by no means as extensive as they are made out to be and are steadily being reduced.

For example, it is popularly believed that while Japanese firms are free to sell in the U.S., American firms are restricted from selling their goods in Japan. In reality, this is not the case. In 1962, there were almost 500 legal barriers to selling foreign products in Japan: by late 1983, most of these barriers had been eliminated, and those remaining were being phased out. Over 50,000 U.S. products are now being sold in Japan.

A common complaint of American firms is that the Japanese government subsidizes Japanese companies, enabling them to "dump" their products in the American marketplace at below-cost prices. This is generally untrue, but it is worth asking what the U.S. government should do when it is true. Should it match Japan subsidy for subsidy? Should import restrictions be imposed?

Perhaps surprisingly, the appropriate response would be to do *nothing*. When Japanese firms sell computer chips to American companies at very low prices, those firms' costs are reduced, enabling them to expand business activity.

It's true that the U.S. computer chip industry might suffer, but laid-off workers will be able to find employment in industries benefiting from the improved economic environment. This basic insight was crystallized by Adam Smith over 200 years ago: why make something here if we can get it cheaper from another country?

We must rid ourselves of the myth that imports hurt the American economy: they do not. When Americans exchange dollars for Hondas, they are getting useful goods: all the Japanese are getting is green paper and bank deposits. If they don't spend our money, we have obtained cars for pieces of paper—a pretty good deal in anyone's book. If they do spend it, then they must purchase American goods and services, i.e., either invest in American business or buy an American export. Imports and exports are simply different sides of the same trade equation.

If we are really serious about competing with Japan—recently named the world's most competitive industrial nation by the European Management Forum—we must copy back from the Japanese the ideas they originally copied from us: Lower taxes, reduce government spending, balance the budget, and eliminate government interference in the market process. Only in this way can we regain the initiative in world markets and revitalize the American dream. ■

Scott D. Palmer is editor of *Data Processing Management* magazine. This article is based on a study he recently prepared for the Cato Institute.

Technology as a Human Right

by Doug Bandow

The advance of technology is transforming both the world economic system and the traditional political order, as rapid changes in man's ability to communicate, transmit information, and utilize space make regulation ever more difficult. As Oswald and Gladys Ganley observe in their recent book, *To Inform or To Control? The New Communications Networks:*

> Communications and information resources have moved great blocks of activity beyond national borders. Whole industries, businesses, money markets, currency flows, banking, energy resources, and defense systems—and communications and information itself—have gone global. Most of our stakes are now global. But governments have not gone global . . . and certain events have escaped national control.

To make up for the lack of both effective national control and global government, developing nations, through the Group of 77 or G-77, as their political lobby is known, are attempting to construct an international regulatory system under the aegis of the United Nations. They hope to both limit the impact of Western technology, like communications systems, on their political stability, and harness it to promote their rapid development. In particular, Third World leaders have seen the tremendous impact of technology on the economies of the industrial nations and believe the same technology will do the same thing for their countries.

But in their quest for instant industrialization, developing nations want neither to bring about the means to absorb new technologies nor to pay for technology transfers from transnational corporations. Indeed, many Third World politicians seem indignant that the private sector has any role at all in providing technology. A 1981 study by the UN Conference on Trade and Development (UNCTAD) decries the fact that "the availability of technologies in the public domain is often made subject to private decisions" while lauding socialist countries where technology is "not subject to the profit motive." This hostility to the very concept of private ownership has led developing-country diplomats and UN officials to promote an entirely new philosophy regarding technology: All nations "have the right of access to technology," for it is "part of the universal human heritage."

This universal human heritage is not limited to tangible machines and devices, but includes the mental work that invents and applies them; the UNCTAD Secretariat defines technology as "a body of knowledge about techniques—a technique being a utilized method of production." Controlling such a body of knowledge requires expansive international control, and has led to Third World demands for operational plants, markets to sell goods produced by such plants, a vocational training system, access to subsequent technology advances, an international technology transfer code and fund, and restrictions on "reverse transfer" through immigration to industrialized countries.

"Coercive technology transfers would reduce the incentive for the production and distribution of new technologies."

The United Nations has been working for the past decade and more to satisfy the technology agenda of the G-77. Though much of the rhetoric, resolutions, and reports seem harmless, if misguided, the Third World has demonstrated infinite patience. It took 17 years and 11 conference sessions to turn a General Assembly resolution declaring the seabed to be the "common heritage of mankind" into an international treaty, but if the Law of the Sea Treaty takes effect it will establish the first element of a new coercive economic order, with global regulation of resource development, forced international income redistribution, and mandatory technology transfers from private companies. Several international organizations, like UNCTAD, are now at work on proposals to require transfers of all technology, and could ultimately succeed as well.

UNCTAD was established in 1964 to promote international trade, but the developing nations soon turned it into a forum for pushing wealth transfers and economic regulation. It established a permanent Intergovernmental Group on Transfer of Technology, and in 1975 the G-77 presented a restrictive draft code of conduct for technology transfers. Negotiations have continued since then, particularly in the Conference on an International Code of Conduct on the Transfer of Technology, which held its fifth session last fall. Both the UNCTAD conference and the General Assembly have called for completion of the technology code. The General Assembly even created an interim committee of the technology transfer conference in an effort to push the code along.

The proposed technology transfer code would restructure the legal rules protecting private development, production, and commercialization of technology. The developing countries want to give nations the right to regulate the terms and conditions of any technology transfer arrangements. For example, they would prevent technology sellers from negotiating for certain use restrictions on the technology, competitive obligations on buyers, and a number of common commercial practices. Moreover, the code would require sellers to guarantee the suitability of the technology supplied, minimum production levels to be obtained with it, training of native workers, supply of improvements and spare parts, and price of spare parts and other goods and raw materials. Finally, the code directs industrialized countries to grant developing nations preferential treatment, including giving them access to information and technology within their control and inducing their private companies to favor developing countries.

Doug Bandow is editor of *Inquiry* and a senior policy consultant to the Cato Institute. While on the White House staff, he was a deputy representative to the Third United Nations Conference on the Law of the Sea.

The New International Economic Order

The General Assembly also has actively promoted technology regulation. For example, it has regularly endorsed the proposal for a New International Economic Order (NIEO)—a radical restructuring of the entire international economic system. In 1974 the developing nation majority passed a resolution calling for NIEO, which included a demand for technology transfers to developing nations. And in 1980 the General Assembly adopted the Restrictive Business Practices Code, first drafted by UNCTAD in 1973, which includes many provisions similar to those in the technology transfer code, broadly authorizing developing countries to control the terms of technology deals.

Another UN body interested in technology transactions is the Commission on Transnational Corporations, established by the General Assembly in 1974. It has worked ever since on a code of conduct for transnational corporations. The proposed drafts would authorize wholesale governmental regulation of business practices, including technology transfers. Though the technology provisions are not as detailed as in UNCTAD's code, they embrace the same general principles, and UNCTAD has endorsed the commission's proposed code.

And at the 1979 United Nations Conference on Science and Technology for Development (UNCSTAD), developing countries drafted a Programme for Action on the use of science and technology in development. The congressional Office of Technology Assessment reports that the "conference was noteworthy for its numerous attacks on developed countries for monopolizing science and technology. The developing countries demanded large-scale transfers of technical hardware and know-how to the developing world."

That conference recommended the creation of three new international organizations, including the United Nations Center for Science and Technology for Development. The General Assembly subsequently created the Center, which has promoted the position that the industrialized countries have monopolized technology and withheld it from developing nations. Assistant Secretary General Amilcar Ferrari, head of the Center, says that "we are preparing an operational plan encompassing all the activities of the United Nations system towards . . . restructuring international relations."

The Attack on Property Rights

UNCTAD has launched two indirect attacks on the technology rights of private companies, as well. The first is to encourage national efforts to regulate technology transfers; some countries, like Brazil, have previously legislated significant rstrictions on their own. According to a 1983 policy paper, UNCTAD is preparing a report on "concrete proposals for the formulation of common approaches to guide developing countries in their preparation of laws, regulations, and policies on the transfer and acquisition of technology."

"The end result of the Law of the Sea would be to cut Third World peoples off from the benefits of seabed mining."

The second is to weaken patents and other forms of intellectual property rights. Third World spokesmen argue that protecting intellectual property unfairly advantages the holders of technology and disadvantages those who "need" it, and drains needed investment capital from developing countries. UNCTAD, for example, has attacked the system because only 1% of the world's patents are held by developing countries and developing nations must pay for the right to use patents, trademarks, and technical services; it complains of "overpricing of imports of intermediate products and equipment, profits on capitalization of know-how and price mark-ups, and other costs inherent in technological dependence." (Similar charges have been made by the United Nations Industrial Development Organization, UNIDO, which contends that intellectual property "is one of the main constituents of a strategy of domination used by the industrialized countries" and is a "unilateral contrivance" used "to exploit the developing countries.")

This pervasive belief in the injustice of private property has led UNCTAD to set up a so-called Group of Governmental Experts, which, along with the UNCTAD Secretariat, has been studying patent and trademark policies. Furthermore, the 1983 UNCTAD policy plan endorsed an "in-depth review" of trademark protections and the revision of the patent laws to make them "capable of effectively complementing other policies for national development" by promoting technology transfers on "fair and reasonable terms," the training of native personnel, increased access to patent documentation, and "new and imaginative studies of possibilities for giving preferential treatment to all developing countries."

UNCTAD has also participated as an organization in the World Intellectual Property Organization (WIPO), which is reviewing the Paris Convention for the Protection of Intellectual Property. UNCTAD's 1981 study called for reducing copyright protections, and its 1983 policy plan stated that UNCTAD would "play a prominent role" in reviewing the intellectual property issue.

In WIPO the developing nations first proposed significantly reducing the level of patent protection in 1975. In 1980 they succeeded in eliminating the requirement that changes in the Paris Convention be unanimous, delivering effective control of the Conference to the G-77. In 1981 the Nairobi Diplomatic Conference tentatively approved, over American opposition, allowing countries to grant an exclusive license to anyone, including a patent holder's competitors, after 30 months, and to revoke the patent entirely after five years, if the country decides that the patent holder has not adequately "worked" the patent. (A patent might be held not to be worked if the good is imported, and even if regulatory barriers delayed the good's introduction.) At WIPO's fall 1982 conference, these issues came up again, along with pro-

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posals to favor developing states in terms of fees paid for patent rights and time allowed to complete the patent process. America continued to oppose the weakening of patent rights, which Barry MacTaggart, chairman and president of Pfizer International, says "would confer international respectability on the abrogation of patents."

WIPO has also taken on trademarks. A 1981 draft report urged that the organization consider eliminating or limiting the use of trademarks, at least in developing countries. The report contended that trademarks gave companies excessive market power, allowing them to charge excessive prices. (Trademarks, of course, merely help consumers identify specific products and companies—and political parties in some Third World countries.)

From the Oceans to the Stars

The United Nations has also spawned proposals to mandate technology transfers in specialized areas. The most complete system is provided by the Law of the Sea Treaty, or LOST, which was opened for signature in 1982. The United States refused to sign the treaty, in part because of the mandatory technology transfer provisions.

The LOST regulates the use of the oceans and creates an International Seabed Authority to control private seabed development. Private miners are obligated to sell, upon demand, their technology to the Enterprise or developing countries. If the miner is leasing the technology, he must obtain "written assurances" from the third party owner that the technology can be provided the Enterprise or Third World nations on the same terms that it was supplied to him. Further, every country that has "sponsored" a private miner agrees to "take all feasible measures within its own legal system" to "ensure that such technology" is made available.

By creating a forced sale, the transfer article guarantees that no transaction with the Enterprise can ever be fair. The seller cannot refuse to provide technology that is intended to give him a competitive advantage, nor even demand a premium for technology that is sophisticated and unique. And there is no effective remedy to prevent disclosure of proprietary information about the technology to others.

Third World spokesmen and their supporters consider these provisions to be among the most important of the treaty. Dalhousie University professor Elisabeth Mann Borgese, for example, says that the LOST provides a "unique opportunity to create . . . new instruments for technology transfer." And the Norwegian ambassador to the conference, Jens Evensen, who supported the Third World's demands, has said that the "importance" of the principle of mandatory technology transfer established by LOST "should not be underestimated in future discussions and negotiation."

Unfortunately, the UN may attempt to apply these principles to space development. The General Assembly has endorsed, and four nations have ratified, the "Agreement Governing the Activities of States on the Moon and Other Celestial Bodies" (or Moon Treaty). Only one more ratification is needed to bring the treaty into effect. Much of the rhetoric in the Moon Treaty matches that in the LOST, and Article 11 obligates treaty signatories "to establish an international regime" to regulate the use of the moon. Any regulatory system eventually set up will almost certainly be dominated by the Third World and include technology transfer provisions similar to those established by the sea treaty.

"Many Third World politicians seem indignant that the private sector has any role at all in providing technology."

The Third World's interest in private space technology was clearly demonstrated at the 1982 United Nations Conference on the Exploration and Peaceful Uses of Outer Space, or UNISPACE '82. Third World spokesmen considered UNISPACE '82 to be part of the general NIEO negotiations, and the Office of Technology Assessment reports that "if there was a single underlying theme to UNISPACE '82 it was the transfer of space technology from developed to developing nations." The final conference report contended that developing nations will never be able to "realize their full potential as long as there is no restructuring of existing international economic relations on a just and equitable basis," and that there must be changes "in the international process of" technology transfers.

The potential harm to American individuals and firms of all these forms of coercive technology transfers is obvious—they would directly redistribute wealth from Western producers and consumers to Third World governments. These proposals would also reduce the incentive for the production and distribution of new technologies.

Harming the Third World

But the harm would eventually be far greater to Third World peoples. Economist Karl Brunner points out that "restrictions on external commercial contacts imposed by Third World governments are by far the most important obstacles to the inflow of productive wealth and resources." The less control companies have over their products, the more resources they have to use to pacify local bureaucrats, and the less they can earn on investments in often unstable environments, the less likely they are to invest. After all, UNCTAD reports that roughly 90% of the world's technology trade occurs among developed countries; companies are far more likely to do without the 10% in developing countries than to lose control of the technology being transferred in the other 90%. And the less investment, the fewer technology transfers that will occur, the fewer jobs that will be created, and ultimately the slower development will proceed in the Third World.

The attack on intellectual property rights would have a similar effect. Michael Kirk, head of the international division of the United States Office of Patents and Trademarks, says that the Third World's WIPO package is "tantamount to expropriation, and it's bad for the developmental process." Reducing patent protection will not increase foreign investment in technology transfers. Roger Brooks of the Heritage Foundation has pointed out that patent

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How Industrial Policy Picks Losers

Picking Losers . . . ? The Political Economy of Industrial Policy, *by John Burton (London: The Institute of Economic Affairs, 1983), 77 pp., $7.50.*

Burton makes his criticism of industrial policy by first illuminating elements of the market system that seem to be kept secret around most universities and public offices. Improvements in the unhampered business world, he explains, are made through an evolutionary economic process where every event has natural causes and important consequences for economic improvement. Just as in biological evolution, the economy progresses by the "mutations" of business experimentation and the "natural selection" of the profit-and-loss system. Burton points out, however, that the analogy breaks down on the matter of general welfare: In economic evolution, the few direct competitors of the "fittest" suffer, but the rest of the community benefits by the new and superior products made available at a lower price; in biological evolution, the direct competitors of the fittest perish and no other species is necessarily helped in any way.

Drawing on the insights of F. A. Hayek and A. A. Alchian, Burton relates the flaws of industrial policy to the evolutionary development of the market by the important and often misunderstood role of economic losses in the process. Losses are often misunderstood because neoclassical economic techniques, which pervade the business, bureaucratic, and academic worlds, do not satisfactorily deal with loss-making firms and their exiting of the industry. The most interesting features of such a firm are the way disappearance occurs and the consequences which follow for the industry. Neoclassical theory, however, tends to allow changes to be made costlessly and instantaneously, and to consider the industry to be so large that the actions of one firm have no impact on the industry. Burton emphasizes that exiting firms do not quietly crawl away and die, as an extinct species might, leaving no mark on the economic world. Rather, it goes through a process of reorganization, reevaluation, and change of ownership which is integral to the overall economic evolution.

The basic pitfall of industrial policy is that it unnaturally interferes with the evolutionary growth of business. One of the major purposes of industrial policy is to bolster degenerating firms or industries. This practice perverts the development process because economic organizations that have been shown to be inferior, either domestically or internationally, are not experiencing the results dictated by the process. This breakdown of the evolution disturbs the natural rewards that the superior firms should obtain and the move toward efficiency for the entire community that would result. Firms unable to go on competing, says Burton, should be left to dismantle themselves and reintegrate their resources into more prosperous industries.

Policy Report Reviews

Besides aiding ailing sectors, industrial policy is designed to pick out and incubate economic winners. This endeavor preempts the natural process that would have taken place, and the alteration works its way through the economy, fouling up the evolutionary process at each step. The "winners" picked, Burton explains, are in no sense winners at all because they have not won by any competitive process of natural selection. Government choice-making is necessarily ignorant of the relevant economic knowledge to determine winners because that knowledge is so volatile and diffuse. Burton further suggests that there is little reason to suppose that the government even aims at choosing the "winners." Characteristic of the government selection process are political favoritism, lobbying presure, self-serving functionaries, and corruption.

In his chapter on "the political market," Burton has a good discussion of how resources are diverted from production to subsidy-seeking and indeed how firms may be formed in order to get subsidies.

Regulation of Pharmaceuticals: Balancing the Benefits and Risks, *by Henry G. Grabowski and John M. Vernon (Washington: American Enterprise Institute, 1983), 74 pp., $4.95.*

The slumping of the pharmaceutical industry has made many people raise questions about the Food and Drug Administration (FDA), which must approve all new drugs. Since 1962, the annual rate of new drugs introduced has fallen, R&D costs have risen, and the average approval period of new drugs has become about 2½ years. (Compare with the United Kingdom's 5 months.) The authors argue that pharmaceutical regulation has become too stringent.

The approval of new drugs by the FDA has progressively become more difficult. In 1938, after a major drug disaster involving the drug sulfanilamide, which killed more than a hundred children, the Food, Drug, and Cosmetic Act was passed. Firms were required to submit a new drug application to the FDA before introducing any new pharmaceutical into interstate commerce. The application, which had to demonstrate that the drug was safe under recommended conditions, was automatically approved in 60 days unless the authorities determined that it did not contain sufficient evidence of drug safety. This caused a lag in introducing new drugs, but the regulatory review times were still relatively short. A much greater FDA role was established in 1962 following the thalidomide tragedy, with the Kefauver-Harris amendments. The new regulation gave the FDA the authority to determine effectiveness as well as safety of drugs. Approval periods lengthened as the safe-and-effective burden of proof was completely shifted to the drug innovator.

Grabowski and Vernon explain that there are two types of drug introduction errors: the rejection of drugs that actually are safe and effective, and the acceptance of drugs that are not safe and effective. The FDA, they say, is overly sensitive to the second type of error because congressional committees almost never investigate the failure to approve a new drug, while there are

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Reviews (Cont. from p. 9)

many investigations of FDA approval of new drugs. "An FDA official who approves a drug subsequently shown to be not safe or effective stands to bear heavy personal costs." Because of this bias, the FDA official may reject the drug when the evidence actually is inconclusive or opt for more testing, protracting the approval period.

The authors suggest that while the FDA is biased towards the one type of error, the unregulated market is biased toward the other, i.e., new drugs that are not safe and effective are readily accepted in order to increase profits. Thus regulation needs to be restructured to eliminate bias in either direction.

The central flaw with the study is that while substantial evidence is provided to show the burden of pharmaceutical regulation, the ostensible systematic flaw with the free market is not dealt with at all, except the brief mention of the two drug tragedies. The authors need to provide reasons for their conclusions about the unregulated market.

The authors discuss several regulatory reforms designed to find the happy medium of private and public control. One suggestion is to make a "probably safe and effective" category of new drugs which would allow provisional acceptance of the drug and would require clear labeling of its classification. Another is to thrust some of the burden of proof of the quality of a new drug back on to the FDA, as it was before 1962. A new external body of pharmaceutical experts could be created to hear appeals on new drug decisions. Subjecting the FDA to this external review, the authors say, would alter the incentives to delay and reject new drugs.

Third World Multinationals: The Rise of Foreign Investment from Developing Countries *by Louis T. Wells, Jr. (Cambridge: MIT Press, 1983), 206 pp., $25.00.*

While the activities of First World multinationals and their impact on the development process of Third World host countries have been the focus of much discussion, this is the first major investigation of the rise in the last 15 years of foreign investment from developing nations. This book explores the rationales for the foreign investment of firms based in developing countries and the impact of this on the international economic order.

Direct investment held abroad by developing countries was at least $5-10 billion by 1980 and has been substantially increasing. Unlike multinationals of the United States, subsidiaries of developing country firms are almost all in other developing countries, and most of the investment is in neighboring countries. Thus Third World multinationals constitute a means of bringing technology to developing countries without increasing dependence on firms and governments from the rich countries of the North.

Third World firms have found many economic reasons for international branching. Most firms in Wells's study exported before they manufactured abroad and undertook foreign manufacturing only when threats appeared to their foreign market. Quotas could be circumvented and access to raw materials in the host country made easier. The foremost reason for foreign branching, however, is the lure of lower input costs (primarily wages). Hong Kong firms, for example, went to Macao, the Philippines, and Thailand because of the lower wage rates. Another concern for many Third World firms is the political risk at home. "If the home country takes a turn for the worse, the firm's owners can leave and run to the overseas subsidiaries."

Host governments often encourage the establishing of subsidiaries of firms based in other developing countries because of the promise of regional economic integration, the transfer of technology, and the employment of domestic resources. These last two attractions, however, make multinationals from rich countries all the more appealing. This alternative is often exploited, keeping out Third World multinationals.

The home government may wish to induce the branching because the foreign activities should eventually earn foreign exchange in the form of dividends and fees (although foreign investment initially means an outflow of exchange from the home country). It may object, however, because of the exportation of managerial and technical personnel.

International institutions such as the International Labour Office, the Andean group, and the United Nations have given encouragement and provided incentives to the foreign investment of firms in developing nations with the aims of increasing employment, integrating regional economic affairs, and minimizing the dependence on First World institutions.

In assessing the contribution of Third World multinationals to the development process and to international relations, Wells concludes that, in net, a positive step is being taken. "Only part of that judgment is based on the narrow economic contributions of such firms." The overriding factor is the effect on the tensions between the rich countries of the North and the poor countries of the South. "Foreign direct investment among the developing countries makes a contribution toward reducing those tensions."

Studies in Public Regulation, *edited by Gary Fromm (Cambridge: MIT Press, 1983), 393 pp., $15.00.*

Studies in Public Regulation presents the proceedings of the Conference on Public Regulation sponsored by the National Bureau of Economic Research in 1977. The volume follows the usual format in such cases, with primary papers followed by short (and often pithy) comments by economists who have previously published in the relevant field.

The book opens with a useful (if necessarily incomplete) general survey of the literature on regulation by Roger Noll of Cal Tech and Paul Joskow of MIT. The fact that both are affiliated with an "Institute of Technology" may be the source of what are apparently technocratic concerns. Argue Noll and Joskow: "Far too much of the effort of economists has been directed toward asking whether there should or should not be regulation, and far too little effort directed at how to improve the performance of regulatory agencies."

Also included in the volume are papers dealing with such subjects as a new evaluative criterion for regulatory policy incorporating both allocative and distributive concerns, the role and justification of solvency regulation in the insurance industry, the impact on railroad investment of regulatory barriers to exit, the political economy of water pollution controls, rate structures in multiproduct firms, and cross subsidization in regulated markets. Concluding the volume is a chapter by University of Chicago economist Sam Peltzman commenting on the papers and on the possibilities for a general theory of regulation. Peltzman notes an asymmetry common in the literature on regulation, including the papers in this volume, between the serious treatment often accorded the attempt to understand and measure the cartelizing effects of regulation and the minimal analytical treatment accorded the "market failure" justifications for regulation. As Peltzman remarks, "Conjuring up rationales for regulation is too easy a sport; perhaps deserves a Pigovian tax."

Studies in Public Regulation offers numerous insights into the regulatory process but is already somewhat out of date and is at times extraordinarily technical and out of the reach of most potential readers. For the specialist in the theory of regulation, however, it may be useful. ■

Technology (Cont. from p. 8)

protection "is a necessary and central component of an attractive investment climate," particularly if the company must produce the product itself when it cannot find a local enterprise to produce it. This issue is particularly serious for products that require extensive testing, such as pharmaceuticals and chemicals, since the regulatory delays often exceed the time that developing nations would allow the companies to work patents before revoking them.

The specific technology transfer programs would stifle particular forms of development. The National Ocean Industries Association, the National Association of Manufacturers, and a number of individual firms have made it clear that mining companies would not mine, and technology suppliers would not supply technology, under the LOST provisions. The end result would be to cut Third World peoples off from the benefits of seabed mining. As for space, hundreds of millions of dollars have been invested in commercial space applications, but such investment would dry up if any resulting technology would be controlled by some international authority.

The fundamental problem is that the developing country leaders misperceive both the problems and solutions. Western nations and companies do not arbitrarily withhold technology from the Third World—if nothing else, it is not in their financial interest to do so. Nor is technology a simple "thing" that can be handed over. Richard Cooper, Undersecretary of State for Economic Affairs under President Carter, has written that:

> There is a failure to appreciate that much of the specialized knowledge is readily available for the taking in professional and trade journals, and that much of the rest resides in the small and scattered bits of knowledge concerning how to do particular things. In both cases, the key is trained manpower; technology by itself cannot simply be "transferred."

Moreover, any transferred technology is only as valuable as the use to which it is put. Subsidized or even free technology from abroad that has not been developed in concert with the characteristics of the local economy—that is, adapted to local labor markets, educational standards, financial institutions, raw materials, and complementary technologies—is unlikely to be used efficiently. In fact, even UNCTAD has acknowledged that "technological transformation is much more than mere imports of external technology." It also requires "the mastery of the skills to produce these very instruments and processes, to organize, administer, manage and plan their future development."

The developing countries recognize the critical role that technology has played in enriching the industrialized nations; they therefore see their salvation in technology. And, under the right conditions, technology has played, and will continue to play, an important role in spurring Third World development. But those right conditions will not be created by coercing the transfer of Western products and expertise.

This is not to say we should be unsympathetic with the plight of the people of the developing world; sociologist Peter Berger has written of the "immense anguish and pain, physical as well as moral" that has "been associated with the entry of these people into the common history of our age." But erecting new regulatory barriers is not compassionate, especially when it is domestic regulatory barriers—civil, political, and economic—that most hinder their economic development. To oppose the UN's redistributionist technology proposals may seem harsh, but to support them, exacerbating the fundamental cause of Third World poverty, would be far harsher. ■

Coming Up in Policy Report:

Exclusive interview with F. A. Hayek

Is the debt crisis over?

Richard Rahn, Ronald D. Utt, and Greg Ballentine on the federal budget

"To be governed . . ."

We're torn between bicycle racing and mud-wrestling

The House of Representatives' Democratic Caucus is presenting a televised debate Sunday starring the eight Democratic presidential candidates. . . .

Said Rep. Charles E. Schumer (D-N.Y.), who chaired the caucus project, ". . . And it was my idea to do it this Sunday, because now people who are accustomed to watching Sunday football on TV may watch this instead. Their choice will be bicycle racing in Italy, mud-wrestling in Japan or the presidential candidates in New Hampshire."

—*Washington Post*, Jan. 14, 1984

Another Communist country suffers chronic unseasonal weather

Vietnamese officials say typhoons in October dealt a severe setback to food production.

—*Washington Post*, Dec. 27, 1983

Great moments in deregulation

A new ruling by Virginia Attorney General Gerald L. Baliles may soon . . . allow the sale of packs with 25 cigarettes instead of the traditional 20.

—*Washington Post*, Jan. 24, 1984

Wait . . . it's becoming clearer . . . more waste of taxpayers' money

The Pentagon has spent millions of dollars, according to three new reports, on secret projects to investigate extrasensory phenomena and to see if the sheer power of the human mind can be harnessed to perform various acts of espionage and war—penetrating secret files, for example, locating submarines or blowing up guided missiles in midflight.

Further, one of the reports says concern about a psychic arms gap has reached as high as the [Carter] White House. . . .

What emerges is a picture of both superpowers trying to master such esoteric arts as ESP (extrasensory perception), telepathy (thought transfer), clairvoyance (seeing things that are out of sight), and psychokinesis (mental influence over objects or events)—all in the name of the national defense.

—*New York Times*, Jan. 10, 1984

The secret is out

[The economic assumptions in presidential budgets] are the product of yearly negotiations between the heads of the Treasury Department, the Office of Management and Budget, and the Council of Economic Advisers. They consider not only the range of what private forecasters say, but also what they hope will happen to the economy if Congress passes the Administration budget, and the political importance of putting the budget in the best possible light. In other words, they make the numbers up.

—*The New Republic*, Feb. 13, 1984

Profiles in courage

A group of leading Democrats today released what they called a "blueprint for the future" . . . that would reduce the federal budget deficit . . .

"We're not interested in reducing benefits, especially in an election year," said Rep. Thomas J. Downey (D-N.Y.).

—*Washington Post*, Jan. 8, 1984

That's what we wondered

[Virginia State Sen. Wiley] Mitchell said, "Many members—when they first come in here—look at this hallowed chamber [the Virginia legislature] with its traditions and grandeur and ask themselves 'How did I ever get elected to serve here?' A year later they look around the same room and ask themselves, 'How did these people ever get elected to serve here?'"

—*Washington Times*, Jan. 30, 1984

Much like the public schools

[Virginia State Board of Education member Allix B.] James added that home education could result in a child "that is not educated and a child that is not even prepared to deal in a society."

—*Washington Post*, Jan. 28, 1984

If you also leave aside domestic spending, it's $900 billion lower

Leaving aside defense and interest on the national debt, the 1985 budget is $60 billion lower than spending would have been under the pre-Reagan Administration budget.

—Interview with David Stockman in *Fortune*, Feb. 6, 1984

Well, as long as he's honest about it

Vice President George Bush yesterday pledged that the Reagan administration will continue to resist domestic pressures for more trade protection, which he said "are mounting" as a result of policies being pushed by Democratic presidential candidates.

But he also acknowledged, in answer to a question, that President Reagan granted additional trade protection to America's textile industry last month because of a commitment "made in our campaign for election four years ago."

—*Washington Post*, Jan. 20, 1984

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