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# 11

# METAL MANUFACTURES, N.E.S.

#### Trade

Germany was the leading exporter in the miscellaneous metal manufactures division as a whole, followed by the United States, the United Kingdom, France, and Japan, in that order (Table 11.1). The United States maintained a lead in several subgroups, however, particularly in finished structural parts and structures (SITC 691) and in containers (SITC 692). France accounted for more than 10 per cent of exports in these two groups and in household equipment of base metal (SITC 697), and Belgium-Luxembourg was the largest exporter of all in wire products (SITC 693) at \$48 million, leading Germany, the next in importance, by more than 30 per cent.

For the most part, this division, which is a miscellany of products not closely related in use or manufacture, consists of commodities which have not undergone major innovations in either design or production methods during the years covered here. A possible exception might be the finished structural parts group, in which some of the items, such as oil drilling structures and prefabricated buildings, underwent considerable improvements in design.

Aside from the price data, discussed later in this chapter, and the trade data, which show the United States to have been a net importer in several of the groups, the weakness of the U.S. competitive position in division 69 is suggested by the many complaints of injury from imports and demands for escape-clause investigations made by U.S. companies, on such products as wood screws (SITC 694), axes and

Note: SITC 69. Value of OECD exports in 1963: \$2.5 billion; 5.7 per cent of study total. Coverage: Finished structural parts and structures, containers, wire products and fasteners, tools, cutlery, and miscellaneous manufactures of metal.

Table 11.1
OECD Exports of Metal Manufactures, n.e.s. (SITC 69), by Origin, Destination, and Commodity Group, 1963 (dollars in millions)

		Per Cent of		Share ir	OECD	Exports	Share in OECD Exports (per cent)	
	Value of	OECD Exports				1	EEC	
	Exports	in 69	OECD	U.S.	U.K.	Total	Germany	Japan
Total, all destinations and groups	\$2,519	100.0	100.0	100.0 19.8	14.7	45.5 <sup>a</sup>	22.6	7.9
Destination 17 S	252	10.0	100.0		9.1	38.1	15.9	37.3
OECD Europe	1,067	42.4	100.0	9.1	10.5	63.4	36.2	1.5
U.K.	71	2.8	100.0	21.1		42.3	26.8	4.2
EEC total	621	24.7	100.0	0.9	8.7	68.1	34.5	1.3
Germany	126	5.0	100.0	11.1	. 9.5	49.2		3.2
Canada	205	8.1	100.0	79.5	8.8	5.4	3.4	3.9
Japan	15	9.0	100.0	53.3	13.3	20.0	13.3	
Latin America	218	8.7	100.0	46.8	6.4	33.9	16.1	0.9
Other	762	30.3	100.0	17.1	26.8	37.4	13.1	6.7

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(continued)

Table 11.1 (concluded)

		Per Cent of		Share i	n OECI	) Export	Share in OECD Exports (per cent)	
	Value of	OECD Exports					EEC	
	Exports	in 69	OECD	U.S.	U.K.	Total	Germany	Japan
SITC commodity group								
Finished structural parts &	\$317	12.6	100.0	24.3	14.8	24.3 14.8 46.4 <sup>b</sup>	18.3	4.4
structures (691) Metal containers for storage &	176	7.0	100.0	22.2	15.3	49.4 <sup>c</sup>	17.6	2.8
transport (692) Wire products (excl. elect.) &	205	8.1	100.0	7.9	15.6	56.1 <sup>d</sup>	17.1	10.2
fencing grills (693) Nails, screws, nuts, bolts, rivets,	214	8.5	100.0	14.5	8.6	39.3	18.7	22.9
etc. (694) Tools for use in hand or machine	505	20.0	100.0	22.6	14.7	40.2	27.1	5.3
(695) Cutlery (696)	160	6.4	100.0	5.0	22.5	43.1	28.1	20.6
Household equipment of base	235	9.3	100.0	13.6	10.6	56.6 <sup>e</sup>	21.3	6.4
Manufactures of metal, n.e.s. (698)	707	28.1	100.0	25.5	15.6	43.4	24.6	5.1
Source: Appendix A. <sup>a</sup> Of which France, 8.3 per cent. <sup>b</sup> Of which France, 11.7 per cent. <sup>c</sup> Of which France, 15.3 per cent. <sup>d</sup> Of which Belgium-Luxëmbourg, 23.4 per cent. <sup>e</sup> Of which France, 11.5 per cent.	er cent.					·		

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Table 11.2	atios of U.S. Exports to Manufacturers' Shipments and U.S. Imports to New Supply	(Output plus Imports), Metal Manufactures, n.e.s., 1964
	Ratios of U.S. Ex	9

	Katios of U.S. Expor (Outpi	Katios of U.S. Exports to Manufacturers' Shipments and U.S. Imports to New Supply (Output plus Imports), Metal Manufactures, n.e.s., 1964 (per cent)	to New Supply	
			Ratio	0
SITC	SIC-based Product Code	Title	Exports to Manufacturers' Shipments	Imports to New Supply
691	244.1	Finished structural parts and structures, n.e.s.	,	N A IV
	34492	Prefabricated and portable metal buildings	n m	NA <sup>2</sup>
		and parts		
692		Metal containers for storage and transport		
	3411	Metal cans	-	$NA^a$
	3491	Metal shipping barrels, drums, kegs, and pails	. 2p	$NA^a$
	34434	Gas cylinders	12 <b>p</b> (	
	34435,37,38,39	Metal tanks	4 >	ပ
693		Wire products (excluding electric) and		
		Jencing grius		
	34811, 33151	Noninsulated ferrous wire rope, cable, strand	3	7
	34814, 33157	Iron and steel woven wire products	3	
	34815, 33575	Nonferrous woven wire products	2	4
	34816, 33156	Fencing and fence gates		
	34812,13	Wire springs		\ NA
	34819, 33159	Other fabricated wire products		°
	33571, 33521	Aluminum and alloy wire and cable, not	4	
		ınsulated		
	33572, 33511	Copper and alloy wire and cable, not insulated	5	_
		(continued)		

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			Ratio	•
			Exports to	Imports to
			Manufacturers'	New
SITC	SIC-based Product Code	Title	Shipments	Supply
694		Nails, screws, nuts, bolts, rivets, and similar		
		articles		
	33152	Steel nails and spikes	ĸ	22
	34521	Standard industrial fasteners	3	4
695		Tools for use in the hand or in machines		
	3544,45	Special dies, jigs, and fixtures, and machine	2 <b>b</b>	1
		tool accessories		
	3425	Hand saws and saw blades and accessories	∞	4
969		Cutlery		
	34211	Cutlery, scissors, shears, etc.	4	15
	34212	Razor blades and razors, excl. electric	4	4
697.1		Domestic stoves, boilers, cookers, etc.		
	34334	Domestic heating stoves	S	$NA^a$

Source: U.S. Commodity Exports and Imports as Related to Output, 1965 and 1964, U.S. Bureau of the Census, 1967.

\*\*AGroup total ratio less than 0.5 per cent.

\*\*b1965 ratio.

\*\*CLess than 0.5 per cent.

axheads (SITC 695), stainless-steel table flatware, scissors and shears (SITC 696), straight pins, and safety pins (SITC 698).

Another view of the U.S. trade position in this group is given by data on the ratios of exports and imports to output. Some of the latter ratios were substantial, as can be seen in Table 11.2. The matching of trade to output data is not perfect and does not cover all the products in this division but does include most of the important ones. In two of the items frequently mentioned as being subject to severe foreign competition on the U.S. market, steel nails and spikes and some cutlery, imports supplied 15 per cent or more of the domestic market, but in wire products, a frequent subject for complaint, the ratios of imports to output plus imports were below 8 per cent.

As was pointed out in Chapter 9, the import ratios that are usually quoted are larger than those of Table 11.2 because the commodity breakdown is finer and the items most subject to foreign competition are therefore more clearly pinpointed and because the data usually cited are based on tonnage rather than value. The use of tonnage exaggerates the importance of imports because the imports tend to be of lower average value per ton than U.S. production; that is, they consist mainly of the least fabricated types of steel products.<sup>2</sup> Some idea of the overall effect of using tonnage rather than value is given by the comparison of ratios for the total of steel mill products. The tonnage ratio for steel mill products as a whole was 7.3 per cent in 1964,<sup>3</sup> while the value ratio for total blast furnace, steel mill, and electrometallurgical products plus fabricated wire products was about 4 per cent (see source to Table 11.2). The value ratio, it should be added, tends to understate the importance

Wire nails and staples 48.8% Barbed wire 47.9 Woven wire fence 27.9

The data are taken from Foreign Trade Trends, Iron and Steel, American Iron and Steel Institute, 1967, p. 67.

3 Ibid., p. 65.

<sup>&</sup>lt;sup>1</sup>U.S. Tariff Commission, Wood Screws of Iron or Steel: Report to the President on Escape-Clause Investigation No. 34 . . . , October 1954; Axes and Axe-Heads: Report on Escape-Clause Investigation No. 76 . . . , May 1959; Stainless-Steel Table Flatware: Report to the President on Escape-Clause Investigation No. 61 . . . , January 1958, and later reports on the same product; Scissors and Shears, and Manicure and Pedicure Nippers, and Parts Thereof: Report to the President on Investigation No. 24 . . . , March 1954, and later reports on the same products; Straight (Dressmakers' or Common) Pins: Report to the President on Escape-Clause Investigation No. 7-109 . . . , T.C. Pub. 52, February 1962; Safety Pins: Report to the President (1962) under Executive Order 10401, T.C. Pub. 46, January 1962, and later reports on the same product. <sup>2</sup> Tonnage data for wire products (U.S. imports as a percentage of apparent consumption, 1964) often cited as examples of import competition are:

Table 11.3
OECD Exports of Metal Manufactures, n.e.s., 1953, 1957, 1961-64
(dollars in millions)

			Share in	n OECD	Export	s (per cent)	
	Value of				F	EEC	
_	OECD Exports	OECD	U.S.	U.K.	Total	Germany	Japan
	INCLUE	DING SWI	TZERL	AND A	ND SPA	.IN	
1964	\$2,828	100.0	19.1	14.3	45.6	22.7	8.3
1963	23,514	100.0	19.7	14.8	45.6	22.7	8.0
1962	2,358	100.0	20.4	16.1	45.0	22.6	7.5
1961	2,217	100.0	19.6	16.6	46.2	23.6	6.9
	EXCLUI	DING SWI	TZERL	AND A	ND SPA	IN	
1961	2,166	100.0	20.0	16.9	47.3	24.2	7.1
1957	1,747	100.0	22.3	20.6	43.1	22.4	4.1
1953	1,144	100.0	23.0	24.9	40.5	19.8	2.5

Source: Appendix B.

of imports, to the extent that the lower value per ton of the imports is a consequence of lower prices rather than lower quality or product mix.

Exports of metal manufactures, n.e.s. (that is, SITC division 69 as a whole) more than doubled between 1953 and 1964 (Table 11.3). The United States almost held its share of the export market after 1961 following losses in the earlier years, while the U.K. share declined throughout the period. Germany gained sharply before 1961, and Japan increased its share of OECD exports in every year. The most pervasive shifts in export shares among the individual commodity groups within division 69 were the losses by the United States and the United Kingdom and gains by Japan and Canada. Germany and France lost ground in more cases than they gained, while Sweden, and the EEC countries other than Germany and France showed more gains than losses.

Some of these shifts resulted from nonprice factors. For example, in metal containers (SITC 692), one obstacle to international trade and competition was the existence of safety regulations, such as those of the Interstate Commerce Commission in the United States. In some cases, products that were acceptable to the purchaser could not be bought for the United States or for countries adopting U.S. standards because the regulatory agencies were slow to accept new technological

Table 11.4
International Prices, Metal Manufactures, n.e.s., 1953, 1957, 1961-64
(1962 = 100)

	1953	1957	1961	1962	1963	1964
U.S.	86	98	98	100	100	102
U.K.	90	101	103	100	99	103
EEC	87	99	100	100	97	98
Germany	84	93	98	100	99	101
Japan	NA	NA	98	100	93	101

Source: Appendix C.

developments which would eventually lower prices substantially. In other cases, products which met physical requirements fully were not acceptable for lack of a stamp attesting to inspection and testing in the United States. Internal company rules, geared toward American-manufactured products, had to be amended so that advantage could be taken of lower foreign prices for products of equal quality.

In electric wire and cable (SITC 693), Japan's gains in export share were due, according to one report, both to increases in Asia's share of world building of electric power installations and to Japan's success, by the end of the period, in overcoming its previous handicap of producing only a limited range of cable sizes to the point where its range was equal to that of the European exporters.<sup>4</sup>

#### Price Trends

Prices of miscellaneous metal manufactures in the United States moved almost completely in step with those of European countries over the whole period of our study. They rose in each period shown until 1962, remained constant or almost constant in 1963, and then rose slightly in 1964 (Table 11.4). Only Japan showed some sharply different price trends, with a large decline in 1963, and then a larger rise in 1964 than in any other country.

Price indexes constructed from domestic wholesale price data, using

<sup>4 &</sup>quot;Electric Wire, Cable Exports Running High," Journal of Commerce, September 29, 1965.

international trade weights, rose relative to the international price indexes for every country listed (see Appendix F). Except for Japan, this meant a larger rise in the indexes from wholesale prices. In other words, if the international price indexes are at all reliable, wholesale prices of these metal products were biased estimators of international price movements for most countries, and the bias was consistently upward. Japanese wholesale prices, in contrast, declined, while the international price index rose. This may have been a consequence of a weakness in our data (the international price index constructed entirely from Japanese time series data, listed in Appendix C, fell even more than the wholesale price index) or of the restrictions imposed by the United States on imports of some of these products.

## **Price Competitiveness**

The price competitiveness of the United States in this division relative to Germany and Japan was quite stable during the period for which we have indexes (Table 11.5). Relative to the United Kingdom and the EEC countries other than Germany, however, the U.S. price position deteriorated.

U.S. price competitiveness indexes built up from wholesale price data for the individual groups show a substantial improvement in the U.S. position relative to Britain between 1957 and 1964, at a time when the index based on international prices showed a decline (see Appendix F). Relative to Germany, however, the two price competitiveness indexes show virtually identical developments from 1957 to 1964. An index

Table 11.5
U.S. Price Competitiveness, Metal Manufactures, n.e.s., 1953, 1957, 1961-64
(1962 = 100)

	1953	1957	1961	1962	1963	1964
Relative to						
U.K.	105	103	105	100	100	100
EEC	102	101	101	100	97	95
Germany	99	95	100	100	99	98
Japan	NA	NA_	99	100	94	99

Source: Appendix D.

of U.S. price competitiveness based on U.S. and Japanese wholesale price series shows a decline from 1953 to 1963 and then a leveling off in 1964.

In the individual groups, the indexes of U.S. price competitiveness from wholesale price data do not show any consistent relationship to those from international prices. However, in three out of four cases of very large divergence between the two, listed below (data from Appendixes D and F and underlying data), the change in price relationships implied by international price data was less favorable to the United States than that implied by the wholesale price data.

Change in U.S. International Price Competitiveness

			From	
			Domestic Wholesale	From International
SITC	Country	Dates	Prices	Prices
692	U.K.	1957–64	+26%	-17%
693	Japan	1961-64	+4	-14
695	Germany	1953-64	-8	+9
696	Germany	1953-64	+3	-14

#### Price Levels

European price levels for metal manufactures, n.e.s., ranged between 3 and 13 per cent below U.S. prices in all the years covered in the study (Table 11.6). The gap between American prices and those of the United

Table 11.6
Price Levels, Metal Manufactures, n.e.s., 1953, 1957, 1961-64
(U.S. for each year = 100)

	1953	1957	1961	1962	1963	1964
U.S.	100	100	100	100	100	100
U.K.	97	95	97	92	92	92
EEC	97	96	97	96	93	91
Germany	90	87	92	92	91	90
Japan	NA	NA	74	74	69	73

Source: Appendix E.

Kingdom, and EEC (except Germany) widened considerably between 1953 and 1964. Japanese prices were far lower than those of the other countries, 25 to 30 per cent below the U.S. level in all the years for which we have data.

Price levels among the individual groups varied considerably (see Appendix E). Fragmentary data indicate a fairly favorable U.S. position in SITC 691, finished structural parts and structures which covers a wide range of degrees of fabrication. At the lower end it includes slightly fabricated structural steel products akin to the iron and steel bars, rods, plates, and sheets of SITC 673 or 674, with only the addition of minor adaptations to fit them for particular jobs. At the higher end it covers complete prefabricated structures. At least at the beginning of the period British firms bidding on construction projects abroad were said to be at a disadvantage relative to Continental producers in terms of the range and quality of structural steel products available to them. Italian firms showed particular strength in markets for electrical transmission towers, winning a considerable number of bidding contests in foreign countries. After the end of the period covered by this study there were accusations by American companies that Italian successes in this country were due to subsidies from the Italian government, and the U.S. Treasury eventually imposed a countervailing duty against steel transmission towers from Italy on that ground.5

In cable manufacturing (part of SITC 693), Japan was still considered a newcomer even after the end of our period and was accused by some of selling at a loss to break into the international market. In copper cable, the existence of price differences among copper markets at times favored one cable producer over another (see Chapter 10). This type of case occurred during the wide price swings of 1966, when British cable producers, purchasing copper at producers' prices, were said to have a considerable advantage over German producers who had to buy half of their copper requirements at prices 40 per cent or more above the producers' price level.

A British wire rope producer was accused of dumping its products in the United States at the end of our period, but the Treasury Department

<sup>&</sup>lt;sup>5</sup> "Steel: Beams for the Builder," *Economist*, November 2, 1957; "Italy Firm Low Bidder on Peace River Job," *Journal of Commerce*, August 24, 1965; "Bite for Steel," *Economist*, April 29, 1967.

<sup>6 &</sup>quot;Electric Cable: Current Setback," Economist, December 24, 1966.

<sup>7 &</sup>quot;BICC: A Real Cost Squeeze," ibid., April 23, 1966.

dropped the case after the company agreed to raise its prices, which were found to have been below its home market prices.8

Both the United Kingdom and the EEC countries substantially undersold the United States in nails, screws, nuts, etc. (SITC 694) by the end of the period. The weakness of the United States in this group was reflected in the difficulties of U.S. companies in even staying in some parts of this business in the face of foreign competition. The problems of the U.S. steel industry in the market for nails came into the open after the period covered by the study, but they probably began before 1964. In 1966, one large steel company announced that it was withdrawing published prices for several sizes of nails in favor of negotiated prices in view of the inroads of foreign competition, exemplified by the fact that half of the nails sold in the United States in 1965 had been imported. Another American steel company announced two days later that it was abandoning nail production entirely as a result of foreign competition. One report quoted a price difference in the United States of about 30 per cent early in 1966, very close to our margin of 31 per cent relative to the EEC in 1964.9

Only Germany showed much lower prices than the United States in tools (SITC 695), while U.K. prices were at about the American level. One part of the U.S. industry, in a brief opposing tariff reductions, stated that foreign competition, at least in the United States, was confined to high-volume metal cutting tools.<sup>10</sup> The American producers seemed safe on some special items within the United States for security reasons, and were said also to have a strong competitive position in some high-quality tools.

In cutlery (SITC 696) the fragmentary data available, which were not adequate for publication, indicated that European prices were close to those of the United States. Only Japan had ever enjoyed a large price advantage over the United States.

<sup>&</sup>lt;sup>8</sup> "Treasury Study Finds Britons Not 'Dumping' Wire Rope in the U.S.," Wall Street Journal, September 24, 1964.

<sup>&</sup>lt;sup>9</sup> "U.S. Steel Sets Major Revision of Prices, Including Boosts, Cuts, Dropping of Quotes," Wall Street Journal, March 1, 1966; "Jones & Laughlin Is Pulling Out of Nail Business," ibid., March 3, 1966; "Jones & Laughlin Ends Nails Making," New York Times, March 3, 1966; "Some Rivals Expect to Follow U.S. Steel on Prices; Changes Called a Slight Net Rise," Wall Street Journal, March 2, 1966.

<sup>&</sup>lt;sup>10</sup> "Statement of the Metal Cutting Tool Institute in Opposition to Possible Further Tariff Concessions on Metal Cutting Tools by the Government of the United States," New York, February 3, 1964, mimeo.

Several Tariff Commission investigations of cutlery were made because of complaints by U.S. producers that they were being seriously injured by imports. The Tariff Commission found injury to U.S. producers in imports of stainless-steel tableware and recommended withdrawal of some GATT (General Agreements on Tariffs and Trade) concessions by the United States. The report described considerable differences in the foreign exports. Japanese exports were at the low end of the quality scale and were made to order for U.S. importers on the basis of designs furnished by them; the European products, on the other hand, were frequently higher in quality than the U.S. products and sold on the basis of distinctive design and superior finish. One U.S. manufacturer explained his imports from Europe on the basis that high-quality tableware was uneconomical to produce in this country because of the high labor content involved.

As a result of these investigations, both the United States and Japan took measures to reduce the volume of Japanese exports to the United States. The United States withdrew the GATT concessions, and Japan imposed its own limitation on exports. A sharp reduction in U.S. imports then took place.<sup>11</sup>

In scissors and shears also, a Tariff Commission investigation pointed to a U.S. disadvantage in the higher-quality products, but not in lower-quality ones, which required a smaller proportion of labor cost.<sup>12</sup>

In miscellaneous metal products (SITC 698) all the countries listed had price levels more than 10 per cent below the U.S. level in 1964, with Japan the lowest.

The price level relationships clearly do not explain all the differences in country export shares from one group to another. For the United Kingdom in particular, the price ratios seem to be unrelated to the export ratios of Table 11.1. The United Kingdom does better as an exporter of wire than one would expect from the price data but less well in manufactures of metal n.e.s. Of course the latter group is so heterogeneous that the price level index may well be unrepresentative.

The relationship between German and U.S. export shares fits the price relatives much better, that is, the ratio of German exports to U.S. exports is high where the ratio of German prices to U.S. prices is low, and vice versa.

<sup>11</sup> See reference in footnote 1.

<sup>12</sup> See reference in footnote 1.

### Summary

In this group, which contains several items in which foreign competition affected the U.S. as well as foreign markets, the U.S. price position worsened by comparison with the United Kingdom and EEC countries other than Germany, but showed little or no deterioration relative to Germany and Japan. However, Japanese prices for most items and other countries' prices for some were far below the U.S. level, and some of the problems of American firms may have been a consequence of this large price differential (that is, a delayed reaction to earlier price changes) rather than of contemporaneous changes in price competitiveness.

Disagreements between international and wholesale price data were extensive in this division, with wholesale prices usually biased upward and frequently showing price competitiveness movements opposite to those in our international price data.