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APPENDIX D

INDEXES OF PRICE COMPETITIVENESS

General Note

The indexes of U.S. price competitiveness in the following tables are a measure of the movement of foreign relative to U.S. prices. A rise in the U.S. *price competitiveness* index occurs when the foreign price index rises relative to the U.S. price index. An index of U.S. price competitiveness for a commodity group is measured by (1) the ratio of foreign to U.S. price indexes (time-to-time relatives) or (2) the movement of the ratio of foreign to U.S. price levels (place-to-place data). For a more detailed description of price competitiveness indexes, see Chapter 1.

The indexes of price competitiveness were calculated on a four-digit, or in some cases five-digit, commodity group level. The two-digit and three-digit indexes are aggregations of these subgroup indexes, using 1963 OECD export weights. For each 4- or 5-digit group, the competitiveness index was calculated from time-to-time data, place-to-place data, or a combination of both, depending upon the amount and quality of each. The notes to the individual tables indicate the extent to which each type of data was used.

Indexes are given in the tables for all groups and subgroups for which the amount and quality of the data were sufficient for publication. The notes that follow the tables cover all the subgroups, including those not shown.

Table D.1

Indexes of U.S. Price Competitiveness, Iron and Steel, 1953, 1957, 1961-64
(1962 = 100)

SITC Number	Commodity Group and Country	1953	1957	1961	1962	1963	1964
67	Iron and steel						
	U.K.	117	108	101	100	97	104
	EEC	119	117	102	100	98	104
	Germany	112	110	102	100	97	104
	Japan	NA	NA	108	100	100	100
673	Bars, rods, angles, shapes, and sections						
	U.K.	NA	105	100	100	96	105
	EEC	127	126	109	100	102	110
	Germany	114	117	106	100	100	108
	Japan	NA	NA	115	100	104	106
673.2	Bars and rods (excl. wire rod)						
	U.K.	NA	NA	98	100	96	NA
	EEC	123	125	109	100	105	107
	Germany	NA	117	104	100	103	106
673.4 & 673.5	Angles, shapes, and sections						
	U.K.	NA	NA	102	100	98	103
	EEC	NA	132	105	100	100	108
	Germany	NA	NA	103	100	97	105
674	Universals, plates and sheets						
	U.K.	133	118	104	100	92	104
	EEC	121	119	100	100	93	100
	Germany	110	109	101	100	91	99
	Japan	NA	NA	110	100	96	98
674.1 & 674.2	---3mm. or more (excl. tinned)						
	U.K.	NA	NA	107	100	96	107
	EEC	NA	131	104	100	93	109
	Germany	NA	128	107	100	92	110
674.3	---less than 3mm., uncoated						
	U.K.	NA	111	104	100	NA	NA
	EEC	NA	119	100	100	92	97
	Germany	NA	102	99	100	93	97
674.7	---tinned						
	U.K.	NA	NA	NA	100	97	99

(continued)

Table D.1 (concluded)

SITC Number	Commodity Group and Country	1953	1957	1961	1962	1963	1964
676	Rails and track construction material						
	U.K.	NA	NA	98	100	100	NA
677	Iron and steel wire (excl. wire rod)						
	EEC	NA	122	105	100	99	106
	Germany	NA	120	103	100	99	108
	Japan	NA	NA	107	100	97	101
678	Tubes, pipes, and fittings						
	U.K.	102	98	95	100	102	104
	EEC	108	104	96	100	101	105
	Germany	109	99	98	100	102	104
	Japan	NA	NA	99	100	104	94
678.2	Tubes and pipes (excl. cast iron), seamless						
	U.K.	102	98	95	100	102	102
	EEC	129	105	96	100	102	102
	Germany	123	103	95	100	101	102
	Japan	NA	NA	99	100	109	104
678.3	Tubes and pipes (excl. cast iron), welded, etc.						
	U.K.	NA	NA	98	100	101	103
	EEC	NA	107	98	100	100	109
	Germany	NA	98	102	100	102	108
678.5	Tube and pipe fittings						
	U.K.	NA	NA	85	100	108	110
	EEC	NA	NA	93	100	103	99
	Japan	NA	NA	NA	100	94	NA

Note: SITC 67: The indexes are weighted averages of the 3-digit SITC groups for which we had data. These are the five 3-digit groups listed in the table, plus groups 671 (pig iron, spiegeleisen, sponge iron, iron and steel powders and shot, and ferro-alloys), 672 (ingots and other primary forms of iron and steel), and 675 (hoop and strip of iron and steel). No data were available for group 679 (iron and steel castings and forgings, unworked, n.e.s.), which accounts for only 1 per cent of the total weight of group 67. The coverage of the 3-digit groups varies by country. The *U.K.* index excludes 675 for all years, 676 for 1953 and 1957, and 677 for 1953. The *EEC* and *German* indexes exclude 676 for all years and 677 for 1953. The *Japanese* index, which covers only 1961-64, includes 673, 674, 675, 677, and 678 for that period.

The indexes for 671, 672, and 675 were based on time-to-time data, U.S. and foreign, either or both of which were considered insufficient to publish (see notes to Table C.1).

673: The indexes are weighted averages of the two 4-digit SITC groups listed in the

table, plus SITC 673.1 (wire rod of iron or steel). For the United Kingdom, the EEC, and Germany, the coverage of the 4-digit subgroups is complete, except for 673.4 and 673.5 combined in 1953. The Japanese data for all subgroups are limited to the 1961-64 period.

The unpublished 673.1 indexes are based on time-to-time data, U.S. and foreign, either or both of which were considered insufficient to publish.

673.2: The *German* indexes are based on the time-to-time relatives underlying the international price indexes in Table C.1. The *U.K.* and *EEC* indexes are based on a combination of time-to-time and place-to-place data.

673.4, and 673.5: See 673.2.

674: The indexes are weighted averages of three of the four 4-digit subgroups. No data are available for 674.8 (plates and sheets less than 3 mm., coated, except tinned plates), representing about 12 per cent of the total weight of 674. In addition, 1953 data are lacking for U.K. 674.1 and 674.2 combined (universals, plates, and sheets 3 mm. and over); 1953 EEC data, 674.7 (tinned plates and sheets); 1953-62 German data, 674.7; and 1953-61 Japanese data, 674.3 (plates and sheets less than 3 mm.) and 674.7. The *U.K.* index is based on place-to-place data for 674.1 and 674.2 combined, and on a combination of time-to-time and place-to-place data for 674.3 and 674.7. The *EEC* and *German* indexes are based on time-to-time data for 674.1 and 674.2 combined, and 674.3, and on a combination of time-to-time and place-to-place data for 674.7. The *Japanese* index is based on both time-to-time and place-to-place data for 674.1 and 674.2 combined and 674.7. The 674.3 component is based on time-to-time data.

674.1, 674.2, 674.3, and 674.7: See 674.

676: The *U.K.* index, which covers only the 1960s, is a weighted average of 676.1 (rails) for 1961-64, and 676.2 (sleepers and other railway track material) for 1961-63. Both subgroup indexes are derived from place-to-place data.

677: The *German* and *Japanese* indexes are based on time-to-time data; the *U.K.* is based on place-to-place data; and the *EEC*, on a combination of both.

678: The indexes are weighted averages of the three 4-digit subgroups shown in the table. Data for 678.1 (tubes and pipes of cast iron) are not sufficient to construct indexes of competitiveness. No data are available for 678.4 (high-pressure hydroelectric conduits of steel).

678.2: Based on place-to-place data.

678.3: Based on time-to-time data; 1953 data for *EEC* and *Germany* were considered too weak to publish separately, but are included in the aggregation of the 678 index.

678.5: Based on place-to-place data. *EEC* indexes for 1953 and 1957 and *German* indexes for all years were considered too weak to publish separately, but are included in the aggregation of the 678 index.

Table D.2
 Indexes of U.S. Price Competitiveness, Nonferrous Metals,
 1953, 1957, 1961-64
 (1962 = 100)

SITC Number	Commodity Group and Country	1953	1957	1961	1962	1963	1964
68	Nonferrous metals						
	U.K.	100	101	100	100	102	106
	EEC	105	102	100	100	101	108
	Germany	104	105	100	100	99	107
682	Copper						
	U.K.	100	99	99	100	100	105
	EEC	102	102	101	100	100	111
684	Aluminum						
	U.K.	99	103	102	100	104	104
	EEC	108	101	101	100	100	101

Note: **SITC 68:** The index for each country is a weighted average of indexes for eight of the nine 3-digit groups which make up SITC 68. The one group omitted is 688 (uranium and thorium and their alloys), which represents only 0.03 per cent of the weight of the total group. No data were available on SITC 68 for Japan. The subgroup indexes were all based on time-to-time data, except for the *U.K.* index for 687, which was based on place-to-place data. See notes to Tables C.2 and E.2 for description of underlying time-to-time and place-to-place data, respectively.

682 and 684: These indexes are aggregates of the 4-digit subgroups, and are based on time-to-time data (see note to Table C.2).

Table D.3

Indexes of U.S. Price Competitiveness, Miscellaneous Metal Manufactures,
1953, 1957, 1961-64
(1962 = 100)

SITC Number	Commodity Group and Country	1953	1957	1961	1962	1963	1964
69	Manufactures of metal, n.e.s.						
	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
692	Metal containers for storage and transport						
	U.K.	NA	110	97	100	95	91
	EEC	128	109	98	100	98	99
	Germany	NA	93	100	100	97	96
692.1	Tanks, vats, etc., for storage or manufacturing						
	U.K.	NA	NA	97	100	91	89
692.2	Casks, drums, boxes, cans, etc., for transport						
	U.K.	NA	NA	98	100	98	92
	EEC	128	109	98	100	98	99
	Germany	NA	93	100	100	97	96
693	Wire products (excl. electric) and fencing grills						
	U.K.	NA	100	105	100	94	94
	EEC	84	94	102	100	94	99
	Germany	86	96	105	100	94	102
	Japan	NA	NA	104	100	91	89
693.1	Wire cables, ropes, etc., not insulated						
	U.K.	NA	106	111	100	95	NA
	EEC	NA	92	104	100	86	94
	Germany	NA	NA	111	100	86	100
	Japan	NA	NA	103	100	83	NA
693.2	Wire of iron or steel, of types used for fencing						
	EEC	NA	NA	105	100	99	98
693.3	Gauze, netting, grill, fencing, etc., of wire						
	EEC	NA	NA	99	100	101	104
	Germany	NA	NA	99	100	101	104
694	Nails, screws, nuts, bolts, etc., iron, steel or copper						
	U.K.	NA	NA	100	100	98	89

(continued)

Table D.3 (concluded)

SITC Number	Commodity Group and Country	1953	1957	1961	1962	1963	1964
694	Nails, screws, nuts, bolts, etc., iron, steel or copper (continued)						
	EEC	110	100	101	100	96	94
	Germany	NA	98	102	100	95	92
694.1	Nails, tacks, staples, spikes, etc.						
	EEC	NA	NA	99	100	96	99
	Germany	NA	NA	99	100	99	101
694.2	Nuts, bolts, screws, rivets, washers, etc.						
	EEC	NA	NA	102	100	96	92
	Germany	NA	NA	103	100	93	88
695	Tools for use in the hand or in machines						
	U.K.	NA	NA	100	100	98	98
	EEC	92	88	98	100	99	100
	Germany	92	88	98	100	99	100
696	Cutlery						
	U.K.	NA	NA	97	100	102	106
	Germany	NA	NA	103	100	100	102
	Japan	NA	NA	98	100	109	120
698	Manufactures of metal, n.e.s.						
	U.K.	103	92	94	100	101	103
	EEC	107	105	100	100	102	98
	Germany	107	105	100	100	102	98

Note: SITC 69: The indexes are weighted averages of the 3-digit SITC groups for which we had data. The *U.K.* index covers all 3-digit groups except 1953 and 1957 data for 691 and 694. The *EEC* index excludes 1953 and 1957 for 691. The *German* index covers all groups for all years. The *Japanese* index which covers only the 1960s, includes data for 693, 695, and 696 for all four years, and 692 and 697 for 1962-63 only.

The indexes for 3-digit groups are combinations of price competitiveness indexes for 4-digit subgroups. The majority of these were computed from the time series data underlying the international price indexes of Table C.3, but some were derived from the place-to-place price comparisons used to construct the price level indexes of Table E.3.

For the *United Kingdom*, the international price index data were used for SITC 696, 697, and 698, and price level data for SITC 691. For the other groups the price competitiveness indexes were a combination of the two types.

The *German* indexes, aside from those for SITC 691, for which we lacked adequate data, and 693, for which price level data were used, are based on time-to-time data. For SITC 698 the price competitiveness index is derived from data for subgroup 698.3 in both Germany and the United States, because the U.S. index contained almost no data for other subgroups.

For the *EEC*, international price index data for SITC groups 694-698 and price level

data for SITC 691 were used. Indexes for SITC 692 and 693 are based on a combination of the two types of data. The EEC indexes for SITC 695–698 include only German data, as do a few of the links in the series for other groups.

The *Japanese* indexes for SITC 695 and 696 are derived from time series data; those for 692, from price level data; and for SITC 693, from a combination of the two types.

692: See SITC 69.

692.1: The *U.K.* index is based on place-to-place data.

692.2: The *U.K.* and *EEC* indexes are derived from a combination of time-to-time and place-to-place data. The *German* index is based on time-to-time data only.

693: See SITC 69.

693.1: The *Japanese* index is based on place-to-place data. For the *United Kingdom*, the *EEC*, and *Germany*, both time-to-time and place-to-place observations were used.

693.2: The *EEC* index is based on time-to-time data.

693.3: The *EEC* and *German* indexes are based on time-to-time data.

694: See SITC 69.

694.1 and 694.2: The *EEC* and *German* indexes are based on time-to-time data.

695, 696, and 698: See SITC 69.

Table D.4
Indexes of U.S. Price Competitiveness, Machinery Other than Electric,
1953, 1957, 1961-64
(1962 = 100)

SITC Number	Commodity Group and Country	1953	1957	1961	1962	1963	1964
71	Machinery other than electric						
	U.K.	99	99	99	100	100	101
	EEC	99	95	98	100	100	100
	Germany	99	94	98	100	100	100
711	Power generating machinery, other than electric						
	U.K.	106	101	100	100	97	100
	EEC	104	98	97	100	99	96
	Germany	102	94	96	100	99	94
711.4	Aircraft engines (incl. jet propulsion engines)						
	U.K.	NA	97	101	100	95	94
711.5	Internal combustion engines, excl. aircraft						
	Germany	106	95	97	100	99	94
712	Agricultural machinery and implements						
	U.K.	102	105	101	100	99	100
	EEC	101	102	100	100	100	100
	Germany	102	102	101	100	99	99
712.5	Tractors other than road tractors						
	U.K.	102	105	101	100	99	100
	EEC	103	102	100	100	101	102
	Germany	105	104	102	100	100	101
714	Office machines						
	U.K.	98	97	97	100	98	97
	EEC	118	98	97	100	98	97
	Germany	116	98	97	100	98	97
714.1	Typewriters and check-writing machines						
	EEC	NA	99	100	100	100	99
	Germany	NA	NA	101	100	100	98
714.2	Calculating, accounting machines, etc. (incl. electronic computers)						
	U.K.	102	101	99	100	95	94
	EEC	117	98	97	100	97	96
	Germany	115	96	97	100	98	96
714.9	Office machines, n.e.s. (excl. statistical machines)						
	EEC	117	100	96	100	97	96
	Germany	116	99	96	100	97	96

(continued)

Table D.4 (continued)

SITC Number	Commodity Group and Country	1953	1957	1961	1962	1963	1964
715	Metalworking machinery						
	U.K.	90	94	96	100	101	102
	EEC	87	90	100	100	100	99
	Germany	92	94	100	100	102	102
715.1	Machine tools for working metals						
	U.K.	90	94	96	100	101	102
	EEC	87	90	100	100	99	98
	Germany	92	94	100	100	103	101
	Metal-cutting machine tools						
	U.K.	92	95	96	100	100	102
	EEC	89	90	102	100	96	97
	Germany	95	96	102	100	101	101
	Metal-forming machine tools						
	U.K.	87	91	93	100	105	104
	EEC	83	91	96	100	106	97
	Germany	87	89	97	100	106	103
715.2	Metalworking machinery other than machine tools						
	EEC	NA	NA	99	100	100	102
	Germany	NA	NA	99	100	100	102
717	Textile and leather machinery						
	U.K.	98	97	99	100	102	102
	EEC	101	98	99	100	100	101
	Germany	101	98	99	100	101	101
	Japan	NA	NA	102	100	101	100
717.1	Textile machinery						
	EEC	102	97	99	100	100	101
	Germany	102	97	99	100	101	102
717.2	Machinery (excl. sewing machines) for hides, skins, or leather						
	U.K.	NA	NA	NA	100	100	91
	EEC	NA	102	97	100	99	100
	Germany	NA	102	97	100	99	100
717.3	Sewing machines						
	Germany	99	99	98	100	99	99
	Japan	NA	NA	100	100	102	102
718	Machines for special industries						
	U.K.	NA	102	102	100	98	98
	Germany	NA	94	98	100	99	100

(continued)

Table D.4 (continued)

SITC Number	Commodity Group and Country	1953	1957	1961	1962	1963	1964
718.2	Printing and bookbinding machinery						
	U.K.	99	104	103	100	100	101
	Germany	99	96	101	100	99	104
718.3	Food-processing machines (excl. domestic)						
	EEC	108	97	99	100	101	104
	Germany	108	98	100	100	99	102
718.4	Construction and mining machinery, n.e.s.						
	U.K.	NA	101	100	100	99	99
	Germany	NA	92	95	100	99	100
	Japan	NA	NA	101	100	98	95
718.5	Mineral crushing, sorting, etc., machinery; glassworking machinery						
	U.K.	NA	NA	102	100	91	NA
719	Machinery and appliances (nonelect.) and parts, n.e.s.						
	U.K.	99	99	99	100	102	102
	EEC	94	94	97	100	100	101
	Germany	93	91	97	100	101	101
719.1	Heating and cooling equipment						
	U.K.	NA	NA	100	100	100	99
	EEC	97	98	99	100	101	98
	Germany	84	86	96	100	102	101
719.2	Pumps and centrifuges						
	U.K.	96	104	99	100	99	98
	EEC	96	95	97	100	99	100
	Germany	95	92	97	100	99	99
719.21	Pumps for liquids						
	Germany	103	91	94	100	100	99
719.22	Pumps for gases						
	Germany	NA	93	99	100	100	100
719.3	Mechanical handling equipment						
	U.K.	NA	104	101	100	107	110
	EEC	84	94	95	100	99	99
	Germany	NA	94	95	100	99	98
719.31	Lifting and loading machinery						
	U.K.	NA	104	101	100	108	111
	EEC	NA	92	94	100	98	99
	Germany	NA	92	94	100	99	99

(continued)

Table D.4 (concluded)

SITC Number	Commodity Group and Country	1953	1957	1961	1962	1963	1964
		719.32	Forklift and other industrial trucks				
	EEC	NA	99	99	100	100	96
	Germany	NA	99	99	100	100	96
719.5	Powered tools, n.e.s.						
	U.K.	105	99	103	100	102	99
	Germany	90	85	94	100	99	101
719.6 & 719.8	Nonelect. mach. and appliances, n.e.s. (excl. domestic appliances)						
	U.K.	NA	98	100	100	99	103
	EEC	90	91	98	100	102	106
	Germany	90	92	99	100	101	105
719.7	Ball, roller, or needle-roller bearings						
	Germany	115	92	100	100	98	96
719.9	Parts and accessories of machinery, n.e.s.						
	U.K.	NA	NA	94	100	105	104
	EEC	103	97	97	100	104	102
	Germany	101	95	97	100	105	103
719.92	Taps, cocks, valves, and similar appliances, n.e.s.						
	U.K.	113	99	97	100	104	106
	EEC	113	99	97	100	103	104
	Germany	109	96	98	100	105	105
	Japan	NA	NA	NA	100	102	127
719.93	Transmission shafts and cranks, pulleys, etc.						
	Germany	NA	NA	NA	100	102	99

Note: SITC 71: The indexes are weighted averages of separate indexes for each of the seven 3-digit component groups.

711: The U.K. index is based on time-to-time data for 711.1 (steam generating boilers), 711.4 (see note below), and 711.5. The EEC and German indexes are based on time-to-time data for 711.1 and 711.5.

711.4: The U.K. index was calculated by dividing its time-to-time price index by that for the U.S. The indexes are those of Table C.4 except for 1961 when the U.S. index for complete aircraft engines (excluding parts) was used to provide comparability with the U.K. index.

711.5: See 711.

712: The U.K. index is based on time-to-time data for 712.1 (cultivating machines), 712.2 (harvesting, threshing, and sorting machines), and 712.5. The EEC and German indexes are based on time-to-time data for 712.1, 712.2, 712.3 (dairy-farming equipment), and 712.5.

712.5: See 712.

(continued)

Notes to Table D.4 (continued)

714: The indexes are weighted averages of separate indexes for the three 4-digit groups listed in the table, and, for the 1962-64 period, 714.3 (statistical machines). The 4-digit indexes were derived by dividing the time-to-time index for each of the other countries by the U.S. index for the same period.

Changes in price competitiveness inferred from place-to-place indexes, although based on fewer and less reliable observations than the time-to-time calculations, are similar. The main difference between the two is that the place-to-place data show a deterioration in the position of the United States relative to the United Kingdom, which is not apparent in the time-to-time data.

714.1, 714.2, and 714.9: See 714.

715: The *U.K.* index is based solely on time-to-time data for 715.1. The *EEC* and *German* indexes are based on time-to-time data and include 715.1 for all years and 715.2 for the 1960s (see below).

715.1: The indexes for the 4-digit group and its subdivisions are based on time-to-time price data and are aggregated from indexes for individual machine tools. In calculating the price competitiveness indexes for each subgroup the data were adjusted for differences between buyers' and sellers' reports. The *U.K.* index includes both buyers' and sellers' data for most products. The *German* and *EEC* indexes, on the other hand, are based almost exclusively on buyers' data.

715.2: Indexes for the *EEC* and *Germany* are based on time-to-time data. The following indexes for 1956-58 (1962 = 100) are based on a comparison of place-to-place data for those years with data for 1961-64: United States relative to the United Kingdom, 110; relative to the *EEC*, 86; relative to Germany, 85.

717: The *U.K.*, *EEC*, and *German* indexes are based on the time-to-time data for the three 4-digit groups listed in the table. The *Japanese* index is also based on time-to-time data, but excludes 717.2.

717.1, 717.2, and 717.3: See 717.

718: The *U.K.* index is a weighted average of the indexes shown for 718.2, 718.4, and 718.5, except that the 1953 figure for 718.5 was not included in the aggregation (see note below). The *German* index is a weighted average of the indexes shown for 718.2, 718.3, and 718.4, and time-to-time data for 718.5, which was not considered sufficient to publish as a separate index. An *EEC* index, covering the same groups as the German index, was constructed from time-to-time data and included in the aggregation of SITC 71, but was considered too weak to use separately. *Japanese* data were limited to 718.4 for the 1960s (see below).

718.2: The indexes are based on time-to-time data.

718.3: The indexes are based on time-to-time data. An alternative set of indexes, comparing prices for the same types of machinery in each country instead of comparing price movements for all items available, gives the following results:

	1953	1957	1961	1962	1963	1964
Relative to EEC	NA	98	99	100	102	104
Relative to Germany	NA	98	100	100	100	102

718.4: The indexes are based on time-to-time data.

718.5: The *U.K.* index was based on place-to-place data. The 1953 figure represents the *U.K.* price level relative to the United States in 1953, divided by this relative price level in 1962. However, since we did not have sufficient 1957 data, we had no 1957/1953 or 1961/1957 link for aggregating the index to the 3-digit level. Therefore the 1953 figure for 718.5 is not included in the 718 index. Although there are insufficient data for an index for 1957, a rough calculation for 1959 suggests an index of

about 114, and 1957 would be only a little lower. There are too few observations for a 1964 index but those we have, and the U.S. wholesale price index, both suggest that there was little or no change between 1963 and 1964.

719: The indexes are weighted averages of separate indexes for the seven 4-digit groups shown separately, which account for over 99 per cent of the world trade weight of 719. Some data were available for each 4-digit group for all periods except for the 1957/1953 U.K. index links for 719.3 and for 719.6 and 719.8 combined.

719.1: The indexes are based on time-to-time data.

719.2: The indexes are derived from the time-to-time relatives underlying the international price indexes, aggregated from 5-digit subgroup indexes. For the links through 1961-62 the index of U.S. price competitiveness for SITC 719.2 is calculated from subgroup indexes for SITC 719.21 and 719.22. There are no U.S. price data for 719.23 (centrifuges) for the earlier links. The indexes from 1962 on include all three subgroups. Subgroup indexes of price competitiveness are weighted by the value of OECD exports, as given in Appendix A.

719.21 and 719.22: See 719.2.

719.3: Indexes for total mechanical handling equipment are combinations of those for SITC 719.31 and 719.32. For lifting and loading machinery (SITC 719.31), the U.K. index is based on price level data. The *German* and *EEC* series, however, are derived mainly from the time-to-time data underlying Table C.3. For forklift and other industrial trucks (719.32) the U.K. index (not published) is based on price level data for 1964, and on the international price index time series data for earlier years. The index for *Germany* is derived from time series data and that for the *EEC* consists of the German series and some price level data for France.

A U.K. index derived from time-to-time data for SITC 719.31 was considered too weak to be published. Instead of the improvement in U.S. price competitiveness implied by the indexes in the table, it showed virtually no change from 1961 through 1964.

The *German* and *EEC* indexes of price competitiveness are dominated by German time series data, but the reported price level data can serve as something of an independent check. French data on price levels for 719.31, which are used in the index for 1962-64, confirm the slight decline in U.S. competitiveness over that period shown by the time series data. The German price level data, not used for the index, also suggest a decline in the U.S. competitive position. In the case of SITC 719.32, the price level data for *EEC* countries do not confirm the decline in U.S. price competitiveness shown by the time series data. For the most part they suggest either stability or a decline in 1963 followed by a rise in 1964, but in any case, not much difference between the 1962 and 1964 levels. Furthermore, some data for 1965 suggest a substantial improvement rather than a decline in U.S. competitiveness since 1962. The 1964 deterioration in U.S. price competitiveness therefore is somewhat questionable.

Some fragmentary price level comparisons with Japan in item 719.31 suggest an improvement in U.S. price competitiveness in 1964, but the opposite picture is conveyed by the domestic price indexes, which show a decline that year and every other year from 1961 to 1964.

719.31 and 719.32: See 719.3.

719.5: The U.K. index is calculated from subgroup indexes for SITC 719.52 (except in 1964) and 719.53. There are no U.S. price data for 719.54 and no U.K. price data for 719.51 or 719.54. The index relative to Germany includes all subgroups except 719.54 except in 1964, when there was no U.S. price index for 719.51 either.

719.6 and 719.8: The U.K. index was calculated from international price indexes for items 719.62-719.66. For rubber processing machinery and for miscellaneous

(continued)

Notes to Table D.4 (concluded)

machinery and mechanical appliances in items 719.61 and 719.8, the movement of the U.K./U.S. price level was used because it covers a larger number of observations. The *German* and *EEC* indexes are derived from international price indexes except for the rubber machinery index relative to Italy, which was calculated from price levels.

719.7: The index for *Germany* is based on time-to-time data.

719.9: The indexes shown in the table, with the exception of those for item 719.92 relative to the United Kingdom in 1953 and 1957, and those for Japan, are derived from time-to-time data as summarized in the international price indexes of Table C.4. The price competitiveness indexes for SITC 719.9 as a whole, with the same exceptions, are calculated from the corresponding international price indexes instead of being aggregations of item price competitiveness indexes as in other subgroups where the item indexes were stronger.

For item 719.92 the indexes used for the United Kingdom after 1957 and for the United States are the averages of company indexes described in the notes to Table C.4. If the international price indexes based on averages of individual observations had been used the price competitiveness indexes would have been as follows (1962 = 100):

	1953	1957	1961	1962	1963	1964
Machinery parts and accessories, n.e.s. (719.9)						
Relative to U.K.	NA	NA	92	100	107	108
Relative to EEC	99	95	97	100	106	108
Relative to Germany	97	93	97	100	108	109
Taps, cocks, valves, and similar appliances (719.92)						
Relative to U.K.	NA	NA	93	100	109	114
Relative to EEC	107	95	97	100	108	116
Relative to Germany	103	92	97	100	110	117

The indexes of price competitiveness relative to the *United Kingdom* for 1953 and 1957 and all those for *Japan* are based on place-to-place price comparisons. Both of these cover only item 719.92, with approximately 10 to 20 observations in each case. It is possible to construct, for all the years, an index of U.K. price competitiveness entirely from place-to-place comparisons of the type used in this table only for the early years. These data yield the following index for 719.92 (1962 = 100): 1953, 121; 1957, 107; 1961, 104; 1962, 100; 1963, 113; 1964, 125. The number of items used ranges from about 20 at the beginning to more than 100 in most of the years covered.

719.92 and 719.93: See 719.9.

Table D.5
 Indexes of U.S. Price Competitiveness, Electrical Machinery,
 Apparatus, and Appliances, 1953, 1957, 1961-64
 (1962 = 100)

SITC Number	Commodity Group and Country	1953	1957	1961	1962	1963	1964
72	Electrical machinery, apparatus, and appliances						
	U.K.	94	91	99	100	105	103
	EEC	96	92	97	100	103	101
	Germany	94	91	97	100	102	101
	Japan	NA	115	102	100	100	102
722	Electric power machinery and switchgear						
	U.K.	NA	84	102	100	110	107
	EEC	NA	86	96	100	105	105
	Germany	NA	82	94	100	104	106
	Japan	NA	NA	97	100	102	113
722.1	Electric power machinery						
	U.K.	NA	75	91	100	109	101
	EEC	NA	81	92	100	108	109
	Germany	NA	76	90	100	105	111
	Japan	NA	NA	100	100	106	128
	Sweden	NA	NA	82	100	102	87
	Switzerland	NA	72	91	100	112	104
722.2	Apparatus for making, breaking, or protecting elect. circuits						
	EEC	NA	NA	101	100	101	100
	Germany	NA	NA	101	100	101	100
723	Equipment for distributing electricity						
	U.K.	85	84	96	100	103	99
	EEC	90	82	90	100	96	95
	Germany	90	82	90	100	97	103
	Japan	NA	NA	113	100	110	111
723.1	Insulated wire and cable						
	U.K.	NA	84	95	100	103	103
	Japan	NA	NA	115	100	113	114
723.2	Electrical insulating equipment						
	Japan	NA	NA	108	100	98	96
724	Telecommunications apparatus						
	U.K.	98	98	100	100	106	103

(continued)

Table D.5 (concluded)

SITC Number	Commodity Group and Country	1953	1957	1961	1962	1963	1964
724	Telecommunications apparatus (continued)						
	EEC	NA	NA	100	100	105	101
	Germany	NA	NA	100	100	105	99
	Japan	NA	121	106	100	105	102
724.1 & 724.2	Television and radio broadcast receivers						
	U.K.	100	94	102	100	99	98
	EEC	NA	NA	101	100	107	111
	Germany	NA	NA	101	100	108	111
	Japan	NA	151	124	100	110	110
724.9	Telecommunications equipment, n.e.s.						
	U.K.	97	100	99	100	109	105
	EEC	96	97	99	100	104	96
	Germany	94	95	99	100	104	94
	Japan	NA	110	99	100	102	98
725	Domestic electrical equipment						
	U.K.	NA	NA	NA	100	97	100
	EEC	NA	100	102	100	98	98
	Germany	NA	99	102	100	97	97
726 & 729	Other elect. mach. and apparatus (incl. med. and radiol.)						
	U.K.	86	89	94	100	103	102
	EEC	96	92	96	100	103	101
	Germany	95	92	96	100	102	100
	Japan	NA	NA	100	100	93	93
729.1	Batteries and accumulators						
	EEC	NA	NA	98	100	101	106
	Germany	NA	NA	98	100	101	105
729.2	Electric lamps						
	EEC	NA	90	94	100	111	110
729.4	Automotive electrical equipment						
	Germany	NA	NA	NA	100	99	95
729.5	Elect. measuring and controlling instruments						
	U.K.	NA	86	95	100	96	94
	Germany	107	95	106	100	97	94
729.9	Electrical machinery and apparatus, n.e.s.						
	EEC	80	81	95	100	104	102
	Germany	81	83	95	100	104	101

Notes to Table D.5

Note: **SITC 72:** The index for each country is a weighted average of separate indexes for the five 3-digit groups or combinations listed in the table. The *EEC* and *German* indexes exclude 722 for 1953, and the *Japanese* index excludes 722, 723, and 725 for 1953 and 1957.

722: Indexes relative to the *United Kingdom* for SITC 722.1 are derived from place-to-place data for power transformers, instrument transformers, and generators, and a combination of place-to-place and time-to-time data for electric motors. The transformers and generators are weighted at 65 per cent and the electric motors at 35 per cent. Most of the data are from competitive bidding covering projects in the United States and many foreign countries. The indexes for SITC 722.2 are from a small number of place-to-place comparisons, not sufficient for publication.

The *German* indexes were derived from similar data, except that only time-to-time observations were used for electric motors in SITC 722.1 and for SITC 722.2 as a whole, as described in the note to Table C.5. The indexes for other *EEC* countries, which cover only SITC 722.1, were derived entirely from place-to-place comparisons for power transformers, generators, and electric motors, largely from bidding data. Both the Swiss and Swedish indexes were derived from place-to-place data for power transformers, instrument transformers, and generators, with the weight of instrument transformers held constant relative to that of power transformers and generators. Constant weights, based on the number of observations for each type in all years combined, were used because the instrument transformer price relatives were regularly lower than those of other products and it was important to eliminate fluctuations in the average due solely to fluctuation in the relative number of observations in the two groups.

The *Japanese* data are weakest of all, with each link based on fewer observations, all from place-to-place comparisons of power transformers, instrument transformers, generators, electric motors, and circuit breakers. The weight of electric motors was set at 35 per cent of SITC 722.1 in the years for which data were available. An alternative index of U.S. price competitiveness relative to *Japan* for SITC 722.1, calculated from time-to-time data for the two countries and using the U.S. international price index and the official Japanese export price indexes (see notes to Table C.5), is as follows (1962 = 100): 1961, 84; 1962, 100; 1963, 110; 1964, 110. In most groups this index from time series data would be the preferred one. Here, however, we use place-to-place data because of the weakness of the U.S. international price index.

Most of the bidding data for generators and power transformers was adjusted for differences in quality among offers, as reported by the purchasing agencies. In some cases, especially for instrument transformers, where there were no adjusted data or where the difference between adjusted and unadjusted data appeared to be due mainly to the limited coverage of the former, rather than to the adjustments, we used the unadjusted price comparisons.

For further discussion of bidding data see notes to Table E.5.

722.1 and 722.2: See 722.

723: *U.K.* indexes are a combination of price competitiveness indexes for subgroups 723.1 and 723.2. The former are based on place-to-place data for 1957-64, and on weak time-to-time data for 1953-57; the latter are based on place-to-place data for 1961-64 and on time-to-time data for 1953-61. The *EEC* index is based on place-to-place comparisons for countries other than Germany, 1962-64, and on time-to-time data for Germany, 1953-64. *Japanese* indexes are derived entirely from place-to-place price comparisons.

(continued)

Notes to Table D.5 (concluded)

723.1 and 723.2: See 723.

724: The indexes of price competitiveness are built up entirely from time-to-time data using the price series underlying Table C.5. The price competitiveness table is more complete than Table C.5, however, since it makes use of subgroup indexes based on small numbers of series for which the comparison of two countries was considered more representative than either country's international price index. The *U.K.* index is a combination of price competitiveness indexes for SITC 724.1, portable transistor radios in SITC 724.2, and SITC 724.9. The *German* index is a combination of a price competitiveness index for SITC 724.1 and 724.2 combined, and one for SITC 724.9. Data are mostly from official export price data, and the relative weights of television and radio receivers in the German series are German export rather than world trade weights. The *EEC* index is mainly derived from German data with a few additional observations for other countries. The *Japanese* index is a combination of price competitiveness indexes for SITC 724.1, portable transistor radios in SITC 724.2, and SITC 724.9. The Japanese export price indexes used for 1957-61 actually refer to the period January 1960 to June-July 1961, and probably understate the fall in Japanese prices and in U.S. price competitiveness.

The indexes for Germany and the EEC are not strictly comparable to those for the United Kingdom and Japan because they include both portable transistor and other radios in SITC 724.2. A more comparable, but less complete, set of calculations using only transistor radios in SITC 724.2 and giving 724.2 only the weight of the transistor radio portion results in the following indexes of U.S. price competitiveness (1962 = 100):

	1953	1957	1961	1962	1963	1964
Telecommunications equipment (SITC 724)						
Relative to U.K.	98	99	100	100	107	104
Relative to EEC	97	102	100	100	102	98
Relative to Germany	96	100	100	100	102	97
Relative to Japan	NA	115	103	100	103	100
Television and radio receivers (SITC 724.1 and 724.2)						
Relative to U.K.	98	96	101	100	100	100
Relative to EEC	119	110	102	100	96	102
Relative to Germany	122	122	102	100	96	102
Relative to Japan	NA	137	117	100	106	107

All these indexes are based on small numbers of observations, considerably smaller, in the case of the EEC countries, than those used in Table D.5. Indexes for 1953 and 1957, omitted there, are shown here because, although the number of observations is smaller, we have more assurance of comparability between countries.

724.1, 724.2, and 724.9: See 724.

725: Indexes are weighted averages of U.S. price competitiveness indexes for subgroups, each calculated from time-to-time data underlying the indexes of Table C.5.

726 and 729: Data are from time-to-time indexes underlying Table C.5. Price competitiveness indexes were calculated for each 4-digit subgroup, and these were aggregated to total group price competitiveness indexes.

729.1, 729.2, 729.4, 729.5, and 729.9: See 726 and 729.

Table D.6
 Indexes of U.S. Price Competitiveness, Transport Equipment,
 1953, 1957, 1961-64
 (1962 = 100)

SITC Number	Commodity Group and Country	1953	1957	1961	1962	1963	1964
73	Transport equipment						
	U.K.	98	100	104	100	103	107
	EEC	107	105	101	100	101	102
	Germany	102	101	100	100	102	101
731	Railway vehicles						
	U.K.	NA	NA	102	100	103	NA
	EEC	89	86	94	100	100	102
	Germany	88	85	94	100	100	101
731.1, 731.2; & 731.3	Railway locomotives						
	U.K.	NA	NA	102	100	102	NA
	Germany	74	77	91	100	102	105
732	Road motor vehicles						
	U.K.	104	105	106	100	102	107
	EEC	107	105	102	100	103	104
	Germany	102	102	101	100	102	102
732.1 & 732.6	Passenger motor cars and chassis with engines mounted						
	U.K.	109	105	106	100	101	106
	EEC	114	113	102	100	102	102
	Germany	106	107	101	100	102	100
	France	122	124	102	100	103	108
	Italy	138	122	108	100	101	101
	Japan	NA	167	113	100	95	92
732.2, 732.3, 732.4, 732.5, & 732.7	Buses, trucks, etc., and chassis with engines mounted						
	U.K.	94	104	106	100	103	110
	EEC	95	91	102	100	104	110
	Germany	95	91	102	100	103	107
734	Aircraft and parts						
	U.K.	NA	NA	NA	100	106	103
	France	NA	85	94	100	100	96
734.1	Aircraft, heavier than air						
	U.K.	NA	86	102	100	103	103
	France	NA	80	98	100	101	103

(continued)

Table D.6 (concluded)

SITC Number	Commodity Group and Country	1953	1957	1961	1962	1963	1964
735	Ships and boats						
	EEC	114	112	98	100	95	93
	Germany	110	106	94	100	97	95
	Japan	114	120	98	100	90	90

Note: **SITC 73:** The *U.K.* index is a weighted average of indexes for 731 (1961–1963 only), 732, 733 (road vehicles other than motor vehicles), 734 (except in 1953), and 735. The *EEC* and *German* indexes cover 731, 732, 733, and 735 for all years. *Japanese* data are limited to 735 (shown separately), and some data for the 1960s for 731 and 733 (not published). This is not sufficient to construct a Japan index for 73 as a whole.

731: The *U.K.* index is based on separate price competitiveness indexes for (1) 731.1, 731.2, and 731.3 combined (see note below), and (2) 731.7 (based on place-to-place data for parts of railway vehicles). The former was assigned the OECD export weight of 731.1–731.4, as given in Appendix A. The *EEC* index is a combination of a German index for 731.1 through 731.4 (see note below), and *EEC* competitiveness indexes for 731.5 and 731.6 combined and for 731.7, both based on time-to-time data. The *German* index is a combination of indexes derived from time-to-time data for 731.1 through 731.4 (see note below, 731.5 and 731.6 combined, and 731.7).

731.1, 731.2, and 731.3: The *U.K.* index is based on time-to-time indexes derived from selected bidding data. (See appendix to Chapter 14.) The *German* index covers 731.4 (self-propelled cars), as well as locomotives. It is based on time-to-time data underlying the international price indexes of Appendix C.

732: The indexes for the *United Kingdom*, the *EEC* and *Germany* are based on the two 4-digit combination subgroups, and on 732.8 (parts). Figures show ratios of foreign to U.S. international price indexes. International price indexes comparable to each other in coverage and method were used in each foreign-U.S. comparison in this table, whereas those in Table C.6 are the best estimates that could be made for each country, regardless of comparability. The differences, however, are slight.

732.1 and 732.6: The indexes for *France*, *Italy*, and *Japan* are based on time-to-time data. For other countries, see 732.

732.2, 732.3, 732.4, 732.5, and 732.7: See 732.

734: Indexes are derived entirely from the time-to-time indexes given in Table C.6. These were based on Civil Aeronautics Board data for U.S. airframes and engines and on company data for other aircraft and for all aircraft parts. Several alternative indexes were available but were considered less reliable. However, they may be interesting as indicators of the range of possibilities using other measurements. The results are as follows:

Aircraft and parts, relative to the United Kingdom: A U.K.-U.S. price competitiveness index based on CAB data for U.K. aircraft declined to 99 in 1964. However, this index covers only short-range aircraft, in which the U.K. position was most favorable. Substitution of U.S. company data completely independent of the CAB reports but comparable to the company data used in the U.K. index yields an index of 102.

Aircraft and parts, relative to France: Substitution of company reports for CAB data

in the U.S. price index results in an index of U.S. price competitiveness of 95 instead of 96 in 1964, and one of 82 instead of 85 in 1957.

Complete aircraft, relative to the United Kingdom: Use of CAB data for U.K. aircraft prices indicates a decline in U.S. price competitiveness, but this comparison, as mentioned above, is confined to short-range aircraft. Substitution of company for CAB data on U.S. aircraft results in a 1964 price competitiveness index of 100.

Complete aircraft, relative to France: If company data are used for both the U.S. and France, the price competitiveness index for 1961 through 1963 shows no change, instead of a slight rise, but a somewhat larger gain in U.S. price competitiveness from 1957 through 1962.

734.1: See 734.

735: These indexes are derived from the international price indexes in Table C.6. The U.K. index given in the text produces the following index of price competitiveness relative to the United States: 1953, 97; 1957, 97; 1961, 100; 1962, 100; 1963, 105; 1964, 110.

Table D.7
Indexes of U.S. Price Competitiveness, Miscellaneous Manufactured
Articles, 1953, 1957, 1961-64
(1962 = 100)

SITC Number	Commodity Group and Country	1953	1957	1961	1962	1963	1964
861	Scientific, medical, etc., instruments and apparatus						
	U.K.	87	97	101	100	99	104
	Japan	NA	NA	101	100	102	100
861.4,	Photographic and cinematographic equipment, n.e.s.						
861.5, &	EEC	NA	NA	102	100	102	101
861.6	Germany	NA	NA	103	100	102	101
861.7	Medical instruments, n.e.s.						
	EEC	NA	NA	94	100	104	109
	Germany	NA	NA	94	100	104	109
861.9	Measuring, controlling, and scientific instruments, n.e.s.						
	U.K.	NA	105	107	100	97	102
	EEC	99	98	100	100	99	98
	Germany	98	98	100	100	99	98
891	Musical instruments, recorders, etc., and parts and accessories						
	U.K.	NA	NA	103	100	100	98
	EEC	NA	89	95	100	105	106
	Germany	NA	88	96	100	106	107
891.4	Pianos and other string musical instruments						
	EEC	NA	NA	99	100	106	102
	Germany	NA	NA	99	100	106	100

Note: SITC 861: The U.K. index is a combination of (1) price competitiveness indexes based on time-to-time data for 861.1, 861.2, and 861.3 combined (optical goods) 1957-64; 861.4, 861.5, and 861.6 combined, 1961-62; 861.7; and 861.9; and (2) an index based on a combination of time-to-time and place-to-place data for 861.8 (meters and counters, nonelectric). The Japanese index is based on time-to-time data and covers 861.1, 861.2, and 861.3 combined; 861.4, 861.5, and 861.6 combined; and 861.9.

861.4, 861.5, and 861.6: See 861 and 864.

861.7: See 861 and 864.

861.9: For the United Kingdom, see 861. For the EEC and Germany, see 861 and 864.

891: The U.K. index for the 1960s is based on time-to-time data and covers 891.1 (phonographs, tape recorders, etc.); 891.2 (phonograph records, recorded tape, etc.), except 1961; 891.4; and 891.9 (parts and accessories of musical instruments). The EEC and German indexes for 1957-64 are based on time-to-time data and cover 891.1, 1964 only; 891.2, 1963 and 1964 only; 891.4; 891.8; and 891.9.

891.4: See 891.