real solution to the safety problem — off shore deep water ports. The U.S. is, as we know, the only major industrial country without such ports, thereby excluding the use of the newest and most modern tankers for U.S. oil imports.

Other critics point out that tanker treaties with other countries have sat in the Senate for years unsigned.

Rounding out a well-planned offensive against foreign

shipowners is a Justice Department study, released a few months ago, charging that shipowner "conferences" or agreements regulating rates and other aspects of world shipping violate U.S. anti-trust laws. Foreign shipowners are now expecting indictments and are saying: "It's time the U.S. understands it cannot rule over world shipping."

U.S. Demand For Protectionism— A Cover For Industrial Backwardness

STEEL

The American Iron and Steel Institute's white paper on the "Economics of International Steel Trade," the industry's keynote statement on protectionism, charges that the Japanese and to a lesser extent the Western Europeans have the advantages of a modern steel industry whereas U.S. steelmakers have allowed their industry to sink into obsolescence. The study released last month lists three main elements of the development of the Japanese steel industry which have placed Japanese steelmakers in an advantageous position vis-a-vis U.S. producers and which, the study argues, have led to wide-scale dumping on the U.S. market:

"First, the steel industry was provided with enormous capital inputs, primarily in the form of debt. Second, the Japanese steel industry benefited from a rapidly expanding production volume which permitted modern capacity additions and scale economies and hence, the lowest possible operating costs. Third, government and business have worked together to maintain high operating rates in order to maintain Japan's cost competitiveness in steel and to protect the steel industry's highly leveraged financial position."

While the AISI's report declares that the Japanese capital investment in steel is based on high exports and the dumping of its steel on the U.S., what the report actually makes clear is that the cries for protectionism issuing from the U.S. steel industry are attempts to cover for its extreme backwardness. The steel industry has followed a policy of no capital investment and underspending on maintenance and repairs. Industry demands for freedom from environmental regulations and tax concessions do not remedy the fact that the steel industry is running its plant into the ground.

Secondly, the calls for increased labor productivity to match Japanese steel are equally spurious. The nearly three-fold increase in productivity in the Japanese steel industry over the last decade was achieved by the introduction of modern machinery; the standard of living of Japanese workers and hence their productivity continued to lag behind U.S. workers. U.S. steelmakers now think they can compete with the Japanese by accelerating the trend of destroying labor power, the U.S.

producers' one remaining asset.

Over the long-term, the number of workers has declined significantly, while raw steel output increased marginally. Between 1956 and 1976 employment shrunk from 621,000 to 454,000; the number of production workers declined from 509,000 to 339,000. Under conditions of a declining workforce, and aging plant and equipment, the stagnant level of U.S. steel output could only have been maintained through speed-up.

Raw Steel Production¹ (in millions of net tons)

	USA	Japan	EEC(9)	Rest of Free World ²	Red Bloc	Total
1950	96.8	5.3	53.2	13.3	39.2	207.8
1951	105.2	7.2	59.0	14.7	44.7	230.8
1952	93.2	7.7	64.4	17.4	50.0	232.7
1953	111.6	8.5	63.2	19.8	55.2	258.3
1954	88.3	8.5	69.0	20.4	59.5	245.7
1955	117.0	10.4	80.3	24.0	65.5	297.2
1956	115.2	12.2	85.7	28.0	69.7	310.8
1957	112.7	13.8	90.4	25.1	79.7	321.7
1958	85.3	13.0	86.0	25.5	88.8	298. 9
1959	93.4	18.3	92.6	30.2	102.7	337.2
1960	99.3	24.4	107.9	34.1	115. 9	381.6
1961	98.0	31.2	105.9	37. 9	117.1	390.1
1962	98.3	30.4	103.9	41.1	120.4	394.1
1963	103.3	34.7	106.4	51.7	126.1	422.2
1964	127.1	43.9	121.2	51.0	135.8	479.0
1965	131.5	45.4	125.5	54.7	146.0	503.1
1966	134.1	52.7	121.5	57.3	153.5	519.1
1967	127.2	68.5	126.3	60.0	165.6	547.6
1968	131.5	73.7	138.2	65.5	173.6	582.5
1969	141.3	90.5	148.5	69. 6	182.1	632.0
1970	131.5	102.9	151.7	76.2	192.9	654.2
1971	120.4	97.6	141. 3	75.7	204. 9	639.9
1972	133.2	106.8	153.4	85. 3	215.8	694.5
1973	150.8	131.5	165.5	93.7	227.3	768.8
1974	145.7	129.1	171.5	9 9.2	237.3	782.8
1975	130.9r	112.8	138.1	85.5	244.7	712.0
1976	128.0p	118.4	148.1	105.1	253.5	753.1

p = preliminary

Source: AISI Annual Statistical Report, 1959-1976.

Source: "Economics of International Steel Trade"

⁼ revised

¹ Bulgaria, North Korea and Red China were not reported separately and have, therefore, been included in the Rest of Free World prior to 1957.

² Calculated as the difference between total world raw steel production and the sum of USA, Japan, EEC(9), and Red Bloc raw steel production.

NUMBER OF EMPLOYEES AND HOURS WORKED IN THE IRON AND STEEL INDUSTRIES

	Average Number of Employees (000's)	Average Hours Worked Per Week Per Employee
1976	454	
1975	457	35.9
1974	512	37.9
1973	509	38.6
1972	478	37.6
1971	487	36.7
1970	531	37.2
1969		
1968		
1967		
1966	F	
1965	584	38.0
1964		
1963	520	
1962	521	37.1
1961	523	37.1
1960	572	36.4
	515	
	523	
	624	
	621	
***************************************	American Iron and Steel	

The steel industry has in fact premised its outlook — its calls for protectionism and increased labor productivity alike — on the assumption that there can be no increased demand for steel and that the profit margin must be based on adjusting to an ever shrinking pie. On the contrary, under a new monetary system, the worldwide need for steel would demand the quick doubling of U.S. output a demand which the steel industry is now not prepared to meet. As a result of decades of underinvestment, steel capacity has actually been shrinking. This situation is highlighted by the fact that in 1975 the AISI redefined "capacity" such that full capacity was redefined as "tonnage capability to produce raw steel for a full order book based on the current availability of raw materials, fuels, and supplies, and of the industry's coke, iron, steelmaking, rolling and finishing facilities" — in other words, steel capacity which already has not been run into the ground.

One look at the replacement cost depreciation charges of the steel companies — what it would cost to replace worn-out plant and equipment at today's prices - underlines the fact that the steel companies' cash-flow isn't even adequate to meet maintenance and replacement costs.

According to the McGraw-Hill fall 1976 survey misnamed "How Modern Is American Industry," the steel industry is far and away the most outmoded industry in the U.S. with the exception of the country's antiquated railroad system. As of December 1976 the steel industry itself said it considered 30 percent of its plant and equipment technologically outmoded, and said it would cost \$18.67 billion to replace it with the most modern facilities available. Two years earlier the industry reported that 20 percent of its facilities were outmoded — a 50 percent jump over a two year period in which a certain amount of capacity was simply junked and thus disappeared from the survey. The steel industry also reported that 53 percent of its capacity was installed prior to December 1966 — was ten years or older — and that 23 percent was installed prior to December 1956.

Iron Age, the metals industry weekly, reported recently that as of 1973, 45 percent of the nation's coking capacity was represented by ovens more than 20 years old and noted that old, dirty coking ovens present the worst environmental and health hazzards in the industry - and are one of the chief causes of the industry's billion dollar "clean up" bill. Armco recently spent \$175 million on two new batteries at its Middleton plant, but most companies are simply not replacing the old batteries for lack of investible funds.

Between 1960 and 1974, a period over which the industry spent \$24 billion on plant and equipment, there was no increase in raw steel capacity.

Environmental Question

The obvious question is where did the industry's "capital expenditures" go? An increasing amount of capital spending has been absorbed by pollution abatement measures — the cost of cleaning up after old and technologically obsolete steel capacity. In 1976, for example, the industry spent a record \$489 million on environmental protection facilities. Normal maintenance and replacement, given the high rate of inflation of capital goods products, runs about \$2 billion a year. That left only about \$500 million of a record \$3.2 billion capital expenditures for plant expansion in 1976. Arthur B. Little, the Cambridge based consulting firm, projects a

Comparison of Labor Productivity United States, Japan and West Germany

(in manhours per net ton)

	United States	Japan	West Germany	
	(1)	(2)	(3)	
1964	13.12	25.47	22.24	
1965	12.39	24.71	22.09	
1966	12.03	21.70	21.51	
1967	12.58	18.92	19.15	
1968	11.98	17.30	1 6. 5 3	
1969	11.89	14.72	14.73	
1970	12.39	13.25	14.99	
1971	11.76	13.20	15.06	
1972	10.87	11.69	13.42	
1973	9.86	9.39	12.09	
1974	9.78	9.18	11.43	
1975	10.92	9.21	12.76	
1976	n.a.	n.a.	n.a.	

n.a. = Not Available.

Sources: 1964 (United States): Bureau of Labor Statistics, An International Comparison of Unit Labor Cost in the Iron and Steel Industry, 1964: United States, France, Germany, United Kingdom, Bulletin 1580 Table 5, page 12; and unpublished up-

1964, 1972-1975: Jerome A. Mark, Assistant Commissioner for Productivity and Technology, Bureau of Labor Statistics, "Com-parative Growth in Manufacturing Productivity and Labor Costs in Selected Industrialized Countries", 27 October 1976,

1965-1971: Derived by Putnam, Hayes & Bartlett, Inc. using the above documents and indices provided in unpublished data from Bureau of Labor Statistics, August 1975.

Source: "Economics of International Steel Trade"

\$12-14 billion "clean up" bill for the industry between 1975 and 1983 — 26 percent of the industry's capital needs. The wastefulness of such spending is rivaled only by Carter's plan to save energy by converting the nation's utilities and industry to coal and would be totally obviated by replacing outmoded steel capacity with modern equipment. In the case of steel, this means moving to the Jordan process, a process which was developed over 10 years ago, which utilizes a mixture of oxygen and carbon dioxide in conventional blast furnaces and increases the use value of the exhaust from the furnace, eliminating environmental problems as well as doubling iron output.

However, under current credit and monetary conditions, the U.S. steel industry hasn't even fully made the switch to the Basic Oxygen Process: even though the BOP was introduced in the 1950's, in 1976 the industry was still producing more than 23 million tons of raw steel or close to 20 percent of steel output in open hearth furnaces due to lack of money!

Between 1960 and 1973 prices of steelmaking equipment jumped 72 percent, one symptom of the build up of debt and profit requirements throughout the dollar

sector. Existing steel capacity is carried on the books of steel companies at \$160 a ton; a new greenfield plant, like the planned U.S. Steel plant, would cost \$1400 a ton — a nine-fold increase! U.S. Steel, with a total net worth of \$5 billion, would have to spend \$3 billion to build a new plant, which would only represent a 10 percent increase in steel producing capacity.

The cost of not modernizing the steel industry, however, is the worsening competitiveness and profitability of the industry.

Industry observers point out that the steel companies needed at minimum 10-11 percent general price increases to stay — or get — in the black. But it is now unlikely that even the 6 percent increases which are supposed to become effective June 19 will stick: steel consumers shifted their July orders to June to beat the price increases, and analysts are already predicting a 10 percent downturn in steel production this summer due to the drying up of steel demand. Thus, steel companies will continue to postpone equipment repairs and increase their reliance on worker "productivity" to give a one-shot boost to steel profits.

1930s-Style Depression Crisis Grips Plains, West

AGRICULTURE

The cruel spectre of the 1920s and 1930s farm collapse is stalking the Plains and Western United States, the heart of the nation's wheat and livestock industries. There, in an area which encompasses one quarter of the nation's farm enterprises and accounts for more than one-fourth of total U.S. agricultural output, farmers, ranchers and their bankers face a classic depression crisis that threatens to choke off future production and plunge the farm sector into an orgy of bankruptcies and ruin.

The facts of the matter are written in black and white in the monthly balance sheets of the Kansas City Federal Reserve, and confirmed in an extraordinary April U.S. Department of Agriculture "special survey" and elsewhere. According to the USDA projections, fully one-third of the area's farm borrowers — that is, those who depend on non-real estate loans from local and regional commercial banks to carry on operations from one harvest to the next, store crops, purchase new equipment, etc. — are in serious difficulty with their loans.

Bankers surveyed by the USDA in the targeted 9-state area expect that the bulk of these farm producers, or about 60,000 farmers, will be forced to partially liquidate their businesses to pay their debts, and declare that an additional 6 percent, or some 14,000 farm operators, will have to be foreclosed immediately!

No Pretense Of "Recovery"

It is no accident that this crisis is breaking out first in the Plains and Western regions. The bedrock wheat and livestock sectors of American agriculture made no pretense of "recovery" from the 1974 "recession" calamity, and wheat growers in particular have taken every successive downward ratchet in world trade on the chin.

For livestock producers, the recent drought was simply the proverbial last straw, coming on top of three straight years of aggravated slump, with phenomenal rates of forced herd liquidation at steadily declining prices. As the International Monetary Fund's world austerity program has cramped the international grain trade in favor of debt payments to the Lower Manhattan banks, wheat growers watched prices tumble from \$4 a bushel to nearly \$2 in less than four years. Now, with billions of bushels of unmarketed grain and steadily rising production expenses, wheat producers are on the ropes.

Regional Banks On Short Fuse

This combination has put a short fuse to the regional banking networks supporting the farm economy in the Plains and West in particular. The bulk of these banks' assets are tied up in unpayable loans to cash-starved and highly leveraged farmers and ranchers, at the same time that it is the earnings and savings of these same cash-starved farmers that constitute the banks' primary deposit base — their source of lendable funds! During 1976, according to the USDA, Plains and Western regional bank deposits grew 11 per cent, while agricultural loan