Economic Intelligence Report

GROWTH OF INDUSTRIAL PRODUCTION IN COMMUNIST CHINA 1952–60

CIA/RR ER 61–48

December 1961

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MEMORANDUM FOR: Recipients of CIA/RR ER 61-48, Growth of Industrial Production in Communist China, 1952-60, December 1961, CONFIDENTIAL

SUBJECT : Correction of the Chart, Figure 4, in ER 61-48

The accompanying chart, Figure 4, has been corrected and should replace the Figure 4 following page 3 of the report.

FOR THE ASSISTANT DIRECTOR, RESEARCH AND REPORTS:

[redacted]

Chief, Publications Staff

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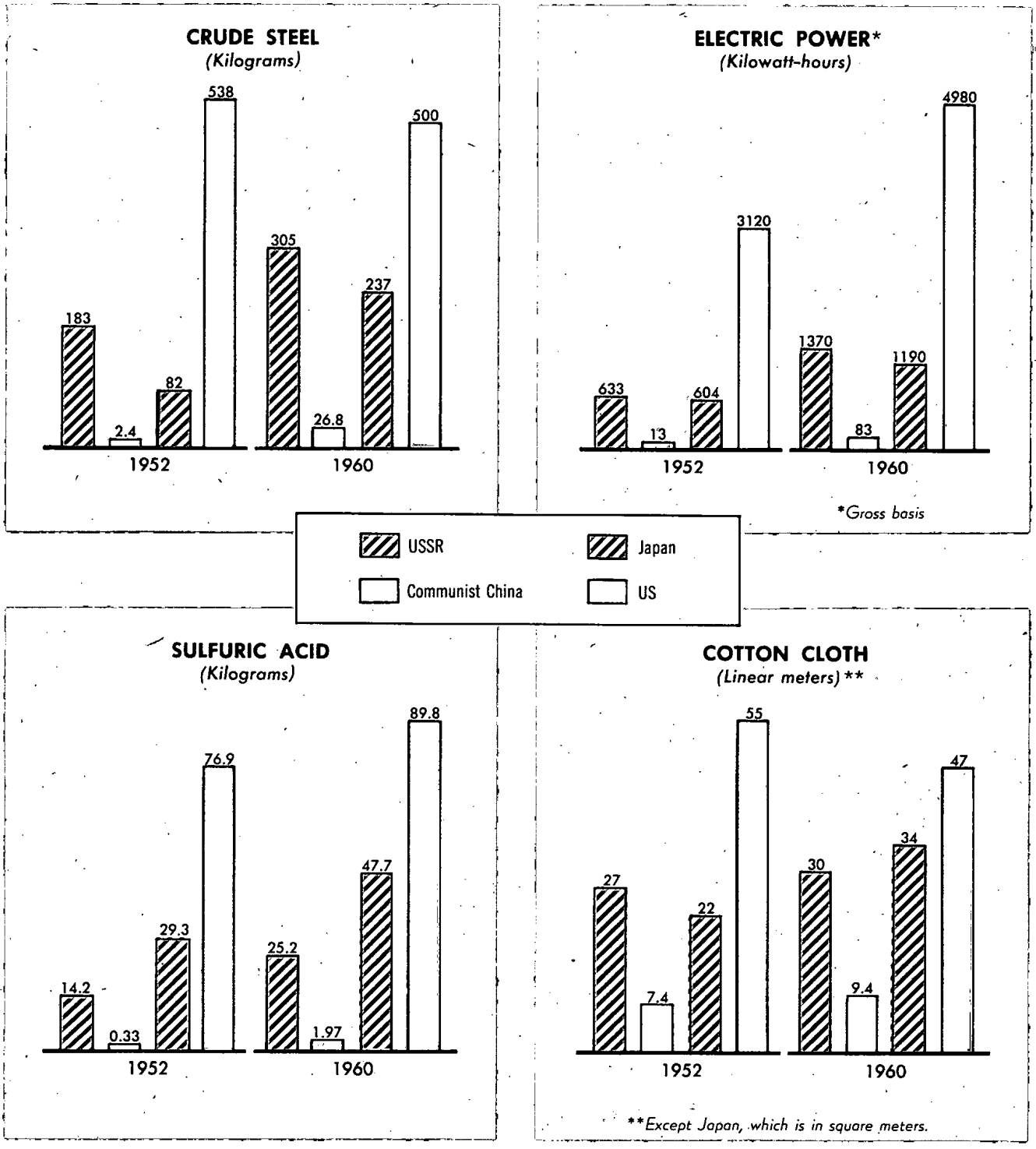
Figure 4 50X1

PER CAPITA PRODUCTION OF CRUDE STEEL, ELECTRIC POWER, SULFURIC ACID AND COTTON CLOTH IN THE USSR, COMMUNIST CHINA, JAPAN, AND THE US, 1952 AND 1960



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Economic Intelligence Report

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WARNING

This material contains information affecting the National Defense of the United States within the meaning of the espionage laws, Title 18, USC, Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

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Tables

Charts

GROWTH OF INDUSTRIAL PRODUCTION IN COMMUNIST CHINA*
1952-60

Growth of industrial production** in Communist China during 1952-60 has been remarkable but less rapid than is claimed in official Chinese statistics. Industrial production in 1960 is estimated to have been more than four times the level in 1952, an increase equivalent to an average annual rate of growth of about 20 percent for the 8 years.*** Production in heavy industry increased at an estimated average annual rate of 27 percent during the period, or almost three times as rapidly as light industry. Value added by heavy industry was 71 percent of the total value added by industry in 1960 compared with 46 percent in 1952. The trends in total, heavy, and light industrial production during 1952-60, on a value-added basis, are shown in the chart, Figure 1.†

The rapid growth of the heavy industry sectors -- such as ferrous metals, metal products and machinery, electric power, chemicals, and construction materials -- and the comparatively slow expansion of the light industry sectors -- such as textiles and clothing, foods, beverages, and tobacco -- are depicted in the chart, Figure 2.†

Rates of growth in industrial handicraft†† in Communist China during 1952-60 were significantly lower than in the rest of industry. The decline in the relative importance of handicraft production was due primarily to the shift of production of cotton cloth, paper, sugar, and

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* The estimates and conclusions in this report represent the best judgment of this Office as of 15 October 1961.

** Unless otherwise indicated, industrial production in this report is measured by value added in production. Value added in a sector of industry is found by subtracting the cost of materials, fuels, and other purchases used in production from the value of its final product; the resulting figure represents the amount of economic activity performed in that particular sector of industry. Gross value, on the other hand, which is the basis of the weights used in the official Chinese Communist index of industrial production, refers to the value of the final product of all industrial enterprises.

*** Rates of growth were calculated by using Chinese domestic prices of 1957. If US prices had been used in the calculation, the results would have been slightly lower.

† Following p. 2.

†† Industrial handicraft in Communist China refers to handicraft production by full-time, self-employed individuals hiring no more than three workers.

other light industrial products out of handicraft enterprises into relatively modern plants. By 1959, for example, cotton cloth was no longer produced by handicraft units. In addition, the largest increases in production in Communist China have occurred where the handicraft element was either small or nonexistent -- for instance, in finished steel, machine tools, electrical equipment, petroleum, and electric power.* The declining proportion of value added in handicraft production to the total value added by industry in 1952, 1957, and 1960 is shown in the accompanying chart, Figure 3.

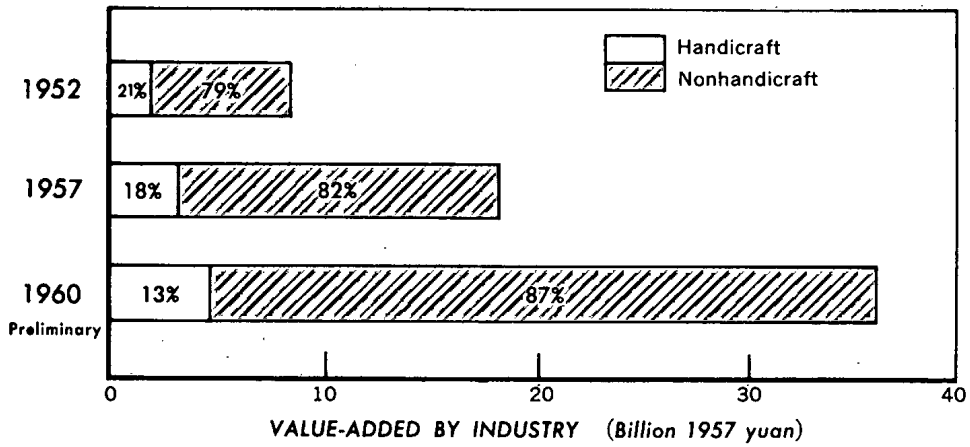

Figure 3. Contribution of Handicraft Industries to the Total Industrial Production in Communist China, 1952, 1957, and 1960

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Because of a continuing lack of information [redacted] a precise estimate of the growth of industrial production for 1960 is not possible. Industrial production was seriously disrupted in 1960 by the second consecutive year of poor harvests, the sudden withdrawal of Soviet technicians, and the accumulated problems in planning

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* Coal was an exception in 1958, when much of the increase in production of coal came from small pits.

Figure 1

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YEARLY PERCENTAGE CHANGES IN ESTIMATED INDUSTRIAL PRODUCTION IN COMMUNIST CHINA, WITH VALUE-ADDED WEIGHTS, 1953-60

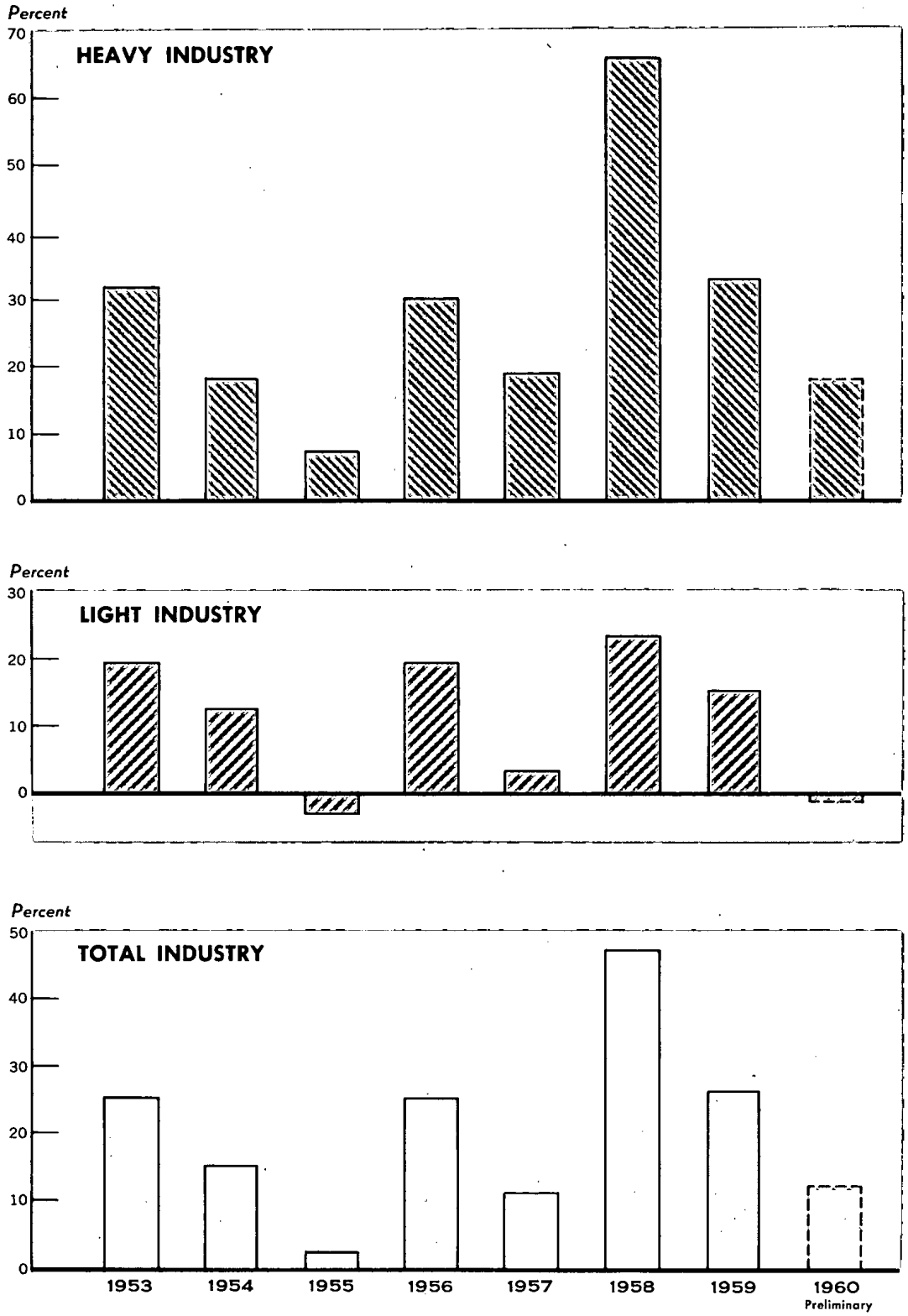

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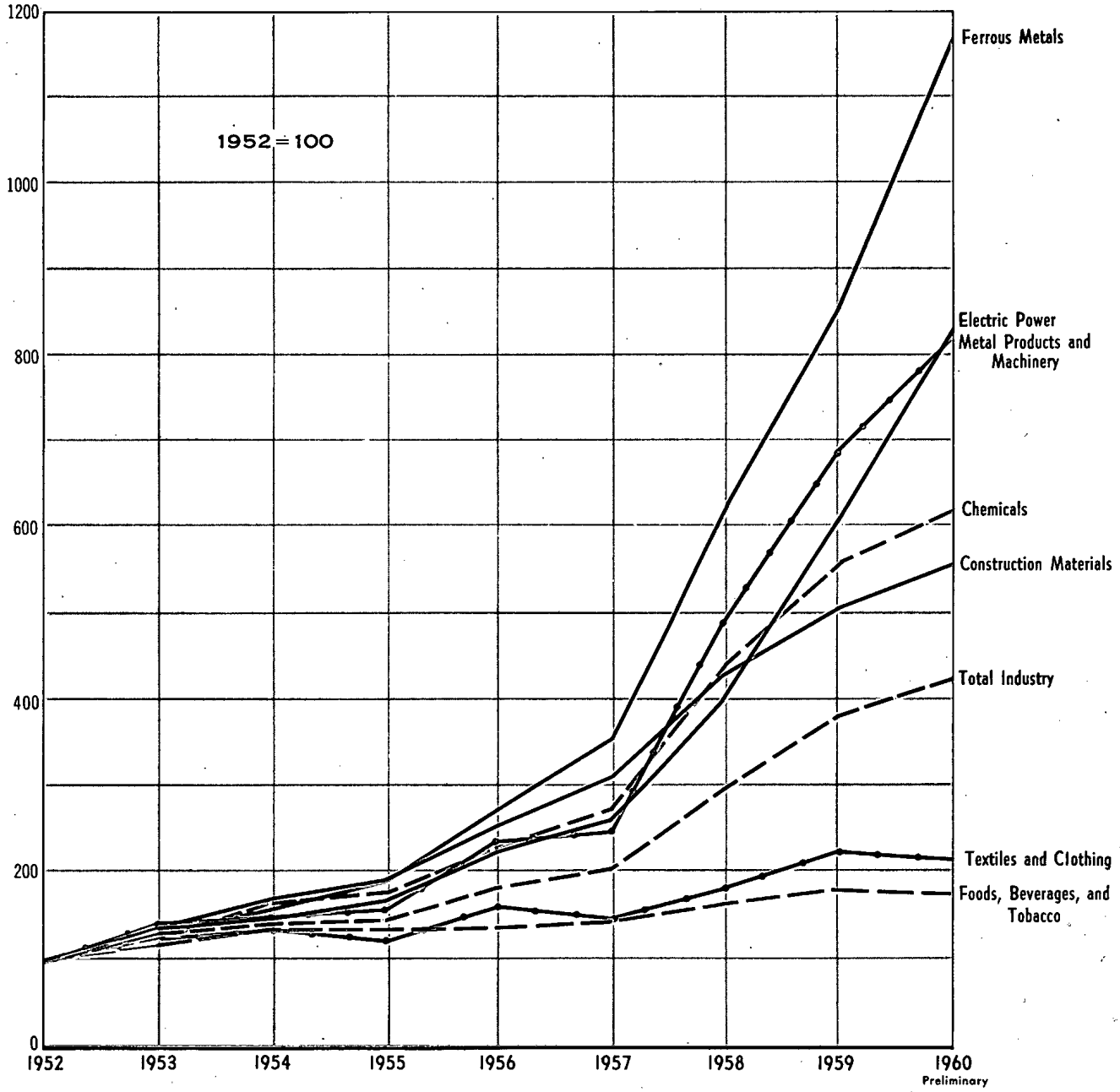
Figure 2 50X1

INDEXES OF ESTIMATED GROWTH OF INDUSTRIAL PRODUCTION IN COMMUNIST CHINA, BY MAJOR SECTORS, WITH VALUE-ADDED WEIGHTS, 1952-60



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and organization that were attributable mainly to the excesses of the "leap forward" policy.*

In spite of the impressive record of industrial achievements since 1952, per capita output of basic industrial commodities remains small, as shown in the chart, Figure 4.** Communist China, moreover, still has a long way to go before it catches up with Japan, the USSR, and industrialized countries of the West in terms of quality and diversity of industrial production and mastery of modern technology.

The growth of industrial production in Communist China has not been as great as claimed by the regime. The chart, Figure 5,** presents a comparison of the official claims of increases in the gross value of industrial production with the estimates in this report of increases in the gross value of industrial production for 1952-60.*** The principal causes of bias appear to have been (1) the increase in the degree of double-counting in the official index that resulted from the rapid changes in industrial organization after 1957, (2) the inclusion of products not previously counted, and (3) the pressure put on subordinate units to report everything that could be counted under any pretext.

Estimated indexes of industrial production in Communist China during 1952-60 are presented in Tables 1 through 3.† Estimates of physical production, prices, and value added per unit of commodities used to compute the indexes are presented in Tables 4 and 5.†† The methodology for computing the indexes is given in Appendix B.

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* The term leap forward as used in this report refers to the regime's policy, instituted in 1958 (and carried over into 1959 and early 1960 in milder form), of working men and machines at a maximum speed with only secondary concern for the quality and balanced proportioning of output.

** Following p. 4.

*** It should be noted that, because of differing patterns of weights, the index of industrial production estimated in this report on the basis of gross value (see Table 2, Appendix A, p. 8, below) differs from the index estimated on the basis of value added (see Table 1, Appendix A, p. 7, below). Table 3 (Appendix A, p. 9, below) gives both official and estimated indexes of gross industrial production.

† Appendix A, pp. 7 through 9, below.

†† Appendix A, pp. 10 through 16, below.

Figure 50X1

PER CAPITA PRODUCTION OF CRUDE STEEL, ELECTRIC POWER, SULFURIC ACID AND COTTON CLOTH IN THE USSR, COMMUNIST CHINA, JAPAN, AND THE US 1952 AND 1960

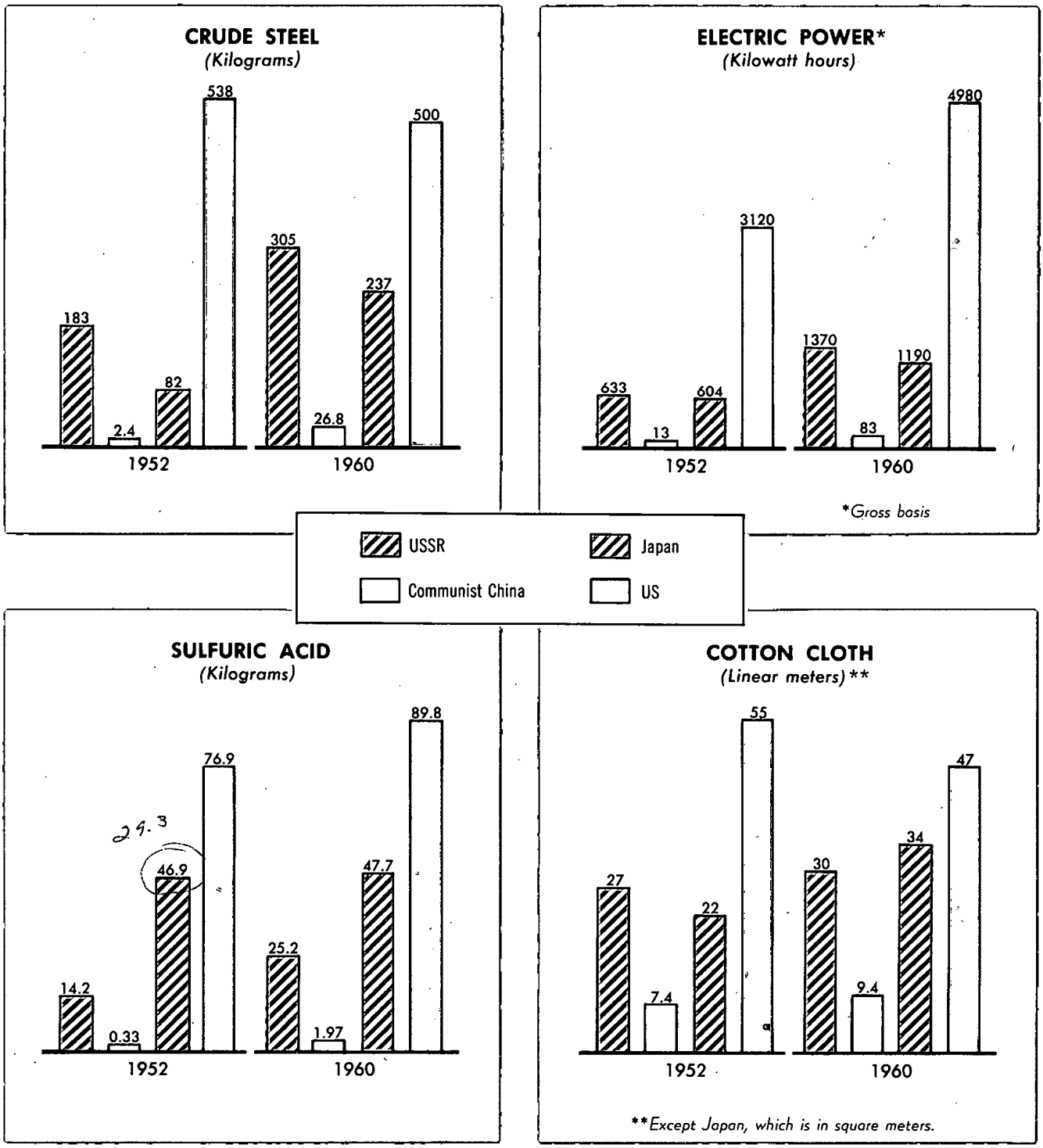

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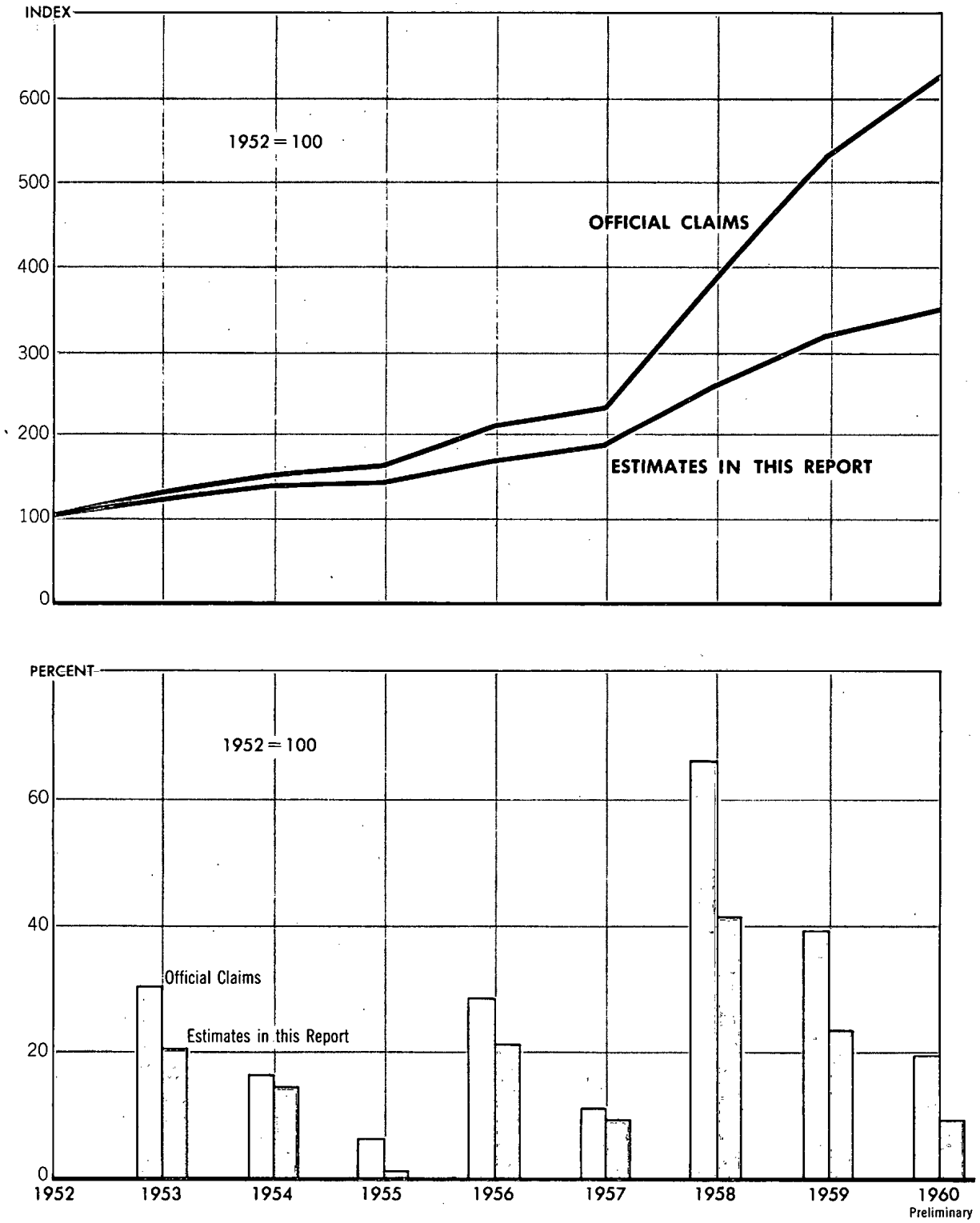
Figure 5

COMPARISON OF OFFICIAL CLAIMS WITH THE ESTIMATES IN THIS REPORT OF THE ANNUAL INCREASES IN THE GROSS VALUE OF INDUSTRIAL PRODUCTION IN COMMUNIST CHINA, 1952-60



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APPENDIX A

STATISTICAL TABLES*

Introductory Note

The index in Table 1 has been constructed with value-added weights that were derived from domestic 1957 Chinese Communist yuan prices. The index in Table 2 has been constructed with gross-value weights that also were based on Chinese domestic yuan prices of 1957.** The index in Table 1 is patterned after the revised index of industrial production of the US Federal Reserve Board.*** Table 3 compares the official Chinese index of gross industrial production with the calculated index of gross value shown in Table 2.

Table 4 presents estimates of the physical production of the major industrial commodities used in constructing the indexes in Tables 1 and 2. Table 5 presents estimates of the value added per unit and the factory-door prices of major industrial commodities. Tables 6 and 7 give the details for two sector indexes: (1) metal products and machinery and (2) other consumer goods.

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* Tables 1 through 7 follow on pp. 7 through 20.

** Unless otherwise indicated, yuan values in this report are given in constant 1957 yuan and may be converted to US dollars at a rate of exchange of 2.46 yuan to US $1. This rate, which is based on the yuan-sterling rate for telegraphic transfers, bears no relationship to domestic price levels, nor does it necessarily reflect the value of the yuan in terms of dollars.

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Table 1

Index of Estimated Total Industrial Production in Communist China, with Value-Added Weights a/
1952-60

1957 = 100

	1957 Value-Added Weights b/		Indexes								
	Sector	Division	1952	1953	1954	1955	1956	1957	1958	1959	1960 Preliminary
Heavy industry											
Ferrous metals	16.8		28	35	44	53	77	100	175	239	327
Nonferrous metals	2.3		43	52	57	66	72	100	133	169	224
Metal products and machinery	22.8		40	57	61	62	95	100	198	277	330
Military machinery c/	4.4		75	79	62	64	93	100	194	255	227
Construction materials	6.1		32	44	55	61	82	100	137	163	178
Timber	17.6		40	63	80	75	75	100	126	147	154
Chemicals	11.7		37	45	61	65	86	100	161	206	227
Coal	9.7		48	51	62	72	85	100	176	226	244
Petroleum	4.4		30	42	52	68	80	100	157	233	285
Electric power	4.2		38	48	57	64	86	100	152	229	314
Total heavy industry	100.0	57.0	39	51	61	65	84	100	166	220	259
Light industry											
Textiles and clothing	39.6		69	84	91	84	110	100	124	153	146
Paper and printing	10.8		54	60	72	74	85	100	148	172	170
Food, beverages, and tobacco	26.8		69	81	92	93	95	100	116	127	124
Other consumer goods d/	22.8		48	58	68	68	84	100	117	125	133
Total light industry	100.0	43.0	63	75	84	82	97	100	123	142	140
Total industry		100.0	49	61	71	72	90	100	147	186	208

a. For the methodology, see Appendix B.
b. Value-added weights are defined on p. 1, above.
c. Including ammunition, weapons, medium tanks, naval vessels, and aircraft.
d. Including furniture and fixtures, hardware, leather and rubber products, soap and cosmetics, pottery and earthenware, glassware and mirrors, and matches.

Table 2

Index of Estimated Industrial Production in Communist China, with Gross-Value Weights a/
1952-60

1957 = 100

	1957 Gross-Value Weights b/		Indexes								
	Sector	Division	1952	1953	1954	1955	1956	1957	1958	1959	1960 Preliminary
Heavy industry											
Ferrous metals	12.9		28	35	44	54	77	100	174	241	329
Nonferrous metals	4.9		41	50	56	64	71	100	134	171	228
Metal products and machinery	31.7		40	57	61	62	95	100	198	277	330
Military machinery c/	6.1		75	79	62	64	93	100	194	255	227
Construction materials	6.5		23	34	47	56	76	100	140	155	164
Timber	9.8		40	63	80	75	75	100	126	147	154
Chemicals	15.8		35	43	58	64	86	100	160	207	230
Coal	6.5		47	50	60	71	85	100	176	226	244
Petroleum	2.9		30	42	51	67	80	100	158	233	286
Electric power	2.9		38	48	57	64	86	100	152	229	314
Total heavy industry	100.0	41.5	39	51	59	63	85	100	171	228	267
Light industry											
Textiles and clothing	36.2		73	84	90	87	108	100	124	149	143
Paper and printing	5.8		55	62	73	76	86	100	155	170	166
Food, beverages, and tobacco	37.3		71	82	96	95	95	100	113	123	119
Other consumer goods d/	20.7		48	58	68	68	84	100	117	125	133
Total light industry	100.0	58.5	66	77	87	85	97	100	120	136	133
Total industry		100.0	55	66	75	76	92	100	141	174	189

a. For the methodology, see Appendix B.
b. For an explanation of the gross-value weights, see the methodology.
c. Including ammunition, weapons, medium tanks, naval vessels, and aircraft.
d. Including furniture and fixtures, hardware, leather and rubber products, soap and cosmetics, pottery and earthenware, glassware and mirrors, and matches.

Table 3

Indexes of Gross Industrial Production in Communist China
1952-60

Period	Official Index a/		Estimated Index b/	
	1952 = 100	Percent of Previous Year	1952 = 100	Percent of Previous Year
1952	100		100	
1953	130	130	120	120
1954	151	116	136	114
1955	160	106	138	101
1956	205	128	167	121
1957	228	111	182	109
1958	380 c/	166	256	141
1959	529 c/	139	316	123
1960 (preliminary)	627 c/	119	344	109
		Averages		Averages
1953-57		118		113
1958-60		140		124
1953-60		126		117

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b. This estimated index is taken from Table 2, p. 8, above.
c. This official index, which is based on 1957 prices rather than on 1952 prices, is believed to have been calculated by using a broader definition of industrial production than that used in the 1952-57 index.

Table 4

Physical Production of Major Industrial Commodities in Communist China
1952-60

Commodity	Unit	1952	1953	1954	1955	1956	1957	1958	1959	1960 Preliminary
Ferrous metals										
Pig iron a/*	Million metric tons	1.93† b/	2.23†	3.11†	3.87†	4.83†	5.94†	13.69† c/	20.5† d/	27.5† e/
Crude steel f/	Million metric tons	1.35†	1.77†	2.22†	2.85†	4.46†	5.35†	8.0†	13.35†	18.45†
Finished steel g/	Million metric tons	1.11†	1.49†	1.76†	2.10†	3.22†	4.3†	6.0†	8.5	12.0
Iron ore h/	Million metric tons	4.3†	5.8†	7.2†	9.6†	15.5†	19.4†	59.0†	71.0	90.0
Manganese ore i/	Thousand metric tons	190.6†	195.0†	172.2†	196.0†	400.0†	469.0†	534.0†	1,243.0†	1,500
Nonferrous metals										
Tungsten j/	Thousand metric tons	15.3†	19.0	19.0	20.0	23.2	30.0	30.0	33.0	34.0
Molybdenum k/	Thousand metric tons	1.0	1.0	1.0	1.2	1.5	1.6	3.8	3.8	4.0
Aluminum l/	Thousand metric tons	0	0	2	10	15	39	50†	70†	100
Copper l/	Thousand metric tons	9	13	15	15	14	14	34	55	90
Tin l/	Thousand metric tons	14	15	16	18	19	26	31	32	32
Lead l/	Thousand metric tons	5	9	15	16	17	31	45	70	110
Zinc l/	Thousand metric tons	5	8	10	13	15	19	29	50	90
Antimony l/	Thousand metric tons	10	11	11	12	12	13	14	15	15
Mercury l/	Thousand flasks of 76 pounds	3	5	11	20	24	25	44	45	45
Fluorspar	Thousand metric tons	120	125	125	125	130	130	130	130	140
Machinery										
General machinery										
Machine tools m/	Thousand units	13.7†	20.5†	15.9†	13.7†	25.9†	28.3†	30	33	38
Textile machinery										
Cotton spindles	Thousand units	383†	287†	489†	304†	784†	484†	1,000†	1,300†	2,000
Cotton looms	Thousand units	6.5†	9.7†	15.1†	9.3†	19.3†	10	16	34	55
Agricultural machinery										
Plows, two-wheeled, one- or two-bottom, animal-drawn	Thousand units	5†	20†	53†	525†	1,793†	N.A.	N.A.	N.A.	N.A.
Grain combines, tractor-drawn	Units	0	0	0	3†	22†	124†	545†	1,243†	2,590
Threshing machines, power-operated	Units	0	0	0	0	0	0	740†	2,700†	3,000
Tractors	Units	0	0	0	0	0	0	957†	4,900†	10,000†
Drainage and irrigation pumps	Thousand horsepower	60†	70†	80†	80†	90†	150†	500†	1,790†	3,000
Electrical equipment										
Turbines, steam and hydraulic	Thousand kilowatts	7†	17†	10†	69†	223†	198†	800	2,150	2,150
Electric motors n/	Thousand kilowatts	639†	918†	957†	607†	1,069†	1,455†	6,052†	8,000	7,700
Electric generators o/	Thousand kilowatts	30†	59†	61†	108†	281†	198† p/	800 q/	2,150 q/	2,150 q/
Transformers	Thousand kilovolt-amperes	1,167†	1,961†	1,961†	1,926†	2,847†	3,571†	11,600	14,850	11,550

* Footnotes for Table 4 follow on p. 14.

Table 4

Physical Production of Major Industrial Commodities in Communist China
1952-60
(Continued)

Commodity	Unit	1952	1953	1954	1955	1956	1957	1958	1959	1960 Preliminary
Machinery (Continued)										
Railroad equipment										
Mainline locomotives (steam)	Units	20†	10†	52†	98†	184†	167†	350†	532†	700
Mainline locomotives (diesel)	Units	0†	0†	0†	0†	0†	0†	2	3†	0
Mainline locomotives (electric)	Units	0†	0†	0†	0†	0†	0†	0†	1†	0
Freight cars g/	Thousand units	5.8†	4.5†	5.4†	9.3†	6.4†	7.3†	11.0†	19.7†	25
Passenger cars	Units	6†	50	100	200	311†	350	450	800	800
Shipbuilding										
Merchant vessels r/	Thousand gross register tons	7	11	17	22	15	15	31	45	60
Trucks										
Medium (5-ton)	Thousand units	0	0	0	0	1.6†	7.5†	15.6	17	15
Light (2-1/2-ton)	Thousand units	0	0	0	0	0	0	Negl.	1	2
Three-wheeled	Thousand units	0	0	0	0	0	0	Negl.	0.9	Negl.
Military machinery										
Ammunition	Thousand metric tons	30	30	22	23	24	15	10	7	7
Armaments										
Weapons										
Small arms s/	Thousand units	191.2	211.5	268.5	294.0	164.8	307.5	307.5	300	275
Mortars	Thousand units	1.8	3.0	4.5	4.5	6.5	6.5	6.5	2	0
Recoilless rifles	Thousand units	2.7	3.4	1.0	1.4	2.4	2.4	2	2	2
Rocket launchers	Thousand units	8.5	8.5	4.1	1.1	1.1	1.1	0.1	0	0
Artillery	Units	250	250	75	225	310	310	310	200	200
Medium tanks (T-54)	Units	0	0	0	0	0	0	10	100	500
Naval vessels	Thousand LSD t/	2	3	3	2	7	11	10	11	10
Aircraft										
Jet fighters, Fresco (MIG-17)	Units	0	0	0	0	0	1	119	190	90
Jet fighters, Farmer (MIG-19)	Units	0	0	0	0	0	0	0	0	9
Piston transports, Colt (An-2)	Units	0	0	0	0	0	1	50	100	135
Helicopter, Hound (Mi-4)	Units	0	0	0	0	0	0	0	3	85

Table 4

Physical Production of Major Industrial Commodities in Communist China
1952-60
(Continued)

Commodity	Unit	1952	1953	1954	1955	1956	1957	1958	1959	1960 Preliminary
Construction materials										
Cement u/	Million metric tons	2.9†	3.9†	4.6†	4.5†	6.4†	6.9†	9.3†	12.3†	14
Window glass	Million square meters	21.3†	24.3†	31.3†	33.8†	30.6†	46.1†	52.7†	62.5	65
Brick	Billion pieces	2†	4	7	10	14†	21†	30	30	30
Roof tile	Billion pieces	0.8†	1	1	2	2.7†	2.7†	5	5	5
Timber v/	Million cubic meters	11.2†	17.53†	22.21†	20.93†	20.84†	27.87†	35†	41†	43
Chemicals										
Chemical fertilizers w/	Thousand metric tons	39	53	71	85	132	159	266	408	500
Ammonium sulfate x/	Thousand metric tons	181†	226†	298†	324†	446†	511	467	700	1,550
Ammonium nitrate x/	Thousand metric tons	13†	38	45	87	140	172	543	700	
Phosphates y/	Thousand metric tons	0	0	11	15	77	120†	344†	600	850
Potassium z/	Thousand metric tons	0	0	0	0	0	0	Negl.	40	100
Synthetic ammonia aa/	Thousand metric tons	38†	51	68	84	127†	149†	237†	330	365
Sulfuric acid bb/	Thousand metric tons	190†	260†	344†	375†	517†	632†	740†	1,050†	1,360
Nitric acid cc/	Thousand metric tons	25	37	44	70	112	125	314	360	360
Soda ash cc/	Thousand metric tons	192†	223†	309†	405†	476†	506†	640†	800†	800
Caustic soda cc/	Thousand metric tons	79†	88†	115†	137†	156†	198†	270†	364†	450
Chlorine dd/	Thousand metric tons	50	47	61	69	71	85	110	158	200
Calcium carbide	Thousand metric tons	12	14	17	30	33	60	87	120	145
Refined benzol	Thousand metric tons	19	23	29	36	36	44	51	58	66
Rubber tires ee/	Thousand units	417†	488†	701†	593†	783†	873†	1,500	1,800	1,800
Coal										
Coal ff/	Million metric tons	66.49†	69.68†	83.66†	98.30†	110.36†	130.7†	270.2†	347.8†	425†
Metallurgical coke gg/	Million metric tons	2.0†	2.5†	3.1†	3.7†	6.7†	7.5†	10.4	18.6	25
Petroleum										
Crude oil										
Natural	Million metric tons	0.19	0.30	0.41	0.48	0.64	0.85	1.46	2.68	3.3
Synthetic	Million metric tons	0.24	0.32	0.38	0.49	0.52	0.61	0.80	1.02	1.3
Subtotal	Million metric tons	0.44† hh/	0.62†	0.79†	0.97†	1.16†	1.46†	2.26†	3.70†	4.6

Table 4

Physical Production of Major Industrial Commodities in Communist China
1952-60
(Continued)

Commodity	Unit	1952	1953	1954	1955	1956	1957	1958	1959	1960 Preliminary
Petroleum (Continued)										
Petroleum products ii/										
Gasoline	Million metric tons	0.13	0.17	0.19	0.25	0.33	0.47	0.80	1.15	1.40
Kerosine	Million metric tons	0.05	0.07	0.09	0.11	0.14	0.19	0.23	0.35	0.42
Diesel fuels	Million metric tons	0.02	0.03	0.04	0.06	0.06	0.11	0.26	0.45	0.52
Lubricating oils	Million metric tons	0.01	0.02	0.03	0.03	0.05	0.04	0.08	0.12	0.16
Residuals jj/	Million metric tons	0.29	0.42	0.50	0.75	0.76	0.89	1.34	1.88	2.23
Subtotal	Million metric tons	0.50	0.71	0.85	1.20	1.34	1.70	2.71	3.95	4.73
Electric power (gross basis) kk/										
Thermal electric	Billion kilowatt-hours	6.0	7.7	8.8	9.9	13.1	14.9	23.2	35.3	48
Hydroelectric	Billion kilowatt-hours	1.3	1.5	2.2	2.4	3.5	4.4	4.3	6.2	9
Subtotal	Billion kilowatt-hours	7.3†	9.2†	11.0†	12.3†	16.6†	19.3†	27.5†	41.5†	57
Electric power (net basis)	Billion kilowatt-hours	5.8	7.4	8.8	9.8	13.3	15.4	23.4	35.3	48.4
Textiles										
Cotton cloth ll/	Billion linear meters	4.2†	5.0†	5.5†	4.5†	5.9†	5.1†	5.8†	7.5†	6.5
Cotton yarn	Thousand metric tons	656†	745†	834†	720†	952†	844†	1,107†	1,497†	1,400
Cotton knit goods	Thousand metric tons	55.1†	85†	102.3†	113.3†	129.1†	129.1†	200	226.8	234
Ginned cotton	Million metric tons	1.30	1.18	1.06	1.52	1.44	1.64	2.1	1.8	1.8
Printed and dyed cloth	Billion linear meters	1.84	2.16	2.46	2.09	2.76	2.42	2.74	3.80	3.86
Wool cloth	Million linear meters	4.23†	6.23†	7.82†	10.27†	14.27†	18.12†	26.28†	28.4†	31.3
Wool yarn	Thousand metric tons	1.98†	3.72†	3.27†	3.74†	5.66†	7.0†	8.3†	9.0	9.9
Part-silk cloth	Million linear meters	64.76†	73.8†	78.25†	93.97†	118.61	144.33†	194.84†	198	201
Raw silk mm/	Thousand metric tons	3.55†	4.32†	4.61†	5.38†	6.19†	5.1	6.5	6	6
Gunny sacks	Million units	67†	59†	59†	53†	79†	85†	115	128	134

Table 4

Physical Production of Major Industrial Commodities in Communist China
1952-60
(Continued)

Commodity	Unit	1952	1953	1954	1955	1956	1957	1958	1959	1960 Preliminary
Paper and printing										
Paper nn/	Million metric tons	0.60†	0.67†	0.84†	0.84†	1.0†	1.22†	1.63†	2.13†	2.18
Printing oo/										
Books	Million units	785†	900	1,000	1,100	1,200	1,278†	2,387†	2,000†	1,800
Periodicals	Million units	204†	220	240	270	300	315†	532†	500	480
Newspapers	Million units	1,609†	1,700	1,800	1,900	2,000	2,442†	3,912†	4,800†	4,500
Food, beverages, and tobacco										
Polished rice pp/	Million metric tons	13.6	16.3	19.7	19.6	18.2	21.7	23.4	24.9	24.9
Flour	Million metric tons	3.0†	3.39†	3.72†	4.53†	5.02†	5.03†	6.4	6.4	4.6
Meat pp/	Million metric tons	2.85	3.28	3.81	3.23	3.24	2.74	3.23	3.54	3.3
Fish pp/	Million metric tons	1.24	1.42	1.72	1.88	2.02	1.76	2.07	2.41	2.59
Edible vegetable oils pp/	Million metric tons	0.98†	1.02†	1.26†	1.16†	1.05†	1.1†	1.25†	1.46†	1.5
Sugar pp/	Million metric tons	0.451†	0.638†	0.693†	0.717†	0.807†	0.864†	0.90†	1.13†	1.3
Salt pp/	Million metric tons	4.94†	3.57†	4.89†	7.54†	4.94†	8.28†	10.4†	11.04†	13
Canned goods	Thousand metric tons	14.4†	21.4†	28	44	54†	46.7†	60	80	100
White wine	Thousand metric tons	230†	320	403	508	520†	749†	368†	500	550
Cigarettes	Million cases qq/	2.65†	3.55†	3.73†	3.57†	3.91†	4.46†	4.75†	5.5	5.5
Other consumer goods										
Rubber shoes	Million pairs	61.7†	76.4†	85.8†	97.5†	103.5†	128.9†	182.4†	199†	218
Thermos bottles	Million units	8.2†	8.6†	10.2†	14.4†	16.3†	20.9†	27.6†	37	45
Fountain pens	Million units	7.7†	12	20	40	45	62†	76†	130†	160
Matches	Million crates rr/	9.1†	8†	10.4†	11.2†	12†	10.4†	11.1†	12†	12.5
Soap	Thousand metric tons	117†	120	200	240	260†	242†	272†	280	280

a. Including the total production of pig iron and ferroalloys at large, medium, and "small modern" blast furnaces.
b. A dagger indicates that the information has been obtained from official Chinese Communist publications or announcements and has been accepted after careful examination of the plausibility of the claim.
c. Including 4.16 million metric tons of "native iron."
d. Including 9.6 million metric tons of pig iron made in "small modern" blast furnaces, of which 5.9 million metric tons were usable for production of steel.
e. Of this total, approximately one-half was produced in "small modern" blast furnaces.
f. Excluding production from native furnaces.
g. Including forgings and steel castings.

Table 4

Physical Production of Major Industrial Commodities in Communist China
1952-60
(Continued)

h. Gross amount of crude iron ores, in the state in which they leave the mines.
i. The metal content of the ore in Communist China is about 35 percent.
j. Tonnages of tungsten trioxide (60 percent WO_3 basis).
k. Production of molybdenum (Mo) in ores and concentrates.
l. Production of refined metal.
m. Machine tools that approximate the internationally accepted classifications for metal-cutting machine tools.
n. All sizes, including alternating and direct current.
o. All sizes, alternating current only.
p. Turbogenerators and hydrogenerators only.
q. Including cars of two, four, or more axles.
r. Including oceangoing tankers, cargo and passenger ships, tugs, and self-propelled barges completed during the year but excluding miscellaneous auxiliary ships, harbor craft, and small coastal ships.
s. Including pistols, carbines, and machineguns.
t. Light ship displacement (LSD) is the weight of the ship complete and ready for service in every respect, including permanent ballast and liquids in machinery at operating levels but excluding the crew and their effects.
u. All types of hydraulic cements used for construction.
v. Timber is wood that is not intended to be burned as fuel. This category includes such primary wood products as saw logs, pit props, railroad crossties, and pulpwood as well as such finished wood products as sawn wood, plywood, and veneers. Data exclude Tibet.
w. Nutrient basis.
x. Production is expressed in terms of 20 percent nitrogen (N).
y. Production is expressed in terms of 18.7 percent phosphoric anhydride (P_2O_5).
z. Production is expressed in terms of 40 percent potassium oxide (K_2O).
aa. Tonnages of ammonia (NH_3).
bb. Production expressed in terms of pure (monohydrate) sulfuric acid (100 percent H_2SO_4).
cc. 100-percent basis.
dd. Total production of gas, including quantities later liquefied for use, shipment, or storage.
ee. Including motor vehicle tires and excluding aircraft and bicycle tires.
ff. Including bituminous and anthracite production at modern, primitive, and small pit (handicraft) mines. To convert production in terms of standard fuel equivalents, the annual average calorific values (Kc/Kg) for Communist China for individual years are as follows:

Years	Kc/Kg
1952-57	6,500
1958-59	5,525
1960	4,875

gg. Including production of byproduct, beehive, native, and "small modern" furnaces.
hh. Because of rounding, components do not add to the total shown.
ii. Including the yield of products from imported crude oil.
jj. Including fuel oil, asphalt, coke, and other residuals.
kk. Including total (gross) production at generating centers (therefore including transmission losses and station use).
ll. Including machine made, handicraft, and homespun production.
mm. Including mulberry silk only.
nn. All types.
oo. Excluding publications at the village level.
pp. Including all production that enters state commercial channels and is processed.
qq. One case contains 50,000 cigarettes.
rr. One crate contains 1,000 boxes.

Table 5

Estimated Value per Unit of Major Industrial Products in Communist China 1957

Sector and Item	Unit	Current Yuan	
		Value Added	Factory-Door Price
Ferrous metals			
Pig iron	Metric ton	100	165
Crude steel a/*	Metric ton	150	300
Finished steel			
Modern	Metric ton	315	500
Local	Metric ton	168	300
Iron ore	Metric ton	6	8
Manganese ore	Metric ton	40	53
Nonferrous metals			
Tungsten	Metric ton	5,634	7,042
Molybdenum	Metric ton	10,400	13,000
Aluminum	Metric ton	2,250	3,750
Copper	Metric ton	3,780	5,400
Tin	Metric ton	6,957	10,000
Lead	Metric ton	1,508	2,320
Zinc	Metric ton	1,856	2,320
Antimony	Metric ton	1,085	1,670
Mercury	Flasks of 76 pounds	300	500
Fluorspar	Metric ton	95	105
Machinery			
General machinery			
Machine tools b/	Unit	8,038	12,370
Textile machinery			
Cotton spindles	Unit	45	90
Cotton looms	Unit	900	1,815
Agricultural machinery			
Plows, two-wheeled, one- or two-bottom, animal-drawn	Unit	24	80
Grain combines, tractor-drawn	Unit	12,000	21,000
Threshing machines, power-operated	Unit	5,000	10,000
Tractors	Unit	15,000	22,000
Drainage and irrigation pumps	Horsepower	65	130
Electrical machinery			
Turbines, steam and hydraulic c/	Kilowatt	54	90
Electric motors	Kilowatt	68	137
Electric generators	Kilowatt	66	110
Transformers	Kilovolt-amperes	38	77

* Footnotes for Table 5 follow on p. 18.

Table 5

Estimated Value per Unit of Major Industrial Products in Communist China 1957 (Continued)

Sector and Item	Unit	Current Yuan	
		Value Added	Factory-Door Price
Machinery (Continued)			
Railroad equipment			
Mainline locomotives	Unit	120,600	201,000
Freight cars	Unit	6,453	16,132
Passenger cars	Unit	50,000	100,000
Shipbuilding			
Merchant vessels	Gross register ton	1,650	5,500
Trucks	Unit	8,000	16,000
Construction materials			
Cement	Metric ton	54	70
Window glass	Square meter	1.4	2.3
Brick	Piece	0.01	0.04
Roof tile	Piece	0.009	0.02
Timber	Cubic meter	80	100
Chemicals			
Chemical fertilizers			
Ammonium sulfate	Metric ton	47	174
Ammonium nitrate	Metric ton	41	150
Phosphates	Metric ton	43	160
Potassium	Metric ton	75	278
Synthetic ammonia	Metric ton	130	480
Sulfuric acid	Metric ton	71	237
Nitric acid	Metric ton	256	950
Soda ash	Metric ton	74	275
Caustic soda	Metric ton	62	230
Chlorine	Metric ton	124	460
Calcium carbide	Metric ton	202	750
Refined benzol	Metric ton	122	450
Rubber tires	Set d/	144	320
Coal			
Coal	Metric ton	9.5	13
Metallurgical coke	Metric ton	20	45
Petroleum			
Crude oil			
Natural	Metric ton	60	80
Synthetic	Metric ton	135	180

Table 5

Estimated Value per Unit of Major Industrial Products
in Communist China
1957
(Continued)

Sector and Item	Unit	Current Yuan: Value Added	Current Yuan: Factory-Door Price
Petroleum (Continued)			
Petroleum products			
Gasoline	Metric ton	210	350
Kerosine	Metric ton	171	285
Diesel fuels	Metric ton	105	175
Lubricating oils	Metric ton	473	750
Residuals e/	Metric ton	88	147
Electric power	Kilowatt-hour	0.06	0.08
Textiles			
Cotton cloth	Linear meter	0.22	0.73
Cotton yarn	Metric ton	993	3,075
Cotton knit goods	Metric ton	1,032	5,160
Ginned cotton	Metric ton	67	1,679
Printed and dyed cloth	Linear meter	0.07	0.87
Wool cloth	Linear meter	15.0	30.4
Wool yarn	Metric ton	497	1,344
Part-silk cloth	Linear meter	2	2.6
Raw silk	Metric ton	6,584	36,375
Gunny sacks	Unit	1	2
Paper and printing			
Paper	Metric ton	315	700
Printing			
Books	Unit	0.10	0.40
Periodicals	Unit	0.04	0.17
Newspapers	Unit	0.02	0.06
Food, beverages, and tobacco			
Polished rice	Metric ton	7	134
Flour	Metric ton	60	300
Meat	Metric ton	120	800
Fish	Metric ton	27	271
Edible vegetable oils	Metric ton	14	337
Sugar	Metric ton	63	235
Salt	Metric ton	20	70
Canned goods	Metric ton	516	860
White wine	Metric ton	7	375
Cigarettes	Case f/	104	349
Other consumer goods			
Rubber shoes	Pair	1.2	2.7
Thermos bottles	Unit	0.54	1.8
Fountain pens	Unit	0.33	1.1
Matches	Crate g/	3.6	12
Soap	Metric tons	43	216

a. This item is not used in the estimated indexes; it is included for information only.
b. Machine tools that approximate the internationally accepted classifications for metal-cutting machine tools.
c. Based on Soviet price data that were converted into Chinese yuan at an exchange rate of 1 ruble to 1 yuan. All other price data in this table are estimated domestic Chinese prices.
d. Tire and tube.
e. Including fuel oil, asphalt, coke, and other residuals.
f. One case contains 50,000 cigarettes.
g. One crate contains 1,000 boxes.

Table 6

Index of Estimated Production of the Metal Products and Machinery Sector in Communist China
1952-60

1957 = 100

Metal Products and Machinery Sector	1957 Weights: Group a/	1957 Weights: Subsector b/	Indexes: 1952	1953	1954	1955	1956	1957	1958	1959	1960 Preliminary
Metal products and repair c/		41	34	52	62	62	78	100	140	184	259
Machinery d/											
General machinery	47		52	71	65	61	134	100	137	226	333
Electrical equipment	37		35	55	56	49	81	100	366	519	462
Railroad equipment	9		53	43	58	102	92	100	157	271	335
Shipbuilding	4		47	73	113	147	100	100	207	300	400
Trucks (medium only)	3		0	0	0	0	21	100	208	228	200
Total machinery	100	59	44	61	61	62	106	100	228	341	380
Total metal products and repairs and machinery		100	40	57	61	62	95	100	198	277	330

a. Weights are value added, as explained in the second footnote on p. 1.
b. These gross-value weights are based on Chinese Communist claims, as explained in the methodology, Appendix B.
c. This index is based on (1) Chinese claims of the gross value of production of this subsector in 1952-57 and (2) on the gross value of production of finished steel in 1958-60 (see Table 4, p. 10, above).
d. The index for each group is derived from the gross value of the commodities produced in that group.

Table 7

Index of Estimated Production of the "Other Consumer Goods" Sector in Communist China a/
1952-60

1957 = 100

Items	1957 Gross-Value Weights b/	Indexes								
		1952	1953	1954	1955	1956	1957	1958	1959	1960 Preliminary
Rubber goods	11.3	44	58	66	69	80	100	141	154	169
Pottery and earthenware	3.4	54	72	90	97	127	100	N.A.	N.A.	N.A.
Leather, hides, and furs	14.5	60	69	67	64	100	100	102 c/	98 c/	98 c/
Hardware	24.8	33	41	63	63	78	100	123	198	243
Glassware and mirrors	4.9	23	35	49	47	66	100	N.A.	N.A.	N.A.
Matches	2.6	83	78	100	115	111	100	107	116	121
Furniture and fixtures	32.7	49	60	68	63	75	100	N.A.	N.A.	N.A.
Soap and cosmetics	5.8	79	87	90	98	100	100	112	116	116
Other consumer goods	100.0	48	58	68	68	84	100	117	125	133

a. For the methodology, see Appendix B.
b. Based on official Chinese claims. Weights for 1958-60 are as follows: rubber goods, 31.1; leather, hides, and furs, 40.0; hardware, 5.7; matches, 7.1; and soaps and cosmetics, 16.1.
c. Index based on the rate of slaughtering cattle.

APPENDIX B

METHODOLOGY

1. Computation of the Index in Table 1*

The index of total industrial production presented in Table 1 is essentially a quantity-relative index, weighted by value added, as follows:

$$I = \frac{\sum \left(\frac{q_n}{q_{57}}\right) v_{57}q_{57}}{\sum v_{57}q_{57}} \times 100, \text{ where}$$

I is the index of industrial production,
q_{57} is the number of physical units produced in 1957,
q_n is the number of physical units products in any other year, 1952-60, and
$v_{57}q_{57}$ is the aggregate value added in 1957.

The index of total industrial production was computed in three stages, as follows:

a. Computation of the Sector Indexes

In the first stage the sector indexes generally were computed by taking the physical output of 96 important industrial products listed in Table 4,** classifying the products into the 14 sectors shown in Table 1, and weighting each product within the sector in proportion to the estimated value added in 1957. The two exceptions to this procedure were the "metal products and machinery" and "other consumer goods" sectors, where physical production data were not available. In these sectors, other methods, discussed in (4), below, were used.

(1) Estimates of Physical Production

Table 4 presents estimates of physical production of major industrial commodities. In general, production data for ferrous metals, construction materials, crude petroleum, electric power,

* Appendix A, p. 7, above.
** Appendix A, p. 10, above.

textiles, paper and printing, and "other consumer goods" are based on Chinese Communist claims that were checked against other available information. Production figures for machinery, timber, and coal represent estimates that in some instances are substantially different from Chinese claims (for example, production of machine tools in 1958-60). For the most part, official production data are not available for nonferrous metals, chemicals, and food. Moreover, the Chinese Communists do not report production of metal products, military machinery, and petroleum products. In these cases, independent estimates of production were used. Thus the index of the estimated production of clothing in 1952-60 was based on the retail sales of cotton cloth.

The derivation of the index for the ferrous metals sector may be taken as an example of the general procedure used to establish the level of physical production. Of the products listed in Table 4, five are in the ferrous metals sector -- pig iron, crude steel, finished steel, iron ore, and manganese ore. Official claims were announced for production of pig iron and crude steel in each year during 1952-60. After an examination of available productive capacity, raw materials, and labor, these claims were accepted as reasonable. Incomplete official information was provided for finished steel, iron ore, and manganese ore, and the physical production series for these products were filled out by a study of input-output relationships within the Chinese Communist steel industry.

In sectors where the Chinese Communist claims for production of a commodity or commodities were not accepted, estimates of production of these commodities were made on the basis of other information. For example, estimates for production of metal-cutting machine tools in 1952-60 include only those machine tools that approximate internationally accepted classification standards. The official Chinese claims greatly overstate production of machine tools in 1958-60 because these data include many models that should not be classified as machine tools. These models, which were not included in the official claims for production of machine tools in 1952-57, are primitive devices that utilize flat-belt pulley drives instead of gear trains and, in many instances, that have components made of wood. The estimates of production of machine tools in 1958-60 that were used in this report were based on (a) the estimated productive capacity of each of the 23 modern machine tool plants in China during this period and on (b) information on the progress of production of machine tools, which in turn was based on announcements in the Chinese press. [redacted] 50X1 50X1 50X1 The official claim was for production of 70,000 machine tools in 1959, for example, but the estimate actually adopted was 33,000 machine tools.

Estimates of the physical production in 1958-60 of other industrial equipment such as general machinery, electrical equipment, freight cars, and trucks and in 1952-60 of merchant vessels also were based on productive capacity of plants and shipyards and the various types of reports on progress in production noted above. [redacted] 50X1

[redacted] 50X1

In other sectors, such as food, beverages, and tobacco, the Chinese do not report output of some of the key commodities. Estimates for production of polished rice and meat, for example, were derived from data on state procurement. Thus the estimate of the amount of rice processed by industry in China in 1952-59 was based on (a) official Chinese claims for government procurement of grain from the farms and (b) [redacted] rice constitutes about 50 percent of the total grain procured. Production data for processed rice, therefore, are based on the assumption that all rice moving into state-controlled channels is processed by Chinese industry. Because no official data are available for 1960, the amount of rice processed in 1960 was estimated to have been at the same level as in 1959. 50X1

Estimates of production of meat by industry were based on data on state procurement of hogs. Production of fish was estimated on the basis of official Chinese claims for this production, figures that were reduced by a constant 20 percent each year to allow for losses in production.

(2) Prices Used

The factory-door prices (inclusive of commodity taxes collected at the factory) for industrial products used in the index are shown in Table 5.* These prices are based on [redacted] 50X1
[redacted] newspapers, interrogation reports, official statements of the 50X1
gross value of homogeneous output such as coal or electric power, [redacted] 50X1
[redacted] In one instance, that of steam and hydraulic tur- 50X1
bines, it was necessary to use ruble prices converted into yuan at a rate of exchange of 1 ruble to 1 yuan.

The ferrous metals sector may again be taken as an example of the procedure used. Price information in this sector came in part from official statements that a certain revision in the design of a construction project resulted in the saving of a specified amount of finished steel worth a specified amount of yuan. In the case of a redesigned water trough for an ore dressing plant, for example, the Chinese press reported that 12.7 metric tons** of steel worth

* Appendix A, p. 16, above.
** Tonnages are given in metric tons throughout this report.

10,870 yuan were conserved on each trough. 5/ [redacted] 50X1

50X1

[redacted] 50X1

/ Out of this kind of information an internally consistent set of prices was obtained for the five products studied in the ferrous metals sector, and the resulting set of prices was checked out for reasonableness against US price relationships.

(3) Estimates of Value-Added Weights for Each Commodity

Most of the sector indexes shown in Table 1 were obtained by multiplying the production figures for the specific commodities -- such as pig iron, finished steel, iron ore, and manganese ore in the ferrous metals sector -- by the factory-door prices in 1957 for these products to arrive at the gross value of production and then subtracting the value of the specific amounts of raw materials, fuels, and electric power estimated to be used in production of each of these commodities. The resulting value-added weights for each commodity also are shown in Table 5.*

The value of the intermediate products used in production of pig iron in 1957 -- to cite one example of a product in the ferrous metals sector -- has been estimated as follows:

	Yuan per Unit	
Factory-door price per ton of pig iron		165
Less purchases of intermediate products:		
Iron ore, 2 tons at 8 yuan per ton	16	
Limestone, 0.5 ton at 2.2 yuan per ton	1	
Manganese ore, 20 kilograms at 0.05 yuan per kilogram	1	
Coke, 1 ton at 45 yuan per ton	45	
Electric power, 25 kilowatt-hours at 0.08 yuan per kilowatt-hour	2	65
Value added by 1 ton of pig iron		100

For four sectors and two subsectors, data did not permit value added to be estimated for each product, and a flat percentage of gross value was used for all products within these sectors and subsectors.

* Appendix A, p. 16, above.

For the metal products and machinery, the military machinery, and the chemical sectors and for the printing subsector, the value added as a percent of gross value was obtained by analogy with Manchurian industry in 1941. 8/ For the "other consumer goods" sector and the clothing subsector, the percent of gross value represented by value added is the same as the percent estimated for handicraft production as a whole.

(4) Special Problems in the Computation of Two Sector Indexes

Of the 14 sector indexes, the two most difficult were metal products and machinery and "other consumer goods." These indexes were difficult because of the complete lack of data on physical production for the metal products subsector* and because of the very limited amount of price and production data for the machinery subsector and for the "other consumer goods" sector.

(a) Metal Products and Machinery

The index of production of the metal products and repair subsector of the metal products and machinery sector (see Table 6**) was based on (1) Chinese Communist claims for gross value of production for 1952-57 and on (2) the estimates of production of finished steel (see Table 4***) for 1958-60.

The machinery subsector index, on the other hand, is based on the commodities shown in Table 4, which are classified into five groups (see Table 6). The proportion of value added by each group of commodities within the machinery subsector was estimated on the basis of the labor force in each group in 1957, adjusted by the value added per worker in each group in Dairen and Manchuria in 1941. 9/

The weights used to combine the metal products and repair subsector and the machinery subsector were calculated by taking the gross value in each subsector as a proportion of the total gross value of production of metal products and machinery. These subsector weights were based on official Chinese Communist claims, which were accepted as reasonable after they were found to be roughly consistent with data on the labor force and wages. Detailed indexes for the metal products and machinery sector are presented in Table 6.

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* The metal products subsector includes such diverse products as boilers, structural shapes for bridges, and nuts and bolts.

** Appendix A, p. 19, above.

*** Appendix A, p. 10, above.

(b) "Other Consumer Goods"

The index of production of the "other consumer goods" sector for 1952-60 (see Table 7*) is based on Chinese Communist claims for the gross value of the sector. This procedure was used to construct the index for this period because the estimates of physical production used as a sample for the sector (which makes up only 40 percent of the gross value of the sector) resulted in a faster rate of growth in production than the official index during 1952-56.

In the absence of official data for 1957-60, however, the production figures shown in Table 4** and an index for leather and hides based on the rate of slaughtering cattle were used to compute the index for "other consumer goods." The resulting index was consistent with the data on the retail sales of these commodities.

b. Computation of the Indexes for Heavy Industry and Light Industry

In the second stage the indexes for heavy industry and light industry were computed by combining the appropriate sector indexes in proportion to the value added in each sector.

(1) Gross Value of Production for Each Sector

The gross value of production for each sector, excluding handicraft production, is given in the Great Decade 10/ in 1952 prices. These figures were adjusted to make the sector classifications comparable to those used by the US Federal Reserve Board 11/ and were then converted into 1957 prices [redacted] 50X1
[redacted] To these figures were added the gross value of handicrafts 50X1
for each sector based on a detailed description of handicraft production [redacted] and for some commodities (for example, 50X1
timber and chemicals) the gross value of handicraft production was based on a direct valuation of output.

(2) Value Added by Production for Each Sector

For those sectors where the gross value and the value added were estimated product by product, it was assumed that the value added for the whole sector was the same proportion of gross value as was the case for the specific products studied.

* Appendix A, p. 20, above.
** Appedndix A, p. 10, above.

For metal products and machinery, value added as a percent of gross value was estimated on the basis of analogy with industry in Dairen and Manchuria in 1941 as discussed above. Value added in the military machinery sector was assumed to be the same percent of gross value as in the machinery subsector.

For the "other consumer goods" sector the value added was assumed to be the same percent of gross value as for all handicraft industry.

(3) Weights for Each Sector

The value added, in 1957 prices, for each sector of heavy industry totaled 12,467 million yuan, and the total value for light industry was 8,517 million yuan. The percentage of the total for each sector within heavy and light industry is shown in Table 1.*

c. Computation of the Index for Total Industry

In the third stage the index of industrial production as a whole was obtained by combining the heavy and light industry indexes. The aggregate values of production in heavy and in light industry obtained in the preceding paragraph were not used in combining the indexes, but instead a separate estimate -- yielding a value-added weight of 57.0 percent for heavy and of 43.0 percent for light industry -- was computed in Table 8.**

2. Computation of the Index of the Gross Value of Industrial Production in Table 2***

The difference between the value-added industrial index for Communist China (Table 1) and the estimated index of the gross value of industrial production (Table 2) is in the system of weighting. The weights for the index of gross production are based on the factory-door values (inclusive of commodity taxes collected at the factory level), in 1957 prices, of products sold by the industrial enterprises. The gross-value index rises more slowly than the value-added index because, in general, smaller weights are assigned to the fast-growing industrial commodities. Following are the two estimated indexes of industrial production:

	Percent of Previous Year	
Year	Gross-Value Weights	Value-Added Weights
1953	120	124
1954	114	116
1955	101	101
1956	121	125
1957	109	111
1958	141	147
1959	123	127
1960 (Preliminary)	109	112

* Appendix A, p. 7, above.
** Table 8 follows on p. 28.
*** Appendix A, p. 8, above.

Table 8

Aggregate Values of Heavy and Light Industry in Communist China 1955 and 1957

	Million Yuan			Value-Added Division Weights
	1952 Prices		1957 Prices	
	1955 a/	1957	1957	1957
Heavy industry				
Net output (Chinese concept)	8,322	12,816 b/	10,893 c/	
Plus:				
Depreciation			1,012 d/	
Major repairs			519 e/	
Less:				
Indirect taxes			2,580 f/	
			9,844	57.0
Light industry				
Net output (Chinese concept)	10,114	12,339 b/	11,675 c/	
Plus:				
Depreciation			292 d/	
Major repairs			150 e/	
Less:				
Indirect taxes			4,690 f/	
			7,427	43.0
Total industry			17,271	100.0

a. The Chinese Communists reported net industrial output for 1955 in 1952 prices, broken down into net output of heavy industry and of light industry, 15/ and these data were adjusted to conform with the classifications used in this report. In addition, because the Chinese concept of the net value of industrial production excludes depreciation and major repairs but includes indirect taxes, it was necessary to make the adjustments described in footnotes d, e, and f.

b. Percentage increase, 1957 above 1955, derived from Table 1, Appendix A, p. 7, above.

c. Net output of heavy and light industry in 1952 prices is converted into 1957 prices on the basis of estimates of price changes [redacted] 50X1

d. Depreciation in 1957 is estimated to be 4 percent of industrial fixed assets. (The term fixed assets as used in Communist China includes buildings, machinery and equipment, and installations that have a value of more than 200 current yuan and that have a useful life of more than 1 year.) 17/ This percentage was applied against the average fixed assets of industry in 1957. 18/ On the basis of data contained in a Chinese Communist study of fixed assets in industry, 19/ the above aggregate value of fixed assets was broken down into the following two divisions:

Division	Value (Billion Yuan in 1957 Prices)	Percent
Heavy industry	25.3	77.6
Light industry	7.3	22.4
Total	32.6	100.0

e. Major repair expenditures for industry and transportation in 1957 have been estimated to be 980 million yuan. 20/ Major repair expenditures for transportation in 1957 are estimated to be 311 million yuan, 21/ and major repair expenditures for industry in 1957 are estimated as the difference, or 669 million yuan. Major repair expenditures in heavy and light industry are assumed to be in the same proportion as the value of fixed assets in heavy and light industry.

f. Total indirect taxes on industry have been estimated [redacted] Indirect taxes on industry in 1957 are allocated between taxes in heavy industry and taxes in light industry [redacted] 50X1 50X1

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