

LUNCHEON LECTURE

By

Jool M. Bowditch

Chairman of the Board

The Eagle-Picher Company
Cincinnati, Ohio

The study which is the subject of my talk today comprises a 37-year period from 1914 through 1950. In order to enable you to follow my discussion, I have had copies made of the various charts and tables and have distributed them among you. Prices are expressed in cents per pound and are the wholesale prices at New York for desilverized lead and Primo Western slab zinc. I regret East St. Louis zinc prices were not used, but I did not have the time to make the necessary revisions in all the exhibits.

Chart A shows the relationship between lead and zinc prices during the period under review; while Chart B shows the corresponding relative movements of lead, zinc and wholesale commodity prices in general. The wholesale commodity price index is an average of 889 commodity prices put on a 1926 basis - that is, the 1926 price of each commodity is assumed to represent parity for that commodity. Therefore, relative movements in this composite index are measured as a percentage of the 1926 wholesale price level. Similarly, the lead and zinc price indexes are expressed as a percentage of the 1926 price.

The data upon which Charts A and B are based are given in Table I. All data are taken from bulletins of the U. S. Bureau of Labor Statistics and are annual averages of monthly data.

It will be noted from Table I that, in six of the twelve years prior to 1926 - 1917 to 1920, inc., 1922 and 1925 - the general commodity index was in excess of parity. In the same period, zinc likewise exceeded parity in six years - but not the same six years - 1915 to 1918, inc., 1920 and 1925. Lead, however, exceeded parity in only two years - 1917 and 1925 - and then but slightly (108 in each year).

In the 24 years subsequent to 1926, the general commodity index remained below parity until 1943, when it began an advance which reached a high of 100 in January 1951. Zinc began its advance in 1941, and in January 1951 stood at 236. Lead again lagged and did not exceed parity until 1947 and reached 202 in January 1951. The low points in all three scales occurred in 1932. The January 1951 prices represent increases of 178% in the general commodity list, 451% for zinc, and 431% for lead. These latter figures, however, convey a somewhat erroneous impression. Had the metals maintained their normal relationship to the general commodity index, zinc would have been priced at about 5.08 cents per pound in 1932 and lead at 4.12 cents. On this basis, the increases would have been only 25% for zinc and 11% for lead - still, however, substantially in excess of the increase in the general price level.

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In order to determine whether any sort of a precise mathematical relationship has existed between the metal prices and the wholesale price level, the metal indexes were plotted against the wholesale price level in scattergrams as shown on Charts C and D. Each dot on the scattergram represents a pairing of values for one year. If there had been a precise mathematical relationship between the fluctuations of the two series, the dots would have all fallen within the solid lines on the Charts. Of course, it is inconceivable that any two sets of economic data would show this precise relationship between their fluctuations. However, the dots do show a tendency to range upward and the solid line represents an expression of this tendency as an average relationship between the fluctuations of general commodity prices and metal prices.

These scattergrams do present the fluctuations and variations of the respective price levels in an illuminating manner, even though they may not impart any information with which you are not already familiar. The dots representing certain specific years have been indicated on the charts. For 1915 and 1916, for example, it will be noted that zinc prices far exceeded the general price level (up in the 180-190 area on the chart); while lead prices hugged the solid line very closely. In 1918, 1919 and 1920, both metals were below the general level in substantially the same relationship. I have similarly indicated the years from 1947 to 1950 and January 1951, so that you may readily see the relationship of the advance in metal prices to the corresponding advance in the general wholesale price level.

I had hoped to be able to draw some conclusions from these data as to the probable future course of metal prices under certain assumed conditions. The basic difficulty in drawing such conclusions is the fact that, from the economist's viewpoint, metal prices are already too high in relationship to the general price level. Based on their interpretation of this normal relationship, zinc should have sold in January 1951 at about 11 $\frac{1}{2}$ ¢ a pound and lead at 13 $\frac{1}{2}$ ¢. On the same basis, to justify present metal prices, the general commodity index should rise about 25% to 225; and it would require a rise of 50% to 270 to warrant a lead price of 20 3/4¢ and a zinc price of 21¢.

Table I

WHOLESALE PRICES AND INDEXES

YEAR	LEAD		ZINC		ALL COMMODITIES (1926=100)
	Price (\$ per lb.)	Index (1926=100)	Price (\$ per lb.)	Index (1926=100)	
1914	3.9	66	5.3	68	68.1
1915	4.6	81	11.4	187	69.5
1916	6.8	81	11.0	182	85.5
1917	9.1	108	9.3	120	117.5
1918	7.4	88	8.3	107	131.3
1919	5.8	69	7.4	96	138.6
1920	8.1	96	8.1	105	151.4
1921	4.6	54	5.1	67	97.6
1922	5.8	69	6.1	79	96.7
1923	7.4	88	7.0	91	100.6
1924	8.3	98	6.7	87	98.1
1925	9.1	108	8.0	104	103.5
1926	8.4	100	7.7	100	100.0
1927	6.8	80	6.6	86	95.4
1928	6.3	75	6.4	83	96.7
1929	6.8	81	6.8	89	95.3
1930	5.5	65	4.9	64	85.4
1931	4.2	50	4.0	52	73.0
1932	3.2	38	3.3	42	64.3
1933	3.9	46	4.4	58	65.9
1934	3.9	46	4.5	59	74.9
1935	4.1	48	4.7	61	80.0
1936	4.7	56	5.3	69	80.8
1937	6.0	71	6.9	89	86.3
1938	4.7	50	5.0	65	78.6
1939	5.1	60	5.5	71	77.1
1940	5.2	61	6.7	87	78.6
1941	5.8	69	7.9	102	87.3
1942	6.5	77	8.7	112	98.8
1943	6.5	77	8.7	112	103.1
1944	6.5	77	8.6	112	104.0
1945	6.5	77	8.6	112	105.8
1946	8.2	97	9.2	119	121.1
1947	11.7	174	11.0	143	152.1
1948	18.1	214	14.2	184	165.1
1949	15.3	182	12.8	167	155.0
1950	13.3	158	11.6	159	161.5
1951 (Jan.)	17.0	202	18.2	236	180.1

Source: U.S. Bureau of Labor Statistics.

Prices are Desilverized Lead and Prime Western Zinc at New York

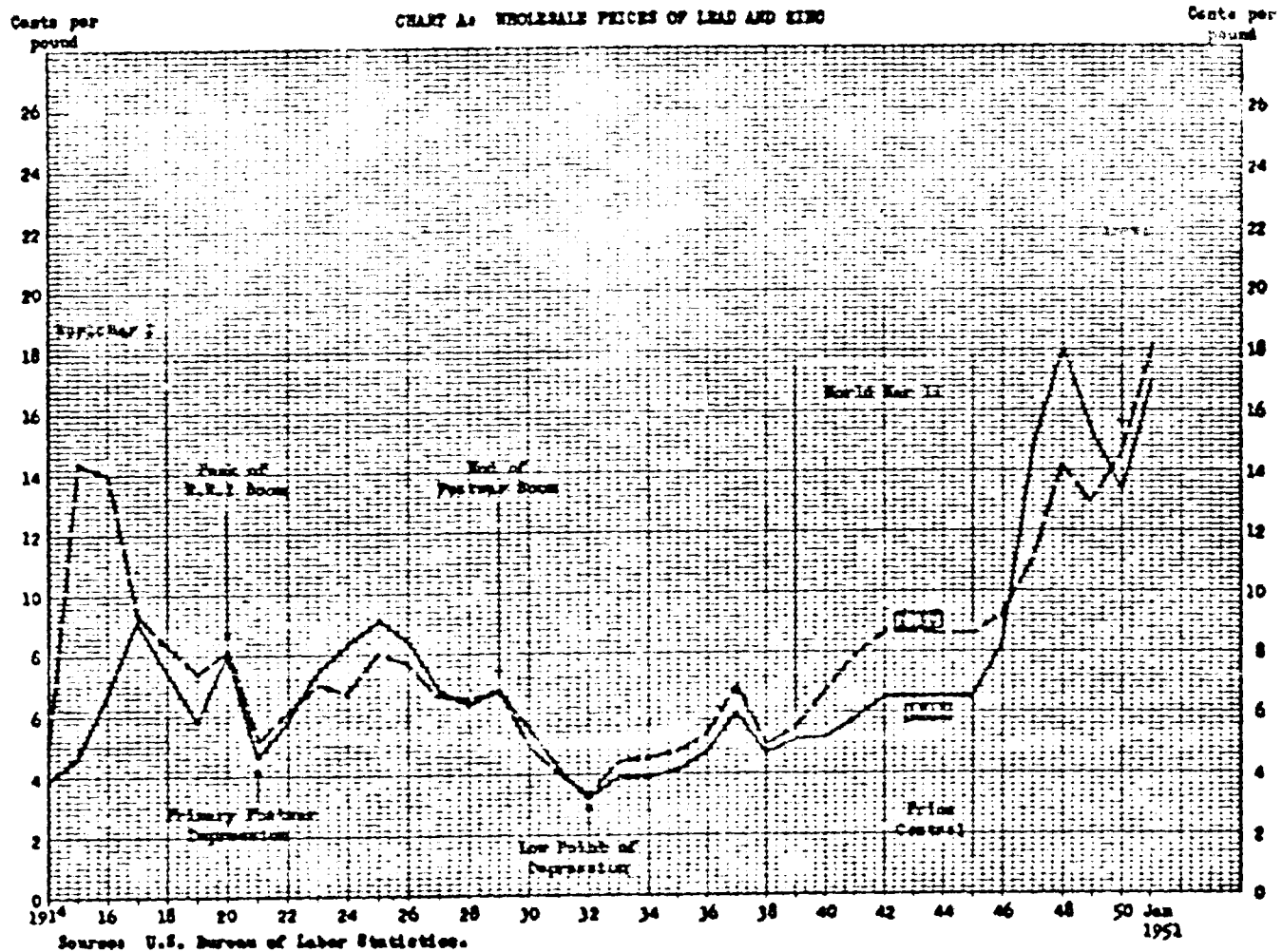


CHART 3: WHOLESALE PRICE INDEXES (1926 = 100)

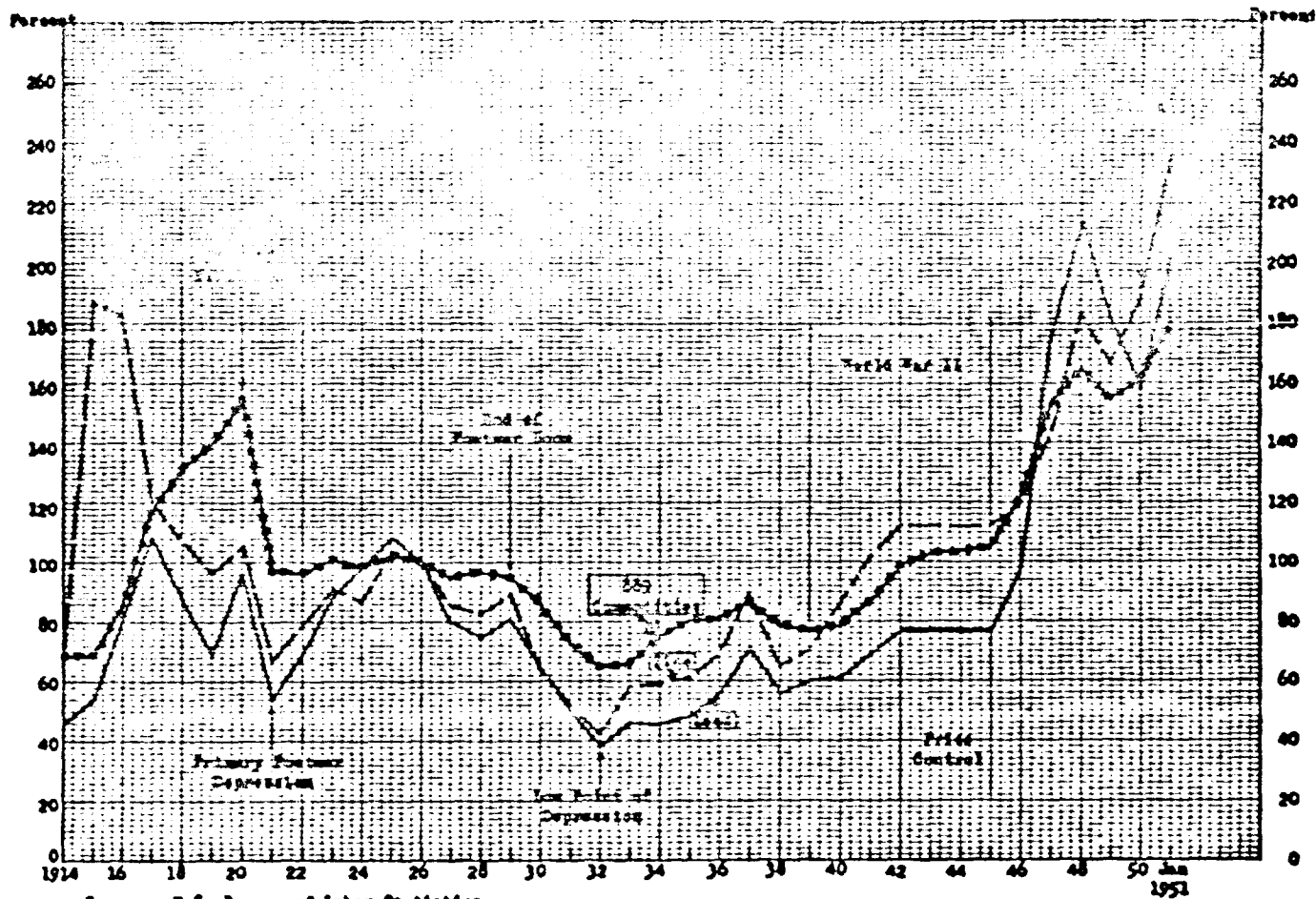


Chart D

