Minimizing Resource Costs under a Gold Standard: From Warehouse Deposits to Deposit Banking

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ABSTRACT

One of the criticisms of the gold coin standard is it entails more resource costs than other systems. Why after all should people have to carry around bags of gold for each transaction and pay to have so much of it stored in vaults? In this piece I will discuss the options of one famous lover of gold, Scrooge McDuck, and discuss how the storage cost criticisms of gold money are unwarranted. A system can easily evolve from one where people held coins to one where they loan their commodity via bankers and earn interest thereby eliminating the large need to store or handle the actual commodity.

Introduction

Scrooge McDuck enjoys gold. He loves looking at it, he loves diving into it, but most importantly he always wants more. As a good lover of gold and wealth in general what is McDuck to do? Should he keep all of his gold on hand or might there be other potentially more lucrative (with less resource costs too) things he can do with his gold? In the 1967 Disney film, *Scrooge McDuck and Money*,[2] Scrooge McDuck refers to the coined money in the vault as "just petty cash" indicating that he only stores a portion of his wealth in the bin.

In this article I will explain how this makes sense from an economic point of view and how a commodity backed banking system can emerge without being wasteful as many people believe. The exercise will also enable us to think about whether 100 percent reserve or fractional reserve banking is best.

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[2] The fifteen minute 1967 Disney film, *Scrooge McDuck and Money*, provides a nice entertaining history on the origin of money. Although the end of the video contains a couple parts that could be interpreted as economic fallacies, the video is mostly good and can be useful for getting people to think about historical monetary systems such as the gold standard. The video is available on Youtube.com.

From warehouse deposits to loan banking

None of what follows actually appeared in any cartoon, but permit to indulge myself to illustrate a point. For analysis sake, first let us assume that for security concerns McDuck does not want to store the gold at his house and instead wants to work with a fictional institution, Duckburg Goldsmith Banker.[3]

Warehouse Deposits

The first choice (Choice A) for McDuck is for Duckburg Goldsmith Banker to allow McDuck to deposit his ounces of gold where McDuck has the ability to visit, observe, and retrieve those specific pieces of gold at any time on demand. The advantage of this is he could see all of his gold at once and retrieve all of his specific coins at any time, but the disadvantage is he has to pay the institution storage fees. Duckburg Goldsmith Banker has limited vault space and rent is expensive so he may not wish to store all of his gold in the vault.

Time Deposits or Loans

McDuck might enjoy having some gold ready for visiting and retrieving on demand, but McDuck is also into making money and doesn't want forgo resources if he doesn't have to. As Scrooge said, "Money shouldn't be idle and must be put to work you know….Making a shrewd investment is the soundest way I know."

Luckily Duckburg Goldsmith Banker also offers McDuck another choice. Duckburg Goldsmith Banker offers McDuck the option of making money by helping McDuck invest the money. The second choice (Choice B) given to McDuck is to make a time deposit or loan where McDuck requests that Duckburg Goldsmith Banker finds a suitable borrower and they loan out the gold deposit for a specific period of time. McDuck gets most of the interest, but Duckburg Goldsmith Banker keeps a small percentage in return for finding the borrower. For example, McDuck might deposit 100 ounces of gold for one year, and Duckburg Goldsmith Banker acting as an intermediary might arrange for a borrower to borrow the gold and pay back 108 ounces in one year. At the end of the year Duckburg Goldsmith Banker gets 1 ounce and Scrooge McDuck gets seven plus his original deposit.

For that year Scrooge McDuck has title for 100 ounces of gold (plus the interest) which he can pick up from Duckburg Goldsmith Banker at the end of the year, whereas the borrower has an IOU of 100 ounces of gold (plus the interest) which is payable to Duckburg Goldsmith Banker at the end of the year. The books of Duckburg Goldsmith Banker are completely balanced, and depending on the contract, Duckburg Goldsmith Banker could agree to bear the risk of what happens if the borrower does not repay Scrooge's loan.[4]

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[3] For a historical discussion of the evolution of goldsmith bankers to banks see Neal and Quinn (2001), a story that has many parallels with the evolution of other markets at that time (Stringham, 2002, 2003).

[4] If the original borrower of Scrooge's time deposit defaulted the Duckburg Goldsmith Banker would be out of luck. But historically, and especially now due to modern advances in credit scores, lenders have been fairly good at assessing the likelihood that lenders will repay their loans. Of course some lenders guess wrong and they lose money as a result, but in the absence of government regulations forcing lenders to make loans to unsuitable borrowers, this is far less common than most non-economists would predict. Lenders can only stay in business over the long run if they are good at making good loans. As Scrooge says "Investing is an art."

In the year, rather than taking up space, sitting idle, and costing Scrooge resources the money is lent out to make money. The borrower gets money to invest for a year, Scrooge gets interest payments for lending his money, and Duckburg Goldsmith Banker get payment for acting as an intermediary, so all parties enter into the contract voluntarily and all parties are better off.

Lines of Credit with Assets as Collateral

But what if midway through the year McDuck gets separation anxiety from being apart from the gold he deposited and wishes he could have some of it back to admire or spend before the end of the year?

With Choice A (McDuck had decided to store it) McDuck simply goes to the vault to Duckburg Goldsmith Banker to see his coins. But with Choice B (McDuck lent out his money until the end of the year) is McDuck out of luck? As long as there is a market with other lenders and borrowers or the owners of Duckberg Goldsmith Bank have gold lying around McDuck is not out of luck.

Duckburg Goldsmith Banker knows that Scrooge is going to be receiving 107 ounces of gold at the end of the year (with his time deposit or loan), so what they could do is open up a second account where they lend McDuck money in the short run. Duckburg Goldsmith Banker would almost certainly be willing to do this because Scrooge would pay them interest for this privilege and his original loan can be used as collateral.

The only thing that Duckburg Goldsmith Banker would need to do is go out into the market and find a lender or if they already had enough ounces of gold sitting around they could lend him their personal pieces of gold.

Duckburg Goldsmith Banker, of course, could not guarantee that they would be able to give Scrooge such a loan in all possible circumstances (suppose they could not find any lenders willing to make the loan in the short run or they did not have an enough extra personal pieces of gold sitting around in the short run), but they could tell him that they will give him that loan in all normal circumstances. In fact, they could extend to Scrooge McDuck a line of credit where he would have the option of getting money at nearly any time.

Even if Duckburg Goldsmith Banker didn’t know Scrooge was a reliable duck, this line of credit could be up to 100 ounces because even if Scrooge defaulted on the new loan, Duckburg Goldsmith Banker would have 100 ounces worth his assets on their books. If he utilizes his line of credit, McDuck will have to pay interest, which means on net he will be receiving less or none of interest from his original time deposit.

Conclusion

This extra choice gives Scrooge the best of all worlds. With Duckburg Goldsmith Banker lending out Scrooge’s gold and extending him a line of credit based on the value of that gold, Scrooge gets interest on his time deposit, and he has the option of getting replacement gold at nearly any time. Scrooge is thus able to reap the benefits of having access to gold when he wants it without having to pay large storage fees to store all of his wealth in the vault.[5] At the same time Duckburg Goldmith Banker, and other borrowers and lenders are better off.

Under the steps I have outlined, Scrooge McDuck is able to take gold and invest them with Duckburg Goldsmith Banker. He earns interest on his invested gold and is given the option of getting gold from the Goldsmith Banker at nearly any time. Among advocates of commodity backed money, some support 100 percent reserves (Rothbard, 1962, 1990; Hoppe 1994; Hoppe, Hülsmann and Block, 1998; Hülsmann, 2003) and others support fractional reserves (Selgin, 1988; Selgin and White, 1996; White, 1995, 1999). I have intentionally described my hypothetical banking system using simple terminology that is not always used in the literature. At this point I will leave the reader with a couple questions: Is the system described above consistent with 100 percent reserve banking, fractional reserve banking, or both? At all points the steps are contractual and at no point are two people holding a title to ownership of the same piece of property. But is giving McDuck the option to deposit gold, earn interest, and pick up gold at practically any time (based on an equity line of credit issued) functionally the same as the fractional reserve banking system where people are allowed to deposit money, earn interest, and withdraw it on demand at practically any time?

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[5] For a comprehensive discussion of other resource costs associated with commodity backed money and why these costs are usually overestimated see Garrison (1985).

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