

IS THE ARIZONA MINING INDUSTRY SLIPPING?

The impression is being given by various writers and statisticians that the mining industry of the state has been steadily slipping in its relation to the State's economy, and that the agricultural industry has been growing so fast that it will soon overtake and pass the mining industry.

The impression is gained from the record of the relative value of the primary products of both industries for the past ten years (1941-1950). Following is this comparative record, as reported by the U. S. Bureau of Mines and "Arizona Statistical Review", published by the Valley National Bank:

	Value of Copper, Lead, Zinc, Gold and Silver Recovered	Value of all Agricultural Crops
1941	\$ 97,638,000	\$ 43,839,000
1942	114,526,000	52,849,000
1943	121,213,000	83,163,000
1944	113,095,000	80,388,000
1945	95,963,000	89,648,000
1946	114,986,000	102,955,000
1947	182,753,000	112,192,000
1948	196,208,000	143,065,000
1949	177,894,000	177,276,000
1950	201,034,000	186,037,000

Cotton has been the chief factor in the growth of the agricultural industry, and in 1950 its value constituted 54.76% of the value of all crops, as compared with 20.41% in 1943, as shown by the following table: (Statistics from "Arizona Cotton Statistics", U. S. Department of Agriculture, Bureau of Agricultural Economics).

YEAR	No. of Bales Cotton	Value of Cotton	% of Total Value of All Crops	Average Price of Cotton Per Lb.
1941	181,000	\$ 18,236,000	41.60	\$.2032
1942	193,000	24,635,000	46.61	.2584
1943	131,000	16,972,000	20.41	.2617
1944	136,000	14,631,000	21.11	.2156
1945	117,000	13,670,000	15.25	.2345
1946	158,000	23,923,000	23.24	.3035
1947	234,000	35,233,000	31.41	.3013
1948	328,000	50,151,000	35.05	.3061
1949	543,000	74,402,000	41.97	.2740
1950	474,000	101,868,000	54.76	.431

In the year 1910, Arizona mines produced 3,914,969 tons of copper, lead, zinc, gold and silver ores, with a value of \$42,731,519; in 1941 this tonnage increased to 25,491,794 with a value of \$97,638,000; and in 1950 the tonnage mined was 42,709,272 with a recovered value of \$201,033,694. From this amazing growth, which is shown graphically herewith, it can hardly be said that the Arizona Mining Industry is slipping. To be sure, the ore value per ton has dropped from \$10.91 in 1910 to \$3.83 in 1941 and \$4.71 in 1950, but the annual tonnage mined has multiplied almost eleven times in the past 40 years.

While copper has been and probably always will be the chief Arizona mining product, a study of the following table shows a remarkable growth in lead and zinc mining in the last few years, and indicates that in the future, lead and zinc will go far toward keeping the Arizona mining industry as the leading industry of the State. Agriculture can hardly be expected to show much further increase in combined production and prices. It would appear that water may probably be the limiting factor as to production, and it is hardly to be expected that better prices will prevail.

COPPER, LEAD - ZINC PRODUCTION IN ARIZONA

YEAR	Tons	C O P P E R		
			Price	Value
Avg. 1911-35	249,510		14.7¢	\$ 80,637,681
Avg. 1936-40	250,966		10.7	53,613,196
1941	326,317		11.8	77,010,812
1942	393,387		12.1	95,199,654
1943	403,181		13.0	104,827,060
1944	358,303		13.5	96,741,810
1945	287,203		13.5	77,544,810
1946	289,223		16.2	93,708,253
1947	366,218		21.0	153,811,560
1948	375,121		21.7	162,802,514
1949	359,010		19.7	141,449,940
1950	403,301		20.8	167,773,216

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	Tons	Price	Value	Tons	Price	Value
Avg. 1911-35	6,376	5.6¢	\$ 797,092	2,678	6.7¢	\$ 471,218
Avg. 1936-40	11,530	5.0	1,150,535	7,319	5.8	843,165
1941	15,638	5.7¢	1,782,732	16,493	7.5	2,473,950
1942	14,772	6.7	1,979,448	18,522	9.3	3,445,092
1943	13,727	7.5	2,059,050	19,677	10.8	4,250,232
1944	16,707	8.0	2,673,120	29,077	11.4	6,629,556
1945	22,867	8.6	3,933,124	40,226	11.5	9,251,980
1946	23,930	10.9	5,216,740	43,665	12.2	10,654,260
1947	28,566	14.4	8,227,008	54,644	12.1	13,223,848
1948	29,899	17.9	10,703,842	54,478	13.3	14,491,148
1949	33,568	15.8	10,607,488	70,658	12.4	17,523,184
1950	26,383	13.5	7,123,410	60,480	14.2	17,176,320

It will be noted that during the period 1941-1950 the price of cotton increased from 20.32 cents to 43.10 cents, or 112.1%; the price of copper increased from 11.8 cents to 20.8 cents, or 76.3%; the price of lead increased from 5.7 cents to 13.5 cents, or 136.8%; the price of zinc increased from 7.5 cents to 14.2 cents, or 89.3%; the price of gold did not change, and the price of silver rose from 71.11 cents to 90.5 cents, or 27.3%. If the price of the five metals had averaged the same increase that cotton enjoyed, 112.1%, the comparative picture would have been something like this, assuming that all agricultural crops had enjoyed the same increase as the major commodity, cotton:

1950 Production	V alue of Metals Based on 1941 Prices	Value of Metals Based on 112.1% Increase in Prices	Assumed Price of Metal
403,301 Tons Copper	\$ 95,179,036	\$ 201,650,500	25.0¢
26,383 Tons Lead	3,007,662	6,384,686	12.1¢
60,480 Tons Zinc	9,072,000	19,232,640	15.9¢
118,313 oz Gold	4,140,955	8,782,966	\$74.235
5,325,441 oz Silver	3,786,921	8,030,765	\$ 1.508
TOTAL v alue of 1950 Metal Production		244,081,557	
TOTAL value of 1950 Agricultural Crops		186,037,000	

As shown above, this would leave the Agricultural Industry still further behind the Mining Industry. The large increase in value of agricultural products was chiefly due to the high government support prices, whereas metal prices had no such support. Part of the time metal prices had a little protection from a 2-cent duty on copper, but when the duty was suspended in 1949, metal prices took a slump and there was no government support price to protect the industry. It is worthy of note that now that the government has guaranteed to restore the duty when and if the price of copper drops below 24 cents, copper has gone up to 24.5 cents per pound, which is 108% above the 1941 price of 11.8 cents, or almost the 112.1% cotton price increase. This is a good illustration of the beneficial effect of protection or support.

A recent compilation by the Arizona Department of Mineral Resources showed that in the period 1941-1950, the total taxes (State, County, City and School) paid per \$10,000 value of product was \$412.97 for the Mining Counties and \$294.90 for the Agricultural Counties. The agricultural industry may well claim to be the leading industry of the State, when it pays a higher tax than any other industry.

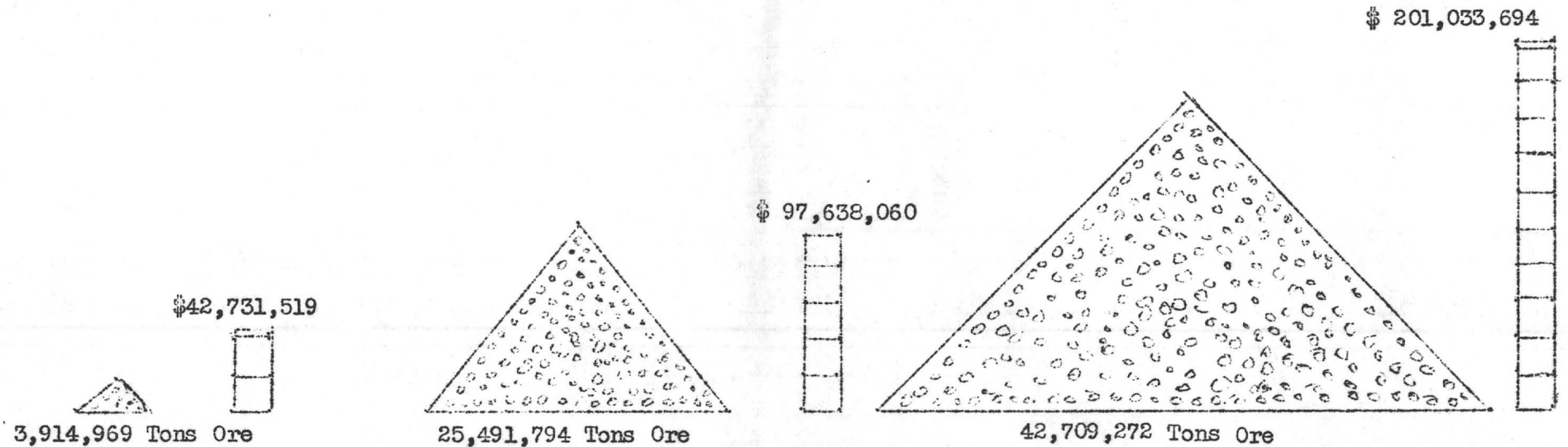
The discrepancy in taxes paid was even more noticeable in the year 1950, when mining property taxes were \$483.23 per \$10,000 value, and the mining severance or sales taxes added \$95.54 to the burden, or a total of \$578.77, as compared with \$296.24 for the agricultural industry and \$83.71 for the livestock industry; or a total of \$379.95 for both industries. These taxes combined are only 65.65% of those paid by mining measured on the comparable base of value of production.

There is talk of the manufacturing industry in Arizona eventually climbing to the top if proper encouragement in the form of tax incentive is offered. It would seem that the tourist industry would be adversely affected by the presence of excessive manufacturing and that what might be gained from one angle might well be lost in another direction. If tax incentives are offered to bring in additional industry it might be well to look to mining, as that industry brings in more tax revenue proportionately than any other industry in the State.

GRAPH SHOWING GROWTH OF ARIZONA MINE PRODUCTION OF COPPER, LEAD, ZINC, GOLD AND SILVER

Statistics compiled by: Arizona Department of Mineral Resources, from USBM Reports.

Year	1910	1941	1950
Tons Ore Mined	3,914,969	25,491,794	42,709,272
Value of Copper, Lead, Zinc, Gold & Silver	\$ 42,731,519	\$ 97,638,060	\$ 201,033,694
Avg Price Copper per lb	12.7¢	11.8¢	20.8¢
" " Lead " "	4.4¢	5.7¢	13.5¢
" " Zinc " "	5.4¢	7.5¢	14.2¢
" " Gold " "	\$20.67	\$35.00	\$35.00
" " Silver " "	54¢	71.11¢	90.5¢



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