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Money in a Prisoner of War Camp

Chapter two of Milton Friedman's *Money Mischief* addresses the nature of money's value in terms of goods and services. Just like any other item, the exchange value of a currency is determined by supply and demand. The supply of money refers to its nominal quantity. When the Federal Reserve in the United States prints more money, it adds more units to the quantity of money. The Fed also alters the quantity of money when it changes reserve requirements of banks. With a lower reserve requirement, banks can lend more, adding to the total supply of money with which goods and services can be purchased.

It is important to distinguish between the nominal quantity of money and the real quantity of money. The real quantity of money is the amount of goods and services that a given nominal quantity will buy. The real quantity is determined by the public as a result of its demand for money. When there are more items available to purchase, it becomes more useful to have currency on hand. Printing more bills without increasing the quantity of goods and services available does not raise the real quantity of money. It instead causes people use their increased number of currency units to bid up the prices of goods and services in the phenomenon known as inflation.

Currency allows people to minimize the number of transactions they have to partake in to exchange what they have for what they desire. For example, suppose Alice has one thousand ears of corn that she grew. She takes them to the market, where she meets Bob. Bob has some

blankets that he made. Alice wants some blankets, but Bob does not want any corn. Alice could find someone with apples to exchange for corn. If Bob does not want apples either, she could continue trading items until she finds something that Bob will accept in exchange for blankets. Alice would have to keep track of reasonable exchange values between the items she trades, which may not be a readily available piece of information. Bob would have the same issues in trying to exchange his blankets for something he desires. Alternatively, Alice could use a common medium of exchange to receive as compensation for her corn, such as gold, which she could then give to Bob in exchange for his blankets. This minimizes the number of transactions anyone has to engage in, while also making it easier to compare values between all items priced in terms of one common item.

The demand for money is also affected by the cost of holding money. Money in cash form means that there is no interest being accumulated on that amount. When prices are rising, one may be better off holding some other asset that is not losing as much value. The level of uncertainty about the future purchasing power of money affects the quantity people are willing to possess at a time. If people expect deflation in the future, they may prefer to hold their money now in order to have higher purchasing power in the future.

Commodity-based money has the added factor of non-monetary demand, which affects the quantity available for monetary use. As Friedman notes, people's varying tastes and preferences alter the number of bushels of wheat that an ounce of gold can be exchanged for. If gold jewelry becomes particularly popular all of a sudden, more gold will be used for that purpose and less for monetary purposes, all else held equal. This would likely lower the amount of gold people would be willing to give up in exchange for wheat. Alternatively, if a newfound

craving for bread sweeps a society, *ceteris parabis*, people would be willing to exchange more gold for a given amount of wheat.

Economist R.A. Radford's personal account of a World War Two prisoner of war camp in Germany provides an interesting lens through which to examine the determinants of the value of money. Captured soldiers were held in temporary camps until they arrived at more permanent abodes. Prisoners typically received rations from the American Red Cross on a weekly basis, which contained various food items, coffee, and cigarettes. Bartering was common earlier on, and eventually cigarettes emerged as a common medium of exchange at the permanent camps. Prisoners posted items for sale and items they wanted and corresponding prices in terms of cigarettes on bulletin boards in the various camp buildings. As previously discussed, this common currency allowed for fewer transactions to occur in order to exchange that which one could provide for that which one desired. As Friedman notes, no one can really say what determines which items will be used as a currency. Some properties of cigarettes probably make them a useful medium of exchange. Machine rolled cigarettes are a standardized size and weight, providing fungibility. They can be used for a range of purchase sizes, with individual cigarettes used for smaller exchanges, packs purchasing larger items, and cartons for even larger purchases. The fact that non-smokers accepted cigarettes in exchange for goods and services highlights their acceptance as a form of money. They accepted them not for consumption, but for future purchases. In contrast, the temporary camps did not give rise to cigarettes as a common medium of exchange. Prisoners did not know where they would be in a near future nor did they know who they would be around, and so an expectation of future purchasing power could not arise.

The camp experienced some problems with their currency. Cigarettes have a strong non-monetary demand, which affects the nominal quantity available for currency purposes. The Red Cross rations would usually arrive once a week. Prices of goods in terms of cigarettes would rise when the shipments came in. Since both cigarettes and other goods typically arrived together, both the nominal quantity and the real quantity of money rose at the same time, though not in equal magnitudes. Throughout the week, as the currency was quite literally burnt up faster than the supply of other goods, the prisoners experienced deflation. In some weeks, the rations would not arrive at all. With smokers hesitant to part with their dwindling supply of smokes, many would resort to barter once again.

Gresham's Law that bad currency drives out good currency was at play in the camp. Higher quality cigarettes were used more for smoking, while lower quality ones were used for exchange. Similar to metallic currencies, debasement occurred with cigarettes when prisoners would roll the cigarette in their fingers and take some tobacco out for smoking or for further use as currency. Some realized that pipe tobacco could be purchased for twenty-five cigarettes, which could be hand-rolled into thirty new cigarettes. Hand-rolled cigarettes gained widespread circulation, which would have inflated prices. Since hand-rolled cigarettes varied in size and shape, they had to be inspected before a purchase could be accepted. This would have likely diminished their exchange value even further as their efficiency for use as a medium of exchange was less than that of standardized machine-rolled cigarettes.

At one point some prisoners decided to open a restaurant at the camp. The restaurant would have to purchase large amounts of food, some of which would be stored for a few days before being sold. The frequent falling of prices in terms of cigarettes would make it difficult for

the restaurant to sustain itself. Consider making a large purchase of food on Red Cross ration day at higher prices and then trying to sell that food days later for much lower prices. Furthermore, heavier smokers would be hesitant to visit the restaurant and part with their cigarettes. The solution was to issue paper currency. The prisoners ran a shop where extra goods were sold and bought, and the shop began purchasing food for the restaurant in exchange for paper bills. The paper money was accepted for purchasing food at both the shop and the restaurant.

Consequently, an expectation of future purchasing power of these paper notes gave rise to prisoners accepting them in exchange for food. Without a non-monetary use, the paper currency was not subject to the deflation experienced by cigarette currency users.

The paper currency retained a relatively stable value until the Red Cross rations were cut in half and the camp was bombed. The goods and services available for purchase decreased, diminishing the demand for paper currency. Fewer exchanges occurred, and the otherwise useless pieces of paper served a lesser function.

Radford's account of the prisoner of war camp illustrates Friedman's discussion of the value of money. The supply of money alters the exchange value of each unit. When more cigarettes arrived in the camp, it took a larger number of cigarettes to purchase a given quantity of goods. As the cigarettes were smoked throughout the week, prices fell. Non-monetary use of cigarettes affected people's willingness to use them as currency, as smokers were less likely to make purchases in terms of cigarettes than non-smokers. Using a common currency tends to make exchange easier than what a barter system can provide. People could sell their extra goods for cigarettes and then buy other goods with those cigarettes. While the paper currency at the camp provided a more stable store of value for some time, its usefulness diminished when the

number of goods and services it could be exchanged for decreased. Even in this isolated world war two prisoner of war camp in Germany, the phenomenon of money arose with impressive similarity to the complex outside world.

Works Cited

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