Volume Title: A Study of Aggregate Consumption Functions

Volume Author/Editor: Robert Ferber

Volume Publisher: NBER

Volume ISBN: 0-87014-453-7

Volume URL: http://www.nber.org/books/ferb53-1

Publication Date: 1953

Chapter Title: Appendix B: Basic Data and List of Computed
Functions

Chapter Author: Robert Ferber

Chapter URL: http://www.nber.org/chapters/c0825

Chapter pages in book: (p. 64 - 69)

BASIC DATA AND LIST OF COMPUTED FUNCTIONS

Table B-1

BASIC DATA USED IN COMPUTATIONS[a]

	S ($ bil.)	Y ($ bil.)	N (mil.)	P (1935-39=100)	Y_0^b ($ bil.)	M ($ bil.)
1922	3.5	56.7	110.0	119.7		
1923	4.8	65.0	111.9	121.9	56.7	
1924	3.0	66.4	114.1	122.2	65.0	
1925	3.4	70.9	115.8	125.4	66.4	
1926	2.5	73.6	117.4	126.4	70.9	
1927	3.1	74.3	119.0	124.0	73.6	
1928	1.9	76.5	120.5	122.6	74.3	54.678
1929	3.7	82.5	121.8	122.5	76.5	55.171
1930	2.9	73.7	123.1	119.4	82.5	54.389
1931	1.8	63.0	124.0	108.7	82.5	52.883
1932	−1.4	47.8	124.8	97.6	82.5	45.415
1933	−1.2	45.2	125.6	92.4	82.5	41.680
1934	−0.2	51.6	126.4	95.7	82.5	45.961
1935	1.8	58.0	127.3	98.1	82.5	49.881
1936	3.6	66.1	128.1	99.1	82.5	55.052
1937	3.9	71.0	128.8	102.7	82.5	57.258
1938	1.0	65.5	129.8	100.8	82.5	56.565
1939	2.7	70.2	130.9	99.4	82.5	60.943
1940	3.7	75.7	132.0	100.2	82.5	66.952
1941	9.8	92.0	133.2	105.2	82.5	74.153
1946	12.0	158.9	141.2	139.3		171.237
1947	3.9	169.5	144.0	159.2	158.9	165.455
1948	10.9	188.4	146.5	171.2	169.5	167.875
1949	8.6	187.4	149.2	169.1	188.4	167.930
1950-H$_1$	12.3*	196.5*	151.0	167.7	188.4	

* At annual rates.

[a] See pages 5-6 for definitions of variables.

[b] The selection of maximum previous values for deflated income (Y/P and Y/NP) for the postwar estimates is a debatable point because the maximum previous values occur in a war year; this does not reflect the standard of living which the nation could otherwise have maintained at that level of income. The procedure followed in this study was to use the 1946 income figure, the income of the first postwar year, as the maximum previous income for the 1947 estimate. However, shortages of consumer goods were still fairly widespread in 1946; moreover, there is some doubt as to the accuracy of the deflation between 1946 and 1947 (see *Conference on Business Cycles* [NBER, 1951], pp. 98-102 and 115). Therefore, the selection of maximum previous deflated income for 1948-50 was made excluding 1946 income from consideration.

Sources: S,Y: 1922-28: Estimates by Harold Barger.
1929-50: National Income Supplements, *Survey of Current Business,* U. S. Department of Commerce.

    N: *Statistical Abstract of the United States, 1949,* p. 7; and population releases of U. S. Bureau of the Census.

    P: *Statistical Abstract of the United States, 1949,* p. 308; and current issues, *Survey of Current Business.*

    M: Successive issues of the *Statistical Abstract of the United States.* Data are called "Total deposits (adjusted) and currency" in source.

Table B-2

REGRESSION FUNCTIONS USED IN ANALYSIS OF PREDICTIVE ACCURACY AND GOODNESS OF FIT

FUNC-TION NUMBER	FUNCTION*	PERIOD OF OBSERVA-TION**	R^2	K†	PERCENTAGE OF ERROR IN ESTIMATE OF SAVINGS‡			
					1947	1948	1949	1950-H_1
(2.1a)	$S = -7.8918 + .1519Y$ $\;\;\;\;(33.32)\;\;\;(7.11)$	a	.83	1.426	−356.4	−89.9	−139.5	−78.9
(2.1b)	$S = -6.766 + .136Y$ $\;\;\;\;(26.28)\;(5.24)$	b	.63	1.025	−317.9	−72.5	−117.4	−62.6
(2.1c)	$S = .5265 + .035Y$ $\;\;\;\;(1.97)\;\;(.78)$	c	.05	2.030	−66.7	34.9	17.4	39.8
(2.2a)	$S/P = -10.6771 + .1999Y/P$ $\;\;\;\;\;\;\;(45.73)\;\;\;\;(6.99)$	a	.83	1.299	−332.6	−77.7	−125.8	−73.8
(2.2b)	$S/P = -6.6090 + .1421Y/P$ $\;\;\;\;\;\;\;(22.33)\;\;\;(3.48)$	b	.43	.762	−247.8	−41.8	−79.9	−37.0
(2.2c)	$S/P = .4213 + .0355Y/P$ $\;\;\;\;\;\;\;(1.73)\;\;\;(.92)$	c	.07	2.127	−71.8	32.0	14.2	37.4
(2.3a)	$S/N = -59.9637 + .1472Y/N$ $\;\;\;\;\;\;\;(29.14)\;\;\;(6.33)$	a	.80	1.129	−319.2	−74.7	−115.3	−62.3
(2.3b)	$S/N = -51.41 + .1295Y/N$ $\;\;\;\;\;\;(24.97)\;\;(5.55)$	b	.66	1.095	−274.0	−55.4	−91.4	−44.4
(2.3c)	$S/N = -5.82 + .0527Y/N$ $\;\;\;\;\;\;(2.66)\;\;(1.38)$	c	.14	1.791	−107.4	16.2	−3.4	22.2
(2.4a)	$S/NP = -95.27 + .2229Y/NP$ $\;\;\;\;\;\;\;\;(66.44)\;\;(8.27)$	a	.87	1.573	−308.8	−67.7	−107.0	−61.9
(2.4b)	$S/NP = -85.66 + .2082Y/NP$ $\;\;\;\;\;\;\;\;(44.95)\;\;(5.33)$	b	.64	.827	−300.0	−65.1	−102.9	−58.3
(2.4c)	$S/NP = -12.15 + .0663Y/NP$ $\;\;\;\;\;\;\;(6.14)\;\;(1.01)$	c	.08	1.749	−117.6	11.6	−8.8	18.8

Table B-2 (cont.)

FUNCTION NUMBER	FUNCTION*	PERIOD OF OBSERVATION**	R^2	κ†	PERCENTAGE OF ERROR IN ESTIMATE OF SAVINGS‡			
					1947	1948	1949	1950-H₁
(2.5a)	$S = -7.02 + \underset{(6.78)}{.1952}Y - \underset{(1.99)}{.0568}Y_{-1}$ (33.72)	a	.89	1.594	-335.9	-84.4	-118.6	-68.3
(2.5b)	$S = -5.53 + \underset{(5.67)}{.2030}Y - \underset{(2.42)}{.0870}Y_{-1}$ (24.51)	b	.74	1.118	-287.2	-65.1	-87.2	-47.1
(2.5c)	$S = -.58 + \underset{(2.43)}{.1600}Y - \underset{(2.34)}{.1140}Y_{-1}$ (2.56)	c	.36	2.060	-115.4	6.4	8.1	22.8
(2.6a)	$S/P = -10.09 + \underset{(4.71)}{.2204}Y/P - \underset{(.57)}{.0306}(Y/P)_{-1}$ (41.72)	a	.84	1.231	-303.7	-71.3	-115.9	-68.5
(2.6b)	$S/P = -4.98 + \underset{(3.73)}{.2391}Y/P - \underset{(1.88)}{.1271}(Y/P)_{-1}$ (18.12)	b	.54	1.130	-143.7	-22.3	-48.0	-22.0
(2.6c)	$S/P = .98 + \underset{(2.41)}{.1524}Y/P - \underset{(2.19)}{.1311}(Y/P)_{-1}$ (4.61)	c	.35	2.448	8.2	40.5	32.3	41.2
(2.7a)	$S/N = -53.76 + \underset{(6.40)}{.1996}Y/N - \underset{(2.18)}{.0641}(Y/N)_{-1}$ (30.64)	a	.87	1.494	-303.7	-73.0	-96.6	-54.3
(2.7b)	$S/N = -43.00 + \underset{(5.67)}{.1998}Y/N - \underset{(2.45)}{.0863}(Y/N)_{-1}$ (23.92)	b	.76	1.169	-251.9	-51.4	-67.2	-33.3
(2.7c)	$S/N = -12.69 + \underset{(2.81)}{.1748}Y/N - \underset{(2.31)}{.1137}(Y/N)_{-1}$ (6.77)	c	.42	2.034	-140.7	-5.4	-5.2	11.1
(2.8a)	$S/NP = -90.84 + \underset{(5.94)}{.2420}Y/NP - \underset{(.64)}{.0284}(Y/NP)_{-1}$ (55.66)	a	.88	1.586	-282.4	-62.8	-100.0	-58.3
(2.8b)	$S/NP = -73.89 + \underset{(4.78)}{.2635}Y/NP - \underset{(1.38)}{.0807}(Y/NP)_{-1}$ (39.86)	b	.68	1.231	-229.4	-48.8	-79.4	-47.9
(2.8c)	$S/NP = .96 + \underset{(2.12)}{.1598}Y/NP - \underset{(1.97)}{.1229}(Y/NP)_{-1}$ $(.54)$	c	.32	2.067	-17.6	30.2	20.6	29.2
(2.9a)	$S = -18.17 + \underset{(7.01)}{.1497}Y + \underset{(1.05)}{.0821}N$ (77.12)	a	.85	1.355	-387.9	-102.4	-157.4	-91.9

Table B-2 (cont.)

No.	Equation							
(2.9b)	$S = -.82 + \underset{(4.98)}{.1314Y} - \underset{(1.00)}{.0456N}$ $\scriptstyle(3.20)$	b	.65	1.111	−282.1	−57.8	−97.7	−47.2
(2.9c)	$S = \underset{(21.94)}{5.85} + \underset{(.72)}{.0325Y} - \underset{(1.01)}{.0419N}$	c	.13	2.142	−35.9	46.8	33.7	52.0
(2.10a)	$S/P = \underset{(39.07)}{7.98} + \underset{(7.78)}{.2333Y/P} - \underset{(2.03)}{.1634N}$	a	.88	1.526	−279.2	−52.4	−86.0	−45.2
(2.10b)	$S/P = \underset{(68.29)}{12.50} + \underset{(7.54)}{.2278Y/P} - \underset{(5.18)}{.1968N}$	b	.80	1.271	−242.8	−36.9	−64.8	−29.0
(2.10c)	$S/P = \underset{(39.31)}{8.81} + \underset{(2.03)}{.1474Y/P} - \underset{(1.77)}{.1255N}$	c	.27	1.613	−162.4	−4.4	−26.4	2.7
(2.11a)	$S = -7.74 + \underset{(7.01)}{.1495Y} + \underset{(1.08)}{.0369T}$ $\scriptstyle(32.93)$	a	.85	1.539	−374.4	−96.3	−147.7	−85.4
(2.11b)	$S = -6.59 + \underset{(4.95)}{.1334Y} - \underset{(.56)}{.0143T}$ $\scriptstyle(25.03)$	b	.64	1.082	−300.0	−66.1	−108.1	−55.3
(2.11c)	$S = \underset{(3.18)}{.86} + \underset{(.65)}{.0301Y} - \underset{(.77)}{.0182T}$	c	.10	2.513	−38.5	45.9	31.4	50.4
(2.12a)	$S/P = -12.80 + \underset{(7.75)}{.2340Y/P} - \underset{(2.02)}{.0721T}$ $\scriptstyle(62.70)$	a	.88	1.481	−321.2	−72.8	−117.3	−69.0
(2.12b)	$S/P = -11.67 + \underset{(6.41)}{.2256Y/P} - \underset{(4.14)}{.1017T}$ $\scriptstyle(55.85)$	b	.73	1.059	−275.5	−54.0	−92.5	−50.2
(2.12c)	$S/P = -4.12 + \underset{(1.47)}{.1074Y/P} - \underset{(1.15)}{.0454T}$ $\scriptstyle(17.17)$	c	.17	1.712	−141.2	2.7	−21.9	7.5
(2.13a)	$S/N = -61.03 + \underset{(7.32)}{.1493Y/N} + \underset{(2.01)}{.5247T}$ $\scriptstyle(33.84)$	a	.86	1.569	−373.3	−96.1	−144.3	−84.4
(2.13b)	$S/N = -54.78 + \underset{(5.06)}{.1357Y/N} + \underset{(.51)}{.1167T}$ $\scriptstyle(25.98)$	b	.66	1.041	−303.7	−67.6	−106.9	−55.6
(2.14a)	$S/NP = -100.32 + \underset{(7.84)}{.2333Y/NP} - \underset{(.87)}{.2202T}$ $\scriptstyle(62.59)$	a	.88	1.606	−291.8	−60.2	−95.9	−53.8

Table B-2 (cont.)

	Equation							
(2.14b)	$S/NP = -94.90 + .2270Y/NP - .4204T$ $\quad\;\;(58.16)\quad(6.63)\qquad\;(2.61)$	b	.75	1.125	-252.9	-44.2	-73.5	-39.6
(2.14c)	$S/NP = -39.92 + .1204Y/NP - .2501T$ $\quad\;\;(20.62)\quad(1.56)\qquad\;(1.24)$	c	.19	1.608	-141.2	2.3	-20.6	8.3
(2.15a)	$S = -7.05 + .1902Y - .0514Y_{-1} + .0131T$ $\quad\;(32.19)\;(5.74)\quad\;(1.54)\qquad(.37)$	a	.89	1.606	-346.2	-87.2	-124.4	-71.5
(2.15b)	$S = -5.28 + .2014Y - .0891Y_{-1} - .0182T$ $\quad\;(23.15)\;(5.55)\quad\;(2.45)\qquad(.81)$	b	.75	1.035	-262.3	-55.6	-74.8	-37.5
(2.15c)	$S = -.25 + .1551Y - .1140Y_{-1} - .0181T$ $\quad\;(1.08)\;(2.33)\quad\;(2.32)\qquad(.91)$	c	.41	2.392	-89.7	17.4	22.1	33.3
(2.16a)	$S/P = -12.07 + .2700Y/P - .0486(Y/P)_{-1} - .0790T$ $\quad\;(59.49)\quad(5.96)\qquad\;(1.06)\qquad\quad(2.19)$	a	.90	1.146	-273.9	-62.3	-101.0	-60.0
(2.16b)	$S/P = -10.12 + .2866Y/P - .0889(Y/P)_{-1} - .0934T$ $\quad\;(52.05)\quad(6.12)\qquad\;(1.82)\qquad\quad(4.01)$	b	.79	1.185	-200.8	-39.4	-69.3	-38.6
(2.16c)	$S/P = -2.84 + .2062Y/P - .1243(Y/P)_{-1} - .0378T$ $\quad\;(13.50)\quad(2.58)\qquad\;(2.08)\qquad\quad(1.09)$	c	.42	2.043	-53.9	15.5	1.2	16.0
(2.17a)	$S/NP = -95.31 + .2649Y/NP$ $\quad\;\;(58.97)\quad(5.82)$ $\qquad\quad -.0423(Y/NP)_{-1} - .2888T$ $\qquad\qquad(.92)\qquad\quad(1.09)$	a	.89	1.666	-247.6	-50.2	-80.6	-45.6
(2.17b)	$S/NP = -83.20 + .2818Y/NP$ $\quad\;\;(53.79)\quad(6.06)$ $\qquad\quad -.0799(Y/NP)_{-1} - .4189T$ $\qquad\qquad(1.64)\qquad\quad(2.75)$	b	.79	1.205	-179.4	-29.3	-51.5	-26.2
(2.17c)	$S/NP = -25.91 + .2099Y/NP$ $\quad\;\;(15.10)\quad(2.56)$ $\qquad\quad -.1206(Y/NP)_{-1} - .2398T$ $\qquad\qquad(2.00)\qquad\quad(1.34)$	c	.42	1.942	-43.5	19.3	8.5	19.6
(2.18b)	$S/Y = .0476 + .0821\dfrac{Y-Y_0}{Y}$ $\quad\;(13.91)\;(6.61)$	b	.73	1.209	-130.4	3.4	-2.2	17.7

Table B-2 (concl.)

FUNCTION NUMBER	FUNCTION*	PERIOD OF OBSERVATION**	R^2	K†	PERCENTAGE OF ERROR IN ESTIMATE OF SAVINGS‡ 1947	1948	1949	1950-B_1
(2.18c)	$S/Y = .0452 + .0350 \dfrac{Y - Y_0}{Y}$ $\quad(13.89)\ (1.64)$	c	.15	1.710	−104.3	15.5	2.2	24.2
(2.19b)	$S/Y = .0407 + .1671 \dfrac{Y/P - (Y/P)_0}{Y/P}$ $\quad(14.88)\ (8.81)$	b	.83	1.451	−26.1	20.7	8.7	19.4
(2.19c)	$S/Y = .0411 + .1242 \dfrac{Y/P - (Y/P)_0}{Y/P}$ $\quad(12.71)\ (2.49)$	c	.34	1.564	−39.1	22.4	8.7	22.6
(2.20b)	$S/Y = .0495 + .0759 \dfrac{Y/N - (Y/N)_0}{Y/N}$ $\quad(13.50)\ (6.00)$	b	.69	1.117	−130.4	3.4	−4.3	19.4
(2.20c)	$S/Y = .0458 + .0283 \dfrac{Y/N - (Y/N)_0}{Y/N}$ $\quad(12.35)\ (1.35)$	c	.13	1.748	−104.3	17.2	2.2	25.8
(2.21b)	$S/Y = .0448 + .1567 \dfrac{Y/NP - (Y/NP)_0}{Y/NP}$ $\quad(15.26)\ (8.06)$	b	.80	1.350	−30.4	19.0	6.5	19.4
(2.21c)	$S/Y = .0441 + .0975 \dfrac{Y/NP - (Y/NP)_0}{Y/NP}$ $\quad(12.98)\ (2.12)$	c	.27	1.523	−52.2	20.7	6.5	24.2
(2.22b)	$S/Y = -.1542 + .1981 \dfrac{Y/NP}{(Y/NP)_0}$ $\quad(47.58)\ (7.11)$	b	.76	1.338	−17.4	19.0	8.7	19.4
(2.22c)	$S/Y = -.0650 + .1088 \dfrac{Y/NP}{(Y/NP)_0}$ $\quad(19.39)\ (2.22)$	c	.29	1.521	−47.8	20.7	8.7	24.2

* Figures in parentheses underneath coefficients are the absolute values of the ratios of those particular coefficients to their standard errors. Origin of T is Jan. 1, 1935 for functions fitted to 1929-40 and Jan. 1, 1932 for all others. Each unit of T is six months.

** a = 1929-40; b = 1923-40; c = 1923-30, '35-40.

† The von Neumann ratio K for testing for the presence of auto-correlation in the residuals is the ratio of the mean-square successive difference to the variance (of the residuals). The expected values of K and the 5% and 1% points of its distribution are as follows:

	Expected value	5%	1%
1929-40	2.182	1.071, 3.293	.797, 3.567
1923-40	2.118	1.206, 3.030	.960, 3.276
1923-30, '35-40	2.154	1.123, 3.185	.859, 3.449

‡ Negative signs indicate overestimates; positive signs, underestimates.

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AUTHOR      05AA National Bureau of Economic Research.
TITLE       07AA A study of aggregate consumption functions <by> Robert Ferber.
SERIES      11AA (National Bureau of Economic Research. Technical paper 8).
PUBLISHER   13AA <New York> National Bureau of Economic Research, 1953.
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