PENNY WISE:
A FOCUS ON THE COPPER DILEMA

By Jeffrey R. Paunicka

Last year in 2005 the US Mint produced 7.7 billion pennies. With these numbers and the current economic conditions, this puts them between a rock and a hard place . It was recently published in CoinWorld, a leading Numismatic periodical, that the cost for the raw materials in pennies (zinc and copper) are now .008¢ and production costs (labor, tooling, etc.) are .006¢ per penny minted. The cost is 1.4 cents for every cent denomination. Apply the excessive costs to the total production quantity and we start to understand the $31 million dilemma the US is facing.

Question of Elimination:

Can they eliminate the pennies from our currency? That would make most accountants cringe at the thought of its implications on financial accuracy. Would you think the governors of each state would be so willing to offset their sales tax revenue for such a proposition? Then consider the GNP (Gross National Product - the total dollar value of all final goods and services produced for consumption) and the number of transactions comprised in it. What effect would the rounding have on such a large amount? A variation of 1/100th of 1% applied to the 2005 GNP is approximately $1.1 billion.

My insight tells me that an alternative lower cost material would have to be implemented. But whatever alternative is selected, it will have the task of adapting into our society and the world of mechanisms that still use the cent.

Copper Redemption:

Think back to the 1960's when silver prices exceeded the face values of the coins they backed. We had a silver redemption to resolve the situation. All silver coinage and paper money backed by silver were eliminated from circulation. Even further back to the 1930's there was a similar redemption on gold spearheaded by then President Franklin Roosevelt (ref: Gold Reserve Act of 1933). Is this possible in the near future for copper? Probably not since copper is classified as a base metal. It has far more diversified uses in our daily lives and industry than the precious metals of gold, silver and platinum.

Valuation Calculation:

Pennies minted before 1982 were composed of 95% copper. After 1982 they were mostly composed of zinc with a copper coating. The coins produced in 1982 were at first 95% copper then mid-year production was changed to the zinc planchets. The weight of a zinc penny is 2.5 grams. The 95% copper coins weigh 3.1 grams. 10¢ face value equates to 1 oz. Current copper prices at the time of this writing are about $3.50 per pound. Extend the calculations: $1 face of copper pennies contain $2.08 of copper.

I am not suggesting you go and start melting bags of pennies. First, I think the government has a problem with the destruction of their coinage and it is my strong recommendation that we remain law abiding citizens. Second, the smelting process of copper can be hazardous. Aside from any toxic fuming vapors, the use of chemicals to minimize oxidation and the extreme heat required to reach the melting point (1083°C or 1981°F) may be considered beyond the scope of a weekend project in the kitchen. But consider this. One (1) ton of pennies has a face value of $3,200.00, their copper value is **$6,649.00**.

Circulation Sampling:

I wanted to support my data with a random market sampling. My first sample was sitting on top of my dresser. A jar filled with change that I have been collecting for 2 years. My sorting totals showed that 38% of the red cents were 95% copper.

The next sampling would provide current circulation data. I went to my local bank and invested $10 for a random 20 rolls of Lincoln cents. Within a half hour I counted out 324 95% copper pennies. A yield of roughly 32% copper coins. Makes you start to think, doesn't it?

About the Author

Jeffrey Paunicka is the President of Insight3 Inc., Portage Indiana, He has worked within the Financial Industry for 18 years and provides professional numismatic services. He holds an MBA from the University of Notre Dame. He can be reached at (219)764-3619.