

# Inflation and Secular Stagnation. Causes and Remedies.

Why is inflation so low? Why is economic growth so slow despite the efforts of central banks and governments?

One possible view of the world:

The identity  $MV = PQ$  is, precisely that, an identity. So as central banks inflate the money supply, why does growth not accelerate, and prices not rise? It must be because the speed of circulation of money slows to compensate for the rise in the stock of money. That is one way of looking at the problem. *Another way of looking at it is to divide the money supply into money destined to buy stuff, and money destined to buy assets.* In fact, the  $M$  in the equation above is not a scalar but a  $1 \times 2$  vector with elements  $M_s$  and  $M_a$ . Similarly,  $V$  is the  $2 \times 1$  vector with elements  $V_s$  and  $V_a$ , where the subscripts refer to stuff and assets respectively. The right-hand side is even more complicated as  $P$  is a vector of all the assets and stuff one could spend money on, and  $Q$  is the vector of all the quantities of such assets and stuff available for purchase.

Looking purely at the market for stuff, one might conclude that the lack of inflation is due to insufficient money supply. Let me repeat that because it is an important distinction: *if there isn't enough money in the market for stuff then the result will be moribund prices and output growth.* Looking at the market for assets, however, one might conclude that *there too much money in the market for assets and that this is causing asset price inflation.* With this distinction the problem facing central banks becomes clearer, even if it may not be any easier to solve. The difficulty is that we do not distinguish between money in the markets for

stuff and money in the markets of assets. But can we?

There is one way. Each individual or household privately allocates their holdings of money between money-for-stuff and money-for-assets (cash being a zero excess return asset.) If money was directed or transferred from individuals who allocate more to money-for-stuff and less to money-for-assets then it would mitigate some of the oversupply of money-for-assets and undersupply of money-for-stuff. Since individuals tend to allocate money in a waterfall fashion, satisfying first their need for stuff before turning to their need for assets, simply directing money from those who have more of it to those who have less of it would be a move in the right direction.

There are other ways. Distinguishing between money-for-stuff and money-for-assets is another way. This could be administratively burdensome. An exchange rate would arise between the two forms of money giving rise to other issues. In order for money-for-stuff to be only for stuff, it must be ineligible for purchasing any type of asset, even cash. Excess money-for-stuff will seek to convert some stuff into stores of value (hoarding) thus distorting those markets and creating allocative inefficiencies. It creates the problem of distinguishing between stuff and assets. An object could derive value from being both an asset and a good or service. The scope for parallel financial systems arises which would create both risks and opportunities. One interesting development is central bank cryptocurrency which could provide the basis of the fork in the road between money-for-assets and money-for-stuff. Establishing a correspondence between proof of work and proof of value added could be an interesting way to manage the money-for-stuff supply.

As some individuals accumulate money-for-stuff, from their talent, enterprise or diligence, they may end up with more money-for-stuff relative to money-for-assets than they desire. They will need to convert their money-for-stuff to money-for-

assets at an exchange rate, such exchange rate fluctuating relative to demand and supply. In an unequal world, any build up in money-for-stuff will result in an excess supply and the exchange rate moving so that the value of money-for-stuff falls relative to the value of money-for-assets. As money for assets is thence invested in assets, asset prices rise. This obtains the same result as an economy which does not distinguish between the two types of money. In other words, we are back to square one. The markets for stuff will be undersupplied for money relative to the markets for assets. One could fix the exchange rate between the two types of money but then a grey market would arise, among other distortions such as hoarding of quasi stores of value. A tax on assets would reduce the excess demand for assets. Given the waterfall priority of resource allocation, a wealth tax would perform the same function.

I give without proof:

1. All factors of production face diminishing marginal returns to scale except for knowledge.
2. In a knowledge economy, owners of institutional claims on knowledge (equity stakes in businesses) will accumulate wealth faster than suppliers of labour.
3. Increasing inequality is the natural consequence of free markets.
4. Inequality eventually leads to secular stagnation and stuff disinflation.
5. 3 and 4 together imply relative wealth transfers from poor to rich.

I propose without validation:

1. A budget neutral solution to disinflation and secular stagnation is to effect wealth transfer from rich to poor in the form of wealth taxes and living wages.

2. Politically, the probability of this happening is pretty small.