Meditations on Money's Measure

Or

The importance of using a reliable unit of **measurement** for what we use as 'money'

The standard for science must include the use of careful observation, experimentation *and measurement*. Measurement in economics is carried out in currency terms; only economic activities measurable in that unit of account are recorded. But the value of currencies fluctuates greatly. What does that say of the field of 'economics'? What about what we use as 'money'?

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First, some recapitulation may be useful…

Money is any object that is generally accepted as payment for goods and services and repayment of debts in a given country or socio-economic context. The main functions of money are distinguished as: a medium of exchange; a unit of account; a store of value; and, occasionally, a standard of deferred payment.

The gold standard, a monetary system where the medium of exchange are paper notes that are convertible into pre-set, fixed quantities of gold, replaced the use of gold coins as currency in the 17th-19th centuries in Europe. These gold standard notes were made legal tender, and redemption into gold coins was discouraged. By the beginning of the 20th century almost all countries had adopted the gold standard, backing their legal tender notes with fixed amounts of gold.

After World War II, at the Bretton Woods Conference, most countries adopted fiat currencies that were fixed to the US dollar. The US dollar was in turn fixed to gold. In 1971 the US government suspended the convertibility of the US dollar to gold. After this, many countries de-pegged their currencies from the US dollar, and most of the world's currencies became unbacked by anything except the governments' fiat of legal tender.

So, money originated as commodity money, but nearly all contemporary money systems are based on fiat money. Fiat money is without intrinsic use value as a physical commodity, and derives its value by being declared by a government to be legal tender; that is, it must be accepted as a form of payment within the boundaries of the country, for "all debts, public and private".

OK, fine. What do we mean by a '***unit of account***', again?

A *unit of account* is a standard numerical unit of measurement of the market value of goods, services, and other transactions. Also known as a "measure" or "standard" of relative worth and deferred payment, a *unit of account* is a necessary prerequisite for the formulation of commercial agreements that involve debt. To function as a *'unit of account'*, whatever is being used as money must be:

1. Divisible into smaller units without loss of value;
2. Fungible: that is, one unit or piece must be perceived as equivalent to any other; and
3. A specific weight, or measure, or size to be verifiably countable.

So, a *unit of account* is a standard monetary unit of measurement of value/cost of goods, services, or assets. It is one of the three well-known functions of money. It lends meaning to profits, losses, assets and liabilities.

Unfortunately, the accounting monetary *unit of account* suffers from the pitfall of **not being a stable unit** of account **over time**. Inflation destroys the assumption that money is stable, which happens to be the very basis of classic accountancy.

In today's modern economies, money in the form of ***currency*** usually serves the role of the standard *unit of account*. The use of money, under conditions of price stability, vastly improves the efficiency of market economies; but not if the monetary unit itself is unstable.

The use of a *unit of account* in financial accounting allows investors to invest capital into those companies that provide the highest rate of return. The use of a *unit of account* in managerial accounting enables firms to choose between activities that yield the highest profit.

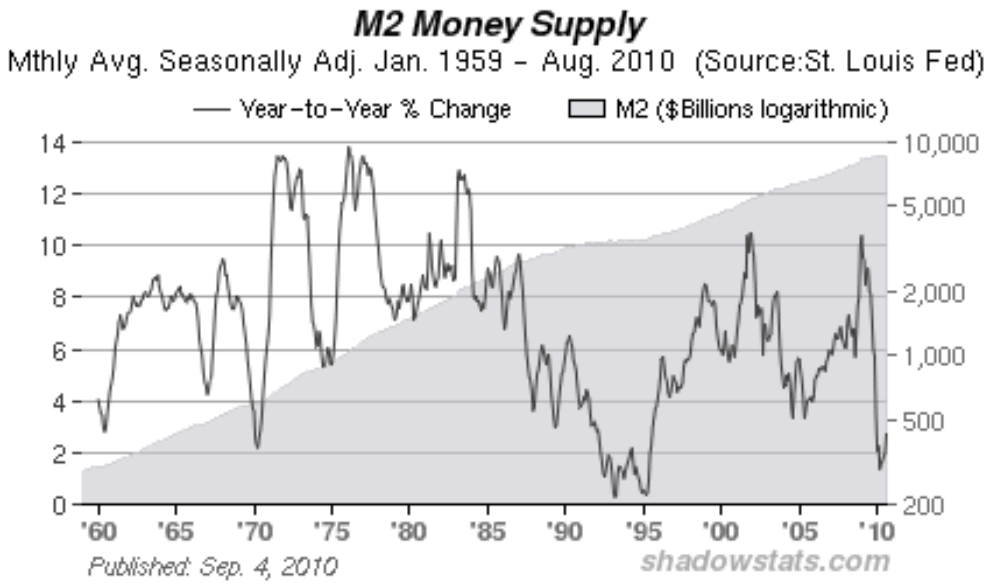
In economics, a standard *unit of account* is used for statistical purposes to describe economic activity. Indexes such as GDP and the CPI are so broad in their scope that compiling them would be impossible without a standard *unit of account*. After being compiled, these figures are often used to guide governmental policy; especially monetary and fiscal policy.

So, one could argue that the **measurement** of our economic performance and/or financial performance, individually or in aggregate, is only as good or reliable as our **money/currency** is, right? If so, then how good or reliable is our money/currency as a **measure**?

Measures of money

When you scan the modern economic literature, the only measure(s) of money you'll find today are aggregate measures. For example, the *money supply* is the amount of financial instruments within a specific economy available for purchasing goods or services. The money supply is usually measured as M0, M1, M2 and M3, four escalating categories. The

categories grow in size with M0 being base money, or the amount of money actually issued by the central bank of a country, M1 being currency (coins and notes) and checking account deposits, M2 being currency, checking account deposits and savings account deposits, and M3 being M2 plus time deposits and repos. M1 includes only the most liquid financial instruments, and M3 relatively illiquid instruments.



The above chart, which you can find here and is based on official data supplied by the US central bank - http://www.shadowstats.com/charts/monetary-base-money-supply - shows that the US money supply, as measured by M2, grew from about US$1 trillion in the 1950s to almost US$10 trillion now and that supply always grew, at an annual rate that varied between less than 1% to more than 12% per annum, averaging around 5% per annum.

The same goes for any other currency: the money supply statistics are abundantly available and appear to be very reliable measures as they seem very precise. That's all good and fine, but what of the basic ***unit of measure*** of that money supply, itself? What of that? Nothing! That is, there is nothing to find in today's literature on the 'measure' itself; in other words, nothing in absolute terms. On the other hand, there is much information and ongoing speculation in relative terms: currency exchange rates and the price of things in currencies.

So, we need to understand what makes a unit of measure accurate/precise/reliable and ask ourselves if we have that in what we use today as 'money'.

Scientific measurement

With the exception of a few seemingly fundamental quantum constants, units of measurement are essentially arbitrary; in other words, people make them up and then agree to use them. Nothing inherent in nature dictates that an inch has to be a certain length, or that a mile is a better measure of distance than a kilometre. Over the course of human history, however, first for convenience and then for necessity, *standards of*

measurement evolved so that communities would have certain common benchmarks. Laws regulating measurement were originally developed to prevent fraud in commerce. Today, *units of measurement* are generally defined on a scientific basis, overseen by governmental or supra-governmental agencies, and established in international treaties. The metre, for example, was redefined in 1983 as the distance travelled by light in free space in 1⁄299,792,458 of a second. Now, **that**'s precise!

What can be said of our *monetary* unit of measure today? Well, one could argue that it is about as precise as the measure for length was before the French Revolution: the King's foot! If the monarch changed, the measure changed. It was variable and not at all precise.

Of course, over time, length (as well as weight and time, for example) became measured more and more precisely. In fact, in all human **scientific** endeavors, precision of the unit of measure has improved over time. But that is NOT the case when it comes to economics, at least not monetary economics. 'Money' today, its value, is based on government fiat, which is itself a highly **elastic** measure, to use an economic concept.

How could this be? Yet, here we are: what we now use every day in all our human actions and interactions of a monetary nature, and never give a second thought to, is… well, quite simply, based only on fiat and so, quite unreliable. This is clearly an aberration in the history of Western Civilization. There is no rational explanation for this that I can see.

Final thoughts

The present financial crisis is far from over. In fact, it is getting worse. It can be described as a debt crisis, but its true nature is a monetary crisis. At its roots, it's a belated gold crisis. The landmark year was 1971, when the United States defaulted on its international gold obligations under the Bretton Woods Agreement. There have been many defaults in history, but the one forty years ago was unique in that it exiled gold internationally from the monetary system; *thereby gold has been prevented from discharging its natural function as the ultimate extinguisher of debt ever since.*

There is a direct cause and effect relationship between that decision in 1971 and the present global financial chaos. We are about to pay the price of our collective delusion as participants in this fiat only money experiment, thanks to the exponential function.

Our monetary system today did not grow naturally, nor was it the result of careful study and planning by competent scientists. In fact, as we have just seen, it has no accurate measure. So it is prudent, I would argue, to account for one's wealth not in legal tender units but in gold weight units, at least until we have Sound Money again.

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