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## Appendix C

### Tables Underlying Material Presented in the Text

TABLE C-1  
100 Largest Manufacturing Corporations, 1955, Ranked by Asset Size and with Date of Most Important Merger, if Mergers Were Important in the Company's History

<i>Rank</i>	<i>Name of Company</i>	<i>Date</i>
1	Standard Oil (N.J.)	Pre-1895
2	General Motors	1908
3	U.S. Steel	1901
4	DuPont (E.I.) de Nemours	1895-1905
5	Ford Motor	None
6	Socony Mobiloil	Pre-1895
7	Standard Oil (Ind.)	Pre-1895
8	Gulf Oil	None
9	Texas Company	None
10	Bethlehem Steel	1902
11	Standard Oil (Calif.)	Pre-1895
12	General Electric	1901-1902
13	Union Carbide & Carbon	1917
14	Chrysler	1922
15	Westinghouse Electric	None
16	Western Electric	None
17	Sinclair Oil	None
18	Shell Oil	None
19	Phillips Petroleum	None
20	Cities Service	None
21	International Harvester	1902
22	Aluminum Co. of America	None
23	Anaconda	1899
24	American Tobacco	1895-1904
25	Kennecott Copper	None
26	Goodyear Tire & Rubber	None
27	Republic Steel	1899
28	Allied Chemical & Dye	1920
29	International Telephone & Telegraph	1949-1951
30	Dow Chemical	None
31	Radio Corp. of America	1929-1934
32	Jones & Laughlin Steel	None
33	Firestone Tire & Rubber	None
34	International Business Machines	1911
35	Olin Mathieson Chemical	1954
36	International Paper	1898
37	Reynolds (R.J.) Tobacco	1895-1904
38	Atlantic Refining	Pre-1895
39	Eastman Kodak	1903
40	National Steel	1929
41	U.S. Rubber	1893
42	Youngstown Sheet & Tube	1923
43	Armco Steel	None

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<i>Rank</i>	<i>Name of Company</i>	<i>Date</i>
44	Monsanto Chemical	None
45	Union Oil	1890
46	Swift	1900-1905
47	Sun Oil	None
48	Pittsburgh Plate Glass	1895
49	American Cyanamid	1929-1934
50	Inland Steel	None
51	Burlington Industries	1954
52	Goodrich (B.F.)	1912
53	Proctor & Gamble	None
54	Continental Oil	Pre-1895
55	Reynolds Metals	None
56	Tidewater Oil	1888
57	Sunray Mid-Continent Oil	1955
58	American Can	1901
59	Armour	None
60	National Dairy Products	1925-1930
61	Sperry Rand	1955
62	Liggett & Myers Tobacco	1895-1904
63	Pure Oil	1895
64	Deere	1911-1912
65	Allis-Chalmers Manufacturing	1901
66	Singer Manufacturing	1906
67	Phelps Dodge	None
68	Crown Zellerbach	1928
69	American Smelting & Refining	1899
70	Grace (W. R.)	1953-1954
71	National Distillers Products	1899
72	Seagram (Joseph E.) & Sons	None
73	Continental Can	1913
74	Schenley Industries	None
75	Weyerhaeuser Timber	None
76	General Foods	1929-1932
77	Kaiser Aluminum & Chemical	None
78	Ohio Oil	Pre-1895
79	Borg-Warner	1928-1929
80	National Lead	1906
81	Caterpillar Tractor	1925-1928
82	Standard Oil (Ohio)	Pre-1895
83	Celanese	None
84	Skelly Oil	None
85	Borden	1899-1904
86	Richfield Oil	None
87	Lockheed Aircraft	None
88	General Dynamics	1954
89	Stevens (J. P.)	None
90	Douglas Aircraft	None
91	Owens-Illinois Glass	1929
92	United Aircraft	1928
93	Wheeling Steel	1920
94	Bendix Aviation	1929

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Rank	Name of Company	Date
95	American Viscose	None
96	Kaiser Steel	None
97	Campbell Soup	1955
98	Philip Morris	None
99	North American Aviation	None
100	American Motors	1953

Sources: *The Fortune Magazine Directory of 500 Largest U.S. Industrial Corporations*, July 1956; data compiled in present study; basic data sheets for Fred J. Weston, *The Role of Mergers in the Growth of Large Firms*, University of California Press, 1953; Gertrude G. Schroeder, *The Growth of Major Steel Companies, 1900-1950*, Johns Hopkins Press, 1953; A. D. H. Kaplan, *Big Enterprise in a Competitive System*, Brookings, 1954; Moody's Manuals, 1929, 1939, and 1955.

TABLE C-2

Annual Rates of Production Growth for Forty-Four Production Series Relevant to the Industries of Highest 1895-1907 Merger Activity by Decades, 1870-1915

Industry and Production Series	Central Year of Decade							
	1875	1880	1885	1890	1895	1900	1905	1910
<b>Food and Kindred</b>								
Products:								
Cocoa imports	9.0	9.9	10.5	9.4	7.4	12.7	10.0	9.2
Coffee imports	3.9	5.8	1.8	2.3	5.1	3.6	0.4	0.3
Distilled spirits	1.5	3.4	0.9	2.9	-0.8	7.8	2.8	2.4
Fermented liquors	5.3	8.4	6.9	5.8	2.6	4.3	4.6	1.7
Raw sugar consumption	3.6	5.4	4.7	4.8	1.7	2.5	2.7	2.9
Flour	...	...	2.7	2.8	2.1	1.5	0.2	0.7
Canned corn	...	...	...	6.5	7.2	12.7	3.6	0.6
Canned tomatoes	...	...	...	7.9	4.3	7.1	5.3	4.0
Tobacco Products:								
Tobacco and snuff	3.3	5.5	5.0	3.0	1.3	3.6	3.3	1.7
Cigarettes	...	...	20.0	11.5	3.5	-0.6	11.5	16.5
Cigars	...	...	4.0	2.2	2.6	6.0	1.1	0.2
Tobacco consumption	...	...	3.5	2.3	1.1	4.2	3.3	1.8
Chemicals and Allied								
Products:								
Superphosphate	12.0	17.5	4.7	4.5	9.3	8.6	5.4	4.2
White lead	...	...	...	2.5	3.4	3.7	3.3	1.7
Phosphate rock	15.0	14.2	8.7	10.2	10.0	6.7	6.5	3.9
Stone, Clay, and Glass								
Products:								
Fluorspar	...	...	9.7	4.5	6.9	23.0	7.2	12.7
Roofing slate	...	...	6.5	3.1	2.9	5.6	-0.8	-2.2
Cement, total	...	...	12.7	6.6	8.1	17.0	14.7	7.2
Gypsum	...	...	7.8	8.2	5.2	20.3	14.7	5.2
Portland cement	...	...	21.7	21.2	45.0	37.7	20.2	7.9

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Industry and Production Series	Central Year of Decade							
	1875	1880	1885	1890	1895	1900	1905	1910
<b>Iron and Steel Mills, Foundries, and Mines:</b>								
Tin plate consumption	8.2	11.2	7.4	1.7	3.5	6.2	5.2	5.5
Iron ore	...	...	8.5	5.1	5.9	11.2	5.9	3.8
Pig iron	5.3	9.4	8.8	5.1	5.1	9.4	5.5	4.3
Rails	5.6	5.5	2.7	-1.3	4.3	9.3	1.3	-1.5
Steel	30.0	14.7	12.2	7.7	12.7	12.5	7.3	6.4
Rolled iron and steel	...	...	...	2.3	6.4	10.5	5.9	5.0
<b>Transportation Equipment:</b>								
Vessels	-4.1	-3.7	1.4	0.2	1.4	9.0	-2.3	-4.4
Locomotives	...	...	0.8	0.9	1.2	17.3	1.2	-4.3
<b>Nonferrous Smelting, Refining, Mills, Foundries, and Mines:</b>								
Copper Ore	7.8	17.2	14.2	9.7	8.7	7.1	6.5	4.3
Gold ore	-0.9	-2.7	-0.2	3.4	10.4	5.2	3.0	0.3
Lead, domestic	17.3	8.3	4.5	2.4	4.5	6.3	3.9	5.0
Silver	5.2	3.3	5.4	4.1	-0.4	0.0	-0.2	2.8
Zinc	14.2	11.0	8.8	7.2	6.2	9.0	7.8	7.5
Lead consumption	4.2	6.4	2.7	4.3	4.4	5.3	2.9	2.4
Lead, total	17.3	8.3	4.5	6.0	6.7	5.2	2.5	3.3
Tin imports	7.6	8.1	6.0	5.8	6.8	6.3	3.0	2.3
Zinc consumption	...	11.2	7.1	5.9	5.1	9.8	7.6	6.0
Gold consumption	...	...	5.4	1.5	0.7	10.3	5.1	2.5
Silver consumption	...	...	7.1	7.4	5.6	12.0	5.1	3.6
Aluminum	...	...	...	66.0	52.0	15.7	9.6	24.0
Copper consumption	...	...	...	8.2	6.6	10.3	4.8	5.4
<b>Bituminous Coal</b>								
<b>Mining:</b>								
Bituminous coal	5.4	12.5	6.5	5.8	6.1	9.6	6.1	4.0
Coal, total	5.1	10.4	6.0	5.3	4.9	8.2	5.7	3.6
Coke	...	...	11.5	6.2	6.6	9.4	6.4	3.5

Source: A. F. Burns, *Production Trends in The United States Since 1870*, National Bureau of Economic Research, 1934, pp. 306-308.

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TABLE C-3

Merger Activity Classified by the Importance of Transportation Costs in the Delivered Price of the Product, 1895-1920

Market Size: L—Local R—Regional N—National	Code		Stage of Fabrication:		
	Durability: N—Nondurable S—Semidurable D—Durable		S—Semifinished F—Finished		
Industry	<i>Net Firm Disappearances</i>		Market size	Dura- bility	Fabri- cation
	All mergers	Consoli- dations only			
<b>Products with Local Markets:</b>					
Crushed and broken stone (142)	26	26			
Cement (142)	8	8	R	D	S
Dimension stone (141)	21	21	R	D	F
Sand and gravel (144)	2	2			
Bakery products (205)	38	37	L	N	F
Bottled soft drinks (2081)	7	7	L	N	F
Malt liquors (2082)	95	91	R	N	F
Printing, publishing (27)	6	5	L-N	N	S-F
Bricks (3251)	49	48	R	D	F
Ice, natural and manufactured	52	44			
	<u>304</u>	<u>289</u>			
<b>Products with National Markets and Low Transportation Costs Relative to Price:</b>					
Confectionery and related products (27)	27	21	N	N	F
Wines (2084)	8	8	N	N	F
Distilled liquors (2085)	79	76	N	N	F
Tobacco products (21)	133	50	N	N	F
Apparel (23)	1	0	N	S	F
Industrial organic chemicals, mainly explosives (282)	48	4	N	N	F
Paints, varnishes, lacquers, etc. (285)	19	18	N	N	F
Rubber products (30)	15	12	N	S	F
Sandpaper (3291)	8	7	N	D	F
Metal products (34)	119	105	R-N	D	F
Machinery (except 36) (35)	142	114	N	D	F
Electrical machinery, etc. (36)	35	30	N	D	F
Transportation equipment (37)	127	112	N	D	F
Instruments (38)	24	16	N	D	F
	<u>785</u>	<u>573</u>			

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TABLE C-3, concluded

Industry	Net Firm Disappearances		Market size	Durability	Fabrication
	All mergers	Consolidations only			
Products with National Markets and High Transport Costs Relative to Price:					
Metal mining (10)	45	37			
Bituminous coal mining (12)	305	274	R	N	S-F
Petroleum and gas extraction (13)	39	37			
Meat products (201)	43	1	N	N	F
Grain mill products (204)	68	63	N	N	S
Sugar (206)	20	15	N	N	S-F
Malt (2083)	28	26	N	N	S
Lumber (24)	36	32	N	D	S
Furniture, fixtures (25)	26	26	N	D	F
Paper and allied products (26)	113	108	N	N	F
Fertilizers (287)	62	44	R	N	F
Petroleum products (29)	34	34	N	N	F
Flat glass (3211)	65	64	N	D	F
Clay sewer pipe (3254)	32	32	R	D	F
Clay refractories (3255)	10	10	R	D	F
Gypsum products (3272)	29	29	N	D	F
Asbestos products (3292)	2	0	N	D	F
Blast furnaces, steel works, rolling mills (331)	311	263	N	D	S
Iron and steel foundries (332)	79	74	R	D	S
Nonferrous smelting, refining, rolling mills and foundries (333-336)	44	33	N	D	S
Tin cans (341)	66	66	N	S	F
	<u>1,457</u>	<u>1,258</u>			
Non-allocable:					
Ordnance (19)	1	1			
Dairy products (202)	7	4	L-N	N	F
Canning and preserving fruits, vegetables and sea foods (203)	79	74	N	N	F
Textiles (22)	78	74	N	S	S
Chemicals and allied products not otherwise allocated (286, 288, 289)	104	60			
Leather and products (31)	23	22	N	S	S-F
Glassware (322)	41	41	N	D	F
Miscellaneous and not otherwise classified	133	97			
	<u>466</u>	<u>373</u>			

Sources: Disappearances data from worksheets and from Appendix B; classifications of products characteristics from *The Structure of American Industry*, National Resources Committee, Washington, D.C., 1939, Part I, Appendix 8, pp. 264-269.

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TABLE C-4

Measures of Relative Merger Activity and Geographical Concentration, 1895-1920

<i>Standard Industrial Classification</i>	<i>Ratio of Merger Capital to Total Industry Capital</i>		<i>Geographical Concentration</i>	
	<i>All mergers</i>	<i>Consolidations only</i>	<i>Three adjacent leading states</i>	<i>Index</i>
201	0.295	0.013	Ill., Mo., Kan.	0.547
202	.201	.138	Wis., Iowa, Ill.	.334
203	.786	.728	Md., N.J., N.Y.	.347
204	.153	.138	Minn., Ill., Wis.	.274
21	.949	.573	N.Y., Pa., Ohio	.543
22	.136	.135	Mass., N.Y., Pa.	.480
24, 25	.083	.068	Minn., Mich., Wis.	.180
26	.561	.541	Pa., N.Y., Mass.	.455
27	.031	.026	N.Y., Pa., Ohio	.336
282	.061	.041	Pa., Ohio, Ind.	.280
285	.334	.324	N.Y., Pa., Ohio	.542
287	.953	.746	Ga., N.C., S.C.	.274
291	.007	.007	Del., Pa.	.365
311	.163	.159	Pa., N.Y., Mass.	.505
321-323	.402	.398	Pa., Ind., Ohio	.636
3211	...	...	Pa., Ind., Ohio	.801
3251	...	...	N.Y., Pa., Ohio	.288
3254	...	...	Ohio, Ind., Pa.	.476
3255	...	...	Ohio, Pa., Ky.	.709
331, 332	2.505	2.311	Pa., Ohio, N.J.	.688
3333	...	...	Ill., Mo., Kan.	.691
352	.730	.709	Ill., Ind., Ohio	.518
36	.439	.388	N.Y., Mass., Pa.	.571
371	2.190	1.654	Ohio, Mich., Ind.	.507
373	.342	.328	Pa., N.Y., N.J.	.348

Source: Worksheets of Appendix B, *Census of Manufacturers, 1905, op. cit.*



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TABLE C-5  
Mergers Achieving Market Dominance, 1895-1904

<i>Company</i>	<i>Net Firm Disappearances</i>	<i>Capitalization (millions of dollars)</i>	<i>Percentage of Market Controlled</i>
42.5%-62.5%:			
Allis Chalmers	3	50.0	50
American Felt	4	5.0	60
American Shipbuilding	7	30.0	60
American Stove	8	5.0	60
American Writing Paper	27	25.0	55
Asphalt Co. of America	12	30.0	35-50
Computing Scale	2	3.5	50
Distilling Co. of America	73	125.0	60
International Paper	24	45.0	60
International Salt	27	30.0	30-60
National Candy	13	9.0	55
National Enameling & Stamping	9	30.0	55
National Glass	18	3.0	50-70
Royal Baking Powder	4	20.0	58-65
Rubber Goods Manufacturing	6	50.0	40-60
Standard Table Oil Cloth	6	10.0	50
United Button	2	3.0	45
U.S. Cotton Duck	12	50.0	45-65
U.S. Envelope	9	5.0	50-60
U.S. Shipbuilding	8	45.0	40-60
Virginia-Carolina Chemical	15	10.0	60
62.5%-82.5%:			
American Can	64	88.0	65-75
American Car & Foundry	12	60.0	65
American Fork & Hoe	12	4.0	80
American Hide & Leather	21	35.0	75
American Locomotive	8	50.0	70
American Radiator	3	10.0	80
American School Furniture	24	10.0	80
American Sugar Refining	6	145.0	70-90
California Fruit Cannery	9	3.5	65
Casein Co. of America	4	6.5	70
Central Foundry	30	14.0	80
Chicago Pneumatic Tool	4	7.5	80
Federal Publishing	3	6.0	75
General Chemical	15	25.0	70
Harbison-Walker Refractories	10	27.6	70
International Harvester	4	120.0	70
International Steam Pump	4	27.5	80
National Biscuit	27	55.0	70
National Fireproofing	22	15.5	65
National Novelty	19	10.0	70
Otis Elevator	6	11.0	65
Standard Sanitary	8	5.0	80
Union Bag & Paper	5	27.5	80
U.S. Gypsum	29	7.5	80
U.S. Steel	170	1,370.0	65

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TABLE C-5, concluded

<i>Company</i>	<i>Net Firm Disappearances</i>	<i>Capitalization (millions of dollars)</i>	<i>Percentage of Market Controlled</i>
82.5% and over:			
American Brake Shoe & Foundry	4	4.5	90
American Caramel	1	1.5	90
American Chiclé	5	9.0	85
American Grass Twine	3	15.0	90
American Linseed	6	33.5	85
American Pneumatic Service	2	15.0	87
American Seeding Machine	7	15.0	90
American Smelting & Refining	12	65.0	85
American Tobacco	162	502.0	90
Diamond Match	38	19.5	85
DuPont (E.I.) de Nemours	65	50.0	85
General Electric & Westinghouse	8	162.0	90
National Carbon	10	10.0	87
Pullman	1	74.0	85
Railway Steel Spring	7	20.0	95
U.S. Bobbin & Shuttle	4	2.0	90
"Large":			
American Agricultural Chemical	32	40.0	
American Sewer Pipe	6	10.0	
Borden	6	20.0	
Brewery Consolidations (12)	97	67.1	
Corn Products Refining	3	80.0	
Ice Consolidations (4)	61	74.4	
International Nickel	3	24.0	
International Silver	16	20.0	
National Lead	18	25.0	
United Shoe Machinery	3	20.0	

Source: Disappearance and capitalizations data from worksheets; data on percentage of market controlled from John Moody, *The Truth about the Trusts*, Moody, 1904.

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TABLE C-6

Early Consolidations that Appeared in Subsequent Larger Mergers

<i>Consolidations later Entering</i>	<i>Year of Earlier Consolidations</i>	<i>Number of Firms Acquired</i>	<i>Capitalization (millions of dollars)</i>
<b>U.S. Steel (1901):</b>			
Shelby Steel Tube	1897	5	5.0
American Steel & Wire (Ill.)	1898	6	24.0
Federal Steel	1898	6	200.0
American Tin Plate	1898	35	50.0
American Steel & Wire (N.J.)	1899	28	90.0
American Steel Hoop	1899	11	33.0
National Steel	1899	8	59.0
National Tube	1899	17	80.0
American Bridge	1900	27	70.0
American Sheet Steel	1900	26	52.0
<b>Distilling Co. of America (1899):</b>			
Standard Distilling and Distributing	1898	11	24.0
Kentucky Distilleries & Warehouse	1899	56	32.0
<b>Corn Products (1902):</b>			
Glucose Sugar Refining	1897	6	40.0
National Starch	1900	4	9.5
<b>American Tobacco (1903):</b>			
Atlantic Snuff	1898	4	10.0
Continental Tobacco	1898	8	75.0
Union Tobacco	1898	2	10.0
Havana-Commercial	1899	14	20.0
Havana-American	1899	8	10.0
American Snuff	1900	3	25.0
American Cigar	1901	9	10.0
<b>Westinghouse:</b>			
Walker	1896	3	2.5
<b>U.S. Cotton Duck (1901):</b>			
Mount Vernon-Woodberry	1899	7	9.5
<b>International Salt (1901):</b>			
National Salt	1899	26	12.0

Source: Moody, *The Truth About the Trusts*.

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TABLE C-7

Quarterly Series of Firm Disappearances by Merger, Industrial Stock Prices, and Industrial Production, 1895-1955

<i>Year and Quarter</i>	<i>Disappearances</i>		<i>Stock Prices</i>	<i>Industrial Production (1947-49=100)</i>	
	<i>Original data</i>	<i>Seasonally adjusted data</i>			
1895	1	3	3	35.5	13.8
	2	14	9	42.0	13.8
	3	24	27	41.8	14.7
	4	1	4	37.3	14.8
1896	1	3	2	35.5	14.0
	2	7	5	36.1	13.3
	3	0	0	28.7	12.9
	4	1	3	35.3	13.1
1897	1	8	6	31.1	13.8
	2	0	0	30.5	14.4
	3	38	45	38.0	15.8
	4	17	42	37.0	16.5
1898	1	132	89	35.7	16.3
	2	64	58	37.2	16.3
	3	19	23	42.3	16.0
	4	76	146	42.6	16.6
1899	1	410	273	49.8	17.2
	2	271	272	54.8	17.7
	3	316	389	55.9	18.5
	4	128	195	54.1	18.6
1900	1	147	103	49.2	18.6
	2	55	60	45.1	18.7
	3	60	69	43.1	17.4
	4	53	70	47.6	17.4
1901	1	97	72	51.7	19.0
	2	120	131	56.0	20.0
	3	61	68	54.1	20.3
	4	112	136	48.8	20.2
1902	1	113	88	49.2	20.5
	2	57	61	49.9	20.8
	3	96	103	49.8	21.2
	4	67	81	47.6	22.4
1903	1	45	36	49.4	22.8
	2	22	22	46.2	23.1
	3	35	39	38.7	23.0
	4	14	17	34.2	20.7
1904	1	27	22	36.4	21.4
	2	15	14	36.8	22.5
	3	4	4	40.6	21.7
	4	17	23	50.0	23.5
1905	1	55	45	55.9	24.6
	2	61	53	57.9	25.8
	3	60	70	60.9	26.0
	4	23	32	65.7	26.2

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TABLE C-7, continued

<i>Year and Quarter</i>	<i>Disappearances</i>		<i>Stock Prices</i>	<i>Industrial Production (1947-49=100)</i>	
	<i>Original data</i>	<i>Seasonally adjusted data</i>			
1906	1	22	19	73.5	27.1
	2	41	33	69.2	25.8
	3	13	16	69.9	26.3
	4	22	31	71.4	26.8
1907	1	44	41	67.5	27.9
	2	20	15	61.3	29.1
	3	16	20	56.8	28.4
	4	5	7	44.8	25.0
1908	1	5	5	47.5	22.5
	2	9	7	54.0	21.8
	3	11	13	60.6	23.5
	4	16	22	63.7	25.4
1909	1	4	4	63.7	26.1
	2	13	9	67.8	27.0
	3	6	8	73.3	28.7
	4	16	21	74.2	29.9
1910	1	62	68	69.2	30.2
	2	36	23	65.6	29.8
	3	22	31	59.3	28.7
	4	14	19	62.5	28.5
1911	1	9	9	63.4	28.0
	2	47	30	63.9	28.4
	3	14	21	61.7	28.6
	4	24	32	59.8	28.8
1912	1	20	20	62.4	30.5
	2	31	20	67.6	30.5
	3	12	20	68.8	31.5
	4	13	17	68.3	33.3
1913	1	28	28	62.1	33.4
	2	28	18	59.1	33.6
	3	5	9	60.3	33.1
	4	7	9	58.8	32.0
1914	1	20	21	61.8	31.1
	2	3	2	60.7	30.4
	3	5	8	57.9	30.3
	4	7	8	55.0	28.7
1915	1	4	4	57.0	29.9
	2	22	15	66.9	31.7
	3	8	12	78.9	33.8
	4	28	32	94.6	37.0
1916	1	13	15	93.8	38.3
	2	46	33	90.2	37.0
	3	16	21	92.3	37.3
	4	32	36	102.8	39.0
1917	1	55	64	94.2	40.4
	2	36	27	94.7	42.6
	3	46	53	88.4	40.1
	4	37	42	73.6	40.2

APPENDIX C  
TABLE C-7, continued

Year and Quarter	Disappearances				Stock Prices	Industrial Production (1947-49=100)	
	Original data		Seasonally adjusted data				
1918	1	19	21		78.2	38.4	
	2	17	13		79.7	41.5	
	3	14	15		82.1	40.6	
	4	11	13		84.2	37.1	
1919	1	19	57	20 51	83.6	37	
	2	50	82	41 91	98.0	37	
	3	56	147	56 144	107.0	41	
	4	38	125	47 131	110.4	40	
1920	1	78	209	74 186	100.1	44	
	2	48	186	41 210	94.1	42	
	3	28	188	27 192	87.5	41	
	4	42	166	55 165	78.8	36	
1921	1		184		162	75.2	31
	2		99		114	74.3	30
	3		80		84	68.3	31
	4		122		116	75.7	33
1922	1		86		74	83.8	35
	2		53		62	92.9	38
	3		82		90	97.6	40
	4		76		70	97.5	45
1923	1		84		71	101.0	47
	2		67		77	96.2	49
	3		44		49	90.2	48
	4		105		99	91.0	46
1924	1		110		94	97.4	46
	2		71		78	91.9	43
	3		87		97	101.9	42
	4		85		83	108.2	45
1925	1		124		108	120.8	48
	2		104		106	124.7	48
	3		127		140	138.4	48
	4		175		181	153.0	50
1926	1		286		258	152.9	50
	2		236		223	143.0	51
	3		171		186	160.5	52
	4		146		159	155.3	52
1927	1		161		152	157.6	52
	2		247		220	167.2	52
	3		220		236	184.8	51
	4		213		242	192.6	50
1928	1		197		196	199.6	51
	2		315		268	213.4	52
	3		242		259	225.8	54
	4		274		311	267.0	57
1929	1		349		369	308.4	58
	2		395		324	312.0	60
	3		312		337	354.3	61
	4		160		177	255.6	56

APPENDIX C

TABLE C-7, continued

<i>Year and Quarter</i>	<i>Disappearances</i>		<i>Stock Prices</i>	<i>Industrial Production (1947-49=100)</i>	
	<i>Original data</i>	<i>Seasonally adjusted data</i>			
1930	1	204	230	267.1	54
	2	237	188	265.1	51
	3	156	165	227.9	47
	4	189	208	184.0	44
1931	1	163	194	176.3	42
	2	142	111	146.2	43
	3	87	89	134.5	40
	4	71	79	94.8	36
1932	1	7	8	79.5	34
	2	102	80	54.2	30
	3	46	44	61.0	29
	4	40	46	62.1	32
1933	1	19	22	58.2	30
	2	43	35	81.3	37
	3	33	31	99.0	44
	4	12	14	95.4	38
1934	1	19	21	104.0	40
	2	25	22	98.6	43
	3	34	30	91.4	38
	4	23	27	97.7	39
1935	1	36	36	102.3	45
	2	27	26	111.2	44
	3	38	35	126.8	47
	4	24	27	140.4	51
1936	1	39	36	151.0	50
	2	25	27	152.4	54
	3	27	26	164.9	57
	4	32	34	177.6	61
1937	1	32	30	185.9	63
	2	27	30	173.3	65
	3	29	30	173.7	64
	4	31	30	129.7	52
1938	1	32	31	122.5	45
	2	20	22	115.8	44
	3	22	24	139.1	48
	4	33	29	150.7	53
1939	1	24	24	144.2	54
	2	22	24	131.7	54
	3	16	18	140.1	59
	4	25	21	150.0	66
1940	1	29	31	147.6	63
	2	45	49	132.6	63
	3	30	34	126.8	67
	4	36	29	132.4	73
1941	1	22	25	124.1	79
	2	23	26	118.9	85
	3	24	27	126.9	89
	4	42	32	117.0	93

APPENDIX C

TABLE C-7, continued

<i>Year and Quarter</i>	<i>Disappearances</i>		<i>Stock Prices</i>	<i>Industrial Production (1947-49=100)</i>	
	<i>Original data</i>	<i>Seasonally adjusted data</i>			
1942	1	19	22	107.5	98
	2	17	19	100.0	102
	3	31	34	106.6	108
	4	51	38	115.1	117
1943	1	44	50	127.6	123
	2	43	50	138.1	127
	3	47	51	138.8	129
	4	79	59	135.3	130
1944	1	68	78	137.3	129
	2	73	85	140.6	126
	3	79	84	146.7	123
	4	104	78	148.0	123
1945	1	59	68	155.9	125
	2	53	60	164.3	119
	3	79	84	169.9	100
	4	142	109	188.9	87
1946	1	95	108	196.4	85
	2	132	146	205.4	87
	3	109	114	190.5	93
	4	83	65	170.5	96
1947	1	98	112	178.1	99
	2	97	104	171.2	99
	3	84	87	180.5	99
	4	125	102	180.5	102
1948	1	60	67	172.6	103
	2	55	59	185.6	103
	3	52	53	182.8	104
	4	52	44	180.4	104
1949	1	31	34	176.7	99
	2	26	28	170.9	95
	3	31	31	177.5	96
	4	33	29	191.2	96
1950	1	46	51	203.2	100
	2	58	61	217.7	109
	3	51	51	215.0	118
	4	64	57	229.3	121
1951	1	46	50	249.1	122
	2	43	45	252.3	122
	3	66	67	264.0	118
	4	72	63	265.1	119
1952	1	69	76	267.1	121
	2	69	72	264.2	119
	3	74	77	275.0	122
	4	76	66	276.7	132
1953	1	55	60	286.4	134
	2	87	90	273.0	136
	3	55	59	268.1	135
	4	91	77	276.3	129



APPENDIX C

TABLE C-7, concluded

Year and Quarter	Disappearances		Stock Price	Industrial Production (1947-49=100)
	Original data	Seasonally adjusted data		
1954 1	74	82	292.6	124
2	72	74	320.6	124
3	109	119	346.7	123
4	130	108	376.0	128
1955 1			405.9	133
2			428.4	138
3			465.3	140
4			471.3	143

Sources: *Mergers*: For the sources of the series on firm disappearances by merger see Chapter 2, Table 2, of this monograph. The merger turning points were dated by the business cycle staff of the National Bureau of Economic Research. The merger series was deseasonalized in the UNIVAC program, and the deseasonalized series was used in dating the turning points.

*Stock Prices*: The quarterly index of stock prices from 1897 through 1955 was derived from the Dow-Jones monthly index of stock prices by taking the arithmetic mean of the three monthly indexes for a given quarter. The continuity of the index was broken in December 1914, when the number of stocks was increased from 12 to 20. The two series were spliced as of this date, the pre-1914 indexes being multiplied by the ratio (0.756) of the new to the old index for the period of overlap. The index for 1895-1896 was derived from A. M. Mathews, "New York Bank Clearings and Stock Prices, 1866-1914," *Review of Economics and Statistics*, October 1926, p. 193, Chart 7. The data, seasonally adjusted, were obtained from the National Bureau's business cycle files.

*Industrial Production*: The quarterly series of industrial production for the years 1895-1918 was derived from the Babson monthly index of business activity by taking the arithmetic mean of the three monthly indexes of a given quarter. This was spliced to the Federal Reserve Board Index, using the ratio (0.508) for the year 1919, to provide a continuous series from 1895 to 1955. The pre-1919 seasonally adjusted data were obtained from National Bureau's business cycle files. The Federal Reserve series, seasonally adjusted, was taken from the *Federal Reserve Bulletin*.