

**Production-Side Purchasing Power Parity and Labor Productivity Comparison  
for Japan, Korea and the US in 1935**

**Kyoji Fukao (Hitotsubashi University)  
Tangjun Yuan (Hitotsubashi University)**

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Following the methodology of de Jong and Woltjer (2007), we estimate the PPP-adjusted labor productivity of Japan, Korea and the US in 1935. On this methodology, also see Broadberry and Burhop (2007) and Fremdling, de Jong and Timmer (2007). Several preceding studies, such as Pilat (1994), Choi (2006) and Kim, Duol and Park (2007) compared the labor productivity levels of the Japanese and the Korean manufacturing sector in the pre-war period. Their analysis is based on gross output per worker estimation.

**Data**

We obtained data from the following sources.

Gross output, number of workers, unit producer prices:

The Ministry of Commerce and Manufacturing (No Shomu-sho), *Census of Factories* (Kojo Tokei Hyo), 1935

Chosen Government-General (Chosen Sotoku-fu), *Statistics on Manufactured Products* (Kosan Tokei), 1935

US Department of Commerce, *Biennial Census of Manufactures*, 1935

Working hours:

Statistical Division of the Commerce and Manufacturing Minister's Office (Sho Ko Daijin Kanbo Tokei-ka), *Wage Statistics* (Chingin Tokei-hyo)

Chosen Government-General (Chosen Sotoku-fu), *Statistics on Manufactured Products* (Kosan Tokei), 1939

de Jong and Woltjer (2007) (sorry for quoting the preliminary result)

Value added/gross output ratio:

Nishikawa and Koshihara (1981)

Kim, Nak Nyeon (2006)

US Department of Commerce, *Biennial Census of Manufactures*, 1935

## Major Results

**Table 4. Relative labor productivity, based on market exchange rates (Japan=1)**

	Labor productivity			Relative labor productivity	
	Japanese ¥	Korean ¥	US\$	Exchange rate=3.42 yen/US\$	
	Japan	Korea	US	Korean	US
Total	4581	3607	5469	0.79	4.08
Textiles and their products	3330	2293	3356	0.69	3.45
<b>Metal industries</b>	8647	2985	5294	0.35	2.09
<b>Machinery</b>	3982	1238	5445	0.31	4.68
Stone, clay, and glass products	3055	1500	3605	0.49	4.04
<b>Chemicals and allied products</b>	7933	2734	7165	0.34	3.09
Wood products	2922	2283	2630	0.78	3.08
Printing, publishing and allied industries	3681	1700	4557	0.46	4.23
Food and kindred products	7390	6781	10237	0.92	4.74
Miscellaneous industries	2648	1750	6238	0.66	8.06

**Table 5. Relative labor productivity, adjusted by PPP (Japan=1)**

	Relative price level		Relative productivity	
	Japan=1		Adjusted by PPP	
	Korea	US	Korea	US
Total	1.07	1.88	0.73	2.17
Textiles and their products	1.23	2.76	0.56	1.25
<b>Metal industries</b>	0.77	1.45	0.45	1.44
<b>Machinery</b>	0.53	1.69	0.59	2.76
Stone, clay, and glass products	0.98	2.42	0.50	1.67
<b>Chemicals and allied products</b>	0.95	2.52	0.36	1.23
Wood products	<i>1.07</i>	<i>1.88</i>	0.73	1.63
Printing, publishing and allied industries	<i>1.07</i>	<i>1.88</i>	0.43	2.25
Food and kindred products	0.84	1.22	1.09	3.88
Miscellaneous industries	1.51	5.46	0.44	1.47

**Table 6. Relative productivity (man-hour basis), adjusted by PPP (Japan=1)**

	Annual hours worked			Relative productivity	
	Adjusted by PPP			(man-hour basis)	
	Japan	Korea	US	Korea	US
Total	3132	2431	1817	0.95	3.74
Textiles and their products	3209	2551	1774	0.71	2.26
<b>Metal industries</b>	3081	2696	1813	0.51	2.45
<b>Machinery</b>	3158	2758	1809	0.67	4.82
Stone, clay, and glass products	3003	2573	1812	0.58	2.77
<b>Chemicals and allied products</b>	3133	1930	1892	0.59	2.03
Wood products	2975	3690	1958	0.59	2.48
Printing, publishing and allied industries	3256	3097	1896	0.45	3.86
Food and kindred products	2958	2209	1962	1.46	5.84
Miscellaneous industries	3075	2380	1682	0.57	2.69

**Table 7. Relative productivity (value-added basis), adjusted by PPP (Japan=1)**

	Single deflation				
	Value-add rate			Relative Productivity (value-added basis)	
	Japan	Korea	US	Adjusted by PPP	
				Korea	US
Total	0.249	0.328	0.418	0.97	3.64
Textiles and their products	0.117	0.289	0.423	1.39	4.52
<b>Metal industries</b>	0.231	0.197	0.416	0.38	2.60
<b>Machinery</b>	0.510	0.279	0.445	0.32	2.41
Stone, clay, and glass products	0.663	0.453	0.628	0.34	1.58
<b>Chemicals and allied products</b>	0.262	0.353	0.405	0.49	1.89
Wood products	0.652	0.250	0.533	0.28	1.34
Printing, publishing and allied indu	0.409	0.335	0.594	0.35	3.26
Food and kindred products	0.141	0.344	0.293	2.65	8.03
Miscellaneous industries	0.368	0.339	0.399	0.40	1.60

**Table 8. Relative productivity (value-added/man-hour basis), adjusted by PPP (Japan=1)**

	Single deflation				
	Value-add rate			Relative Productivity (value-added/man-hour basis)	
	Japan	Korea	US	Adjusted by PPP	
				Korea	US
Total	<b>0.249</b>	<b>0.328</b>	0.418	1.25	6.28
Textiles and their products	0.117	0.289	0.423	1.75	8.18
<b>Metal industries</b>	0.231	0.197	0.416	0.43	4.41
<b>Machinery</b>	0.510	0.279	0.445	0.37	4.21
Stone, clay, and glass products	0.663	0.453	0.628	0.40	2.62
<b>Chemicals and allied products</b>	0.262	0.353	0.405	0.80	3.13
Wood products	0.652	0.250	0.533	0.23	2.03
Printing, publishing and allied industrie	0.409	0.335	0.594	0.37	5.60
Food and kindred products	0.141	0.344	0.293	3.55	12.11
Miscellaneous industries	0.368	0.339	0.399	0.52	2.92

For more detail, please see the tables at the end of this handout.

## Implications

TABLE 7  
EAST ASIAN PRICE LEVELS RELATIVE TO THE U.S. (1934-36)

	Expenditure Weight				Relative Price Level (Fisher average, U.S. = 1)		
	Taiwan	Korea	Japan	U.S.	Taiwan	Korea	Japan
Consumption	0.73	0.84	0.70	0.77	0.39	0.43	0.45
Private investment	0.20	0.11	0.18	0.08	0.47	0.49	0.50
Government expenditure	0.07	0.05	0.12	0.15	0.24	0.25	0.28
GDP	1.00	1.00	1.00	1.00	0.38	0.41	0.43

*Source:* Price levels and weights for Korea and Taiwan are based on Fukao *et al.* (2006). U.S. weights are based on U.S. Department of Commerce (1998, p. 147).

Source: Fukao, Ma and Yuan (2007).

TABLE 8  
1934–36 EAST ASIAN PER CAPITA GDPs IN 1934–36 U.S. DOLLARS AND RELATIVE TO THE U.S.

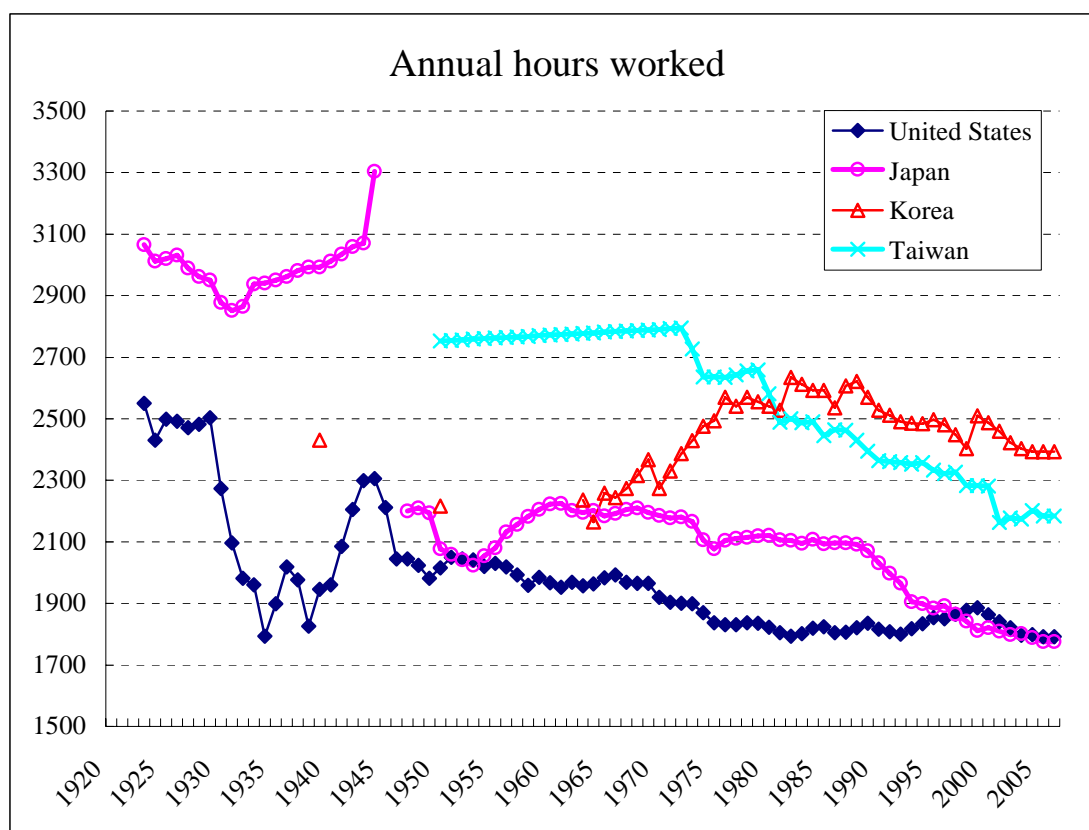
	U.S.	Japan	Taiwan	Korea	China
1. Exchange rate converted estimate	574.7	77.1	49.2	29.1	20.1
	100%	13.4%	8.6%	5.1%	3.5%
2. Relative GDP price levels	1	0.43	0.38	0.41	0.32
3. PPP adjusted estimate = 1 ÷ 2	574.7	180.8	129.6	70.9	63.6
	100%	31.5%	22.6%	12.3%	11.1%

*Source:*

1. GDP for China from Liu and Yeh (1965, p. 68, table 10); for Japan from Ohkawa and Shinohara (1979), for Taiwan and Korea from Mizoguchi and Umemura (1988); for the U.S. from the *Historical Statistics of the U.S.* (the Bicentennial Edition, 1975).

2. 1934–36 exchanges rates: 1 U.S. dollar = 3.43 Japanese yen = 3.01 Chinese yuan (Hsiao, 1974, p. 192). Taiwanese and Korean currencies are fixed at 1:1 to the Japanese currency.

Source: Fukao, Ma and Yuan (2007).



Sources: After 1950, Groningen Growth and Development Centre and the Conference Board, Total Economy Database, January 2007, <http://www.ggd.net>

For Japan, before 1950, Showa Kokusei Soran (Statistics on the State of Japan in Showa Period). The data is on manufacturing factories.

For U.S, before 1950, Ethel B. Jones New (1963) 'Estimates of Hours of Work Per Week and Hourly Earnings, 1900-1957', *The Review of Economics and Statistics*, Vol. 45, No. 4. pp. 374-385.

For Korea, 1939, Chosen Government-General (Chosen Sotoku-fu), *Statistics on Manufactured Products* (Kosan Tokei), 1939. After the War, the data is on South Korea.

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**Table 1. Summary statistics of manufacturing data  
Japan 1935**

	Number of establishments	Number of employees (thousands)	Value of products (million Japanese Yen)	Average productivity
Total	84625	2361	10816	4581
Textiles and their products	25562	1007	3353	3330
Metal industries	7318	218	1882	8647
Machinery	10352	367	1463	3982
Stone, clay, and glass products	3896	93	283	3055
Chemicals and allied products	4644	229	1814	7933
Wood products	7267	85	249	2922
Printing, publishing and allied indu	3358	61	223	3681
Food and kindred products	13684	158	1168	7390
Miscellaneous industries	8544	144	382	2648

**Korea 1935**

	Number of establishments	Number of employees	Value of products (million Korean Yen)	Average productivity
Total	5584	167	604	3607
Textiles and their products	377	31	72	2293
Metal industries	239	7	21	2985
Machinery	324	7	9	1238
Stone, clay, and glass products	336	10	15	1500
Chemicals and allied products	1161	43	118	2734
Wood products	240	6	15	2283
Printing, publishing and allied indu	285	7	12	1700
Food and kindred products	2326	49	331	6781
Miscellaneous industries	296	6	10	1750

**US 1935**

	Number of establishments	Number of employees	Value of products (million US\$)	Average productivity
Total	168436	8290	45340	5469
Textiles and their products	22847	1806	6061	3356
Metal industries	11852	1121	5934	5294
Machinery	13646	1492	8122	5445
Stone, clay, and glass products	5722	263	946	3605
Chemicals and allied products	15544	1218	8727	7165
Wood products	16127	632	1662	2630
Printing, publishing and allied indu	22606	475	2165	4557
Food and kindred products	48936	929	9511	10237
Miscellaneous industries	11156	355	2212	6238

Table 2. Japan's price level (1935, US=1)

	Japanese weight			US weight			Japanese		US		Japanese/ US	Japanese price level		
	I	II	III	I	II	III	Prices	Units	Prices	Units		US weight	Japanes e weight	Fisher average
<b>All industries</b>											<b>0.673</b>	<b>0.419</b>	<b>0.531</b>	
<i>Steam turbines and steam locomotives are not included</i>											<i>0.882</i>	<i>0.421</i>	<i>0.609</i>	
<b>Textiles and their products</b>	<b>0.309</b>			<b>0.170</b>								<b>0.385</b>	<b>0.341</b>	<b>0.362</b>
<b>Silk and yarn</b>	<b>0.545</b>			<b>0.216</b>								<b>0.476</b>	<b>0.533</b>	<b>0.504</b>
Raw silk				0.335			0.01	11.352 kg	2.09 pounds			0.71760328		
Cotton yarn				0.603			0.86	1.247 kg	0.34 pounds			0.48180474		
Spun silk for sale				0.047			0.09	5.847 kg	2.23 pounds			0.34746225		
Twisted silk yarn				0.015			0.03	10.558 kg	2.22 pounds			0.62923447		
<b>Fabrics</b>	<b>0.431</b>			<b>0.757</b>								<b>0.351</b>	<b>0.234</b>	<b>0.287</b>
Jeans				0.041			0.03	0.132 m	0.12 sq. yards			0.28747594		
Drills				0.070			0.13	0.195 m	0.10 sq. yards			0.49603484		
Other wide cotton fabrics				0.775			0.28	0.168 m	0.21 sq. yards			0.20965829		
All silk fabrics				0.065			0.56	0.425 m	0.29 sq. yards			0.38924499		
Jute bagging				0.002			0.00	0.282 m	0.07 sq. yards			1.06743986		
Rayon fabrics				0.046			0.00	0.269 m	0.19 sq. yards			0.37102009		
Rayon and cotton mixed fabrics				0.000			0.00	0.227 m	0.20 sq. yards			0.31066081		
<b>Hosiery</b>	<b>0.024</b>			<b>0.027</b>								<b>0.586</b>	<b>0.380</b>	<b>0.472</b>
Underwear				0.074			0.64	13.925 doz.	5.71 doz.			0.71090644		
Total gloves				0.926			0.36	2.330 doz.	1.85 doz.			0.36628887		
<b>Metals and metal products</b>	<b>0.182</b>			<b>0.167</b>								<b>0.732</b>	<b>0.648</b>	<b>0.689</b>
<b>Metals</b>	<b>0.714</b>			<b>0.506</b>								<b>0.644</b>	<b>0.624</b>	<b>0.634</b>
Pig iron				0.229			0.62	35.956 tons	16.95 tons (2240 poui			0.61833294		
Ferro-alloys				0.065			0.08	0.221 kg	73.67 tons (2240 poui			0.87586739		
Steel plains				0.173			0.09	0.093 kg	70.92 tons (2240 poui			0.38149155		
Copper casting, rough				0.076			0.01	738.087 tons	168.91 tons			1.27398808		
Copper plate				0.042			0.04	0.816 kg	281.07 tons			0.84621103		
Copper wire				0.165			0.03	0.783 kg	0.14 pounds			0.76319025		
Copper tubing, seamless, and pipe				0.021			0.02	1.006 kg	354.19 tons			0.82824559		
Other copper metals				0.004			0.00	0.756 kg	0.21 pounds			0.47267637		
Zinc casting, rough				0.035			0.01	0.303 kg	98.02 tons			0.90255767		
Zinc plates and sheets				0.011			0.01	0.259 kg	162.84 tons			0.46458196		
Lead				0.001			0.02	0.253 kg	88.24 tons			0.83678428		
Lead plates				0.022			0.00	0.265 kg	133.20 tons			0.57923749		
Lead tubing				0.021			0.00	0.273 kg	145.91 tons			0.54490934		
Aluminum products				0.098			0.05	1.507 kg	0.35 pounds			0.57296858		
Tin				0.038			0.00	3.617 kg	987.77 tons			1.06761142		
<b>Metal products</b>	<b>0.286</b>			<b>0.494</b>								<b>0.821</b>	<b>0.717</b>	<b>0.767</b>
Cast-iron pipe fitting				0.241			0.14	0.089 kg	47.53 2000 pounds			0.5441018		
Nails, brads, and spikes				0.248			0.12	7.097 casks	3.20 kegs			0.64739371		
Tinplate				0.511			0.74	0.310 kg	0.05 pounds			0.89957585		
<b>Machinery, including transportation equipment</b>	<b>0.138</b>			<b>0.228</b>								<b>0.963</b>	<b>0.363</b>	<b>0.591</b>
<b>Engines and turbines</b>	<b>0.148</b>			<b>0.042</b>								<b>0.777</b>	<b>0.560</b>	<b>0.660</b>
Steam engines				0.056			0.08	7774.674 numbers	3117.31 numbers			0.72712331		
<b>Steam turbines</b>				<b>0.532</b>			<b>0.65</b>	<b>56423.080 numbers</b>	<b>5178.39 numbers</b>			<b>1</b>		
Internal combustion engines (General gasoline)				0.334			0.06	186.070 numbers	137.29 numbers			0.39512973		

Table 2. Japan's price level (1935, US=1)

	Japanese weight			US weight			Japanese		US		Japanese/ US	Japanese price level		
	I	II	III	I	II	III	Prices	Units	Prices	Units		US weight	Japanes e weight	Fisher average
Water wheels and water turbines			0.078			0.22	12431.677	numbers	15466.29	numbers	0.23434158			
<b>Electric Machinery</b>		<b>0.412</b>			<b>0.404</b>							<b>0.872</b>	<b>0.206</b>	<b>0.424</b>
Power transformers			0.612			0.14	68.758	numbers	144.10	numbers	0.13911373			
Fans			0.028			0.06	20.111	numbers	4.83	numbers	1.21348509			
Storage batteries			0.046			0.58	14.572	numbers	4.09	numbers	1.03924895			
Dry batteries			0.257			0.14	0.120	numbers	0.03	numbers	1.05337318			
Elevators, winding machines			0.057			0.08	2913.606	numbers	2034.48	numbers	0.41752641			
<b>Transportation equipment</b>		<b>0.440</b>			<b>0.554</b>							<b>1.043</b>	<b>0.891</b>	<b>0.964</b>
Steam-railroad cars			0.121			0.28	63050.548	numbers	2828.70	numbers	1			
Electric-railroad cars			0.005			0.04	16588.294	numbers	14119.41	numbers	0.34252392			
Motor vehicles			0.386			0.15	2587.950	numbers	331.38	numbers	2.27683369			
Bicycles			0.012			0.13	24.768	numbers	18.36	numbers	0.39327695			
Steel ships			0.451			0.26	249186.677	numbers	#####	numbers	0.5862028			
Wooden ships, etc			0.025			0.14	2018.251	numbers	402.33	numbers	1.46250537			
<b>Stone, clay, and glass products</b>		<b>0.028</b>			<b>0.027</b>							<b>0.373</b>	<b>0.459</b>	<b>0.414</b>
<b>Cement</b>		<b>0.500</b>			<b>0.030</b>							<b>0.619</b>	<b>0.618</b>	<b>0.618</b>
Portland cement			0.985			0.99	3.213	casks	1.51	barrels	0.62148187			
Natural, puzzolan, and masonry cement			0.015			0.01	2.136	casks	1.42	barrels	0.43811532			
<b>Lime</b>		<b>0.029</b>			<b>0.057</b>							<b>0.276</b>	<b>0.276</b>	<b>0.276</b>
Lime			1.000			1.00	6.997	tons	7.39	tons	0.27608544			
<b>Glass</b>		<b>0.338</b>			<b>0.693</b>							<b>0.361</b>	<b>0.361</b>	<b>0.361</b>
Shade Globes			1.000			1.00	0.061	numbers	0.59	doz.	0.36077978			
<b>Clay products</b>		<b>0.132</b>			<b>0.220</b>							<b>0.405</b>	<b>0.405</b>	<b>0.405</b>
Common brick, Building brick			1.000			1.00	0.014	numbers	10.07	thousands	0.40488385			
<b>Chemicals and allied products</b>		<b>0.188</b>			<b>0.080</b>							<b>0.317</b>	<b>0.497</b>	<b>0.397</b>
<b>Chemicals not else where classified</b>		<b>0.254</b>			<b>0.029</b>							<b>0.904</b>	<b>0.854</b>	<b>0.878</b>
Sulfuric acid			0.411			0.39	14.232	tons	7.11	tons	0.5836347			
Nitric acid			0.013			0.03	142.928	tons	87.46	tons	0.47643696			
Soda ash			0.522			0.35	74.998	tons	15.19	tons	1.43972563			
Iodine			0.005			0.00	8.887	kg	1.19	pounds	0.98608483			
Chlorine			0.025			0.10	0.102	kg	38.39	tons	0.77582156			
Carbon dioxide			0.007			0.06	0.145	kg	0.05	pounds	0.37084232			
Alcohols			0.017			0.08	0.756	kg	0.12	pounds	0.80286039			
<b>Ink, printing and writing</b>		<b>0.095</b>			<b>0.013</b>							<b>0.416</b>	<b>0.416</b>	<b>0.416</b>
Printing and lithographing inks			1.000			1.00	0.680	kg	0.22	pounds	0.41640654			
<b>Soap</b>		<b>0.078</b>			<b>0.085</b>							<b>0.618</b>	<b>0.553</b>	<b>0.585</b>
Laundry soap (bar)			0.793			0.39	0.189	kg	0.05	pounds	0.52815795			
Laundry soap (powder)			0.207			0.61	0.225	kg	0.04	pounds	0.67545208			
<b>Oil</b>		<b>0.217</b>			<b>0.205</b>							<b>0.320</b>	<b>0.318</b>	<b>0.319</b>
Fuel oil			0.235			0.62	61.487	tons	0.23	gallons	0.12280569			
Paraffin wax			0.177			0.02	294.822	tons	0.19	gallons	0.70459417			
Asphalt			0.090			0.04	27.636	tons	10.79	2000 pounds	0.74689383			
Cotton seed oil			0.301			0.16	0.339	kg	0.08	pounds	0.54194271			
Linseed Oil			0.158			0.07	0.410	kg	0.09	pounds	0.60649259			
Miscellaneous animal oils and fats			0.039			0.08	0.351	kg	0.06	pounds	0.78944071			
<b>Fertilizers</b>		<b>0.220</b>			<b>0.137</b>							<b>0.363</b>	<b>0.799</b>	<b>0.539</b>
Chemicals fertilizers			0.835			0.01	55.206	tons	14.75	tons	1.0915278			



Table 2. Japan's price level (1935, US=1)

	Japanese weight			US weight			Japanese		US		Japanese/ US	Japanese price level		
	I	II	III	I	II	III	Prices	Units	Prices	Units		US weight	Japanes e weight	Fisher average
			0.012			0.05	0.083	kg	25.52	tons	0.94285268			
			0.009			0.02	75.087	tons	25.11	tons	0.87175831			
			0.144			0.92	78.517	tons	33.46	2000 pounds	0.31055949			
<b>Leather</b>		<b>0.028</b>			<b>0.433</b>							<b>0.141</b>	<b>0.144</b>	<b>0.142</b>
	Cattle leather		0.971			1.00	7.660	pieces	15.93	sides	0.14016582			
	Horse,		0.029			0.00	5.912	pieces	1.74	half and whole	0.99022622			
<b>Gelatin and glue</b>		<b>0.006</b>			<b>0.010</b>							0.669	0.622	0.645
	Gelatin		0.670			0.68	0.428	kg	0.07	pounds	0.77685464			
	Glue		0.330			0.32	1.149	kg	0.34	pounds	0.4421252			
<b>Coke-oven</b>		<b>0.101</b>			<b>0.084</b>							<b>0.567</b>	<b>0.567</b>	<b>0.567</b>
	Cokes		1.000			1.00	14.995	tons	6.99	short tons	0.56700493			
<b>Wood distillation and Charcoal</b>		<b>0.000</b>			<b>0.003</b>							0.815	0.815	0.815
	Charcoal		1.000			1.00	36.487	tons	0.12	bushels	0.81529908			
<b>Food and kindred products</b>		<b>0.116</b>			<b>0.267</b>							<b>0.817</b>	<b>0.819</b>	<b>0.818</b>
<b>Grain-mill and products</b>		<b>0.223</b>			<b>0.282</b>							0.540	0.569	0.555
	Wheat flour		0.966			0.84	0.152	kg	6.67	barrels	0.58965857			
	Noodles, macaroni, spaghetti, etc		0.034			0.16	0.162	kg	0.07	pounds	0.28621065			
<b>Liquors</b>		<b>0.490</b>			<b>0.222</b>							2.023	2.075	2.049
	Wines		0.020			0.09	42.540	100 liters	0.42	gallons	1.12902508			
	Beer		0.980			0.91	46.599	100 liters	8.76	barrels	2.11128101			
<b>Sugar</b>		<b>0.172</b>			<b>0.156</b>							0.726	0.736	0.731
	Sugar cane		0.130			0.06	0.230	kg	65.85	2000 pounds	0.92634892			
	Refined sugar		0.870			0.94	0.239	kg	88.53	2000 pounds	0.71380652			
<b>Cooking oils</b>		<b>0.044</b>			<b>0.067</b>							0.625	0.534	0.578
	Vegetable cooking oils		0.959			0.62	0.385	kg	0.10	pounds	0.52636644			
	Miscellaneous animal oils and fats		0.041			0.38	0.351	kg	0.06	pounds	0.78944071			
<b>Other products</b>		<b>0.071</b>			<b>0.272</b>							<b>0.220</b>	<b>0.257</b>	<b>0.238</b>
	Canned Vegetables						0.771	kg		case				
	Salt		0.262			0.01	0.046	kg	0.01	pounds	0.56576603			
	Ice		0.738			0.99	6.306	tons	3.88	2000 pounds	0.21529682			
<b>Miscellaneous industries</b>		<b>0.038</b>			<b>0.062</b>							<b>0.210</b>	<b>0.159</b>	<b>0.183</b>
<b>Hats</b>		<b>0.732</b>			<b>0.711</b>							<b>0.151</b>	<b>0.149</b>	0.150
	Felt hats		0.893			0.81	6.418	doz.	12.76	doz.	0.1466624			
	Straw hats		0.107			0.19	3.634	doz.	6.22	doz.	0.17035231			
<b>Pens and pencils</b>		<b>0.268</b>			<b>0.289</b>							<b>0.356</b>	<b>0.198</b>	0.265
	Pens		0.341			0.51	12.247	doz.	77.70	gross	0.55140883			
	Pencils		0.659			0.49	0.071	doz.	1.67	gross	0.1485276			

Table 3. Korea's price level (1935: Japan=1)

	Korean weight			Japanese weight			Korea	Japan	Units	Korean/ Japanese	Korean price level		
	I	II	III	I	II	III	Prices	Prices			Japanese weight	Korean weight	Fisher average
<b>All industries</b>											1.169	0.983	1.072
Including Boilers, elevators, winding machines											1.137	0.973	1.052
<b>Textile and their products</b>	<b>0.125</b>			<b>0.309</b>							<b>1.360</b>	<b>1.104</b>	<b>1.225</b>
<b>Yarn</b>		<b>0.192</b>			<b>0.225</b>						<b>0.930</b>	<b>0.931</b>	<b>0.931</b>
Raw silk			<b>0.964</b>			<b>0.946</b>	10.453	11.352	kg	0.921			
Doupion raw silk			<b>0.001</b>			<b>0.023</b>	5.488	7.423	kg	0.739			
Frison			<b>0.035</b>			<b>0.030</b>	3.269	2.409	kg	1.357			
<b>Spun silk</b>		<b>0.212</b>			<b>0.098</b>						<b>0.800</b>	<b>0.814</b>	<b>0.807</b>
Cotton yarn			<b>0.998</b>			<b>0.873</b>	1.015	1.247	kg	0.815			
Flax yarn			<b>0.002</b>			<b>0.010</b>	0.534	1.093	kg	0.489			
Miscellaneous flax yarn			<b>0.000</b>			<b>0.016</b>	0.114	0.998	kg	0.114			
		<b>0.009</b>			<b>0.025</b>						<b>2.721</b>	<b>3.752</b>	<b>3.195</b>
Cotton (for fishing nets)			<b>0.049</b>			<b>0.490</b>	1.304	1.275	kg	1.023			
Cotton (miscellaneous)			<b>0.951</b>			<b>0.510</b>	5.506	1.265	kg	4.353			
<b>Fabrics</b>		<b>0.331</b>			<b>0.605</b>						<b>1.437</b>	<b>1.313</b>	<b>1.374</b>
<b>Cotton Shirting</b>			<b>0.095</b>			<b>0.400</b>	<b>0.178</b>	<b>0.158</b>	<b>m</b>	<b>1.125</b>			
Sheeting			<b>0.848</b>			<b>0.089</b>	0.210	0.161	m	1.309			
Ogura sheeting			<b>0.000</b>			<b>0.039</b>	0.526	0.283	m	1.857			
Miscellaneous wide cotton fab			<b>0.004</b>			<b>0.068</b>	0.421	0.145	m	2.910			
Canvas			<b>0.006</b>			<b>0.029</b>	0.517	0.432	m	1.197			
White cotton cloth			<b>0.000</b>			<b>0.043</b>	1.351	0.526	tan	2.568			
Stripe cotton cloth			<b>0.000</b>			<b>0.023</b>	1.361	0.953	tan	1.429			
Woven color cotton			<b>0.004</b>			<b>0.006</b>	1.153	0.948	tan	1.216			
Towels			<b>0.000</b>			<b>0.025</b>	0.800	1.071	dozen	0.747			
<b>Spun silk fabrics</b>			<b>0.002</b>			<b>0.011</b>	<b>0.363</b>	<b>0.300</b>	<b>m</b>	<b>1.211</b>			
Miscellaneous silk fabrics			<b>0.000</b>			<b>0.001</b>	0.259	0.221	m	1.168			
Narrow silk crepes			<b>0.000</b>			<b>0.113</b>	9.000	7.418	tan	1.213			
Habutae silk			<b>0.001</b>			<b>0.023</b>	4.615	5.183	tan	0.890			
Raw woven silk gauze and gos			<b>0.001</b>			<b>0.007</b>	3.061	6.230	tan	0.491			
Meisen fabric			<b>0.000</b>			<b>0.036</b>	8.333	4.462	tan	1.868			
Shaku miscellaneous Japanese			<b>0.000</b>			<b>0.013</b>	2.449	8.390	tan	0.292			
Hakama			<b>0.000</b>			<b>0.005</b>	2.809	7.760	tan	0.362			
Flat silk			<b>0.001</b>			<b>0.000</b>	3.727	3.339	tan	1.116			
Miscellaneous narrow raw silk			<b>0.003</b>			<b>0.007</b>	3.424	2.991	tan	1.145			
<b>Silk-cotton mixed fabrics</b>			<b>0.002</b>			<b>0.004</b>	<b>2.059</b>	<b>2.610</b>	<b>tan</b>	<b>0.789</b>			
<b>Hard and bast fiber fabrics</b>			<b>0.001</b>			<b>0.002</b>	<b>4.476</b>	<b>2.142</b>	<b>tan</b>	<b>2.090</b>			
Stripe flax fabrics			<b>0.000</b>			<b>0.001</b>	4.000	2.965	tan	1.349			
<b>Rayon fabrics</b>			<b>0.014</b>			<b>0.040</b>	<b>0.327</b>	<b>0.153</b>	<b>m</b>	<b>2.133</b>			
Shaku			<b>0.000</b>			<b>0.014</b>	4.000	1.895	tan	2.111			
<b>Rayon filament mixed fabrics</b>			<b>0.011</b>			<b>0.001</b>	<b>1.916</b>	<b>0.175</b>	<b>m</b>	<b>10.933</b>			
<b>Hosiery</b>		<b>0.043</b>			<b>0.033</b>						<b>3.369</b>	<b>0.848</b>	<b>1.690</b>
Cotton textile underwear			<b>0.024</b>			<b>0.364</b>	8.554	1.195	dozen	7.157			
Woolen, woolen-cotton mixed underwe			<b>0.007</b>			<b>0.193</b>	24.443	15.619	dozen	1.565			
Cotton socks			<b>0.906</b>			<b>0.268</b>	1.203	1.463	dozen	0.822			
Woolen, woolen-cotton mixed socks			<b>0.001</b>			<b>0.092</b>	3.704	3.566	dozen	1.039			
Cotton gloves			<b>0.063</b>			<b>0.041</b>	1.000	1.088	dozen	0.919			
Woolen, woolen-cotton mixed gloves			<b>0.000</b>			<b>0.042</b>	6.000	2.326	dozen	2.579			
<b>Floss silks</b>		<b>0.000</b>	<b>1.000</b>		<b>0.000</b>	<b>1.000</b>	<b>4.403</b>	<b>1.150</b>	<b>kg</b>	<b>3.828</b>	<b>3.828</b>	<b>3.828</b>	<b>3.828</b>
<b>Wadding</b>		<b>0.213</b>	<b>1.000</b>		<b>0.014</b>	<b>1.000</b>	<b>0.942</b>	<b>0.592</b>	<b>kg</b>	<b>1.592</b>	<b>1.592</b>	<b>1.592</b>	<b>1.592</b>

Table 3. Korea's price level (1935: Japan=1)

	Korean weight			Japanese weight			Korea	Japan	Units	Korean/ Japanese	Korean price level		
	I	II	III	I	II	III	Prices	Prices			Japanese weight	Korean weight	Fisher average
<b>Metal and metal products</b>	<b>0.038</b>			<b>0.182</b>							<b>0.783</b>	<b>0.760</b>	<b>0.771</b>
<b>Metals</b>		<b>1.000</b>			<b>1.000</b>						<b>0.783</b>	<b>0.760</b>	<b>0.771</b>
Pig Iron			<b>0.415</b>			<b>0.076</b>	27.389	35.956	ton	0.762			
Steel (cast)			<b>0.348</b>			<b>0.295</b>	51.182	57.939	ton	0.883			
Steel (miscellaneous sheets)			<b>0.167</b>			<b>0.163</b>	0.063	0.108	ton	0.579			
Steel (miscellaneous )			<b>0.069</b>			<b>0.466</b>	0.073	0.092	ton	0.794			
<b>Machinery, including transportati</b>	<b>0.012</b>			<b>0.138</b>							<b>0.648</b>	<b>0.433</b>	<b>0.530</b>
<b>Boilers</b>		<b>0.005</b>			<b>0.108</b>						<b>0.058</b>	<b>0.041</b>	<b>0.048</b>
Water tube boilers			<b>0.368</b>			<b>0.797</b>	928.571	55025.596	numbers	0.017			
Miscellaneous tube boilers			<b>0.632</b>			<b>0.203</b>	447.200	2047.217	numbers	0.218			
<b>Engines and turbines</b>		<b>0.063</b>			<b>0.216</b>						<b>0.983</b>	<b>0.750</b>	<b>0.858</b>
Steam engines			<b>0.019</b>			<b>0.045</b>	666.667	7774.674	numbers	0.086			
Internal combustion engines													
General gas engines			<b>0.007</b>			<b>0.002</b>	1500.000	3090.000	numbers	0.485			
General gasoline			<b>0.904</b>			<b>0.266</b>	529.308	186.070	numbers	2.845			
General oil engines			<b>0.067</b>			<b>0.626</b>	1286.364	3623.782	numbers	0.355			
Water turbines			<b>0.002</b>			<b>0.062</b>	50.000	12431.677	numbers	0.004			
<b>Elevators</b>		<b>0.000</b>	<b>1.000</b>		<b>0.006</b>	<b>1.000</b>	<b>40.000</b>	<b>2913.606</b>	numbers	<b>0.014</b>	<b>0.014</b>	<b>0.014</b>	<b>0.014</b>
<b>Winding machines</b>		<b>0.019</b>			<b>0.078</b>						<b>0.031</b>	<b>0.031</b>	<b>0.031</b>
Winding machines			<b>1.000</b>			<b>1.000</b>	293.423	9607.574	numbers	0.031			
<b>Pumps</b>		<b>0.006</b>	<b>1.000</b>		<b>0.004</b>	<b>1.000</b>	<b>40.828</b>	<b>1121.285</b>	numbers	<b>0.036</b>	<b>0.036</b>	<b>0.036</b>	<b>0.036</b>
<b>Blowers</b>		<b>0.001</b>	<b>1.000</b>		<b>0.012</b>	<b>1.000</b>	<b>2.618</b>	<b>316.427</b>	numbers	<b>0.008</b>	<b>0.008</b>	<b>0.008</b>	<b>0.008</b>
<b>Measures</b>		<b>0.105</b>			<b>0.033</b>						<b>1.019</b>	<b>1.077</b>	<b>1.048</b>
Universal measures			<b>0.063</b>			<b>0.181</b>	0.103	0.123	numbers	0.837			
Voltmeters			<b>0.285</b>			<b>0.099</b>	1.128	0.852	numbers	1.324			
Balances and scales			<b>0.652</b>			<b>0.720</b>	2.718	2.658	numbers	1.023			
<b>General lighting bulbs</b>											<b>0.155</b>	<b>0.155</b>	<b>0.155</b>
General lighting bulbs		<b>0.004</b>	<b>1.000</b>		<b>0.063</b>	<b>1.000</b>	0.010	0.065	numbers	0.155			
<b>Railroad cars and locomotives</b>		<b>0.487</b>			<b>0.159</b>	<b>1.000</b>					<b>0.794</b>	<b>0.823</b>	<b>0.808</b>
Steam locomotives			<b>0.023</b>			<b>0.509</b>	43640.000	63050.548	numbers	0.692			
Gasoline cars			<b>0.040</b>			<b>0.050</b>	13333.333	6346.336	numbers	2.101			
Parts, attachments and accessories													
Passenger cars and freight cars			<b>0.890</b>			<b>0.442</b>	3023.548	3952.248	numbers	0.765			
Electric cars													
<b>Motor vehicles</b>		<b>0.128</b>	<b>1.000</b>		<b>0.023</b>	<b>1.000</b>	<b>452.912</b>	<b>829.996</b>	numbers	<b>0.546</b>	<b>0.546</b>	<b>0.546</b>	<b>0.546</b>
<b>Bicycles</b>		<b>0.006</b>	<b>1.000</b>		<b>0.007</b>	<b>1.000</b>	<b>19.764</b>	<b>24.768</b>	numbers	<b>0.798</b>	<b>0.798</b>	<b>0.798</b>	<b>0.798</b>
<b>Miscellaneous cars</b>		<b>0.021</b>			<b>0.016</b>						<b>1.514</b>	<b>1.514</b>	<b>1.514</b>
Carts			<b>1.000</b>			<b>1.000</b>	31.131	20.566	numbers	1.514			
<b>Ships</b>		<b>0.154</b>			<b>0.273</b>						<b>0.817</b>	<b>0.817</b>	<b>0.817</b>
Miscellaneous (except steel ships)			<b>1.000</b>			<b>1.000</b>	1648.333	2018.251	numbers	0.817			
<b>Stone, clay and glass products</b>	<b>0.026</b>			<b>0.028</b>							<b>1.151</b>	<b>0.841</b>	<b>0.984</b>
<b>Clay</b>		<b>0.065</b>			<b>0.237</b>						<b>1.385</b>	<b>1.385</b>	<b>1.385</b>
Clay pipes			<b>1.000</b>			<b>1.000</b>	0.258	0.186	numbers	1.385			
<b>Glass</b>		<b>0.033</b>			<b>0.046</b>						<b>1.104</b>	<b>1.104</b>	<b>1.104</b>
Shade, globes			<b>1.000</b>			<b>1.000</b>	0.067	0.061	dozen	1.104			
<b>Bricks</b>		<b>0.083</b>			<b>0.065</b>						<b>0.913</b>	<b>1.036</b>	<b>0.972</b>
Building bricks			<b>0.822</b>			<b>0.250</b>	0.015	0.014	numbers	1.085			
Fire bricks			<b>0.178</b>			<b>0.750</b>	0.060	0.071	numbers	0.856			
<b>Tiles</b>		<b>0.016</b>			<b>0.023</b>						<b>0.766</b>	<b>0.760</b>	<b>0.763</b>
Smoked roofing tiles			<b>0.992</b>			<b>0.790</b>	0.033	0.043	numbers	0.759			
Miscellaneous roofing tiles			<b>0.008</b>			<b>0.210</b>	0.040	0.051	numbers	0.791			

Table 3. Korea's price level (1935: Japan=1)

	Korean weight			Japanese weight			Korea	Japan	Units	Korean/ Japanese	Korean price level		
	I	II	III	I	II	III	Prices	Prices			Japanese weight	Korean weight	Fisher average
<b>Cement (including Portland cement)</b>		<b>0.637</b>	<b>1.000</b>		<b>0.479</b>	<b>1.000</b>	<b>3.493</b>	<b>3.213</b>	casks	<b>1.087</b>	<b>1.087</b>	<b>1.087</b>	<b>1.087</b>
<b>Cement products</b>		<b>0.057</b>			<b>0.046</b>						<b>0.354</b>	<b>0.161</b>	<b>0.239</b>
Cement tiles			<b>0.513</b>			<b>0.142</b>	0.057	0.047		1.207			
Cement pipes			<b>0.198</b>			<b>0.576</b>	0.430	1.481		0.290			
Cement slates			<b>0.289</b>			<b>0.282</b>	0.080	1.419		0.056			
<b>Lime</b>		<b>0.020</b>	<b>1.000</b>		<b>0.028</b>	<b>1.000</b>	<b>8.285</b>	<b>6.997</b>		<b>1.184</b>	<b>1.184</b>	<b>1.184</b>	<b>1.184</b>
<b>Enameled iron</b>		<b>0.089</b>			<b>0.077</b>						<b>1.630</b>	<b>1.630</b>	<b>1.630</b>
Tableware			<b>1.000</b>			<b>1.000</b>	0.134	0.082		1.630			
<b>Chemicals and allied products</b>	<b>0.208</b>			<b>0.188</b>							<b>1.271</b>	<b>0.704</b>	<b>0.946</b>
<b>Chemicals</b>		<b>0.135</b>			<b>0.212</b>						<b>0.374</b>	<b>0.277</b>	<b>0.322</b>
Sulfate			<b>0.288</b>			<b>0.107</b>	14.157	14.952	ton	0.947			
Caustic soda			<b>0.001</b>			<b>0.161</b>	34.719	149.906	ton	0.232			
Iodine			<b>0.001</b>			<b>0.001</b>	7.229	8.887	kg	0.813			
Oxygen gas			<b>0.019</b>			<b>0.042</b>	0.003	0.221	m3	0.013			
Hydrogen gas			<b>0.015</b>			<b>0.006</b>	0.080	0.336	kg	0.238			
Ammonium chloride			<b>0.482</b>			<b>0.154</b>	0.069	0.223	kg	0.308			
Methanol			<b>0.040</b>			<b>0.006</b>	0.273	0.360	ton	0.757			
Naphthalene			<b>0.002</b>			<b>0.005</b>	0.028	0.085	ton	0.331			
Alcohol			<b>0.002</b>			<b>0.004</b>	1.050	0.756	kg	1.388			
Glycerin			<b>0.141</b>			<b>0.039</b>	1.295	0.991	kg	1.308			
Chloridation kalium			<b>0.000</b>			<b>0.001</b>	80.000	81.551	ton	0.981			
Miscellaneous			<b>0.028</b>			<b>0.474</b>	0.417	1.626	kg	0.256			
<b>Synthetic dyes</b>		<b>0.001</b>			<b>0.023</b>						<b>0.579</b>	<b>0.579</b>	<b>0.579</b>
Miscellaneous synthetic dyes			<b>1.000</b>			<b>1.000</b>	2.067	3.567	kg	0.579			
<b>Paints</b>		<b>0.000</b>			<b>0.023</b>						<b>0.880</b>	<b>0.922</b>	<b>0.901</b>
Chinese ink			<b>0.278</b>			<b>0.017</b>	0.833	0.783	kg	1.065			
Miscellaneous ink			<b>0.722</b>			<b>0.983</b>	1.083	1.236	dozen	0.877			
<b>Soap</b>		<b>0.009</b>			<b>0.037</b>						<b>0.787</b>	<b>0.820</b>	<b>0.803</b>
Bath soap			<b>0.036</b>			<b>0.459</b>	0.769	0.837	dozen	0.920			
Industrial detergents			<b>0.005</b>			<b>0.070</b>	0.170	0.242	kg	0.703			
Laundry soap (bar)			<b>0.958</b>			<b>0.373</b>	0.157	0.189	kg	0.831			
Laundry soap (powder)			<b>0.001</b>			<b>0.097</b>	0.012	0.225	kg	0.051			
<b>Oil</b>		<b>0.023</b>			<b>0.083</b>						<b>0.890</b>	<b>0.997</b>	<b>0.942</b>
Coal-tar			<b>0.147</b>			<b>0.067</b>	19.567	25.184	ton	0.777			
Benzol			<b>0.136</b>			<b>0.060</b>	173.509	234.376	ton	0.740			
Toluol			<b>0.000</b>			<b>0.005</b>	299.250	349.728	ton	0.856			
Creosote			<b>0.003</b>			<b>0.030</b>	49.914	50.867	ton	0.981			
Volatile oil			<b>0.008</b>			<b>0.481</b>	79.414	113.223	ton	0.701			
Light oil			<b>0.054</b>			<b>0.072</b>	84.009	59.976	ton	1.401			
Machine oil			<b>0.191</b>			<b>0.132</b>	110.240	91.928	ton	1.199			
Heavy oil			<b>0.058</b>			<b>0.068</b>	34.999	29.044	ton	1.205			
Paraffin			<b>0.050</b>			<b>0.038</b>	141.370	294.822	ton	0.480			
Pitch			<b>0.080</b>			<b>0.022</b>	20.986	15.878	ton	1.322			
Miscellaneous			<b>0.274</b>			<b>0.026</b>	64.780	48.741	ton	1.329			
<b>Vegetable oils</b>		<b>0.016</b>			<b>0.052</b>						<b>0.930</b>	<b>0.978</b>	<b>0.954</b>
Sesame oil			<b>0.060</b>			<b>0.080</b>	0.663	0.508	kg	1.304			
Cotton seed oil			<b>0.603</b>			<b>0.186</b>	0.324	0.339	kg	0.955			
Soybean oil			<b>0.336</b>			<b>0.439</b>	0.348	0.356	kg	0.978			
Miscellaneous			<b>0.001</b>			<b>0.295</b>	0.372	0.503	kg	0.740			
<b>Animal oils and fats</b>		<b>0.103</b>			<b>0.009</b>						<b>1.076</b>	<b>1.293</b>	<b>1.179</b>
Sardine oil			<b>0.992</b>			<b>0.085</b>	0.172	0.133	kg	1.294			

Table 3. Korea's price level (1935: Japan=1)

	Korean weight			Japanese weight			Korea	Japan	Units	Korean/ Japanese	Korean price level		
	I	II	III	I	II	III	Prices	Prices			Japanese weight	Korean weight	Fisher average
			0.001			0.093	0.090	0.159	kg	0.566			
			0.007			0.530	0.259	0.185	kg	1.404			
			0.000			0.018	0.153	0.194	kg	0.789			
			0.000			0.273	0.229	0.406	kg	0.565			
Candles		0.002	1.000		0.003	1.000	0.562	0.466	kg	1.207	1.207	1.207	1.207
Processed oil		0.116			0.023					0.946	0.950	0.948	0.948
Hydrogenated oils			0.806			0.770	0.233	0.234	ton	0.996			
Hydrogenated wax			0.071			0.010	0.240	0.287	kg	0.835			
Stearin			0.123			0.220	0.235	0.302	kg	0.777			
Rubbers		0.091			0.087						0.614	0.614	0.614
	Miscellaneous rubber shoes		1.000			1.000	0.322	0.525		0.614			
Papers		0.041			0.164						4.002	1.235	2.223
	Printing paper		0.001			0.887	0.903	0.207	kg	4.354			
	Wrapping paper		0.999			0.113	0.271	0.220	kg	1.234			
Fertilizers		0.401			0.183						0.918	0.970	0.943
	Soybean cakes		0.021			0.140	75.817	80.573	ton	0.941			
	Miscellaneous Vegetable oil cakes												
	Fish scraps		0.160			0.015	0.069	0.083	ton	0.838			
	Pupa cakes		0.001			0.004	0.053	0.076	ton	0.699			
	Bone meal		0.001			0.012	71.143	75.087	ton	0.947			
	Super-phosphate		0.028			0.348	30.581	31.212	ton	0.980			
	Ammonium phosphate		0.164			0.000	98.835	41.036	ton	2.409			
	Ammonium sulfate		0.625			0.481	81.304	93.520	ton	0.869			
Leather		0.011			0.023						1.643	1.421	1.528
	Cattle leather		0.365			0.523	15.598	7.660	sheets	2.036			
	Sole leather		0.635			0.477	30.071	24.828	sheets	1.211			
Gelatin and glue		0.000			0.005						1.060	1.060	1.060
	Gelatin and glue		1.000			1.000	0.453	0.428	kg	1.060			
Others		0.049			0.073						0.673	0.671	0.672
	Cokes												
	Miscellaneous		0.673			0.672	12.163	17.417	ton	0.698			
	Briquettes and briquette balls		0.327			0.328	12.912	20.753	ton	0.622			
<b>Food and kindred products</b>		<b>0.573</b>			<b>0.116</b>						<b>0.959</b>	<b>0.737</b>	<b>0.841</b>
Liquors		0.615			0.436						0.996	0.707	0.839
	Rice wine sake		0.234			0.653	39.768	38.658	100l	1.029			
	Sweet rice wine mirin, including mirin v		0.000			0.022	37.161	56.290	100l	0.660			
	Low-class distilled spirits		0.628			0.085	23.811	40.057	100l	0.594			
	Beers		0.131			0.235	50.555	46.599	100l	1.085			
	Wines		0.006			0.005	34.766	42.540	100l	0.817			
Soy sauce		0.003	1.000		0.070	1.000	1.125	13.815	100l	0.081	0.081	0.081	0.081
Miso (bean paste)		0.015	1.000		0.021	1.000	0.141	0.103	kg	1.368	1.368	1.368	1.368
Vinegar		0.001	1.000		0.002	1.000	18.622	7.596	100l	2.452	2.452	2.452	2.452
Sake lees		0.009	1.000		0.007	1.000	0.012	0.087	kg	0.136	0.136	0.136	0.136
Flours		0.110			0.178						1.035	1.035	1.035
	Wheat flour		1.000			1.000	0.157	0.152	kg	1.035			
Starch		0.030			0.014						1.637	1.637	1.637
	Miscellaneous starch		1.000			1.000	0.240	0.147	kg	1.637			
Sugar		0.135			0.153						0.858	0.858	0.858
	Refined sugar		1.000			1.000	0.205	0.239	kg	0.858			
Food cans		0.038			0.050						1.571	1.099	1.314
	Canned beef		0.032			0.104	1.557	0.903	kg	1.723			
	Canned, bottled and potted meat		0.005			0.001	1.181	0.331	kg	3.568			

Table 3. Korea's price level (1935: Japan=1)

	Korean weight			Japanese weight			Korea	Japan	Units	Korean/ Japanese	Korean price level		
	I	II	III	I	II	III	Prices	Prices			Japanese weight	Korean weight	Fisher average
			<b>0.094</b>			<b>0.059</b>	0.275	0.363	kg	0.759			
			<b>0.001</b>			<b>0.045</b>	0.556	0.349	kg	1.591			
			<b>0.226</b>			<b>0.208</b>	0.835	0.203	kg	4.123			
			<b>0.066</b>			<b>0.009</b>	2.045	0.635	kg	3.220			
			<b>0.482</b>			<b>0.278</b>	0.993	1.113	kg	0.892			
			<b>0.001</b>			<b>0.148</b>	0.104	0.379	kg	0.275			
			<b>0.094</b>			<b>0.146</b>	0.208	0.327	kg	0.635			
<b>Seafood</b>		<b>0.028</b>			<b>0.033</b>						<b>0.793</b>	<b>0.633</b>	<b>0.681</b>
	Salt		<b>0.900</b>			<b>0.401</b>	0.028	0.046	kg	0.619			
	Agar		<b>0.071</b>			<b>0.426</b>	2.280	2.592	kg	0.879			
	Dried bonito (katsuobushi)		<b>0.029</b>			<b>0.172</b>	0.704	1.109	kg	0.634			
<b>Tea</b>		<b>0.000</b>			<b>0.018</b>						<b>1.305</b>	<b>1.211</b>	<b>1.257</b>
	Green tea 1		<b>0.828</b>			<b>0.897</b>	0.585	0.524	kg	1.117			
	Green tea 2		<b>0.074</b>			<b>0.055</b>	0.368	0.322	kg	1.140			
	Brown tea		<b>0.098</b>			<b>0.049</b>	2.636	0.533	kg	4.942			
<b>Ice made</b>		<b>0.008</b>	<b>1.000</b>		<b>0.013</b>	<b>1.000</b>	<b>6.913</b>	<b>6.306</b>	ton	<b>1.096</b>	<b>1.096</b>	<b>1.096</b>	<b>1.096</b>
<b>Noodles</b>		<b>0.009</b>	<b>1.000</b>		<b>0.006</b>	<b>1.000</b>	<b>0.175</b>	<b>0.162</b>	kg	<b>1.080</b>	<b>1.080</b>	<b>1.080</b>	<b>1.080</b>
<b>Miscellaneous industries</b>		<b>0.018</b>			<b>0.038</b>						<b>1.536</b>	<b>1.484</b>	<b>1.510</b>
<b>Tatami matting</b>		<b>0.001</b>	<b>1.000</b>		<b>0.002</b>	<b>1.000</b>	<b>0.800</b>	<b>0.676</b>	sheets	<b>1.183</b>	<b>1.183</b>	<b>1.183</b>	<b>1.183</b>
<b>Straw products</b>		<b>0.101</b>			<b>0.064</b>						<b>3.336</b>	<b>3.336</b>	<b>3.336</b>
	Straw-mats and mat bases		<b>1.000</b>			<b>1.000</b>	2.283	0.684	sheets	3.336			
<b>Leather products</b>		<b>0.707</b>			<b>0.437</b>						<b>2.296</b>	<b>2.290</b>	<b>2.293</b>
	Leather footwear		<b>0.926</b>			<b>0.916</b>	6.348	2.800	numbers	2.267			
	Leather bags		<b>0.074</b>			<b>0.084</b>	7.263	2.776	numbers	2.616			
<b>Brushes</b>		<b>0.022</b>			<b>0.063</b>						<b>0.872</b>	<b>0.872</b>	<b>0.872</b>
	Miscellaneous brushes		<b>1.000</b>			<b>1.000</b>	0.988	1.132	dozen	0.872			
<b>Hats</b>		<b>0.168</b>			<b>0.414</b>						<b>0.548</b>	<b>0.545</b>	<b>0.546</b>
	Textile hats		<b>0.216</b>			<b>0.357</b>	1.476	2.624	dozen	0.562			
	Straws		<b>0.784</b>			<b>0.643</b>	1.962	3.634	dozen	0.540			
<b>Japanese-style umbrellas</b>		<b>0.001</b>	<b>1.000</b>		<b>0.020</b>	<b>1.000</b>	<b>0.680</b>	<b>0.400</b>		<b>1.701</b>	<b>1.701</b>	<b>1.701</b>	<b>1.701</b>

Table 4. Relative labor productivity, based on market exchange rates (Japan=1)

	Labor productivity			Relative labor productivity	
	Japanese ¥	Korean ¥	US\$	Exchange rate=3.42 yen/ US\$	
	Japan	Korea	US	Korean	US
Total	4581	3607	5469	0.79	4.08
Textiles and their products	3330	2293	3356	0.69	3.45
<b>Metal industries</b>	8647	2985	5294	0.35	2.09
<b>Machinery</b>	3982	1238	5445	0.31	4.68
Stone, clay, and glass products	3055	1500	3605	0.49	4.04
<b>Chemicals and allied products</b>	7933	2734	7165	0.34	3.09
Wood products	2922	2283	2630	0.78	3.08
Printing, publishing and allied industries	3681	1700	4557	0.46	4.23
Food and kindred products	7390	6781	10237	0.92	4.74
Miscellaneous industries	2648	1750	6238	0.66	8.06

Table 6. Relative productivity (man-hour basis), adjusted by PPP (Japan=1)

	Annual hours worked			Relative productivity (man-hour basis)	
	Japan	Korea	US	Adjusted by PPP	
				Korea	US
Total	3132	2431	1817	0.95	3.74
Textiles and their products	3209	2551	1774	0.71	2.26
<b>Metal industries</b>	3081	2696	1813	0.51	2.45
<b>Machinery</b>	3158	2758	1809	0.67	4.82
Stone, clay, and glass products	3003	2573	1812	0.58	2.77
<b>Chemicals and allied products</b>	3133	1930	1892	0.59	2.03
Wood products	2975	3690	1958	0.59	2.48
Printing, publishing and allied industries	3256	3097	1896	0.45	3.86
Food and kindred products	2958	2209	1962	1.46	5.84
Miscellaneous industries	3075	2380	1682	0.57	2.69

Table 8. Relative productivity (value-added/man-hour basis), adjusted by PPP (Japan=1)

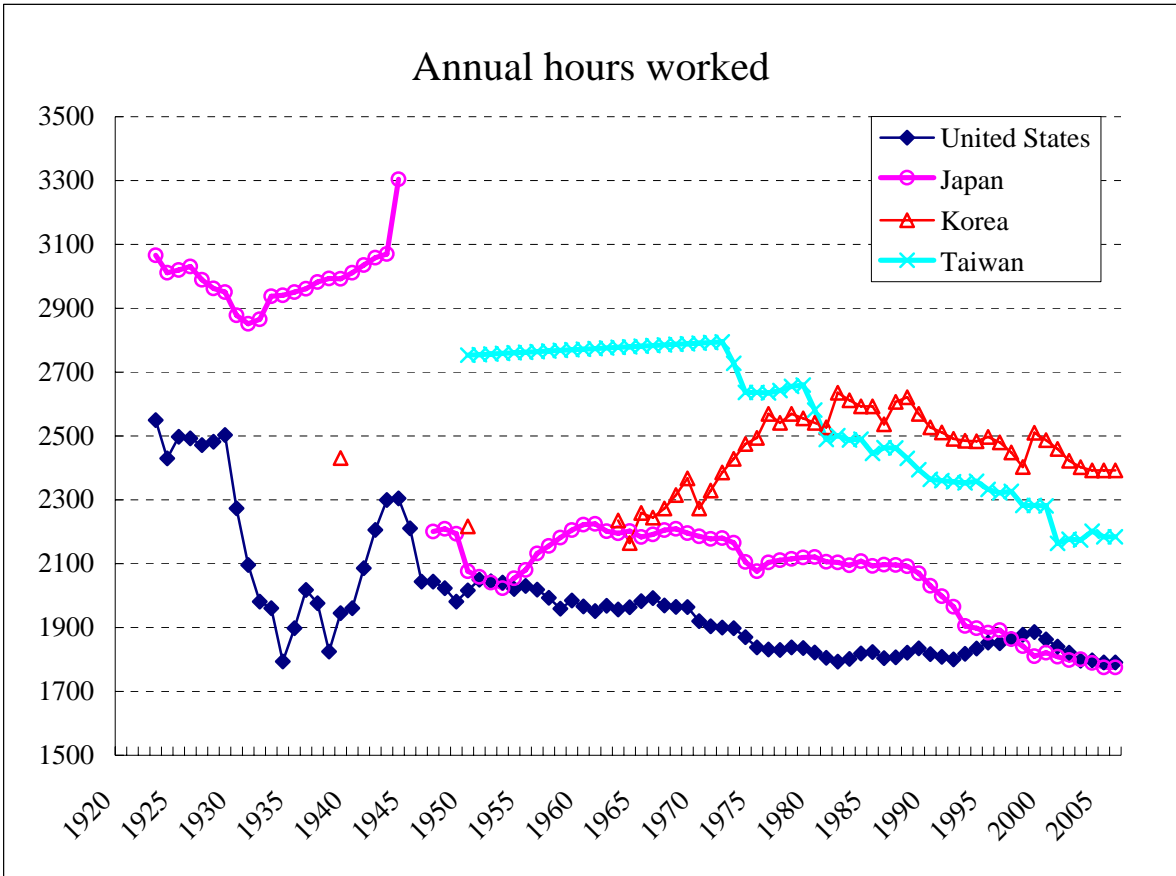
	Value-add rate			Relative Productivity (value-added/man-hour basis)	
	Japan	Korea	US	Adjusted by PPP	
				Korea	US
Total	0.249	0.328	0.418	1.25	6.28
Textiles and their products	0.117	0.289	0.423	1.75	8.18
<b>Metal industries</b>	0.231	0.197	0.416	0.43	4.41
<b>Machinery</b>	0.510	0.279	0.445	0.37	4.21
Stone, clay, and glass products	0.663	0.453	0.628	0.40	2.62
<b>Chemicals and allied products</b>	0.262	0.353	0.405	0.80	3.13
Wood products	0.652	0.250	0.533	0.23	2.03
Printing, publishing and allied industries	0.409	0.335	0.594	0.37	5.60
Food and kindred products	0.141	0.344	0.293	3.55	12.11
Miscellaneous industries	0.368	0.339	0.399	0.52	2.92

Table 5. Relative labor productivity, adjusted by PPP (Japan=1)

	Relative price level		Relative productivity	
	Japan=1		Adjusted by PPP	
	Korea	US	Korea	US
Total	1.07	1.88	0.73	2.17
Textiles and their products	1.23	2.76	0.56	1.25
<b>Metal industries</b>	0.77	1.45	0.45	1.44
<b>Machinery</b>	0.53	1.69	0.59	2.76
Stone, clay, and glass products	0.98	2.42	0.50	1.67
<b>Chemicals and allied products</b>	0.95	2.52	0.36	1.23
Wood products	<b>1.07</b>	<b>1.88</b>	0.73	1.63
Printing, publishing and allied industries	<b>1.07</b>	<b>1.88</b>	0.43	2.25
Food and kindred products	0.84	1.22	1.09	3.88
Miscellaneous industries	1.51	5.46	0.44	1.47

Table 7. Relative productivity (value-added basis), adjusted by PPP (Japan=1)

	Value-add rate			Relative Productivity (value-added basis)	
	Japan	Korea	US	Adjusted by PPP	
				Korea	US
Total	0.249	0.328	0.418	0.97	3.64
Textiles and their products	0.117	0.289	0.423	1.39	4.52
<b>Metal industries</b>	0.231	0.197	0.416	0.38	2.60
<b>Machinery</b>	0.510	0.279	0.445	0.32	2.41
Stone, clay, and glass products	0.663	0.453	0.628	0.34	1.58
<b>Chemicals and allied products</b>	0.262	0.353	0.405	0.49	1.89
Wood products	0.652	0.250	0.533	0.28	1.34
Printing, publishing and allied industries	0.409	0.335	0.594	0.35	3.26
Food and kindred products	0.141	0.344	0.293	2.65	8.03
Miscellaneous industries	0.368	0.339	0.399	0.40	1.60



Sources: After 1950, Groningen Growth and Development Centre and the Conference Board, Total Economy Database, January 2007, <http://www.ggdc.net>

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