

**Research Unit for Statistical
and Empirical Analysis in Social Sciences (Hi-Stat)**

**Estimating Provisional Consumer Price Index (CPI) of
The Philippines, 1902~1940**

Konosuke Odaka

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Preliminary; not for quotation

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by
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1. Information on Prices and 'Weights'

The Consumer Price Index, or CPI, is essential and valuable statistical information for measuring the impact of fluctuating commodity and service prices on our daily lives. It helps gauge the ease or hardships faced by ordinary citizens. The fundamental data required to calculate the CPI are the unit retail prices of goods and services purchased for consumption.

In contemporary industrialized countries, this original data is officially collected by government statistical offices. Present-day government practices typically involve surveying a vast number of items to compile comprehensive data¹.

Equally significant is the concept of 'weights' in this context. Weights represent the extent to which payments for specific goods and services contribute to households' total expenditures over a defined time period, such as each month. An ideal choice for determining weights would be data on the distribution of total spending on these goods and services. This data is obtained from the government's Family Income and Expenditure Surveys

¹ The number of items surveyed goes up to as many as 582 in contemporary Japan.

(FIES), which originate from household expense records maintained by a sizeable, randomly selected group of households².

These raw data are collected by government statistical offices, rigorously examined for errors or deficiencies, categorized, consolidated into monthly, quarterly and yearly data, and released to the public.

It is crucial that each price used for CPI computation aligns precisely with the purpose and weight assigned to the respective payment.

2. Guiding Principles for CPI Estimation

In our endeavor to estimate the Consumer Price Index (CPI) of the Philippine Islands, with a specific focus on the price data for the City of Manila during the first half of the twentieth century, we will adhere to three guiding principles:

- i. **Utilizing Statistical Time Series of Retail Prices:** Our primary source of information will be the statistical time series of retail prices. This principle primarily applies to the period beginning in 1913.
- ii. **Leveraging Substitute Data When Necessary:** In cases where the series (1) is periodically absent or completely unavailable³, we will make use of substitutable information whenever possible.
- iii. **Supplementing Shortages with Extrapolation:** To compensate for short-term gaps in price data, we will employ extrapolation techniques.

The first principle predominantly applies to the period starting in 1913. However, retail price data for the earlier decades, from 1899 to 1912, is scarce and necessitates supplementation from additional data sources. These sources may include government foreign trade statistics, implicit price series derived from production records (particularly in the primary industry), or statistical series collected and compiled by researchers.

In cases where the second principle is applied, we will assume that the ratios of transportation costs and commercial margins in the respective retail prices remained constant over the years.

² In the case of present-day Japan, the sample size of FIES households approximates 9,000.

³ Unless there exists clear evidence that the commodity or the service in question was unavailable during the period.

3. Data Sources

As previously mentioned, acquiring the requisite price information for Consumer Price Index (CPI) estimation poses a challenge for the first half of the twentieth century in the Philippines. The primary sources of retail prices are primarily limited to public documents compiled and issued by government authorities, particularly the central government. Notable sources include the *Statistical Bulletin of the Philippines*, no. 2, 1919 (pp. 214-219), *The Report of the Bureau of Commerce, The Manila Market-Masters, Twenty-fourth Annual Report of the Department of Labor*, Fiscal Year Ending Dec. 31, 1932 (pp. 131-132), and *The Year Book of Philippine Statistics 1941* (p. 469). Moreover, valuable collections of information have been amassed or curated by specialists, most notably Professor Richard Hooley. Professor Hooley's work includes the estimation of GDP statistics for the Philippines spanning the years 1902 to 1940.

The essential statistical weights required for this study are only available in the initial Family Income and Expenditure Survey (FIES) conducted by the Bureau of Census in 1957⁴. Some information on the pre-W.W.II Family Expenditure Surveys (FES) may be found in Appendix II below.

4. Estimating CPI through Annual Weighted Averages of Consumable Goods and Services

The estimation of the Consumer Price Index (CPI) involves a two-step calculation process.

Firstly, we calculated the annual weighted averages of unit price indices for 13 food items, which encompassed rough rice, shelled corn, minor crops, beef, pork, chicken, chicken eggs, fish, coffee, coconuts, condensed milk, brown sugar, and white salt. These averages were determined using weights derived from the respective proportions of product values in their aggregated values in the 1939 domestic markets. This initial outcome may be referred to

⁴ Ideally, the weights for the calculation should be measured annually. Unfortunately, however, the itemized expenditure classification of the pre-W.W.II Family Expenditure Survey (FES) by the Bureau of Labor was of a highly limited kind and has been used only to a very limited extent.

as CPI_f ⁵.

Secondly, we computed additional annual weighted averages that included CPI_f along with the remaining available price series. In this step, we utilized the expenditure proportions reported for the City of Manila as per the 1957 Family Income and Expenditure Survey (FIES)⁶. The items integrated into the second stage of the averaging process, in addition to CPI_f , encompassed liquor, tobacco, house rent, household forest products, household human services, clothing, and transportation, including storage and communication. This expanded the total number of major price items considered in the computation to 20.

These calculations ultimately yielded the CPI we were seeking.

5. Estimated CPI

In Figure 1 below, one may observe the results of the CPI calculation alongside the movements of the implicit GDP deflators estimated by Hooley⁷ and a trial cost of living index imputed by the present author. Generally, the measures of consumer prices and GDP deflators exhibit close alignment, except for a few notable deviations during the years 1902-1916, 1920, and 1925.

Regarding the period from 1902 to 1916, the present author holds an unverified impression that Hooley's real GDP estimations might have underestimated the period's actual values, thereby causing upward bias in its implicit deflators.

In terms of the sharp spikes in CPI during the years 1920 and 1925, a comprehensive examination of the monetary and financial crises experienced by the Islands in the late 1910s and early 1920s is essential. However, it is worth noting that the significant CPI increase in 1920 subsided relatively quickly, likely reflecting the wise decision-making and prompt actions taken

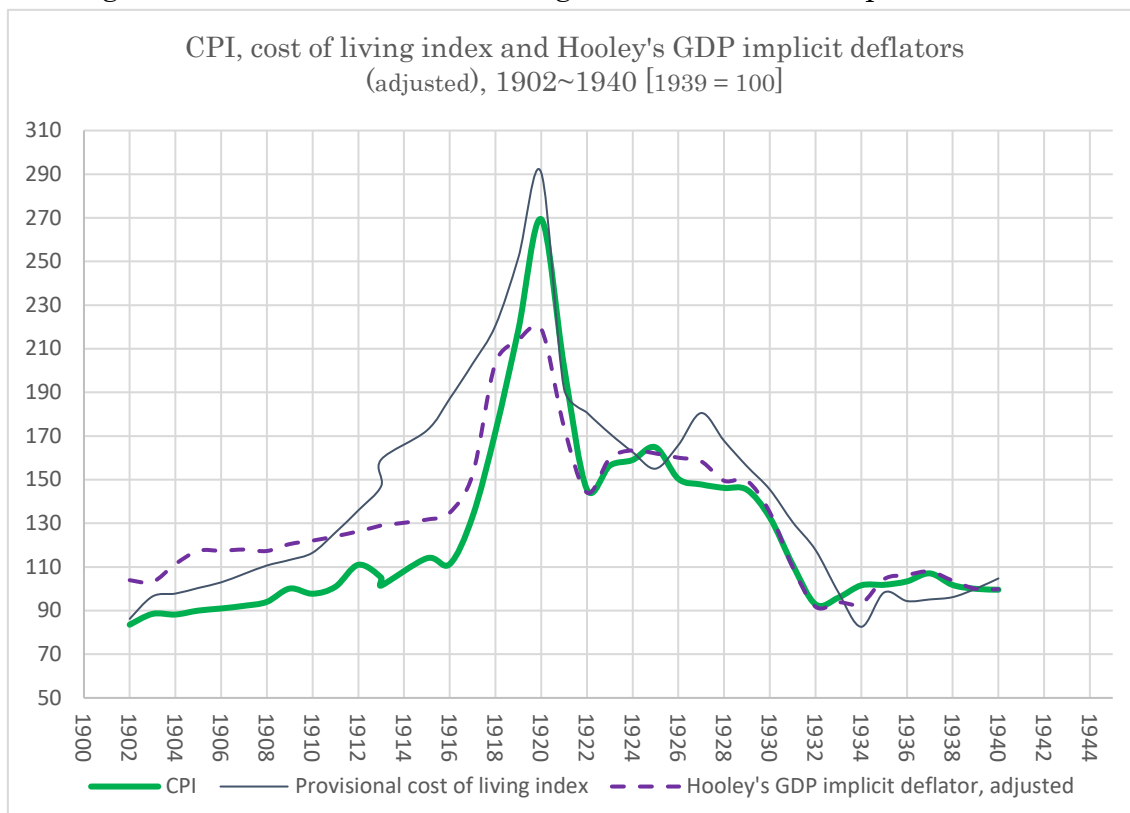
⁵ The respective weight figures for stage (1) are as follows: rice 0.405, corn 0.057, minor crops 0.028, beef 0.007, pork 0.030, chicken 0.042, chicken eggs 0.0004, fish 0.107, coffee 0.001, coconuts 0.174, condensed milk 0.003, sugar 0.146, and salt 0.0001.

⁶ The respective weight figures for stage (2) are as follows: total food 0.476, liquor 0.017, tobacco 0.038, house rent 0.228, forest products 0.022, household services 0.063, cloths 0.084, and transportation, including storage and communication 0.071.

⁷ Slightly adjusted by the present writer (cf. K. Odaka, "Adjusting Hooley's Philippine GDP," Global COE Hi-Stat DP series 300, August 2023).

by the relevant policy authorities at that time.

Figure 1. CPI vs. the cost of living index[§] and GDP implicit deflators



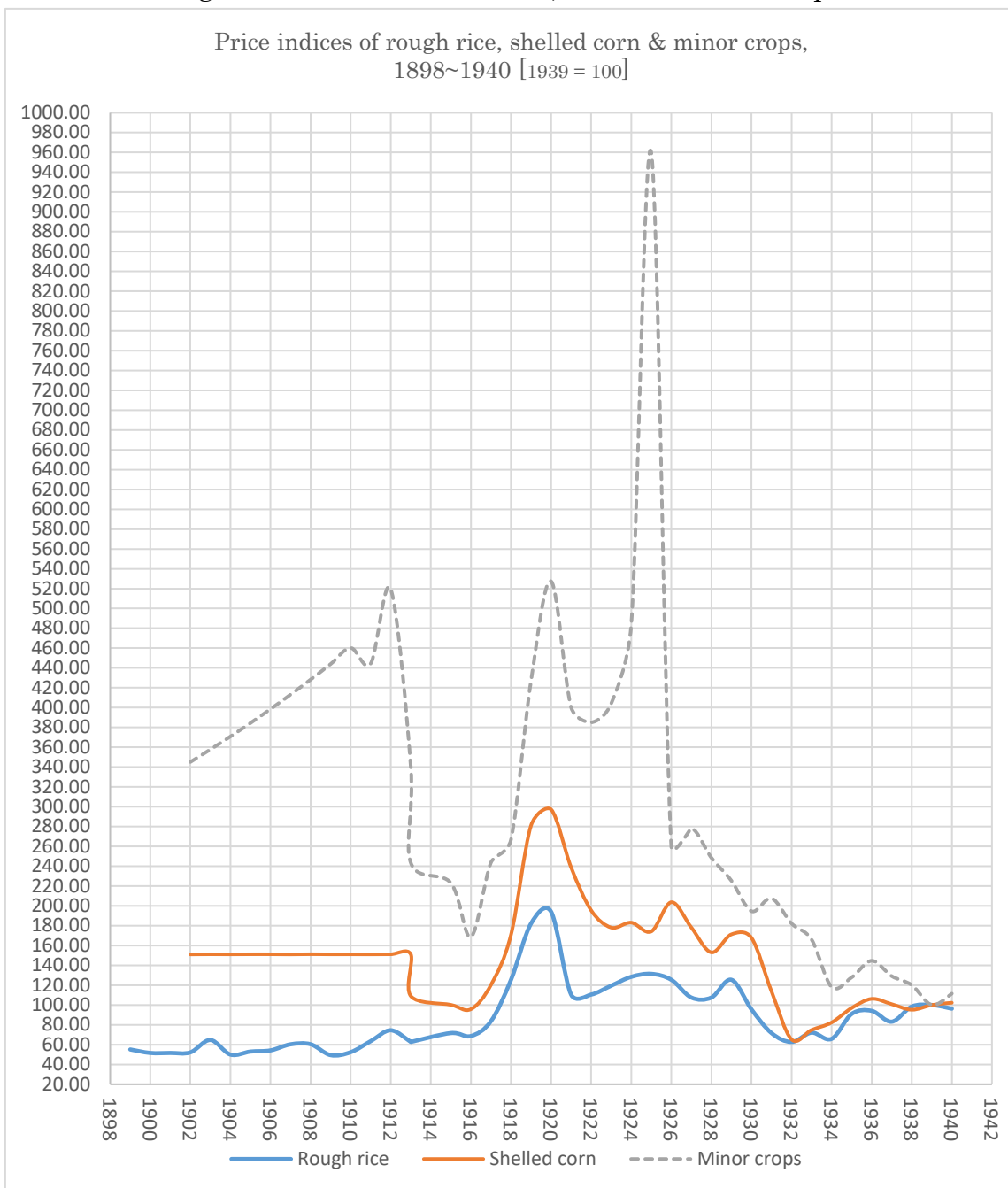
Data source) CPI estmntn.ix2023; file CPI AE59.

Note) § The cost of living index has been observed from data collected by pre-W.W.II family expenditure surveys (FES) for workers' households in the City of Manila, conducted intermittently by the Bureau of Labor⁸. First, per capita expenditures on five major items for each survey year were computed: food, house rent, cloths, fuel and light, and the miscellaneous. Second, the weighted averages of these five yearly items were computed using their respective expense proportions in the aggregate total expenditures of all the FES's conducted during the years 1909~1938 as weights: 0.590 for food, 0.106 for house rent, 0.072 for cloths, 0.061 for fuel, light, and water, and 0.171 for the miscellaneous, to finally yield what is named here as 'the cost of living index,' by setting its value of the year 1939 as 100.

⁸ The yearly records of pre-W.W.II FES used here are: 1909, 1910, 1918, 1920, 1921, 1927, 1930, 1934, and 1938.

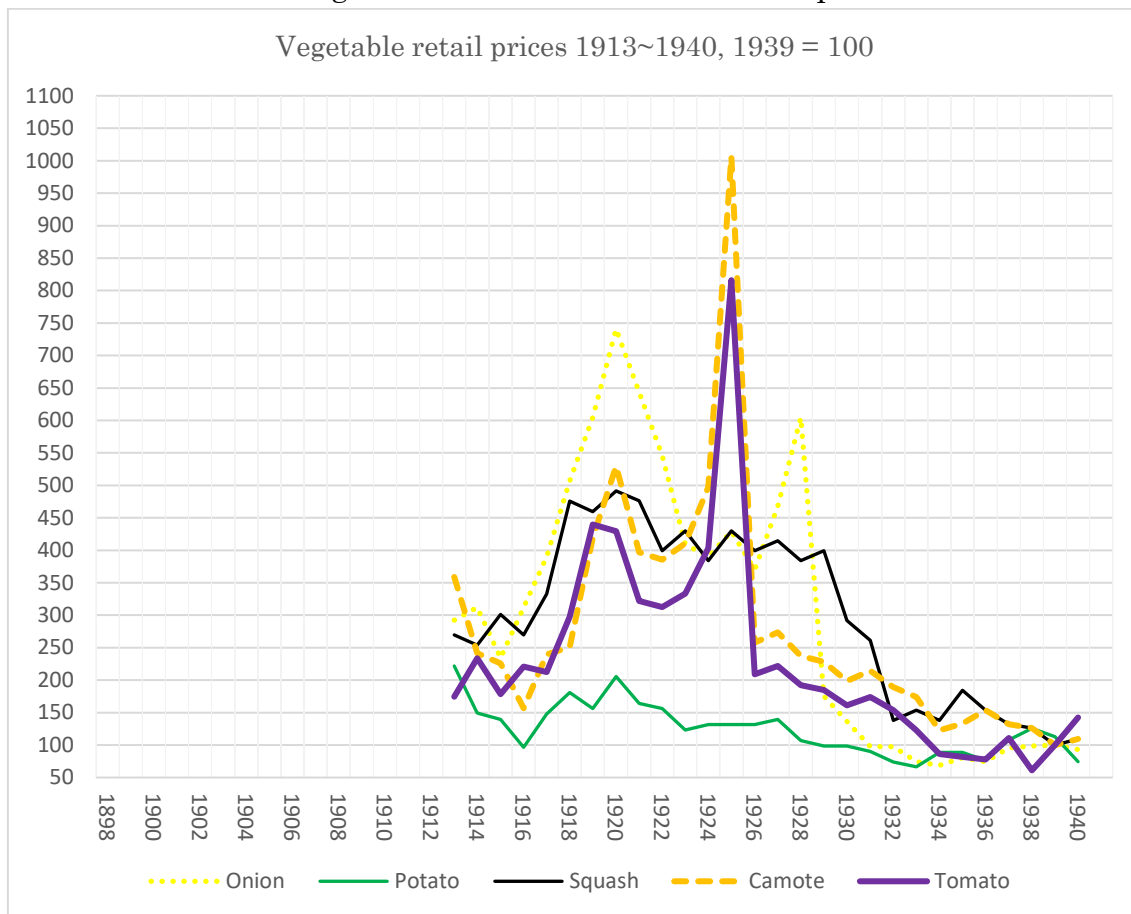
(Appendix I) The Retail Price Content of the Estimated CPI

Figure 2. Price indices of rice, corn and minor crops



Data source) CPI estmtd.ix2023; file Corn AH13.

Figure 3. Price indices of minor crops

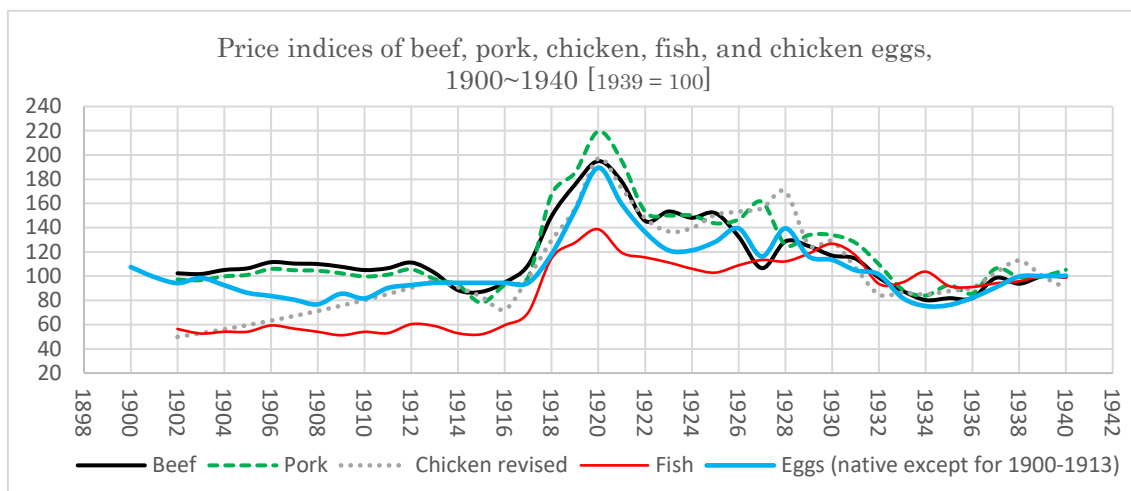


Data source) CPI estmtd.ix2023; file Minor crops CK20.

Note) Uninterrupted price information on vegetables for the years 1913-1940 or 1941 is not only limited to following five items: potatoes, squashes, sweet potatoes (camotes) and tomatoes, but available only from 1913, as depicted below. These prices were first made to form annual, weighted averages by using their respective production values reported by the 1938 agricultural census as weights: onions 0.349, potatoes 0.022⁹, squash 0.158, camotes 0.868, and tomatoes 0.079. The result of the computation was then connected to the implicit price series of total minor crops for 1902~1913, which are reported in the Hooley's GDP worksheet.

⁹ Potato prices for years 1913-1915 are missing, and have been estimated assuming that they moved parallel to those of camotes.

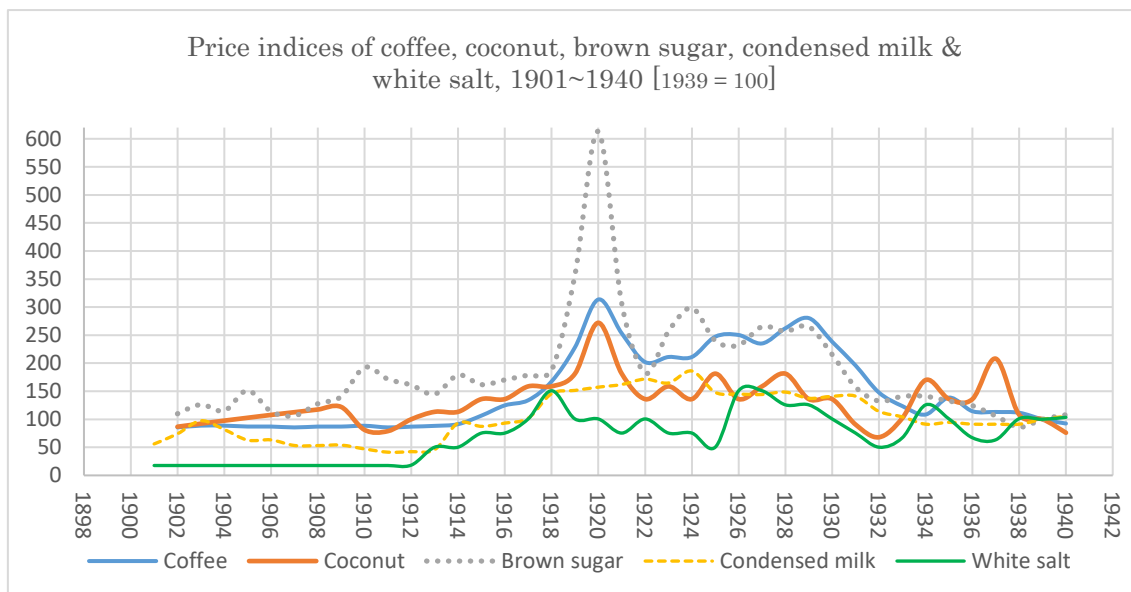
Figure 4. Price series for meat, fish, and chicken eggs



Data source) CPI estmntn.ix2023; file Meat CW49.

Note) The data in this figure come from the production records prepared by K. Eto.

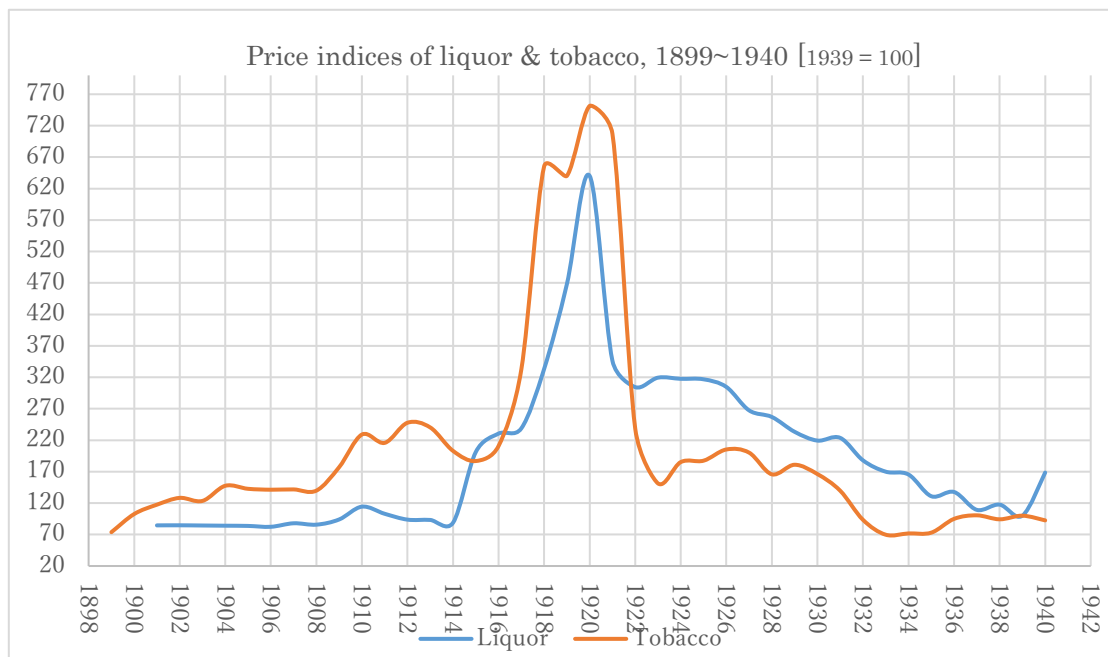
Figure 5. Price series of coffee, coconuts, sugar, condensed milk and salt



Data source) CPI estmtd.ix2023; file Coffee AL 41.

Note) Original data for condensed milk and salt were derived from import statistics, while all other data came from domestic production statistics compiled by K. Eto. Quantity values for condensed milk from 1901-1907 and white salt from 1901-1910 are missing. To estimate these missing values, we extrapolated by assuming a constant rate of change based on the averages from the five-year periods immediately following the years when reporting began.

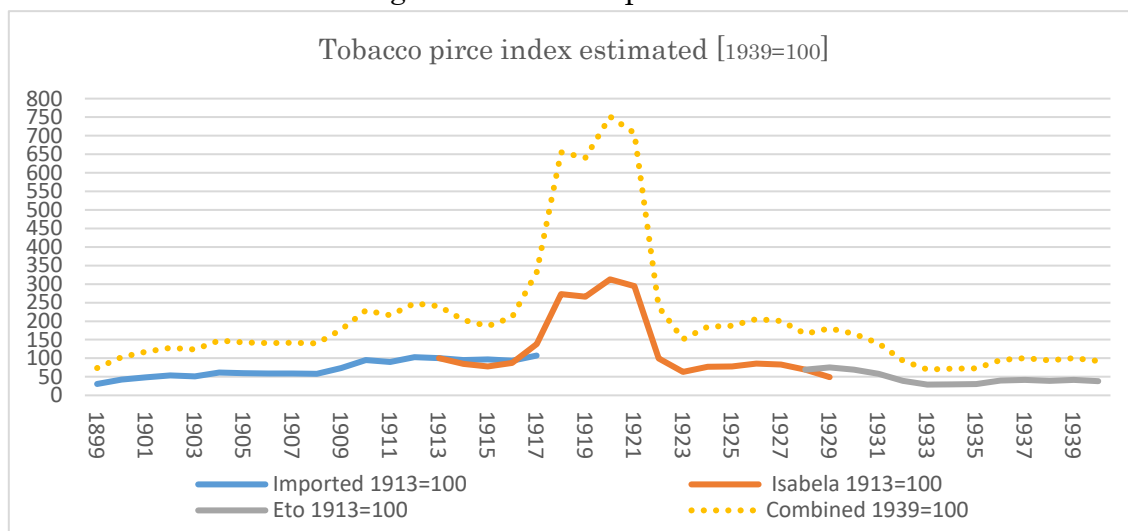
Figure 6. Price indices of liquor and tobacco



Data source) CPI estmtd.ix2023; Liquor rev. AI28.

Notes) Price series for liquor have been derived from the manufacturing output series prepared by K. Eto. For tobacco prices see Figure 7 below.

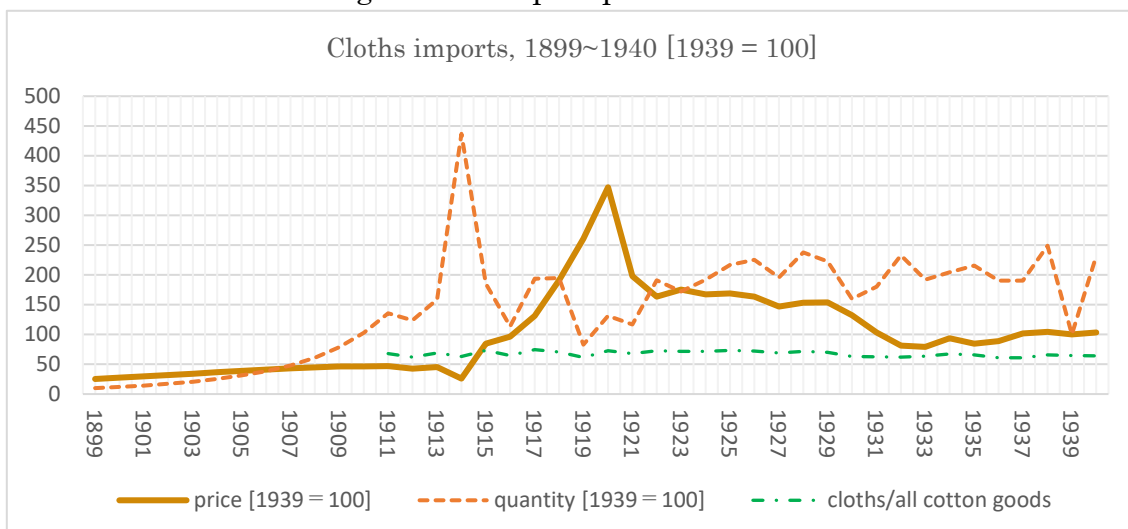
Figure 7. Tobacco price series



Data source) CPI estmtd.ix2023; Liquor rev. AI28.

Notes) Price series for tobacco's have been supplemented by the monthly wholesale prices of Isabela brand recorded for the period of Dec. 1912 through Nov. 1929, which were visually copied from the diagram contained in the *Statistical Bulletin of the Philippine Islands*, 1928 and 1929 editions.

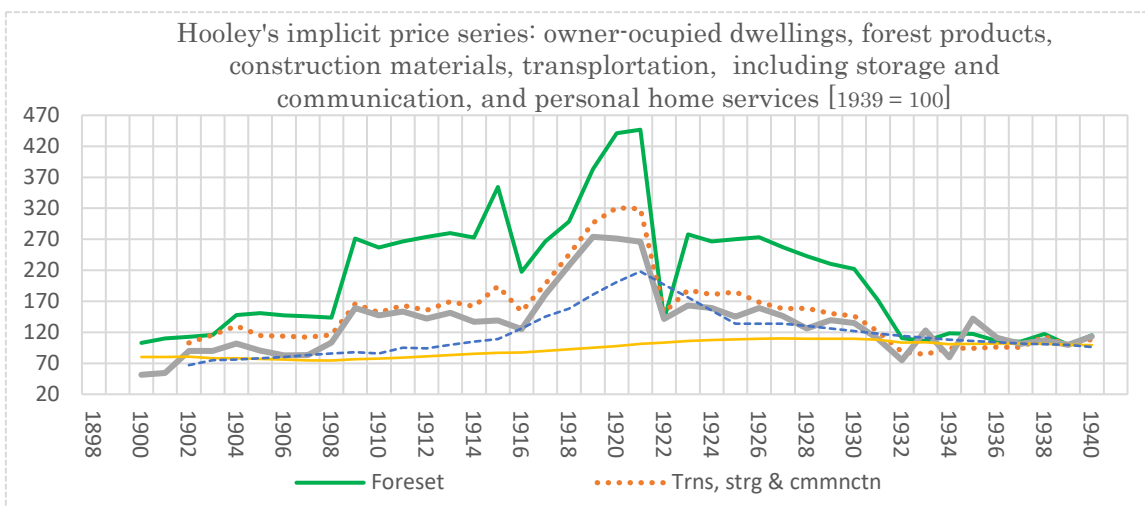
Figure 8. Import prices of cloths



Data source) CollectedRetailPrices.31viii23; file Cotton etc. AU21.

Note) Quantities and values of cloths (unbleached, bleached, dyed and printed) are not reported for 1899~1910. They have been estimated by utilizing their respective average growth rates during 1911-1921. (Data source: PI estmtd.ix2023; Liquor rev. AI28.)

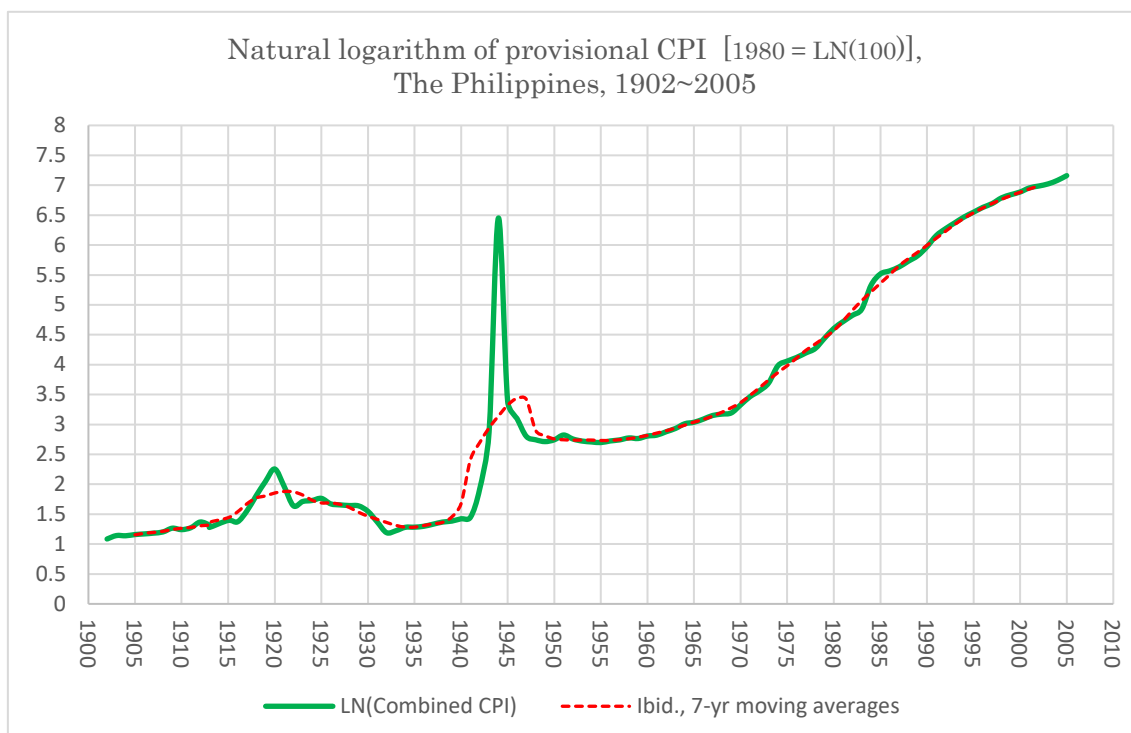
Figure 9. Implicit prices for forest products, owner-occupied dwellings, construction materials, transportation, including storage and communication, and personal home services



Data source) CPI estmntn.ix2023; file Implct prcs G34.

Note) Price series for owner-occupied dwellings have been used to represent house rent in our CPI, but the implicit prices for construction materials may have been a better choice.

Figure 10. Long-run provisional, combined CPI
in natural logarithm, 1902~2005

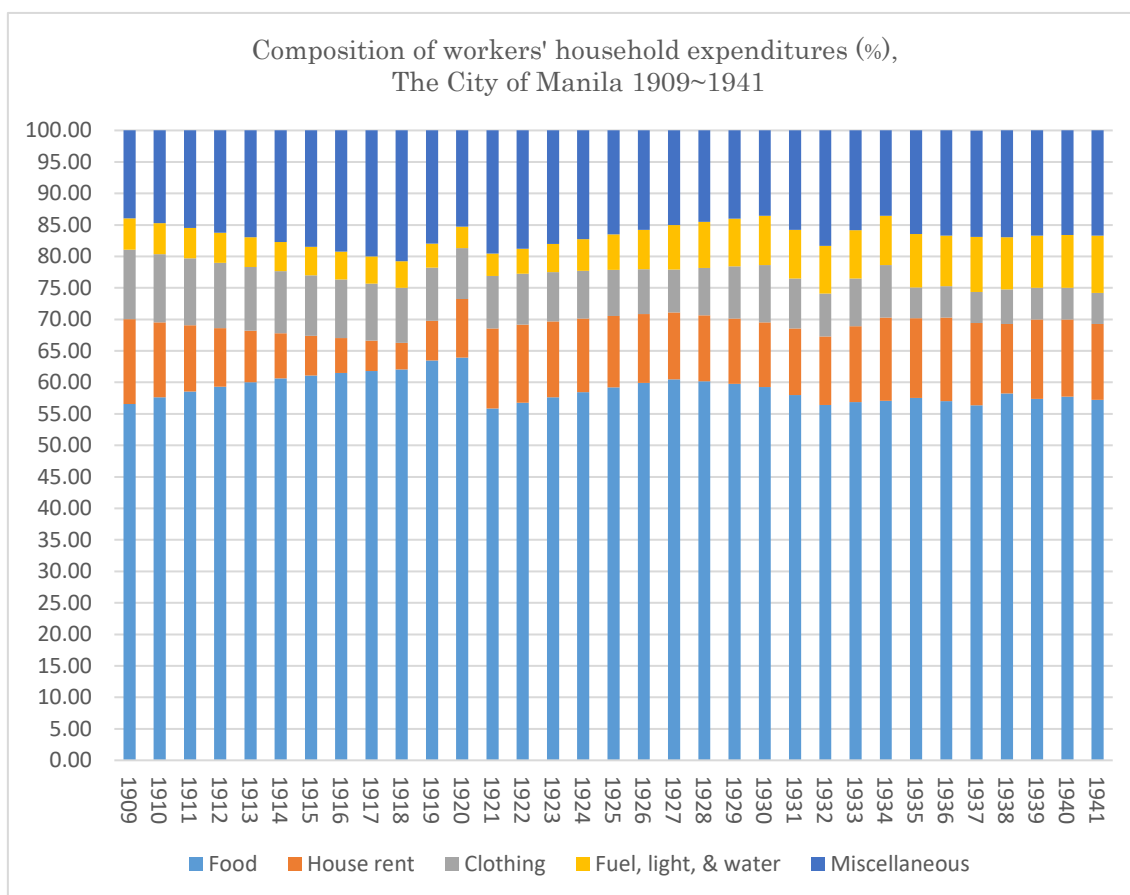


Data source) CPI estmtd.ix2023; CPI(1) BB 28.

Note) CPI for 1937~2005 has been prepared by connecting its series published by the Central Bank of the Philippines. The data for the years 1941~1942 lacking in the CBP's CPI series have been constructed from arithmetic averages of monthly cost of living data for Dec. 1941~Jan. 1945, published by Eduardo Z. Romualdez, "Financial problems created by the war," *Journal of History*, Vol.10, No.4 (1962), pp. 461-462.

(Appendix II) Supplementary Figures:
 Composition of Household Expenditures and
 the Relation between Average Real Labor Productivity and Real Wages

Figure 10. Composition of household expenditures based on FES,¹⁰
 The City of Manila, 1909~1941

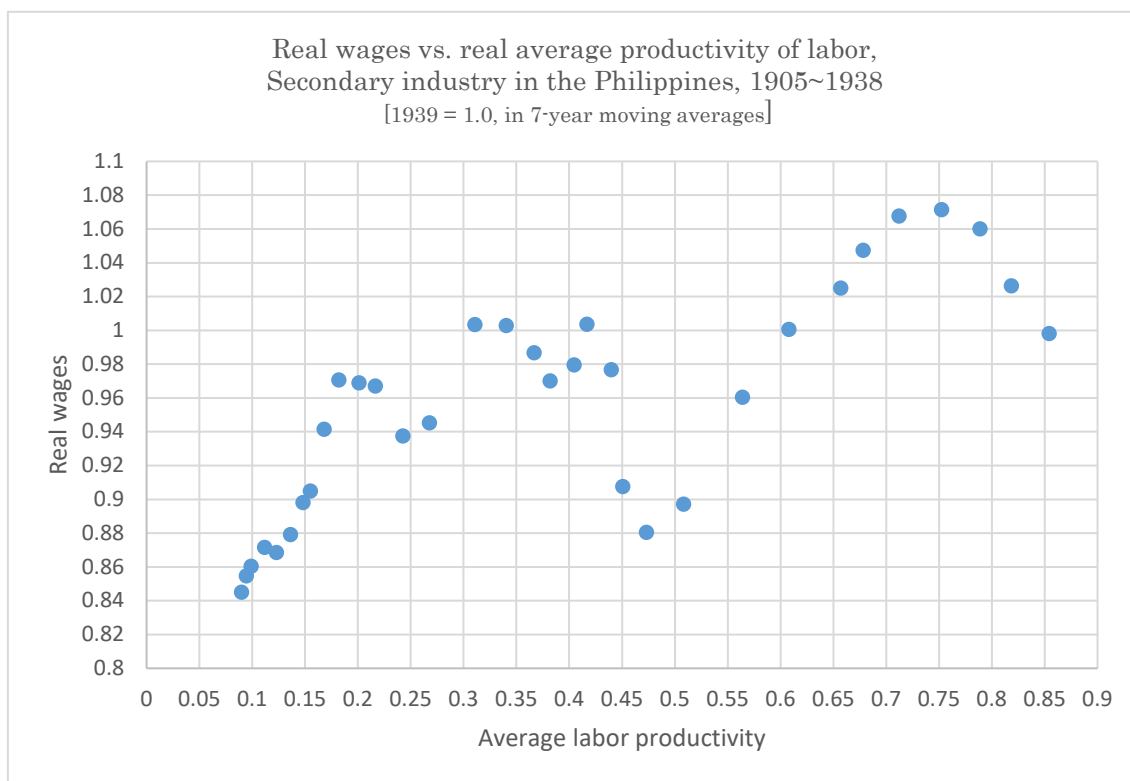


Data source) 1909-41FamilyBudgetDataExtended.3ii2023; file Σ CF48.Note)

Note) Based on (i) Family Expenditure Survey conducted by the Bureau of Labor for the years 1909, 1918, 1920, 1921, 1925, 1927, 1930 and 1934, and on (ii) the data reported in *the Yearbook of Philippine Statistics 1946*, p. 251 for the years 1935-1941. Data for all the other years have been interpolated by assuming constant rates of growth between the surveyed years.

¹⁰ Family Expenditure Survey conducted by the Bureau of Labor (and the Department of Labor) between 1909 and 1938.

Figure 11. Average real labor productivity in the secondary industry and real money wages, 1905~1938



Data source) TwoGDPsAdsted.iv2023; file Tmsrs BM80.

Explanatory Notes) For each year within the period of 1902~1940, we calculated the gross total value added of the secondary industry (the GDP's secondary industry component) in real terms, denoted as ' q .' Subsequently, we divided ' q ' by the corresponding employment figures of the same industry, denoted as ' l ,' to derive the real average labor productivity (q/l). Similarly, we divided the index of money wages for skilled and unskilled labor, denoted as ' w ,' by the CPI index estimated in this study ' p ,' yielding the time series of real wages (w/p). Finally, we computed seven-year moving averages for both variables and represented their one-to-one combinations in a scatterplot, as displayed in Figure 11.

The diagram highlights a general, albeit somewhat crude, positive association between the two variables, except for specific points when economic depressions took place

Appendix III: CPI Time-series Data

(1) Our CPI, 1902~1940

Data for the Estimation of Provisional Consumer Price Index (CPI) of the City of Manila, 1908-1940 [1939 = 100]																							
Year	Rough rice	Shelled corn	Minor crops	Beef	Pork	Chicken	Eggs	Fish	Coffee	Coconuts	Condensed milk	Brown sugar	White salt	Food total	Liquor	Tobacco	Owner-occupied dwelling	Forest products	Household services	Cloths	Transportation, storage and communication	CPI estimated	
1899	55.12																				25.30		
1900	51.61						107.51									102.60	80.00	102.61			27.35		
1901	51.61						99.36				56.04					117.50	80.00	110.04			29.51		
1902	52.17	151.00	345.10	102.38	97.24	49.84	94.25	56.39	85.53	86.76	74.09	150.99	156.49	88.56	84.73	128.31	80.40	112.61	67.00	31.78	102.61	83.55	
1903	64.72	151.13	357.74	101.77	96.66	52.90	98.51	52.63	88.69	92.22	97.38	165.26	162.28	96.81	84.40	123.51	78.30	115.63	75.00	34.14	115.63	88.51	
1904	49.98	151.06	370.84	105.09	99.81	56.15	92.50	54.12	88.69	97.57	81.78	149.36	162.28	90.19	84.07	147.54	77.95	147.59	76.00	36.55	130.33	88.21	
1905	52.99	151.14	384.42	106.46	101.11	59.59	86.21	54.12	87.08	102.73	62.87	172.76	159.33	96.23	83.74	142.73	77.15	151.11	78.00	38.94	114.74	90.01	
1906	54.18	151.14	398.50	111.53	105.93	63.25	83.64	59.30	87.08	107.79	63.29	171.77	159.33	98.73	82.35	141.29	75.84	147.36	80.00	41.23	113.63	90.98	
1907	60.33	151.01	413.10	110.38	104.84	67.13	80.47	56.65	85.53	112.65	53.30	164.08	156.49	101.15	87.93	141.77	74.62	145.52	83.00	43.30	112.16	92.19	
1908	60.39	151.19	428.23	110.01	104.48	71.25	76.75	54.07	87.03	117.42	53.11	175.69	159.23	104.02	85.75	139.85	74.69	143.91	86.00	45.01	115.79	94.02	
1909	49.41	151.06	443.92	107.75	102.34	75.62	85.48	51.21	87.03	122.05	54.00	163.49	159.23	98.84	94.00	177.09	76.35	270.96	88.00	46.17	165.84	100.11	
1910	52.36	151.08	460.18	105.02	99.74	80.26	81.62	54.02	88.48	81.15	47.14	146.68	161.88	91.28	114.36	229.00	77.68	256.63	86.00	46.60	151.82	97.74	
1911	63.52	151.04	444.44	106.57	101.22	85.18	90.23	52.97	85.53	78.92	41.39	148.00	156.49	95.30	103.01	215.78	79.20	266.74	95.00	47.18	163.10	100.94	
1912	74.50	151.13	519.38	111.22	105.63	90.41	92.61	60.34	86.93	100.09	42.34	204.55	159.05	114.94	93.74	247.74	81.36	273.56	94.00	42.44	155.59	111.01	
1913	62.71	151.09	340.25	102.68	97.52	95.96	94.48	58.84	88.29	113.33	45.88	144.75	161.53	98.56	93.24	240.29	83.49	280.00	100.00	45.56	169.34	105.16	
1913	62.71	109.03	243.42	88.38	92.65	90.77	94.48	52.85	91.33	113.33	93.24	178.80	161.53	97.48	88.75	203.02	85.05	272.57	105.00	26.19	161.54	101.47	
1915	71.67	100.14	223.07	87.08	78.02	82.99	94.48	52.01	106.55	136.00	87.39	161.77	193.84	100.64	201.21	186.89	86.71	354.41	109.00	84.50	194.48	114.00	
1916	68.68	95.77	168.68	94.88	92.65	72.62	94.48	59.57	124.82	136.00	93.22	170.29	193.84	99.81	230.54	210.81	87.57	217.62	126.00	96.34	153.51	111.31	
1917	83.61	120.24	243.71	109.18	99.15	98.55	94.48	69.98	133.95	158.67	101.96	178.80	226.15	117.07	238.86	332.62	89.78	266.36	145.00	131.21	197.83	133.20	
1918	125.42	170.88	266.86	149.47	167.42	129.67	118.10	114.74	167.44	158.67	145.65	187.32	226.15	147.34	333.20	655.23	92.30	298.54	158.00	190.70	245.21	172.03	
1919	182.15	281.03	427.00	175.47	185.30	155.61	154.01	127.66	228.33	181.33	151.48	357.61	258.46	213.08	468.11	640.22	94.98	383.37	181.00	261.06	296.55	218.61	
1920	194.10	297.29	527.36	194.96	219.43	197.10	189.44	138.69	313.57	272.00	157.31	613.04	387.68	278.89	640.23	751.46	97.95	440.84	201.00	347.14	320.76	269.34	
1921	110.49	238.82	400.30	178.07	195.23	172.47	159.45	119.39	253.27	181.33	162.00	306.52	193.84	173.68	346.18	706.96	101.51	446.74	218.00	198.01	319.13	201.84	
1922	110.49	195.44	385.04	145.57	153.28	147.83	136.44	115.50	202.01	136.00	171.66	182.25	115.26	141.80	304.39	238.62	103.27	140.61	197.00	163.73	152.13	145.54	
1923	119.44	178.10	404.08	153.37	150.05	136.88	121.33	111.30	211.06	158.67	164.76	256.81	162.41	158.82	319.44	151.29	105.92	278.08	176.00	175.23	187.97	156.45	
1924	128.40	183.08	483.49	148.17	150.05	139.61	121.33	106.12	211.06	136.00	186.10	298.24	188.60	166.62	317.58	185.22	107.61	266.74	155.00	167.18	180.69	159.03	
1925	131.39	174.15	959.75	152.07	143.60	150.56	128.31	102.89	247.24	181.33	148.02	240.25	151.93	179.93	316.84	187.45	108.57	270.27	134.00	168.80	184.80	164.84	
1926	125.42	203.65	259.80	132.58	146.82	153.30	139.46	108.93	250.25	136.00	145.06	231.96	146.69	151.28	304.71	205.25	109.68	273.18	134.00	163.62	168.48	150.39	
1927	107.50	178.16	278.34	106.58	161.34	156.04	116.22	113.35	235.18	158.67	144.23	265.10	167.65	152.70	267.41	200.24	110.07	257.32	134.00	147.02	157.91	147.82	
1928	107.50	153.03	248.51	128.68	125.85	169.73	139.46	112.16	262.31	181.33	148.50	256.81	162.41	152.78	256.92	165.76	109.37	242.99	130.00	153.48	158.41	146.21	
1929	125.42	171.24	225.29	124.78	133.92	125.93	116.22	118.63	280.40	136.00	137.45	265.10	167.65	152.75	233.33	180.96	109.62	230.65	126.00	153.97	150.39	145.38	
1930	95.56	167.71	194.58	116.98	133.92	128.66	113.43	126.72	238.19	136.00	140.88	215.39	136.21	133.25	219.38	166.16	109.54	222.22	122.00	132.16	146.17	132.69	
1931	71.67	113.76	207.60	114.38	127.46	106.76	104.83	117.12	195.98	90.67	141.24	157.40	99.54	102.31	223.71	139.69	107.86	172.18	118.00	103.17	121.45	111.06	
1932	62.71	65.27	182.23	98.78	109.71	84.86	101.34	93.61	147.74	68.00	114.11	132.55	83.82	83.44	187.99	93.42	103.47	110.42	114.00	81.24	88.40	92.87	
1933	72.11	74.77	165.90	87.98	89.14	86.28	82.17	94.80	123.62	102.00	104.33	140.83	76.64	93.90	169.95	69.75	103.76	105.90	111.00	79.10	84.37	95.95	
1934	65.84	82.30	118.18	80.26	84.00	84.86	75.32	103.68	108.54	170.00	91.29	140.83	67.06	102.94	165.43	71.80	100.67	118.24	108.00	93.82	94.40	101.59	
1935	90.93	96.98	127.86	81.80	92.57	87.69	76.14	91.83	138.69	136.00	94.55	132.55	69.45	106.23	130.94	73.04	101.40	117.32	106.00	84.55	94.14	101.83	
1936	94.06	106.16	144.58	81.80	85.71	90.52	82.17	91.04	114.37	136.00	91.29	124.26	67.06	107.07	137.65	94.94	101.77	105.90	104.00	88.78	96.27	103.40	
1937	83.13	100.81	129.10	98.55	106.33	102.84	90.73	94.10	113.07	208.00	91.29	105.88	63.53	113.37	109.26	100.58	101.98	104.90	102.00	101.74	95.51	107.06	
1938	98.44	95.19	120.02	93.72	99.28	112.80	99.68	95.76	111.66	108.00	91.29	86.03	101.18	99.02	117.59	94.26	101.48	117.24	101.00	104.69	113.29	101.74	
1939	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1940	96.25	102.24	111.44	99.36	105.24	90.05	100.29	98.96	92.46	76.00	105.23	108.09	103.53	95.55	168.61	92.52	99.17	115.33	96.00	103.58	108.44	99.57	
1941															168.61								
Food weight	0.4049	0.0567	0.0279	0.007	0.0301	0.0421	0.0004	0.11	0.0011	0.1744	0.003	0.1456	0.0001	1.0000									
Total weight														0.4763	0.0171	0.0382	0.2276	0.0224	0.0632	0.0842	0.0711	1.0000	

(2) Long-run Provisional CPI, 1902~2005 and Some Related Series

Year	Central Bank of the Philippines CPI [1980=100]	Our CPI [1939=100]	Combined CPI [1980 = 100]	Secondary industry output, in thousands 1939 pesos	Secondary industry employment, in thousands	Secondary industry average labor productivity, in 1939 pesos	Hooley's money wage index [1939 = 1.0]
1899							
1900							
1901							
1902		83.55	2.959	49,858.856			0.670
1903		88.51	3.135	69,242.365	1,026.379	67.463	0.750
1904		88.21	3.124	54,906.239	1,013.032	54.200	0.760
1905		90.01	3.188	62,954.832	999.924	62.960	0.780
1906		90.98	3.222	75,150.668	987.069	76.135	0.800
1907		92.19	3.265	76,997.388	974.484	79.014	0.830
1908		94.02	3.330	68,389.759	962.194	71.077	0.860
1909		100.11	3.546	64,840.911	950.234	68.237	0.880
1910		97.74	3.462	81,926.533	938.649	87.281	0.860
1911		100.94	3.575	98,088.248	927.502	105.755	0.950
1912		111.01	3.931	118,962.920	916.878	129.748	0.940
1913		105.16	3.724	129,553.010	906.890	142.854	1.000
1913		101.47	3.593	127,179.886	897.689	141.675	1.050
1915		114.00	4.037	103,889.394	889.479	116.798	1.090
1916		111.31	3.942	112,647.409	882.531	127.641	1.260
1917		133.20	4.717	125,732.513	877.207	143.333	1.450
1918		172.03	6.093	157,864.061	873.993	180.624	1.580
1919		218.61	7.742	164,472.271	850.112	193.471	1.810
1920		269.34	9.539	159,728.717	827.234	193.088	2.010
1921		201.84	7.148	232,016.998	805.368	288.088	2.180
1922		145.54	5.155	286,509.434	784.532	365.198	1.970
1923		156.45	5.541	228,940.098	764.751	299.365	1.760
1924		159.03	5.632	225,745.653	746.061	302.584	1.550
1925		164.84	5.838	214,251.477	728.506	294.097	1.340
1926		150.39	5.326	225,662.303	712.147	316.876	1.340
1927		147.82	5.235	242,825.706	697.059	348.357	1.340
1928		146.21	5.178	272,487.030	683.334	398.761	1.300
1929		145.38	5.149	282,635.319	671.086	421.161	1.260
1930		132.69	4.699	297,077.509	660.454	449.808	1.220
1931		111.06	3.933	348,158.085	651.606	534.308	1.180
1932		92.87	3.289	427,021.262	644.743	662.312	1.140
1933		95.95	3.398	354,087.385	640.109	553.167	1.110
1934		101.59	3.598	424,982.063	637.994	666.122	1.080
1935		101.83	3.606	270,937.213	638.744	424.172	1.060
1936		103.40	3.662	310,663.715	642.771	483.320	1.040
1937	3.792	107.06	3.792	365,037.702	650.566	561.108	1.020
1938	3.928	101.74	3.928	399,948.614	662.713	603.502	1.010
1939	3.993	100.00	3.993	442,604.152	675.086	655.626	1.000
1940	4.152	99.57	4.152	417,085.661	687.691	606.502	0.960
	(To continue)		(To continue)				

3) Long-run Provisional CPI, 1902~2005 (continued)

Year	CBP CPI [1980=100]	Combined CPI [1980 = 100]	Year	CBP CPI [1980=100]	Combined CPI [1980 = 100]
1941	4.251	4.251	1981	112.155	112.155
1942		6.854	1982	124.523	124.523
1943		17.611	1983	138.021	138.021
1944		632.910	1984	206.007	206.007
1945	29.428	29.428	1985	248.693	248.693
1946	22.174	22.174	1986	261.837	261.837
1947	16.456	16.456	1987	279.505	279.505
1948	15.550	15.550	1988	307.633	307.633
1949	15.081	15.081	1989	337.165	337.165
1950	15.541	15.541	1990	391.616	391.616
1951	16.832	16.832	1991	472.524	472.524
1952	15.749	15.749	1992	530.358	530.358
1953	15.214	15.214	1993	585.425	585.425
1954	14.992	14.992	1994	645.413	645.413
1955	14.843	14.843	1995	698.337	698.337
1956	15.244	15.244	1996	757.069	757.069
1957	15.511	15.511	1997	806.766	806.766
1958	16.031	16.031	1998	887.443	887.443
1959	15.882	15.882	1999	935.849	935.849
1960	16.550	16.550	2000	979.092	979.092
1961	16.803	16.803	2001	1,048.607	1,048.607
1962	17.782	17.782	2002	1,081.896	1,081.896
1963	18.777	18.777	2003	1,121.060	1,121.060
1964	20.321	20.321	2004	1,188.617	1,188.617
1965	20.840	20.840	2005	1,287.505	1,287.505
1966	21.965	21.965			
1967	23.341	23.341			
1968	23.883	23.883			
1969	24.362	24.362			
1970	27.863	27.863			
1971	31.927	31.927			
1972	35.199	35.199			
1973	40.127	40.127			
1974	53.573	53.573			
1975	57.937	57.937			
1976	61.528	61.528			
1977	66.385	66.385			
1978	71.419	71.419			
1979	84.864	84.864			
1980	100.000	100.000			
	To continued	To continued			

Note) CPI's for 1937~2005 have been prepared by connecting its series published by the Central Bank of the Philippines (CBP). The missing figures for the years 1942~1944 have been supplemented by arithmetically 'cost of living' data for Jan. 1942~Dec. 1944 reported by Eduardo Z. Romualdez, "Financial Problems Created by the War," *Journal of History*, Vol.10, No.4, 1962, pp. 461-462.

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