

Internet Appendix: List of annual reports

The table lists the source of each firm's annual reports and the years for which reports are available.

Company	Source	Annual reports	Company	Source	Annual reports
Allis-Chalmers Co.	MIT	1914-1916,1918-1921	Lehigh Coal & Navigation Co.	Columbia	1914-1921
American Agricultural Chemical Co.	Harvard	1914-1920	National Biscuit Co.	Columbia	1914-1921
American Can Co.	Columbia	1914-1921	National Carbon Co.		Acquired
American Car & Foundry Co.	Columbia	1914-1921	National Lead Co.	Columbia	1914-1921
American Cement Co.		Not available	New York Air Brake Co.	Columbia	1914-1921
American Cotton Oil Co.	Columbia	1914-1921	New York Dock Co.	Columbia	1914-1921
American Grass Twine Co.	Columbia	1914-1921	Pacific Coast Co.	Columbia	1914-1921
American Hide & Leather Co.	Columbia	1914-1921	Pacific Mail Steamship	Columbia	1914-1921
American Linseed Co.	Col/Harv	1914-1921	Pittsburgh Coal Co.	NYPL	1914-1921
American Locomotive Co.	Columbia	1914-1921	Pressed Steel Car Co.	Columbia	1914-1921
American Malting Co.	Columbia	1914-1918	Pullman Co.	Harvard	1914-1921
American Smelting & Refining Co.	Columbia	1914-1921	Quaker Oats	Columbia	1914-1921
American Snuff Co.	Columbia	1914-1921	Railway Steel Spring Co.	Columbia	1914-1921
American Steel Foundries Co.	Columbia	1914-1921	Republic Iron & Steel Co.	Columbia	1914-1921
American Sugar Refining Co.	Columbia	1914-1921	Rubber Goods Mfg. Co.		Acquired
American Tobacco Co.	Harvard	1914-1921	Sloss-Sheffield Steel & Iron Co.	Columbia	1914-1921
American Woolen Co.	Columbia	1916-1921	Streets Western Stable Car Line		Sold
Cambria Steel Co.	Columbia	1914-1917, 1919-1921	Swift & Co.	Columbia	1914-1921
Central Leather Co.	Columbia	1914-1921	Union Bag & Paper Co.	Columbia	1914-1921
Colorado Fuel & Iron Co.	Columbia	1914-1921	United Fruit Co.	Columbia	1914-1921
Corn Products Co.	Alabama	1914-1921	United States Cast Iron Pipe & Foundry Co.	Alabama	1914-1921
Diamond Match Co.	Columbia	1914-1920	United States Realty & Improvement Co.	NYPL	1914-1916, 1919-1921
Distillers Securities Corporation	Columbia	1914-1918	United States Reduction & Refining Co.		Foreclosure
Electric Storage Battery Co.	Columbia	1914-1921	United States Rubber Co.	Columbia	1914-1921
General Asphalt Co.	Columbia	1914-1921	United States Steel Co.	U.S. Steel	1914-1921
General Chemical Co.	Columbia	1914-1919	Virginia Iron, Coal & Coke Co.	Columbia	1914-1921
General Electric Co.	Columbia	1914-1921	Virginia-Carolina Chemical Co.	Harvard	1914-1920
International Paper	Harvard	1914-1921	Westinghouse Air Brake Co.	Columbia	1914-1921
Lake Superior Corporation	Columbia	1914-1921			

Internet Appendix: Firm summaries

Summary of investment and finance behavior for the sample companies during the 1914-1921 period as described in company annual reports. A table for each firm lists the values of key variables for 1913 to 1924. In the 'Debt' column, * denotes a year (1914-1921) in which there is an investment spike in which investment > EBIT and ψ denotes a year in which there is an investment spike in which investment < EBIT.

Allis-Chalmers:

The company substantially expanded its net working capital in 1916, 1917, and 1920. Over the 1916 to 1920 period, *cumulative operating profits exceeded this level of investment and there was no debt issuance*. Financial data for 1913 was not available.

Investment spike: 1916, 1917, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	Δ OWC	CAPEX	Assets
1913	N/A	N/A	1,066,059	0	0.0000	N/A	N/A	45,709,716
1914	-3,431,653	-0.0751	-25,068	0	0.0000	-2,012,633	-1,419,020	44,146,064
1915	957,176	0.0217	1,078,352	0	0.0000	943,940	13,236	45,514,768
1916	4,023,200	0.0884	3,165,020	0*	0.0000	3,973,639	49,561	47,823,472
1917	3,263,131	0.0682	5,308,790	0 ψ	0.0000	2,914,801	348,330	54,893,596
1918	-1,310,798	-0.0239	9,754,749	0	0.0000	-977,156	-333,642	63,791,928
1919	-474,044	-0.0074	5,967,714	0	0.0000	-892,564	418,520	61,000,416
1920	9,591,235	0.1572	4,664,249	0*	0.0000	8,006,923	1,584,312	64,020,680
1921	-5,954,869	-0.0930	2,375,467	0	0.0000	-5,022,709	-932,160	60,431,952
1922	-2,093,962	-0.0346	2,508,549	0	0.0000	-1,760,426	-333,536	59,629,840
1923	1,955,530	0.0328	3,234,636	0	0.0000	2,960,149	-1,004,619	61,161,684
1924	-127,574	-0.0021	3,736,101	0	0.0000	-1,158,910	1,031,336	62,737,588

American Agricultural Chemical:

Investment spiked in 1914, 1918, 1919, 1920 and 1921. According to the 1914 annual report, the company anticipated needing to increase the amount of phosphoric acid in its fertilizers due to a war-induced reduction in imports of potash. The 1917 annual report notes that "*the enormous demand for food crops and cotton brought about by the exigencies of war, has greatly stimulated the demand for fertilizers ...*" In 1916, the company sold \$1,000,000 of 5% Convertible Debenture bonds, the proceeds of which, together with commercial collections, enabled the company to reduce its floating debt. In 1918, *substantial increases in capital expenditures, inventory, and accounts receivable exceeded the company's operating profits. This high level of investment was financed through a \$13.5 million increase in notes payable in 1918. Subsequently, in 1919, the company issued \$9.5 million of common stock "in order to provide additional working capital" [see 1919 annual report]. In addition, some of the company's debentures were converted into common stock in 1919, further expanding the company's equity.*

Investment spike: 1914, 1918, 1919, 1920, 1921

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	3,993,411	0.0604	3,895,556	14,988,000	0.2118	2,816,064	1,177,347	70,771,424
1914	5,703,900	0.0806	3,678,198	20,019,800*	0.2584	3,301,800	2,402,100	77,487,456
1915	2,372,748	0.0306	4,513,240	21,763,080	0.2719	468,356	1,904,392	80,054,680
1916	-5,327,147	-0.0665	6,328,920	17,675,540	0.2341	-3,367,184	-1,959,963	75,490,304
1917	5,328,495	0.0706	6,421,037	20,671,180	0.2516	3,472,788	1,855,707	82,158,656
1918	18,719,816	0.2278	8,987,423	34,372,000*	0.3360	14,298,068	4,421,747	102,305,272
1919	9,510,269	0.0930	4,943,456	27,720,600*	0.2503	6,041,104	3,469,165	110,733,576
1920	9,425,943	0.0851	5,888,766	29,930,900*	0.2608	1,873,524	7,552,419	114,744,760
1921	10,592,418	0.0923	-4,697,781	52,138,000*	0.4142	6,327,776	4,264,642	125,878,192
1922	-8,317,481	-0.0661	1,452,201	41,053,356	0.3608	-10,722,528	2,405,047	113,776,936
1923	-17,431,698	-0.1532	3,031,423	37,155,760	0.3612	-11,184,672	-6,247,026	102,864,392
1924	-8,612,926	-0.0837	2,553,830	35,280,636	0.3522	-8,584,990	-27,936	100,177,288

American Can:

Investment spiked in 1915, 1916, 1917, 1918, and 1920. According to the 1916 annual report, “Present commercial conditions cannot be regarded as normal...*present high prices of materials requires considerably more working capital than heretofore.*” The company’s operating profits and investment expanded substantially in 1917 and 1918 due to the war effort. The 1917 annual report notes that the company’s increased plant capacity allowed the company to “undertake large contracts with the United States Government,” that these contracts produced “substantial net profits,” and that the capacity of the company’s plants “is therefore fully engaged are fully engaged.” According to the 1921 annual report, “The past year was one of readjustment of conditions created by the war ...lower prices have lessened working capital requirements.” *Throughout the 1914 to 1921 period, operating earnings were sufficient to finance investment needs and the company reduced its debt level.*

Investment spike: 1915, 1916, 1917, 1918, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	4,601,749	0.0467	5,645,679	11,201,667	0.1093	1,885,893	2,715,856	102,468,576
1914	996,100	0.0097	5,057,802	13,448,000	0.1300	6,682	989,418	103,469,512
1915	3,932,736	0.0380	5,683,806	12,912,000 ^ψ	0.1210	2,177,966	1,754,770	106,694,992
1916	7,895,807	0.0740	8,591,049	12,386,000 ^ψ	0.1075	5,850,957	2,044,850	115,173,856
1917	6,596,639	0.0573	18,492,042	11,872,500 ^ψ	0.0891	-2,424,408	9,021,047	133,183,128
1918	12,562,502	0.0943	13,576,335	11,329,000 ^ψ	0.0782	7,608,152	4,954,350	144,864,960
1919	386,355	0.0027	9,728,758	10,791,500	0.0799	77,306	309,049	135,076,128
1920	6,974,753	0.0516	8,351,876	10,233,000 ^ψ	0.0729	-214,788	7,189,541	140,311,312
1921	-4,324,839	-0.0308	5,520,261	9,655,500	0.0715	-7,042,166	2,717,327	134,992,992
1922	2,123,302	0.0157	12,898,924	9,139,500	0.0627	1,581,356	541,946	145,750,144
1923	12,063,076	0.0828	13,423,202	8,633,500	0.0563	7,304,504	4,758,572	153,281,184
1924	-386,705	-0.0025	13,906,757	8,128,000	0.0526	-4,391,468	4,004,763	154,621,760

American Car & Foundry:

The company had dramatic growth in revenues and operating profits during the 1917 to 1920 period due to the war effort. As described in the 1918 annual report, “*The facility with which such of its plants and equipment as have been needed, have been diverted from their original purposes and devoted to the production of supplies required by our Government in its prosecution of the war...*” In addition it was noted in the 1919 annual report that “Prior to 1917, the Company had already in some degrees adapted itself to war conditions. It had been a producer in large quantity of munitions of different kinds for Great Britain

and some of her allies. Its activities along these lines naturally became more intensified after our country entered the war.” *During the entire 1916 to 1920 period, the company’s operating profits exceeded its investment levels; thus, the company did not issue any debt or equity and its debt ratio remained at 0.0.* Although inventory levels increased sharply through 1919, the company had a large negative investment in that year because of a \$45 million increase in accounts payable to the US Government. As explained in the 1919 annual report, the U.S. government placed with the company “the largest single purchase of cars ever made in the history of railroad operation or car building.” The report also notes that the company was “relieved by the Government of what would be the heavy burden, under present conditions, of financing the purchase of the material required for this large number of cars.”

Investment spike: 1915, 1917, 1921

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	2,426,111	0.0256	3,078,593	0	0.0000	826,112	1,599,999	106,033,992
1914	-2,200,757	-0.0208	3,057,971	0	0.0000	-2,200,757	0	93,367,456
1915	4,944,165	0.0530	2,330,936	0*	0.0000	4,944,165	0	91,351,728
1916	-4,745,739	-0.0520	2,816,018	0	0.0000	-4,745,739	0	101,852,768
1917	4,839,161	0.0475	10,310,872	0 ^ψ	0.0000	4,839,161	0	110,692,656
1918	3,137,113	0.0283	11,281,742	0	0.0000	3,137,112	1	127,223,832
1919	-34,819,492	-0.2737	11,771,813	0	0.0000	-35,562,232	742,739	177,791,872
1920	6,390,929	0.0359	10,401,192	0	0.0000	5,398,354	992,575	139,549,824
1921	26,179,726	0.1876	8,550,855	0*	0.0000	22,821,930	3,357,796	136,668,160
1922	-8,162,396	-0.0597	6,583,320	0	0.0000	-8,588,448	426,052	120,885,232
1923	17,390,160	0.1439	6,213,611	0	0.0000	16,933,308	456,852	130,113,248
1924	-8,737,927	-0.0672	6,304,967	0	0.0000	-9,339,208	601,281	124,316,968

Giant Portland Cement (successor to American Cement):

We were unable to locate any annual reports for this company. The financial data for 1913 and 1914 was not available.

Investment spike: 1916, 1917, 1920, 1921

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1915	N/A	N/A	61,704	767,850	0.1899	N/A	N/A	4,043,253
1916	131,413	0.0325	123,094	717,850*	0.1813	98,442	32,971	3,959,429
1917	352,507	0.0890	78,123	667,850*	0.1674	106,256	246,251	3,990,679
1918	-76,673	-0.0192	40,393	652,600	0.1687	-12,543	-64,130	3,869,277
1919	-17,193	-0.0044	324,132	565,100	0.1337	-191,595	174,402	4,225,425
1920	525,265	0.1243	195,248	515,100*	0.1228	230,636	294,629	4,193,393
1921	109,879	0.0262	197,068	462,100 ^ψ	0.1106	-121,930	231,809	4,177,500
1922	13,002	0.0031	71,657	412,100	0.1022	29,854	-16,852	4,031,436
1923	4,379	0.0011	214,538	335,000	0.0848	21,299	-16,920	3,951,216
1924	-168,949	-0.0428	322,357	173,000	0.0457	-63,165	-105,784	3,787,569

American Cotton Oil:

During fiscal year 1918, the company more than doubled its dollar amount of investment. *This investment substantially exceeded operating profits* and was due primarily to a \$3 million increase in inventory and a \$3 million increase in accounts receivable “... made necessary because of the increased business of the Company and the high cost of raw materials”. [1918 Annual Report]. *To finance this investment, the*

company issued \$5 million of one-year notes. When these notes matured the following year, they were rolled into two-year notes. Following completion of the War, the company experienced a large decline in operating profitability and elected to omit payment of dividends on its preferred stock “until such time as conditions in the industries in which this Company is engaged become more normal and until the Company’s balance sheet justifies the belief that dividends can be conservatively maintained” [1921 Annual Report].

Investment spike: 1916, 1917, 1918, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	695,082	0.0134	1,796,109	10,000,000	0.1902	-93,700	788,782	52,568,840
1914	94,422	0.0018	1,512,623	10,000,000	0.1909	-255,000	349,422	52,370,944
1915	-185,518	-0.0035	2,539,433	10,000,000	0.1854	-264,602	79,084	53,946,512
1916	2,987,254	0.0554	2,528,459	10,000,000*	0.1829	3,083,284	-96,030	54,667,204
1917	2,558,141	0.0468	2,034,042	10,000,000*	0.1816	2,371,975	186,166	55,061,880
1918	5,422,711	0.0985	2,327,995	17,500,000*	0.2703	5,225,040	197,671	64,741,528
1919	-4,460,372	-0.0689	2,694,214	15,000,000	0.2386	-4,472,661	12,289	62,863,176
1920	5,500,211	0.0875	-1,542,531	20,800,000*	0.3231	4,591,027	909,184	64,372,576
1921	-8,395,838	-0.1304	-2,114,512	14,000,000	0.2539	-8,979,484	583,646	55,144,748
1922	-3,459,808	-0.0627	-1,689,390	18,500,000	0.3575	-2,156,212	-1,303,596	51,749,016

Crex Carpet (successor to American Grass Twine):

Investment spiked in 1915 and 1920. Nonetheless, *investment is substantially below operating profits in every year except 1915 and 1921 and the company maintains zero debt.* In the 1918 annual report the company notes “that the conversion of a number of small sized looms not required in the manufacture of the regular line of goods has enabled the company to take up the manufacture of cotton duck for the US Government...” Financial data for 1916 was not available.

Investment spike: 1915, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	258,752	0.0655	301,711	0	0.0000	117,667	141,085	4,014,751
1914	-185,471	-0.0462	59,878	0	0.0000	-218,564	33,093	3,923,617
1915	359,760	0.0917	36,892	0*	0.0000	160,268	199,492	4,019,877
1916	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1917	N/A	N/A	206,631	0	0.0000	N/A	N/A	4,129,784
1918	33,579	0.0081	195,341	0	0.0000	-57,121	90,700	4,125,887
1919	105,827	0.0256	207,256	0	0.0000	28,415	77,412	4,161,907
1920	299,041	0.0719	447,042	0 ^ψ	0.0000	228,188	70,853	4,545,400
1921	74,517	0.0164	-251,651	0	0.0000	-233,133	307,650	4,045,061
1922	-309,153	-0.0764	-58,066	0	0.0000	-380,487	71,334	4,014,989
1923	-270,944	-0.0675	98,038	0	0.0000	22,549	-293,493	3,731,084
1924	82,807	0.0222	194,481	0	0.0000	38,354	44,453	3,838,082

American Hide & Leather:

In 1917, the company substantially increased investment primarily due to an expansion in net working capital. *Investment exceeds operating profits in 1917 and the company finances this deficit through an increase in debt from \$3.8 million to \$7 million.* In 1918 and 1919, *operating profits increase substantially*

and investment falls dramatically. During these years, the company pays down the company's debt to approximately its 1916 level.

Investment spike: 1917

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	1,033,271	0.0295	1,261,887	7,206,000	0.2017	832,199	201,072	35,725,048
1914	-154,049	-0.0043	859,192	6,671,000	0.1861	-176,794	22,745	35,851,600
1915	115,312	0.0032	2,029,966	5,569,000	0.1580	68,031	47,281	35,236,264
1916	-105,690	-0.0030	2,541,426	3,848,000	0.1079	363,483	-469,173	35,652,856
1917	4,423,995	0.1241	2,880,807	7,050,000*	0.1787	4,326,931	97,064	39,452,232
1918	-328,766	-0.0083	3,483,617	5,356,000	0.1347	-418,667	89,901	39,748,844
1919	-1,491,383	-0.0375	3,580,578	3,707,000	0.0908	-1,661,974	170,591	40,818,880
1920	-3,198,954	-0.0784	1,824,540	6,600,000	0.1841	-2,675,529	-523,425	35,845,444
1921	-3,069,830	-0.0856	N/A	2,950,000	0.0937	-2,494,309	-575,521	31,468,856
1922	1,144,893	0.0364	1,035,158	2,400,000	0.0751	1,108,097	36,796	31,939,940
1923	1,182,512	0.0370	N/A	3,200,000	0.0963	1,096,793	85,719	33,218,324
1924	-902,513	-0.0272	N/A	2,500,000	0.0791	-1,014,290	111,777	31,596,948

American Linseed:

Initially, the War had a negative impact on the company's profitability. According to the 1914 Annual Report, "Beginning with February your business began to show a falling off, which continued each month until the beginning of the general European war on August 1, when all businesses, as well as your own, became demoralized, and August and September, which would have been our best months, were our worst." Similarly, the 1915 Annual Report states, "The war has so unsettled your business that it has been impossible to tell from month to month what the following month would bring forth." *The firm's investment was negative in 1916 and 1917 and the company reduced its debt to zero during this period.* Investment spiked subsequently when American Linseed substantially increased both its property, plant, and equipment and its inventory in 1919 due to substantial increases in demand for its coconut oil and refined edible products. Supplies for these products came from overseas. According to the 1918 annual report, "...supplies have to come from overseas and whereas we have ordinarily been able to make turnovers in from four to five months, under present conditions it requires at least from ten to twelve months. For these reasons *we are considerable borrowers of money at the present time for the purchase of raw material for our subsidiary companies.*" The company's notes payable increased from zero to \$8 million in 1918, remained at \$8 million in 1919, and fluctuated thereafter.

Investment spike: 1918, 1919, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	1,208,955	0.0350	544,025	515,000	0.0142	-160,109	1,369,064	36,317,248
1914	238,869	0.0066	406,497	1,860,000	0.0505	79,265	159,604	36,866,164
1915	47,338	0.0013	1,081,661	315,000	0.0087	-76,317	123,655	36,356,584
1916	-21,045	-0.0006	1,500,336	0	0.0000	-85,628	64,583	37,522,772
1917	-2,052,961	-0.0547	2,147,519	0	0.0000	2,514,325	-4,567,286	39,349,980
1918	1,990,943	0.0506	2,540,188	8,024,366 ^h	0.1645	1,657,234	333,709	48,771,912
1919	14,031,083	0.2877	4,329,242	8,048,078*	0.1453	9,125,670	4,905,413	55,382,996
1920	872,397	0.0158	2,666,807	10,469,000 ^h	0.1765	-980,896	1,853,293	59,320,108
1921	-7,621,743	-0.1285	-4,168,141	5,356,500	0.1118	-8,301,036	679,293	47,905,472
1922	-109,972	-0.0023	1,006,971	4,317,044	0.0883	274,184	-384,156	48,912,384
1923	1,063,576	0.0217	-519,823	6,355,000	0.1315	956,543	107,033	48,326,920
1924	1,636,640	0.0339	1,597,762	6,588,000	0.1301	2,094,811	-458,171	50,638,144

American Locomotive:

The increase in investment in 1914 largely reflected a buildup of “working capital which is ordinarily engaged in the productive transactions of the business, but because of the extreme depression has become unemployed and has accumulated in the treasury” [1914 Annual Report]. *The company used surplus cash on hand to redeem \$2,000,000 of outstanding gold notes which fell due on October 1, 1914* [1914 Annual Report]. The company further curtailed investment in 1915, anticipating war-related reductions in business. According to the 1915 Annual Report, “the outbreak of the European war at the beginning of August 1914, made continued depression in our business more than probable.” *Both investment and profitability jumped in 1916 due to the war.* The company purchased a substantial amount of new equipment and altered existing plants for the manufacture of munitions. The 1916 Annual Report notes that “the good [financial] showing was due to the successful execution of the company’s munitions orders.” Business expanded sharply for the company during the 1917 to 1920 period as the company manufactured both munitions and locomotives for the war effort. As noted in the 1917 annual report, “The munitions work at Richmond and Montreal will be completed in August, 1917. The work of restoring these plants to locomotive production uses has already been started and when completed the entire capacity of all the plants of the company will be devoted exclusively to the manufacture of locomotives, which are urgently needed abroad as a war necessity ...” Also, the 1918 annual report notes, “The plants of all locomotive builders of this country will be taxed to their maximum capacity during the war and probably for some time thereafter, to supply the requirements of the railroads operated by the United States Railroad Association, industrial plants engaged in manufacturing war essentials, and to meet the demands of our Government and its Allies for foreign service.” Some of the costs of plant expansion and modification were included in manufacturing costs and expensed on the income statement. For example, in 1917, \$3.8 million of such costs “has been included in the manufacturing cost and deducted from earnings.” [1917 annual report] *Working capital also expanded during this period, necessitating external financing in 1918 when the company’s loans payable increased by \$7.3 million. Subsequently, reductions in this working capital in the latter part of 1919 yielded surplus funds that were used to pay down the debt and add to the company’s cash reserves.* “As this amount of cash added to other accumulations since July 1, 1919, is far in excess of immediate needs of the company because of the small amount of business on hand, the company has liquidated all of its loans payable, amounting to \$7,535,000, and purchased \$23,500,000 of U.S. Treasury 4 ½ per cent Certificates” [1919 annual report]. The company substantially reduced working capital in 1921 as “the volume of domestic business was very materially reduced due to the general depression of business throughout the country” [1921 Annual Report].

Investment spike: 1914, 1916, 1917, 1918, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	-6,751,050	-0.0854	6,226,484	11,727,378	0.1495	-6,354,318	-396,732	78,420,776
1914	2,028,784	0.0259	2,562,251	8,193,094 ^ψ	0.1127	2,042,944	-14,160	72,730,352
1915	-12,104,960	-0.1664	-1,142,602	5,746,032	0.0719	-11,705,538	-399,422	79,866,920
1916	12,264,926	0.1536	8,070,434	4,710,025*	0.0553	14,450,346	-2,185,420	85,126,072
1917	7,677,786	0.0902	5,393,872	3,293,000*	0.0392	10,563,877	-2,886,091	84,106,424
1918	6,070,436	0.0722	5,210,554	9,236,000*	0.1009	8,435,082	-2,364,646	91,544,544
1919	-22,524,724	-0.2461	7,430,820	9,492,000	0.0974	-20,905,436	-1,619,289	97,477,232
1920	8,386,312	0.0860	6,841,441	1,932,000*	0.0210	10,160,549	-1,774,237	92,032,072
1921	-6,429,719	-0.0699	4,605,029	1,932,000	0.0226	-5,280,248	-1,149,471	85,630,408
1922	8,093,097	0.0945	1,386,477	1,932,000	0.0220	9,351,612	-1,258,515	87,770,520
1923	-2,466,471	-0.0281	9,787,563	1,932,000	0.0209	-1,025,766	-1,440,705	92,266,984
1924	-10,643,463	-0.1154	7,070,511	432,000	0.0048	-7,842,125	-2,801,338	89,362,000

American Smelting & Refining:

The company reduced investment in 1914 as "... the declaration of war in Europe on August 1 brought about, temporarily, an absolute cessation of buying in virtually all of the metal markets of the world.

1914 - It was thought best by the directors, on account of possible financial difficulties that might result from the war in Europe, to reduce the capital expenditures during the last portion of the year to such works as was nearing completion or of prime necessity " [1914 Annual Report]. *During the war years, the company expanded investment using internally generated funds.* The 1917 annual report notes that the enlargements of its works "have been effected at a cost of fully \$15,000,000, all of which has been taken out of the earnings of the Company, and the enlarged capacity will doubtless be entirely useless after the war demand ceases." The 1918 annual report notes that plant expansions "had to be made at very abnormal expense, due to war prices and conditions." Despite the fact that internal funds were sufficient to fund the company's investment needs, the company's capital structure shifted towards debt. *In 1917, \$32 million in bonds were issued in exchange for \$32 million in preferred stock.* Subsequently, \$7 million of these bonds were converted to common stock. Both investment and profitability declined sharply in 1921 due to the "extreme depression in the non-ferrous metal industry which followed the war" [1921 Annual Report].

Investment spike: 1916, 1917, 1918, 1919, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	2,525,635	0.0133	10,917,238	13,534,500	0.0713	156,936	2,368,699	189,818,784
1914	-1,963,918	-0.0103	10,065,488	13,351,000	0.0708	-3,209,780	1,245,862	188,577,232
1915	-3,273,883	-0.0174	9,154,320	12,612,500	0.0625	-5,944,348	2,670,465	201,816,352
1916	8,639,446	0.0428	14,728,837	6,699,000 ^ψ	0.0308	6,926,712	1,712,734	217,325,136
1917	9,466,978	0.0436	17,579,844	31,881,400 ^ψ	0.1437	8,880,704	586,274	221,857,760
1918	2,638,270	0.0119	10,575,964	31,961,700 ^ψ	0.1440	750,280	1,887,990	221,886,080
1919	10,694,087	0.0482	8,477,311	33,046,600*	0.1535	6,873,044	3,821,043	215,251,392
1920	5,415,121	0.0252	9,803,840	32,574,700 ^ψ	0.1520	1,589,624	3,825,497	214,338,512
1921	-1,426,173	-0.0067	3,627,342	34,930,500	0.1833	-3,040,820	1,614,647	190,609,920
1922	-2,049,488	-0.0108	8,469,084	42,477,700	0.2192	103,004	-2,152,492	193,820,192
1923	2,639,528	0.0136	12,861,376	51,328,700	0.2495	7,209,004	-4,569,476	205,749,456
1924	4,182,133	0.0203	15,418,211	50,100,100	0.2347	-6,679,996	10,862,129	213,463,568

American Snuff:

Although investment spiked in 1914, 1916, 1917, and 1920, *investment levels throughout the sample period were always well below operating earnings. Correspondingly, the company had no outstanding debt over this interval of time. Annual reports did not provide any discussion of the company's results.*

Investment spike: 1914, 1916, 1917, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	818,178	0.0406	1,919,304	0	0.0000	410,592	407,586	18,243,828
1914	394,489	0.0216	1,685,668	0 ^ψ	0.0000	272,992	121,497	17,650,546
1915	-840,575	-0.0476	1,701,334	0	0.0000	-853,112	12,537	17,733,520
1916	211,928	0.0120	1,899,686	0 ^ψ	0.0000	470,056	-258,128	18,158,712
1917	343,731	0.0189	1,504,645	0 ^ψ	0.0000	309,023	34,708	18,243,558
1918	56,035	0.0031	1,533,893	0	0.0000	169,150	-113,115	18,886,072
1919	171,082	0.0091	1,774,412	0	0.0000	96,837	74,245	19,002,964
1920	975,976	0.0514	1,906,759	0 ^ψ	0.0000	792,088	183,888	20,189,774
1921	-200,400	-0.0099	1,811,679	0	0.0000	-251,871	51,471	19,820,808
1922	-172,739	-0.0087	2,193,954	0	0.0000	-223,064	50,325	20,624,498
1923	1,820,412	0.0883	2,082,520	0	0.0000	1,779,939	40,473	21,101,550
1924	533,324	0.0253	1,858,588	0	0.0000	407,818	125,506	21,172,362

American Steel Foundries:

Initially, the onset of the war reduced the company's business activity. From the 1914 Annual Report, "The actual results up to the middle of the year were almost exactly what had been expected. [...] However, the August showing was on tonnage accumulated before the outbreak of the European war. From that point we, in common with most industries, went steadily down and the end of the year was worse than the beginning." Subsequently, the company's business expanded as a result of the war effort to the point that "Substantially the entire product of the Company's Plants was for Government work" [1918 annual report]. *Investment spiked in each of the years 1915 to 1920, but operating earnings generally exceeded investment during this period and there was a gradual reduction in debt outstanding.* –The company understood the transitory nature of this investment and profitability as evidenced by the following quote from the 1916 Annual Report. "It must be kept in mind that a considerable part of the earnings for the year were derived from business outside of our regular line of work, and necessarily of a temporary character." In 1919, the company purchased a controlling interest in Griffin Car Company "to stabilize earnings." [1919 annual report]. The acquisition was financed through an \$8.5 million preferred stock issue. The company also built an automobile spring manufacturing plant that contributed to capital expenditures in 1919 and 1920. The company slashed investment in 1921 as the company adjusted to the post-War economy. "The outstanding features of business for 1921 were liquidation and readjustment – a continuation of the reaction begun the year before" [1921 Annual Report].

Investment spike: 1915, 1916, 1917, 1918, 1919, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	222,650	0.0085	1,768,240	5,418,100	0.2016	-271,272	493,922	26,875,850
1914	-586,161	-0.0218	493,206	4,819,100	0.1829	-912,990	326,829	26,343,668
1915	1,645,797	0.0625	502,765	1,959,500*	0.0690	1,262,331	383,466	28,395,120
1916	2,314,876	0.0815	4,225,810	1,586,500 ^ψ	0.0468	1,773,746	541,130	33,885,024
1917	2,887,634	0.0852	8,038,675	1,716,800 ^ψ	0.0440	1,772,742	1,114,892	38,984,872
1918	1,889,661	0.0485	4,189,424	1,372,800 ^ψ	0.0376	940,147	949,514	36,483,192
1919	7,592,434	0.2081	6,115,007	1,028,800*	0.0201	-902,187	8,494,621	51,297,288
1920	6,909,082	0.1347	6,670,993	684,800*	0.0114	2,757,391	4,151,691	60,204,792
1921	-2,330,551	-0.0387	1,241,338	340,800	0.0068	-3,173,896	843,345	50,374,748
1922	4,121,565	0.0818	4,088,892	340,800	0.0066	3,829,333	292,232	51,728,792
1923	593,572	0.0115	7,912,570	0	0.0000	-729,733	1,323,305	56,803,536
1924	-656,655	-0.0116	5,077,655	0	0.0000	-1,727,695	1,071,040	58,595,616

American Sugar Refining:

The War “caused huge swings in sugar prices“ [1914 Annual Report] and the “The business of the Company always more or less dependent for its prosperity upon world sugar conditions becomes increasingly so with the progress of the world war” [1915 Annual Report]. *Although investment spiked in 1915, 1918, 1919, and 1920, the company’s operating profits generally exceeded its investment needs (with the exception of 1920) and the company did not require external financing.* The 1917 annual report notes, “A large cash balance has been accumulated, partly due to a liquidated inventory and partly through the desire to be in a strong position during the period of uncertain conditions.” Further, the 1918 annual report notes “The trend of world sugar conditions and of the probable international readjustment continue so uncertain as to justify a policy of keeping strong in quick assets.” Both capital expenditures and net working capital expanded in 1920 and total investment exceeded operating profits; however, the company did not initially acquire external financing. *It subsequently issued \$30 million in bonds in late 1921, noting that “The Company expected to carry through its construction program from ordinary receipts and from the proceeds of the sale of capital investments. However, the severe inventory and bad account losses of the last two years [repudiation of contracts], as well as the slow liquidation of customers’ contracts, and the enlarged credits necessarily extended to customers, made it desirable for the Company to put itself in a more liquid position”* [1921 Annual Report].

Investment spike: 1915, 1918, 1919, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	7,638,758	0.0605	3,103,770	0	0.0000	6,551,505	1,087,253	122,984,784
1914	794,075	0.0065	5,101,341	0	0.0000	1,340,036	-545,961	123,009,416
1915	1,366,496	0.0111	5,597,980	0 ^ψ	0.0000	289,670	1,076,826	122,061,872
1916	-3,650,321	-0.0299	8,319,882	0	0.0000	-4,133,204	482,883	129,979,776
1917	-10,489,796	-0.0807	8,212,787	0	0.0000	-11,174,477	684,681	137,398,848
1918	8,893,585	0.0647	8,434,376	0*	0.0000	7,108,254	1,785,331	142,185,152
1919	7,866,650	0.0553	9,418,674	0 ^ψ	0.0000	5,730,651	2,135,999	147,427,904
1920	18,564,672	0.1259	-3,373,811	0*	0.0000	11,094,936	7,469,736	171,615,664
1921	-3,594,073	-0.0209	-586,390	0	0.0000	-13,095,370	9,501,297	155,291,856
1922	28,290,188	0.1822	10,354,772	30,000,000	0.1888	25,137,762	3,152,427	158,874,704
1923	6,297,225	0.0396	5,815,093	30,000,000	0.1926	6,139,044	158,181	155,778,896
1924	-12,857,875	-0.0825	13,119,407	30,000,000	0.1842	-12,987,460	129,585	162,853,872

American Tobacco:

Investment spiked in 1916, but earnings exceeded investment and the company slightly reduced its debt. Revenues jumped from \$90 million in 1917 to \$144 million in 1918, reflecting war-related demands for tobacco. According to General John J. Pershing, “You ask me what we need to win this war. I answer tobacco as much as bullets. Tobacco is as indispensable as the daily ration; we must have thousands of tons without delay.” [Advertising and Society: An Introduction. Chichester, West Sussex: Wiley-Blackwell, 2014.] *The company substantially expanded investment in 1918, primarily through a large increase in inventory (\$19 million) and large drop in accounts payable (\$11 million). This investment exceeded operating profits in 1918 so the company issued \$25 million in Gold Notes with maturities from one year to five years. Additionally, in lieu of the payment of four regular quarterly dividends, shareholders were issued scrip to be converted into common shares at par on 3/1/1921. Subsequent investment spikes in 1919, 1920 and 1921 were exceeded by operating profits and the company reduced its debt. This deleveraging was more dramatic in 1922 when the company liquidated substantial amounts of its net working capital and fixed investment.*

Investment spike: 1916, 1918, 1919, 1920, 1921

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	5,741,337	0.0396	14,721,638	4,373,800	0.0304	-1,961,540	7,702,877	143,929,408
1914	1,289,362	0.0090	11,836,931	4,491,270	0.0317	1,145,328	144,034	141,572,896
1915	-3,051,912	-0.0216	11,434,019	2,189,450	0.0161	-2,949,584	-102,328	136,103,536
1916	2,188,034	0.0161	12,412,623	2,126,100 ^ψ	0.0154	1,787,380	400,654	137,928,352
1917	-2,194,119	-0.0159	13,563,664	2,069,500	0.0126	-2,481,312	287,193	164,275,312
1918	28,672,600	0.1745	19,034,762	27,026,500*	0.1413	28,071,140	601,460	191,292,032
1919	6,754,998	0.0353	18,722,128	21,906,200 ^ψ	0.1063	5,941,208	813,790	206,108,320
1920	4,010,288	0.0195	18,615,398	18,481,300 ^ψ	0.0938	3,032,248	978,040	197,056,832
1921	2,464,170	0.0125	20,068,773	15,071,250 ^ψ	0.0791	2,462,928	1,242	190,462,240
1922	-9,259,649	-0.0486	20,380,840	1,676,400	0.0090	-8,961,888	-297,761	185,814,768
1923	-120,296	-0.0006	17,981,998	1,387,000	0.0072	-398,568	278,272	193,129,184
1924	3,300,123	0.0171	20,844,993	1,319,300	0.0070	2,506,120	794,003	188,646,976

American Woolen:

Investment spiked in 1914 that exceeded operating earnings and coincided with an increase in debt. The company subsequently substantially increased both capital expenditures and working capital (primarily accounts receivable and inventory) in 1917 due to the war effort. As noted in the 1917 annual report, “...the additional heavy demands by the Federal Government, pursuant to the entrance of the US into the World War, far outstripped our ability to meet all requirements.” This investment far exceeded operating earnings and was financed through incremental bank loans. The 1917 annual report highlights the link between the firm’s debt and its war-related investment: “The increase in indebtedness, as shown in the Treasurer’s report, is occasioned mainly by the very large volume of Government business, in addition to the regular business of the Company, and by the increased cost of raw materials and supplies.” This debt was initially reduced in 1918 as the company liquidated working capital, but increased again in 1919 as investment spiked by an amount that substantially exceeded operating earnings.

Investment spike: 1914, 1917, 1919

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	-10,031,655	-0.1215	-1,031,076	2,974,300	0.0413	-10,415,496	383,841	71,953,024
1914	6,276,798	0.0872	3,176,437	7,756,700*	0.0962	5,634,396	642,402	80,670,488
1915	2,257,747	0.0280	4,470,871	7,803,700	0.0952	1,554,384	703,363	81,984,688
1916	-10,794,688	-0.1317	6,491,236	12,548,350	0.1375	-12,187,662	1,392,974	91,292,280
1917	33,757,620	0.3698	10,933,883	21,794,550*	0.1772	29,969,330	3,788,289	123,007,200
1918	-11,521,468	-0.0937	5,740,062	3,350,700	0.0270	-16,866,184	5,344,716	124,122,976
1919	51,527,252	0.4151	4,575,106	20,906,048*	0.1570	40,054,376	11,472,875	133,174,040
1920	-5,199,495	-0.0390	2,416,152	7,127,000	0.0561	-13,444,220	8,244,725	126,945,328
1921	4,006,374	0.0316	6,311,743	6,101,900	0.0463	956,120	3,050,254	131,886,848
1922	14,743,982	0.1118	6,852,086	11,949,700	0.0879	12,497,124	2,246,858	135,876,736
1923	18,505,322	0.1362	7,257,537	11,946,500	0.0783	13,623,224	4,882,098	152,622,960
1924	-14,942,414	-0.0979	-6,275,670	13,375,000	0.0938	-16,347,320	1,404,906	142,602,832

Cambria Steel:

The company exhibited a decline in operating profits in 1914. “Prior to August, the new tariff law was the chief disturbing factor, permitting foreign manufacturers to quote exceedingly low prices which the American mills were compelled to meet. Later the European war completely unsettled financial conditions throughout the world. In October the financial condition was relieved and has since been gradually improving” [1914 Annual Report]. Subsequently, *investment spiked in 1915 and 1916 as its business expanded due to the War*. “A larger volume of business and better prices were secured in the last quarter on account of the increased demand brought about largely by the War, although domestic business also improved. ... The War has eliminated the importation of steel more completely than was ever dreamed of under any proposed tariff and also gives us export orders that are unnatural, so that a phenomenal expansion is taking place,” [1915 Annual Report]. *Investment substantially exceeded earnings in 1915 and the company correspondingly increased its debt*. The company had high levels of investment in 1918 and 1920 due to spikes in capital expenditures and fluctuations in net working capital in those years. However, *high levels of operating profits and large balances of cash and marketable securities were sufficient to fund the investment so debt actually declined between 1917 and 1920*. The company was taken over by Bethlehem Steel in 1923; thus, no financial data are available for 1922 onward.)

Investment spike: 1915, 1916, 1918, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	3,845,709	0.0558	6,688,529	0	0.0000	2,083,024	1,762,685	71,699,048
1914	4,898,342	0.0683	2,478,095	3,000,000	0.0403	1,969,867	2,928,475	74,428,400
1915	18,661,152	0.2507	7,448,207	7,461,172*	0.0789	759	18,660,392	94,539,376
1916	24,565,588	0.2598	25,715,430	5,647,124 ^u	0.0474	15,193,826	9,371,761	119,176,584
1917	-5,247,539	-0.0440	43,575,566	5,011,912	0.0322	-12,840,770	7,593,231	155,622,448
1918	29,237,488	0.1879	28,304,306	4,561,000*	0.0284	13,344,434	15,893,054	160,615,872
1919	-6,924,476	-0.0431	13,727,085	4,254,000	0.0271	-11,843,726	4,919,250	156,869,088
1920	23,670,010	0.1509	24,518,886	3,941,000 ^u	0.0241	9,861,448	13,808,562	163,415,168
1921	7,866,750	0.0481	9,470,340	3,627,000	0.0226	-11,629,470	19,496,220	160,193,024

Central Leather:

The onset of the War was associated with increases in investment and in profitability. “While during the first half of the year 1915, our domestic business showed little if any improvement over 1914, by mid-year the impetus given to the general business of the country through the large demands created by the war and the wide improvements in all lines of the industry with the consequent increased employment in labor, had resulted in a distinct increase in the demand for leather for home consumption” [1915 Annual Report]. Strong profitability continued once the U.S. entered the War. The 1918 annual report states, “Improvement in domestic trade, due in large extent to the demand of the Government for boots and leather equipment for the army, stimulated the business during the six months from April to October.” *In each of the years from 1914 through 1919, operating profits exceed investment and, as a result, the company did not add to its debt over those years.* A large positive investment in 1919 came from a \$12 million increase in inventory. The negative value for CAPEX offsets this increase, but is due to a write down of the property account. The 1919 annual report explains, “The end of the war period and the strong situation of the Company has afforded the opportunity to readjust the property account of the Company so as to reflect to a conservative extent a portion of the enhancement in the pre-war values of its timber lands and forest products and to eliminate from the property account the entire amount of all intangible values.” In 1920, sales dropped almost 50%, resulting in large losses. The 1920 annual report states, “The abnormally severe winter, the almost complete breakdown of the transportation system of the country, the delays in delivery and the cancellation of orders with the cessation of retail buying, all worked to produce by early summer a condition of almost complete stagnation in our industry, in common with or possibly beyond that in others.” *The company responded to the associated capital needs by increasing debt.*

Investment spike: 1916, 1917

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	341,273	0.0028	6,269,080	35,842,160	0.2957	1,920,104	-1,578,831	121,211,080
1914	934,903	0.0077	6,715,131	35,048,152	0.2911	2,298,152	-1,363,249	120,402,856
1915	-360,809	-0.0030	8,465,104	34,344,152	0.2831	1,815,480	-2,176,289	121,323,240
1916	8,585,861	0.0708	17,327,409	32,336,150 ^ψ	0.2463	11,080,344	-2,494,483	131,268,240
1917	8,348,536	0.0636	16,243,062	31,665,150 ^ψ	0.2179	8,741,424	-392,888	145,306,896
1918	-2,729,749	-0.0188	8,314,642	30,623,150	0.2090	-2,372,888	-356,861	146,501,472
1919	-1,163,339	-0.0079	16,126,688	28,978,650	0.1987	13,565,360	-14,728,699	145,835,456
1920	-17,453,996	-0.1197	-20,590,006	37,389,648	0.3105	-15,947,876	-1,506,119	120,418,816
1921	-14,478,079	-0.1202	-9,230,486	34,829,648	0.3008	-13,593,392	-884,687	115,771,584
1922	-3,493,308	-0.0302	3,366,417	29,149,750	0.2576	-2,459,316	-1,033,992	113,149,016
1923	-6,986,205	-0.0617	-5,434,035	26,892,450	0.2570	-5,181,656	-1,804,549	104,636,768
1924	-11,602,122	-0.1109	1,353,900	18,636,050	0.1909	-9,491,228	-2,110,894	97,633,376

Colorado Fuel & Iron:

The increase in revenues and operating profits during the War period were driven largely by government contracts. Investment increased sharply in 1918. According to the 1918 annual report, “Commercial buying of steel was suspended during the greater part of 1918 under direction of the War Industries Board to make room for Government orders.” *Nonetheless investment was exceeded by operating earnings and, therefore, did not require external financing. Following completion of the War, earnings fell sharply. The company liquidated a large portion of its fixed assets in 1919 and reduced debt during that year.*

Investment spike: 1918

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	17,650,258	0.2750	3,997,694	45,266,000	0.5030	-1,748,012	19,398,270	89,994,240
1914	1,084,464	0.0121	1,408,715	45,158,000	0.5084	617,160	467,304	88,820,584
1915	-183,637	-0.0021	1,984,461	45,075,000	0.5105	-190,261	6,624	88,298,944
1916	782,198	0.0089	4,562,017	45,005,000	0.4951	665,254	116,944	90,909,280
1917	1,907,263	0.0210	6,512,516	44,823,000	0.4700	669,353	1,237,910	95,377,568
1918	6,645,640	0.0697	5,646,073	44,351,000*	0.4429	2,179,362	4,466,278	100,132,608
1919	-9,309,436	-0.0930	1,899,223	37,943,000	0.4596	-329,729	-8,979,707	82,552,848
1920	-2,352,947	-0.0285	3,947,263	37,593,000	0.4508	-1,264,626	-1,088,321	83,392,744
1921	-3,944,070	-0.0473	-164,422	37,322,000	0.4703	-2,759,965	-1,184,105	79,349,896
1922	-702,592	-0.0089	1,995,204	37,122,000	0.4706	985,563	-1,688,155	78,878,696
1923	98,187	0.0012	3,351,268	36,875,000	0.4654	1,391,496	-1,293,309	79,233,400
1924	-828,539	-0.0105	3,394,749	36,912,000	0.4632	-210,297	-618,242	79,687,240

Corn Products:

Investment spiked in 1916, 1917, and 1918. *Operating earnings also increased sharply during this period and consistently exceeded investment. Therefore, the company gradually decreased its debt level during the War years.* Annual reports did not provide any discussion of the company's results.

Investment spike: 1916, 1917, 1918

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	585,634	0.0059	3,071,428	8,247,320	0.0841	918,620	-332,986	98,064,840
1914	30,336	0.0003	3,210,881	7,921,440	0.0802	2,161,568	-2,131,232	98,765,640
1915	-329,312	-0.0033	712,485	7,595,560	0.0757	194,626	-523,938	100,386,312
1916	4,226,820	0.0421	7,386,877	7,269,680 ^u	0.0690	1,925,195	2,301,625	105,332,200
1917	8,484,181	0.0805	15,205,626	6,943,800 ^u	0.0620	8,672,254	-188,073	112,058,616
1918	14,511,226	0.1295	22,049,585	6,616,920 ^u	0.0511	10,012,466	4,498,760	129,582,816
1919	-3,359,771	-0.0259	20,746,044	6,250,040	0.0453	10,247,234	-13,607,005	138,080,112
1920	-4,149,448	-0.0301	17,430,783	5,923,160	0.0413	-5,164,940	1,015,492	143,255,696
1921	677,798	0.0047	7,604,461	5,548,280	0.0405	-10,763,328	11,441,126	137,137,552
1922	-38,968,068	-0.2842	12,286,329	2,806,700	0.0234	1,867,236	-40,835,304	120,131,464
1923	-5,204,610	-0.0433	12,598,051	2,550,660	0.0241	-5,197,704	-6,906	105,794,536
1924	1,150,889	0.0109	12,934,661	7,498,620	0.0678	3,550,468	-2,399,579	110,593,760

Diamond Match:

Investment in working capital increased in 1914 due largely to “sharp advances in the cost of materials used in the manufacture of matches which have heretofore been supplied largely, and in some instances, solely by foreign countries [1914 Annual Report].” During the fiscal year of 1917, Diamond Match increased investment more than four-fold through a combination of capital expenditures and increases in net working capital (primarily inventory). Capital expenditures were made in connection with a new factory in Savannah, Georgia “for the manufacture of the type of match required by the Government for use of its armed forces” [1918 Annual Report]. Additionally, the company built a new plant in Spokane, Washington; this plant “was also made necessary by war conditions.” [1918 Annual Report]. *Because of increased profits during the War period, the company was able to finance these large investments with internal funds.* The company subsequently had further large investment outlays in 1920. These outlays were primarily due to capital expenditures that the company described as being necessary to “cope with peculiar existing post-war conditions in the raw material field, and avail itself of unprecedented opportunities for expansion in profitable branches of its prime business and associated fields of industry” [1919 Annual Report]. *Because*

the scale of investment exceeded internal funds, the company required external capital in 1920, which it obtained through the issuance of \$6 million of fifteen year debentures. These bonds were subsequently paid off by the end of 1923, coincident with large reductions in net working capital and property, plant, and equipment.

Investment spike: 1914, 1917, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	832,405	0.0407	1,455,490	1,328,000	0.0626	470,264	362,141	21,210,080
1914	1,449,318	0.0683	1,219,976	1,295,700*	0.0613	777,499	671,819	21,145,752
1915	-2,950,538	-0.1395	1,205,009	0	0.0000	-753,233	-2,197,305	18,193,364
1916	1,107,197	0.0609	2,630,121	0	0.0000	442,340	664,857	18,333,978
1917	4,521,474	0.2466	3,607,960	0*	0.0000	2,684,861	1,836,613	21,598,802
1918	1,263,876	0.0585	2,608,627	0	0.0000	502,129	761,747	23,779,460
1919	-1,044,763	-0.0439	2,673,516	0	0.0000	-1,532,571	487,808	24,604,124
1920	9,667,603	0.3929	2,723,081	6,901,116*	0.2030	3,084,528	6,583,075	34,000,248
1921	1,291,374	0.0380	2,540,776	7,035,366	0.2012	669,904	621,470	34,959,740
1922	-443,101	-0.0127	2,532,094	6,663,858	0.1967	516,204	-959,305	33,884,788
1923	-10,868,690	-0.3208	2,430,123	0	0.0000	-5,793,586	-5,075,104	26,466,596
1924	7,466	0.0003	2,069,806	0	0.0000	1,591,691	-1,584,225	25,801,048

Distillers Securities Corporation:

Investment spiked in 1914 and 1915, but did not require external financing. Between 1916 and 1919, operating earnings exceeded investment and the company substantially reduced its debt obligations. According to the 1917 annual report, 1917 “had been the most successful year in the history of the company.” In 1918, facing the specter of prohibition, the company’s Board of Directors, “concluded that it is for the best interests of the company and its stockholders to enlarge the scope of its business.” Thereafter, the company increased investment in 1919 and 1920 by adapting a number of its plants to accommodate the manufacture of cereal food products, food stuffs, yeast, and other food products. This expansion in capital investment exceeded operating earnings in 1920 and was financed primarily through incremental debt. The company subsequently went into receivership in 1922.

Investment spike: 1914, 1915, 1919, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	566,886	0.0096	2,060,814	15,635,711	0.2363	-2,843,534	3,410,420	66,181,368
1914	1,263,068	0.0191	2,334,293	15,663,236 ^ψ	0.2585	1,261,122	1,946	60,590,020
1915	4,076,453	0.0673	2,223,794	15,658,236*	0.2782	4,637,739	-561,286	56,291,704
1916	-548,056	-0.0097	1,674,681	14,038,628	0.2405	-434,720	-113,336	58,384,296
1917	-3,208,505	-0.0550	5,497,377	8,969,384	0.1608	-194,407	-3,014,098	55,777,016
1918	-14,332,563	-0.2570	10,514,810	6,648,855	0.1261	-6,270,917	-8,061,646	52,741,800
1919	775,115	0.0147	3,354,947	5,811,855 ^ψ	0.1197	1,519,623	-744,508	48,534,688
1920	9,800,130	0.2019	2,448,280	12,178,579*	0.2284	1,666,513	8,133,617	53,312,488

Electric Storage Battery:

Operating earnings steadily increased over the 1916-1919 and exceed cumulative investment over that period. In 1920, revenue jumped from \$6 million to \$12 million, EBIT increased to \$6 million, inventory jumped \$5 million, and capital expenditures were over \$6 million. “Stocks and Bonds in other Corporations” decreased by \$5 million. Outstanding common equity increased by \$2.4 million in 1920,

but the annual reports do not provide any details of an equity offering. Company annual reports did not provide any discussion of the company's results. Beginning in 1920, the company's financial results reflect a consolidated balance sheet.

Investment spike: 1915, 1916, 1917, 1918

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	321,391	0.0160	1,208,755	0	0.0000	13,123	308,268	20,483,340
1914	-91,567	-0.0045	1,103,238	0	0.0000	-169,385	77,818	21,022,014
1915	434,280	0.0207	1,360,747	0 ^ψ	0.0000	405,030	29,250	19,136,396
1916	1,918,372	0.1002	1,582,053	0*	0.0000	1,234,672	683,700	20,651,914
1917	3,514,223	0.1702	2,477,882	2,000,000*	0.0809	2,428,394	1,085,829	24,707,928
1918	1,818,363	0.0736	3,949,374	1,000,000 ^ψ	0.0370	1,119,448	698,915	27,021,936
1919	-520,123	-0.0192	4,800,812	0	0.0000	-814,306	294,183	33,930,220
1920	13,582,117	0.4003	6,157,091	0	0.0000	6,947,862	6,634,255	44,296,488
1921	-6,171,723	-0.1393	5,602,384	0	0.0000	-4,347,370	-1,824,353	41,028,712
1922	2,200,327	0.0536	7,570,838	0	0.0000	1,141,259	1,059,068	45,201,024
1923	1,944,184	0.0430	7,216,522	0	0.0000	1,149,608	794,576	41,926,544
1924	2,161,129	0.0515	7,210,883	0	0.0000	829,615	1,331,514	44,416,704

General Asphalt:

The company's business was disrupted by the outbreak of the War. According to the 1914 Annual Report, "With the outbreak of the war, ... conditions became more acute, and public improvements were suspended more generally than before." This was later offset by war-related chartering of the company's freight steamers. "On the other hand some of Company's freight steamers, all of which were not required in the Company's own business, were sub-chartered during the year, and are still sub-chartered, at high rates; thus offsetting the heavy shrinkage in European business" (1915 Annual Report). The company made a substantial increase in investment in 1918 that was linked to the development of new, war-related products. According to the 1918 annual report, the company was "able to assist the military and naval branches of the Government" by developing "a substitute for shellac, used in waterproofing rifle cartridges, and by the continued production of asphalt caulking compound, asphalt paint and varied raw and manufactured products. Sales from these new products "counteracted the slowing down effect of the war on general trade". *However, because operating earnings exceeded investment levels, no external financing was required. Investment dramatically increased in 1920 and outstripped operating profits.* The 1920 annual report notes, "It was not possible promptly to fill all orders received during the extraordinary business conditions in the first nine months of the year. It was equally difficult to obtain orders in the closing months, and from the end of the year up to the time of this report." During 1920, inventory increased by \$1.3 million, accounts receivable increased by \$1.9 million, and *\$4 million of convertible bonds were issued to stockholders.*

Investment spike: 1918, 1920, 1921

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	364,768	0.0094	1,495,731	3,834,851	0.0980	-552,656	917,424	39,135,052
1914	-340,897	-0.0087	581,181	3,441,426	0.0898	-738,048	397,151	38,334,536
1915	123,083	0.0032	1,124,112	3,599,489	0.0941	-16,491	139,574	38,263,316
1916	-406,503	-0.0106	1,100,832	3,117,737	0.0799	-169,304	-237,199	39,036,956
1917	72,021	0.0018	1,258,201	3,488,152	0.0872	-110,622	182,643	39,984,720
1918	636,416	0.0159	1,642,832	3,409,768 ^u	0.0856	675,099	-38,683	39,848,532
1919	-193,148	-0.0048	1,541,678	2,883,140	0.0714	19,488	-212,636	40,352,732
1920	3,657,702	0.0906	1,966,804	7,722,445*	0.1655	2,802,213	855,489	46,657,416
1921	650,211	0.0139	-143,405	7,408,080*	0.1662	-1,676,533	2,326,744	44,584,896
1922	2,069,722	0.0464	1,189,397	7,173,405	0.1605	1,699,388	370,334	44,700,928
1923	-1,171,578	-0.0262	1,626,152	5,102,200	0.1169	-1,242,708	71,130	43,662,076
1924	1,384,578	0.0317	2,108,404	5,000,000	0.1115	832,129	552,449	44,850,736

General Electric:

The company's business declined in 1914, but bounced back in 1915 and 1916 due, in part to the War. "The value of orders received for special munitions during 1915 was \$33,980,000" [1915 Annual Report]. Further, in 1916, *the company expanded investment to meet war-related demands*. "Urgent pressure upon the management for immediate and extensive additions to your manufacturing facilities involved expenditure of \$8,828,254.80 for plant account during 1916....The increase in merchandise inventories was due not only to the greater volume of business, but to necessity for carrying, at the existing high prices, larger than normal stocks of all kinds of material as a safeguard against uncertainties of delivery" [1916 Annual Report]. GE substantially increased investment further in 1917 through a \$9 million increase in PP&E and a \$33 million increase in inventory. The annual report for 1917 notes "A substantial portion of the large increase [in orders] for the past year consisted of orders for ship propulsion and other apparatus placed by and for the US Government..." Further, the 1918 annual report states that "In order to expedite the completion of Government and other contracts essential to the prosecution of the war, your Company was forced to make heavy expenditures for additional manufacturing facilities ..." *Although GE's profitability correspondingly increased, investment expenditures exceeded operating profits. To finance the deficit, the company issued \$27.8 million in notes payable in 1917.* The 1917 annual report states that "It is expected that with the return of normal business conditions, sufficient cash will be released by a reduction in inventories and customers' notes and accounts to provide for the two note issues aggregating to \$25,000,000.00." *In 1918, a common stock rights offering raised \$14 million.*

The company again made a dramatic increase in investment in 1920, which was primarily due to a \$16 million increase in PP&E and a \$35 million increase in inventory. The 1920 annual report notes that \$22 million in bonds and \$31 million in notes payable were issued to provide for these outlays. A common stock rights offering raised \$12 million in 1920 and an additional rights offering of \$27 million was approved in November, 1920.

Investment spike: 1916, 1917, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	10,072,317	0.0763	14,065,700	20,151,500	0.1398	5,118,320	4,953,997	144,125,360
1914	-16,650,245	-0.1155	11,855,383	12,067,500	0.0872	-17,500,232	849,987	138,418,368
1915	-7,247,633	-0.0524	12,307,995	12,049,000	0.0807	-5,872,408	-1,375,225	149,278,560
1916	27,582,460	0.1848	19,160,973	12,047,500*	0.0736	27,374,824	207,635	163,622,112
1917	43,708,556	0.2671	33,516,830	39,805,220*	0.1718	34,743,888	8,964,669	231,630,480
1918	-5,775,505	-0.0249	32,982,072	38,547,000	0.1450	-10,755,504	4,979,999	265,841,568
1919	3,494,974	0.0131	38,355,221	28,547,000	0.1040	-3,319,688	6,814,662	274,476,000
1920	66,659,496	0.2429	35,420,616	82,810,760*	0.2289	50,242,832	16,416,663	361,776,096
1921	-51,899,244	-0.1435	24,455,666	38,004,512	0.1128	-52,609,400	710,156	337,009,504
1922	-10,396,576	-0.0308	30,794,966	24,577,440	0.0720	-6,729,832	-3,666,744	341,571,104
1923	7,380,171	0.0216	38,001,528	24,011,230	0.0643	12,742,456	-5,362,285	373,566,528
1924	-12,405,312	-0.0332	45,135,683	19,083,500	0.0498	-10,568,152	-1,837,160	383,229,280

International Paper:

The War initially hurt the company's business in 1914 and 1915. According to the 1914 Annual Report, "The European war has interfered with the sale of paper in foreign markets; and the foreign business has been further impaired because of exorbitant ocean freight rates, and because in some cases ships were not available at any price." Nonetheless, earnings were sufficient to finance investment over these years and the company's debt level was stable. Subsequently, demand for paper expanded greatly during the war. "Suddenly, in the early part of 1916, there came a remarkable revival [in demand for newsprint], and newspapers increased their circulation and advertising to a point never before known. The demand for paper increased by leaps and bounds, and although all the machines of the continent were operated to their greatest capacity, the demand for consumption greatly exceeded production" [1916 Annual Report]. The company substantially increased inventory in 1917 and 1918. According to the 1919 annual report, "The war has led to revolutionary changes in everything connected with industrial matter. The most notable of these is the enormous increase in the cost of labor and materials, which in turn leads to the necessity of more than twice the working capital required 6 years ago to carry on the same volume of business." *This expanded investment exceeded operating earnings and was funded through an increase in notes payable.* The 1918 annual report states, "The increase in bank loans is due largely to conditions that will disappear when the war conditions and restrictions come to an end and general business operations approach normal." *Debt levels were subsequently reduced by approximately 50% between 1918 and 1920 using internally generated funds.* In 1917 accumulated dividends were paid in a combination of preferred stock, common stock, and cash. As a result, outstanding preferred stock and common stock each increased by \$2.3 million. *The company expanded debt in 1921 and 1922 as investment substantially exceeded operating earnings.*

Investment spike: 1914, 1917, 1918, 1919, 1920, 1921

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	999,582	0.0137	1,881,402	21,138,500	0.2897	633,781	365,801	72,961,384
1914	1,934,036	0.0265	2,005,000	20,702,000 ^u	0.2820	1,782,115	151,921	73,413,768
1915	-1,071,156	-0.0146	2,067,249	18,279,000	0.2552	-802,222	-268,934	71,636,784
1916	-337,232	-0.0047	5,447,710	14,497,000	0.1998	-609,048	271,816	72,564,264
1917	3,677,150	0.0507	11,407,491	12,317,000 ^u	0.1586	3,567,635	109,515	77,660,744
1918	10,780,927	0.1388	6,638,099	16,554,000*	0.1953	11,080,140	-299,213	84,753,000
1919	3,382,217	0.0399	5,594,840	15,382,000 ^u	0.1778	2,958,792	423,425	86,494,760
1920	15,709,844	0.1816	19,418,522	8,247,418 ^u	0.0838	-5,150,548	20,860,392	98,390,952
1921	12,605,693	0.1281	-7,113,932	23,210,578*	0.2278	5,157,556	7,448,137	101,869,992
1922	-58,064	-0.0006	-6,609,544	32,006,632	0.3161	-5,670,664	5,612,600	101,249,176
1923	4,450,188	0.0440	4,929,839	30,717,000	0.2972	1,126,046	3,324,142	103,358,408
1924	-3,185,464	-0.0308	3,471,296	26,523,500	0.2598	-2,490,762	-694,702	102,101,816

Lake Superior:

With the outbreak of the War, the demand for steel fell and the company dramatically reduced its capital expenditures. According to the 1914 Annual Report, “The demand for steel has fallen off and money stringency, owing to the European situation, is operating as an adverse factor... Throughout the year capital expenditure has been curtailed as far as possible.” The company suspended the payment of interest on its income bonds. *During the War, the company’s operations “have been largely governed by the requirements of the Imperial Munitions Board” [1917 Annual Report], but did not result in an expansion of profitability or investment. During this period, debt was stable.* Business expanded following completion of the War and the company expanded investment in 1918 and 1919. The company encountered cash flow difficulties in 1921 as “a changed business situation occurred and a large tonnage of iron and steel booked for Winter delivery was cancelled or suspended, owing to an inability of our customers to accept shipments” [1921 Annual Report]. Nonetheless, operating earning still exceeded investment and debt was unchanged.

Investment spike: 1918, 1919

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	624,667	0.0124	859,180	8,800,000	0.1742	639,528	-14,861	50,507,016
1914	-74,667	-0.0015	464,110	8,814,000	0.1760	-147,427	72,760	50,087,040
1915	207,729	0.0041	433,811	8,643,000	0.1742	246,705	-38,976	49,606,244
1916	-165,603	-0.0033	449,054	8,472,000	0.1720	-96,499	-69,104	49,252,340
1917	8,165	0.0002	558,715	8,294,000	0.1683	-160,840	169,005	49,275,364
1918	558,222	0.0113	1,116,974	8,294,000 ^u	0.1705	514,794	43,428	48,638,928
1919	802,419	0.0165	1,468,185	8,294,000 ^u	0.1647	794,301	8,118	50,352,100
1920	-309,792	-0.0062	474,688	8,051,000	0.1633	-305,937	-3,855	49,303,224
1921	213,914	0.0043	292,002	8,051,000	0.1637	217,397	-3,483	49,173,292
1922	15,367	0.0003	298,880	8,051,000	0.1641	42,419	-27,052	49,068,232
1923	132,027	0.0027	272,095	7,963,000	0.1617	358,548	-226,521	49,239,712
1924	82,833	0.0017	261,736	7,710,500	0.1576	90,917	-8,084	48,927,840

Lehigh Coal & Navigation:

The company made a dramatic increase in investment in 1917 that is driven by an \$11 million increase in the book value of property, plant, and equipment. This increase, which was based on an appraisal of the

company's coal properties, was offset as capital surplus and, presumably, did not have a cash flow effect. The 1917 annual report notes that "The commercial production for the year was the largest in the history of the company." During that year, *common shareholders were offered a subscription for an additional 10% of the company's equity. The annual report notes, "The cash received from the sale of the additional capital stock was designed to recoup the treasury of your Company and thus enable it, during the probable period of the war, to provide for enlarging its mining and other operations and facilities, as aforesaid."*

Investment spike: None (revalued assets in 1917)

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	3,417,447	0.0646	3,366,813	27,070,796	0.4631	-890,898	4,308,345	58,458,560
1914	1,433,102	0.0245	3,673,674	28,822,300	0.4665	1,375,719	57,383	61,790,120
1915	-287,284	-0.0046	3,487,373	28,687,300	0.4547	-289,893	2,609	63,086,912
1916	-41,906	-0.0007	3,979,830	29,055,300	0.4643	-1,070,657	1,028,751	62,574,972
1917	12,110,235	0.1935	4,549,352	26,674,000	0.3553	1,385,051	10,725,184	75,084,352
1918	3,842,708	0.0512	3,989,928	27,401,000	0.3566	2,312,604	1,530,104	76,842,128
1919	3,087,038	0.0402	5,085,189	26,083,000	0.3426	1,095,488	1,991,550	76,127,120
1920	2,158,663	0.0284	6,383,177	25,188,000	0.3266	-139,371	2,298,034	77,127,080
1921	3,126,558	0.0405	5,166,320	22,613,000	0.3016	1,022,916	2,103,642	74,970,288
1922	1,413,373	0.0189	3,586,320	22,392,000	0.2997	-2,766,863	4,180,236	74,713,712
1923	1,083,490	0.0145	6,106,252	22,303,000	0.2816	1,079,514	3,976	79,194,792
1924	6,848,223	0.0865	4,658,091	18,850,000	0.2472	3,655,245	3,192,978	76,258,792

National Biscuit Company:

The company substantially expanded working capital in 1916 and 1917 due to the War. The 1918 annual report notes, "The Cracker Baking Industry was hurriedly requested by the Army to provide Hard Bread in half pound rations, packed principally in soldered tins to resist gas. When the Armistice was signed, this company alone had reached a production of 800,000 Hard Bread rations per day." *Nonetheless, the company's levels of investment were small relative to operating profits during this period and throughout the entire sample period. Therefore, the company required no external funds and maintained zero debt.*

Investment spike: 1916, 1917, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	1,736,108	0.0260	5,168,018	0	0.0000	698,983	1,037,125	68,193,936
1914	-327,678	-0.0048	4,520,402	0	0.0000	-436,814	109,136	68,816,624
1915	480,265	0.0070	4,129,791	0	0.0000	159,576	320,689	69,225,256
1916	2,823,915	0.0408	4,579,306	0 ^ψ	0.0000	2,546,942	276,973	70,310,688
1917	2,232,588	0.0318	4,622,349	0 ^ψ	0.0000	3,235,851	-1,003,263	73,506,456
1918	-212,422	-0.0029	5,135,840	0	0.0000	340,629	-553,051	75,388,640
1919	-283,510	-0.0038	5,349,862	0	0.0000	-2,310,796	2,027,286	77,730,024
1920	3,703,618	0.0476	5,543,120	0 ^ψ	0.0000	-829,000	4,532,618	80,332,872
1921	-5,340,914	-0.0665	5,677,461	0	0.0000	-6,278,598	937,684	83,188,072
1922	4,745,563	0.0570	11,024,980	0	0.0000	471,847	4,273,716	90,954,400
1923	4,648,575	0.0511	12,092,828	0	0.0000	1,947,853	2,700,722	95,394,208
1924	4,218,722	0.0442	12,881,530	0	0.0000	1,326,438	2,892,284	98,305,472

National Lead:

The company substantially increased investment in 1916 because of the War. Part of this increase reflected increases in working capital due to war-related increases in supply costs. “- Before the outbreak of the European war, antimony was selling in the New York market at from 6c to 7c per pound. Today prices range between 43c and 45c” [1915 Annual Report]. Further, according to the 1919 annual report, “...at the beginning of the war, the US Cartridge Co., in ten months’ time constructed two large plants on leased ground; equipped them with machinery; increased its workforce from four hundred to eight thousand employees, and its daily output of military cartridges from twenty-five thousand to a million and a half. When the US Government entered the war additional buildings were leased and at the date of the armistice the company had fifteen thousand employees and was turning out about four million cartridges, ...” (Note that beginning in 1917, the company consolidated its balance sheet, bringing existing subsidiary debt onto the consolidated balance sheet. We are unable to determine whether or not the debt in 1917 represents an increase in subsidiary debt.)

Investment spike: 1916, 1919, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	-757,358	-0.0146	2,458,300	0	0.0000	266,104	-1,023,462	51,745,020
1914	-1,041,746	-0.0201	2,476,292	0	0.0000	-1,282,360	240,614	52,364,064
1915	-19,629	-0.0004	2,710,526	0	0.0000	-36,662	17,033	53,458,968
1916	838,158	0.0157	2,977,699	0 ^ψ	0.0000	818,746	19,412	55,163,900
1917	31,941,134	0.5790	4,896,953	10,051,000	0.1245	14,188,404	17,752,730	80,713,856
1918	776,115	0.0096	4,692,815	9,715,000	0.1112	401,020	375,095	87,376,248
1919	2,536,819	0.0290	4,632,560	9,403,000 ^ψ	0.1068	2,959,372	-422,553	88,081,376
1920	3,908,965	0.0444	4,735,509	9,030,000 ^ψ	0.0967	2,135,778	1,773,187	93,337,024
1921	589,508	0.0063	3,481,513	8,595,000	0.0969	940,966	-351,458	88,705,792
1922	-858,680	-0.0097	4,927,548	8,142,000	0.0873	310,976	-1,169,656	93,304,528
1923	-1,717,959	-0.0184	5,296,413	7,731,000	0.0823	-3,013,512	1,295,553	93,934,880
1924	-539,260	-0.0057	4,454,978	7,318,000	0.0768	935,620	-1,474,880	95,261,576

New York Air Brake:

*The company substantially expanded investment between 1914 and 1916 as a result of the War. As stated in the 1914 annual report, “Your Company has already received brake equipment orders from several foreign governments which, together with increased orders and enquiries from our own railroads, give promise of a much more prosperous year.” Similarly, the 1915 Annual Report states that “The Company has large orders for brakes on hand, and with our munition orders less than one-sixth filled, we have reason to anticipate a very profitable year’s business.” *The company increased its debt in 1915, when investment exceeded operating earnings, then reduced debt the following year when operating earnings substantially exceeded investment. During the fiscal year 1918, New York Air Brake substantially increased investment expenditures primarily through a \$1.8 million increase in inventory and a \$2.5 million increase in the asset listed as “Expenditures for a/c U.S. Government Contracts.”* These expenditures related to orders for munitions and air brakes from foreign countries as well as the United States. According to the 1917 annual report, “New buildings had to be constructed to take care of these orders, and the Company has built four buildings approximately 1000 x 100 feet each and one 240 x 400 feet, of steel and concrete, all of which are nearly completed and will be manufacturing munitions in the next thirty days ...” In addition, the 1917 annual report states, “Our munition orders for the United States Government now amount to a value of over \$30,000,000.00, and our orders for airbrakes are the largest we have ever had on the books.” *In 1918, the company’s bills payable increased from zero to \$6.4 million. These payables were ultimately paid down by the end of 1922 through a combination of operating earnings in excess of required investment needs and a \$5 million convertible preferred share issue in 1922.**

Investment spike: 1914, 1915, 1916, 1918, 1919, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	6,173	0.0005	849,029	3,000,000	0.2237	-156,439	162,612	13,409,391
1914	134,821	0.0101	839,728	3,000,000 ^h	0.2237	-64,794	199,615	13,412,910
1915	2,771,099	0.2066	1,578,680	5,496,760*	0.3080	1,225,062	1,546,037	17,845,392
1916	3,563,101	0.1997	8,427,134	3,000,000 ^h	0.1405	673,148	2,889,953	21,345,640
1917	-1,266,285	-0.0593	2,100,545	3,000,000	0.1335	-1,866,017	599,732	22,471,324
1918	3,528,706	0.1570	2,331,087	9,430,000*	0.3307	2,998,597	530,109	28,519,284
1919	977,830	0.0343	663,818	9,880,000*	0.3570	818,867	158,963	27,678,068
1920	891,274	0.0322	1,292,285	7,564,789 ^h	0.3298	-416,709	1,307,983	22,939,460
1921	-2,485,094	-0.1083	89,844	7,693,145	0.3934	-923,935	-1,561,159	19,556,188
1922	-1,104,938	-0.0565	1,445,428	3,000,000	0.1502	-789,942	-314,996	19,971,124
1923	-649,666	-0.0325	3,094,990	3,000,000	0.1451	-252,137	-397,529	20,675,484
1924	-553,505	-0.0268	1,640,405	3,000,000	0.1461	-90,689	-462,816	20,535,172

New York Dock:

In 1914, the company initially expanded investment due, in part to plans for a municipal railway in Brooklyn. However, “owing to the financial conditions brought about by the European War, actual work has been temporarily suspended” [1914 Annual Report]. *Nonetheless, the initial investment exceeded operating earnings and the company slightly expanded its debt.* Earnings expanded in the subsequent years “due to a considerable extent to the crowded condition of the Port on New York on account of the European War” [1915 Annual Report]. *Between 1916 and 1921, investment was always low relative to operating earnings and debt was essentially unchanged.* Annual reports did not provide any discussion of the company’s results during this period.

Investment spike: 1914, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	41,555	0.0013	942,797	12,550,000	0.4006	-249,337	290,892	31,326,136
1914	1,044,017	0.0333	943,781	12,845,000*	0.4064	-64,197	1,108,214	31,603,650
1915	230,094	0.0073	1,130,802	12,550,000	0.3966	157,657	72,437	31,645,640
1916	-146,501	-0.0046	1,416,770	12,550,000	0.3889	34,974	-181,475	32,274,590
1917	-230,867	-0.0072	2,057,196	12,550,000	0.3773	483,105	-713,972	33,264,080
1918	84,394	0.0025	2,252,766	13,050,000	0.3780	-302,955	387,349	34,522,208
1919	62,614	0.0018	2,225,061	12,550,000	0.3686	-636,234	698,848	34,047,232
1920	457,234	0.0134	2,472,560	12,550,000 ^h	0.3682	-31,399	488,633	34,084,996
1921	-239,531	-0.0070	2,597,522	12,550,000	0.3619	77,929	-317,460	34,678,416
1922	101,047	0.0029	2,228,176	12,550,000	0.3644	-17,477	118,524	34,435,572
1923	-71,459	-0.0021	2,090,889	12,550,000	0.3648	-276,152	204,693	34,405,364
1924	-239,522	-0.0070	2,103,920	12,550,000	0.3658	-171,690	-67,832	34,312,828

Pacific Coast:

Because of the pre-War recession, “all departments of the company’s business suffered...” [1914 Annual Report]. The company suspended dividends on its common stock “in order that its credit and the efficiency of its properties may be maintained unimpaired” [1915 Annual Report]. The company’s business further suffered as a result of the War. According to the 1916 Annual Report, “Normal conditions and operations of mines to capacity can hardly be expected until the return of steamship tonnage, now more properly

engaged elsewhere, to the Pacific.” *Investment spiked in 1914 and 1916. The former exceeded operating earnings and required external finance, while the latter was small relative to operating earnings and was associated with a reduction in debt that year.* The 1918 annual report notes, “On August 21, 1917, the Government assumed regulation of the coal industry; on December 28, 1917, it assumed control of the Pacific Coast Railroad.” The government returned control of the railroad to the management in 1920. The 1920 annual report notes, “During the period of Government control there was no consequential renewals of rails...” In 1920, the company expanded its net working capital and slightly increased debt.

Investment spike: 1914, 1916, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	583,096	0.0264	1,053,019	5,000,000	0.2261	13,775	569,321	22,112,806
1914	1,118,429	0.0506	738,747	5,750,000*	0.2509	135,159	983,270	22,918,844
1915	-289,002	-0.0126	608,490	5,750,000	0.2604	6,315	-295,317	22,077,286
1916	350,393	0.0159	887,697	5,600,000 ^u	0.2503	114,331	236,062	22,374,768
1917	-781,449	-0.0349	946,391	5,400,000	0.2373	917,244	-1,698,693	22,759,514
1918	82,889	0.0036	1,181,544	5,200,000	0.2256	-611,333	694,222	23,050,426
1919	-302,272	-0.0131	794,483	5,000,000	0.2188	-521,794	219,522	22,851,764
1920	451,530	0.0198	853,625	5,265,000 ^u	0.2306	591,853	-140,323	22,835,802
1921	-142,118	-0.0062	223,185	5,215,000	0.2343	-526,400	384,282	22,259,062
1922	415,943	0.0187	-428,241	5,465,000	0.2447	-13,581	429,524	22,332,684
1923	-358,555	-0.0161	269,791	5,749,771	0.2593	292,614	-651,169	22,175,352
1924	581,550	0.0262	553,212	5,821,322	0.2642	-102,851	684,401	22,029,628

Pacific Mail Steamship:

The company’s business expanded with the onset of the War. According to the 1915 Annual Report, “The increase in operating revenue of the Trans-Pacific Line is due to conditions brought about by the European War.” In 1917 and 1918 and the company responded by increasing net working capital (primarily receivables) during that period. As explained in the 1918 annual report, “the earnings of the Company have been determined entirely by the charter rates allowed by the United States Shipping Board under the terms of US Government Requisition Charter.” The annual report further points out that the war had created new opportunities for the company and that the company had “structured its financings to take advantage of these possibilities.” *Because the company had cash on hand that had been “set aside from prior earnings,” the net working capital expansion did not necessitate any new financing and the company maintained zero debt throughout the 1916-1920 period.* However, the company did issue \$1.75 million in common stock (pro-rata to common stock holders) to redeem outstanding preferred stock. *In explaining this recapitalization, the company stated in its 1918 semi-annual report that it “places all shareholders on the same basis and removes for the Company an obstacle to quick and expeditious financing in the future ...”* Capital expenditures spiked in 1920 and it was financed, in part, by \$1 million of debt financing.

Investment spike: 1917, 1918, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	251,121	0.0101	217,367	3,281,250	0.1337	308,811	-57,690	24,537,854
1914	-63,965	-0.0026	458,163	2,625,000	0.1103	40,582	-104,547	23,789,940
1915	-916,639	-0.0385	478,304	1,802,125	0.0760	437,245	-1,353,884	23,724,436
1916	-5,678,372	-0.2393	1,238,957	0	0.0000	-1,128,663	-4,549,709	5,351,136
1917	2,140,842	0.4001	2,454,632	0 ^ψ	0.0000	2,162,041	-21,199	9,426,126
1918	3,647,835	0.3870	1,686,250	0*	0.0000	4,543,834	-895,999	15,297,906
1919	-2,404,563	-0.1572	2,392,115	0	0.0000	-5,066,693	2,662,130	10,803,117
1920	1,520,856	0.1408	1,630,595	0 ^ψ	0.0000	-364,352	1,885,208	10,473,157
1921	-416,352	-0.0398	-478,555	1,000,000	0.1105	-1,337,685	921,333	9,047,312
1922	662,028	0.0732	281,602	667,000	0.0771	602,293	59,735	8,649,288
1923	-641,954	-0.0742	186,549	334,000	0.0419	361,448	-1,003,402	7,967,220
1924	361,218	0.0453	341,188	1,000,000	0.1348	626,255	-265,037	7,416,973

Pittsburg Coal Co:

Trade conditions, which were harmed by the recession of 1913, were further hurt by the onset of the War. As noted in the 1915 Annual report, “Canadian commercial conditions continued to show the disastrous effects of the war on all lines of business but are now improving.” Once the US entered the War, business activity increased substantially and the company substantially expanded investment in both fixed assets and working capital in 1917. The 1917 annual report states, “The year 1917 was disorganized throughout in demand, costs, prices, and distribution. The light stocks carried over, general business activity, severe winter weather during the first quarter, followed by the entry of the country into the European war, together, created an insistent demand from the beginning ... ” *Nonetheless, earnings exceeded investment during this year and the company reduced its debt level.* (The dramatic apparent increase in investment in 1918, primarily reflects a \$46 million increase in the book value of its property, plant, and equipment due to a revaluation of real estate assets. In other words, it is an asset change without a cash flow effect.) The 1919 annual report states, “After the Armistice was signed in November 1918, demand for coal for war purposes ended. An exceptionally mild winter followed. A pessimistic feeling as to the future of business was generally held. Due to these causes the need for coal was much reduced.” Earnings fell in the post-War period but bounced back substantially in 1920 due to “a period of greatest activity in the history of Bituminous trade” [1921 Annual Report]. Despite corresponding large investments in net working capital, earnings exceeded investment and the company reduced its debt by nearly 50% in 1920.

Investment spike: 1914, 1917, 1920, 1921

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	20,133,688	0.2032	3,582,408	35,204,936	0.3161	4,643,614	15,490,074	111,368,248
1914	2,645,342	0.0238	2,186,751	33,758,724*	0.3109	132,965	2,512,377	108,582,648
1915	834,769	0.0077	2,246,010	25,227,294	0.2522	-889,084	1,723,853	100,024,936
1916	-473,637	-0.0047	3,528,581	21,909,456	0.2224	-491,516	17,879	98,507,400
1917	9,502,988	0.0965	15,019,108	17,586,500 ^ψ	0.1557	3,258,239	6,244,749	112,973,176
1918	49,668,480	0.4396	9,956,562	17,745,060	0.1080	467,620	49,200,860	164,332,640
1919	-3,757,927	-0.0229	6,951,985	19,825,100	0.1232	-4,653,450	895,523	160,969,200
1920	6,626,586	0.0412	13,493,656	14,168,500 ^ψ	0.0865	5,511,295	1,115,291	163,811,920
1921	3,270,522	0.0200	6,110,199	14,727,328 ^ψ	0.0914	926,678	2,343,844	161,098,352
1922	-3,598,434	-0.0223	6,187,581	13,378,500	0.0836	-4,021,648	423,214	160,120,352
1923	17,910,892	0.1119	9,968,926	12,922,387	0.0758	4,095,548	13,815,343	170,547,968
1924	-1,325,007	-0.0078	3,095,676	12,090,374	0.0734	-2,341,159	1,016,152	164,634,960

Pressed Steel Car:

Investment spiked in 1916 and 1917 due to the War and associated changes in supply prices. As noted in the 1915 Annual Report, “The above increase in price of materials was due largely to the extraordinary demand from abroad... and after many months of negotiation, secured an order from the Russian Imperial Government for a considerable number of gondola and box cars of large capacity, such as are used in this country, but adapted to meet the existing conditions in Russia.” *Operating earnings also increased during these years and remained high relative to investment through the end of the War. The company, therefore, did not acquire any external capital during these years and maintained zero debt throughout.* A \$10 million spike in inventory in 1920 was offset by a \$10 million jump in accounts payable. Both were reversed the following year. *Earnings fell dramatically in 1921 and were substantially below investment levels in 1921 and 1922. Correspondingly, the company raised \$6 million in debt capital.*

Investment spike: 1916, 1917, 1919

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	1,267,997	0.0353	2,374,816	0	0.0000	925,041	342,956	36,959,440
1914	-863,314	-0.0234	892,352	0	0.0000	-1,381,512	518,198	35,293,328
1915	691,361	0.0196	1,324,814	0	0.0000	323,101	368,260	44,292,656
1916	1,821,522	0.0411	2,751,251	0 ^ψ	0.0000	706,433	1,115,089	43,421,688
1917	1,569,250	0.0361	2,130,308	0 ^ψ	0.0000	845,855	723,395	44,788,552
1918	737,316	0.0165	3,950,785	0	0.0000	-330,201	1,067,517	47,564,084
1919	2,529,789	0.0532	4,265,232	0 ^ψ	0.0000	2,677,777	-147,988	45,222,320
1920	356,839	0.0079	2,531,805	0	0.0000	-180,845	537,684	55,935,812
1921	1,239,101	0.0222	681,906	0	0.0000	926,054	313,047	44,491,768
1922	4,269,145	0.0960	-11,688	6,000,000	0.1188	4,406,097	-136,952	50,518,892
1923	687,536	0.0136	2,036,862	6,000,000	0.1155	-73,429	760,965	51,940,416
1924	3,175,457	0.0611	1,509,356	6,000,000	0.1196	2,395,949	779,508	50,149,108

Pullman:

Investment spiked in each year from 1914-1918. Nonetheless, cumulative operating earnings exceeded investment over this period and the company did not raise external funds. The company maintained zero debt throughout. The 1921 Moody’s report notes, “From Dec.31, 1917, to Feb. 29, 1920, company operated under Federal control and up to Aug. 31, 1920, compensation was guaranteed under the Transportation Act, and above accounts for 1918, 1919, and 1920, are not comparable with prior years.” Company annual reports did not provide any discussion of the company’s results.

Investment spike: 1914, 1915, 1916, 1917, 1918, 1921

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	16,752,513	0.1111	11,414,107	0	0.0000	1,601,560	15,150,953	158,543,776
1914	10,282,786	0.0649	10,844,917	0 ^ψ	0.0000	-2,548,312	12,831,098	133,917,264
1915	5,876,413	0.0439	10,546,849	0 ^ψ	0.0000	-965,318	6,841,731	134,836,768
1916	14,960,887	0.1110	12,380,367	0*	0.0000	8,242,319	6,718,568	137,206,752
1917	13,416,783	0.0978	13,632,412	0 ^ψ	0.0000	5,771,159	7,645,624	143,389,408
1918	10,017,683	0.0699	13,402,206	0 ^ψ	0.0000	10,337,622	-319,939	160,084,272
1919	-3,897,167	-0.0243	12,730,057	0	0.0000	2,685,360	-6,582,527	171,254,544
1920	-13,337,104	-0.0779	12,913,509	0	0.0000	-12,404,926	-932,178	195,311,968
1921	8,541,904	0.0437	6,120,984	0*	0.0000	-5,255,709	13,797,613	163,248,992
1922	-1,042,182	-0.0064	11,671,134	0	0.0000	-4,629,582	3,587,400	176,747,872
1923	8,014,969	0.0453	13,216,936	0	0.0000	3,059,430	4,955,539	184,454,224
1924	14,724,216	0.0798	13,603,063	0	0.0000	-2,687,840	17,412,056	191,479,168

Quaker Oats:

The company's business expanded during the war years and investment spiked in 1916, 1917, and 1918. As noted in the 1915 Annual Report, "The needs of the neutral countries cut off from the regular sources of supply, together with the inevitable increase in food consumption of some of the nations, have made an unusually large volume of export business possible... The increases made in warehouse and elevator space during the past two years made it possible for us to carry the material needed for such an enormous output, proving the wisdom and necessity of the investment." Despite increases in earnings in 1917 and 1918, operating profits were insufficient to cover larger increases in inventory and capital expenditures. According to the 1918 annual report, the increased investment was a result of the need to build extra capacity to "meet the tremendous temporary demand for food products" and that these "war time facilities" were "in excess of the requirements of our normal business". *To finance the increased investment, the company expanded notes payable in 1918 from \$5.9 million to \$20.5 million. The 1918 annual report notes that the company's outstanding preferred stock increased from \$10.5 million in 1918 to \$18 million in 1919 and outstanding common stock increased from \$8.25 million in 1918 to \$11.25 million in 1920. This expansion in equity corresponded with a reduction in the company's notes payable from \$20.5 million in 1918 to \$15.3 million in 1920. Debt was further reduced to \$4.9 million in 1921 and \$0 in 1922 as the company reduced its capacity.* As noted in the 1921 Annual Report, "During the war years milling capacities in the lines we manufacture were greatly increased. The result is we have, and will continue to have, keen competition because the supply exceeds the demand. Export business in all lines is today suffering on account of the unsatisfactory financial condition of the European countries."

Investment spike: 1916, 1917, 1918

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	2,567,409	0.1187	2,212,676	3,225,000	0.1344	1,103,468	1,463,941	23,996,658
1914	1,355,158	0.0565	2,288,119	3,770,000	0.1472	556,230	798,928	25,619,200
1915	1,085,823	0.0424	3,528,212	1,950,000	0.0748	840,046	245,777	26,078,472
1916	6,034,364	0.2314	3,479,687	5,300,000*	0.1674	5,432,939	601,425	31,666,244
1917	7,556,157	0.2386	5,201,927	5,900,000*	0.1472	4,356,396	3,199,761	40,085,856
1918	15,537,582	0.3876	4,526,589	20,480,000*	0.3464	11,833,092	3,704,490	59,124,364
1919	-7,678,671	-0.1299	3,159,894	9,600,000	0.1798	-7,345,764	-332,907	53,391,512
1920	-3,750,770	-0.0703	-5,060,175	15,295,000	0.3059	-5,372,366	1,621,596	50,004,524
1921	-7,872,261	-0.1574	2,877,715	4,900,000	0.1215	-7,832,744	-39,517	40,321,408
1922	-1,871,317	-0.0464	4,633,279	0	0.0000	-1,085,718	-785,599	39,731,624
1923	4,076,653	0.1026	4,389,307	0	0.0000	3,491,962	584,691	43,182,420
1924	5,285,528	0.1224	5,336,923	1,000,000	0.0211	5,415,058	-129,530	47,416,224

Railway Steel Spring:

The company's business expanded with the onset of the war. An investment spike in 1916 was driven by an expansion of net working capital. According to the 1916 Annual Report, "The improved conditions existing during the latter part of 1915 continued throughout the year 1916, and the plants of your Company have been operated to the fullest capacity during all the year, manufacturing its regular line of production, of which a considerable volume has been sold for export, resulting in larger earnings, both gross and net, than in any other year since incorporation of the Company. To meet the demands of this additional business, necessary alterations to the properties have been made and the capacity for output of manufactured material has been increased." *However, throughout the entire period, operating earnings exceeded investment and the company's debt balance was reduced to zero in 1918.*

Investment spike: 1916, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	-806,832	-0.0206	1,472,093	6,901,000	0.1775	-754,250	-52,582	38,871,752
1914	-505,513	-0.0130	713,285	6,628,000	0.1743	-499,350	-6,163	38,035,224
1915	224,774	0.0059	1,688,466	6,358,000	0.1649	569,460	-344,686	38,558,116
1916	1,378,373	0.0357	3,022,590	6,093,000 ^ψ	0.1499	2,225,573	-847,200	40,641,964
1917	-2,894,495	-0.0712	8,098,968	2,967,000	0.0689	-83,141	-2,811,354	43,045,220
1918	-1,748,729	-0.0406	8,019,020	0	0.0000	-1,281,737	-466,992	44,830,744
1919	-188,261	-0.0042	4,394,354	0	0.0000	244,248	-432,509	42,760,444
1920	2,800,435	0.0655	4,435,350	0 ^ψ	0.0000	3,030,243	-229,808	43,598,512
1921	-3,867,112	-0.0887	1,551,635	0	0.0000	-3,622,985	-244,127	41,233,264
1922	-112,120	-0.0027	2,327,294	0	0.0000	322,150	-434,270	41,870,100
1923	220,725	0.0053	3,341,271	0	0.0000	499,895	-279,170	43,259,576
1924	-1,085,490	-0.0251	1,841,159	0	0.0000	-920,062	-165,428	42,404,516

Republic Iron & Steel:

Revenues and operating earnings substantially increased with the onset of the War. The 1915 Annual Report states that "The improvement in the iron and steel business ... was more rapid than expected owing to the extraordinary demands made on this country by Europe for munition and other purposes, these demands being far in excess of trade expectations." Similarly, the 1917 annual report notes that demand was "emphasized by our country's war program, also by increased demands from Allied countries and other sources." The company substantially increased investment in 1916, but operating earnings far exceeded investment and the company actually reduced its debt that year. Following completion of the War, investment spiked in 1918, 1919, and 1920. *Operating earnings exceeded investment in 1918 and 1920 and debt declined in those years. In 1919, the company had a financing deficit, which was covered by a combination of internal funds and a \$2.8 million stock issue.* The 1919 annual report states, "On account of the large cash expenditures made during recent years for property additions and extensions also because of the Company's expanding business needs, the Board of Directors decided to strengthen the Working Capital by the proceeds of sale, at par, to the holders of Common Stock, of 26,480 shares of unissued authorized Common Stock and 1,610 shares of Treasury Common Stock." As a result of the recession in 1921, the company's operating results in that year "were decidedly the worst in our history" [1921 Annual Report]. Nonetheless, the company's debt was stable.

Investment spike: 1916, 1918, 1919, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	2,339,361	0.0297	3,063,390	16,361,595	0.2093	-193,217	2,532,578	78,165,432
1914	1,276,276	0.0163	1,869,074	16,933,000	0.2188	252,185	1,024,091	77,399,728
1915	1,971,996	0.0255	4,385,723	18,331,500	0.2233	482,982	1,489,014	82,103,248
1916	4,544,325	0.0553	15,647,899	16,795,500 ^h	0.1800	1,520,525	3,023,800	93,320,784
1917	3,388,705	0.0363	26,495,189	15,403,000	0.1382	-3,888,760	7,277,465	111,451,032
1918	9,005,012	0.0808	14,210,875	14,275,000 ^h	0.1272	3,671,315	5,333,697	112,254,096
1919	7,781,064	0.0693	3,189,713	14,093,000*	0.1225	3,474,113	4,306,951	115,089,128
1920	9,619,418	0.0836	10,167,324	13,474,000 ^h	0.1093	4,656,749	4,962,669	123,282,928
1921	-2,505,676	-0.0203	-4,858,268	13,357,000	0.1203	-5,535,126	3,029,450	111,051,248
1922	428,252	0.0039	1,295,679	13,125,500	0.1150	71,157	357,095	114,113,144
1923	6,673,837	0.0585	7,478,858	22,253,000	0.1818	3,507,989	3,165,848	122,381,520
1924	4,081,651	0.0334	3,040,568	21,338,500	0.1763	216,180	3,865,471	121,027,696

Sloss-Sheffield Steel & Iron:

The company expanded working capital in 1914 stating in the 1914 Annual Report that “Hoping . . . that we would have an improved market after the first effects of the war were spent, we declined to meet the very low prices that were being made, in many instances because of the financial necessities of the companies, and at the close of the year we had accumulated over 147,000 tons of iron on our furnace yards.” *The company financed this expansion of working capital with a floating rate debt issue, which it expected to pay down in the near term, stating “this debt will be liquidated very rapidly as soon as iron begins to move freely from our furnaces”* [1915 Annual Report]. Investment spiked again in 1916, due primarily to “an expenditure of nearly \$800,000 during the year on furnaces and mines, all of which was paid from earnings or surplus account” [1916 Annual Report]. *Between 1916 and 1918, operating earnings exceeded investment and the company gradually decreased its debt level.* In 1918, accounts payable jumped by \$6 million dollars. This increase was primarily due to \$6 million dollars in contracted liabilities for by-product coke ovens intended to produce war materials for the U.S. government. [See 1918 annual report.] The large increase in operating working capital in 1919 was due to a \$4.5 million dollar decrease in accounts payable, most of which came from the decrease in these contracted liabilities. *According to the annual report, the completion of the by-product plant, the electrification of the mines and other improvements led to the issuance of \$6 million in 10-year bonds in 1919. Debt decreased steadily thereafter.* Business severely deteriorated with the onset of the recession in late 1920 and continued to be poor throughout 1921. The company substantially reduced working capital during this year and slightly reduced debt as well.

Investment spike: 1914, 1916, 1919, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	576,956	0.0240	888,466	4,500,000	0.1810	239,505	337,451	24,868,196
1914	978,881	0.0394	700,140	5,339,145*	0.2078	834,391	144,490	25,687,600
1915	-946,225	-0.0368	732,388	4,823,570	0.1881	-1,089,806	143,581	25,648,628
1916	1,138,438	0.0444	2,200,674	4,715,000 ^h	0.1775	465,822	672,616	26,560,164
1917	280,750	0.0106	2,704,873	4,000,000	0.1450	-171,667	452,417	27,585,168
1918	-3,506,676	-0.1271	3,114,572	2,000,000	0.0624	-6,421,314	2,914,638	32,044,460
1919	4,375,531	0.1365	2,773,985	7,288,000*	0.2088	4,426,802	-51,271	34,906,976
1920	3,108,837	0.0891	2,646,279	5,700,000*	0.1708	2,624,746	484,091	33,370,804
1921	-2,407,843	-0.0722	848,857	5,400,000	0.1557	-2,381,018	-26,825	34,675,976
1922	-10,521	-0.0003	895,468	5,103,000	0.1575	438,494	-449,015	32,404,288
1923	4,046,042	0.1249	3,052,248	5,282,000	0.1632	3,401,134	644,908	32,364,184
1924	1,629,497	0.0503	2,089,082	8,177,000	0.2285	483,689	1,145,808	35,789,624

Swift & Company:

Investment spiked in each year, 1916-1919, reflecting both substantially higher capital expenditures and large increases in inventory and accounts receivable. The 1918 annual report notes that “a large part of the foods produced by us has been furnished to the United States and Allied Governments.” It further notes that “the packing industry was able to adapt itself to wartime demands perhaps more quickly than any other industry” and that from 1914 to 1918 beef exports increased 300% and pork exports increased 83%. *Nonetheless, despite high rates of profitability, the company’s high investment levels greatly exceeded operating profits. During this period, investment was financed primarily through notes payable and bonds; the former increased from \$39 million to \$145 million and outstanding bonds increased from \$31 million to \$55 million. Though the company experienced a substantial decline in profits with the onset of the recession in late 1920, it also substantially reduced investment and used some of the surplus to reduce debt.* The company also was able to maintain its dividend because “during the prosperous years during the war we provided for this serious decline by appropriating large amounts to surplus in order to maintain the Company in sound financial condition” [1921 Annual Report].

Investment spike: 1916, 1917, 1918, 1919

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	10,523,288	0.0695	11,458,020	44,160,400	0.2479	3,384,020	7,139,268	178,114,080
1914	6,951,261	0.0390	11,926,943	49,538,848	0.2641	3,571,144	3,380,117	187,604,192
1915	13,275,280	0.0708	16,959,178	57,433,552	0.2770	13,170,048	105,232	207,366,432
1916	30,300,252	0.1461	23,974,225	70,184,496*	0.3042	30,147,008	153,243	230,753,248
1917	63,037,948	0.2732	39,740,253	101,805,056*	0.3323	58,560,224	4,477,725	306,380,512
1918	92,013,136	0.3003	28,732,467	151,503,792*	0.3647	67,936,080	24,077,060	415,373,696
1919	69,996,888	0.1685	23,894,316	200,482,704*	0.4095	59,440,592	10,556,295	489,539,936
1920	-10,724,872	-0.0219	15,576,133	189,195,472	0.4196	-17,040,512	6,315,640	450,905,568
1921	-80,756,704	-0.1791	-784,578	127,776,608	0.3531	-81,579,968	823,267	361,843,872
1922	-22,559,106	-0.0623	19,615,997	119,396,000	0.3363	-18,281,760	-4,277,346	355,044,000
1923	-5,157,109	-0.0145	18,101,077	98,329,144	0.2910	-1,914,528	-3,242,581	337,864,448
1924	14,157,404	0.0419	18,745,489	92,390,032	0.2735	-11,508,192	25,665,596	337,791,008

Union Bag and Paper:

The onset of the War hurt the company’s profitability. The 1914 Annual Report notes “When the war began, about August first, there was a marked improvement in volume, which, however, was only of short duration, and during the last quarter of the year shipments were abnormally low.” The company, therefore, began liquidating some of its fixed assets. In 1916, the company effected “the recapitalization of the Company” (1917 annual report) in which property, plant, and equipment was reduced from \$30 to \$9 million; preferred stock decreased from \$11 million to \$0; common stock decreased from \$16 to \$10 million; and debt increased from \$2.6 to \$4.3 million. Much of the investment in 1917 came from an additional \$1.9 million in surplus based on an appraisal of the firm’s capital assets and did not affect cash flow. *Therefore, operating cash flow exceeded investment throughout the 1916-1920 period and debt was reduced over these years. Debt was increased substantially again in 1922 as the company’s expansion of net working capital exceeded operating profits.*

Investment spike: 1917, 1918, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	-708,926	-0.0207	430,555	4,341,333	0.1291	-598,985	-109,941	33,617,004
1914	356,484	0.0106	737,010	3,972,000	0.1197	336,768	19,716	33,183,036
1915	-645,973	-0.0195	124,653	2,569,000	0.0791	-1,375,242	729,269	32,487,454
1916	-20,368,692	-0.6270	2,592,078	4,306,000	0.2621	891,736	-21,260,428	16,430,383
1917	3,030,758	0.1845	2,870,100	4,116,500*	0.2142	933,676	2,097,082	19,221,048
1918	1,027,050	0.0534	2,205,337	3,916,500 ^h	0.1929	862,754	164,296	20,306,256
1919	178,689	0.0088	2,127,659	3,297,500	0.1658	-283,560	462,249	19,893,608
1920	1,402,094	0.0705	4,618,128	2,928,500 ^h	0.1296	370,068	1,032,026	22,594,810
1921	-1,927,315	-0.0853	530,214	2,820,000	0.1236	-3,215,791	1,288,476	22,822,640
1922	4,068,427	0.1783	1,303,146	6,620,000	0.2793	3,608,344	460,083	23,705,226
1923	-84,457	-0.0036	1,336,631	6,350,000	0.2722	-391,954	307,497	23,331,556
1924	-1,206,533	-0.0517	687,894	6,160,000	0.2732	-887,054	-319,479	22,550,116

United Fruit:

Prior to the onset of the War in 1914, the company issued \$10 million in four-year notes “to provide for additions to railways equipment and cultivations in the tropics, for additional working capital, and, temporarily for the maturity of First Mortgage Notes” [1914 Annual Report]. The 1917 annual report notes that “Since the commencement of the war in 1914, the United Fruit Company, through its subsidiary companies, or from builders direct has furnished thirty-seven ships, aggregating 184,000 gross tons, representing two-thirds of its entire owned tonnage either in service or building, to the governments of the US and its allies.” Further, the 1916 Annual Report notes that “our British fleet consists of nineteen ships, seven of which have been taken under charter by the Admiralty.” The 1919 report updates, “All of the ships remaining in the hands of the American and British governments, both of American and British registry, have been returned to the Company.” Operating earnings also increased substantially during the war years and exceeded investment in each year. In addition, the 1916 Annual Report notes that the company “issued 121,981 new shares to stockholders under the terms of the Company’s circular dated January 21, 1916. The proceeds of the issue of new shares were used primarily for the payment of the \$12,000,000 Four Year Six per cent Coupon Gold Notes of the Company dated May 1, 1913, which were called for prior payment on May 1, 1916.” Thus, between 1916 and 1921, debt was reduced from \$21.9 million to \$1.1 million.

Investment spike: None

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	13,492,273	0.1999	6,197,876	26,570,156	0.3219	782,089	12,710,184	82,545,384
1914	11,236,592	0.1361	3,742,247	35,325,432	0.3975	1,551,664	9,684,928	88,867,408
1915	-5,338,116	-0.0601	7,614,570	34,796,760	0.3870	-766,508	-4,571,608	89,916,320
1916	-1,029,351	-0.0114	13,342,986	21,907,030	0.2235	2,165,575	-3,194,926	98,025,112
1917	4,326,228	0.0441	17,592,391	18,659,758	0.1698	221,096	4,105,132	109,860,552
1918	502,497	0.0046	24,830,007	6,516,747	0.0511	-7,614,008	8,116,505	127,622,344
1919	6,201,496	0.0486	30,709,046	2,632,899	0.0178	-6,543,233	12,744,729	147,684,400
1920	19,300,764	0.1307	44,615,274	2,325,932	0.0139	-3,762,997	23,063,760	167,684,128
1921	13,577,743	0.0810	20,579,836	1,070,512	0.0067	4,298,647	9,279,096	160,312,768
1922	-2,880,543	-0.0180	22,561,549	1,283,472	0.0075	-5,304,415	2,423,872	171,229,312
1923	10,585,456	0.0618	27,218,021	1,073,866	0.0059	5,641,401	4,944,055	182,815,568
1924	8,888,283	0.0486	20,568,827	2,191,614	0.0116	2,934,438	5,953,845	188,558,080

United States Cast Iron Pipe & Foundry:

The outbreak of the War was harmful to the company's business. As noted in the 1915 Annual Report, "Obviously, your Company has not participated in the business resulting from the extraordinary demands of Europe for munitions and other supplies. Your plants are not adapted to the making of war munitions; and partly because of the war perhaps, the demand for your product from its chief users, viz.: municipalities, gas companies, railroads, has been light over a longer period than ordinarily obtains. With the outbreak of the European war your business, in common with nearly all lines, suffered sudden and severe curtailment." Net working capital levels increased substantially in 1916 and 1917, due primarily to "higher prices and costs of iron, fuel, labor..." [1916 Annual Report]. The 1917 annual report notes that the slowing of demand for pipe in certain areas "has been offset in part by tonnage for Government use and the needs of war industries". The 1918 annual report states, "Just prior to the signing of the armistice substantially all the pipe you were making was directly or indirectly for war purposes." *Nonetheless, operating earnings exceeded investment levels between 1915 and 1918 and debt was correspondingly reduced.*

Investment spike: 1916, 1917, 1918, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	420,349	0.0136	709,942	1,080,140	0.0351	139,516	280,833	30,729,446
1914	-591,677	-0.0193	95,632	1,069,350	0.0352	-442,610	-149,067	30,338,850
1915	160,168	0.0053	223,071	1,045,430	0.0348	26,205	133,963	30,024,912
1916	676,688	0.0225	1,425,896	821,000 ^ψ	0.0274	700,613	-23,925	29,993,592
1917	1,174,998	0.0392	1,459,454	789,000 ^ψ	0.0255	649,990	525,008	30,965,560
1918	750,477	0.0242	1,194,678	767,000 ^ψ	0.0245	91,857	658,620	31,316,578
1919	-611,627	-0.0195	-423,363	752,000	0.0244	-1,298,966	687,339	30,871,870
1920	1,020,211	0.0330	1,012,208	692,000*	0.0220	358,726	661,485	31,412,636
1921	178,267	0.0057	197,740	650,000	0.0215	-671,413	849,680	30,282,952
1922	1,280,560	0.0423	1,143,411	625,000	0.0197	580,237	700,323	31,758,716
1923	447,271	0.0141	3,589,763	597,000	0.0177	2,015,777	-1,568,506	33,666,720
1924	986,295	0.0293	6,083,060	577,000	0.0152	360,667	625,628	37,870,872

United States Realty & Improvement:

The company substantially increased investment in 1914 and 1915, and again in 1917. However, in each case, the level of operating earnings was comparable in magnitude to the investment level and there was only a small increase in debt over this period. Between 1917 and 1924, debt was reduced from \$14.6 million to \$0 as the company's earnings expanded, even through the recession of 1921. As noted in the 1921 Annual Report, "The earning position of the Company's large office buildings has materially increased and during the last year they have produced a far larger income than heretofore due to demand for office space, ..."

Investment spike: 1914, 1915, 1917

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	-175,871	-0.0053	1,919,038	12,690,000	0.3854	-591,202	415,331	32,927,012
1914	938,865	0.0285	1,404,636	13,142,000 ^h	0.4176	-156,018	1,094,883	31,470,346
1915	1,407,417	0.0447	1,197,348	14,030,000*	0.4241	871,989	535,428	33,080,588
1916	-12,941,090	-0.3912	1,089,892	14,130,000	0.4399	-2,719,674	-10,221,416	32,120,924
1917	1,534,688	0.0478	1,371,921	14,616,164*	0.4538	2,050,187	-515,499	32,210,668
1918	743,369	0.0231	2,076,596	13,730,000	0.4332	-1,338,492	2,081,861	31,691,684
1919	-370,785	-0.0117	1,493,592	11,930,000	0.3876	-426,185	55,400	30,780,056
1920	-106,899	-0.0035	3,076,157	10,795,000	0.3594	-201,820	94,921	30,039,830
1921	818,464	0.0272	3,201,400	9,254,000	0.3402	1,361,733	-543,269	27,200,706
1922	8,589,399	0.3158	3,705,107	2,848,000	0.0782	1,702,781	6,886,618	36,431,040
1923	3,510,471	0.0964	3,472,083	1,894,000	0.0475	-955,449	4,465,920	39,905,148
1924	-3,387,371	-0.0849	4,224,088	0	0.0000	-1,904,593	-1,482,778	37,270,360

United States Rubber:

The company's business expanded substantially as a result of the War, beginning in late 1914. The 1914 Annual report states “- [War had no effect on business at first.] In December, however, this situation changed, and the necessity became so apparent that rush orders were sent over here and rubber boots, warm-lined rubbers and wool boots to the extent of one and one-half million dollars in value were shipped to England and France.” *This expansion in business necessitated an expansion in net working capital of a magnitude such that investment exceeded operating profits in 1916, 1919, and 1920. The company sharply increased debt in 1917 through a bond issue, then again in 1920.* The 1920 annual report notes that “the proceeds of [the \$20 million bond issue] were used in payment for additions to fixed properties.” *Additionally, in 1919, the company raised \$36 million in common stock through an offering to current shareholders. Debt was subsequently reduced in 1921 and 1922.* The 1921 Annual Report notes that “The year 1921 was one of readjustment and liquidation [a drastic reduction in prices, excess cost of finished goods absorbed, inventories written down, and contractual liabilities for materials at higher prices]” Financial data for 1913 was not available.

Investment spike: 1916, 1917, 1919, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1914	N/A	N/A	10,170,559	48,129,600	0.2508	N/A	N/A	191,926,416
1915	-3,762,455	-0.0196	11,669,005	38,297,708	0.1854	-6,384,112	2,621,657	206,551,440
1916	26,558,248	0.1286	15,191,655	63,510,864*	0.2856	22,718,560	3,839,689	222,366,576
1917	25,925,086	0.1166	26,218,581	82,030,056 ^h	0.3185	28,006,880	-2,081,794	257,575,776
1918	748,397	0.0029	39,480,631	78,065,352	0.2969	-3,032,328	3,780,725	262,891,456
1919	38,645,888	0.1470	21,396,099	67,807,000*	0.2122	21,921,920	16,723,969	319,534,208
1920	76,646,848	0.2399	26,864,297	136,431,808*	0.3505	48,030,232	28,616,616	389,252,704
1921	-37,441,644	-0.0962	-4,891,530	122,161,800	0.3589	-46,610,760	9,169,116	340,391,968
1922	-23,874,184	-0.0701	12,662,111	111,061,800	0.3511	-14,104,616	-9,769,568	316,311,008
1923	11,544,521	0.0365	12,161,055	123,260,800	0.3777	6,657,696	4,886,825	326,371,904
1924	-5,237,867	-0.0160	13,783,904	115,568,800	0.3578	-7,543,704	2,305,837	322,955,744

United States Steel:

Revenues and EBIT throughout the period dwarfed the pre-war averages. U.S. Steel's capital expenditures jumped from \$70 million in 1916 to \$100 million in 1917. In its 1917 annual report U.S. Steel refers to the “extraordinary cost of facilities installed by reason of war requirements and conditions.” The report further states that “the large demand for iron and steel products which existed during 1916 continued during the

year 1917 ... after the entrance of the United States into the European war, especially for certain lines of products required for the war program. These demands largely exceeded the producing capacity of the manufacturers.” The 1918 annual report noted that “about 65 per cent of the entire output of steel products ... during the year 1918 was supplied to Government Departments, including the Federal Railroad Administration, and to the allies of the United States in the war.” The report also notes that “it was realized immediately following the entrance of the United States into the war ... that the supply of steel ... was of paramount importance” and that “in order to increase the productive capacity of the properties to meet the greater demands for steel necessitated by war conditions There has been appropriated and expended since August 1, 1914, for additions, extensions, and betterments the sum of \$302,776,000.” *Notably, EBIT in 1917 and 1918 (\$494 million and \$447 million, respectively) dwarfed the capital expenditures in each year. Debt declined steadily over the period, suggesting that the company financed the high investment expenditures with internal funds.* A jump in accounts payable in 1917 drove the decrease in working capital that year and was reversed in 1919. *In sum, U.S. Steel’s earnings exceeded its investment expenditures during the 1916 to 1920 period and its debt declined in each year during the period.*

Investment spike: 1916, 1919, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	57,565,836	0.0324	112,650,179	636,963,200	0.3538	7,599,088	49,966,748	1,800,586,368
1914	-769,204	-0.0004	54,338,155	633,446,400	0.3588	-19,177,840	18,408,636	1,765,257,472
1915	32,024,354	0.0181	107,693,416	643,464,640	0.3481	13,178,160	18,846,194	1,848,541,824
1916	128,270,136	0.0694	315,306,124	629,298,880 ^ψ	0.3021	58,382,672	69,887,464	2,083,027,968
1917	-99,459,696	-0.0477	493,802,947	622,557,248	0.2542	-199,226,096	99,766,400	2,449,550,080
1918	73,711,568	0.0301	447,340,175	617,210,176	0.2400	-9,107,580	82,819,152	2,571,617,280
1919	191,968,160	0.0746	177,513,277	601,778,368*	0.2544	144,634,912	47,333,244	2,365,882,368
1920	160,321,376	0.0678	202,107,510	586,390,592 ^ψ	0.2413	88,978,784	71,342,600	2,430,546,944
1921	49,153,416	0.0202	89,556,228	572,109,120	0.2446	-16,788,160	65,941,576	2,339,105,280
1922	10,447,300	0.0045	94,098,288	571,352,768	0.2441	-9,719,456	20,166,756	2,340,653,312
1923	68,328,936	0.0292	181,910,165	557,679,168	0.2304	19,004,064	49,324,872	2,420,882,688
1924	83,760,144	0.0346	150,345,123	539,974,208	0.2237	6,022,544	77,737,600	2,414,194,688

Virginia Iron, Coal & Coke:

Investment during the 1915 to 1919 period was negative as the company did not participate in a War-related business expansion. The 1916 Annual Report states, “Contrary to the general impression abroad in the land, the pig iron manufacturer did not begin to participate in the advance in prices of his product as a result of the European War until the first six months of the present calendar year, and up to the date of this report prices have not reached an abnormal stage and there is little indication that they will.” *During this period, operating earnings were positive and the company reduced its debt each year. Investment spiked in 1920, but this investment level was still below operating earnings and the company slightly reduced debt that year.*

Investment spike: 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	-844,032	-0.0470	385,095	6,755,055	0.3929	-865,084	21,052	17,191,136
1914	73,681	0.0043	276,960	6,804,856	0.3953	182,688	-109,007	17,213,268
1915	-62,469	-0.0036	167,774	7,144,994	0.4068	34,045	-96,514	17,564,216
1916	-1,072,868	-0.0611	134,655	6,367,128	0.3746	-935,284	-137,584	16,995,988
1917	-371,332	-0.0218	1,724,048	5,177,903	0.3219	-179,388	-191,944	16,083,030
1918	-565,634	-0.0352	1,857,137	4,586,928	0.3056	471,692	-1,037,326	15,010,260
1919	-1,216,134	-0.0810	1,490,018	3,788,928	0.2589	137,174	-1,353,308	14,636,306
1920	1,343,234	0.0918	2,920,062	3,539,000 ^u	0.2070	632,194	711,040	17,093,216
1921	-940,994	-0.0551	519,718	3,523,000	0.1806	-816,314	-124,680	19,509,200
1922	124,966	0.0064	1,088,809	3,000,702	0.1549	428,866	-303,900	19,372,388
1923	-326,686	-0.0169	878,694	2,989,000	0.1545	-75,472	-251,214	19,345,658
1924	-629,068	-0.0325	350,103	2,952,000	0.1580	-249,548	-379,520	18,689,114

Virginia-Carolina Chemical:

Investment spiked in 1915 and 1917 as it adjusted to War conditions. The 1915 Annual Report states that “We propose to build additional warehouses during this Fall at such points as may be deemed advisable.” Moreover, investment increases reflected War-related increases in supply prices. As stated in the 1916 Annual Report, “The heavy increase in the value of the inventory this year is to a large extent due to the very much higher price of materials and supplies, as compared with last year.” *Although investment levels were generally lower than EBIT during the War years, debt increased steadily over the period with notes payable increasing by \$16 million and bonds decreasing by \$3 million.*

Investment spike: 1915, 1917, 1918, 1919, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	3,675,208	0.0466	2,991,102	23,822,752	0.2926	2,910,320	764,888	81,407,184
1914	-401,139	-0.0049	4,073,756	23,399,250	0.2856	-129,496	-271,643	81,928,936
1915	5,058,634	0.0617	4,979,949	25,847,150*	0.2931	5,103,736	-45,102	88,182,928
1916	177,305	0.0020	5,667,847	23,863,870	0.2712	-754,020	931,325	87,982,272
1917	5,169,424	0.0588	5,905,250	27,264,332 ^u	0.2886	4,030,208	1,139,216	94,476,144
1918	7,886,534	0.0835	10,193,268	30,638,384 ^u	0.2852	7,735,384	151,150	107,443,912
1919	4,597,771	0.0428	8,933,335	33,346,940 ^u	0.2908	3,953,408	644,363	114,654,520
1920	7,463,021	0.0651	9,251,746	37,006,608 ^u	0.3052	5,323,788	2,139,233	121,240,344
1921	3,915,763	0.0323	-13,152,876	53,688,704	0.4481	1,171,984	2,743,779	119,804,152
1922	-11,009,460	-0.0919	1,684,780	49,062,648	0.4498	-11,485,104	475,644	109,088,192
1923	-5,600,691	-0.0513	603,474	53,658,344	0.5196	-5,843,856	243,165	103,262,568
1924	-10,794,792	-0.1045	-1,822,290	55,076,952	0.5536	-10,824,112	29,320	99,486,704

Westinghouse Air Brake:

The company substantially increased working capital in 1916, but its *operating earnings exceeded investment and the company maintained zero debt*. In 1918, the company further increased capital expenditures, inventory and accounts receivable. According to the 1917 annual report, “... the demand for brake apparatus to equip cars and locomotives urgently needed for the transportation of troops and supplies, both here and abroad, has continued to increase in volume and pressure until all of our facilities and every possible effort on our part is required to meet it, and in thus striving to prevent serious delay in the intermediate increase of transportation facilities, we believe we are doing more for the successful conduct of the war than we can possibly do otherwise.” *The company financed the increased investment with a temporary increase in notes payable of \$7.2 million in 1918. These notes were repaid in 1919 with proceeds*

from reductions in asset accounts, but the company then borrowed \$7.2 million in 1920 to finance another expansion in investment. This too was paid down the following year, largely through a liquidation of inventory.

Investment spike: 1916, 1918, 1920

Year	Investment	Invest./BVA	EBIT	Debt	Debt/BVA	ΔOWC	CAPEX	Assets
1913	4,468,477	0.1908	5,255,200	0	0.0000	1,979,701	2,488,776	29,425,172
1914	1,282,701	0.0436	3,482,994	0	0.0000	171,615	1,111,086	28,295,662
1915	-764,822	-0.0270	1,882,137	0	0.0000	-1,288,995	524,173	29,099,344
1916	5,141,627	0.1767	9,585,928	0 ^ψ	0.0000	5,105,759	35,868	34,145,528
1917	117,167	0.0034	6,449,144	0	0.0000	109,395	7,772	40,356,920
1918	13,242,778	0.3281	6,855,459	7,235,410*	0.1332	9,878,421	3,364,357	54,330,776
1919	-6,676,247	-0.1229	7,458,568	0	0.0000	-6,896,952	220,705	48,228,184
1920	11,925,195	0.2473	6,592,232	7,210,000*	0.1272	10,623,982	1,301,213	56,664,596
1921	-12,395,084	-0.2187	914,379	0	0.0000	-11,820,045	-575,039	44,755,004
1922	1,919,322	0.0429	7,002,763	0	0.0000	2,611,488	-692,166	48,806,688
1923	163,811	0.0034	11,260,226	0	0.0000	-368,986	532,797	54,974,932
1924	-12,158	-0.0002	6,974,314	0	0.0000	-2,015,115	2,002,957	56,399,096