經 濟 統 計

ECONOMIC FACTS

南京金陵大學農學院農業經濟系出版

DEPARTMENT OF AGRICULTURAL ECONOMICS
COLLEGE OF AGRICULTURE AND FORESTRY
UNIVERSITY OF NANKING
### NANKING, CHINA

第一圖　　成都市勞動負販界生活費指數民國廿六年一月至廿七年五月

民國二十六年二月至六月＝一○○

　　抗戰開始以來，總指數尚無上升之趨勢，蓋因食物價格低廉之故。惟衣著類材料則猛漲百分之二○有強。

FIGURE 1.—INDEX NUMBERS OF COST OF LIVING FOR THE LABORER-PEDLAR CLASS IN CHENGTU, CHINA, JANUARY, 1937 – JUNE, 1938.

Feb. – June 1937 = 100

　　There has been no upward movement of the general index due to the cheaper foodstuffs since the outbreak of the war. Cost for clothing materials has shot up by more than 20 per cent on account of the hostilities.
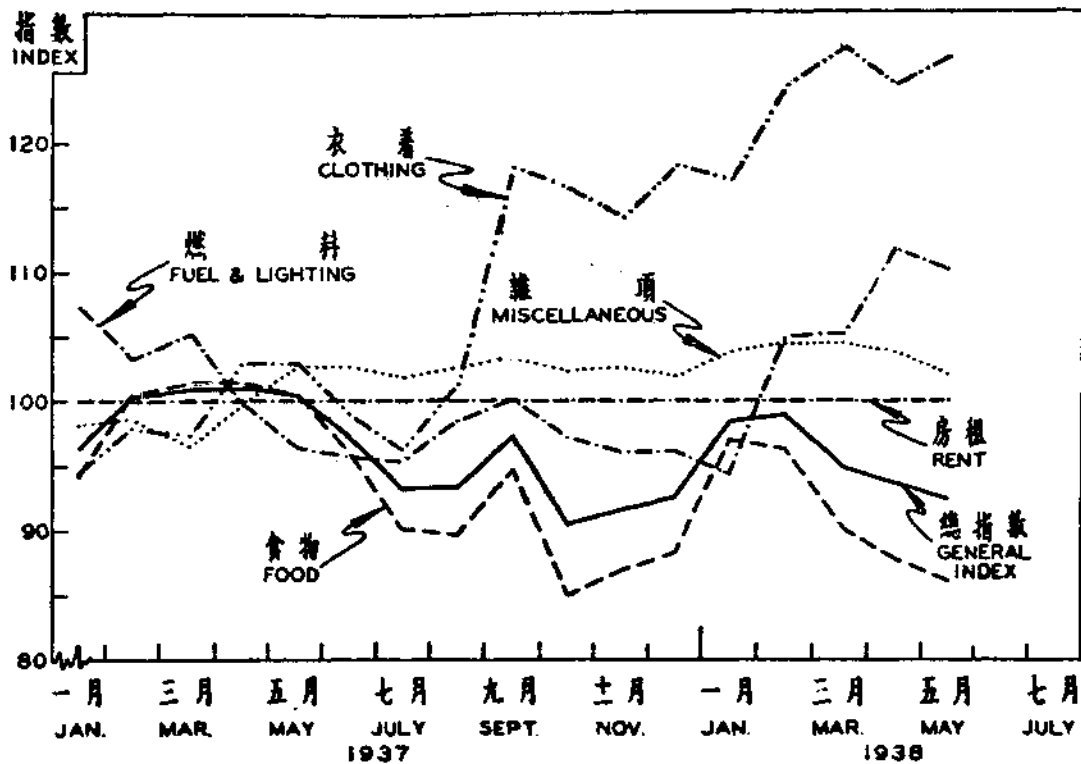
A 欄：　指數為上海對倫敦，紐約，巴黎，漢堡，橫濱，印度，爪哇，香港，及新加坡，電滙之簡單幾何平均

B 欄：　根據香港華南晨報
C 欄：　根據香港華南晨報
D 欄：　根據香港華南晨報

E 欄：　$\dfrac{K \text{欄}}{H \text{欄}} \times$ 一九二六年平均上海對倫敦之電滙

F 欄：　$\dfrac{L \text{欄}}{H \text{欄}} \times$ 一九二六年平均上海對紐約之電滙

G 欄：　$\dfrac{M \text{欄}}{H \text{欄}} \times$ 一九二六年平均上海對香港之電滙

H 欄：　第二三七至二四三頁：上海物價之斯答鐵司脫指數，一九一三年＝一〇〇　換算一九二六年為基期時乘以〇·六六六七(一·五〇之倒數)

I 欄：　H 欄 × Q 欄

J 欄：　計算方法見第二四〇頁附註

K 欄：　「斯答鐵司脫」週刊所載之英國斯答鐵司脫指數，一八六七至一八七七年＝一〇〇　換算一九二六年為基期時乘以〇·七九四九一三

L 欄：　華倫及皮而生「黃金與物價」第一八二頁：美國斯答鐵司脫指數　換算一九二六年為基期時乘以〇·六八四九三一五最近資料來自私人報告

M 欄：　香港進出口貨部所編之批發物價指數（包含保險運輸成本之物價指數）一九二二年＝一〇〇，換算為一九二六年為基期時乘以〇·九八六

N 欄：　H 欄之倒數乘以一〇〇

O 欄：　$\dfrac{\text{上海對倫敦之電滙指數，一九二六年}=\text{一〇〇}}{K \text{欄}}$

P 欄：　$\dfrac{\text{上海對紐約之電滙指數，一九二六年}=\text{一〇〇}}{L \text{欄}}$

Q 欄：　$\dfrac{\text{上海對倫敦之電滙}}{\text{倫敦之中國銀幣所含銀量之價格}}$

R 欄：　$\dfrac{\text{倫敦每兩純金之便士價格}}{\text{上海對倫敦之電滙}}$

中國貨幣與物價水準*
CHINESE CURRENCY AND THE PRICE LEVEL*

時期 Period	上海國幣對九種外幣之電滙指數 Index of yuan exchange rate in Shanghai on nine countries	外國對申電滙市價 Foreign Exchange Rate			國幣之購買力平價 Purchasing power parity of Chinese yuan			物價指數 (一九二六年=一〇〇) Price Indices 1926 = 100						國幣之物品價格 一九二六年=一〇〇 Value of yuan in terms of commodities (1926 = 100)			國鈔之銀元價格 Value of paper yuan in terms of silver yuan	倫敦以國幣計之金價 Price of gold in yuan in London	時期 Period
		倫敦對申國幣一元合便士 T.T. London on Shanghai (Pence per yuan)	紐約對申國幣百元合美金元 T.T. New York on Shanghai (U.S.$ per 100 yuan)	香港對申國幣百元合港幣 T.T. Hongkong on Shanghai (H.K.$ per 100 yuan)	國幣對英磅 Pence per yuan	國幣對美元 U.S.$ per 100 yuan	國幣對港幣 H.K.$ per 100 yuan	中國「上海斯氏指數」 China "Shanghai Statist"			外國 Foreign Countries			中國 China	英國 England	美國 U.S.A.			
								以國幣計 in currency	以銀幣計 in silver	以金價計 in gold	英國 U.K.	美國 U.S.A.	香港 Hongkong						
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
1926	100.0	24.535	43.98	93.62	24.2	48.9	91.8	100.00	100.0	100.0	100.00	100.00	100.0	100.0	100.0	100.0	1.032	42.15	1926
1927	89.9	22.358	43.94	93.09	22.3	44.2	—	105.33	105.7	96.7	97.30	95.21	—	95.0	93.6	95.9	1.036	46.26	1927
1928	92.5	22.993	46.14	94.07	22.7	46.6	—	101.33	101.8	96.1	95.27	96.57	—	98.7	98.4	97.2	1.037	44.98	1928
1929	84.5	20.837	41.90	90.87	20.9	43.3	—	105.33	104.7	89.7	91.22	93.15	—	95.0	93.1	91.0	1.026	49.64	1929
1930	62.5	14.961	29.92	90.97	16.1	33.1	—	115.33	114.3	70.1	77.03	78.08	—	86.7	79.2	78.1	1.023	69.13	1930
1931	49.6	12.083	22.44	95.24	13.1	24.7	101.3	122.00	119.4	55.4	66.22	61.64	134.7	82.0	74.3	73.3	1.010	93.24	1931
1932	55.6	14.952	21.74	93.91	13.9	22.4	100.61	110.67	108.6	48.8	63.51	50.68	120.7	90.3	95.9	86.6	1.013	96.12	1932
1933	57.5	15.050	28.60	91.00	15.3	28.3	93.0	100.67	97.9	42.1	63.51	58.22	102.0	99.3	96.5	91.4	1.003	101.03	1933
1934	61.3	16.383	34.09	89.13	16.3	35.2	88.2	96.00	86.3	39.7	64.86	68.97	92.3	104.2	103.0	100.5	0.928	102.31	1934
1935	64.3	18.070	36.57	78.04	16.7	37.2	71.9	98.00	71.5	42.8	67.57	74.66	76.8	102.0	108.9	99.5	0.753	95.85	1935
1936	56.1	14.559	29.75	95.24	14.6	32.6	80.4	116.00	98.6	41.9	70.27	77.40	101.7	86.2	84.7	78.4	0.878	117.11	1936
1937	59.2	14.519	29.62	97.62	13.8	29.1	83.1	142.80	120.9	51.5	81.64	84.93	129.3	70.0	72.5	70.5	0.874	118.06	1937
1936																			**1936**
Jan.	54.9	14.705	29.66	94.12	15.2	34.9	80.6	109.33	93.2	39.2	68.92	78.08	96.0	91.5	86.3	77.2	0.880	117.62	Jan.
Feb.	54.9	14.643	29.91	93.57	15.1	33.9	79.8	110.67	95.3	40.2	68.92	76.71	96.3	90.4	86.3	79.5	0.888	117.63	Feb.
March	55.0	14.665	29.82	93.51	14.6	32.6	80.6	114.00	98.4	41.4	68.92	76.03	100.2	87.7	86.3	80.2	0.891	117.75	March
April	54.9	14.625	29.73	92.91	14.6	32.5	80.2	115.33	97.1	41.7	68.24	76.71	100.8	86.7	87.2	79.3	0.869	117.54	April
May	55.0	14.534	29.69	92.91	14.7	32.2	82.5	113.33	95.4	41.0	67.57	74.66	101.9	88.2	88.1	81.5	0.869	116.94	May
June	55.1	14.483	29.89	93.90	14.4	32.4	79.6	114.67	98.6	41.4	66.89	76.03	99.5	87.2	89.0	80.0	0.888	115.78	June
July	55.1	14.450	29.97	94.67	14.6	32.5	82.8	116.66	101.4	42.2	68.92	77.40	105.3	85.7	86.3	78.6	0.897	115.93	July
Aug.	55.6	14.486	30.05	97.44	14.8	33.1	80.5	117.33	102.6	42.6	70.27	79.45	102.9	85.2	84.7	76.9	0.903	115.49	Aug.
Sept.	55.3	14.448	29.94	97.26	15.3	33.5	80.4	116.00	100.6	42.3	71.62	79.45	101.6	86.2	82.4	77.2	0.895	116.21	Sept.
Oct.	58.7	14.507	29.33	97.44	15.4	32.9	82.5	117.33	100.1	42.0	72.97	78.77	105.5	85.2	81.5	76.6	0.880	118.47	Oct.
Nov.	58.9	14.616	29.47	97.86	15.4	32.5	77.8	120.66	98.8	43.3	75.00	80.14	102.3	82.9	80.0	75.2	0.845	117.74	Nov.
Dec.	58.7	14.545	29.53	97.86	15.3	32.2	78.1	126.67	101.7	45.4	78.38	83.56	107.8	78.9	75.9	71.8	0.829	118.28	Dec.
1937																			**1937**
Jan.	58.6	14.651	29.65	97.86	14.9	32.7	78.9	131.33	109.3	47.4	79.05	87.67	112.9	76.1	75.3	68.4	0.859	118.25	Jan.
Feb.	58.6	14.649	29.60	98.34	15.0	31.9	79.7	133.33	113.5	48.1	81.08	86.99	115.8	75.0	73.4	69.0	0.878	118.63	Feb.
March	58.7	14.690	29.66	98.52	15.5	32.7	81.6	135.33	111.6	48.9	85.14	90.41	120.3	73.9	69.9	66.4	0.851	118.84	March
April	58.9	14.621	29.71	98.22	15.3	33.0	86.0	134.00	110.3	48.6	83.11	90.41	125.6	74.6	71.6	66.4	0.849	117.14	April
May	58.9	14.570	29.80	98.04	15.2	31.4	84.9	136.67	114.4	49.5	83.78	87.67	126.4	73.2	71.0	68.4	0.864	117.38	May
June	58.6	14.518	29.65	98.46	14.9	30.9	86.2	137.67	116.5	49.7	83.11	86.99	129.3	72.6	71.0	68.7	0.873	118.36	June
July	59.6	14.370	29.49	98.04	14.3	30.1	82.8	142.40	120.5	51.0	84.46	87.67	128.5	72.4	69.8	68.2	0.873	117.88	July
Aug.	59.3	14.467	29.65	97.50	14.0	29.2	85.2	143.60	121.8	51.7	83.11	85.62	133.3	70.6	71.0	69.8	0.875	117.50	Aug.
Sept.	59.6	14.656	29.66	97.32	13.4	27.8	87.6	148.13	125.7	53.4	82.09	84.25	141.4	69.7	71.9	71.0	0.876	118.20	Sept.
Oct.	60.0	14.451	29.46	97.26	13.1	26.6	87.3	148.47	125.9	53.2	80.40	80.82	141.2	68.5	73.4	74.0	0.875	118.33	Oct.
Nov.	60.0	14.306	29.44	96.21	11.5	23.3	78.3	161.40	138.6	57.7	77.03	76.71	137.7	62.0	76.6	78.0	0.886	118.02	Nov.
Dec.	60.0	14.281	29.63	95.92	11.6	22.7	79.2	161.07	145.8	58.0	77.36	74.66	139.1	62.1	75.9	80.8	0.934	118.23	Dec.
1938																			**1938**
Jan.	60.0	14.188	29.70	95.92	11.7	22.9	79.5	158.13	133.3	57.0	76.68	73.97	137.0	63.3	76.9	80.8	0.870	117.56	Jan.
Feb.	—	14.188	29.85	95.92	11.7	22.4	78.5	158.53	133.3	57.4	76.62	72.60	135.6	63.1	75.4	82.4	0.868	117.73	Feb.
March	60.2	13.885	28.45	94.99	11.3	22.0	78.1	159.60	128.4	55.2	74.86	71.92	135.9	62.7	75.6	79.7	0.830*	123.33	March
April	56.3	13.031	27.27	92.04	—	—	—	163.27	130.7	54.1	—	—	135.0	61.5	—	—	0.826*	131.86	April
May	—	11.973	24.07	84.44	—	—	—	162.47	123.3	—	—	—	—	—	—	—	0.783	—	May

Column A: Simple geometric average of T.T. Exchange rates of yuan in Shanghai on London, New York, Paris, Hamburg, Yokohama, India, Java, Hongkong, and Singapore.

Column B: Current quotations are taken from *South China Morning Post.*

Column C: Current quotations are taken from *South China Morning Post.*

Column D: Current quotations are taken from *South China Morning Post.*

Column E: $\dfrac{\text{Column K}}{\text{Column H}}$ X Yearly average T.T. Exchange rate of yuan, Shanghai on London, 1926

Column F: $\dfrac{\text{Column L}}{\text{Column H}}$ X Yearly average T.T. Exchange rate of yuan, Shanghai on New York, 1926

Column G: $\dfrac{\text{Column M}}{\text{Column H}}$ X Yearly average T.T. Exchange rate of yuan, Shanghai on Hongkong, 1926

Column H: pp. 237–243, " Statist " Index in Shanghai, 1913 = 100. Index numbers were converted to the 1926 base by multiplying by 0.6667, the reciprocal of 150.

Column I: Column H X Column Q.

Column J: Method of calculation, see page 239, footnote.

Column K: " Statist " index of U.K. 1867–77 = 100: "The Statist" Journal index numbers were converted to the 1926 base by multiplying by 0.794917.

Column L: "Statist" index of U.S.A. 1913 = 100: Warren and Pearson "Gold and Prices" recent figures: private report. Index numbers were converted to the 1926 base by multiplying by 0.6849315.

Column M: Hongkong C.I.F. Index 1922 = 100 converted to 1926 = 100 by multiplying by 0.986: Exports and Imports Department of Hongkong.

Column N: Reciprocal of Column H X 100.

Column O: $\dfrac{\text{Index number of T.T. Exchange rate of yuan, Shanghai on London, 1926 = 100}}{\text{Column K}}$

Column P: $\dfrac{\text{Index number of T.T. Exchange rate of yuan in Shanghai on New York, 1926 = 100}}{\text{Column L}}$

Column Q: $\dfrac{\text{T.T. Exchange rate of yuan, Shanghai on London}}{\text{Price of silver content of yuan in London}}$

Column R: $\dfrac{\text{Prices of gold per ounce in pence in London}}{\text{T.T. Exchange rate of yuan, Shanghai on London}}$

中國貨幣與物價水準

上海對外滙兌指數 自一九二六年至一九三一年以九國貨幣計算之國幣價值下落甚鉅，由於前期銀價之下落及後期金值之上漲。自一九三一年至一九三五年，以數外國貨幣貶值及白銀之物品價值上漲，國幣之滙兌價值增高。一九三五年十一月三日，中國放棄銀本位，自此以後上海外滙率指數頗為穩定。一九三六年十月及一九三七年七月，此項指數稍漲，大都由於法郎之貶值所致。一九三八年三月中國頒行限制外滙辦法，此後國幣外滙率即行猛跌（第四三七頁第一圖）。

倫敦對上海之電滙率 在一九二六年倫敦以二四・五便士可購國幣一元，其後以銀值繼續跌落而金值上漲，至一九三一年僅須一二・一便士即可購國幣一元。英國於一九三一年放棄金本位，此後英國金價保持於較高水準，同時白銀之物品價值上漲，故自一九三一年後，倫敦國幣對便士之交換率上漲。中國於一九三五年，放棄銀本位並穩定國幣一元換英鎊一四・五便士，此率直至一九三八年三月始終保持穩定，國幣地位未為中日戰爭而搖動。然以今年三月財政部頒佈外滙限制辦法，致一部份群眾發生慌亂，於是國幣滙價落於空前之低水準（第四三七頁第二圖）

紐約對上海之電滙率 一九三一年以前，紐約對上海之電滙率，與倫敦循相似途徑，惟紐約對申電滙率於一九三二年內賡續下落，與倫敦相反。蓋美國於一九三三年三月，始放棄金本位，較英國約遲十八閱月。自一九三五年十一月以後，美國滙率保持平穩水準，逾兩年之久，即國幣一元約合美金三角。一九三八年三月跌為美金二角八分，次月復跌為二角七分，而至五月已達每元合美金二角四分之最低点（第四三八頁第三圖）。

香港對上海之電滙率 一九三五年以前香港採用銀本位，香港對上海之電滙率與倫敦及紐約對上海者不同。一九三四及一九三五兩年，政府徵收白銀出口稅及平衡費，因此國幣貶值。自一九三六年以來，國幣與港幣之滙價頗為平定，蓋以香港與中國同於一九三五年終放棄銀本位，並與英鎊保持固定價值。在一九三七年六月，香港對上海之電滙率為每國幣百元合港幣九八・四六元。自中日戰事爆發後，滙率驟然下降，至一九三八年五月，每國幣百元僅約合港幣八四元（第四三八頁第四圖）。

國幣之購買力平價 —— 購買力平價論，乃世界大戰後凱撒爾敎授所銓釋者。此論之眞實性，自基於多因。英美及中國物價指數所包含之物品大致相同，但香港物價指數所包含之物品及所用之物價，與其他三國迥然不同，（參閱『國外物價』一節之討論）。職是之故，國幣之購買力平價與國幣之英滙及美滙甚為符合，而與港滙價格則甚為軒輊。自中日戰爭爆發以來國內物價高漲而英美兩國則復經受經濟恐慌，因此國幣對美金與英鎊

CHINESE CURRENCY AND THE PRICE LEVEL

General Index of Foreign Exchange Rates in Shanghai.

The value of the yuan in terms of nine other currencies sagged tremendously up to 1931, due to the fall of the value of silver in the earlier part of that period and the rise of the value of gold later. From 1913 to 1935, the exchange value of the yuan appreciated because of monetary devaluation in some other countries and a rise in the commodity value of silver. China left the silver standard on November 3rd, 1935. Since that time, the general index of foreign exchange rates in Shanghai has been fairly stable. The slight advance of the index in October, 1936, and again in July, 1937, were mainly caused by the depreciation of the French franc. In March, 1938, measures to restrict foreign exchange were instituted in China. The exchange rate of the Chinese yuan fell precipitously thereafter (figure 1, page 437).

T.T. Exchange Rate, London on Shanghai.

In 1926 it took 24.5 pence to buy one yuan in London. As the value of silver fell continuously, and that of gold rose thereafter, in 1931 it required only 12.1 pence to buy one yuan. England left the gold standard in 1931. Since then the price of gold in the United Kingdom has been maintained at a higher level. Meanwhile, the commodity value of silver rose. Thus the exchange rate of the Chinese yuan in terms of pence rose in London after 1931. China abandoned the silver standard in 1935 and pegged her currency to the pound sterling at the rate of 14.5 pence per yuan. This rate remained very stable until March, 1938. The yuan was not affected by the Sino-Japanese hostilities, but the nervousness on the part of the public, caused by the foreign exchange restrictions, announced by the Ministry of Finance in March this year, dragged it down to a record low level (figure 2, page 437).

T.T. Exchange Rate, New York on Shanghai.

The T.T. rate of New York on Shanghai followed a similar course to that of London on Shanghai, until 1931. In contrast to the rate of London on Shanghai the New York rate on Shanghai continued to fall in 1932, because the United States left the gold standard in March, 1933, about 18 months later than England. For more than two years, since November, 1935, a stable level has been maintained, i.e., about 30 U.S. cents to a Chinese yuan. It dropped to 28 U.S. cents in March, 1938, 27 U.S. cents in the following month, and in May, it reached the lowest point of 24 U.S. cents to a yuan (figure 3, page 438).

T.T. Exchange Rate, Hongkong on Shanghai.

Before 1935 Hongkong was on the silver standard. The exchange rate of Hongkong on Shanghai varied from those of London and New York on Shanghai. In both 1934 and 1935 the Chinese yuan depreciated, because the equalization fee and the

第一圖　上海國幣對九種外幣之電滙指數，一九二六年至一九三八年四月
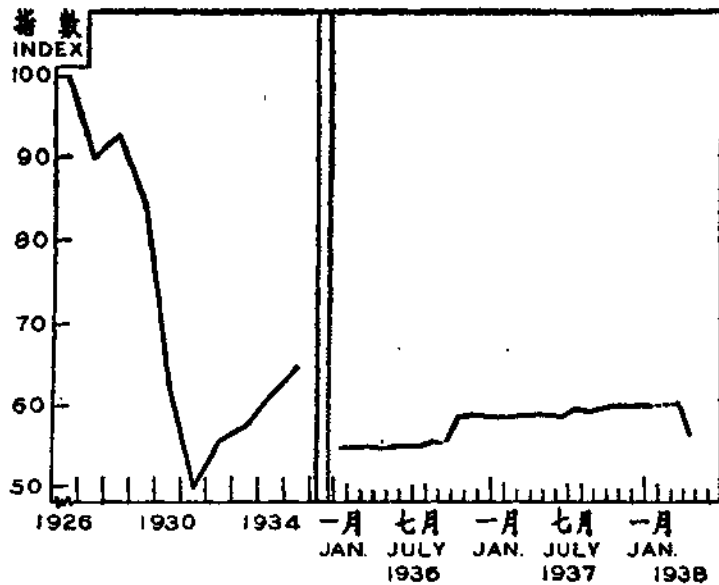
一九二六年＝一〇〇

FIGURE 1.—THE INDEX NUMBERS OF T.T. EXCHANGE RATES OF THE CHINESE YUAN IN SHANGHAI OF NINE OTHER COUNTRIES, 1926 – APRIL, 1938

1926 = 100

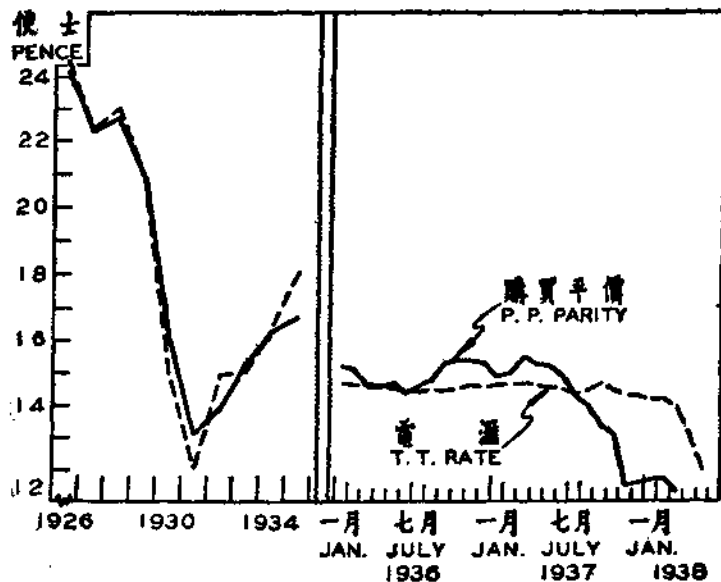第二圖　國幣之購買力平價及其倫敦對上海之電滙率一九二六年至一九三八年五月

（國幣合便士）

FIGURE 2.—THE PURCHASING POWER PARITY OF THE CHINESE YUAN AND THE T.T. EXCHANGE RATE, LONDON ON SHANGHAI, 1926 – MAY, 1938

(Pence per yuan)

之購買力平價，遂落於紐約與倫敦市場國幣電滙率之下。 最近倫敦對上海及紐約對上海之電滙率恐將跌落至購買力平價水準或竟更爲低落， 亦未可知。

　　中國物價　一九三二年以前，中國以貨幣計算之各種物價與以白銀計算之物價循同一途徑。嗣以歐西各國相率放棄金本位， 銀值上漲。中國以國幣計算之物價，其跌落不若以白銀計算之物價爲遠， 因此中國白銀購買力遠較他國爲低。在一九三四及一九三五年， 白銀外流爲數至足驚人。自一九三五年十一月三日後以貨幣計算之物價呈上升之趨勢， 其變動與以金

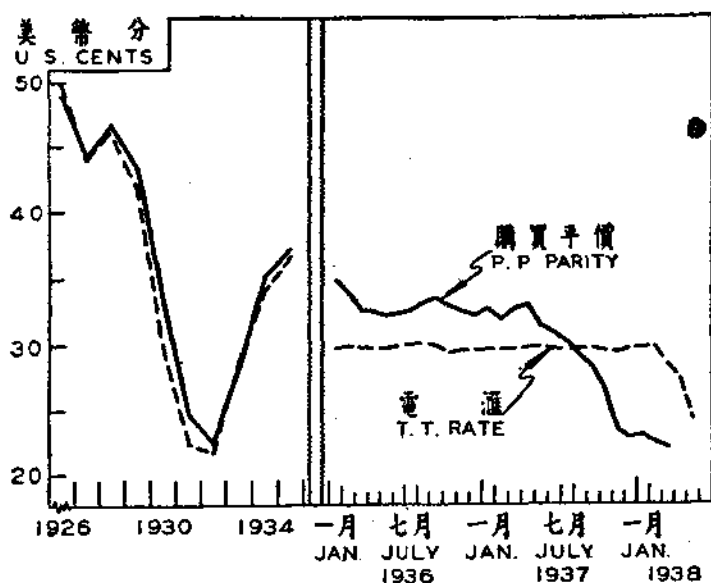第三圖　國幣之購買力平價及其紐約對上海之電滙率一九二六年至一九三
八年五月

（國幣合美分）

FIGURE 3.—THE PUR-
CHASING POWER
PARITY OF THE CHI-
NESE YUAN AND THE
T.T. EXCHANGE RATE,
NEW YORK ON SHANG-
HAI, 1926 – MAY, 1938

(U.S.$ per yuan)

第四圖　國幣之購買力平價及其香港對上海之電滙率一九二六年至一九三
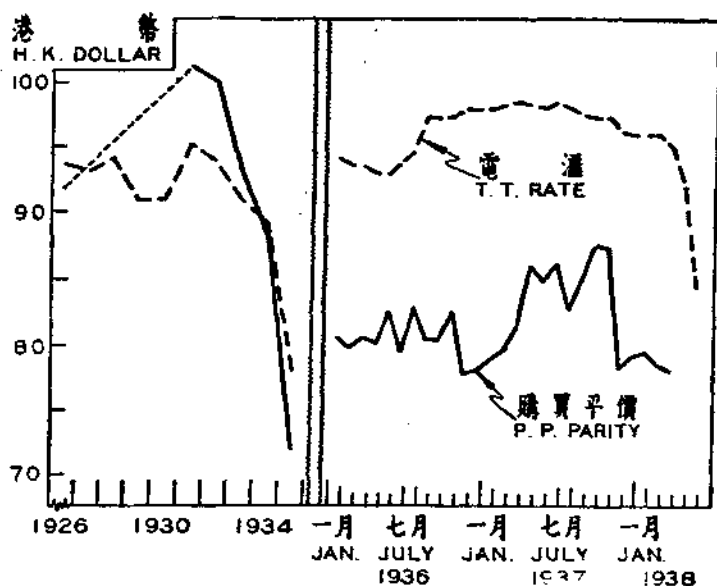八年五月

（每百元國幣合港幣）

FIGURE 4.—THE PUR-
CHASING POWER
PARITY OF THE CHI-
NESE YUAN AND THE
T.T. EXCHANGE RATE,
HONGKONG ON SHANG-
HAI, 1926 – MAY, 1938

(H.K.$ per 100 yuan)

export tax on the movement of silver were instituted during these
years. Since 1936 the yuan exchange rate in terms of Hongkong
dollars has been fairly stable, because both Hongkong and China
had left the silver standard and pegged their currencies to the
pound sterling at the end of 1935. The T.T. rate of Hongkong on
Shanghai was H.K. $98.46 per 100 Chinese yuan in June, 1937.
It declined steadily after the outbreak of the Sino-Japanese
hostilities. In May, 1938, 100 Chinese yuan were worth only
about 84 Hongkong dollars (figure 4, page 438).

計算之價格，較與以銀計算者更爲相同。在一九三六年終，以貨幣計算之物價達一九三一年之高水準。自一九三七年六月至十二月，因現有戰爭關係，以貨幣計算之物價上漲百分之二〇。一九三七年十二月之指數較一九三一年水準高出百分之三四‧八。自一九三五年以來以白銀計算之物價波動水準於較以貨幣計算之物價約低百分之二〇。

中國以金計算之物價與英美兩國循相同途徑，若以一九二六年爲一〇〇，則自一九二九至一九三四年以金計算之物價，由九〇猛跌至四〇，由於金值之上漲，是後物價指數呈上漲趨勢。自一九三七年六月至十二月此項指數上升百分之一九‧二，與同期以貨幣計算之物價上升率相同，可見政府於一九三七年內維持外滙始終不變。一九三八年來以貨幣計算之物價保持於高水準，而以銀計算之物價自一九三七年十二月至一九三八年三月，則下落百分之一一。蓋因中國物價之上漲，不能抵銷當時以銀計算之國幣貶值。以英鎊及美金計算之國幣價值跌落，故以金計算之物價亦由一九三七年十二月之五九‧二跌至一九三八年四月之五五‧八（第四三九頁第五圖）。

國外物價 一九三一年以前英美兩國之物價變動於平行線上，一九三一年九月英國貨幣貶值其物價因之稍爲平穩，而美國物價於一九三二年則仍繼續下傾。美國於一九三三年春放棄金本位，故一九三二至一九三四年物價指數增高一八点。自一九三五至一九三七年春，英美兩國物價指數一致上升，是後兩國又同經歷經濟恐慌，英國物價指數自一九三七年三月至
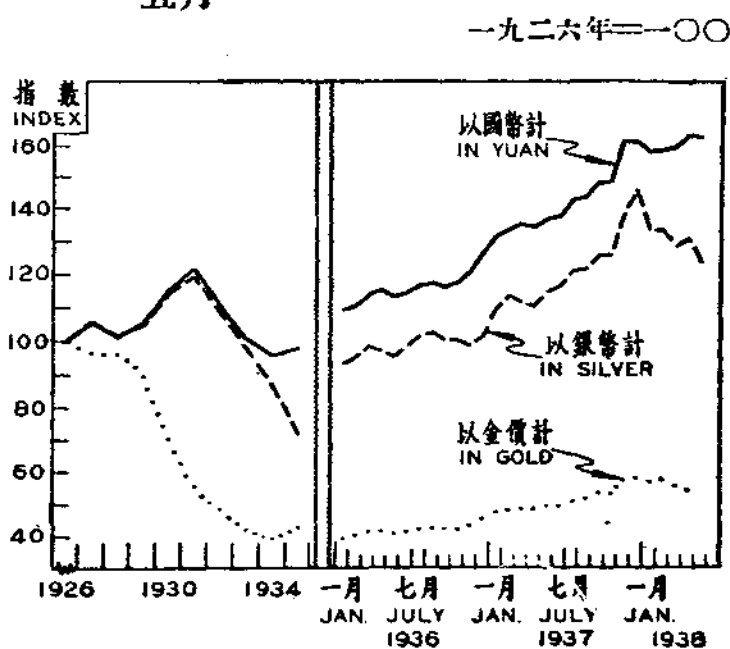
第五圖　上海批發物價之『斯答的司斯脫』指數一九二六年至一九三八年五月

一九二六年＝一〇〇

FIGURE 5.—THE "SAUER-BECK - STATIST" IN-DEX NUMBERS OF WHOLESALE PRICES IN SHANGHAI, 1926 – MAY, 1938

1926 = 100

Purchasing-Power Parity of Chinese Yuan.

The theory of purchasing-power parity was expounded by Professor Gustav Cassel after the World War. The validity of this theory would, of course, depend upon many factors. For the United Kingdom, the United States and China, the commodities included in compiling the index numbers of commodity prices were the same or nearly the same, but for Hongkong the commodities included and price quotations used were quite different from all others (see discussions under "Prices Abroad"). Correspondingly, the movement of the purchasing-power parity of the Chinese yuan corresponded very closely to that of the T.T. rate in terms of either U.S. dollars or the pound sterling, while a big discrepancy existed between the purchasing-power parity and T.T. exchange rate of the Chinese yuan in Hongkong. Since the outbreak of the Sino-Japanese hostilities, commodity prices in China have risen, while the United States and United Kingdom have been experiencing another economic depression. Thus, the purchasing-power parity of the Chinese yuan in terms of both U.S. dollars and the pound sterling, fell below the T.T. rates of the yuan in New York and London. It is probable that the T.T. rate of London on Shanghai and that of New York on Shanghai will fall to the level of the purchasing-power parity or even lower.

Prices in China.

In China until 1932, prices of all commodities in terms of currency have followed the same course as prices in terms of silver. On account of the successive abandonment of the gold standard by different European countries and the rise of the value of silver, prices in terms of currency in China did not fall as fast as prices in terms of silver. Therefore, the purchasing power of silver in China was too low in comparison with that in other countries. A tremendous amount of silver escaped from China during 1934 and 1935. After November 3, 1935, prices in terms of currency have showed an upward trend, fluctuating in a similar way as prices in gold rather than prices in silver. Prices in terms of currency reached their 1931 level at the end of 1936. From June to December, 1937, prices in currency rose by 20 per cent on account of the present hostilities. The index in December, 1937, was 34.8 per cent higher than the 1931 level. Prices in silver have fluctuated at a level approximately 20 per cent below the price in currency since 1935.

Prices in China in terms of gold have followed much the same course as those in England and the U. S. A. From 1929 to 1934 prices in gold fell precipitously from 90 to 40, if 1926 equals 100, due to the rise of the value of gold, and thereafter they have shown an upward trend. From June to December, 1937, this index advanced by 19.2 per cent, which indicates the same rate of increase as took place in the index of prices in terms of currency over the same period. The Government has obviously maintained

一九三八年四月下跌一〇・三点，同期美國指數下跌一八・五点（第四四一頁第六圖）。香港貨幣本位與中國同，故其物價變動亦與中國同。

國幣之物品價值　一九三五年十一月三日以前中國採用銀本位制，英美白銀購買力之漲落與中國物價指數之倒數情形極爲相似。　自一九二六至一九三一年五年之內國幣之物值，在美國下落二七点，在英國下落二八点，而在中國則僅下落十八点，由於中國物價不易變動之故。　自一九三五年後，國幣物值已不復受銀值之統制，而受英美兩國物價水準之統制，如中國能始終維持其國幣對英美之法定滙率，則國幣價值之變動必與英美兩國物價變動適成相對之關係。　自一九三七年九月後國幣物值之漲落，在英美兩國與國內迥異（第四四二頁第七圖）。設中國對外貿易不爲日本之侵畧所破壞，則絕不致有此等現象發生，而中國之入口貨亦必然大增也。

以銀元計算之國鈔　自一九二六年至一九三三年國鈔恒溢出倫敦市塲國幣面值百分之一至四。自一九三四年直至一九三五年秋，雖中國採用銀本位制，國鈔開始下跌，其結果在一九三四及一九三五兩年大量白銀出口，限制白銀出口之種種實施不特不能糾正此種情形，反使國鈔價值益形低落。一九三五年平均每元國鈔僅合銀元七角五分。　自中國正式放棄銀本位後，一九三六及一九三七年國鈔每元合銀幣八角七分。　自一九三八年三月始雖國外銀價下降而國鈔對銀幣之值仍然猛跌（第四四三頁第八圖），可知近來國幣對英鎊及美金滙率未能穩定。

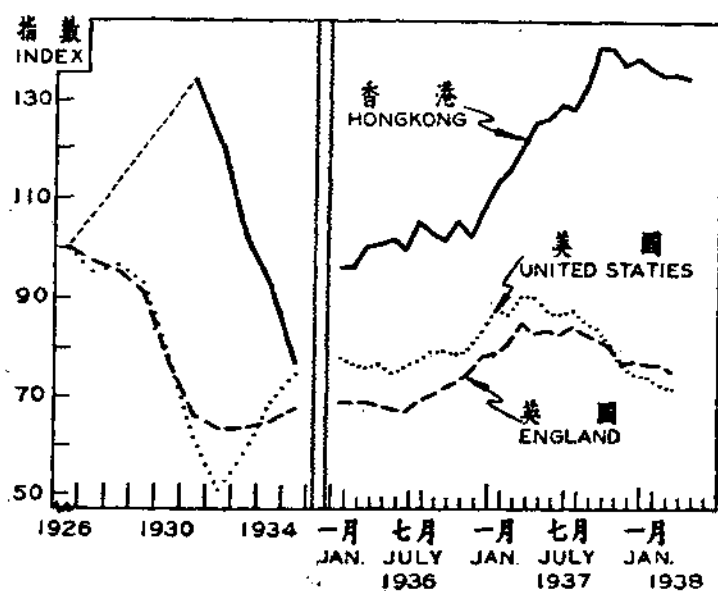第六圖　英國美國及香港之批物價指數，一九二六年至一九三八年四月
一九二六年＝一〇〇

FIGURE 6.—THE INDEX NUMBERS OF WHOLE-SALE PRICES IN ENGLAND, THE UNITED STATES AND HONGKONG, 1926 – APRIL. 1938

1926 – 100

the exchange value of the yuan rigidly throughout 1937. Prices of commodities in terms of currency remained at a high level during 1938, while prices in terms of silver dropped by 11 per cent from December, 1937, to March, 1938, because the advance of commodity prices in China did not counterbalance the depreciation of the Chinese yuan in terms of silver. As the value of the Chinese yuan in terms of sterling and U.S. dollars fell, prices in terms of gold declined from 59.2 in December, 1937, to 55.8 in April, 1938 (figure 5, page 439).

Prices Abroad.

Prices in England and the United States fluctuated over parallel courses until 1931. England devalued her currency in September, 1931, and prices have been more or less stable, while prices in the United States were still declining during 1932. The United States left the gold standard in the spring of 1933 and the price index rose by 18 points from 1932 to 1934. Price indexes in both the United States and United Kingdom advanced correspondingly from 1935 to the spring of 1937. Since that time both countries have been experiencing another depression. The price index for England fell by 10.3 points from March, 1937, to April, 1938, and that for the States by 18.5 points over the same period (figure 6, page 441). As Hongkong has been on the same monetary standards as China, the movement of commodity prices there resembles those in China.

Commodity Value of the Yuan.

Prior to November 3, 1935, China was on the silver standard. The purchasing power of silver in the United Kingdom and the United States rose or fell in much the same manner as the reciprocal of the price index in China. In five years, from

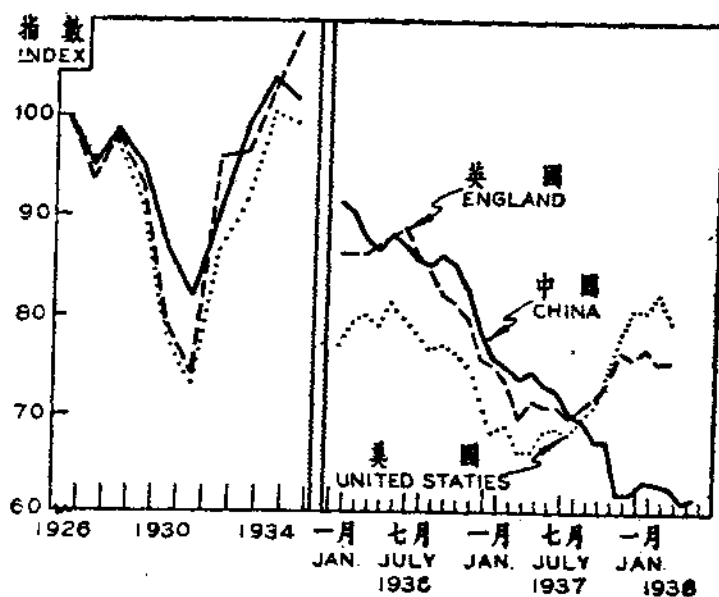第七圖　國幣在英國美國及中國之價值一九二六至一九三八年五月

一九二六年＝一〇〇

FIGURE 7.—THE VALUE OF THE CHINESE YUAN IN ENGLAND, THE UNITED STATES, AND CHINA, 1926 – MAY, 1938

1926 – 100

— 442 —

第八圖　以銀幣計算之國鈔價格一九二六年至一九三八年五月
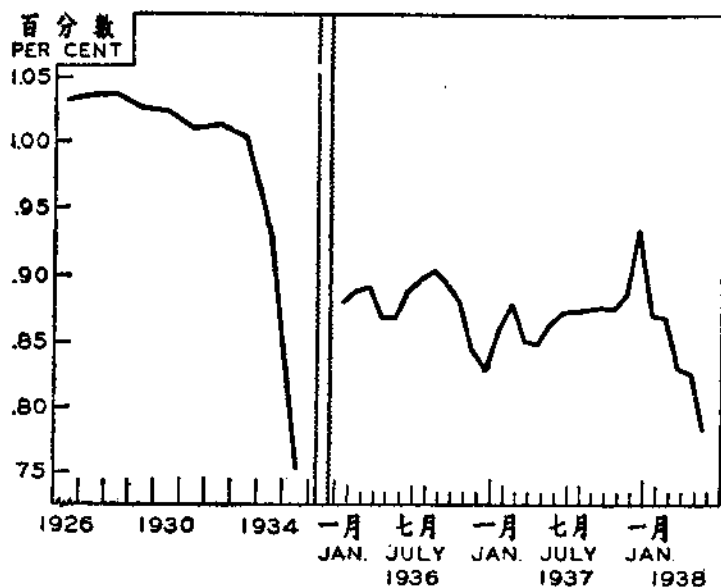
FIGURE 8.—THE PRICE OF THE PAPER YUAN IN TERMS OF THE SILVER YUAN, 1926 – MAY, 1938
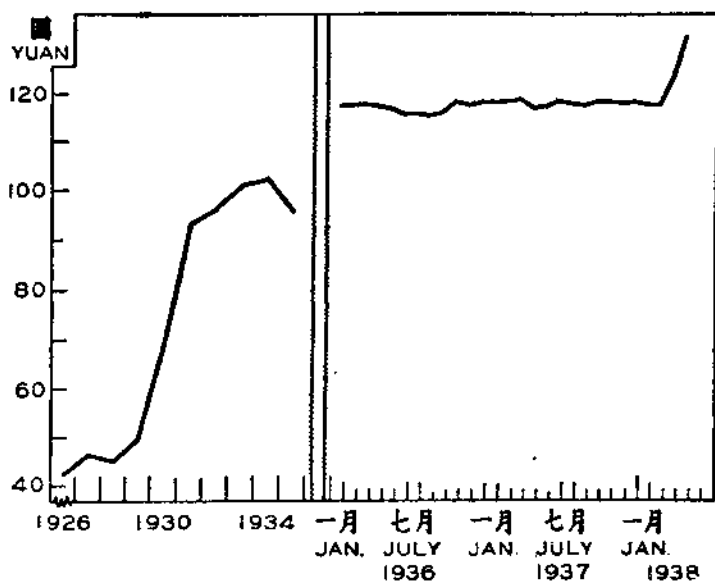
第九圖　倫敦以國幣計算之金價一九二六年至一九三八年四月

FIGURE 9.—THE PRICE OF GOLD IN TERMS OF CHINESE YUAN IN LONDON, 1926–APRIL, 1938

　　倫敦以國幣計算之金價　自一九二六至一九二八年以國幣計算之金價較爲穩定。自一九二九年始，以國幣計算之金價猛漲，由於世界各國金值上漲之故。當一九三一至一九三四年間，因銀值上漲金值低貶，故以國幣計之金價猛漲性爲之稍殺。自一九三五年十一月三日後，國幣與英鎊保持穩定滙率，由是以國幣計算之金價頗爲平穩，且因以英鎊計算之金價亦甚平穩也。自一九三八年一月以來，以國幣計算之金價猛漲（第四四三頁第九圖）可知抗戰期內維持外滙之困難必日增不已。

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楊　蔚
胡國華

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1926 to 1931, the commodity value of the yuan fell by 27 points in the United States and by 26 points in the United Kingdom, while in China it fell only by 18 points, due to the rigidity of price changes in China. Since 1935, the commodity value of the yuan has been governed by the price level in the United States and United Kingdom rather than by the value of silver (figure 7, page 439). If China were able to maintain her currency at a constant exchange rate with sterling and the U.S. dollar, change in the value of the yuan would be inversely related to the change of prices in England and the United States. The rise or fall of the commodity value of the yuan in the United States and England has deviated from that in China since September, 1937. Were China's foreign trade not paralyzed by the Japanese invasion, this phenomenon would never have occurred, and China's imports from foreign countries would be tremendously increased.

Paper Yuan in Terms of Silver Yuan.

The paper yuan, from 1926 to 1933, was at a premium of from 1 to 4 per cent above the par in London. Since 1934, it has depreciated even though China had been on the silver stnadard up to the fall of 1935. This resulted in the export of a huge amount of silver in both 1934 and 1935. Restrictions on the export of silver did not correct this situation, but depreciated the paper yuan still further. On the average, one paper yuan was worth only 0.75 silver yuan in 1935. After the official departure from the silver standard, the paper yuan was worth about 0.87 silver yuan in 1936 and 1937. Beginning from January, 1938, the paper yuan in terms of silver yuan fell precipitately, while the price of silver abroad was declining. Evidently, the exchange rate of the Chinese yuan has not been stable in relation to sterling and the U.S. dollar recently (figure 8, page 440).

Price of Gold in Terms of Yuan in London.

The price of gold in yuan was comparatively stable from 1926 to 1928. Beginning from 1929, the price of gold in yuan advanced rapidly, due to the increase in the value of gold all the world over. The rapidity of the rise in the price of gold in terms of yuan was checked during the years between 1931 and 1934, because of the appreciation of the value of silver and the depreciation of that of gold. After November 3, 1935, China maintained her currency at a constant ratio with British currency. The price of gold in terms of yuan, therefore, has been fairly stable, because the price of gold in sterling has been very stable too (figure 9, page 440). The increasing difficulties of maintaining the value of the yuan during the present war can be perceived from the rapid advance of the price of gold in terms of yuan from January, 1938.

W. Y. Yang
Hu Kwo-hwa

河南洛陽農佃制度與農塲企業大小之關係

本文爲河南洛陽一百農家，一九三六年之農事經營研究。是年該處旱魃爲虐，致作物產量僅達通常產量百分之六十。被調查之農家，皆位於乙等之土地區內，其土壤則分爲砂粘土及粉砂粘壤土[1] 計有自耕農三六家，半自耕農五六家及佃農八家。

　　農塲大小　農塲面積平均爲二一•六畝，作物面積爲二〇•六畝，又作物畝面積爲二四•六畝（第四四七頁第一表）[2] 佃農之農塲面積，作物面積及作物畝面積均爲最大。半自耕農之農塲面積平均爲一九•五畝，其中百分之四五•一爲自有者，百分之〇•四爲押進者，百分之五四•四爲租進者。自耕農之成年男子單位爲五•五，半自耕農爲四•五，佃農則爲四•七。

　　分租爲洛陽最通行之納租方法。採用分租農家，佔納租農家總數百分之五四•七（第四四七頁第二表），谷租則佔百分之三四•四。採用錢租及錢谷租者，爲數極少。

　　農塲資本　自耕農之農塲資本總額爲八三三•一元，半自耕農爲六五六•八元，佃農爲一〇〇一•九元（第四四七頁第三表）。田地投資爲最大之資本項目，佔總資本百分之七五；農舍投資次之，爲百分之一六•四。自耕農田地投資佔總資本百分之七三•五，半自耕農佔百分之七五•三，佃農則佔百分之八〇•四。自耕農農舍投資佔總資本百分之一八，半自耕農佔百分之一五•七，佃農則佔百分之一三•一。上述事實，顯示佃農之資本大部爲其地主之投資。地主所供給其佃農之房舍，普通皆甚簡陋，因之佃農之房舍投資百分率，較自耕農及半自耕農爲低，而其田地投資百分率則較自耕農及半自耕農爲高。自耕農塲內樹木價值較半自耕農及佃農爲高，蓋農民多不願植樹於租進之田地也。

　　農塲支出　農塲支出分爲現金支出及非現金支出兩大類。自耕農之現金支出百分率爲二八•六，半自耕農爲三三•三，佃農爲三七•八（第四四八頁第四表）。反之非現金支出百分率，則自耕農較半自耕農及佃農爲高。家工估值爲最大支出項目，各種農塲之總平均爲七六•九元佔總支出百分之六八。田地賦稅爲現金支出中最大之項目，而爲總支出中之次大項目。購買種子，秧苗，飼料及肥料之費用，與農塲資本中種子，飼料肥料等之所投資本，成一反比例。佃農投於種子飼料及肥料等之資本百分率較小，因之其購買種子，秧苗，飼料及肥料等之費用較高。

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1 孫文郁路易士崔毓俊著：　豫鄂皖贛四省土地分類之研究　金陵大學農業經濟系一九三六年出版
2 一當地畝＝0.94 市畝＝0.0627 公頃

RELATION OF LAND TENURE TO SIZE OF FARM BUSINESS IN LOYANG, HONAN

The year's business for 1936 was studied on one hundred farms in Loyang, Honan, North China. It was a year of drought conditions and crop yields amounted to only sixty per cent of normal. All farms were located on Class IV land, consisting of silty clay and silty clay loam soils.[1] Thirty-six farms were owned by operators themselves, 56 farms were partly owned and eight were rented.

Size of Farm.

The average farm area was 21.6 mow, crop area 20.6 mow, and crop mow area 24.6 mow (table 1 page 447).[2] Tenant farms had the largest farm area, crop area and crop mow area. The size of a partowner's farm was 19.5 mow, of which 45.1 per cent was owned, 0.4 per cent was mortgaged and 54.4 per cent rented. The adult male units per owned farm were 5.5, per partly owned farm 4.5 and 4.7 per tenant farm.

Share renting was the most common type of renting system employed. It amounted to 54.7 per cent of all renting farms (table 2, page 447). Crop renting represented 34.4 per cent. Cash renting and cash and crop renting systems are very rare in Loyang.

Farm Capital.

The total farm capital was 833.1 yuan on owned farms, 656.8 yuan on partly owned farms and 1001.9 yuan for rented farms (table 3, page 447). Investment in land was the largest item, being 75.0 per cent of the total capital, that on farm buildings ranked next, being 16.4 per cent. The value of land on owned farms was 73.5 per cent of the total capital, as compared with 75.3 per cent for partly owned farms and 80.4 per cent for rented farms. Value of farm buildings on owned farms was 18 per cent as compared with 15.7 per cent on partly owned farms and 13.1 per cent on rented farms. These facts serve to show that the capital investment on tenant farms is mostly made by their landlords. In general landlords furnished poor shelters for their tenants., The percentage of value of farm buildings for tenants was, therefore, lower than that for owners and part owners. On the other hand, the percentage of value of land was higher for tenants than for owners and part owners. The value of trees was higher on owned farms than on partly owned and tenant farms, because farmers seldom planted trees on rented land.

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1   Swen, W.Y., Lewis, A.B., and Tsui, R.T., Land classification of 34 hsien in Anhwei, Honan, Hupeh, and Kiangsi. Department of Agricultural Economics, University of Nanking, 1936.
2   One local mow = 0.94 shih mow = 0.0627 hectares.

第一表　河南洛陽一百農塲之農佃制與農塲大小及家庭大小之關係
TABLE 1.—RELATION OF LAND TENURE TO SIZE OF FARM AND FAMILY,
100 farms, Loyang, Honan, 1936

農 佃 制 Land Tenure.	農家數目 Number of farms	農塲面積 Farm, area	作物面積 Crop area	作物畝 Crop mow	成年男子單位 Adult male units
	數目 number	畝 mow	畝 mow	畝 mow	數目 number
自 耕 農　Owners	36	22.0	20.7	25.1	5.5
半 自 耕 農　Part owners..	56	19.5	18.5	21.9	4.5
佃　　　農　Tenants	8	34.9	34.0	40.8	4.7
平　　　均　Average	100	21.6	20.6	24.6	4.9

第二表　河南洛陽六四農家之納租方法
TABLE 2.—TYPES OF RENTING SYSTEM
64 farms, Loyang, Honan, 1936

農 佃 制 Land tenure	農家數目 Number of farms	有下列交租方法農家百分比 Percent of farms with			
		分 租 Share renting	谷 租 Crop renting	錢 租 Cash renting	錢 谷 租 Cash & crop renting
半 自 耕 農　Part owners..	56	55.4	32.1	8.9	3.6
佃　　　農　Tenants	8	54.0	50.0	0.0	0.0
平　　　均　Average	64	54.7	34.4	7.8	3.1

第三表　河南洛陽一百農家自耕農半自耕農及佃農之農塲資本
TABLE 3.—FARM CAPITAL OF OWNERS, PART OWNERS AND TENANTS
100 farms, Loyang, Honan, 1936

項 目 Items	自 耕 農 Owners		半自耕農 Part owners		佃 農 Tenants		平 均 Average	
農家數目　Number of farms	36		56		8		100	
	元 yuan	百分比 percent	元 yuan	百分比 percent	元 yuan	百分比 percent	元 yuan	百分比 percent
田　　　地　Land	612.0	73.5	494.1	75.3	805.9	80.4	561.4	75.0
農　　　舍　Farm buildings	149.8	18.0	103.6	15.7	131.3	13.1	122.4	16.4
牲　　　畜　Livestock	37.5	4.5	31.5	4.8	32.9	3.3	33.8	4.5
農　具　用　Farm tools and implements..	18.3	2.2	16.6	2.5	22.4	2.2	17.7	2.4
其 他 用 具　Other supplies	2.3	.3	2.5	.4	2.9	.3	2.5	.3
種子, 飼料, 肥料, 等　Seed, feed, fertilizer, etc. ...	8.9	1.0	6.3	1.0	5.9	.6	7.2	1.0
樹　　　木　Trees	4.3	.5	2.2	.3	.6	.1	2.8	.4
總　　　計　Total	833.1	100.0	656.8	100.0	1001.9	100.0	747.0	100.0

第四表　河南洛陽一百農家自耕農半自耕農及佃農各項支出數量及百分比

TABLE 4.—AMOUNT AND PERCENTAGE OF VARIOUS FARM EXPENSES
FOR OWNERS, PART OWNERS AND TENANTS

100 farms, Loyang, Honan, 1936

項　目 Items	自 耕 農 Owners		半自耕農 Part owners		佃 農 Tenants		平 均 Average	
農 家 數 目　Number of farms	36		56		8		100	
現金支出 Cash expenses :	元 yuan	百分比 percent	元 yuan	百分比 percent	元 yuan	百分比 percent	元 yuan	百分比 percent
僱　　工　Hired labor	6.8	5.3	2.5	2.4	7.5	6.1	4.4	3.9
農舍農具修理　Repair of buildings and implements	1.8	1.5	1.1	1.1	.2	.2	1.3	1.2
購買種子秧苗及菓樹　Seed, seedlings and fruit trees pur-chased	0.3	.2	.7	.7	4.3	3.5	.9	.8
田 地 賦 稅　Land Tax	10.1	7.9	10.6	10.4	20.0	16.4	11.2	9.9
其 他 捐 稅　Other taxes	8.8	6.9	5.9	5.7	1.9	1.6	6.7	5.9
購 買 農 具　Farm implements pur-chased	.3	.2	.8	.8	0	0	.5	.4
購買飼料及肥料　Feed and fertilizer pur-chased	8.3	6.6	10.4	10.1	11.5	9.5	9.7	8.6
其 他 支 出　Unclassified expenses...	0	0	2.2	2.1	0.6	.5	1.3	1.1
現金支出總計　Total cash expenses...	36.4	28.6	34.2	33.3	46.0	37.8	36.0	31.8
非現金支出 Non-cash expenses :								
資 本 減 少　Capital decrease	0.4	.3	0.1	.1	0.4	.3	0.3	.2
家　　工　Unpaid family labor ..	90.6	71.1	68.4	66.6	75.4	61.9	76.9	68.0
非現金支出總計　Total non-cash expenses	91.0	71.4	68.5	66.7	75.8	62.2	77.1	68.2
總　　計　Total	127.4	100.0	102.7	100.0	121.8	100.0	113.1	100.0

Farm expenses.

Farm expenses were classified into two major groups:
cash expenses and non-cash expenses. The percentage of
cash expenses on owned farms was 28.6, while on partly
owned farms 33.3 per cent and on tenant farms 37.8 per cent
(table 4, page 448). On the other hand, the percentage of
non-cash expenses was higher on owned than on partly owned and
tenant farms. Unpaid family labor was the largest item, which
averaged 76.9 yuan for all farms, or 68 per cent of the
total expenses. Land tax was the largest item in the group of
cash expenses and the next largest item in all expenses. Expenses
for purchased seeds, seedlings, feed, and fertilizer had an inverse
relationship to the farm capital which was invested in seed, feed,
fertilizer etc. Tenant farms had a smaller percentage of capital
invested in seed, feed, fertilizer, etc., so the expenses for seed,
seedlings, feed, fertilizer, etc. were higher.

Farm receipts.

The average farm receipts amounted to 139.9 yuan
(table 5, page 449). Tenant farms had the largest receipts,
192.3 yuan; owned farms 144 yuan, and partly owned farms

農塲收入　農塲收入平均爲一三九・九元（第四四九頁第五表）。佃農收入最大，爲一九二・三元，自耕農爲一四四元，半自耕農爲一二九・八元。作物及作物副產之收入，佔總收入百分之四二；家用產品，大部爲作物及其副產，其供家用者，價值佔總收入百分之五五・五，因此作物爲河南洛陽農民之重要收入。現金收入（包括備售及繳租部份）百分率，自耕農爲三〇，半自耕農爲四八・八，佃農爲六四。佃農既不得不出售其產品或以其產品之一部，爲繳付地租之用，故其家用產品之百分率遂較半自耕農及自耕農爲小。

　　收益　週年內農事經營收益可以各種方法算出，例如農塲賺欵，農塲工作賺欵，塲主工作賺欵，工作酬服，農塲淨利，家庭賺欵及家庭現金進欵等。

　　農塲賺欵係農塲總收入與總支出之差（塲主工作之估值除外）。佃農之農塲賺欵爲七〇・五元，半自耕農爲二七元，自耕農爲一六・六元（第四五〇頁第六表）。

　　塲主工作賺欵係以塲主之農塲賺欵減其農塲資本八厘利息而得。農塲工作賺欵之計算，亦與上法相同，惟須包括地主之收支及資本利息。佃農塲主工作賺欵爲負〇・一元，半自耕農爲負三一・四元，自耕農爲負五〇・一元，同樣工作賺欵亦以佃農較自耕農及半自耕農爲高。

第五表　河南洛陽一百農家自耕農半自耕農及佃農各項收入數量及百分比
TABLE 5.—AMOUNT AND PERCENTAGE OF VARIOUS FARM RECEIPTS
FOR OWNERS, PART OWNERS AND TENANTS
100 farms, Loyang, Honan, 1936

項　目 Items		自耕農 Owners		半自耕農 Part owners		佃農 Tenants		平均 Average	
農家數目	Number of farms	36		56		8		100	
		元 yuan	百分比 percent	元 yuan	百分比 percent	元 yuan	百分比 percent	元 yuan	百分比 percent
現金收入	Cash receipts:								
出售作物及副產物	Crops and crop by-products sold	42.4	29.4	60.4	46.5	122.0	63.4	58.9	42.1
出售牲畜及牲畜產品	Livestock and live-stock products sold	.8	.6	.7	.6	1.1	.6	.8	.5
雜項收入	Miscellaneous income ..	0.0	0.0	2.2	1.7	0.0	0.0	1.2	.9
現金收入總計	Total cash receipts	43.2	30.0	63.3	43.8	123.1	64.0	60.9	43.5
非現金收入	Non-cash receipts:								
家用產品	Products used by family	100.0	69.4	64.5	49.7	69.1	35.9	77.6	55.5
資本增加	Capital increase	0.8	.6	2.0	1.5	0.1	.1	1.4	1.0
非現金收入總計	Total non-cash receipts	100.8	70.0	66.5	51.2	69.2	36.0	79.0	56.5
總計	Total	144.0	100.0	129.8	100.0	192.3	100.0	139.9	100.0

129.8 yuan. Forty-two per cent of the total receipts were derived from crops and crop by products; 55.5 per cent of the value of farm products, being chiefly crops and crop by-products were used by the farmers' own families; therefore, crops are the most important source of farm receipts in Loyang, Honan. The percentage of total cash receipts, including the portion of products to be sold and paid as rent, was 30 for owned farms, as compared with 48.8 per cent for partly owned and 64 per cent for tenant farms. As tenant farmers were obliged to sell their crops to pay cash for rent or to dispose of part of their crops for rent, the proportion of products used by their families was less than the percentage used by families of both part owners and owners.

Profits.

Profits from the year's farm business may be measured in a number of ways, such as by farm earnings, farm labor earnings, operator's labor earnings, labor returns, farm net profits, family earnings and family cash income.

Farm earnings are the difference between total farm receipts and total farm expenses (value of operator's labor excluded). Farm earnings of tenant farms were 70.5 yuan, of partly owned farms 27 yuan, and of owned farms 16.6 yuan (table 6, page 450).

第六表　河南洛陽一百農家農佃制與農場及家庭收益之關係
TABLE 6.—RELATION OF LAND TENURE TO FARM
AND FAMILY PROFITS
100 farms, Loyang, Honan, 1936

項　目 Items	自耕農 Owners		牛自耕農 Part owners			佃　農 Tenants			平　均 Average		
	場主 Operator	農場 Farm	場主 Operator	地主 Land lord	農場 Farm	場主 Operator	地主 Land lord	農場 Farm	場主 Operator	地主 Land lord	農場 Farm
農家數目 Number of farms ...	—	36	—	—	56	—	—	8	—	—	100
		元 yuan	元 yuan	元 yuan	元 yuan	元 yuan	元 yuan	元 yuan	元 yuan	元 yuan	元 yuan
農場賺欵 Farm earnings	16.6	16.6	0.4	26.6	27.0	8.1	62.4	70.5	6.9	19.9	26.8
工作賺欵 Labor earnings	-50.1	-50.1	-31.4	—	-25.5	-0.1	—	-9.7	-35.6	—	-33.1
家庭賺欵 Family earnings	143.0	143.0	98.2	—	125.1	118.4	—	180.9	116.1	—	136.0
家庭現金進欵 Family cash income..	42.7	42.7	32.2	—	58.8	49.6	—	112.1	37.4	—	57.5
工作報酬 Labor returns	—	47.2	—	—	45.3	—	—	73.3	—	—	48.3
農場淨利 Net profit	—	-91.6	—	—	-71.6	—	—	-56.7	—	—	-77.6

第七表　河南洛陽一百農家農佃制與作物指數及資本勞力效率之關係
TABLE 7.—RELATION OF LAND TENURE TO CROP INDEX, CAPITAL
AND LABOR EFFICIENCY
100 farms, Loyang, Honan, 1936

農佃制 Land tenure		農家數目 Number of farms	作物指數 Crop index	每工人等數 之作物畝 Crop mow per man- equivalent	每百元投資 所得之利息 Interest earned on $100 capital
		數目 number	百分比 per cent	畝 mow	元 yuan
自耕農	Owners	36	96.4	9.9	-3.0
半自耕農	Part owners	56	103.5	10.4	-2.9
佃農	Tenants	8	104.7	18.3	2.3
平均	Average	100	101.0	10.8	-2.4

　　家庭賺款之計算，係以農塲賺款加家工估值及其他進款而得。家庭現金進款之計算，係以家庭賺款加資本減少或減資本增加，復減家用農塲產品價值而得。佃農之農塲家庭賺款及家庭現金進款，均較半自耕農及自耕農為高。又佃農之塲主家庭現金進款，亦較他種農家為高。

　　農塲工作報酬係以農塲工作賺款加雇工一切費用及家工估值而得。農塲淨利係以農塲工作賺款減塲主工作估值而得。每一佃農之工作酬報為七三‧三元，農塲淨利為負五六‧七元，兩者均較半自耕農及自耕農為高。

　　資本勞力效率及田地生產力　每百元資本之投資利率，自耕農為負三元，半自耕農為負二‧九元，佃農則為二‧三元（第四五一頁第七表）。每工人等數之作物畝，自耕農為九‧九畝，半自耕農為一〇‧四畝，佃農則為一八‧三畝。因此佃農使用資本及勞力之效率皆較大。

　　作物指數為度量作物產量之衡準。佃種農塲之作物指數，較半自耕農塲及自耕農塲為高。

　　結論　佃農農塲之平均面積較自耕農及半自耕農兩者為大，而其資本及勞力使用之效率亦較大，故其農塲及家庭收益均較自農耕或半自耕農為高。

　　佃農及半自耕農塲之作物指數均較高，故其農塲收益亦較自耕農為高。是以農塲大小及作物指數，為決定農塲收益之二個重要因素。

<div align="right">崔毓俊</div>

Operator's labor earnings are obtained from operator's farm earnings less interest at 8 per cent on operator's farm capital. Farm labor earnings are computed in the same way but include landlord's expenses, receipts, and capital interest. The operator's labor earnings on tenant farms were − 0.1 yuan as compared with −31.4 yuan for partly owned and −50.1 yuan for owned farms. Likewise, the farm labor earnings were higher on tenant than on partly owned and owned farms.

Family earnings are computed from farm earnings plus the value of unpaid family labor and income from other sources. Family cash incomes are computed from family earnings plus capital decrease, or less capital increase and less the value of products consumed on the farm. Both the farm family earnings and farm family cash income were higher on tenant farms than on partly owned and owned farms. The operator's family's cash income on tenant farms was also higher than on other farms.

Farm labor returns are obtained from adding farm labor earnings to the total cost of hired labor and value of the family's unpaid labor. Farm net profits are obtained from farm labor earnings less the value of operator's labor. Labor returns per tenant farm were 73.3 yuan, and farm net profits were −56.7 yuan, both of these being higher for tenant farms than for partly owned and owned farms.

Capital, Labor Efficiency, and Productivity of Land.

The interest earned on 100 yuan of capital investment was −3 yuan on owned farms, −2.9 yuan on partly owned farms and 2.3 yuan on tenant farms (table 7, page 451). The crop mow per man-equivalent was 9.9 mow on owned farms, 10.4 mow on partly owned farms and 18.3 mow on tenant farms. Tenant farms were consequently superior in the efficient use of farm capital and labor.

Crop index is a measurement of crop yields. The crop index was higher on tenant farms than on partly owned and owned farms.

Summary.

The average size of farms was larger for tenants than for both owners and part owners and the capital and labor on them were more efficiently used, so the farm and family profits were higher than on either of the other two groups of farms. Crop index was higher on tenant farms and partly owned farms, and the profits on these farms were also higher than on the owned farms. Thus the size of farm and crop index are two important factors which determine the farm profits.

Tsui Ru-tsuin

成都勞動負販界生活費用指數

引言

　　成都勞動負販界生活費用之研究，始於今春二月。 自中日戰爭爆發以來，成都人口激增，物價猛變。 急需成都生活費指數之編製，不但外來人士即久居成都者亦然。無論何時，如物價發生變動，賴固定收入；如工資贍養金及利息等爲生者，首受影響。 如物價上漲，其購買力即行減低。反之如物價趨落，能以等量收益而獲較多之物品，因以受益。

研究方法

　　爲欲獲得最迅速之結果，以應羣衆之急需，乃棄用『家計登記』法，以其遲延時日且費用高昂。

(1) 抽樣之選擇與權數決定　　　根據人口普遍報告 [1]： 民國廿三年勞動負販界佔成都總人口百分之四〇。 本研究首由調查員造訪一二〇家勞動負販界之家庭， 調查民國廿六年每家消費之物品種類及數量。此一二〇家庭，代表人口普查分業調查之十一種職業（第四五三頁第一表）。此十一種職業，計佔全勞動負販界人口百分之八〇。

　　本研究調查人力車夫一六家， 小販一四家， 及其餘九種職業， 各十家， 共計一二〇家，其中城東二〇家， 城南五四家， 城西二家， 城北一〇家，城中三四家。 此一二〇家每家之成年男子單位係根據『愛德華特爾比數』計算。各家每一成年男子單位之消費量及各業之平均消費量， 亦

第一表　民國廿三年成都市勞動負販界十一業之人數及其百分比 [1]

TABLE 1.—THE NUMBER OF PEOPLE AND PERCENTAGE DISTRIBUTION
OF 11 OCCUPATIONS IN CHENGTU, SZECHWAN, 1934[1]

			業　別 Occupation	人　口 Population	百分比 Per cent
小		賀	Pedlers	29,948	27.25
人	力	車夫	Rikshaw pullers	26.672	24.27
運		髮匠	Barbers	9,528	8.67
長		機	Silk weavers	7,500	6.82
需		織工	Cotton weavers	7,093	6.45
木		工	Carpenters	6,786	6.17
茶		工	Tea house workers	5,380	4.90
成	衣	匠	Tailors	4,770	4.34
泥		工	Masons	4,436	4.04
飯	食	業	Cooks	4,352	3.96
金		工	Blacksmiths and coppersmiths ...	3,440	3.13
共		計	Total	109,900	100.00

1 「民間意識」第三年合訂本第二一頁至二三頁

A COST OF LIVING INDEX FOR THE LABORER-PEDLAR CLASS IN CHENGTU, SZECHWAN

Introduction.

This study was begun in February, 1938. Since the outbreak of Sino-Japanese hostilities the population in Chengtu has increased rapidly and prices of various commodities have changed tremendously. The need of an index of the cost of living has become very urgent, not only for the refugees, who immigrated to Chengtu, but also for the native residents. Whenever changes of commodity prices occur, people living on fixed incomes, such as salaries, wages, pensions, interests, etc. are affected. If prices rise, their purchasing power becomes reduced. If, on the other hand, prices fall, more of everything can be procured with the same amount of income, therefore people will benefit by such a change.

Method of Study

For the purpose of obtaining the quickest results to meet the imminent public need, the "standard budget method" has to be abandoned, as it is slow and costly.

A. The Selection of Sample and the Determination of Weights: According to a census report,[1] the labor-pedlar class represented 40 per cent of the total population in Chengtu in 1934. One hundred and twenty families in this class were visited, and the kind and amount of various commodities consumed by each family during 1937 were recorded by field investigators. These

第二表　成都市勞動負販界生活費用指數（加權綜合）

民國二十六年二月至六月之平均＝一〇〇

TABLE 2.—INDEX NUMBERS OF COST OF LIVING FOR LABORER-PEDLAR CLASSES IN CHENGTU (WEIGHTED AGGREGATES)

Average of February to June 1937 = 100

	食 物 Food	衣 着 Clothing	房 租 Rent	燃 料 Fuel and light	雜 項 Miscel-laneous	總指數 General index	法幣購買力 Purchas-ing power of yuan
1937							
一月 January	94.2	94.5	100.0	107.2	98.2	96.3	103.8
二月 February	100.6	97.9	100.0	103.3	98.6	100.4	99.6
三月 March	101.4	97.3	100.0	105.1	96.5	100.9	99.1
四月 April	101.4	102.9	100.0	99.8	99.6	101.0	99.0
五月 May	100.5	102.9	100.0	96.3	102.6	100.4	99.6
六月 June	96.1	99.0	100.0	95.6	102.6	97.3	102.8
七月 July	90.1	96.2	100.0	95.3	101.8	93.2	107.3
八月 August	89.6	101.2	100.0	98.6	102.5	93.3	107.2
九月 September ...	94.6	118.1	100.0	100.0	103.3	97.2	102.9
十月 October	85.0	116.4	100.0	97.2	102.3	90.5	110.5
十一月 November ...	86.8	114.2	100.0	96.0	102.5	91.6	109.2
十二月 December	88.3	118.1	100.0	96.0	101.9	92.6	108.0
1938							
一月 January	97.0	117.0	100.0	94.4	103.8	98.4	101.6
二月 February	96.3	124.3	100.0	104.9	104.4	98.9	101.1
三月 March	90.1	127.1	100.0	105.1	104.4	94.8	105.5
四月 April	87.9	124.3	100.0	111.7	103.7	93.7	106.7
五月 May	86.9	126.4	100.0	110.0	102.0	92.9	107.6

1 " Popular Consciousness," Vol. 3, pp. 21-23.

均計算。勞動負販界之最後平均消費量，係以成都勞動總人口中之十一職業，各業之人口數量爲權數而計算之。此最後平均消費量，乃於編製加權總合指數時用以乘每種商品之價格者也。 民國廿六年，一二〇家消費之物品，包括九六種。不幸其中有半數不易收集戰前之價格。 本指數所包括之消費品，雖僅及半數，然各物品之總價值，已佔一二〇家消費總值百分之九二 [2]（第四五四頁第二表）。故設橫其他數羅列無遺， 對於本指數亦無甚改變。

(2) 物價材料之收集　　民國廿六年三月以前， 各種物價均抄自各另售商店之舊賬簿，是後之物價則由調查員按週調查之。 房租乃一二〇勞動負販家庭所付之平均額。

2　下列爲指數所包括之物品及其匯數量：—
The Commodities included and their respective weights were as follows:—

物　品 Commodities		單　位 Unit
食物類 Food		
米　Rice	13.690	雙市斗 (a)　Double shih tou (a)
麵粉　Wheat flour	3.882	市斤　Shih catty
切麵　Spaghetti	2.773	,,　Shih catty
蠶豆　Broad beans	0.084	雙市斗　Double shih tou
猪肉　Pork	9.789	市斤　Shih catty
牛肉　Beef	0.644	,,　Shih catty
羊肉　Mutton	0.286	,,　Shih catty
猪油　Lard	1.022	,,　Shih catty
鷄肉　Chickens	0.499	,,　Shih catty
鷄蛋　Eggs	2.359	個　Piece
葱　Onions	0.595	市斤　Shih catty
韮菜　Leeks	0.737	,,　Shih catty
黃豆芽　Soybean sprouts	1.572	.,　Shih catty
萵筍　Lettuce stems	4.116	根　Piece
包菜　Cabbage, rolled	1.927	市斤　Shih catty
海椒　Pepper, red salted spiced..........	0.178	,.　Shih catty
榨菜　Mustard root	0.730	市兩　Shih liang
精粉　Mung beans	0.111	市斤　Shih catty
豆腐　Bean curd	2.445	塊　Piece
花椒　Pepper	0.077	市兩　Shih liang
散鹽　Salt	9.293	市斤　Shih catty
菜油　Rapeseed oil	10.550	,,　Shih catty
白糖　Sugar, white	0.326	,,　Shih catty
水糖　Sugar sirup	0.089	,,　Shih catty
衣着類 Clothing		
陰丹士林　Shirtings Yin-tan-shih-lin	2.486	市尺　Shih foot
漂白洋布　Shirtings white	1.247	,,　Shih foot
土白布　Shirtings white	3.705	,,　Shih foot
棉花　Cotton	0.091	市斤　Shih catty
洋襪　Socks	0.781	雙　Pairs
撐鞋　Shoes	1.098	,,　Pairs

(a)　一雙斗＝二市斗
1 double shih tou = 2 shih tou.

120 families who were visited according to the census report represented 11 occupations (table 1, page 453). Eightly per cent of the total labor population fell into these 11 occupations.

Sixteen rickshaw pullers,[1] 14 pedlars, and 10 families of each of nine other occupations were visited. Twenty of these families are located in the eastern part of the city, 54 in the south, 2 in the west, 10 in the north and 34 in the central part.

The adult male unit has been calculated for each of the 120 families, according to "Atwater's scale." The amount of various commodities consumed by each adult male unit was computed for each family. Again the average for each occupation was figured out. The final average for the labor-pedlar class was computed by using the percentage of population of each of the 11 occupations in the total working population in Chengtu as weights. This final average was to be used in multiplying the price of each respective commodity for the making of a weighted aggregative index.

It was found that 96 commodities were consumed by these 120 families in 1937. Unfortunately the prices of half of these commodities were not available for the period prior to the war. Although only half of the commodities were used in making this index their value amounted to 92 per cent of the total consumption of the 120 laborer-pedlar families studied[2] (table 2, page 454). Hence, the probability that this index would be modified by including the other half of these commodities is small.

B. Collection of Price Data: Prices of various commodities, prior to March 1938 were copied from retailers' accounts and, thereafter, collected each week by our own investigators. House rent here is the average paid by these 120 families.

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2   (Continued from Preceding page).

房 租 類 Rent

| 行租 | Rent | 1 | 標準間(b)Standard room (b) |
| 押租 | Deposit commodities | 2% | 月利(c) Per month (c) |

燃 料 類 Fuel and Light

燃炭	Charcoal	0.154	市担 Shih picul
煤炭	Coal	0.031	挑市斤(d)Tiao (d)
大河松柴	Fire wood pine Taho	7.827	大捆 (e)Bundle (e) big
南河松柴	Fire wood pine Nanho	5.218	小捆 (e)Bundle small (e)
桐枝青杠	Stems dried	0.667	擔兩捆(f)Tan (f)
保元青杠	Fire wood Tsing Kang	0.858	,, Tan
火柴	Matches	6.958	盒 Pack

雜 項 類 Miscellaneous

小雙刀紙煙	Cigarettes	1.362	包(10支) Pack 10's
皮絲煙	Tobacco strip	51.709	市兩 Shih liang
肥皂	Soap	3.795	條塊 Piece
毛巾	Towels	0.609	條 Piece
毛茶	Tea	0.422	市斤 Shih catty
河酒	Wine	4.381	,, Shih Catty
菜碗	Vegetable bowl	0.510	個 Piece
飯碗	Rice bowl	1.207	,, Piece
鉄鍋	Pan	0.017	口 Piece

(b) 一標準間＝二六七立方尺   1 standard room = 267 cubic shih feet
    以押金之月利二分計算   2 per cent of the deposit per month.
(c) 一挑＝一六〇市斤   1 tiao = 160 shih catties.
(d) 大捆＝一八斤   1 big bundle = 18 catties.
(e) 小捆＝一四斤   1 small bundle = 14 catties.
(f) 一擔＝九〇斤   1 tan = 90 catties.

(3) **指數之編製** 指數之編製係用加權總合法（勒司培爾斯氏公式，指數 $= \frac{\sum P_1 Q_0}{\sum P_0 Q_0}$）。廿六年二月至六月，每月之平均數爲一〇〇，蓋以是年六月以後，物價因最近之戰事而有不規則之變動。

指數既以此法計算，則物品之佔家庭費用大者其價格變動影響於指數亦大。若以基期內平均消費價格而論，則食物佔總費用百分之六六•五四；房租佔百分之一五•七四，燃料佔百分之六•五九，衣着僅佔百分之二•七五，雜項佔百分之八•三九。就米一項而論，於廿六年二月至六月間，佔食物類消費值百分之八〇•四二，佔總生活費用百分之五三•五一。故米價之漲跌爲勞動負販界生活費高低之最大因素。

指數除包括房租及押租外，包括消費品四六種；計食物二四種，衣着六種，燃料七種及雜項九種。

民國廿六年一月以來生活費用之變動

勞動負販界生活費之總指數及分類指數如 第四三〇頁第一圖所示。總指數因米糧季節之變異自廿六年一月之九六升至次月之一〇〇•此後直至五月，均無甚漲落。自五月至七月跌落七点，因本年稻作豐收有望，糧價下落所致。自八月至九月，突升至六月之水準，蓋因糧價翥漲，並衣着類因戰爭發生，交通阻塞致價格突漲所致。十月囘跌爲九〇•五，此後逐漸上升而達廿七年二月之九九，二月後因食物價賤之故，指數又呈疲勢，至五月計跌七点。

米值佔食物費用百分之八〇強，故食物指數變動與米價變動有極密切之關係。廿五年稻作收獲欠佳，故廿六年上半年之食物指數較下半年爲高。廿六年新稻登塲後，秋雨連綿，無法晒打，到貨遂少，同時成都糧商居奇，因此食物指數九月較上月增漲五点，而至十一月又囘跌至八五。自廿六年十月至廿七年一月指數自八五漲至九七，因其時有自流井客幫在蓉大批採米，行市因之爆漲，但因運輸不便，自流井客商所購之米無法銷售他埠，乃重行出售，加以二月間本市數發空襲警報，居民他遷者頗多，食物需要因減少。故自今年二月至五月，指數跌落十一点。

衣着類指數，廿六年前數月翥見上漲，六及月七月微有跌勢。下半年由七月至八月漲五点，八月至九月又漲至十七点，九月至今年二月再漲六点，至五月竟達一二六之高点，自去年七月至今年五月，計漲百分之三一•四，考其原因，由於戰事發動後，紡織品來貨漸絕，致指數有此空前高漲。然勞動負販界在此期內，爲避免突來之高價，購買衣料者亦形減少。

房租因契約關係，自廿六年初以來，指數未有變動。

C. The Making of Index Numbers: Index numbers are calculated by the weighted aggregative method (Laspeyres' formula, index $=\dfrac{\Sigma P_1 Q_0}{\Sigma P_0 Q_0}$. The monthly average of the aggregates from February to June, 1937 is considered as 100, because prices after June, 1937, have been erratically influenced by the present war.

An index calculated by this method is pronouncedly affected by the price changes of those commodities which represent the most important family expenditures. As far as the average values in the base period are concerned, food amounted to 66.54 per cent of the total expenditure; rent 15.74 per cent; fuel 6.59 per cent; clothing 2.74 per cent and miscellaneous commodities 8.39 per cent. Rice, throughout, accounted for 80.42 per cent of the expenditure in the food group and 53.51 per cent of the total cost of living during the period between February and June, 1937. Hence, the fluctuations in the price of rice have been the most influential factor in the cost of living of this class of the population.

The index includes prices of 46 commodities in addition to house rent and deposits. Twenty-four commodities are classified in the group of foodstuffs, six in clothing, seven in fuel, and nine in the miscellaneous group.

Changes in the Cost of Living Since January, 1937

The index numbers of the cost of living of the laborer-pedlar class are shown in table 2 (page 454), and graphically in figure 1 (page 430). The general index rose from 96 in January, 1937 to 100 in the following month, due to seasonal variation of food prices. Until May, 1937, the index had been comparatively stable. It fell by seven points from May to July, because of the declining price movement of rice, caused by the bumper crop in prospect. From August to September it reflated rapidly to the June level, on account of the slight increase in food prices and the sudden spurt of prices in the clothing group, which was brought about by the stoppage of transportation because of war conditions. It fell again to 90.5 in October. The index rose gradually thereafter, and reached 99 in February, 1938. From February, 1938, to May, the index declined once more by seven points because foodstuffs were cheaper.

Because rice accounted for more than 80 per cent of the total food expenses, the index numbers of foodstuffs varied in very close relationship to the changes in the price of rice. Harvest conditions were poor in 1936, so the index of foodstuffs for the first half of 1937 was higher that for the second half of the same year. Owing to the unceasing rains in the fall after the harvest, threshing was delayed for some time. Meanwhile, grain dealers in Chengtu refrained from disposing of their stocks. Consequently, the index number of the cost for food advanced by five points in September from the previous month. It fell again to 85 in October. From October, 1937, to January, 1938, the index rose from 85 to 97, owing to the large purchases made in the Chengtu market by dealers from Tseliutsing. It fell by eleven points in May from the January level, because dealers from Tseliutsing resold their stocks which they were holding in Chengtu, as they were unable to dispose of them in other markets due to hampered transportation conditions, and, furthermore, the air raid

燃料類自廿六年一月之一〇七下降至七月之九五，七月至九月漲五点，九月至廿七年一月下跌六点。自廿七年一月至四月又漲十八点，至五月跌落二点。燃料類指數所含之物品以木炭及木柴爲主，柴炭價格，恒自年初開始下跌，蓋其時水運漸暢，入夏來貨更湧，故指數益低。惟廿六年八月因戰爭之故，柴炭價畧漲，是年九月，運船封爲軍用，以致到貨缺乏，指數益升。至十月，軍運船大多於嘉定銷差，得以裝柴囘蓉，故去冬燃料價格下傾，今春一月以來，因都江堰江水少，運輸不便，故指數上漲，四五月間，柴區雨水不足，伐柴農民急於戽水灌稻，故柴炭到貨大減，其價頗見猛漲。

雜項類未有劇變，但因戰事及其他連帶關係，指數畧呈漲勢。

勞動負販界之生活費用總指數變化無定，或漲或跌，勞動者法幣購買力遂因之而異。若以廿六年二月至六月之法幣購買力爲一〇〇，則至廿七年四月間法幣一元之購買力爲一〇七，至五月間爲一〇八，意即廿七年四月法幣一元可當廿六年二月至六月間之法幣一元另七分。同樣，廿七年五月之法幣一元，可當廿六年二月至六月之法幣一元另八分。法幣購買力之上漲，大概由於糧食價值之貶跌。是故城市勞動者購買力之高漲，亦即農民購買力低落之表示也。

楊　蔚
胡國華

alarms in February reduced the population of Chengtu considerably, thereby cutting down the demand for foodstuffs.

The cost index of the clothing group rose slightly in the first few months of 1937 and declined somewhat in June and July. It advanced by five points from July to August, 17 points from August to September, and six points from September 1937 to February, 1938. It went up to 126 in May, 1938, which represents a gain of 31.4 per cent from July 1937 to May, 1938. The chief reason which accounted for this rise was that the supply of piece goods and textiles had been cut off after the outbreak of the war. However, people would probably adjust themselves to this panic situation by reducing their purchases of these commodities.

Rent did not show any change from the beginning of 1937, because it was fixed by contract.

The index of the fuel group fell from 107 in January to 95 in July, 1937. It rose by five points from July to September, and fell by six points from September, 1937, to January, 1938. It, then rose by another 18 points from January to April and fell two points from April to May. Fuel consists chiefly of firewood and charcoal. It is customary for the price of fuel to fall in the beginning of the year, when the river becomes navigable. Fuel prices should fall in the summer, when the supply becomes abundant, but in August, 1937, the price of fuel rose slightly due to the war. Freight junks were all engaged for military transportation in September, therefore, only very few junks carrying fuel were able to get through. The index advanced still further. Most of the freight junks were released at Kiating in October and were able to ship fuel to Chengtu once more, thus, during last winter the price of fuel was falling, instead of rising. From January to February, 1938, the water in the river was low, freight rates were high, and, consequently, the index advanced rapidly. In April and May there was very little rainfall, and farmers in fuel producing regions, who are woodcutters in their spare time, were busy pumping water for the irrigation of their rice crops, so the production of fuel was greatly reduced and its price rose considerably.

The index of the miscellaneous group did not show any violent fluctuations, but, on account of the war, the index had an upward trend.

As the general index of the cost of living for laborers and pedlars was changing, rising or falling, the purchasing power of their legal tender notes varied correspondingly. If we were to take the purchasing power of the yuan in February to June, 1937, as 100, the purchasing power of the yuan would be 107 in April and 108 in May, 1938. In other words, one yuan in April, 1938, was worth one yuan and seven cents in February to June, 1937; and, likewise, one yuan in May, 1938, was equivalent to one yuan and eight cents in February to June, 1937. The appreciation of the purchasing power of the yuan was brought about mainly by the depreciation of the value of foodstuffs grown by farmers. Consequently, the higher purchasing power of city laborers discloses the lower purchasing power of the rural population.

W. Y. Yang
Hu Kwoh-hwa

棉花產量對於其購買力之影響

商品之購買力為其供需狀況所控制，此人所共知者也。供需均受各種重要程度不等因素之影響。棉花為一種具有國際重要性之基本商品。其供給因素對於其購買之影響，較需要因素為大，蓋人口增長，消費習慣及消費者購買力之變遷，所引起之棉花需要變遷每年差異較小，而棉花供給則以氣候之變異甚鉅，時有差異也。

本文棉花產量與其購買力關係之計算方法係採用『供給價值』曲線公式 $y = \dfrac{h}{x^a}$。

中外棉花產量與其購買力之關係

中國棉產與天津棉花購買力之關係及美國棉產與紐約棉花購買力之關係有如圖一，二，所示。產量愈大，則其購買力愈低。反之產量愈小，則其購買力亦愈高。然兩者關係程度並不密切。此或由于下列諸原因(一)棉花價格之變動為世界市場所控制，本國產額非主要原因(二)分析時棉花存貨未經列入(三)運費，關稅，及其他分配費用之增減，亦足以影響產量與購買力之常態關係。棉花歉收對其購買力之影響較豐收為大。在中國當棉花產量較前五年之平均產量低百分之二十時，其購買力則較前五年之平均購買力高百分之三十六。若棉花產量較前五年之平均產量高百分之二十時，其購買力僅較前五年之平均購買力低百分之十九。美國情形頗相似。當該國棉產低于前五年之平均產量百分之二十時，其購買力則較前五年之平均購買力高百分之二十八。若棉產量高于前五年之平均產量百分之二十時，其購買力則較前五之平均購買力低百分之十八。具體言之，設中國前五年之棉花平均價格為每市擔四十元（五十公斤）。若中國棉產較前五年之平均產額低百分之二十時，則中國棉花價格將漲至每市擔五十四元四角之高價。反之，若中國棉產較前五年之平均棉產高百分之二十時，中國棉花價格將跌至每市擔三十二元四角。

棉花垣在八九月間收穫，必須經過貿易階段後，始能達消費者。此外，棉花于運至市場前，軋花打包等手續，需時頗久。故棉花產量對翌年購買力之影響較其對當年購買力之影響為大（第四六三及四六四頁，第一及第二圖）。中國棉花產量與當年天津棉花購買力之繫聯係數 Rho 為〇‧四〇，其與翌年天津棉花購買力之繫聯指數 Rho 為〇‧四二。美國棉花產量與當年紐約棉花購買力之繫聯係數 Rho 為〇‧三二，而其與翌年紐約棉花購買力之繫聯係數 Rho 為〇‧五二。

THE EFFECT OF PRODUCTION OF COTTON UPON ITS PURCHASING POWER.

It is commonly understood, that the purchasing power of a commodity is governed by the supply of and demand for the commodity. Supply and demand are each affected by a number of factors of varying degrees of importance. Cotton is a basic commodity of international significance. The factors of supply have a greater influence upon its purchasing power than those of demand, because changes in the demand for cotton, caused by the growth of population, changes in the habit and customs, and buying power of consumers, vary comparatively little from year to year, whereas extreme variations in its supply are frequent owing to the great variability of weather conditions.

The five-year moving average method is used in calculating the mathematical relation between the production and purchasing power of cotton. The equation $y = \dfrac{b}{x^a}$ is selected for the supply-price curve.

Relation of Production to the Purchasing Power of Cotton

The relation of the domestic production of cotton to its purchasing power was calculated for both Tientsin (figure 1 page 463) and New York (figure 2, page 464). A large crop of cotton tends to bring about a low purchasing power and a small crop a higher purchasing power. Since the deviation of any single year from the normal curve is very wide, the relation is not very significant. This may be due to three factors, (1) cotton prices are determined by the world market, domestic production is not an essential factor, (2) the stock and carry-over of cotton are not included in the analysis, and (3) changes in freight rates, tariff charges and other distribution charges may disturb the normal relationship.

A small crop of cotton has a more striking effect on its purchasing power than does a large crop. In China, should a crop be 20 per cent below the average of the five preceding years, its purchasing power would be 36 per cent higher. On the other hand should the cotton crop be 20 per cent larger than the average of the five preceding years, its purchasing power would be only 19 per cent lower. In the United States, this same relationship exists. A 20 per cent decrease of cotton crop as compared with the average of the five preceding years, would be associated with an increase of 28 per cent in the purchasing power of cotton in New York, and a 20 per cent increase of the cotton crop would cause a decrease of only 18 per cent in its purchasing power. Practically speaking, if the average price of cotton in the five preceding years were $40 per shih picul (50 kgs.), a crop of 20 per cent less in China would be sold for $54.4 per shih picul, and a crop of 20 per cent more would be sold for $32.4 per shih picul.

棉花爲一種世界基本商品，其購買力非爲一國或一地之供需因素所控制，而爲世界各國所控制。故世界棉產對於國內棉花購買力之影響，輒較本國棉產對於其購買力之影響爲大。此種情形，在中國尤爲顯著（第四六五及四六六頁第三及第四圖）。世界棉產與翌年天津棉花購買力之繫聯係
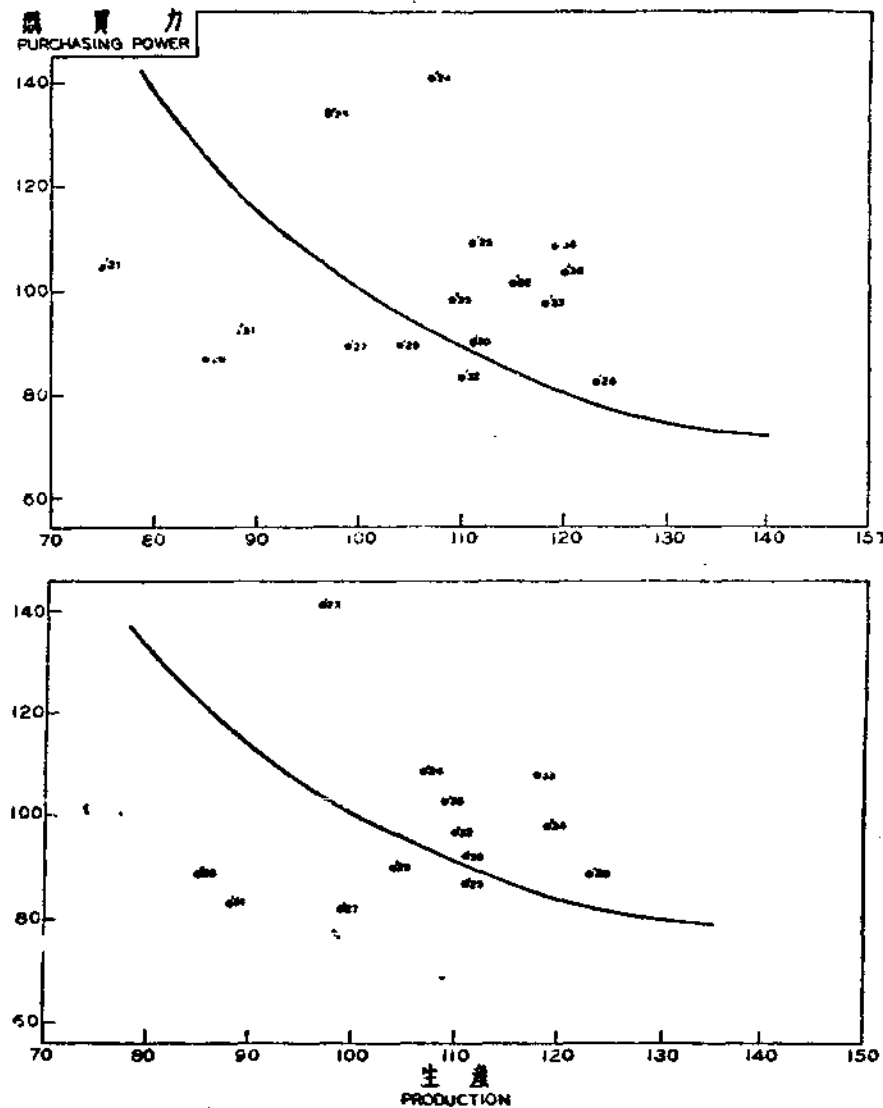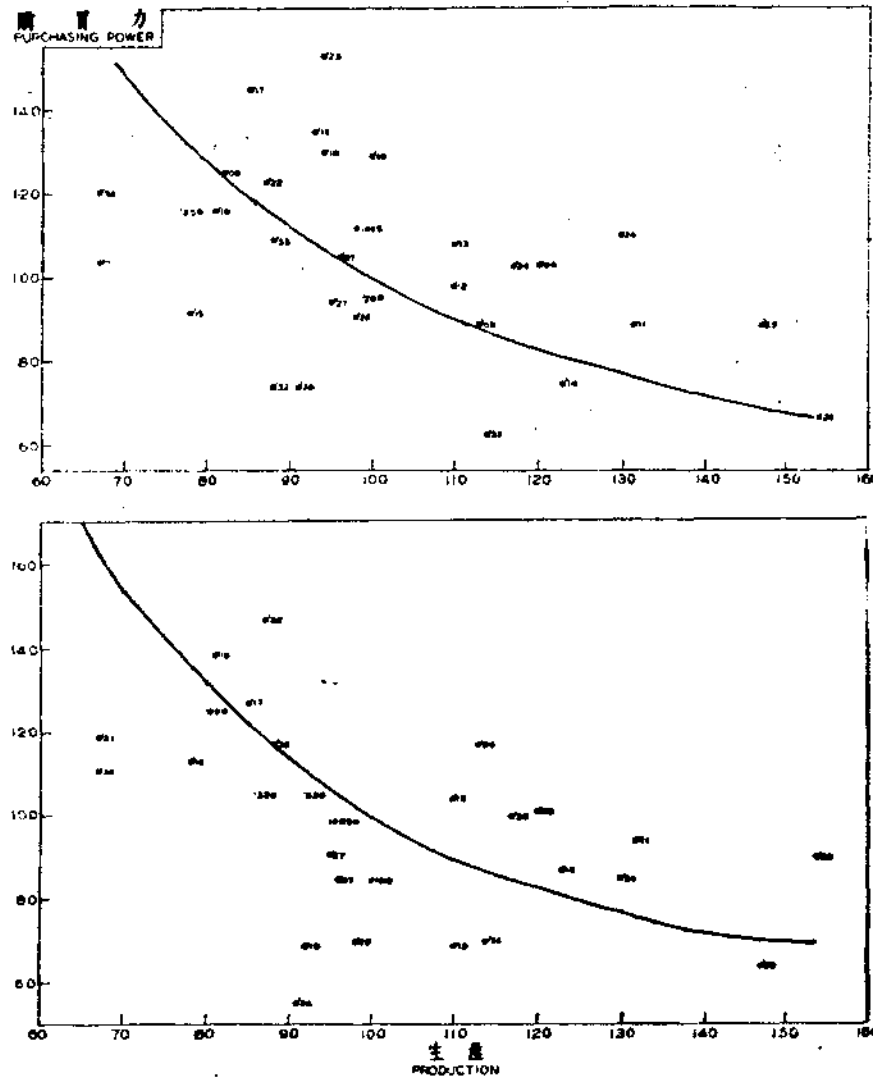

第一圖　中國棉花產量與當年及翌年天津棉花購買力之關係
一九二一至一九三六年

中國棉花產量對翌年棉花購買力之影響較其對當年棉花購買力之影響爲大。產量與翌年購買力之繫聯係數爲〇·四三，其與當年購買力之繫聯數爲〇·四〇。

FIGURE 1.—RELATION OF THE PRODUCTION OF COTTON IN CHINA
TO THE PURCHASING POWER OF COTTON IN THE CURRENT YEAR
AND IN THE FOLLOWING YEAR IN TIENTSIN

1921 – 1936

The size of production of cotton has a greater influence upon its purchasing power in the following year than that in the current year in China. The rho is 0.43 for the following year and 0.40 for the current year.

Cotton is usually harvested in August or September. It cannot reach the consumer without passing through the channel of trade. Moreover, a considerable time is taken up by ginning and packing before it reaches the market. Therefore, the size

第二圖　美國棉花產量與當年及翌年紐約棉花購買力之關係
一九〇五至一九三五年

美國棉花產量對翌年棉花購買力之影響較其對當年棉花購買力之影響為大。產量與翌年購買
力之繁縮係數為〇·五二，其對當年購買力之繁縮係數為〇·三二。

FIGURE 2.—RELATION OF THE PRODUCTION OF COTTON IN THE UNITED STATES TO THE PURCHASING POWER OF COTTON IN CURRENT YEARS AND IN FOLLOWING YEARS IN NEW YORK,
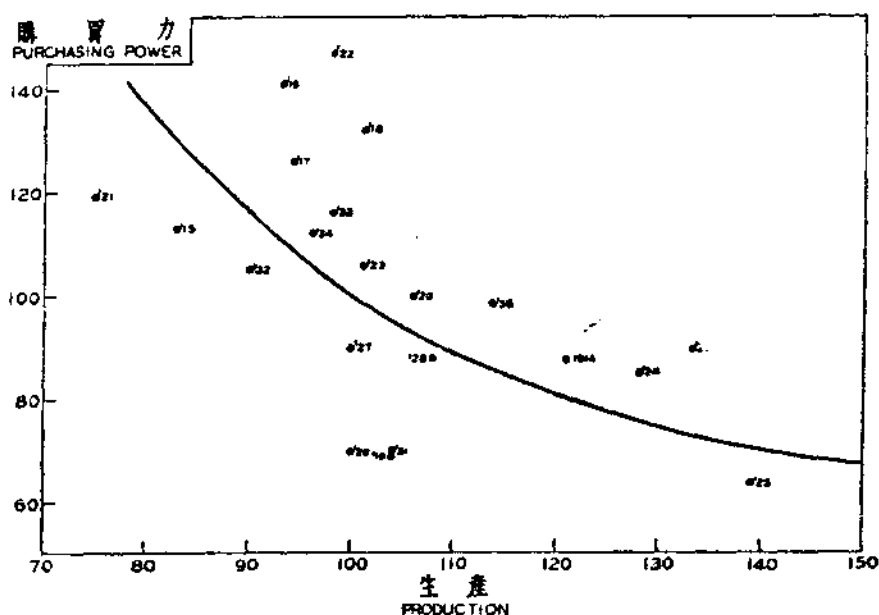
1905 – 1935

The size of production of cotton has a greater influence upon its purchasing power in the following year than that in the current year. The rho is 0.52 for the following year and 0.32 for the current year.

數 Rho 爲〇‧五四，而本國棉產與翌年天津棉花購買力之繫聯係數 Rho 爲〇‧四二。世界棉產與翌年紐約棉花購買力之繫聯係數 Rho 爲〇‧五六，而美國棉產與翌年紐約棉花購買力之繫聯係數 Rho 爲〇‧五二。

棉產豐歉對於其購買力季節變遷之影響

區別棉花豐歉之法，係先求出歷年來棉花產額之長期趨勢，然後依此長期趨勢之公式，計算每年之估計產量。此種估計，謂之常態產量，與各相當年之實際產量相較。若實際產量大于估產量，即作爲豐收年。反之，若實際產量小于估計產量即作爲歉收年。豐歉各組中棉花購買力季節變化之計算法，係將各作物年全年平均購買力作爲一〇〇，再求各月份對全年平均數之百分之比，然後求各組中各年之相當月份之平均數即得。中外棉花購買力無顯著之長期趨勢，故于分析中無庸計算。
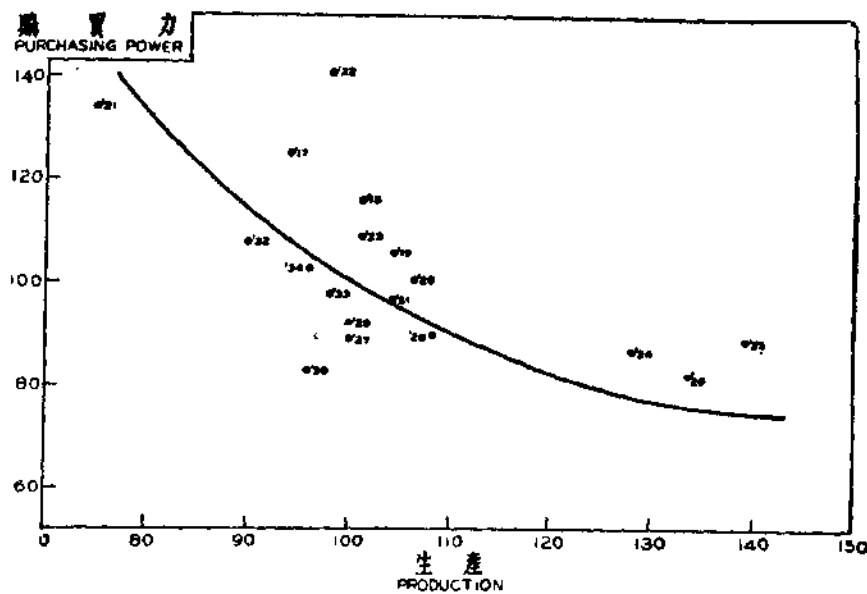

第三圖　世界棉花產量與翌年天津棉花購買力之關係
一九一七至一九三四年

天津棉花之購買力頗受世界棉花產量之影響，蓋棉花爲世界基要物品，兩者之繫聯係數爲〇‧五四。

FIGURE 3.—RELATION OF THE WORLD PRODUCTION OF COTTON TO THE PURCHASING POWER OF COTTON IN THE FOLLOWING YEAR IN TIENTSIN, 1917 – 1934

Cotton, being a world basic commodity, its purchasing power in Tientsin is affected by the world production of the crop. The rho is 0.54.

of crop produced has a greater influence upon its purchasing power in the following year than that in the current year (Figures 1 and 2, pages 463 and 464). In China, the index of correlation Rho between the amount of the domestic production of cotton and its purchaing power in Tientsin is 0.40 for the current years and 0.42 for the following year. In the United States, the index of correlation Rho is 0.32 for the current year and 0.52 for the following year.

Because cotton is a world basic commodity, the purchasing power is not governed by supply and demand factors within any one country or district, but by those in all countries. The effect that the size of the cotton crop of the whole world has upon its purchasing power is as important or even more important than the effect brought about by the size of the domestic crop. This phenomenon is especially significant in China (figures 3 and 4 pages 465 and 466). The index of correlation Rho for the relation of world production and domestic production of cotton to its purchasing power in the following year in China amounts to 0.54 and 0.42 respectively. The index of correlation Rho for the relation of world production and domestic production of cotton to its purchasing power in the United States amounts to 0.56 and 0.52 respectively.

第四圖　世界棉花產量與翌年紐約棉花購買力之關係

一九一四至一九三四年

紐約棉花之購買力頗受世界棉花產量之影響，蓋棉花為世界基要物品，兩者之繫聯係數為○‧五六。

FIGURE 4.—RELATION OF THE WORLD PRODUCTION OF COTTON TO THE PURCHASING POWER OF COTTON IN THE FOLLOWING YEAR IN NEW YORK, 1914 – 1934

The purchasing power of cotton in New York is affected by the world production of the crop, because cotton is a world basic commodity. The rho is 0.56.

根據計算所得，每當棉花豐收之年，其購買力在作物收獲後之下跌速度及程度均較歉收年爲大（第四六九頁第五及第六圖）。豐收年天津棉花購買力季節變化指數于該作物收穫後下跌一○点，歉收年中僅下跌五•八点。豐收年紐約棉花購買力季節變化指數于美國作物收獲後下跌一四•九点，歉收年僅下跌一○•八点。棉花豐收時，其購買力季節變化程度較諸歉收時爲大。豐收年中天津棉花購買力季節變化指數之最高点與最低点相差一三点。歉收年中兩者僅相差六•八点。美棉豐收年中紐約棉花購買力季節變化指數之最高点與最低点相差一五•八点，于歉收年中則相差一○•八点（第四六七頁第一表）。

中國豐收年棉花購買力季節性變化程度與歉收年之差別，較美國爲大。豐歉年中國棉花購買力季節變化程度相差七•二点。紐約則相差五•○点（第四六七頁第一表）。此或由於中國運銷制度之不善及貯藏設備之幼稚所致。中國農民如貯棉以待善價，其所負風險較美國農民爲大。

第一表　天津紐約棉花收成對其當年購買力季節變遷之影響
一九二一至一九二八年

TABLE 1.—EFFECT OF THE SIZE OF CROP ON THE SEASONAL FLUC-
TUATION OF THE PURCHASING POWER OF COTTON IN THE
CURRENT YEAR, IN TIENTSIN AND NEW YORK, 1921 – 1928

月　份 Month	天　津 Tientsin		紐　約 New York	
	豐　年 Large crop year	歉　年 Small crop year	豐　年 Large crop year	歉　年 Small crop year
一月 January	98.0	101.0	95.9	101.8
二月 February	99.0	100.0	97.2	102.6
三月 March	101.0	98.9	98.1	103.3
四月 April	102.2	99.2	99.1	102.0
五月 May	103.4	100.0	102.0	102.7
六月 June	106.2	99.0	104.8	103.9
七月 July	106.4	101.7	108.0	105.3
八月 August	103.4	104.0	104.5	101.7
九月 September	98.4	103.0	102.7	97.5
十月 October	94.2	100.0	98.6	94.5
十一月 November	98.1	98.2	93.1	96.5
十二月 December	96.2	99.2	93.0	100.3
高低点相差 Difference between the highest and the lowest point	13.0	6.8	15.8	10.8
豐歉年相差 Difference between the large crop year and small crop year	7.2		5.0	

Effect of Size of Crop upon Seasonal Fluctuations in the Purchasing Power of Cotton.

In order to distinguish the years producing large crops from those producing small crops, an equation of the trend for cotton production over a number of years has to be obtained. Then the estimated production in each year is calculated from the equation. These estimates are considered as the normal production. If the actual production in a year is greater than the estimated production by a considerable amount, it is classified in the group of large crop years. If, on the other hand, the actual production is smaller, it is classified in the group of small crop years. In calculating the seasonal fluctuation in the purchasing power of cotton for each group, the purchasing power in each month is expressed as a percentage of the yearly average for the corresponding month in each group. No significant long term trend in the purchasing power of cotton, either in China or abroad, can be found. Moreover, in calculation the purchasing power of each month is expressed as a percentage of the yearly average of the corresponding year. Therefore, the trend was not considered in the analysis.

第二表　天津紐約棉花翌年收成其當年購買力季節變遷之影響

一九二一至一九二八年

TABLE 2.—EFFECT OF THE SIZE OF CROP IN THE FOLLOWING YEAR ON THE SEASONAL VARIATION OF PURCHASING POWER OF COTTON IN THE CURRENT YEAR IN TIENTSIN AND IN NEW YORK, 1921 –1928

月　份 Month	天　津 Tientsin				紐　約 New York			
	豐　收　年 Large crop year		歉　收　年 Small crop year		豐　收　年 Large crop year		歉　收　年 Small crop year	
	翌年 豐收 Followed by a large crop	翌年 歉收 Followed by a small crop	翌年 豐收 Followed by a large crop	翌年 歉收 Followed by a small crop	翌年 豐收 Followed by a large crop	翌年 歉收 Followed by a small crop	翌年 豐收 Followed by a large crop	翌年 歉收 Followed by a small crop
一月 January	101.9	103.7	95.5	94.6	97.6	92.4	105.2	100.7
二月 February	104.0	107.5	90.3	96.6	98.8	96.3	104.0	99.5
三月 March	99.2	102.8	97.2	102.8	100.8	99.7	103.2	100.8
四月 April	101.4	103.9	102.0	102.5	100.3	100.7	101.1	100.8
五月 May	96.9	104.0	103.0	105.2	102.3	103.8	100.0	103.7
六月 June	96.4	108.4	99.4	106.4	103.2	105.5	100.0	102.9
七月 July	98.4	105.5	96.2	103.5	103.8	114.8	93.9	100.7
八月 August	104.8	96.3	106.1	98.6	110.2	102.9	103.8	100.7
九月 September ...	96.4	90.6	101.5	101.4	102.6	99.8	97.9	98.4
十月 October	99.8	92.0	99.5	98.6	96.8	95.8	99.3	100.5
十一月 November ...	100.6	98.7	99.2	95.0	97.4	95.4	95.8	99.4
十二月 December	100.7	100.5	98.9	94.5	97.4	91.3	103.3	101.3
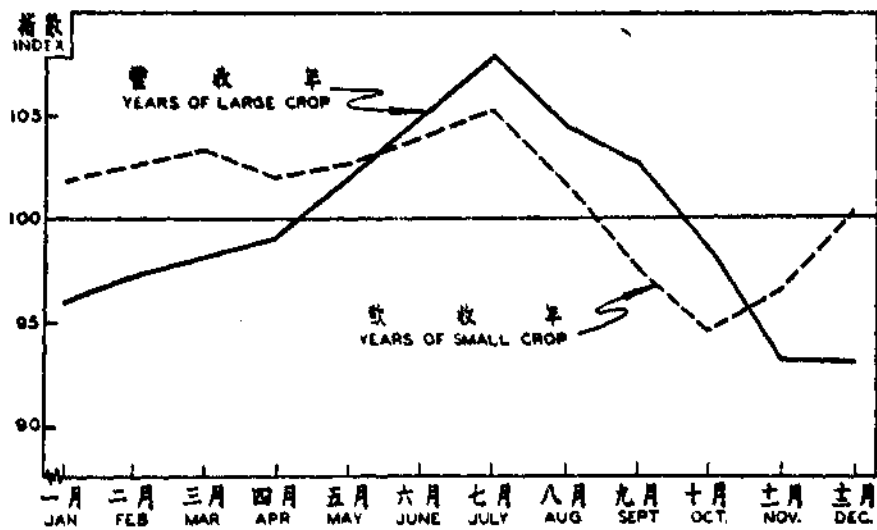
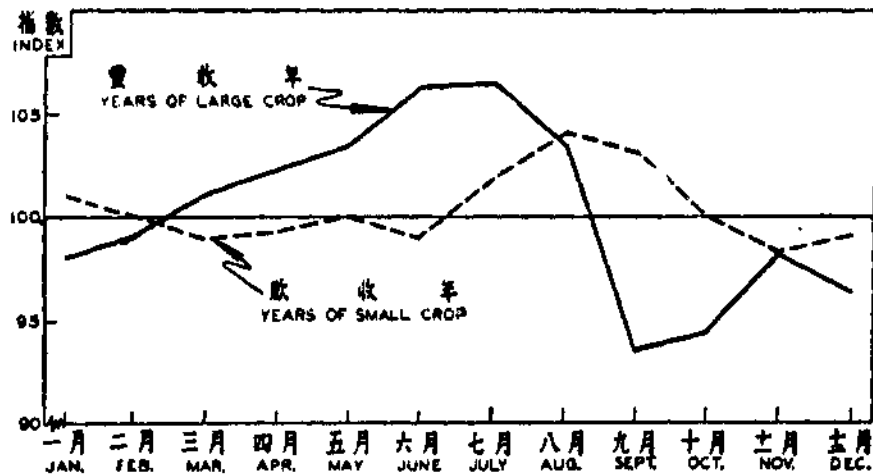第五圖　中國棉花豐收年及歉收年之天津棉花購買力季節變遷
一九二八至一九三六年

全年平均＝一〇〇

豐收年天津棉花購買力之季節變遷程度較歉收年棉花購買力之季節變遷程度爲大。

FIGURE 5.—SEASONAL FLUCTUATIONS IN THE PURCHASING POWER
OF COTTON IN YEARS OF LARGE AND SMALL CROPS, TIENTSIN,
1921 – 1936.

Yearly average = 100

The degree of seasonal fluctuation in the purchasing power of cotton in Tientsin is greater in years of large crop than that in years of small crop.

第六圖　美國棉花豐收年及歉收年之紐約棉花購買力季節變遷
一九二一至一九三六年

全年平均＝一〇〇

豐收年紐約棉花購買力之季節變遷程度較歉收年棉花購買力之季節變遷程度爲大。

FIGURE 6.—SEASONAL FLUCTUATIONS IN THE PURCHASING POWER
OF COTTON IN YEARS OF LARGE AND SMALL CROPS, NEW YORK,
1921 – 1936.

Yearly average = 100

The degree of seasonal fluctuation in the purchasing power of cotton in New York is greater in years of large crop than that in years of small crop.

It is found that in large crop years, the purchasing power of cotton falls faster and more severely than that in small crop years after the harvest (figures 5 and 6 page 469). In Tientsin, the index of the purchasing power of cotton falls 10 points in large crop years and 5.8 points in small crop years. In New York, it falls 14.9 points in large crop years and 10.8 points in small crop years. The degree of fluctuation in the purchasing power of cotton is greater in large crop years than that in small crop years. In Tientsin the difference between the highest point and the lowest point in the index of seasonal fluctuations of purchasing power of cotton amounts to 13 points in years of large crops and 6.8 points in years of small crops. In New York the difference is 15.8 points in years of large crops and 10.8 points in years of small crops (table 1, page 467).

The difference between the degree of seasonal fluctuations of the purchasing power of cotton in the years of large crops and small crops is greater in China than that in the United States. The difference is 7.2 in Tientsin and 5.0 in New York (table 1, page 467). This is probably due to the fact that the market system is inefficient in China and storage facilities are poor when compared with those in the United States. Chinese farmers stand a greater risk than American farmers if they keep their products for a longer period.

The seasonal fluctuation in the purchasing power of cotton is not only affected by the size of the crop produced in the corresponding year, but it is also affected by the size of the crop produced in the following year. This can be demonstrated by classifying years producing large crops into those followed by years of large crops and those followed by years of small crops, and noting the movement of the purchasing power that takes place during the two classes of years.

Both in years of large and small crops, as the season develops into a large crop year, the market becomes aware of the large crop through the medium of crop reports issued both by private concerns and the government. The " potential " supply becomes large and the purchasing power toward the end of the crop season would be considerably lower than at the beginning of the season. If as the season draws to a close, the next crop seems a small one, and is expected to be small one by the market, the " potential " supply will be small and at the same time the actual supply will be diminished by consumption, therefore, the purchasing power toward the end of the crop season will be higher than it was at the beginning of the season. This characteristic movement in the purchasing power of cotton, resulting from changes in the "potential" supply, is identical in China and the United States (table 2, page 468 and figures 7 and 8 pages 471 and 472).

棉花購買力之季節變化非僅受當年棉花收成之影響，其與翌年之收成亦有顯著之關係。為明白表示起見，作者將歷年棉花之收成分為(一)豐收翌年豐收(二)豐收翌年歉收，(三) 歉收翌年豐收及(四)歉收翌年歉收等各組，用觀各組中棉花購買力季節變化之異同。 根據分析所得，無論本年度
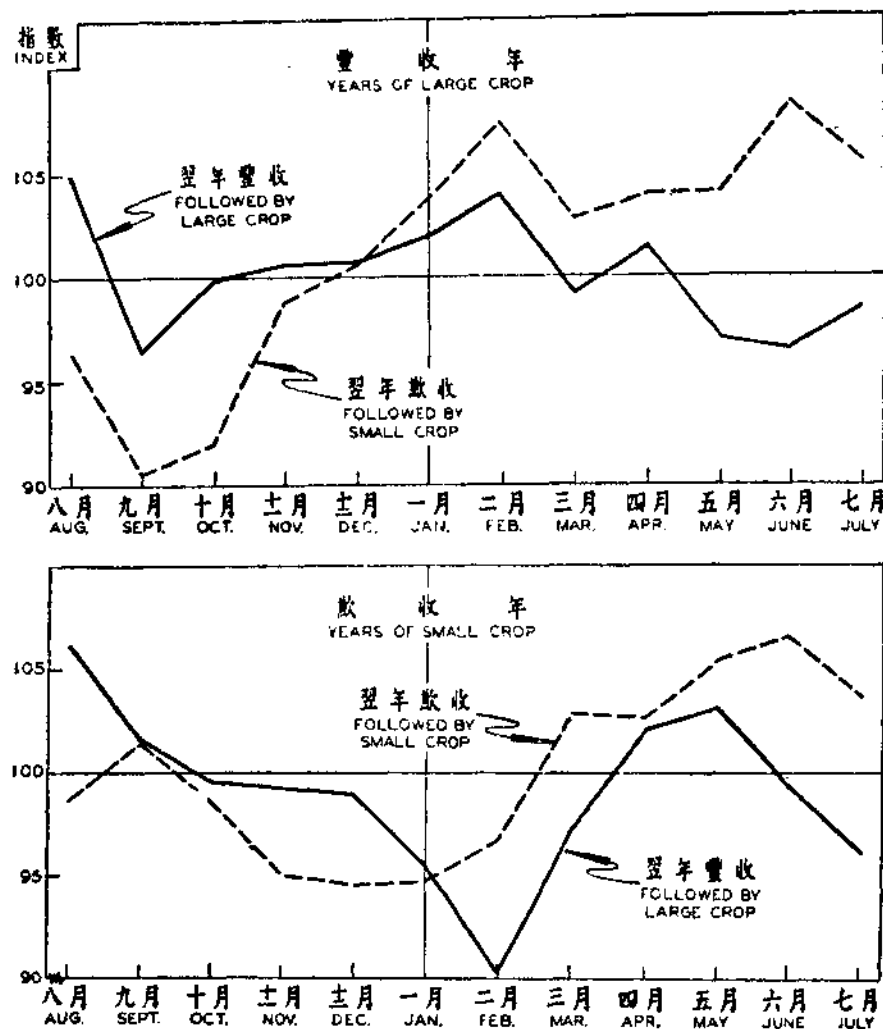
第七圖　　中國翌年棉產之豐歉對本年度天津棉花購買力季節變遷之影響
一九二八至一九三六年

全年平均＝一〇〇

本年度中國棉產無論豐歉，若下季棉作行將豐收，則天津棉花購買力於本作物季終了前將較前為低。若下季棉作行將歉收，則其購買力於本作物季終了前將較加高。
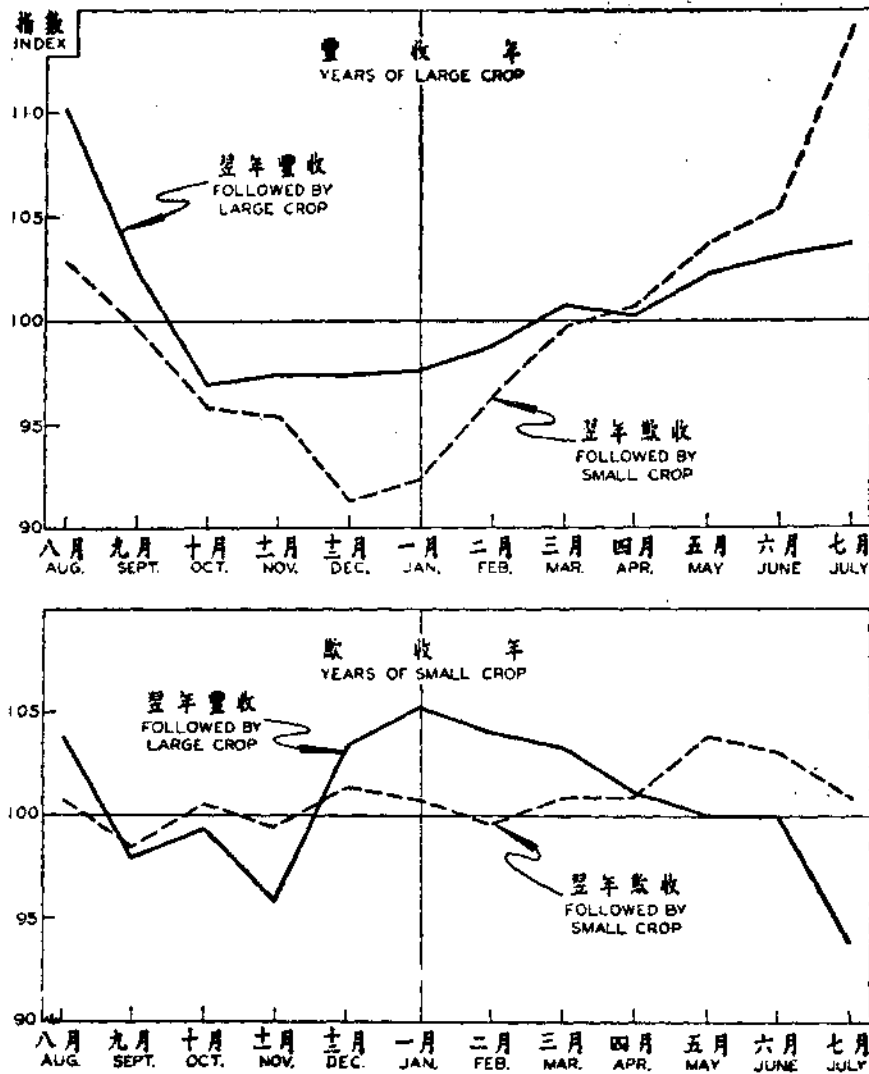
FIGURE 7.—THE EFFECT OF THE SIZE OF DOMESTIC PRODUCTION OF
COTTON IN THE FOLLOWING YEAR TO THE SEASONAL FLUCTU-
ATION IN THE PURCHASING POWER OF COTTON IN THE CURRENT
YEAR IN TIENTSIN, 1928 – 1936.

Yearly average = 100

Both in years of large crop and small crop, if the following crop is a
large one, the purchasing power of cotton toward the end of the crop season
would be lower than the beginning.　And if the following crop is a small one,
the purchasing power toward the end of the season would be considerably
higher.

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Conclusion

A large crop of cotton brings about a low purchasing power and a small crop of cotton a high purchasing power. A crop deficit has a more marked effect on the purchasing power than does an increase in crop yield. The size of the crop has a greater

第八圖　美國翌年棉產之豐歉對本年度紐約棉花購買力季節變遷之影響
一九二一至一九三六年

全年平均＝一〇〇

本年度美國棉產無論豐收或歉收，若下季棉作行將豐收，則紐約棉花購買力於本作物季終了前將較前為低，若下季棉作行將歉收則其購買力於本作物季終了前將較前加高。

FIGURE 8.—THE EFFECT OF THE SIZE OF DOMESTIC PRODUCTION OF COTTON IN THE FOLLOWING YEAR TO THE SEASONAL FLUCTUATION IN THE PURCHASING POWER OF COTTON IN THE CURRENT YEAR IN NEW YORK, 1921 – 1936.

Yearly average = 100

Both in years of large crop and small crop, if the following crop is a large one, the purchasing power of cotton toward the end of the crop season would be lower than the beginning. And if the following crop is a small one, the purchasing power toward the end of the season would be considerably higher.

之棉產爲豐收或歉收， 棉花市塲于事前由政府機關或私人方面所發表之產量估計報告中，即可洞悉下季棉產之豐歉。 若下季棉花之估計產量爲豐收，則棉花之『潛伏產量』行將增大，因此本作物季終了前之購買力較前爲低。反之，若下季作物爲歉收，則棉花『潛伏產量』行將減少，同時本季之實際供給量，因消費而銳減。因此作物季終了前之購買力必較前爲高。 中外棉花購買力因『潛伏產量』之影響而發生之季節變化情形，頗爲相似（第四六八頁第二表及第四七一及四七二頁第七及第八圖）。

結　　論

棉產豐收時，其購買力跌，而歉收時則漲。 棉花購買力受歉收之影響較受豐收爲大。棉產之豐歉對於其翌年購買力之影響， 輒較當年爲大。本國棉花購買力變遷受世界棉產之影響大于本國棉產之影響， 蓋棉花爲世界基本商品也。棉花之豐歉能影響其購買力之季節性變化。 棉花豐收年中購買力之季節變化程度較歉收爲大。 豐歉年中國棉花購買力季節變化程度之差別輒大於美國，蓋(一)中國運銷制度及組織不善，(二)貯藏設備幼稚。

棉花翌年產額亦能影響本年購買力之季節變化。 若下季作物將豐收，則作物季終了前之購買力垣較前爲低。反之， 若下季作物行將歉收，則本作物季終了前之購買力必高漲。

減輕中國農民產品價格季節變化程度之方策，不外(一)流通農村金融(二)發展交通運輸機關，及(三)取鄉政治方面之碍碍。

徐　壯　懷

中國中東部與北部數種交替農具經濟使用之比較分析

中國中東部之農具材料，係于民國二十四年夏間， 用調查方法向浙，蘇，皖，贛，鄂等五省十一地區，一四二六農家蒐集而得， 稍後于二十六年春，復向皖北， 魯及豫等三省六地區三六〇農家蒐集相同之材料。

influence upon its purchasing power in the following year than in the current year. Because cotton is a world commodity, the world production of cotton is as important, or even more important than that of the domestic production upon its purchasing power in any country.

The seasonal fluctuation in the purchasing power of cotton is affected by the size of the crop. The degree of seasonal fluctuation in the purchasing power is greater in years of large crops than in years of small crops. The difference between the degree of fluctuation in years of large crops and years of small crops is greater in China than in the United States, owing to (1) the poor marketing system and organization in China, (2) the primitive storage facilities in China.

Seasonal fluctuations in the purchasing power of cotton are also affected by the size of the crop in the following year. As the season develops into a large crop year, the purchasing power toward the end of the crop season becomes lower than at the beginning of the season. As the season develops into a small crop year, the purchasing power toward the end of the crop season rises considerably.

The degree of seasonal fluctuation of prices of agricultural products might be reduced to some extent by (1) facilitating rural credit, (2) developing transportation systems and communication facilities, and (3) eradicating political handicaps.

Tsu Chwan-hwai

A COMPARATIVE ANALYSIS OF THE ECONOMIC USE OF SOME OF THE ALTERNATIVE FARM IMPLEMENTS IN EAST CENTRAL CHINA AND NORTHERN CHINA, 1933 – 1934 AND 1935 – 1936

Data on the farm implements of East Central China were collected by the survey method from 1,426 farms in 11 localities of five east central provinces — Chekiang, Kiangsu, Anhwei, Kiangsi, and Hupeh, in the summer of 1935. Later, in the spring of 1937, similar data were obtained from 360 farm in six localities of three northern provinces—Northern Anhwei, Shantung, and Honan.

The implements listed in table 1, (page 477 except for cultivating hoes and swinging sickles, which are employed in limited areas only, are commonly used on all these farms. Cultivating hoes are only used on some farms in Tsowping, Shangtung, and swinging sickles on certain farms in Suhsien, Anhwei, and Loyang, Honan.

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第一表（四七七頁）所列各種農具，除耘鋤及撒鑲僅使用於有限之地域外，其他各農家均普遍使用。耘鋤僅有山東鄒平之一小部份田場使用。撒鑲僅有安徽宿縣及河南洛陽之少數田場使用，

中國中東部各地，均用耕犂釘耙耕翻土。耕犂較釘耙之優点有二：耕犂在短時期內成就之工作較多，而每耕一市畝之費用較小。且如使用釘耙工作，則需要之人力較多。惟因小田場每多不飼養役畜，故不能使用耕犂。如大農家之工人充足，亦是有使用釘耙替代耕犂者。使用耕犂之農家，每年每具耕犂可耕地二六‧〇市畝，但使用釘耙之農家，在同時期內每家僅掘地二二‧一市畝。然使用釘耙者，改用耕犂，未必有利，蓋以耕犂僅能在相當面積田場使用，始爲經濟，而多數農家耕種面積，均無必需之數量。

中國中東部一帶土地之灌溉，均用役畜拖動或用人力脚踏或手搖之水車，役畜拖動之水車，其工作快而廉且較人力脚踏或手搖之水車效率爲高並經濟。因小田場不飼養役畜，役畜拖動水車，不能普遍使用，田場之使用役畜拖動水車者，年內每具水車平均灌溉一五‧四市畝，但用人力脚踏或手搖之水車者，年內每家僅能灌溉一四‧八及九‧二市畝。使用脚踏或手搖之水車者，改用役畜拖動之水車，未必有利，除非將每家之灌溉面積增加至一五‧四市畝相近。役畜拖動之水車，祇適用於大而毗連之田坵因此種水車不若脚踏或手搖水車之便於移動也。

如比較脚踏及手搖之水車，則脚踏水車之效率顯較手搖之水車爲高，惟手搖水車之費用較脚踏水車爲廉。最小田場通常僅有農工一人，祇可使用手搖水車。脚踏水車同時約需三四人始可利用。投資於手搖或脚踏之水車，較役畜拖動之水車爲少，故此種水車，多在中國中東部之中大及小田場使用之。

打落桶及打落床，二者均用以打落穀物。打落床似爲較經濟之農具，以其價值較打落桶爲低，而所能成就之工作數量與迅速，則與打落桶相等。惟打落床必須使用於晒塲上，因此作物由田間運至晒塲時，每多散失，但用此打落，可將工作延至農忙季節之後。此使人工分配，較爲得宜。打落桶必須使用於田間，且必須在作物收割後，即刻行之，因此作物散失得以避免，惟短時期內農忙工作之衝突，遂成爲嚴重之問題。使用打落桶之地帶如改用打落床，其最大之反感，蹶爲晒塲旁無空地，以便晒乾打落之新柴，草因此二者，各按照其利便及適合情形而使用之（第四七八頁第二表）。

In all localities of East Central China both plows and digging hooks are used for turning and loaming the soil. The plow has two advantages over the digging hook, it achieves more work in a shorter period of time and has a lower cost per shih mow cultivated. In addition much more energy is required to perform these operations with the digging hook. However, because small farms do not keep work animals it is impossible for them to use plows. When there is enough family labor available on large farms digging hooks are often used in preference to plows. It was possible to turn and loam 26.0 crop shih mow in one year when working with a plow, while only 22.1 crop shih mow could be accomplished with digging hooks over the same period. Nevertheless, it might not have been profitable for the farmers who used digging hooks to buy plows, because plows can only be used economically on farms with a certain amount of land and many of these farmers did not possess the required amount.

In East Central China the land was irrigated by means of wooden chain pumps driven by animals or by the human foot or hand. Pumps worked by animals do the work more quickly and cheaply and are more efficient and economical than pumps worked either by hand or foot. Because small farms do not own work animals animal pumps are not widely used. On the farms employing pumps driven by animals an average of 15.4 crop shih mow could be irrigated in a year, but where foot and hand driven pumps were used it was only possible to irrigate 14.8 and 9.2 crop shih mow per farm each year. It might not have been profitable for the farmers using foot and hand driven pumps to change to animal worked pumps, unless at the same time their irrigated crop area could be increased to nearly 15.4 crop shih mow. It is profitable to employ wooden chain pumps worked by animals only when the fields are large and adjoin one another, as these pumps cannot easily be moved from one field to another, whereas it is a simple matter to move foot and hand driven pumps.

A comparison of the foot and hand driven pump shows that the pump worked by foot is apparently more efficient than the hand pump, but the hand pump is cheaper than the foot pump. Since there is usually only one farm worker on the smallest farms, a pump worked by hand is the only implement that is practicable. The operation of a foot pump on the other hand requires about four farm workers to drive it simultaneously. The investment required for either a hand or a foot pump is much smaller than that for an animal pump and for this reason they are commonly used on medium and small sized farms in the localities of East Central China.

Threshing boxes and threshing racks are both used for threshing grain. The threshing rack seems to be the more economical implement, as it is cheaper than the threshing box but

中國北部之耘鋤及鋤頭二者，均用作鋤地，但耘鋤祇有山東鄒平之少數田塲用之。耘鋤之工作或不及普通鋤頭之工作爲精細，惟用於第一次鋤地之後，最爲合宜。此種耘鋤之使用爲該地最近新引進者，多數農家均不知其利益，故此類農具之使用者，仍屬寥寥。

撒鐮及鐮刀二者均可用作割麥，惟後者尚可用作收割其他作物。撒鐮之使用，多數均在田塲較大而麥作產量較低之地。此種收割方法，雖可節省人工，惟麥稈易折斷，麥粒易脫落。故各地普遍均使用鐮刀，惟用鐮刀工作，須多用人工及體力。

第一表　中國中東部與北部交替農具之價值使用及工作效率

民國二十二至二十三年及二十四至二十五年

TABLE 1.—VALUE, USE AND RATE OF WORK OF ALTERNATIVE FARM IMPLEMENTS IN EAST CENTRAL CHINA AND NORTHERN CHINA, 1933 – 34 and 1935 – 36

農　具 Implements	每件價值 Value per implement	使用年限 Length of life	每日工作效率 Rate of work per day	全年勤 用時間 Days operated per year
	元 yuan	年 years	市畝 shih mow	日數 days
中國中東部 East Central China				
一. 耕掘 1. Plowing and digging:				
（一）耕犁 (1) Plow	5.00	20	3.1	9
（二）釘耙 (2) Digging hook	0.70	10	0.7	13
二. 灌漑 2. Irrigating:				
（一）牛車 (1) Wooden chain pump, animal	33.30	29	5.1	3
（二）脚車 (2) Wooden chain pump, foot	18.70	27	3.9	3
（三）手車 (3) Wooden chain pump, hand	10.50	27	2.2	4
三. 打落 3. Threshing:				
（一）打落桶 (1) Threshing box	5.85	24	1.6	9
（二）打落床 (2) Threshing rack	1.82	23	1.6	14
中國北部 Northern China				
一. 中耕 1. Cultivating:				
（一）耘鋤 (1) Cultivating hoe	5.77	20	11.9	10
（二）鋤頭 (2) Hoe	1.60	18	1.9	77
二. 收割 2. Harvesting:				
（一）撒鐮 (1) Swinging sickle......	1.98	8	10.2	5
（二）鐮刀 (2) Sickle	0.17	4	3.2	39

is able to accomplish as much and do the work as quickly. The threshing rack must be operated on the threshing floor and, consequently, there is some loss of grain in carrying the crops from the fields to the threshing floor, but by using it the work can be postponed until the peak labor season is over. This makes a better distribution of labor possible. The threshing box has to be operated in the fields, immediately after the crops are cut.

第二表　中國中東部與北部交替農具之使用成本及每市畝所需成本
民國二十二至二十三年及二十四至二十五年

TABLE 2.—OPERATING EXPENSES AND COST PER SHIH MOW OF ALTERNATIVE FARM IMPLEMENTS IN EAST CENTRAL AND NORTHERN CHINA, 1933 – 34 and 1935 – 36

農　具 Implement	全年使用費用 Operating expenses per year			每市畝費用 Cost per shih mow			
	利息 (註一) Interest on investment (1)	折舊 (註二) Depreciation (2)	修理 (註三) Repairs (3)	農具 Implement	役畜 Animal labor	人工 Man labor	總計 Total
	元 yuan	元 yuan	元 yuan	元 yuan	元 yuan	元 yuan	元 yuan
中國中東部 East Central China							
一. 耕攊 1. Plowing and Digging:							
（一）耕犁 (1) Plow	0.58	0.24	0.51	0.05	0.10	0.19	0.34
（二）釘耙 (2) Digging hook	0.09	0.07	0.15	0.03	—	0.86	0.89
二. 灌溉 2. Irrigating:							
（一）牛車 (1) Wooden chain pump, animal	3.86	1.13	1.31	0.41	0.06	—	0.47
（二）脚車 (2) Wooden chain pump, foot	2.16	0.69	1.22	0.35	—	0.62	0.97
（三）手車 (3) Wooden chain pump, hand	1.21	0.39	0.47	0.24	—	0.27	0.51
三. 打落 3. Threshing:							
（一）打落桶 (1) Threshing box	0.58	0.19	0.38	0.08	—	0.38	0.46
（二）打落床 (2) Threshing rack	0.18	0.08	0.09	0.02	—	0.38	0.40
中國北部 Northern China							
一. 中耕 1. Cultivating:							
（一）耘鋤 (1) Cultivating hoe	0.26	0.48	0.14	0.09	0.02	0.04	0.07
（二）鋤頭 (2) Hoe	0.06	0.17	0.12	0.01	—	0.18	0.14
二. 收割 2. Harvesting:							
（一）撤鐮 (1) Swinging sickle	0.10	0.24	0.01	0.01	—	0.04	0.11
（二）鐮刀 (2) Sickle	0.01	0.06	0.00	nil	—	0.08	0.08

註一　利息之計算，中東部爲當時田塲價值百分之十，華北爲百分之八。
註二　折舊之計算，乃以已用之年數，除當時價值與全新價值之差額。
註三　包括滑油，機油，原料，零件，工資等。

1 Calculated on the basis of 10 per cent of current farm value for East Central China and 8 per cent for Northern China.
2 Calculated by dividing the difference between the current farm value and the current value when new, by the number of years actually used.
3 Includes grease, oil, materials, new parts, wages, etc.

總之，農民使用耕犂，役畜拖動水車，打落床及耘鋤較爲經濟，因使用成本較少，而工作效率亦較使用其他農具爲同樣工作爲快。使用打落床，除投資小外，尚有其他利点，卽每年之修理費亦低。使用撒鐮之弊，如使用時稍加注意，或用童女工整理折亂柴草，或亦可避免。如使用此種農具有利，則對於未飼養役畜之田塲成一問題，惟合數家公用，或可解決之。使用佳良農具所節省之人工，可利用於其他生產工作。此外農人之日間工作時間，亦得減少。減少工作時間對於目前農民健康有莫大之助益，蓋彼等在農忙期間，不論天氣情形如何，每日均須工作十二小時。

改良農具尚有其他利益，卽在氣候不佳期間，可加快灌漑及收割工作，以減少因使用遲緩舊法而遭受之作物損害。

潘鴻聲

Loss of grain is thus avoided, but the resulting conflict of labor requirements in this short busy period may become a serious problem. The chief objection of the farmers in the localities which use the threshing box, against the use of the threshing rack, is that there is no room on the threshing floor to dry the fresh straw after threshing. Therefore, these two implements are both used according to their convenience and suitability (table 2, page 478).

In North China both the cultivating hoe and hoe are used to cultivate crops, but the use of the cultivating hoes is limited to certain farms in Tsowping, Shantung. The work done with cultivating hoes may not be so good and thorough as that performed with an ordinary hoe, but it is preferable to use the former implement after the first cultivation. It is only recently that the cultivating hoe has been introduced into this hsien, so that a great many farmers there have not yet realized its advantages, hence not many of these implements are used.

The swinging sickle and sickle are both used to harvest wheat, but the latter can also be used to harvest other crops. The swinging sickle is used most extensively in the localities where the farms are large in size and the wheat crops are poor. Labor is saved by this method, but the wheat straws are liable to be tangled and the grain readily dropped. The sickle is commonly and widely used in all localities, but more labor and energy is required for its operation.

In conclusion, it would be more economical for farmers to use plows, wooden chain pumps driven by animals, threshing racks, and cultivating hoes, because to use them costs less and the work is done more quickly than when other implements are employed for the same operations. There is another point in favour of threshing racks, besides the small initial investment required: the annual repairs are also low. The objection against the use of the swinging sickle could be removed if the work were done carefully or child and woman labor employed to sort the tangled straws. It would be a problem for small farms, which do not have work animals, to use some of these implements profitably, but cooperative ownership seems a possible remedy. The human labor saved through the use of better implements could be employed for other productive purposes. In addition, the farmers' working day would be considerably shortened. This would be of great benefit to the farmers, who, at the present time, undermine their health by working twelve hours a day, whatever the weather conditions, during the busy season.

Improved implements have the added advantage of making it possible to speed up irrigating and harvesting operations when the weather is unfavorable, thus saving much of the crops that would be damaged under the slower, older, methods.

Pan Hong-shen

四川重慶之批發物價

民國二十七年四月份物價漲落情形

四月份重慶躉售物價指數較上月降落百分之三。九十二項物價中，有四十五項下跌，二十八項上漲，十九項平隱未變（第四八四頁第二表）。

四月份中各項米糧價格，均逐漸下落，原因係新襟糧多將上市，一般農家又爲春耕雇工需錢，多將存糧出售。同時米糧營業稅亦穫豁免，價逐跌減，本處分析重慶米價季節變遷，四月份之季節指數，較其前後月份爲低，此証明本月糧價之跌落重要原因，乃季節之必然性非一時偶然現象也。食料類中跌價者尚有糖，巴鹽，榨菜等項，漲價者有茶葉酒等，惟猪肉，花鹽，醋及醬油則未有變動，食料指數降爲百分之九〇．九。衣料類中川綢因氣候轉熱，外銷盛旺，故價續漲，棉紗亦暑漲，三峽布及其他棉布價格暑有跌落，而毛織品交易稀少，價無變化，衣料類指數降爲一四四。燃料類中汽油洋燭價格暑漲煤油則向下跌，輪炭因江水陡漲，船舶流通暢利銷路增加，遂亦漲價，燃料類指數昇達一三七．二。五金電料類中圓鐵扁鐵竹節鋼鉛皮線等項，因有漢口來貨價遂下跌，惟燈泡貨少價仍上漲，但指數已由上月二一六．八落至二〇七．七矣。建築材料類中，木料水泥價未變動，其他各項漲跌亦微，指數僅增〇．五。襟項類中桐油因有洋商進貨價遂回漲，豬鬃以運輸尚便價亦提漲，川芎當歸前以價格慘跌來貨絕少價格曾一度回漲，但本月內價又下跌。蓋因來貨甚多銷路仍滯，不能不重趨跌勢也。香煙以漲價太凶消費者減少，價格亦向下跌，小車牌肥皂在本月中因原料價高始行第一次漲價，快靛以來源絕少存貨日減價續上昇，本月襟項類指數降爲一一七．九，本月總指數受食料衣料五金電料各類指數降跌之影響，遂由上月之一二七．二落至一二四．一。

民國二十七年五月份物價漲落情形

五月份重慶躉售物價總指數較上月減少〇．七。九十一項物價中有三十八項上漲，三十六項下跌，十七項未有變動（第四八六頁第四表）。

五月份食料類中各種熟米，磺米，俱因來原稀少，價格暑漲，小麥及麵粉，則平穩無變，冰糖來貨甚稀，價遂高漲。葫豆，豌豆以多年收獲尚豐，跌勢甚凶，牛肉因天氣更趨炎熱，銷路愈窄，價亦再落，其他各項漲跌均微，指數較上月下落一．六。

WHOLESALE PRICES IN CHUNGKING, SZECHWAN
Explanatory Notes for April, 1938

The general index of wholesale prices in Chungking dropped three points as compared with that of the previous month. The prices of 28 articles were higher, 45 lower, and 19 remained unchanged. (table 2, page 484).

The prices of all cereals fell during this month on account of the need of money for spring cultivation, which forced farmers to sell at lower prices, and also in view of the fact that new crops will be appearing in the market very soon. Previous study on the seasonal variation of cereal prices revealed this same result— that a seasonal low usually occurred in April of each year. Quotations for pulverized salt, unpulverized salt, and turnip, salted, eased; wine and tea rose; vinegar and soy sauce remained unchanged. The food index dropped to 90.9.

Of the clothing group, Szechwan silk rose consistently as a result of the growing demand in hot weather and a fairly brisk market. Cotton yarn rose slightly; San Hsia cloth and other cloths were considerably lower. No fluctuations occurred in the prices of winter clothing, since not much business was done. As a result, the clothing index was brought down to 127.

In the fuel group, although gasoline and candles rose only slightly, there was an increasing demand for coal No. 2 because of more active shipping conditions, and consequently its price rose, the index reaching 137.2.

The index of metals and electric supplies dropped from 216.8 to 207.7. Iron bars, iron plates, bamboo steel, lead sheets, etc., were quoted at lower prices as the supply from Hankow became available. The price of bulbs rose due to the shortage of supply.

In the group of building materials, prices of timber and cement remained unchanged; other commodities fluctuated slightly causing the general index to rise only 0.5 points.

The miscellaneous index dropped to 117.9 in April. Wood oil showed an advance as foreign companies bought in; bristles rose on account of better communications; Conioseliunm univitatum, Turez and Ligusticum acutlobum, S et Z, dropped seriously because of over-supply. Cigarettes also dropped as a consequence of quotations being too high, which checked the usual consumers. Soap went up in price owing to the increased cost of manufacture; the price of reduced indigo was higher on account of a shortage in supply.

The general index of all commodities for April, which dropped by 3 points, was seriously affected by the decline of the indexes of the food, clothing, and metals and electric supplies groups.

Explanatory Notes for May, 1938

The general index for Chungking wholesale prices in May showed a slight decline of 0.7 points as compared with last month. Thirty-eight out of 91 quotations went up, 36 went down and 17 remained unchanged (table 4, page 486). No quotations were available for cotton yarn 16's.

衣料類中無一項不爲漲價者，尤以棉紗漲勢特猛，廿支棉紗每包增長四十餘元，卅二支紗增漲七十餘元，蓋因存底本來日見薄弱，加以此種商貨對局部戰地變化，引起過份敏感作用杞憂來源斷絕，遂乘機抬價，而漂布川綢，則又以時屆夏令銷路甚旺，隨之昇漲，本月衣料指數突昇達一五五·八較上月增高一一·八。

燃料類中，煤炭價穩定未變煤油汽油洋燭在月尾時均以缺貨，而價隨陡漲，惟火柴獨以銷塲不旺，價格跌落，燃料指較上月減低一·八。

金屬電料類中除洋釘及亞浦耳長形燈泡因貨少署漲外，其他各項均以來貨尚多，價格俱落，指數低減一〇·二。

第 一 表　重 慶 蠆 售 物 價 指 數
（簡單幾何平均）

民國二十六年＝一〇〇

TABLE 1.—INDEX NUMBERS OF WHOLESALE PRICES IN CHUNGKING, SZECHWAN
(Simple Geometric Average)

1937 = 100

類 別 Groups	總指數 General Index	食料類 Food	衣料類 Clothing	燃料類 Fuel and light	金屬及電料類 Metals & electric Supplies	建築材料類 Building Materials	雜項類 Miscellaneous
項 數 No. of Commodities	92	32	18	10	11	9	12
二十六年 1937							
一月 January	93.5	98.5	92.8	94.6	79.8	92.5	95.3
二月 February	96.2	104.8	93.5	93.5	82.0	93.8	96.5
三月 March	96.7	105.3	93.4	93.5	84.7	92.9	97.6
四月 April	97.9	100.8	95.1	94.0	92.6	94.9	105.2
五月 May	98.3	104.5	96.4	92.2	86.5	94.5	104.8
六月 June	98.8	106.4	96.6	95.3	83.0	95.2	104.2
七月 July	95.1	95.4	97.0	93.3	81.5	99.5	103.8
八月 August	95.7	93.8	94.5	98.6	97.1	103.0	93.7
九月 September	103.1	95.0	112.1	99.1	127.9	98.2	99.7
十月 October	104.4	98.5	111.2	107.7	121.6	99.9	96.9
十一月 November	104.0	97.5	105.4	110.9	122.3	100.4	96.3
十二月 December	98.3	93.2	108.1	117.6	133.6	111.4	86.0
二十七年 1938							
一月 January	109.3	91.4	114.2	122.3	153.8	135.6	93.4
二月 February	119.2	95.1	122.7	130.1	193.7	140.3	109.3
三月 March	127.2*	95.1	148.6*	133.6	216.8	141.4	118.9
四月 April	124.1*	90.9	144.0*	137.2	207.7	141.9	117.9
五月 May	123.4	89.3	155.8	135.4	197.5	141.7	111.5

* 修正指數 Revised.

Owing to the limited supply, prices of all kinds of rice and sugar (dried syrup) were higher in May. The declining quotations for broad beans and field peas were understood to be caused by the reaction from this year's good crops. The price of beef fell on account of a dull market due to hotter weather. The fluctuations in the prices of other foodstuffs were small, the general index being 1.6 points lower as compared with that of April, 1938 (table 3, page 485.)

The quotations for all commodities in the clothing group were higher, caused by the gradual decrease in stocks and at the same time by rumors concerning the future supply. Cotton yarn advanced the most: 20's. rose by more than $40.00 per bale and 3½'s. by $20.00,. Prices of shirtings and Szechwan silk also advanced on account of the growing demand during the hot weather. For these reasons the clothing index was suddenly brought up to 155.8, which is 11.8 points higher than the preceding month.

In the group of fuel and light, kerosene, gasoline and candles showed an advance toward the end of the month due to limited supply. Matches were the only commodity which declined markedly because of a dull market. Coal remained stable. The general index for this group was 1.8 points lower than for the previous month.

Of the metals group only nails and long oppel bulbs had higher quotations, caused by a shortage in supply. Prices of all other commodities fell due to abundant supplies. The general index for this group declined by 10.2 points during the month.

The index for building materials declined only 0.2 points. Class had a lower quotation, because its supply was more abundant than a month ago. Because of the severe damage caused by a

第二表　四川重慶民國廿七年四月與同年三月各種物品價格升降之百分比

TABLE II.—NUMBER AND PERCENTAGE OF COMMODITIES FOR WHICH PRICES WERE HIGHER, LOWER OR UNCHANGED IN APRIL 1938 THAN IN MARCH 1938, CHUNGKING, SZECHWAN

	類　別　Group	總　計 Total		漲 Higher		落 Lower		平 Unchanged	
		項數 No.	百分比 %	項數 No.	百分比 %	項數 No.	百分比 %	項數 No.	百分比 %
總	計 Total	92	100	28	30.4	45	48.9	19	20.7
食　料　類	Food	32	100	6	18.8	21	65.6	5	15.6
衣　料　類	Clothing	18	100	5	27.8	7	38.9	6	33.3
燃　料　類	Fuel and light	10	100	4	40	4	40	2	20.0
金屬及電料類	Metals and electric supplies	11	100	4	36.4	7	63.6	0	0
建築材料類	Building materials	9	100	2	22.2	2	22.2	5	55.6
雜　項　類	Miscellaneous	12	100	7	58.3	4	33.4	1	8.3

第三表　四川重慶民國二十七年四月與同年三月及二十六年四月各種物價升降之比較

TABLE III.—COMPARISON OF PRICE INDEX ON APRIL 1938 WITH THAT OF MARCH 1938 AND APRIL 1937 CHUNGKING, SZECHWAN

類　別 Group	指　數 Index 四月 April 1938	比較三月增（＋）或減（—） Increase (+) or decrease (—) as compared with March 1938	比較上年四月增（＋）或減（—） Increase (+) or decrease (—) as compared with April 1937
總　指　數 General index.	124.1	—3.1	+ 26.2
食　料　類 Food	90.9	—4.2	— 9.9
衣　料　類 Clothing	144.0	—4.6	+ 48.9
燃　料　類 Fuel and Light	137.2	+3.6	+ 43.2
金屬及電料類 Metals and electric Supplies ...	207.7	—9.1	+115.1
建築材料類 Building Materials	141.9	+0.5	+ 47.0
雜　項　類 Miscellaneous .	117.9	—1.0	+ 12.7

建築材料中玻璃因來貨不少價格猛跌，大市瓦因本市火災銷塲增大，價逐高漲，其他漲跌甚微，無足述道指數僅較上月降落〇•二（第四八七頁第五表）。

雜項類中，新聞紙以到貨多而價猛跌黑豬鬃因外市跌價亦行跌落，桐油仍以出口困難價格日跌，牛皮僅銷本市路窄，價格無起抬希望，川芎當歸在下旬中市塲了無交易，謂因受外滙限制出口梗阻所致，雜項類指數，逐由上月之一一七•九降爲一一一•五矣。

如與去年同月比較，則本年五月總指數已漲二五•一，各類物品中，以金屬電料上漲最猛，燃料及衣料指數各漲四三•二及五九•四，（第四八七頁第五表），僅食料類以收成尙豐，運輸阻滯，指數降落，建築材料則因渝市人口激增，價格步漲，指數繼續上昇，雜項類中，各種物品互有漲落，總指數僅漲六•七。

李　德　賢
文　先　俊

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第四表　四川重慶民國廿七年五月與同年四月各種物品價格升降之百分比

TABLE VI.—NUMBER AND PERCENTAGE OF COMMODITIES FOR WHICH
PRICES WERE HIGHER, LOWER, OR UNCHANGED IN MAY 1938
AS COMPARED WITH APRIL 1938, CHUNGKING, SZECHWAN

類　　別　Groups	總計 Total		漲 Higher		落 Lower		平 Unchanged	
	項數 No.	百分比 %	項數 No.	百分比 %	項數 No.	百分比 %	項數 No.	百分比 %
總　　　計 Total	91	100	38	41.7	36	39.5	17	18.8
食　料　類 Food	32	100	9	28.2	14	43.8	9	28.0
衣　料　類 Clothing	17	100	17	100	0	0	0	0
燃　料　類 Fuel and light	10	100	3	30.0	3	30.0	4	40.0
金屬及電料類 Metals and electric supplies	11	100	2	18.1	9	81.9	0	0
建築材料類 Buidling materials	9	100	4	44.4	2	22.2	3	33.3
雜　項　類 Miscellaneous	12	100	3	25.0	8	66.7	1	8.3

fire on May 8th, the demand for tiles enhanced their price remarkably. Price fluctuations for other commodities were trifling, hence the general index was not seriously affected.

Among the commodities in the miscellaneous group quotations for newsprinting paper were markedly lower, due to an abundant supply. Bristles fell owing to the weakened demand in other places. The already low quotations for wood oil and hides were still lower as a result of the hampered export conditions. It was reported that the foreign exchange control recently instituted, discouraged export activities, therefore no business was transacted for Conioselium unicitatum, Turez and Ligusticum acutilobum S. et Z. As a result the price index for this group declined from 117.9 to 111.5.

As compared to the same month last year, the general index for May, 1938, was 25.1 points higher (table 5, page 487). Of the six groups of commodities metals and electric supplies recorded the highest gain. The fuel and clothing groups each advanced by 43.2 and 59.4 points respectively. The food index was the only one that declined. This was probably caused by hampered export activities and this year's good crops. Prices of building materials rose owing to the growing demands of the increasing population of Chungking. The rise and fall in the prices of commodities in the miscellaneous group counterbalanced each other, therefore the general index for this group only advanced by 6.7 points.

Li Teh-hsien
Wen Hsien-tsiun

第五表　四川重慶民國二十七年五月與同四月及二十六年五月
各種物價升降之比較

TABLE V.—COMPARISON OF PRICES INDEX ON MAY, 1938 WITH THAT
OF APRIL 1938 AND MAY 1938 CHUNGKING, SZTCHWAN

類　　別 Groups	指　數 Index 五　月 May	比較四月增（＋） 或減（—） Increase （＋） or decrease （—） as compared with April 1938	比較上年五月增 （＋）或減（—） Increase （＋） or decrease （—） as compared with May 1937
總　指　數 General index	128.4	— 0.7	+ 25.1
食　料　類 Food	89.3	— 1.6	— 15.2
衣　料　類 Clothing	155.8	+11.8	+ 59.4
燃　料　類 Fuel and light	135.4	— 1.8	+ 43.2
金屬及電料類 Metals & electric supplies .	197.5	—10.2	+111.0
建築材料類 Building Materials	141.7	— 0.2	+ 47.2
雜　項　類 Miscellaneous	111.5	— 6.4	+ 6.7