How the U.S. lost its lead in steel production

by Anthony K. Wikrent

Since EIR issued its warning of the imminent bankruptcy of the U.S. economy in 1986, the United States has passed the point of no return. The industrial production base of the United States is now so decimated, that the nation is no longer able to initiate its own recovery. The implementation by American elites of their "post-industrial" policies has left the U.S. significantly behind other industrial nations in most areas of productive activity—while those elites whine about "unfair competition." This week, we examine how the U.S. lost its lead in basic raw steel production.

Paul Volcker's 20% interest rate shock of 1979 caused the postponement and cancelation of durable goods orders and large construction projects in the early 1980s, initiating a collapse in the demand for steel. Reflecting the collapse of orders, shipments of steel plunged from 100.3 million tons in 1979, to 61.6 million tons in 1982, a drop of 38.6% in just two years (**Figure 1**).

From 1982 to 1987, the U.S. steel industry racked up losses each year, eventually totaling over \$12 billion for the period. Shareholders' equity in the industry plunged from \$15.4 billion to \$2.9 billion, as a number of firms, including LTV, the second-largest steel maker, went bankrupt. Today, 15% of the industry still operates under bankruptcy protection.

In the 1860s, American steel makers, led by such men as Pennsylvania Rep. William "Pig Iron" Kelley, would have responded by politically annihilating Paul Volcker. In the 1980s, however, American steel makers responded by quietly reducing capacity, gouging their work-force, and loudly accusing the Japanese and others of "unfair competition." Steel blast furnaces in Pittsburgh and elsewhere were literally dynamited. Today, the United States can produce only three-quarters the amount of raw steel it could produce in 1980. Total industry capacity is now 116.8 million net tons annually, compared to 160.0 million net tons in 1977 (Figure 2).

The number of jobs in the industry was halved, from 452,400 in 1977 to 165,600 at present. The impact on local communities was devastating. In the Monongahela Valley south of Pittsburgh, for example, U.S. Steel closed three mills, including the famous Homestead Works that was a linchpin of the World War II mobilization. In 1979, U.S. Steel had 26,500 workers in the Mon Valley able to produce 8.5 million tons of steel. Now, there are 4,000 workers left,

and the capacity to produce 2.5 million tons of steel. The Mon Valley has lost at least 10% of its total population.

There was yet another unpleasant surprise. Throughout the 1970s, U.S. steel makers had been forced to spend billions of dollars for pollution abatement and emissions control equipment, while Japanese, German, and Korean steel-makers steadily advanced their steel making technology. In the 1980s, U.S. steel makers began to be bluntly told by their customers that imported steel was of significantly higher quality than domestically made steel. Imported steel was easier to form, and less liable to break in the presses. It had far fewer surface defects, and was thus easier to paint. And, at the beginning of the 1980s, imported steel was cheaper as well.

From a market share of 16.3% in 1980, imported steel climbed to a 21.8% market share in 1982 and a 26.4% share in 1984. In October 1984, the free-trade ideologues of the Reagan administration reluctantly implemented a steel import restriction program, based on Voluntary Restraint Agreements. The market share of imports declined slightly, but remained well above 20%, until last year, as Figure 1 shows.

Imports continue to take such a large share of the U.S. market because U.S. steel makers have responded to international competition the wrong way. In accordance with the anti-labor, anti-science precepts of the Anglo-American management style, they attempted to drive down the cost of their product through a brutal assault on their work force, following in the footsteps of Hitler's Economics Minister, Hjalmar Schacht. And they have succeeded: through wage givebacks and freezes (hourly wages remained unchanged from 1982 to 1988), wages of U.S. steel workers have been driven below those of steel workers in Japan and Western Europe. Moreover, ruthless cutting of corners and labor speed-ups has reduced the amount of time to produce one ton of steel to 5.6 employee hours, compared to 6.0 hours in Japan and 5.8 hours in West Germany.

In contrast to this assault on productive labor, the Japanese, Germans, Koreans, and others have maintained or even strengthened their competitive edge by pushing forward with new technological developments, *enhancing the productive powers of labor*. As the 1990 *U.S. Industrial Outlook* notes, "Many of the important technological developments are orig-

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inating in Japan and Western Europe. . . . Steel technology eventually reaches the U.S. on a delayed basis through purchases or joint ventures, leaving domestic firms one step behind foreign competitors."

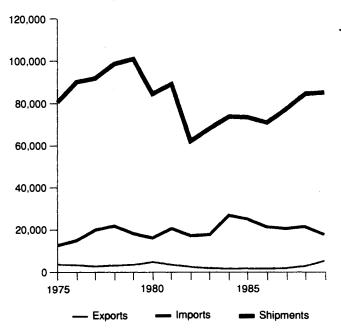
The technological superiority of the Japanese is simply the result of the Japanese willingness to invest in new technologies. During the 1980s, U.S. steel makers were forced to seek out overseas technology just to survive (**Table 1**). Japanese steel makers alone invested over \$3 billion for modernizing and constructing steel production facilities in the United States during the past decade. Japanese steel companies now have a direct stake in about one-third of U.S. steel-making capacity.

Unable to raise cheap capital for technological improvements in a U.S. financial system that is fundamentally intolerant of the lower rates of return associated with capital-intensive investments in improved production technologies, U.S. steel makers interested in remaining in the business have been forced to look overseas for financing capital improvements. For example, three Japanese creditors provided \$330 million of the \$470 million required to build the I/N Tek mill in New Carlisle, Indiana, (55 miles east of Inland's Indiana Harbor works), a joint venture between Nippon Steel Corp. and Inland Steel. The New Carlisle mill is an exact replica of Nippon's Himeji mill, located in southwestern Japan.

John L. Selky, one of the Inland executives involved in

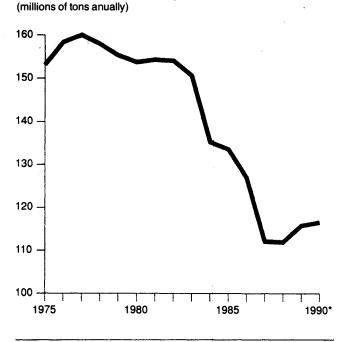
FIGURE 1

U.S. steel imports, exports, and shipments (millions of tons anually)



Source: American Ion and Steel Institute monthly newsletter

U.S. steel imports, exports, and shipments



*preliminary Source: American Iron and Steel Institute

initial negotiations with Nippon in the early 1980s, and now the head of the I/N Tek operation, told the Dec. 11, 1989 Washington Post that during the initial negotiations, before each dinner "The Japanese would give this little preamble, saying that in the '60s, the U.S. steel industry had helped them and given them equipment and technology. Now they realized it was time for them to reciprocate. They felt it was important to help America. It made you feel a little disappointed that we hadn't kept up with the technology in the '70s. You knew what they were saying was true. You hated to hear it. You knew why they needed help in the '60s; it was because they had been demolished in the '40s. We didn't have that excuse."

The leading U.S. mini-mill producer, Nucor Inc., has teamed with SMS Schloemann-Siemag AG, a West German firm that has developed a nozzle able to pour a two-inch thick slab of steel, instead of the standard ten-inch thick slab. Pouring thinner slabs eliminates at least half the rollers and presses needed to reduce the slabs to the quarter inch thickness or less needed by auto and appliance manufacturers. Schloemann-Siemag also developed a way to supercharge the rollers, so that the steel passes through five times faster.

Nucor's chairman, Kenneth Iverson, says that the new technology will allow a ton of steel to be made in 1.5 manhours, costing \$50 to \$70 a ton less, compared to the 4-6 man-hours, and the total cost of \$250 to \$500 a ton now

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TABLE 1

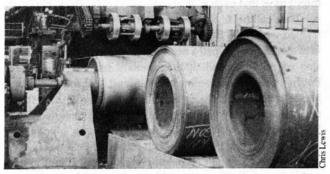
Major foreign involvement in U.S. steel production

U.S. company	Foreign company	Country ownership	Percent	Year	Type of operation established
Fort Wayne Specialty	Slater	Canada	100%	1980	Specialty bar mill
Wheeling-Pittsburgh	Nisshin	Japan	50%	1983	Electrogalvanizingline
California Steel	Kawasaki	Japan	50%	1984	Flat rolled products
California Steel	Rio Doce	Brazil	50%	1984	Flat rolled products
National Intergroup	NKK	Japan	50%	1984	National Steel Co.
Avesta	Avesta AB	Sweden	100%	1984	Stainless plate
LTV Steel	Sumitomo	Japan	50%	1986	Electrogalvanizing line
Armco	C. Itoh	Japan	50%	1987	Steel processing
Baker Hughes	Sumitomo	Japan	50%	1987	Pipe products
Phoenix	CITIC	China	100%	1987	Platemill
USS-Posco	Pohang	Korea	50%	1987	Pittsburg, Calif. works
Nucor	Yamato Kogyo	Japan	50%	1988	Structuralsteel
AlTech	Sammi	Korea	100%	1989	Specialty bar mill
CSC-Copperweld	Daido	Japan	17%	1989	Specialty bar mill
Armco	Kawasaki	Japan	40%	1989	Eastern division mills
Inland Steel	Nippon	Japan	50%	1989	Cold rolling mill
USS Division, USX	Kobe	Japan	50%	1989	Lorain, Ohio mill
Inland Steel	Nippon	Japan	50%	1991	Electrogalvanizing line
LTV Steel	Sumitomo	Japan	50%	1991	Electrogalvanizing line

Source: The WEFA Group, in the Washington Post, Oct. 20, 1989.

standard. The idea of pouring thinner slabs was first raised by Henry Bessemer a century ago, but nozzles smaller than ten inches have never been used before, because they became clogged by impurities in the molten steel. A thinner pour also allows more defects to form on the surface as it cools.

Nucor is having problems with the SMS nozzle because Nucor uses a significantly higher percentage of scrap metal in its charge. Scrap steel has more impurities (copper, zinc, other metals mixed in) than steel made from scratch. This would not be a problem with new technologies based on plasma physics, increasing the energy applied to the work area, and hence temperature, by several orders of magnitude. This would be one way that technologies developed for a



Flat rolled steel accounts for half of U.S. industry shipments, but the collapse in consumption dropped the price more than 15% between spring and summer of 1989 alone.

relativistic beam defense of the country could reverse the economic collapse of the United States.

Dr. Malcolm K. Roberts, the chief of Bethlehem's research division, forthrightly told the Nov. 19, 1989 *Baltimore Sun* that Bethlehem had too much money tied up in older technology to abandon it, and will instead try to develop, in cooperation with other large steel makers, technology able to pour slabs even thinner than two inches.

While capital investment by the U.S. steel industry rose from \$1.2 billion in 1987 to \$1.8 billion in 1988, it was still far short of the \$2.4 billion invested in 1981, and the \$3.0 billion minimum the American Iron and Steel Institute believes must be spent annually for the U.S. steel industry to keep pace with foreign competitors. The U.S. industry also lags in research and development, spending only 0.5% of sales on R&D, compared to 1.5% in Japan, and slightly less in Western Europe.

In 1989, the market share of imported steel finally sank under the 20% level. to 17.9%. The total volume of imports also dropped, to 17.3 million tons, from 20.9 million tons in 1988. The decrease was not made up by increased domestic shipments, however, which rose less than 1 million tons, from 83.8 million tons in 1988 to 84.3 million tons, indicating a further collapse in U.S. consumption of raw steel, now at per capita levels last seen during the Great Depression.

In response to the collapse in demand, world spot prices for steel dropped almost 10%, to \$415 a ton by the end of June 1989. Flat-rolled steel, which accounts for half of

industry shipments, was down to between \$460 and \$480 a ton, from a high of \$560 a ton in spring 1989. Nucor Corp. had cut its domestic selling price to \$320 a ton on 40% of its products. Analysts expected shipments in the last half of the year to decline by about 15%, costing U.S. steel companies at least \$700 million in lost revenues. Shipments for 1990 are expected to fall another 8-10%, to 75 million tons.

Not surprisingly, the financial situation of U.S. steel makers is looking bleak again. Bethlehem Steel Corp., the second largest U.S. steel maker, saw its profit drop 39% to \$245.7 million in 1989, from \$403 million in 1988. LTV, the third largest steel maker, which is still operating under bankruptcy protection, posted a 49% drop in its operating income in 1989, \$230 million compared to the \$452 million of 1988. Fourth-quarter earnings at Inland Steel, the nation's largest operator of steel service centers as well as fourth largest steel maker, plunged 63% to \$6.7 million, from \$57.5 million in the same period a year ago. For 1989, Inland's profit of \$119.7 million was 46% below its 1988 profit of \$262.1 million.

Apparently, Inland is taking the only possible road to survival, given the Anglo-American elites' refusal to even consider a change in their suicidal economic, financial, and banking policies. In December 1989, Inland announced that it was selling 185,000 newly issued shares of preferred stock to Nippon Steel for \$185 million, giving Nippon a total 14% stake in Inland. Inland is following the lead of other major U.S. steel makers, who have sold out significant parts of their operations to foreign control. National Intergroup Inc. has sold 50% of National Steel Corp. to Japan's NKK Corp. Armco has sold 40% of its eastern steel making capacity to Kawasaki Steel Corp. And corporate leech Carl Icahn, with an 18% stake in USX, the largest U.S. steel maker, is now waging a proxy fight to force USX out of steel making altogther.

Certain factions in the U.S. are now attempting to find even cheaper labor to gouge, and may be eyeing Mexico's national steel industry. Mexico's Planning Secretary Ernesto Zedillo announced in early March that the Salinas de Gortari regime has decided to sell to foreigners the Lázaro Cárdenas and Altos Hornos de México steel-making complexes, rather than spend \$2.33 billion to modernize them. Observers familiar with how Salinas is controlled by the Anglo-American establishment suspect the denationalization may be part of a recent secret deal in which the United States doubled the quota for steel imports from Mexico.

Moving steel production overseas appears to be the ultimate aim of the Anglo-American "post-industrial" lunatics: The new Clean Air Act will shut down what is left of the U.S. steel industry. Walter Williams, chairman and chief executive officer of Bethlehem Steel, has warned that the second round of emissions cuts would shut every single coking plant in the U.S., even after steel makers had installed over \$5 billion in new emissions controls.

Clash builds between Brazil and bankers

by Peter Rush

Less than two weeks after the administration of new Brazilian President Fernando Collor de Mello took office, Bankers Trust Senior Vice President Lawrence Brainard issued a savage warning that Brazil had better change its policy on payment of interest on the foreign debt, or face dire consequences. His attack was a response to the announcement by Brazilian Finance Minister Zelia Cardoso that Brazil would only pay about \$5 billion in interest in 1990, and would not pay \$5 billion in arrears. With the sparks already flying in public, it now remains to be seen if the stance taken by the new government will prove to be just a bargaining position, or whether it constitutes a decision to force the banks to take a back seat, and to put economic growth ahead of interest payments.

In his inaugural speech on March 15, Collor clearly stated that he intended to put growth before debt payment. "Our proposal to renegotiate [the \$115 billion foreign debt] is based on a fundamental principle," he said. "For us, it is not a question of knowing how much we can grow after servicing our debt, but of knowing how much we can pay after guaranteeing our economic growth at levels that are in keeping with our traditional growth rates and with our projects for promoting development and justice, which will guide our future actions."

He continued that "one of the main obstacles in our way is undoubtedly the servicing of our foreign debt at current levels." Emphasizing that he did not want confrontations with Brazil's international creditors, he nonetheless said, "I will not accept contracts establishing unilateral solutions," in apparent reference to high interest rates now being charged.

Three days later, on March 15, Finance Minister Cardoso announced in a televised interview that the new government "does not intend to make any agreement on the \$5 billion of back interest." The next day, she told a group of Brazilian businessmen that the foreign debt policy of the country was to pay no more than 2% of the Gross National Product in interest on the debt, which she estimated would come to between \$4 and \$5 billion a year.

Backing up his minister, Collor made the government's position clear once again in a press conference on March 27. Studiously avoiding the term "debt moratorium," and specifying that "at no time do we want confrontation . . . with banks, or with the international financial system," Col-

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