Monetary Policy Missteps
Byron A. Ellis – June 28, 2020

Wen and Arias in their 2014 article, "What Does Money Velocity Tell Us about Low Inflation in the U.S.?," argued that the unprecedented monetary base increase driven by the Federal Reserve's (Fed) large money injections through its large-scale asset purchase programs failed to cause at least a one-for-one proportional increase in nominal GDP. They believe that it is a result of the private sector's willingness to hoard money instead of spending it, which diminishes the velocity of money. It could also be that corporations used the unprecedented increase to buoy the financial markets.

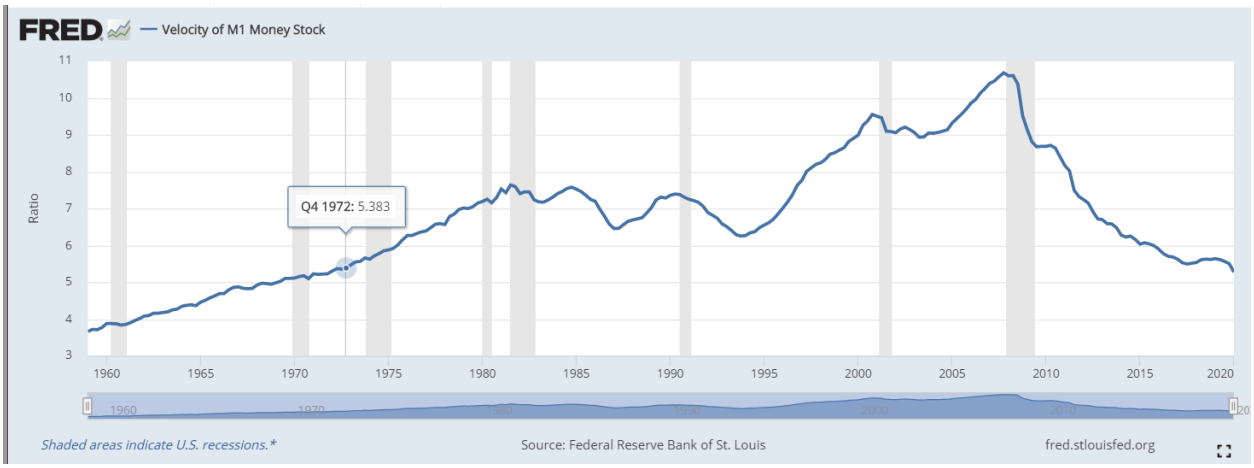
Therefore, the root cause of the falling velocity of money lies in the government policy choice of distributing the unprecedented monetary base increase to corporations and not to consumers. Consumption is approximately 70 percent of the GDP. Thus, consumers would have not hoarded or used the unprecedented monetary base increase to buoy financial markets, they would have spent it on goods and services, and the velocity of money and incomes would have not declined.

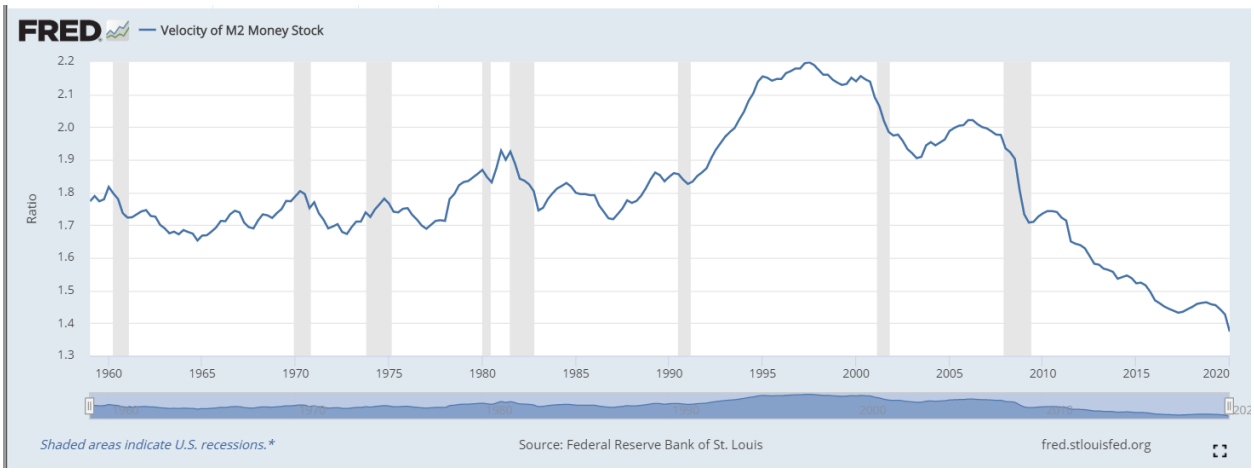
The Fed defines the velocity of money as the frequency at which one unit of currency is used to purchase domestically- produced goods and services within a given period. It is the number of times one dollar is spent to buy goods and services per unit of time (V=Y/M). If the velocity of money is increasing, more transactions are occurring between individuals in the economy. Conversely, if it is falling, fewer transactions are occurring.

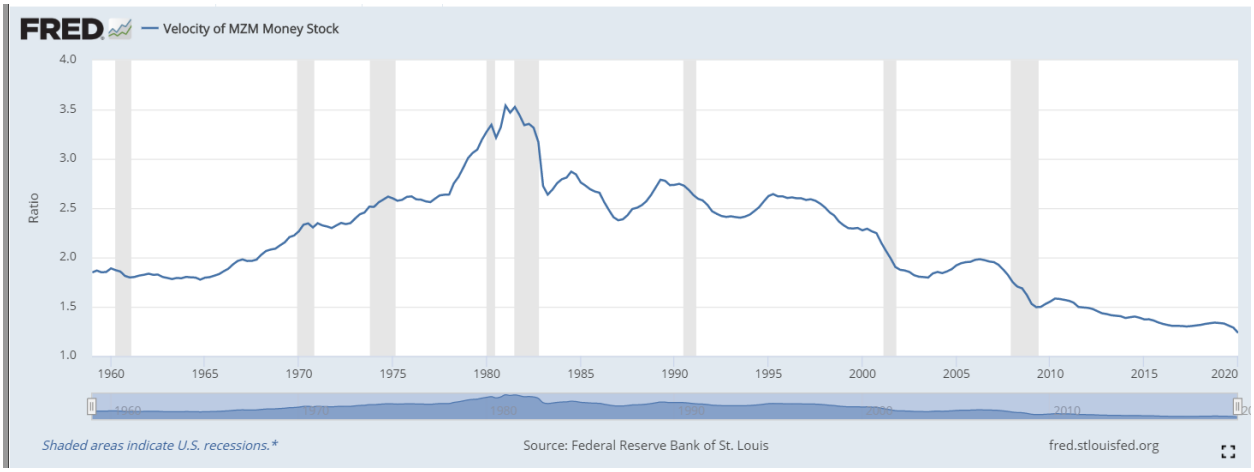
The Fed uses the frequency of currency exchange to determine the velocity of a given component of the money supply, which provides some insight into whether consumers and businesses are saving or spending their money.

The components of the money supply are M1, M2, and MZM. M1 is the narrowest component, it consists of currency in circulation (notes and coins, traveler's checks (non-bank issuers), demand deposits, and checkable deposits). The M2 component includes M1 in addition to saving deposits, certificates of deposit (less than $100,000), and money market deposits for individuals. And, MZM (money with zero maturity) is the broadest component and consists of the supply of financial assets redeemable at par on demand: notes and coins in circulation, traveler's checks (non-bank issuers), demand deposits, other checkable deposits, savings deposits, and all money market funds.

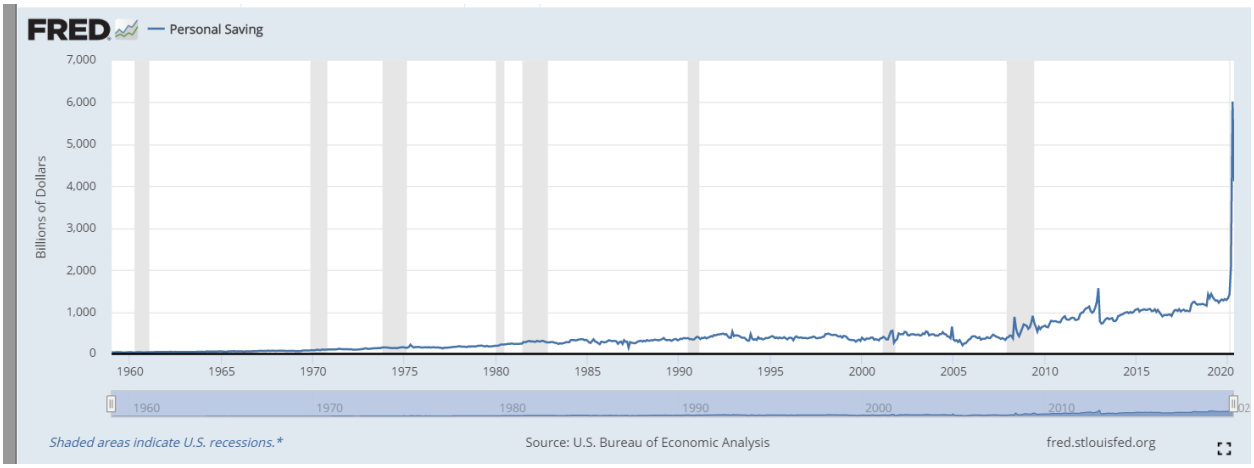
The Fed believes that a decreasing velocity of M1 might indicate fewer short-term consumption transactions are taking place. It considers shorter-term transactions as consumption consumers make on an everyday basis. Comparing the velocities of M1 and M2 provides some insight into how quickly the economy is spending and how quickly it is saving. The velocity of MZM helps determine how often financial assets are switching hands within the economy. The velocities of M1, M2, and MZM are depicted below:







The velocity of money for all three components of money has been declining; for M1 since the recession of 2008, M2 since the late nineties, and MZM since the early eighties. An indication that consumers are spending less or saving more. However, personal saving, as shown in the graph below, did not increase significantly, except for during the pandemic due to consumers staying home and withholding from purchases.



If neither consumption nor saving is increasing at a significant rate and one or both are falling, then consumers' disposable income is also falling, since disposable income is equal to consumption plus saving ($Y_d = C + S$). So, based on the M velocity of money formula ($V = Y/M$), a fall in consumers' income causes the velocity of money to fall.