Money

By Nic Tideman

Introduction

Because people have rights to themselves, they have the right to implement any rules that they wish, within their own nation, regarding money. But if they believe that is important that their national institutions reflect the equality of all citizens that justice requires, then they will want that equality to be reflected in their institutions for money as well.

Poor institutions for money can have terrible consequences for a nation. With poor monetary institutions there can be unanticipated inflation that wipes out the savings of citizens and effectively cancels debts. If the supply of money falls, debts are artificially multiplied, and the nation is likely to go into a recession if not a depression.

In addition to these problems of severe financial risks for citizens, there are questions of justice with respect to money. A government that claims the right to increase the money supply as it sees fit is claiming the right to create purchasing power for the government, which comes at the expense of citizens when prices rise. This is an affront to the idea of government that implements the will of the people.

Thus it is interesting for a theory of social justice to specify the way that money might be organized, to protect people from the severe financial risks of runaway inflation or deflation and depression, while also offering no excessive power for government officials.

Types of Money

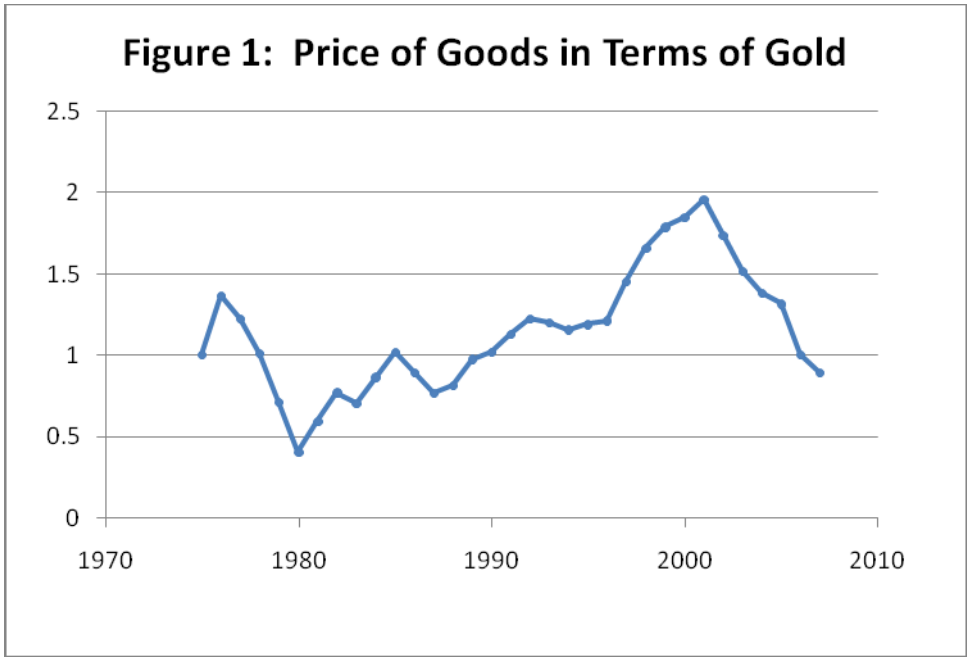
Economists often include bank accounts in their definitions of money, but what I mean by money here is the stuff that can always be used to buy things or pay debts. It could be gold, silver or some other precious commodity, or, as in the U.S. at present, it could be pieces of paper issued by the government that have no intrinsic value.

Where there are governments, money is generally defined by the government, but people will generally settle on a consensus that some particular thing is money if the government does not define it. Even if the government attempts to define what is money, people may come to a different convention if the government's money is particularly unreliable. Thus one possible approach to money is to have

the government do nothing about it and allow people to arrive at a convention on their own. While this is likely to be less harmful than what many governments have done, a well-run government money is can be expected to provide a nation with considerably better service than unregulated convention.

Most monies today are fiat monies. That is, they are composed of pieces of paper that issued by the government and are not guaranteed to be exchangeable for anything of value. Fiat monies tend to be subject to high and unstable rates of inflation, and therefore to be rather unsatisfactory to the populations that use them. Therefore I think that a well-informed populace with other options would choose something other than a fiat money.

Historically, many monetary systems have used gold and silver to specify amounts of money. The trouble with using these metals to define a monetary system is that the price of other things in terms of gold or silver is quite volatile.



As Figure 1 shows, the price of goods in the U.S. (the U.S. Consumer Price Index) relative to the price of gold varied by a factor of more than four between 1975 and 2007. A nation that sought to base its monetary system on gold over this span of time would have experience severe deflation in those times when the price of goods in terms of gold fell, and severe inflation in those times when the price of

goods in terms of gold rose. Such cycles of deflation and inflation would interfere significantly with the productivity of an economy.

The Value of Commodity Money

The particularly valuable thing about basing a monetary system on gold or some other commodity is that an inviolable commitment to a particular value of paper money in terms of a commodity removes the option for a government to reduce the value of money by increasing the money supply for its own purposes. This virtue does not require that the commodity in terms of which money is defined be a precious metal. To give money the most stable value, it should be defined in terms of one commodity or a combination of commodities with a price that, over the years, is a very stable multiple of the overall price level. A nation would reasonably want to undertake extensive research before selecting a commodity definition of its money. But it is interesting to examine one surprising commodity that has been considered as the basis of money. That is bricks.[1]

Brick Money

If money were defined in terms of bricks, and if the price of a brick was 25 cents, then a dollar would represent a promise to deliver four bricks upon request. Instead of a vault filled with gold, the government would support the monetary system with a brickyard. Holders of money would be guaranteed that money would not depreciate in value by the opportunity to exchange their money for bricks whenever they wished.

It might seem that the opportunity to exchange money for bricks would not be particularly valuable, because most people don't use bricks very often. But that would not be a problem. As long as there were a reasonably large number of people who used bricks on a regular basis, it would be possible to get value for money by trading with those who traded with those who used bricks.

Because of the relative ease with which additional bricks can be produced, the price of bricks, relative to other things, tends to be much more stable than the price of gold, relative to other things. Figure 2 shows the annual average of the consumer price level relative to the price of bricks from 1947 to 1984.[2] The ratio of the highest price to the lowest price over this 37-year span of time is just 1.27 to 1, where for gold it was 4.9 to 1. Thus a monetary system based on bricks could be expected to provide much greater price stability than a system based on gold. It is

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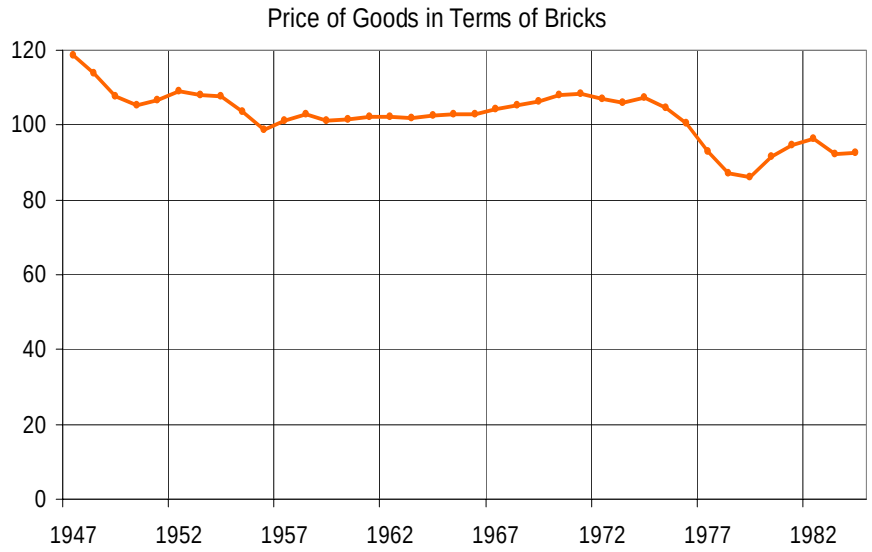
[1] See James Buchanan, "Predictability: The Criterion of Monetary Constitutions" in Leland B. Yeager, *In Search of a Monetary Constitution* (Cambridge: Harvard University Press, 1962), pp. 155-183 (esp. pp. 176-83).

[2] I am not able to sow more recent data because the price series was discontinued.

possible that someone could find a standardized commodity or combination of commodities with greater price stability relative to the overall price level, but until one is found, a monetary system based on bricks is the one to beat.



"Panics" with Gold-Backed and Brick-Backed Money

Bricks would not be subject to a difficulty that afflicts gold as the basis of a monetary system. That is the impossibility of fulfilling promises in a crisis. When a monetary system is based on gold, monetary authorities often have more money circulating than there is gold to exchange for the money. There are two plausible rationales for this practice. The first is that an expanding economy needs an expanding money supply, and the supply of gold generally does not expand as fast as economies do. If governments did not expand paper money when economies expand, prices would need to fall to keep the real value of money in line with the needs of the economy. Since falling prices tend to cause recessions, it is understandable that governments expand their paper money faster than their gold reserves when economies expand. The second rationale for having more paper money than there is gold to back it is that it is a waste of human effort to dig gold out of the ground, and then bury it again in a vault to support a monetary system. If a monetary system can be run without the cost digging all of that gold out of the ground and then storing it is a vault, there will be more human effort available to produce the things that people want.

Both to save resources and to ensure an adequate money supply without falling prices, nations with monetary systems based on gold have traditionally allowed

more paper money to circulate than there was gold in the vaults to exchange for the money. While this helped to ensure an adequate money supply, it was also subject to the possibility of a "monetary panic" in which many people became afraid that money would cease to be exchangeable for gold, and many of them sought to exchange their paper money for gold at about the same time. When this happens it does become impossible to exchange paper money for gold, and the economy tends to falter. If such a monetary panic affects much of the gold-using world at the same time, the monetary authorities can honestly say that there is not enough gold in the world to redeem all of the paper money, so people will simply need to accept that their paper money is not worth the gold that was promised for it.

If a monetary system is based on bricks rather than gold, the scenario plays out differently. If a dollar is a promise to deliver four bricks on demand, then the fact that there are not enough bricks in the world to redeem all of the dollars is not a good reason for abandoning the promise to deliver bricks, because more bricks can always be made. With gold, there might not be enough reserves of ore in the world to produce the gold needed to redeem the promises represented by paper money. With bricks, on the other hand, there is no practical limit to how many can be produced. Redeeming the promise is simply a matter of putting people to work in the brick factory.

A promise to deliver gold for paper money can only be a promise to take gold from the vault if there is any gold in the vault, because of the difficulty of expanding the quantity of gold that has been mined. Therefore it is a promise that people cannot fully believe and one that leads to occasional panics. A promise to deliver bricks for paper money, on the other hand, can be a promise to put people to work in the brick factory, if necessary. Since it is not subject to the same impossibility as a promise to deliver gold it is more believable and can therefore be expected not to lead to panics, at least if the government that issues the money based on bricks really will hire people to produce bricks as necessary.

Equality in a Brick-Backed Monetary System

In any monetary system that uses paper for which there is no corresponding valuable commodity, there is a profit, which has the technical name of seigniorage, arising from the fact that money is placed into circulation without a corresponding expenditure of resources in producing something of value. Thus it is interesting to ask who, as a matter of justice, should receive the seigniorage.

One possible answer is that it is just for the government to receive the seigniorage, since the government represents all of the people. While it is more acceptable in terms of justice for the government to receive the seigniorage than for it to be pocketed by some private party with a government-granted monopoly on issuing paper money, as has sometimes happened, there are three important difficulties with allowing the government to receive the seigniorage. First, a government that is able to acquire funds through seigniorage will be tempted to

increase the money supply injudiciously, thereby causing inflation. Second, a government is more likely to truly represent the people that it supposedly represents if it must have their consent to acquire additional resources. Third and finally, a government is likely to need to reduce the money supply occasionally to prevent inflation. This requires that resources be obtained from citizens, to exchange for the money that will be retired. Citizens who have not noticed any benefits coming from the seigniorage associated with an expansion of the money supply are likely to be annoyed by the effort of a government to obtain resources from them for the purpose of retiring the money supply. Thus it is attractive to think about ways of having the populace share seigniorage instead of having the government absorb it.

The most straightforward way of having the populace share the seigniorage of the money supply is to create a money-issuing "cooperative" that anyone can join. Whenever the money supply needs to be expanded because of an expansion in the economy, the same amount of money is placed in the bank accounts of all members of the money-issuing cooperative. If the money supply needs to shrink, the members of the cooperative are instructed to all turn in the same amount of money. The members of the cooperative can't properly feel mistreated by an obligation to turn in some money; this obligation simply represents a reduction in the size of the interest-free loan that they enjoy. With such an arrangement, governments will no longer have the option of acquiring resources without the consent of the populace, and the profit from seigniorage will be shared equally.

While such a money-issuing cooperative could be used with any system of paper money, it has a particular suitability for a system in which the obligation to deliver something of value in exchange for money when a money holder requests it is taken seriously. The need to reduce the money supply is then signaled by people seeking to redeem money for the promised commodity—bricks in this case. But the reserve is being exhausted. The monetary authorities say to the members of the cooperative, "The public does not want to hold all of the money we have issued. We need to make good on our promise to deliver bricks, but we don't have enough. We will need to make more. To do this we will need to reduce the size of your interest-free loan. If you we all competent to fill jobs at the brick factory we could have all of you work the same number of hours there to fulfill our obligations. Since you don't all have that competence, just send money and we will hire people to produce the bricks." The link between having received the earlier interest-free loan and the current obligation to provide money with which bricks can be produce would make monetary contractions needed for price stability much less painful than when these must be accomplished by tax increases.