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APPENDIX A

TIME SERIES

	G	G ₁	G ₂	O	Y	Z
1928	\$3,596	\$6,626	\$79,000	..
1929	4,226	\$2,382	\$1,844	7,637	82,484	\$3,723
1930	3,303	1,716	1,587	6,829	73,688	2,899
1931	2,457	1,167	1,290	5,526	62,977	1,824
1932	1,364	577	787	4,093	47,819	-1,389
1933	1,564	749	815	3,929	45,165	-1,181
1934	1,973	959	1,014	4,396	51,635	-247
1935	2,746	1,504	1,242	5,439	57,973	1,758
1936	3,687	2,029	1,658	6,796	66,095	3,580
1937	4,113	2,143	1,970	7,491	71,055	3,934
1938	3,088	1,325	1,763	7,064	65,465	952
1939	3,918	1,854	2,064	7,994	70,165	2,701
1940	4,725	2,404	2,321	9,146	75,743	3,691
1941	5,415	2,797	2,618	9,895	92,015	9,760

- G = Total consumer instalment sales credit granted, measured in millions of current dollars: release from the Board of Governors of the Federal Reserve System, May 1947. (These figures and those used for G₁ and G₂ were revised in 1949; changes do not affect the findings in this study.)
- G₁ = Consumer instalment sales credit granted on automobiles, measured in millions of current dollars: release from the Board of Governors of the Federal Reserve System, May 1947.
- G₂ = Consumer instalment sales credit granted for goods other than automobiles (diversified finance) measured in millions of current dollars: release from the Board of Governors of the Federal Reserve System, May 1947.
- O = End-of-year totals of consumer credit outstanding, measured in millions of current dollars: *Federal Reserve Bulletin*, August 1947, p. 1028. The figure for 1928 was estimated on the assumption that for 1928 and 1929 the end-of-year totals of the revised series of consumer credit (*ibid.*) are directly proportional to the end-of-year totals of the original series of consumer credit (*Survey of Current Business*, November 1942, p. 16).
- Y = Disposable personal income, measured in millions of current dollars: National Income Supplement to the *Survey of Current Business*, July 1947, Table 3, p. 19. The figure for 1928 was estimated on the assumption that for 1928 and 1929 the total shares transferred by business enterprises (*The Review of Economic Statistics*, May 1943, Table 2, p. 115) are directly proportional to disposable personal income.
- Z = Personal savings measured in millions of current dollars: National Income Supplement to the *Survey of Current Business*, July 1947, Table 3, p. 19.

TIME SERIES

	<i>L</i>	<i>I</i>	<i>P</i>	<i>P</i> ₁	<i>P</i> ₂	<i>D</i>
1928	\$36,710	124.3	..	..	..	..
1929	36,100	124.1	137.0	114.6	144.2	13.8
1930	36,105	119.9	126.3	109.2	131.8	13.5
1931	34,664	107.5	112.5	104.1	115.1	14.1
1932	32,720	95.1	99.6	102.0	98.7	14.4
1933	29,954	91.2	94.6	90.2	96.0	15.8
1934	32,539	96.5	98.4	94.1	99.8	15.7
1935	35,291	98.7	96.7	92.8	98.0	15.5
1936	39,010	99.3	97.9	95.1	98.8	15.8
1937	39,517	102.9	102.3	99.7	103.1	16.0
1938	39,270	100.4	102.2	107.3	100.5	15.6
1939	42,293	98.9	100.9	105.0	99.5	16.5
1940	46,688	99.7	102.8	107.6	101.2	17.0
1941	51,617	105.4	110.2	118.9	107.5	16.8

L = Estimated end-of-year totals of the currency and deposit holdings of individuals, in millions of current dollars, computed by multiplying total deposits and outside currency (Board of Governors of the Federal Reserve System, *Banking and Monetary Statistics*, pp. 34-35) by the ratio of unclassified cash balances to total cash balances (Solomon Shapiro, "The Distribution of Deposits and Currency in the United States, 1929-1939," *Journal of the American Statistical Association*, December 1943, Table 2, p. 441). The ratio of 1939 was applied to 1940 and 1941 data.

I = Retail price index of consumption as a whole, 1935-39 : 100. Estimated as a weighted average of the Bureau of Labor Statistics cost-of-living index and the index of prices paid by farmers for subsistence (U.S. Department of Agriculture, *Agricultural Statistics 1947*, p. 524, Table 627). The weights are proportionate to the ratio of nonfarm and farm populations, respectively (U.S. Department of Agriculture).

P = Fixed weighted retail price index of durable consumer commodities, 1935-39 : 100, based on data in *Survey of Current Business*, May 1943, p. 17.

P₁ = Retail price index of passenger cars, 1935-39 : 100, based on data in *Survey of Current Business*, *loc. cit.*

P₂ = Fixed weighted retail price index of durable consumer commodities, other than automobiles, 1935-39 : 100, based on data in *Survey of Current Business*, *loc. cit.*

D = Average duration of instalment sales indebtedness on all durable consumer commodities, by months, estimated as the average of the length of the contract for automobile dealers, furniture and household appliance stores, department stores and mail-order houses, and all other retailers, weighted by the corresponding amounts of consumer instalment sales credit granted. Data supplied by the Board of Governors of the Federal Reserve System.

TIME SERIES

	D_1	D_2	R	F	Y_s	F'
1928	..	..	20.24	30,539	\$26.73	29,659
1929	13.0	14.8	21.77	31,069	28.97	30,149
1930	11.8	15.4	21.77	31,839	23.82	31,059
1931	11.9	16.1	21.08	32,102	18.79	31,422
1932	11.6	16.4	19.99	32,457	10.97	31,977
1933	13.6	17.9	20.12	32,751	11.12	32,171
1934	14.2	17.1	20.62	32,967	14.57	32,387
1935	15.0	16.1	21.63	33,314	17.74	32,634
1936	15.3	16.3	23.08	33,597	23.79	32,677
1937	15.4	16.6	24.33	34,162	25.27	33,182
1938	14.5	16.4	24.08	34,726	21.84	33,846
1939	16.1	16.9	24.71	35,291	25.30	34,271
1940	17.3	16.7	26.33	35,855	28.07	34,735
1941	17.9	15.6	..	36,420	37.45	34,960

D_1 = Average duration of instalment sales indebtedness on automobiles, by months, weighted by the corresponding amount of consumer instalment sales credit. Data supplied by the Board of Governors of the Federal Reserve System.

D_2 = Average duration of instalment sales indebtedness for durable consumer commodities, other than automobiles, by months, weighted by the corresponding amounts of consumer instalment sales credit. Data supplied by the Board of Governors of the Federal Reserve System.

R = Estimated number of passenger cars in use at year end, in millions of cars (C. F. Roos and Victor von Szeliski, "Factors Governing Changes in Domestic Automobile Demand," *The Dynamics of Automobile Demand*, footnote 25, pp. 50-51). These data are given for 1929-38. For 1928, 1939, and 1940 the data were estimated by the same method. For 1939 and 1940 the figures for total new car sales to consumers and passenger car registrations during the year were taken from the Automobile Manufacturers Association, *Automobile Facts and Figures* (1946 and 1947) pp. 13 and 22.

F = Consumer units measured in thousands. These data are estimates obtained by combining the population of families and individuals (*The Economic Almanac for 1946-47*, p. 21; 1936-41 period interpolated linearly). The weight applied to individuals is 0.4 which represents the ratio of expenditures of individuals on automobiles and furniture to family expenditures on the same category of goods (National Resources Committee, *Consumer Expenditures in the United States*, 1939, pp. 78 and 80).

Y_s = Supersubsistence income of consumer units having an income below \$5,000, measured in billions of current dollars.

F' = Millions of consumer units having an income below \$5,000.

APPENDIX B

BASIC DATA UNDERLYING ESTIMATES OF INSTALMENT SALES CREDIT

Basic Data Underlying Estimates in Table 12

<i>Variables</i>	<i>1947</i>	<i>1948</i>	
Y	173.6	192.6	Billions of dollars
O ₋₁	10.2	13.7	Billions of dollars
I	168.4	180.4	Index 1935-39 : 100
P	..	191.6	Index 1935-39 : 100
P ₁	..	180.0	Index 1935-39 : 100
P ₂	..	195.8	Index 1935-39 : 100
D	..	14.0	By months
D ₁	..	16.7	By months
D ₂	..	11.7	By months
Z	..	14.9	Billions of dollars
F	40,090	40,775	Thousands of consumer units

Y = Disposable personal income: *Survey of Current Business*, February 1949, p. 10.

O₋₁ = Consumer credit outstanding at year end: *Federal Reserve Bulletin*, July 1949, p. 852.

I = Retail price index of consumption as a whole, 1935-39 : 100, estimated as a weighted average of the Bureau of Labor Statistics cost-of-living index and the index of prices paid by farmers for subsistence: U.S. Department of Agriculture, Bureau of Agricultural Economics, *Indexes of Prices Paid by Farmers for Commodities, and of Prices Paid, Interest, and Taxes, 1910-48* (October 29, 1948) p. 29; *Federal Reserve Bulletin*, July 1949, p. 848. The weights are proportionate to the ratios of nonfarm and farm population, respectively: *The Economic Almanac for 1949*, p. 396.

P = Retail price index of durable consumer commodities, estimated as a weighted average of an index of prices of automobiles and of house furnishings. The weights are proportionate to the average expenditures for automobiles and durables other than automobiles during 1935-39. U.S. Department of Labor, Bureau of Labor Statistics, *Indexes of Retail Prices of Apparel, Housefurnishings, and Services and Miscellaneous Goods to Moderate-Income Families in Large Cities of the United States, June 1948-September 1948*, Supplement III, November 1948, p. 4; *Monthly Labor Review*, February 1949, p. 260; *Survey of Current Business*, July 1947, pp. 43-49.

- P₁** = Retail price index of automobiles, U.S. Department of Labor, Bureau of Labor Statistics, *Indexes of Retail Prices of Apparel, Housefurnishings, and Services and Miscellaneous Goods to Moderate-Income Families in Large Cities of the United States, June 1948-September 1948*, *loc. cit.*
- P₂** = Retail price index of housefurnishings: *Monthly Labor Review*, November 1949, p. 605.
- D** = Average duration of instalment indebtedness on all durable consumer commodities, by months, estimated as the average of the length of contract for automobile dealers, furniture and household appliance stores, weighted by the corresponding amounts of consumer instalment sales credit granted: release from the Division of Research and Statistics, Board of Governors of the Federal Reserve System, June 1949.
- D₁** = Average duration of automobile instalment indebtedness: release from the Division of Research and Statistics, Board of Governors of the Federal Reserve System, June 1949.
- D₂** = Average duration of instalment sales indebtedness for other than automobile durable consumer commodities, by months, weighted by the corresponding amounts of consumer instalment sales credit: release from the Division of Research and Statistics, Board of Governors of the Federal Reserve System, June 1949.
- Z** = Personal savings measured in billions of current dollars: *Federal Reserve Bulletin*, July 1949, p. 850.
- F** = Estimated number of families and single individuals in the United States: *The Economic Almanac for 1949*, p. 111. Author's estimates for 1948.