

"The Public Banking Act" Should Allow for Individual Federal Reserve CBDC Bank Accounts ("FedAccounts") To Transform Monetary Policy

Adjusting interest rates on Wall Street is ineffective in stimulating and too brutal in slowing the economy, but injecting stimulus money and adjusting interest rates on small individual consumer Federal Reserve bank accounts could impact consumer demand more effectively and more immediately. Note the author's proposal for stopping inflation using "FedAccounts" at: <https://www.youtube.com/watch?v=nnMT7DVyK0g>

This follows from the *money flow paradigm* in the author's book "Optimal Money Flow" which is summarized on YouTube at: <https://www.youtube.com/watch?v=-hgBD3ZEhIM>

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Abstract

The Federal Reserve uses a supply-side tool to stop inflation by raising interest rates in financial markets causing businesses that rely on loans to cover initial costs each year on farms and retail establishments and pay back those loans only after the harvest comes in or the holiday season finally covers costs to produce a profit, to cut back employee working hours, lay off workers and close outlets. Countering inflation by cutting back supply to reduce demand makes no sense when a demand-side tool can be created to stop inflation directly and more effectively.

This research, which is based on the *money flow paradigm* as explained in the author's forthcoming book *Distorted Money Flow*, examines the diversion of the flow of money in recent decades from Main Street to Wall Street that has resulted in a buildup of both private debt and public debt without which the people on Main Street would be unable to buy back the value of the goods and services they are producing, and examines a way of achieving much tighter and more immediate control of overall consumer demand by implementing a U.S. dollar based Central Bank Digital Currency (CBDC) through individual Federal Reserve bank accounts called "FedAccounts" for every American.

This is achieved by modifying **The Public Banking Act** as recently proposed in Congress to create a digital cybersecurity block-chained Federal Reserve smartphone bank account for every American. Just as ATMs can be used by competing banks for a fee, private banks could be offered a fee to host these Federal Reserve bank "FedAccounts" for individuals who prefer physical rather than direct online computer and smartphone digital banking.

To focus these accounts on consumers with a high marginal propensity to consume and to avoid competing with commercial banks for large accounts, these accounts could be restricted to one account per Social Security number and interest could be earned only on some base amount (e.g. \$10,000 or less). Initially, \$1,000 would be put into each account, which could not be withdrawn until after age 70. However, account holders could add additional money up to a specified annual limit until the total in their account reached the base amount. Money above the base amount would earn no interest. Any money above the initial \$1,000 could be withdrawn at any time along with interest earned. Post offices could also allow you access to your FedAccount when internet access was inconvenient.

Whenever excessive inflation threatened, the Federal Reserve could set **high interest rates** for these accounts, increase the annual **contribution limit** allowed for that year, and increase the **base amount** to encourage savings and discourage consumer demand, while keeping interest rates somewhat lower in the financial markets to encourage an increase in the supply of goods and services to tightly control inflation.

In the face of an economic downturn, the interest rate on savings could be lowered and the Federal Reserve could inject money into these individual Federal Reserve bank accounts promoting cash withdrawals and spending to stimulate consumer demand as necessary to restore the economy to full employment. Consistent with **The Public Banking Act** as recently introduced in Congress, the Federal Reserve bank would be authorized to offer small loans to individuals and small businesses to further encourage consumer demand and business activity and employment.

JEL Classification: E00, E02, E2 (E20, E21, E24, E25), E3 (E31, E32), E4 (E41, E42, E43, E44), E5 (E51, E52, E58)
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=> How to Stop Inflation Without Causing a Recession <=

Don't repeat our historically dysfunctional approach to stopping excessive price inflation. The Federal Reserve uses a supply-side tool to stop excessive inflation by raising interest rates that works by constraining business enough to cause closing of outlets, a cutback in working hours, and layoffs that suppresses consumer demand. But individual Federal Reserve "FedAccounts" could be created for every American to provide the Federal Reserve with a demand-side tool to directly reduce demand pressure to stop inflation without throwing the economy into recession.

When the Federal Reserve raises interest rates, it suppresses supply for seasonal, cyclical and other businesses that depend on short term liquidity to maintain and establish inventory and cash flow. It suppresses business. Farmers borrow money from the financial system to prepare their crops in the spring and harvest the crop in the fall, and pay it back after the harvest is sold. Retailers borrow to cover costs until the holiday season revenues enable them to pay off loans.

But production is cut back when borrowing costs increase as interest rates rise. This traditional approach suppresses both supply and demand as workers find less work and their incomes fall. High interest rates also cause businesses to put off long-term investments in plant and equipment that would increase supply. The economy slides into recession.

Inflation occurs when too much demand for goods and services is chasing too little supply. The financial markets exist to offer liquidity to businesses to maintain or expand the supply of goods and services. Countering the rapidly rising prices requires increasing supply while reducing demand. Current supply shortages call for encouraging supply. *But the traditional Federal Reserve policy approach will do the opposite of what is needed.*

Sure, suppressing business to lay off workers to reduce demand will work if you slam on the brakes hard enough. But trashing our economy to stop inflation is not necessary. What the Federal Reserve is missing is a demand-side tool to ratchet down demand directly when markets for goods and services become overheated.

Under the **Postal Savings Act** of 1910, our post offices served as banks for more than 50 years from 1911 to 1966. You could go to any of our 34,000 post offices to cash a check or set up a savings account. The **Public Banking Act**, which was recently introduced in the Congress to create postal savings accounts, could be modified to provide the Federal Reserve with a demand-side tool to curb excessive inflation without throwing our economy into a recession.

Demand can be tamped down and supply encouraged by creating Federal Reserve savings accounts (FedAccounts) and offering **high interest rates** in those savings accounts on balances up to some specified limit, such as \$10,000 (with no interest earned on amounts above that limit), while leaving the rates in the New York financial markets relatively low to stimulate, not suppress, supply. (See YouTube video at: <https://www.youtube.com/watch?v=nnMT7DVyK0g>)

Higher interest rates will encourage savings. Saving more and spending less is obviously what is needed when too much money is chasing too few goods. If we offer high enough interest rates in postal bank accounts dispersed in our 34,000 post offices around the country, excess demand can be reduced enough to stop inflation without forcing the economy into an unnecessary recession. This approach withdraws money from the economy by offering a return on investment, not by taxation. People will still be able to purchase their necessities, but will be motivated to delay or cut back on luxuries until the economy cools off and postal bank interest rates return to normal. It is voluntary, but very effective if the interest rates are set high enough.

This will especially benefit the elderly who need a good return on their savings to help finance their retirement. Encouraging more people to save more money will also serve as an automatic stabilizer by providing people with the savings they need to ride out economic downturns, which, in turn, will make such downturns shorter and less extreme - protecting profits and tax revenues.

Note that the Federal Reserve is independently financed from its bank fees and investments, which produce enough revenue such that the Federal Reserve donates about \$80 billion to the U.S Treasury each year. The Federal Reserve, not the taxpayers, can pay for setting up and operating the postal banks. The Federal Reserve could also help pay for postal employee pensions. This will reduce, not increase, the overall tax burden.

With reasonable limits on the savings and loan amounts restricted to one account per person or small business, these postal banks can avoid interfering with the normal functioning of the commercial banking industry. Private banks, credit unions, and ATM machines could be given a fee for providing a physical location to access these Federal Reserve Bank "My America" personal savings accounts in addition to or as an alternative to banking at your local post office.

When the opposite conditions develop with low demand, high unemployment, and the start of a deflationary cycle, postal banks could offer small loans at relatively low interest rates to individuals and small businesses. Such a loan program has already been proposed in bills formulated in both the Senate and the House in the last few years such as Senator Kirsten Gillibrand's **Postal Banking Act** as Senate bill **S.2755** or Representative Rashida Tlaib's **Public Banking Act** as House bill **H.R.8721**. These bills are aimed at helping unbanked and underbanked people who live paycheck to paycheck and suddenly face job loss, a medical emergency, an automobile accident, or some other event that forces them to go to loan sharks, pawn shops, payday loan dealers, or "cash now" providers who charge exorbitant interest rates.

Federal Reserve FedAccounts offering high interest rates could attract middle-class and working-class people, and those with high marginal propensities to consume who tend to spend most of their income, except when offered an exceptionally high interest rate on savings. This will provide the Federal Reserve with a demand-side tool to directly impact Main Street instead of relying on indirectly influencing demand through a supply-side tool aimed at Wall Street. Targeting demand through personal bank accounts to stop excessive inflation or, alternatively, to stimulate demand in a weak economy will be much more cost effective in offering more bang for the buck, will be more direct and have a more immediate impact, use less money and be less disruptive of our economy than current Federal Reserve supply-side stabilization strategies.

Preface

The *money flow paradigm* addresses the following issues:

1. How fundamental change from supply-side to demand-side economy flipped Say's Law.
2. The diversion of income and wealth from Main Street to Wall Street as fixed costs replace variable costs and technology moves us toward a "zero marginal cost society."
3. What wealthy individuals and corporations actually do with their ever-increasing wealth.
4. The distortions in financial markets and the economy that are caused by this enormous diversion of wealth where workers can no longer buy back the value they are producing.
5. How financialization favors shareholder profits over labor and real capital investments.
6. Why ever-increasing private and public debts have been necessary to make up for the loss of consumer purchasing power with investor profits favored over labor and capital.
7. Why government expenditures often crowd-in rather than crowd-out private expenditures in moving toward full employment while avoiding excessive inflation.
8. Why monetary policy is ineffective and must be empowered with universal FedAccounts.

Distorted money flow creates an unbalanced economy. Economic analysis often uses static concepts such as dividing up a pie, or comparative statics where the unemployment rate in one period is compared with that in the next period. An entirely different picture and understanding of our economic system can be obtained with dynamic analysis using money flowing through the economy just as blood flows through the body. Moreover, instead of moving from one equilibrium state to another, we can obtain a much better understanding of our economy when we view it as in disequilibrium with some forces moving toward equilibrium and other, disruptive forces, moving the economy away from equilibrium. In this view our economy is in a constant struggle between conflicting forces and never actually achieves equilibrium in any real sense.

At the microeconomic level a consumer, a business or a government official may think that when they spend the money it's gone. But from a macroeconomic perspective it's not gone. It just moves on. The very nature of money flow can change over time with money that used to be flowing primarily to labor and capital now flowing to profits as industry becomes more concentrated as start-ups and small firms are taken over or run out of business by larger firms as "creative" destruction is replaced with *competition* destruction. Money that used to flow to Main Street is now flowing to Wall Street, to the financial economy instead of the real economy.

Money flows around our economy with a good deal of it passing through government hands at the national, state, and local levels. The dictates of government taxation, regulation and expenditure can greatly influence the flow of money through our economy. As government policy changes, the money flow changes in terms of the amount and velocity of the money flowing through different sectors and entities in our economy. We like to think of our economy as an arena where the free market forces of supply and demand operate independently of the government, but the very nature of those supply and demand curves are inherently shaped by government laws, policies, and procedures. The special interests who finance the political campaigns of our elected officials and who often influence and sometimes write those laws, policies and procedures want us to ignore their influence on supply and demand and pretend that market forces are natural and immutable. This distorted money flow can be corrected with proper fiscal and monetary policies to produce a healthier, faster growing, dynamic economy for everyone, including with the use of new Federal Reserve smartphone postal bank FedAccounts.

I. Introduction

Understanding Distorted Money Flow

In economics we have a natural tendency to think in static terms. An individual, a business or even the government thinks that “when we spend the money it’s gone.” But it’s not gone. It just moves on to the next person, business or other economic entity. Money flows through our economy the way blood flows through our body. Money may flow rapidly through some parts of the economy and more slowly through others. It may get to the financial centers of our economy, but by-pass other areas such as the inner cities or rural areas leaving them to economic decay. A distorted money flow away from inner city neighborhoods and rural regions has led to racial unrest in the inner cities and a “tea party” populist rebellion in rural areas.

The *money flow paradigm* explains that power will always tend to concentrate at the top of the wealth pyramid with less and less money flowing down toward the middle and bottom.¹ Eventually so much money flows to the already wealthy that the financial economy becomes separated from the real economy where goods and services are actually produced. In recent decades the wealth distortion has become so great that the people on Main Street have been unable to buy back the value of what they produce that they have had to go deep into debt and be supported by government deficit spending to attain and maintain full employment. However, since the wealthy put the excess money they acquire into the financial markets on Wall Street by purchasing stocks and bonds, interest rates are kept extraordinarily low which discourages people on Main Street from saving money and, instead, encourages them to go further into debt. This contributes to overall financial instability. Without savings people have no financial resources to fall back on in the face of a job loss, medical emergency, storm damage or other disruption. Exceptionally low interest rates discourage people from saving any of the stimulus money they receive, which can contribute to a sudden shift from insufficient consumer demand to excessive consumer demand in short order.

The past few years with the COVID-19 pandemic have produced an abrupt and temporary deviation from the previous prevailing pattern toward insufficient consumer demand and deflation. Only lately have prices and wages started rising quickly with supply shortages and job openings unfilled as people sought to avoid catching the coronavirus and temporarily benefited from stimulus payments. But these stimulus payments are essentially “helicopter money” transferred directly from the government to individuals to counter the economic impact of the COVID-19 pandemic and not a normal, fundamental increase in consumer demand coming from some improvement in the nature of the economy. Such a one-off round of payments does not change the fundamental deflationary nature of our distorted money flow and the chronic inadequate level of consumer demand relative to the enormous global supply that has been only briefly interrupted by the COVID-19 pandemic. Moreover, the supply shortages are temporary and evoke the old saying that “the solution to high prices is high prices and the solution to low prices is low prices” which means in this case that the extra profit offered by the higher than usual prices will most likely invoke an increase in supply, especially where wages

¹ See George Cooper in this short YouTube video on the impact on the economy of our distorted money flow and the role of government: <https://www.youtube.com/watch?v=tw-D9Y8iEOs&t=155s>

have failed to rise commensurately with the price increases, to meet demand and bring inflation down or even return to the more chronic deflationary pressures.

In contrast to this recent development, for the past several decades the build-up of wealth for rich people and large corporations has led to inflation in the stock and bond markets and deflation in other parts of the economy including real wage deflation as wages have stagnated or even declined in real purchasing power. Such a decline in purchasing power increases the real debt burden of existing debt further depressing consumer demand and leading to further deflation ultimately threatening to produce a debt-deflation spiral with rising unemployment and a drop in labor force participation as the long-term unemployed drop out of the labor market. This is especially important now that poor and middle-class individuals and families have tried to compensate for this loss of purchasing power by taking on enormous amounts of private debt in recent years. With such a large private debt overhang, even a mild deflation could throw the economy into a powerful downward spiral. The federal government has countered this with deficit-financed stimulus spending to supplement private debt to move the economy toward full employment.

The COVID-19 pandemic has added to these money flow distortions by shifting demand dramatically from services such as travel and restaurant dining which require social interaction to products that can be ordered over the internet and delivered directly to one's home. The burst in demand for products from overseas producers has resulted in a logjam at coastal ports which, in turn, has driven prices upward. Domestic production has been handicapped by workers who are unable to do their work from home and are reluctant to return to their workplace in the face of the COVID-19 pandemic. This distorted money flow drives prices and wages upward in the absence of adequate monetary and fiscal policy tools to more tightly control consumer demand.

The velocity of money, V , varies by who gets the money and what they do with it. Poorer people may use the money immediately to put food on the table or pay the rent, while wealthy people may buy expensive paintings, exclusive properties or more stocks and bonds with whatever additional money they acquire. Income and wealth inequality leads to distorted money flow where ever greater economic inequality leads to a chronically falling velocity of money. The aging of our population also contributes to a decreasing velocity of money as the elderly demand less in housing and transportation as well as in goods and services although more in health care costs in their final years. Sometimes money moves quickly through the hands of those who directly produce goods and services, and other times money can get caught up in a loop where it moves around financial markets without generating any real product or service.

Currently relatively high interest rates on savings can be obtained by purchasing U.S. Treasury I-Bonds, which have been offering an interest rate of over seven percent. However, such bonds can only be purchased in the primary market directly from the U.S. Treasury for a thirty year period with a high penalty for early withdrawal. The U.S. Treasury does not permit a secondary market to buy and sell these I-Bonds. Consequently, there is no way to legally purchase these I-Bonds through an intermediary. Consumers with the highest marginal propensities to consume are the least likely to know about these bonds, much less take advantage of them. In the extreme case of a consumer with the highest marginal propensity to consume, who must spend every penny to cover food and shelter, that consumer is unlikely to

take advantage of the U.S. Treasury I-Bonds or any other high interest rates savings opportunity.

However, there will be some high marginal propensity to consume consumers who are currently meeting their basic living expenses and could afford to peel off some of their income for savings and still meet their essential needs if the interest rate were high enough and the accounts easy to access and widely known. There may be other consumers with relatively high marginal propensities to consume who are already saving some money, but not as much as they would if they had convenient access to a high interest rate savings account.

These types of consumers are the targets for the proposed Federal Reserve bank accounts ("FedAccounts"). They can enable the Federal Reserve to get the most bang for the buck by offering these high interest rate savings accounts. Since prices are set by the marginal consumer, and not the average consumer, getting these high marginal propensity to consume consumers to cut back somewhat on spending will stop inflation much more quickly and much more effectively, without additional taxation or adding to the national debt, than the current Federal Reserve monetary policy of raising interest rates in the New York financial markets through a quantitative tightening (QT) policy.

Of course, the wealthiest consumers who naturally have the lowest marginal propensities to consume are unlikely to cut back any of their spending although they can certainly be expected to shift some of their savings to any high interest rate savings opportunity such as the proposed FedAccounts should they become available. To discourage this transfer of funds from the private banks, a base limit such as \$10,000 is set for the FedAccounts with no interest earned on balances above the base limit.

When we think in static terms, we like to imagine the economy is in equilibrium where all markets are clearing properly and resources are being allocated efficiently, but in reality, the markets and the economy as a whole can be in disequilibrium with a distorted money flow that leads to high levels of unemployment. Even when unemployment is low and prices are stable, distortions in our economy can gradually cause bubbles to build up leading to irrational exuberance in the stock market followed by a sudden downward spiral upon "Minsky moments" as these sudden reversals have come to be known. Consequently, the government must be constantly on the lookout for serious problems developing in our economy. To avoid economic downturns, Congress should authorize the Federal Reserve to use the most appropriate tools, including Federal Reserve individual-person bank accounts, to quickly and effectively guide the economy back to full employment and maximum sustainable economic growth without excessive inflation.

Introduction to the *Money Flow Paradigm*

Economics is a story about how the economy ought to work in theory versus how it actually works in practice. A key aspect of this story is the role that the government plays in the economy. Various paradigms offer differing explanations of the government's role. The traditional story is that under the free enterprise system the economy has a natural tendency to move toward equilibrium except for temporary unexpected supply shocks or demand shocks such as the disruption caused by the COVID-19 pandemic.

Minsky (1986)² challenged this benign view of economics arguing that in reality the free enterprise system was prone to naturally occurring, although still largely unexpected, systematic, substantial and dramatic movements away from equilibrium beginning with “Minsky moments”. More recently, Dalio (2018)³ described inherent short-term and long-term financial debt crises. Cooper (2008)⁴ extended the Minsky hypothesis in his rejection of the efficient market hypothesis, and Lo (2018)⁵ offered his alternative adaptive market hypothesis. Akerlof (1970)⁶ won a Nobel prize in economics by revealing inefficiency in markets with asymmetric information, while Kahneman (2011)⁷ and Thaler (2015)⁸ won Nobel prizes for developing the field of behavioral economics, which rejects the traditional assumption of rational, independent economic decision makers, as explained earlier by Ariely (2008).⁹ *Modern Monetary Theory* (MMT), as developed by Kelton (2020)¹⁰ and her colleagues, has provided a more comprehensive understanding of how our economy works with the Federal Reserve and other government entities dominating and controlling the market for U.S. treasuries and other related short-term securities. These scholars and many others have provided the basis for our analysis.

This research is about the *money flow paradigm* which contends that disequilibrium is the natural state of economics (not the equilibrium economics you learned in your Principles of Economics course) and maintains that government is the heart of the free enterprise system (not an alien, outside force interfering with it). Government sets the laws, rules and regulations that determine the structure of markets and ultimately the supply and demand configurations. Following Piketty,¹¹ Saez¹² and others, the *money flow paradigm* sees the free enterprise system

² Minsky, Hyman P. *Stabilizing an Unstable Market*. Prepared for the Bank Credit Analyst Conference. New York Plaza Hotel, 1986.

³ Dalio, Ray. *Principles for Navigating Big Debt Crises*. Bridgewater Associates, Westport, CT. 2018.

⁴ Cooper, George. *The Origin of Financial Crises: Central Banks, Credit Bubbles and the Efficient Market Fallacy*. New York: Vintage Books. 2008.

⁵ Lo, Andrew W. *Adaptive Markets: Financial Evolution at the Speed of Thought*. Princeton University Press. 2018.

⁶ Akerlof, George A. “The Market for ‘Lemons’: Quality Uncertainty and the Market Mechanism.” *Quarterly Journal of Economics*, 84(3), pp. 488-500. 1970.

⁷ Kahneman, Daniel. *Thinking Fast and Slow*. New York: Farrar, Straus and Giroux. 2011.

⁸ Thaler, Richard H. *Misbehaving: The Making of Behavioral Economics*. New York: W. W. Norton & Company, Inc. 2015.

⁹ Ariely, Dan. *Predictably Irrational: The Hidden Forces That Shape Our Decisions*. New York: HarperCollins Publishing. 2008.

¹⁰ Kelton, Stephanie. *The Deficit Myth: Modern Monetary Theory and the Birth of the People’s Economy*. New York: Hachette Book Group, Inc. 2020.

¹¹ Piketty, Thomas. *Capital in the 21st Century*. Harvard University Press. 2013.

¹² Saez, Emmanuel. “Income and Wealth Inequality: Evidence and Policy Implications.” *Contemporary Economic Policy*, 35(1), pp. 7-25, January 2017.

as inherently moving toward extreme income and wealth inequality that produces a disequilibrium gap between aggregate demand and aggregate supply.

Why Inflation is Temporary and Deflation Has Become a Major Threat

One result of this distorted money flow is the dysfunctionality of the Phillips curve, which posits a tradeoff between unemployment and inflation. In earlier decades, economists thought that the lower bound for the non-accelerating inflation rate of unemployment (NAIRU) might be around six percent unemployment. However, prior to the recent pandemic the unemployment rate fell below four percent without triggering excessive inflation. In fact, inflation has averaged below the Federal Reserve's target rate of two percent even in recent periods of low unemployment. The pandemic has temporarily created supply shortages and stimulus spending has temporarily reinforced demand. But these forces will dissipate as the pandemic recedes and stimulus ends.

The *money flow paradigm* provides a simple explanation. Low unemployment did not trigger inflation in recent decades because so little money was flowing to workers that even at low unemployment levels, aggregate demand for domestic goods and services was weak relative to aggregate supply. The government has been able to temporarily increase aggregate demand in response to the COVID-19 pandemic by providing stimulus payments targeted at low income individuals and households with the highest marginal propensities to consume. This has created a temporary inflationary effect. However, in general, the expansion of the global supply chain and the availability of cheap labor (with workers overseas being paid subsistence wages to produce a wide variety of goods and services) have together created what Alpert (2013)¹³ called "*The Age of Oversupply*."

First of all, it is important to acknowledge the difference between real inflation and measured inflation. Ideally there would be (or perhaps already is) an online app that will tell you whether your family is experiencing inflation in terms of the goods and services you actually purchase.¹⁴ Any inflation measure that is appropriate for someone else with an entirely different consumption pattern may be entirely useless for you if it doesn't come close to matching your consumption pattern. If you are consistent in what you purchase each month, then you can create your own inflation index quite easily. Just create a list of the services (including entertainment and travel) and products that you typically purchase each month including such things as utilities (water, electricity, etc.) and rent (or implicit rent if you are a homeowner) and the cost of that market basket becomes your own personal price index.

The U.S. Bureau of Labor Statistics creates the consumer price index (CPI) based on a fixed market basket of goods and services. Attempts are made to adjust that market basket somewhat over time, but substitutions within that basket, changes of the quality of goods and services in the basket, and new products outside of that basket make tracking inflation with a fixed market of goods and services quite difficult. Creating a market basket that is really representative of the typical family's market basket is even more difficult. The CPI does a poor job of measuring the market basket of wealthy individuals who purchase large quantities of

¹³ Alpert, Daniel. *The Age of Oversupply: Overcoming the Greatest Challenge to the Global Economy*. New York: Penguin Group, 2013

¹⁴ The online smartphone apps *Flipp* and *Basket* may be helpful to you in this regard.

stocks and bonds. Consequently, money flowing into stock and bond markets driving up their prices to extraordinary levels is not well represented in the CPI.

Although inflation generally hurts low income and rural households the most,¹⁵ inflation can have a positive effect on people with high levels of debt with fixed loan rates such as a fixed rate thirty-year mortgage.¹⁶ Fixed debt becomes less of a burden when it remains constant as prices and wages rise. The higher wage makes that fixed debt easier to manage.

When the government spends too much and taxes too little, economists warn of inflation with too much money chasing too few goods driving up prices. But what if the online goods or services we are pursuing with additional cash are practically unlimited in supply? Are we now approaching what Rifkin (2014)¹⁷ called "*The Zero Marginal Cost Society*." As a result of a combination of the COVID-19 pandemic and more mass shootings at public venues and private workplaces, it has been safer to work at home and interact socially online. These concerns and opportunities to cut travel and business rental costs have encouraged online meetings using Zoom and similar online applications. A Russian hacker cyberattack on Colonial Pipeline produced a temporary spike in gasoline prices. This further discouraged travel. President Vladimir Putin of Russia and Crown Prince Mohammed bin Salman Al Saud of Saudi Arabia clearly preferred Donald Trump to Joe Biden and are limiting the supply of crude oil to keep gasoline prices high in the United States to create a political liability for President Joe Biden.

Traditionally, it was the younger households which drove up the price of goods and services with their needs for housing, automobiles, clothing and the like. Today, with fewer marriages and lower birth rates, younger people spend more time interacting online. If you are an elderly retired person, most of what you purchased in your younger years involved the physical world -- shoes, shirts, going out to a nice restaurant or attending sports or other entertainment venues. But for younger folks today the world is changing and more of their marginal money is now going to the online world -- access to Netflix, tokens in online games, extra payments for premium level access to online media sites such as Classmates, LinkedIn, Academia, Google Workplace services, and now certain groups in Facebook. Meanwhile, elderly people tend to have accumulated too much stuff and often reduce their purchases as they get older exhibiting a low marginal propensity to consume. All this has reduced the aggregate demand for traditional goods and services.

As a result of a combination of the COVID-19 pandemic, more mass shootings at public venues and private workplaces, and opportunities to cut travel and business rental costs, online meetings using Zoom and similar applications are increasing rapidly. More often than not, the premium information this extra access provides already exists. Your payments don't create it, but just give you access to it. What do many of these relatively new opportunities to spend your money online have in common? Answer: Zero, or very close to zero marginal costs.

¹⁵ Franck, Thomas. "[GOP report shows inflation hurts low-income Americans the most, blames Democrats](#)," *CNBC*, November 15, 2021.

¹⁶ Morrow, Allison. "[Why inflation can actually be good for everyday Americans and bad for rich people](#)," *CNN Business*, December 1, 2021.

¹⁷ Rifkin, Jeremy. *The Zero Marginal Cost Society: The Internet of Things, the Collaborative Commons and the Eclipse of Capitalism*. New York: St. Martin's Press, 2014.

When marginal costs are zero, extra revenue goes straight to the bottom line (profits). As an increasing portion of our marginal expenditures goes into the online world, inflation shows up in profits to investors and stock prices with little, if any, going to drive up prices for offline goods and services. Without government subsidies and transfers, workers get so little of the additional money that they go deeply into debt and the little money they do get goes increasingly into making their interest payments. Consequently, almost all of the marginal money spent online goes to Wall Street with little, if any, going to Main Street. The financial economy has become increasingly separate from the real economy driving up stock and bond prices higher and higher.

As if lights-out manufacturing was bad enough with machines working throughout the night producing products, we now face self-driving vehicles being automatically loaded and unloaded with little help from workers. These savings will mostly go to the bottom line. A multitude of electric vehicles is poised to hit the market, eventually undermining the market for gasoline. Some services that used to be provided locally are provided by people in other countries such as India, where English is the official language, so that money flows there and reduces the need for such services within the United States.

All that money from President Biden's stimulus and infrastructure programs is likely to temporarily drive up the prices of some ordinary goods and services. While some prices such as crude oil, gasoline, lumber and some foods may rise in the short run, there is little prospect of aggressively rising prices for most goods and services in the longer term. With the cost of producing solar and wind energy falling, gaining access to free energy from the sun is rising. A breakthrough in battery or related technologies would spur the transition to electric vehicles to further drive down transportation and other energy related costs. Panasonic has come up with a new, promising breakthrough lithium battery called "4680," lithium mining is rapidly expanding in the U.S., and a new battery based on the process of rusting is also in development.

Summary, Conclusions and Transition

The purpose of this research is to examine the role of government in directing the flow of money in the economy and to present a proposal for altering the money flow both by changing our fiscal tax transfer system and improving the Federal Reserve's control of the money supply in response to pandemics such as the COVID-19 crisis and other threats to the health of our economy, and to avoid excessive inflation and maintain full employment while maximizing productivity and sustainable growth. Under the *money flow paradigm*, the government must monitor the quantity and velocity of money as well as the distribution of money in the economy as the economy typically finds itself caught in a chronic disequilibrium between aggregate demand and aggregate supply, which requires that the government make appropriate adjustments to maintain a healthy economy.¹⁸ The goal is to make the most efficient and

¹⁸ Everyone with a Social Security number could be given shares in the United States of America (USA). These shares could not be traded on the stock exchange, but would pay dividends. When aggregate supply greatly exceeds aggregate demand, the number of shares and/or the dividends per share could be increased. The government would pay the dividends out of a tax on financial transactions and an increase in the capital gains tax. This could complement and build upon the "baby bond" proposal that has become increasingly popular in recent years.

effective use of the resources available and not unnecessarily waste them with poor economic policy using inadequate and out-of-date supply-side policy tools.¹⁹

This requires that Congress pass legislation by adjusting the proposed “*Public Banking Act*” to provide the Federal Reserve with individual digital cybersecurity FedAccounts as a demand-side policy tool so that the Federal Reserve monitor and respond to both short-term business cycles and long-term distortions affecting the national and international economies for extended periods (e.g., decades or longer). In moving away from introductory economics textbooks toward the real world of economics, we find that disequilibrium dominates with the promise of equilibrium in the long run as a distant hope or aspiration that never quite comes about in reality. Breakthroughs in technology persist in creating or adding to such disruptions and may be expected to increase in frequency and intensity in the future.

¹⁹ For an alternative approach that provides each American over the age of 18 with access to a Universal Fund, read the book: “*Citizen Capitalism: How a Universal Fund Can Provide Income and Influence to All*” by Lynn A. Stout, Tamara Beinfanti, and Sergio Alberto Gramitto, Berrett-Koehler Publishers, 2019.

II. The Rise and Fall of Say's Law

The Establishment of Say's Law

Economics became widely known as what Thomas Carlyle called "the dismal science" when Thomas Malthus predicted that the population growth rate will always threaten to exceed the food supply growth rate. Therefore, there could never be too much food, because the population growth would at least keep up with (subsistence) and at worst exceed (starvation) the available food supply. Demand would always increase to consume whatever could be supplied. This led to what has become known as Say's Law: "Supply creates its own demand" and the basis for supply-side economics. Economic growth, according to the dismal science, was always a supply-side phenomenon. You could take demand for granted and just focus on trying to increase supply.

For centuries we saw humanity spreading out across the continents and populating the far corners of the world. It seemed like humans would eventually overpopulate the world. Eventually, we would need to find another planet to colonize to keep on growing. Population growth was a given, until it wasn't. Almost out of the blue, the unexpected happened. As countries reached higher levels of economic development, their population growth rates slowed.

Early on a Monday morning, I was about to begin my lecture about the international income distribution to my economics class at Notre Dame. But my students were all excited. They were all talking with one another about the great football game on Saturday where Notre Dame won at the last minute with an amazing play. I couldn't get their attention. Finally, I said: "Today we are going to talk about birth control." My students were shocked. "Birth control?" they exclaimed. "The professor is going to talk about birth control. This is a Catholic university. He can't talk about birth control." But I persisted. "What is the most effective birth control method in the world?", I asked. The students continued murmuring in apprehension and concern. Finally, I said: "The most effective birth control method in the world is per capita income. When per capita income reaches about \$6,000 per capita, birth rates drop like a rock."²⁰ With rising per capita income, birth rates drop. In rich countries, they have dropped below the replacement rate of an average of 2.1 children for each woman in her reproductive years.

Japan points the way toward world population decline

Japan is ahead of other countries in the transition to an economy where an aging population is dramatically increasing the ratio of non-working elderly relative to a shrinking active workforce. The elderly generally demand fewer products and services except for health services than young families, but eventually need more personal medical services. Health costs rise while government revenues fall, and aggregate demand is sustained through massive deficit spending

²⁰ Historically, having a child was viewed by some people as an investment, especially after the advent of agriculture, and during the industrial revolution with the use of child labor in manufacturing. Eventually, this developed into a slave trade where the costs of raising a child were bypassed with the capture of fully grown slaves from Africa. Entrepreneurs in London could invest in the slave trade where the hard work of others provided a good return on investment. Hard work paid off, but not for the slaves. Their hard work paid off for the investors. This natural product of capitalism and free enterprise was abolished through government intervention when laws and regulations were passed banning child labor and slavery.

necessary to keep the workforce fully employed. In spite of the rising deficit and health costs, and in the absence of sustained government stimulus spending over the long run, deflation with falling prices and wages threatens to dominate, rather than the widely feared and reviled inflation, as measured by the typical market basket of goods and services used to calculate the consumer price index. As baby boomers die and the population declines, consumer demand shrinks, while technology expands and speeds up the global supply chain.

Over the long run, in the face of an increasing money flow distortion where a larger and larger proportion of the quantity of money flows to the wealthiest people who have the lowest marginal propensities to consume, aggregate demand threatens to fall short of aggregate supply, because the bottom 90 percent of the population can no longer buy back the value of the goods and services they are producing unless government maintains and expands its flow of stimulus money to them, paid for through deficit spending or the predistribution (more money to Main Street before taxes) and/or redistribution (more money to Main Street after taxes) of wealth.

Over 90 percent of the world's countries currently have a birth rate below the population replacement rate with at least 20 countries expected to cut their native populations in half by 2100 including Japan, Italy, Spain, Portugal, Germany, Thailand and South Korea, among others. Russia's population peaked at around 147 million and is heading down to 142 million as a result of an aging population, falling birth rates, relatively higher death rates, and emigration (especially young people) exceeding immigration. China's economy has recently reached a level of per capita income over \$10,000 with its population expected to peak in 4 years and then decline significantly thereafter. Populations are increasing primarily in poor regions of Africa such as Nigeria and Ghana, where the natural resource curse keeps most of the population in poverty with just over \$2,000 income per capita.

Around the turn of the millennium, millions of people in China were moving out of poverty into what for many would become what we would call a lower-middle-class lifestyle. This improvement in their economic well-being was quickly changing "the dismal science" into something not quite so dismal. Japan had already gone through this transition and had a birth rate well below the 2.1 child per woman of child-bearing age known to be the replacement rate for maintaining a constant population. Japan, Germany, Italy, Russia and many other developed economies already have shrinking populations. As a result of its one child policy and its rising per capita income, China's population will soon reach a peak and start declining. If it weren't for immigration, the United States would have a falling population as well. For a given level of technology and, therefore, productivity, a declining workforce means a decline in gross domestic product (GDP) and less money from the earnings tax which funds the Social Security system.

Darwinian Natural Selection Paradox

At first the Darwinian natural selection story seems very comforting where individuals and their offspring adjust to changing environmental conditions to enhance their prospects to multiply and survive as a species. But the reversal from an increasing world population to an expected peak of around ten billion people, followed by an expected continually declining world population, appears to contradict that wonderful Darwinian story. Having more offspring surviving longer to guarantee an ever-increasing population of humans was supposed to ensure the success and

survival of humanity. Gronewold (2021)²¹ sees this as part of a broader ecology where the birth rates of animals drop as population density increases. In human populations, this is manifested in the movement from the countryside to the city as seen most recently and most intensely in China. But how can we make sense of a world where birth rates and populations continually decline as the world grows richer in physical and intellectual wealth per capita?

The prospect of a progressively shrinking world population creates a Darwinian *natural selection paradox*. Under Darwin's theory of natural selection, the species that prosper do so because they have more surviving offspring, so their populations grow to enable the survival of the species. However, with humans, as the income and education levels of a country increase, the population of that country tends to decrease. Also, within a country, the wealthier, more educated people tend to have the fewest children. This suggests a human *natural selection paradox*, where the more successful individual countries and the people within those countries are, the less the chance of human survival.

This phenomenon suggests that instead of overpopulating the earth, it appears that we will have to leave a note for the last remaining person to remember to "turn off the lights." In the meantime, global supply has been rapidly expanding to reach unheard-of levels, and we are beginning to face what may well be a continual decline in population and, all else held equal, a chronic deficiency in aggregate demand.

The Antithesis of Say's Law is "Demand Creates Its Own Supply"

Say's Law essentially says that if we define a "good" as something that people generally want, then all goods can be sold at some price. This is the foundation of the conservative supply-side argument. Given sufficient confidence, businesses will hire more workers and expand production to increase supply. The workers, in turn, generate more demand and at some price the additional goods supplied will be sold. Incentives that encourage business confidence will result in more jobs with the economy expanding to a higher level of supply and demand. In essence, Say's law says produce it and demand will come as if by magic. Hard-core supply-siders see business confidence as the key to this story of economic growth.

The problem with this supply-side story is the vagueness of the word "confidence" and any convincing explanation of how any such confidence would motivate a company to expand its productive capacity. Most companies are not charities. They are unwilling to set a price lower than the cost of production. Unless the business sees or anticipates an increase in demand for its products, it will have no incentive to add another line of production when it is unable to sell all that it is producing with its current lines of production. Any tax cuts or other confidence building access to additional cash will incentivize the business to invest in the financial economy such as in the stock or bond markets, instead investing in the real economy. Investing in more productive capacity requires a reasonable expectation of increased consumer demand, nothing less. In business "show me the money" translates into "show me the demand." Supply-side economics assumes that there will always be sufficient demand. They mistake the financial economy for the real economy and don't recognize that these are increasingly becoming separate economies.

Supply-side economics emphasizes the role of workers as factor inputs into the production process rather than as consumers. From the supply-side point of view, giving money

²¹ Gronewold, Nathaniel. *Anthill Economics: Animal Ecosystems and the Human Economy*. Lanham, Maryland: Prometheus Books, 2021.

to unemployed workers just encourages them to remain unemployed. But demand-side economics sees workers differently. From the demand-side point of view, more money going to workers is a good thing, especially if it causes them to hold back on taking a job until a higher wage is offered and gives them more money to spend to increase consumer demand. An unemployment insurance check helps ensure that a worker will not sell out for too low a wage. Even in the absence of a union, a higher unemployment insurance payment can lead to higher wages at the expense of profits so that consumer demand increases. This means more money flowing to consumer demand on Main Street and less going to the financial markets on Wall Street.

When aggregate demand is too weak relative to aggregate supply, **higher unemployment payments** paid for by taxing the wealthy will help divert the money flow, from the financial markets where it piles up inflating stock and bond prices and depressing interest rates, to money flowing to workers who have higher marginal propensities to consume than the investors on Wall Street. When demand is weak, Wall Street investors can't find real business projects to invest in and, instead, use the money in an upward spiral of financial derivatives spinning around and around increasing monetary velocity, but contributing nothing to employment or real economic growth. In such circumstances diverting profits to worker paychecks helps create real business opportunities by increasing the demand for goods and services. The money already on Wall Street is then readily available to expand production in response to this increase in consumer demand on Main Street.

Under *Equilibrium Economics*, Say's Law says: "Don't worry, supply will create its own demand." However, falling prices will only discourage consumption and reduce aggregate demand. Why pay more for a new car now when it will be cheaper next year? If you want a really great deal on a new car, wait several years! Moreover, with prices falling due to the lack of demand for products, which in turn creates a lower demand for workers to produce those products, which drives down wages, existing debts become harder to pay off. The problem is that nominal debts are unchanged even as nominal wages fall, which makes it harder for people to pay. This just cuts back consumer demand for goods and services even more. Deflation slows the economy, throwing more and more workers out of work.

A supply-side policy of increasing the money flowing to Wall Street may generate political campaign contributions but is not a recipe for increasing aggregate demand and employment, but just the opposite. Consequently, government intervention is needed to avoid deflation and stimulate consumption when aggregate demand weakens. In effect, *Disequilibrium Economics* understands that over the long run we are facing strong aggregate supply and weak aggregate demand so it reverses Say's Law to instead say: "Demand creates its own supply."

III. Rising Private Debt and Public Debt

The Ineffectiveness of Monetary Policy

In expounding on the quantity theory of money in the equation $M V = P Q$, where M is the quantity of money, V is the velocity of money, P is the price level, and Q is the quantity of output, Milton Friedman assumed that the velocity of money, V , was a constant such that increases in the quantity of money, M , would lead to increases in the price level, P , in establishing the **Friedman rule** that *inflation was always and everywhere a monetary phenomenon meaning that inflation was caused by increasing the money supply, M , faster than the expansion of the output of the economy, Q .*²²

However, our distorted money flow has diverted a larger and larger portion of M to wealthy individuals (who typically have low marginal propensities to consume) and corporations that largely pour that money into the New York financial markets where it sits without affecting the purchase of real goods and services in the real economy. This diversion to the financial economy has reduced the effective velocity of money, V , because the money trapped in the financial markets does not turn over in the selling of products and services. It may spin around over and over again in the financial markets, but as far as the real economy is concerned, it is going nowhere and essentially that portion of the money supply has a velocity, V , of zero as far as the real economy is concerned.

Another factor that may lower the marginal propensity to consume and, therefore, lower the velocity of money, V , is the aging of the population. With the exception of an increase in health care expenditures during one's last years of life, most elderly people spend less on the typical basket of goods and services as measured in the consumer price index, CPI, than younger people. As more people live longer, the proportion of old people in our population increases, which lowers the average marginal propensity to consume and the velocity of money, V . Also, consider the higher birth rates following World War II versus the much lower birth rates today, all leading to an ever increasingly older population and lower V .

Let me suggest a **new monetary rule** that because of the very high marginal propensities to consume of poor people and very low marginal propensities to consume of rich and elderly people, *the higher the level of inequality in an economy and the older the average age of people in the economy, the lower the velocity of money, V , in that economy, and vice versa. It is not the quantity of money, M , that leads to inflation, but the combination of a rapidly rising M and a rapidly rising V relative to a less rapidly rising Q that causes inflation.* If inequality is rising rapidly and the population is aging significantly, then V may be falling precipitously to counter the rising M value. In fact, a rapidly falling V may require a rapidly rising M to counter deflationary forces driving down consumer demand and potentially both prices and employment. With our rising inequality of income and wealth, the proper mission for the Federal Reserve is to counter these deflationary forces with an offsetting rise in the quantity of money, M .

The Federal Reserve System's method for stimulating supply is to lower the Federal Funds rate and then increase the quantity of money through quantitative easing (QE) by injecting more money into the New York financial markets to lower interest rates and, thus,

²² Friedman, Milton. *The Optimum Quantity of Money*. New Brunswick, NJ: Aldine Transaction, 2007.

encourage business investment in the real economy. However, there is a big difference between increasing the quantity of money in the financial markets and increasing bank credits for particular projects committed to expanding productive capacity in the real economy. Making lots of money available to businesses at very low interest rates is not sufficient alone to generate economic growth without adequate demand for goods and services. Without increased demand for goods and services that increase in money just drives up bond and stock prices in the financial economy without trickling out to the real economy.

Monetary policy that increases narrow money (M0 or M1) may or may not affect the expansion of broad money (M3 or M4) which is primarily controlled by banks through their extension of credit. The slope of the yield curve tells us something about the effectiveness of current monetary policy in this regard. Low long-term interest rates imply an excess supply of money relative to demand with the **insufficient extension of bank credits** => plenty of supply but inadequate demand. Low interest rates for treasury securities imply confidence in their risk-free nature. Low interest rates on federal debt implies that the level of such debt is not an immediate problem. But the diversion of money to Wall Street implies a general imbalance in the money flow. Such a distorted money flow makes it harder to fully employ the nation's resources and restrains economic growth.

Injecting additional money into New York financial markets in such circumstances may simply increase prices in the bond and stock markets with no significant effect on either aggregate supply or aggregate demand in the real economy. Even an "operation twist" where the Fed trades its short-term securities for long-term securities may not have any real effect on either aggregate supply or aggregate demand.

Throughout the 1990s and so far in the 2000s, Japan has demonstrated the ineffectiveness of the traditional central bank tools in combating deflation. Japan's repeated attempts to increase aggregate demand through various forms of traditional stimulus as well as its own variations of quantitative easing (QE) has shown the need for an alternative approach to increasing consumer demand to defeat deflation. Even with deficits exceeding 240 percent of GDP, Japan has faced a considerably greater deflationary threat than an inflationary one. While the aging of Japan's population implies an increase in health expenditures for the very oldest citizens, it also implies a reduction in demand for the host of expenditures characteristic of young families, including less demand for home construction, appliances, clothing and the like.

Government Comes to the Rescue

It is important to remember that my expenditures are your income and your expenditures are my income. To keep the economy growing at full potential without deflation or inflation, the money flow must keep up with, but not exceed, the growth potential of the economy. Imagine an economy with a GDP (Y) of \$20 trillion growing at 5 percent a year. To pay for that level of production, aggregate demand (C + I + G + Ex-Im) must keep up with that level of production (aggregate supply). If real investment (I) is weak, consumption (C) is inadequate, and exports minus imports is negative (Ex-Im), then government expenditures (G) must make up the difference to keep the economy operating at full capacity.

Higher taxes could further reduce consumption and real investment, unless the money came from unused money that was just sitting around. When workers and businesses are unable to buy back the value of the goods and services they are producing, then the economy

will contract unless the government steps in to temporarily fill the gap with unpaid for government expenditures (deficit spending) or expenditures paid for by taxes on wealth that is largely sitting idle and not contributing significantly to aggregate demand.

The large amount of money in financial markets has driven down interest rates so low that people don't see the point of saving money since they earn so little on their savings. The low interest rates are particularly hard on the elderly who have retired and are counting on a good return from secure investments such as the U.S. Treasury securities. In addition, the federal government finds it relatively easy to increase the national debt with low interest rates keeping down the interest payments on the debt. The resulting high levels of private and public debt makes for a very unstable economy with little slack to deal with an economic downturn or unexpected emergency. It would be hard to argue that too much government debt is driving up interest rates when such rates have remained close to zero even prior to Federal Reserve intervention. In any case, in theory the Fed can always intervene to adjust market interest rates.

Evidence from behavioral economics demonstrates that the wealthy, in sharp contrast to the poor, are motivated primarily by their relative wealth position and not so much, if at all, by the absolute value of their wealth. Consequently, the incentives of wealthy people to compete in trying to get ahead of their peers are not significantly affected by absolute, across-the-board reductions in their wealth that apply equally in amount and/or percentage to them and their peers. Increasing a wealthy person's taxes might make them angry, but at the end of the day they tend to be primarily motivated in trying to keep up with (or get ahead of) "the Jones," who traditionally were the Rockefellers, the Carnegies and the Vanderbilts, but are now the Musks, the Gates's, the Buffetts, the Bezos's and the Zuckerbergs.

The Federal Debt Burden

Increases in federal debt have become contentious issues in recent years. Fiscal conservatives have raised concerns both about possible default as well as the transfer of a large debt burden to our children and grandchildren. An analogy with private debt is often invoked to justify this concern. In reply it is often pointed out that unlike private entities, the federal government has the power to print its own money, tax its citizens and use the power of eminent domain, not to mention the power of the police and the military. The burden on our children and grandchildren is not the amount of the federal debt, but the failure to maintain adequate infrastructure and facilitate a rapidly growing economy. This includes fully employing the vast majority of those people interested in working to maintain a labor shortage that is needed to ensure that business will act to increase worker productivity. With increasing wages, businesses have a greater incentive to employ new labor-saving technologies.

The future federal debt burden is an illusion to some extent because the Federal Reserve could buy up the entire federal debt anytime it wanted. The real issue is how much money is optimal for maximizing economic growth with full employment and without excessive inflation and where is that money flowing. In the short run we are always in a disequilibrium economy where under the *money flow paradigm* it is the responsibility of government to maintain a proper balance between aggregate supply and aggregate demand.

The cash in your wallet used to be government debt. What the government owed you before 1971 was an ounce of gold for \$35. In 1971 President Richard Nixon took the United

States off of the gold standard. Now the government owes you absolutely nothing for \$35 or any amount of money. If you are nervous about using money that is backed by nothing, don't use it.

When some people proposed paying off the Federal debt entirely, Alan Greenspan, a fan of conservative Ayn Rand and chair of the Federal Reserve, was quick to point out that the total elimination of the debt would take away one of the primary stabilization tools of the Federal Reserve. If there were no U.S. Treasury securities to purchase (i.e. no Federal debt), the Federal Reserve could not stimulate the economy by purchasing U.S. Treasury securities in the New York financial markets to release money into the economy to expand the money supply

As mentioned above, before 1971 all of the various U.S. dollar currency and coin denominations were considered the debt of the U.S. government in that the U.S. owed an ounce of gold for every \$35 offered by a foreign government. Under the Bretton Woods agreement other currencies were tied to the U.S. dollar and the U.S. dollar was tied to gold. Surely, it was thought, this was a house of cards that would collapse when President Nixon took the U.S. off of the gold standard.

But Nixon went ahead anyway and unilaterally announced without consulting with any foreign governments that the U.S. would no longer honor its commitment to provide an ounce of gold for \$35. There was no catastrophic collapse in the U.S. economy or other economies when currencies were allowed to float with no repayment of the U.S. dollar debt for gold. The analogy of this U.S. dollar debt to U.S. Treasury security debt is certainly not exact, but it is interesting.

The ratio of publicly held Federal debt to GDP has risen in recent years to about 80 percent, with an overall debt to GDP ratio of about 107 percent if Federal debt held by such government entities as the Federal Reserve and Social Security Administration are taken into account. The risk of default and/or runaway inflation is tempered by the recent experience of Japan where debt to GDP has reached about 240 percent without bringing about default or inflation. Actually, Japan continues to suffer from deflationary forces that its stimulus spending has been unable to fully defeat. At the end of World War II Germany's debt to GDP ratio had reached about 675 percent. The German debt was written off by the allies and with the help of the Marshall Plan allowed for the revival of the German economy.

Moreover, the velocity of money differs depending on where it is flowing. Increasing the velocity of money on Wall Street does little good if the money is just flowing around and around with little going into productive real investment in production capacity. On the other hand, the velocity of money on Main Street is often key to whether consumer demand is too strong relative to supply and threatening to produce excessive inflation or whether demand is inadequate leading to unemployment and underutilization of the economy's resources generally.

The bottom line is that giving excessive amounts of money to Wall Street will not increase productivity and economic growth if it is not properly matched with the money flowing to Main Street. The economy requires a balance that takes into account where the money is flowing and what the velocities of money are in the various realms where it is flowing. To make full and productive use of all of our resources, money must flow to all sectors and regions including the rural heartland and the inner cities. The key is to focus on always maintaining a proper balance and a proper level taking into account both the amount of money flowing to each realm and the velocity of money within each realm. History has repeatedly shown that expecting the "free enterprise system" to do all this on its own with no help from the government is naive at best. History has repeatedly and continually demonstrated that unrestrained free markets do not

lead to a balanced, well functioning economy, and certainly does not lead to the efficient use of all available resources and the maximization of economic growth. There is a natural “winner-take-all” tendency in economics generally, just as there is in sports and entertainment in particular, so it should be no surprise that more and more money would pile up on Wall Street with less and less going to Main Street.

What to do about the Federal Debt

There are basically four ways of dealing with the national debt: (1) increase taxes to pay it off, (2) monetize the debt by having the Federal Reserve Bank “print” money to buy it all up, (3) default on the debt by declaring that the U.S. Treasury would no longer pay the interest on the debt or buy back any of it, or (4) expand or contract the federal debt as necessary to maintain adequate aggregate demand to maintain full employment without triggering excessive inflation. As long as such a large part of the money generated by business goes to the wealthy who have relatively low marginal propensities to consume, the government will need to supplement the incomes of the middle and lower classes to buy back the value of the goods and services they are producing and keep the economy from sliding into recession.

Modern Monetary Theory (MMT) recognizes the importance of maintaining adequate aggregate demand through deficit spending as required for needed public investments, as long as that demand is not so excessive as to overwhelm aggregate supply and trigger excessive inflation – a prospect that is unlikely in the long run under current global circumstances, except for brief periods of disruption such as with the COVID-19 pandemic. Even calculating the ratio of debt to GDP is distorted by money that the government owes to itself. U.S. Treasury securities owned by government entities such as the Federal Reserve and the Social Security Administration should be subtracted out of the overall government debt before calculating the debt to GDP ratio.

In any case, regardless of the calculation, if the financial markets signal a low risk of inflation by maintaining a low interest rate for government debt, then the deficit does not pose an immediate problem. In the late 1970s when there was strong consumer demand and relatively weak aggregate supply along with artificial price increases such as the OPEC cartel rise in the price of crude oil, inflation was a problem. But today the money is flowing to Wall Street that used to flow to Main Street so consumer demand is quite weak relative to global supply, and the inflation is showing up in rising stock and bond prices and not in general consumer prices except for a temporary increase in the prices of crude oil and some food items as well as steel and lumber (housing) that have increased in response to former President Trump’s tariffs and stimulus spending by the Trump and Biden administrations. The COVID-19 virus has also significantly disrupted global supply chains.

The idea that at some unspecified point some future generation will have to pay off the government debt is a fundamental misunderstanding of how the financial market for government debt works. If the public loses confidence in government debt, the interest rate on that debt will rise reflecting the public’s perception of the degree of risk inherent in U.S. Treasury securities. The “bond vigilantes” will demand a premium in compensation for that higher perceived risk.

Furthermore, selling more debt into the market should drive up the interest rates on government securities if there is a shortage of money willing to invest in such debt. It is certainly possible that too much debt could result in the market demanding a high interest rate for holding

such debt, but the low interest rate reflecting the current supply and demand for government debt is not indicating that an excessive amount of government debt has been issued. The introduction of more and more cyber-currencies following Bitcoin, Ether, Litecoin and the like, and their rise in value, provides more evidence of the public's taste for risk, which makes the claim that the federal government's debt may invoke a crisis concerning the public's confidence in the government's ability to pay seem very unrealistic. It is based on a comparison with a person's own personal finances that doesn't hold up at all. Simply put, when the bill collector comes to your door to demand the money you owe, you cannot just run down to your basement to print up some more dollars, but the federal government can. You cannot run over to your neighbor's house and take (tax) money from them to pay your bills, but the government can. You are not the government.

The money in the market for U.S. Treasury securities is primarily from three main sources: (1) Government entities such as the Social Security Trust Fund and the Federal Reserve; (2) Private entities such as wealthy individuals, corporations and institutional investors such as pension funds; and (3) International entities such as foreign government sovereign wealth funds and foreign private individuals, corporations and institutional investors from abroad. The Federal Reserve could intervene in the market for U.S. treasuries to adjust the interest rates to whatever level it deems appropriate.

But what would happen if the Federal Reserve were to monetize the entire national debt? Eliminating the entire debt would not be a good idea, as former Fed chair Alan Greenspan has pointed out, in that it would eliminate the primary tool that the Federal Reserve has to stimulate the economy when the pool of investment funds is low and interest rates are high. However, in the current economic circumstances buying up the national debt might not have as big an inflationary impact as many people fear. After all, the investors who currently own the debt are investing in that debt for their own reasons. More likely than not, they would just purchase other available financial instruments if the Federal debt were no longer available to purchase. Unlike stimulus money given directly to people on Main Street in the real economy, the money would most likely stay on Wall Street in the financial economy and not go to drive up prices of goods and services on Main Street. Instead, stock and bond prices would increase.

For many, the bond market is serving as a store of value. With interest rates so low, those seeking a decent return on their investments are more likely to invest in stocks. But foreign governments have a different motivation. Foreign governments may be moving U.S. dollars into U.S. financial markets to keep those dollars from driving down the value of the U.S. dollar in the foreign exchange markets and undermining those foreign governments' exports to the United States. A cheaper dollar makes foreign currencies more expensive, and, therefore, makes those foreign imports into the United States more expensive. In other words, foreign governments who export goods to the United States to keep their citizens fully employed will want to keep their U.S. dollar reserves in Wall Street and out of the foreign exchange markets.

With so much money already in the financial markets and interest rates currently very low, the additional money that the Federal Reserve injects into the market for U.S. Treasury securities is unlikely to be spent for either consumption or real investment in the real economy. It is more likely to just circulate around Wall Street driving up stock and bond prices without much effect on Main Street. In effect, inflation on Wall Street has come to serve to some extent as an alternative to inflation on Main Street.

The return of profits to shareholders diverts money from labor and capital

In the United States in recent years, the rules and regulations favoring the wealthy, as well as a natural tendency for money to pile up at the top of the income and wealth pyramids, has produced a distorted money flow where a disproportionate amount of money is pouring into the financial markets driving up stock and bond prices and driving down interest rates. This distorted money flow discourages savings, encourages both public and private debt, and hurts elderly dependent upon the return to fixed financial investments such as bonds, certificates of deposit and savings accounts as well as the interest rate returns from annuities and pension funds. In other words, old people with fixed asset investments have less money and young people receiving inadequate pay go deeper into debt. Increases in productivity with real investments in physical and intellectual capital is forgone in favor of increases in dividends and share buy-backs. Such financialization undermines the mission of business as described by Adam Smith in competing to produce new and better products and services for consumers.

Motivating employees with incentives is undermined by diverting money to shareholders

Capitalism won't work for you if you don't have any capital. Primitive societies believed that all of nature was owned by God. Later the King was said to have been given dominion over the natural world and all its resources by God. John Locke's (1632-1704) original idea was that you earn the right of property ownership through what today would be called "sweat equity." Taking property or materials from the natural world and imbuing your labor into them established your property ownership. In this way capital or material ownership could be earned through sweat equity.

However, the link between sweat equity and capital ownership broke down when larger projects required more resources than individual workers could obtain through sweat equity. Capital became concentrated in the hands of the capitalists with little trickling down to the workers. Today, hard work pays off. But not for the workers. When the workers work hard and produce lots of goods and services, stock ownership pays off with big increases in shareholder dividends and valuations. In theory all that money could be used to create big factories to produce lots of products, but the workers can't afford to buy those products.

Conservatives like to talk about the importance of incentives. But where is the incentive for a wealthy person to work hard when the value of their stock portfolio keeps rising without any effort on their part? Yes, hard work pays off, but not for the workers doing that work, but for the shareholders who do nothing but watch the money pile up in their stock portfolio. The return to capital is much higher than the return to labor.

Investing in Adobe in the late 1990s and just checking the box that says: "reinvest dividends," provided shareholders with an over seven thousand percent return, when some of that money could have gone to employees to reward their hard work. Sure, investors deserve a reasonable return, but the extreme emphasis on maximizing shareholder value has gone to an extreme at the expense of reducing our economy's efficiency and productivity.

There is no shortage of money to invest in good ideas, but a shortage of creative entrepreneurs with the ability and willingness to work hard to bring good ideas to the

marketplace and to inspire their employees to work hard in carrying through on effectively implementing the plans and programs needed for success. Investors, who have inherited a lot of money and don't know what to do with it other than investing in broadly based index funds or, alternatively, gambling on individual stocks without much understanding of their potential, don't need to be highly rewarded for spending their days at the country club playing golf. Our emphasis on rewarding shareholders, instead of actual entrepreneurs and their employees, undermines incentives in a distorted version of free enterprise.

To be fair there are some firms that are entirely employee owned such as Burns & McDonnell Engineering in Kansas City, Sammons Enterprises in Dallas, Swinerton Builders in San Francisco, and Chemonics International Inc. in Washington, DC. There are also many companies that allow for partial employee ownership through various stock option plans and similar arrangements. Government should create ways for all Americans to have some stock ownership that would grow over time and supplement Social Security and other sources of retirement income. In Germany workers are represented directly on corporate boards and incentives are designed to inspire workers to work hard and thoughtfully for their companies.

When the workers cannot afford to buy back the value of the goods and services they are producing and the wealthy dominate the financial markets, the relationship between the stock market and the real economy breaks down. The stock market thrives while the real economy struggles. I do nothing, and my stocks generate more and more money. The workers work hard, while their earnings stagnate. Hard work pays off. But not for the worker doing the work. This was not always the case. After World War II the wages of workers kept pace with worker productivity until around 1975 when real wages flattened out even as worker productivity continued to rise. After 1975 the profits from increased productivity were diverted to the shareholders.

The government's attempts to bust the unions such as President Reagan's calling up the national guard to replace the striking air traffic controllers has dramatically altered the money flow in our economy. Unions once provided the balance to counter businesses controlling blocks of jobs with quasi-monopsony or oligopsony power. With about a third of the labor force unionized after World War II, employee pay kept up with employee productivity increases until around 1975 when employee productivity continued to rise but employee compensation flattened out and declined to some extent in real terms when adjusted for inflation. In recent years, the degree of unionization has dropped to ten percent or less. It should be no surprise that so little money ends up in employee paychecks relative to enormous amounts of money given to the ten percent richest people in the United States who own eighty-four percent of the wealth on Wall Street.

Things have only gotten worse and more extreme since then. The top one percent have accumulated enormous wealth while the average worker has gotten nowhere except deeper in debt while living paycheck to paycheck. To keep the economy from tanking in the face of such a distorted money flow, the federal government has itself gone deep into debt. The more distorted the money flow in favor of the wealthy, the greater has been the rise in the national debt to try to keep the economy from collapsing into a deep recession. The fundamental problem is not the government debt itself, but the distorted money flow that makes deficit spending necessary.

Another concern about government spending in general, but government debt financed spending in particular, is whether the government is "crowding out" private investment. This

assumes that the economy could achieve full employment without deficit spending. The weak, inadequate aggregate demand relative to the excessively robust global aggregate supply soundly rejects this assumption.

In addition, we find an *a priori* assumption that private investment is always preferable to government investments and that future generations would be better off if there were no debt financed government investments. But this assumption is wrong when common property resource considerations allow for government debt that is judged by voters to provide a better return for future generations than private investments of equal cost. Some investments in education, infrastructure and basic research, for example, may require government funding to be viable. Major advances in basic research that are unprofitable at the micro level for individual firms can be highly profitable for the nation and the world as a whole. Extensive examples of the benefits of government investments in basic research and technology infrastructure can be found in several books by Mariana Mazzucato.^{23 24 25}

As in any investment, public or private, the costs and benefits of taking on debt should be carefully considered before making the investment. But that fact does not rule out debt-funded public investments if such investments are sufficiently beneficial to future generations. Such investments often offer a higher return to the nation as a whole than any alternative private investment projects.

This is particularly true of investments which would never be made by the private sector because their common property nature generates a free rider problem which the private sector cannot overcome by private contracting because of excessive transaction costs, but is recognized by the public sector as a public benefit. From this point of view, one might be just as concerned about private investment “crowding out” public investment. When all available resources are fully employed, there will always be a trade-off between public and private investment.

On the other hand, when the economy is stuck at a lower level of capacity utilization with high levels of unemployment, government investment expenditures may more accurately be thought of as “crowding in” private investment expenditures by stimulating demand and increasing the money flow throughout the economy. There are many such investments such as money for infrastructure, education and basic research at the National Science Foundation and National Institutes of Health.

Pharmaceutical companies will only invest in medicines with patents that can effectively block competition. If a medicine could cure breast cancer using easily accessible household ingredients, don’t expect a pharmaceutical company to investigate it, reveal it, or develop it. Pharmaceutical companies are motivated to charge a high price for any medicine to cure an illness that threatens people with severe disability or death. Where the need is greatest, the price will be set the highest. Only the government through the National Institutes of Health can

²³ Mazzucato, Mariana. *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*. New York: PublicAffairs, 2015.

²⁴ Mazzucato, Mariana. *The Value of Everything: Making & Taking in the Global Economy*. New York: Hachette Book Group, Inc., 2018.

²⁵ Mazzucato, Mariana. *Mission Economy: A Moonshot Guide to Changing Capitalism*. New York: HarperCollins Publishers, 2021.

make the investments needed for the university research needed to find cures in a cost-effective manner that can offer cures at a reasonable price.

Infrastructure is clearly another area where public investment is needed, because the incentive structure of private commerce does not lend itself well to building common property resources that benefit everyone without providing a clear path to matching private costs to private benefits. Fortunately, the recent passage of the “*Infrastructure Investment and Jobs Act of 2021*” is a good start toward at least repairing our damaged and deteriorating roads, bridges, tunnels, ports, airports and rail facilities.

IV. International Trade and Money Flow

The Role of International Trade in the *Money Flow Paradigm*

The money flowing to the New York financial markets on Wall Street is not all coming from wealthy individuals and corporations in the United States. A considerable amount of money is also coming from wealthy individuals from abroad and foreign corporations. In addition foreign governments have a special interest in keeping U.S. dollars out of the foreign exchange markets. Foreign governments can acquire U.S. dollars from the businesses in their country that get them through trade and investment returns in exchange for the local currency. Some governments then create sovereign wealth funds that use those U.S. dollars to invest in the financial markets in the United States.

The Value of U.S. Dollars in Foreign Exchange Markets

What are the implications of the U.S. importing lots of products from abroad? Does our trade deficit imply that we are getting ripped off and need to impose trade restrictions? For example, consider our trade with China. China takes its resources, and its people work hard producing products for us. In return, instead of sending lots of our products to China, we send them pieces of paper with George Washington's picture on them (U.S. dollars). Ordinarily, all those U.S. dollars would find their way into the international currency exchange markets driving down the value of the U.S. dollar and raising the price of the Chinese yuan. That would make Chinese products more expensive for us to purchase and U.S. products cheaper for China to purchase.

You would think that making U.S. products less expensive for the Chinese people to purchase would be good for China. But China has traditionally had a very small middle class incapable of affording many U.S. products. A more immediate problem for China's government has been the flow of peasants from rural areas into the urban centers where products are produced for export. China needed a way to avoid high levels of unemployment and keep its citizens employed through the manufacture of products for export. Instead of allowing those U.S. dollars to go into the currency exchange markets, China used those U.S. dollars to buy U.S. Treasury securities. In other words, China gave us products, we gave China U.S. dollars, and China gave us our money back again by investing money in U.S. financial markets by buying U.S. Treasury securities. Who is getting ripped off here? (Hint: it is not us.)

Does issuing a lot of U.S. Treasury securities attract U.S. dollars situated abroad that would otherwise drive down the value of the U.S. dollar in international currency exchange markets? This makes it more difficult for the Federal Reserve to suppress inflation through the supply-side. Overseas investors, especially sovereign wealth funds, may move U.S. dollars into New York financial markets leaving a stronger U.S. dollar in international currency exchange markets than would otherwise be the case. Japan and China have purchased large quantities of U.S. Treasury securities with U.S. dollars that would otherwise have gone to drive down the value of the dollar, which would have lowered the price of U.S. exports and increased the price of imports into the U.S. helping move toward a better balance in tradable commodities and services.

However, some foreign governments (e.g., China) may have motives for investing in U.S. Treasury securities other than seeking an attractive return on investment in the form of interest payments. China requires that Chinese exporters turn in U.S. dollars to the Chinese

government in return for renminbi (yuan) to keep those dollars out of foreign exchange markets. China's return on investment in U.S. Treasury securities may be less in the form of interest payments and more in keeping its population fully employed to maintain both economic and political stability by maintaining either a low value for the yuan in international exchange markets or, somewhat equivalently, a high value for the U.S. dollar.

It is important to consider the underlying cause of trade imbalances, especially those that have kept the U.S. dollar strong. China and several European countries, for example, have highly unequal internal wealth distributions such that an insufficient amount of money is flowing to their average people to sustain full employment without substantial exports. In other words, United States consumers and other foreign consumers make up for the lack of adequate demand by China's domestic consumers. The extreme wealth inequality in China and those European countries mean that the people in those countries cannot afford to buy back the value of the goods and services they are producing, but the wealth of those countries has gone to wealthy elites who are eager to invest their money in the United States financial markets.

Even elites in poor, developing countries are often eager to invest their money in the New York financial markets instead of investing in industrial development in their own country. This phenomenon can be viewed as another form of colonial exploitation, with the development of poorer countries held back in favor of providing more wealth to the already wealthy by driving up prices in the U.S. stock market. The U.S. stock market, and stock markets in general, have become alternatives or substitutes for real investment in the productive capacity of economies throughout the world. Simcha Barkai (2020) published a carefully researched paper that revealed that business revenues were going increasingly to profits (financial capital) as opposed to the cost of labor or real capital (e.g. physical or intellectual capital).²⁶

This distorted money flow has created a financial economy that is more and more separated from the real economy. Ironically, it has been restraining and undermining productivity and economic growth rather than supporting and encouraging it. Yes, money is cheap for businesses to borrow, but demand is chronically inadequate without extraordinary stimulus from governments. Businesses have no incentive to expand their operations, but instead they buy up or undercut smaller competitors to increase their market share and prices.

Adam Smith²⁷ explicitly referred to the invisible hand of competition where businesses compete in offering high quality products at lower prices. But he also implicitly referred to a second invisible hand where businesses colluded together to suppress competition and raise prices. These two invisible hands are in a constant struggle with one another. Lately, the second invisible hand appears to be winning as explained in more detail in Teachout (2014)²⁸ and Teachout (2020).²⁹

²⁶ Barkai, Simcha. "Declining Labor and Capital Shares." *The Journal of Finance*, 75(5), pp. 2421-2463. 2020. <https://doi.org/10.1111/jofi.12909>

²⁷ Smith, Adam. *An Inquiry Into The Nature and Causes of The Wealth of Nations*. London: W. Strahan and T. Cadell, 1776.

²⁸ Teachout, Zephyr. *Corruption in America: From Benjamin Franklin's Snuff Box to Citizens United*. Cambridge, MA: Harvard University Press, 2014.

²⁹ Teachout, Zephyr. *Break 'Em Up: Recovering Our Freedom from Big Ag, Big Tech, and Big Money*. New York: St. Martin's Publishing Group, 2020.

Another major reason for the strength of the U.S. dollar in foreign exchange markets is the role of the U.S. dollar as the world's primary reserve currency. In order to avoid the instability and risk associated with fluctuations in the value of trading one country's currency for another, some major entities purchase imports with U.S. dollars and sell exports denoted in U.S. dollars to avoid the ups and downs of the foreign exchange markets. Trade in crude oil and other major commodities is traditionally done in terms of U.S. dollars. Consequently, as international trade continues to increase over time, the demand for U.S. dollars increases to keep the U.S. dollar highly valued in foreign exchange markets.

In other words, a country whose currency serves as a major reserve currency is in basically the same boat as a country that suffers from the natural resource curse, otherwise known as the Dutch Disease, a term coined by *The Economist* to refer specifically to how the value of the Dutch guilder was driven up when the Netherlands discovered massive amounts of natural gas within its territory, and generally to any country selling large quantities of a natural resource in high demand. A reserve currency country and a country suffering from the natural resource curse have great difficulty selling their exports because of the high price of those exports in that country's currency in the foreign exchange markets. In other words, under these circumstances the exports of the United States and the Netherlands would be basically priced out of international markets. The Dutch escaped the Dutch Disease by dropping the guilder and joining the Euro currency union where their natural gas exports were much less impactful with little effect on the strength of the Euro overall.

As a reserve currency it is not only desirable, but necessary, for the country with the reserve currency to run a current account deficit to increase the amount of their currency in foreign exchange markets to keep from being completely priced out of the markets for its exports or see its exporting industries shrink as a result of its reserve currency status and the ever increasing demand for its currency in international markets. Likewise, a country with a rapidly growing economy needs to issue more currency to keep up with the demand for that currency as trading within that country expands in selling more goods and services, *ceteris paribus* (especially with regard to the overall effective velocity of money within the economy).

On the other hand, the advantage of a strong currency are low prices for imports which save consumers money and helps make up for extreme income and wealth inequality within the United States. This is particularly helpful for retired elderly people who are on fixed incomes. In real terms the Chinese and other foreign producers are taking their natural resources and working hard to produce products for us, but instead of sending comparable products to them, we are sending them pieces of paper with George Washington's picture on it (U.S. dollars). For the most part, tariffs on Chinese goods entering the United States are not paid by China. Walmart, in competition with other businesses around the world, buys goods in China and ships them to the United States. When those goods arrive in Long Beach, California, the Federal government requires that Walmart pay a tariff on those goods from China. Walmart can compensate itself to some extent by passing along the cost of the tariff to Walmart customers. Since many of the items Walmart buys from China are relatively inexpensive to begin with, the elasticity of demand for those items may be relatively high relative to the elasticity of supply so Walmart is able to get away with passing along most of the cost of the tariff to Walmart customers without suffering a significant drop in demand for those particular items. When the

price of a great pair of Chinese memory foam sneakers rises from \$9.98 to \$10.58, it is still a great deal relative to alternatives.

The idea that there are a limited number of jobs in this world, and we must fight over them is what economists call the *Lump of Labor Fallacy*. The number and quality of jobs in the United States is not fixed. Fiscal and monetary policies can create as many jobs as we need. The current shortage of workers is in part due to stimulus policies that have been implemented in response to the COVID-19 pandemic. We should not raise prices in Walmart, Target, Amazon and many other low cost venues by imposing tariffs on imports coming from abroad. A better approach is to gain a tighter control over the number and quality of jobs here in the U.S. to keep our workers fully employed while still enjoying the low prices offered by imports from abroad.

The world works for us and we work for ourselves, yet we are told that we are being exploited by others by importing actual physical goods and services and paying for them with pieces of paper (U.S. dollars). The actual truth is the exact opposite of what those U.S. citizens who see themselves as “victims” tell us, the world is working hard and sacrificing their resources to keep us fat and happy! In reality, we are the ones in the dominant and exploitative position in foreign trade. The absence of tariffs works to our advantage. The lumber and steel tariffs we placed on Canada only increased the cost of housing, automobiles and appliances in the United States. We need to remove those tariffs so we can get Canadian lumber and steel for less.

Yes, the overseas competition for the dollars of U.S. consumers means that the wages and jobs of U.S. workers are suppressed. Tariffs do not necessarily solve this problem since they would raise prices without guaranteeing that the money from the higher prices would go to workers in the form of higher wages and more jobs. Both the flow of dollars from abroad into U.S. financial markets in New York and the role of the U.S. dollar as a reserve currency in foreign trade have kept the value of the U.S. dollar strong in foreign exchange markets. The high value of the U.S. dollar makes U.S. exports expensive for people in other countries to purchase. A strong dollar means that we export less than we would otherwise and end up primarily producing our own goods and services for our own citizens.

Another implication of the U.S. dollar serving as the world’s primary reserve currency is that commodities such as oil that are bought and sold in U.S. dollars by-pass the foreign exchange markets so if the U.S. dollar suddenly increased in value or decreased in value it would not have a great effect on the U.S. imports of dollar-traded commodities or U.S. exports of such commodities. Therefore, the United States’ reserve currency status insulates it from many of the disruptive fluctuations in relative currency valuations in the foreign exchange markets.

Gross National Product (GNP) measures a country’s total amount of consumption while Gross Domestic Product (GDP) measures the country’s total amount of production, with the difference being the inclusion of net property income from abroad for GNP. Would you rather live in a country where the ratio of GNP to GDP was two or a country where the ratio was one half? Getting property income from abroad allows you to consume more. A country that injects money into its economy to stimulate consumer demand as needed to maintain full employment, while maximizing its GNP to GDP ratio, is doing better than, if not exploiting, a country whose GNP to GDP ratio is significantly less than one. America has a foreign trade deficit. This means that we are consuming more than we are producing. Surplus countries are being short-changed in that they are producing more than they are consuming. America benefits from their surplus.

Okay, I will admit that I feel badly about this, because when I was growing up my father told me to eat everything on my plate because there were little children starving in China. I never did understand how my eating everything on my plate was helping them (since my uneaten food would be thrown away, not exported to China), but I can see that, while in the short run American demand for Chinese goods can help China employ the flood of rural workers coming to China's cities looking for work, in the long run the unusually strong value for the U.S. dollar due to our reserve currency status is enabling us to exploit the Chinese who take their resources and work hard to produce high quality products for us at very low prices. The Chinese government understands this and is (1) working toward growing the Chinese middle class to increase consumer demand within China to substitute for foreign demand, and (2) encouraging the creation of an international reserve currency for the world to replace the reserve currency status of the U.S. dollar which keeps the dollar strong allowing the United States to continue to consume more than it produces. Replacing the dollar with a new world reserve currency would weaken the dollar and reduce or even eliminate America's trade deficit.

John Maynard Keynes recognized the need for an international reserve currency and proposed to call such a currency "Bancor." Although no such currency has yet been introduced, the International Monetary Fund (IMF) uses special drawing rights (SDRs) to help countries reconcile their currency needs when appropriate through the IMF's auspices. In theory these SDRs could be extended to companies involved in international trade to help them reduce the risk associated with fluctuations in currency valuations. Whether this comes about or some other solution to mitigating such risk is yet to be determined.

In the meantime, currency fluctuations and concerns about imbalances in imports and exports as well as a desire to stabilize and encourage employment in infant industries and other considerations have motivated countries to impose tariffs on imports. The higher prices paid by consumers as a result of imposing import tariffs could exacerbate rather than ameliorate wealth inequality within the United States. However, the high value of the U.S. dollar in foreign exchange markets has concerned some people. Policies designed to drive down the dollar's value in a way that more directly helps U.S. workers gain better paying jobs have been proposed in order to make U.S. exports more competitive without raising the prices of imports into the United States too much, which would hurt the elderly and others on fixed incomes. Robert Kuttner lays out the case for a more managed trade to protect U.S. workers from competition with workers getting less pay and working under more harsh conditions abroad in his book: "*Can Democracy Survive Global Capitalism?*"³⁰ Hopefully, other more direct means of increasing employment and raising wages will be found as an alternative to imposing tariffs or artificially manipulating currency values.

The Chinese leadership recognizes the danger of being too dependent on overseas demand and is gradually working toward building stronger domestic consumer demand for its products. However, as in Japan and elsewhere in the world, an aging population tends toward a reduction – not an increase – in the demand for goods and services with the notable exception of health care. The world-wide deficiency in aggregate demand, and – with the help of technological advances – the global explosion in aggregate supply does not bode well for future economic and political stability in China or elsewhere. The emergence of Africa as another

³⁰ Kuttner, Robert. *Can Democracy Survive Global Capitalism?* New York: W. W. Norton & Company, 2018.

source of cheap labor has yet to be fully exploited implying a continuation and possible expansion of global aggregate supply.

Within the United States some combination of central bank monetary expansion and increased government expenditures will be needed to make up for the ongoing shortfall in aggregate demand. Higher paying jobs require greater consumer demand as well as investment in workforce education. Whether those expenditures are paid for through deficit spending or higher taxes on those with low marginal propensities to consume will be a central issue to debate in coming years. Deficit spending has implications for potential inflation and so-called “crowding out” (or more likely “crowding in” during periods of inadequate demand) and possibly for the value of the U.S. dollar in international currency exchange markets.

V. Money Flow Reversal from Strong Demand to Strong Supply

The Federal Reserve and Monetary Expansion

To fully understand how these distortions in aggregate supply and aggregate demand have come about and their implications for government economic policy, we need to examine our economic history more closely. First, consider the flow of money over the past century. The Federal Reserve Act of 1913 was enacted partially in response to the panic of 1907. The primary purpose was to take control of the money supply out of the hands of politicians who naturally would be tempted to use the printing presses to overpromise and overdeliver money to their voters to a degree that would undermine the value of the currency and generate excessive inflation. In other words, the purpose of the Federal Reserve Act of 1913 was to turn control of the money supply over to professionals who would maintain a long-term perspective in regulating the money flow in the national interest. This was particularly important in periods where aggregate demand was strong and aggregate supply was weak, making inflation a serious threat.

Stimulus money and a shift in spending patterns have created a recent surge in demand for products especially from Internet providers and a corresponding reduction in the demand for services that along with the breakdown of supply chains due primarily to the COVID-19 have created a temporary surge in inflation which is unlikely to last unless fundamental changes are made to the money flow in our economy. If we return to the previously prevailing money flow with more money flowing to Wall Street and less money flowing to Main Street, we will see a return to deflationary pressures unless actively countered by changes in government programs, policies, rules and regulations.

The role of the Federal Reserve was further defined by the challenges the American economy faced in responding to World War I and its aftermath. The money supply doubled primarily due to war debts paid by European powers in gold to the United States over this period. Aggregate demand was able to keep up with aggregate supply until the 1929 stock market crash followed by a reluctance to expand the money supply further. The sudden drop in aggregate demand resulted in a dramatic rise in unemployment until New Deal work programs and preparations for World War II eventually moved the economy toward a new equilibrium.

During the 1930s depression, various countries tried to make their exports more competitive by devaluing their currencies through monetary expansion. When one country would try to get an edge on the others, the other countries would then devalue their currencies in response. In theory this works fine until world aggregate demand catches up with aggregate supply potential. Once the supply potential is reached, further devaluations by printing more money only leads to inflation.

The important point that economists have failed to fully grasp is that the economy does not automatically move toward an equilibrium where aggregate demand matches aggregate supply. As explained in Taleb(2007),³¹ the assumption that all markets quickly and automatically converge to an equilibrium is a misrepresentation of reality. Although some local markets for

³¹ Taleb, Nassim Nicholas. *The Black Swan: The Impact of The Highly Improbable*. New York: Random House Publishing Group, 2007.

specific goods may adjust to bring supply and demand into equilibrium, there are larger, more diverse markets that stay out of equilibrium for extended periods.

As Keynes(1923)³² once said: “In the long run we are all dead. Economists set themselves too easy, too useless a task if, in tempestuous seasons, they can only tell us that when the storm is long past the ocean is flat again.” In other words, economists must stop hoping that aggregate supply and aggregate demand will come into balance or that a temporary intervention supplementing private debt with public debt will patch things up long enough to reach equilibrium, but, instead, at last recognize that the money flow in our economy and in the world economy at large is distorted and will likely remain distorted for an extended period. Although with sufficient collective effort this distortion may be corrected in the long run, it is unlikely to be fixed any time soon, because it is caused by well-entrenched institutional factors, including a tendency for the successful and powerful to exponentially gain greater success and power while the ignorables in the inner-cities and rural flyover country struggle to stay afloat.

Consequently, the Federal Reserve needs a new monetary policy tool to adjust aggregate demand more quickly and more effectively to bring aggregate demand in line with aggregate supply. This should be done in a manner that encourages aggregate supply to grow faster with increased productivity improvements. Businesses are much more likely to employ labor-enhancing productivity improvements when labor is in short supply and wages are rising. In recent years aggregate demand has tended to be chronically weak unless government stimulus payments and inducements artificially strengthen it by subsidizing the least well off as was done in response to the COVID-19 pandemic.

Strong Aggregate Demand After World War II

The period following World War II experienced strong aggregate demand with relatively weak aggregate supply. Deprivation and rationing during the war led to a dramatic rebound in consumer demand thereafter. Troops returning from overseas were generally eager to start young families in what became known as the baby boom with a strong demand for new houses along with furniture, appliances, clothes for the kids, bicycles, automobiles and trucks. The GI Bill supported mortgages and education. Unions were strong with 34.8 percent of workers under union contracts in 1954 giving labor greater power at the bargaining table.³³ Blue-collar employees working under union contracts got a substantial share of the economic pie. Even nonunion workers benefited from the spillover effects of those union contracts.

When U.S. troops entered Germany toward the end of World War II, General Eisenhower was impressed with Germany’s ability to rush troops between the eastern front and the western front on wide, limited access autobahns. General Eisenhower’s appreciation for these efficient German highways during the war, along with his own experience with the less impressive U.S. highway system, motivated President Eisenhower to initiate the Eisenhower Interstate Highway System (as well as an extensive air traffic control system), which, along with the booming housing and automobile industries, provided good paying jobs. This major improvement in American infrastructure led to a substantial increase in productivity and

³² Keynes, John Maynard. *A Tract on Monetary Reform*. London: Macmillan and Company, LTD., 1923.

³³ Data from Pew Research: [American unions membership declines as public support fluctuates](#)

economic growth. In this case government expenditure did not “crowd out” private investment but provided a common property resource that private enterprise was unable to provide for itself. The interstate highway system facilitated, not inhibited, private commercial activity.

However, with Europe and Japan in rubble and American factories quickly reaching their limited capacity, this strong aggregate demand was met with a relatively weak aggregate supply. Initially there was a shortage of funds available for investment. With strong aggregate demand and weak aggregate supply, Say’s Law (“Supply creates its own demand.”) and supply-side economics were alive and well.

Quantity and Velocity of Money

Interest rates rose, cost-push inflation set in, and eventually, toward the end of the 1945 to 1980 period, oil and other commodity prices rose sharply. The great baby boom eventually pushed aggregate demand to overwhelm aggregate supply to produce an excessive annual inflation rate of 13.5 percent in 1980.³⁴

The velocity of money stayed fairly constant during the 1950 to 1980 period causing Milton Friedman to recommend keeping the rate of growth of the money supply equal to the rate of growth of the economy to maximize productivity, employment and growth without inflation. Unfortunately, the velocity of money has been changing since then which greatly complicated the determination and targeting of the appropriate quantity of money needed to establish and maintain maximum employment, productivity and economic growth.

In addition to the need to expand the money supply to accommodate the increase in economic activity within the United States, the role of the U.S. dollar as the world’s reserve currency requires an increase in U.S. dollars to keep up with the use of the U.S. dollar in international financial transactions including international trade. The high demand for U.S. dollars kept the value of the U.S. dollar strong, which imposed an export burden or barrier on the United States similar to the natural resource curse that is often associated with oil and natural gas production that dominates some smaller economies and drives up the value of their currencies.

With any given quantity of money, the velocity of money will be greater when that money is in the hands of those with a high marginal propensity to consume and smaller when in the hands of those with a low marginal propensity to consume. Money turns over much more quickly among poor people than among rich people when consumption is defined in terms of goods and services. Exchanging existing old stocks and bonds is not consumption, but unproductive investment to the extent that it is not financing new productive investment in the real economy. While **arbitrage** can help improve economic efficiency, at some point productive arbitrage is pushed aside by pure speculation that dramatically increases market volatility and instability and turns financial markets into gambling casinos. **Stock buybacks** may raise stock prices, but they are not investments in the real economy that would increase the economy’s supply of real goods and services. Such buybacks can increase the value of the shares of stock owned by the company’s managers and others without increasing the real value of the company. Historically stock buybacks were viewed as a form of insider trading and were illegal.

³⁴ Data from Federal Reserve Bank of St. Louis: <https://fred.stlouisfed.org/series/FPCPITOTLZGUSA> .

It is unfortunate that words like “capital” and “investment” are used to mean two rather different things. On one hand, there is real investment in the real economy to increase productive capacity. Real investment can be physical as in factory manufacturing equipment or abstract such as investment in education. In its either concrete or abstract form, real investment employs real resources such as labor and materials. On the other hand, financial investment refers to trading various forms of wealth such as stocks and bonds. Financial capital and real capital are not the same things. Real investment expenditures are used to employ real resources to increase real capital. Financial investment is a form of savings which does not automatically increase consumption or employment. Thus, real investments and financial investments are opposites in that the former involves spending (demand for money) and the latter involves saving (supply of money). It is another example of how the limitations of a language (English, in this case) can inhibit a full understanding of important concepts that need to be fully differentiated to be fully understood.

You could say that financial investment is a necessary but insufficient condition for real investment. When the Federal Reserve buys U.S. Treasury securities in New York financial markets, it is making a financial investment, which only becomes a real investment in the economy if and when those funds are used to obtain and put to use actual physical or intellectual resources.

Excessive Aggregate Demand Relative to Supply Drives 1970s Inflation

With demand already so strong, it made sense during the 1945 to 1980 period to enhance economic growth through supply-side policies. The tools provided by the Federal Reserve Act of 1913 as amended were appropriate for several decades after World War II to provide adequate liquidity for investment in new plant and equipment. In general, the fundamental economic problem throughout most of the 1950s, 1960s and 1970s was exceptionally strong aggregate demand and inadequate aggregate supply.

By the 1970s aggregate demand had become so strong that inflation became excessive, reaching almost 14.8 percent by March 1980.³⁵ The Federal Reserve under Paul Volker had to intervene to suppress it. Federal Reserve Chairman Volker raised the federal funds rate to 19.1 percent³⁶ in June 1981 contributing to the 1980-1982 recession with an unemployment rate of 10.8 percent³⁷ in November and December of 1982 but helped bring down the inflation rate to 2.5 percent³⁸ by July of 1983.

With strong aggregate demand, the Federal Reserve could effectively control the money supply with tools that worked primarily through aggregate supply via the New York financial markets. Relatively high tariffs kept foreign competition at bay. At that time, there was no need for direct access to consumers to stimulate their demand for new goods and services. Aggregate demand was already generally quite strong relative to aggregate supply. Inflation was

³⁵ U.S. Inflation Calculator: <https://www.usinflationcalculator.com/inflation/historical-inflation-rates/> .

³⁶ Data from Federal Reserve Bank of St. Louis: <https://fred.stlouisfed.org/series/FEDFUNDS> .

³⁷ Data from Federal Reserve Bank of St. Louis: <https://fred.stlouisfed.org/series/UNRATE> .

³⁸ U.S. Inflation Calculator: <https://www.usinflationcalculator.com/inflation/historical-inflation-rates/> .

an ongoing threat and interest rates remained high reflecting strong demand for money for investments into increased productive capability to shore up weak aggregate supply in housing, transportation and production and services generally.

Periods when aggregate demand is very strong and aggregate supply weak are prone to **stagflation** where not enough money is going to employ resources to increase productive capacity and economic growth while too much money is going to demand more goods and services than the economy is producing.

On the other hand, other periods when aggregate demand is weak and aggregate supply is very strong can be described as periods of **secular stagnation** where demand is not adequate to justify adding to productive capacity.

Economic growth suffers from either of these imbalances. With the proper policy tools, the Federal Reserve should be able to make the proper adjustments to avoid the extremes of both **stagflation** and **secular stagnation** and maximize employment and economic growth.

Modest Money Flow to Aristocracy Becomes Extreme Money Flow to Meritocracy

Prior to 1960 America's large corporations were dominated by an aristocracy that in some ways resembled the old English nobility. In fact, prior to the American Revolution, the King of England granted land in America to certain elite families. Wealthy east coast families dominated in America for a lot longer than most people realize or are willing to admit. Legacy was the key to success. It was legacy, not good grades, that got you accepted into elite colleges and universities. Before 1960 even an average grade of C in your prep school was not a problem in gaining admission to an elite university if your father, grandfather, uncle or brother had attended.³⁹

Graduating from Yale, Harvard, Princeton or any of the other elite schools was sufficient for finding a reasonably well-paid executive job at a leading American corporation. The noblesse oblige rules among the early English settlers were simple: stay out of politics, keep your name out of the news, and don't give yourself an oversized salary.

Around 1960 Harvard James Bryant Conant led the way in introducing SAT and ACT scores into admission decisions. Scholarships were introduced to aid applicants to elite prep schools and colleges who were not from wealthy families.⁴⁰ Once ability and achievement potential became important and a geographical distribution preference was introduced to discriminate against certain high achieving non-WASP⁴¹ ethnic and cultural groups from the New York City area and the Boston area, the entire nature of the ruling class changed. Discrimination was still present, but a new meritocracy of sorts was allowed to gradually take over.

Business schools and law schools in general, and economics departments in particular, promoted the "greed is good" philosophy, where Adam Smith's invisible hand was said to justify

³⁹ Brooks, David. *Bobos in Paradise*. New York: Simon and Schuster, 2000.

⁴⁰ At prep school and college reunions, it is interesting to note that the scholarship students are more likely to show up driving expensive, prestigious vehicles than their former classmates from wealthier families, who were taught to hide their wealth to some degree, or at least not flaunt their wealth publically.

⁴¹ WASP = White Anglo-Saxon Protestant.

the single-minded pursuit of one's own self-interest even if that ultimately led to resetting the rules (e.g. tax loopholes, etc.) to benefit the *nouveau riche* of the new meritocracy.

Underpaid government lawyers were no match for the new business and legal elite whose ability and achievements resulted in an accumulation and concentration of wealth far greater than ever desired or achieved by the old aristocracy. Adam Smith's left invisible hand has now been countered with increased economic power which serves as a right invisible hand driving up pure profits, as competitive markets have been replaced by monopolistic and oligopolistic ones.

The new meritocratic elite re-rigged the rules in every sphere of life to their own advantage. Rather than lowering the bar for others to follow, they raised the bar to keep others out. This diverted the money flow away from the vast majority of Americans and toward the top one percent wealthiest elite.⁴²

This money flow diversion was a very fundamental and a very important change in the U.S. economy, starting around 1973.⁴³ Before 1973, labor productivity and wages were highly correlated. After 1973, labor productivity continued its rise, but real, inflation-adjusted, wages flattened out as rising revenues were siphoned off as profits. Such profits piled up in the financial markets as money flowed in a circular loop as stock buybacks, dividends and interest payments that the wealthy just reinvested back into the financial markets where the accumulating pool of money drove interest rates ever lower. In this case, the velocity of money just meant the speed at which these dollars were traveling around and around in the financial markets as market speculators bought and sold old, new and exotic financial products at ever increasing rates. See Petrou (2021) for more details on the widening wealth gap and its causes.⁴⁴

The changes in the money flow, that weakened aggregate demand were due in part to this change in the ruling class and part as a result of focusing on shareholder profits (dividends and stock buy-backs) in the form of financial capital (stocks and bonds, etc.) over labor and real capital (physical and intellectual). Barkai (2020)⁴⁵ calculated the capital costs for the U.S. non-financial corporate sector over the period 1984 to 2014 and found that while labor's share has dropped by 11 percent, the share of real capital has declined 22 percent.

This is associated with a dramatic increase in industrial concentration where one-by-one competitive industries have been turning into duopolies or monopolistic competition where one firm or a handful of firms controls the market. Keynesian and Austrian economists recognized the inevitability of economic downturns, but the Austrians saw such downturns as a cleansing process where weak and inefficient firms were driven out of the market in what Austrian economist Joseph Schumpeter called "creative" destruction, but with larger firms undercutting or

⁴² Brill, Steven. *Tailspin: The People and Forces Behind America's Fifty-Year Fall -- And Those Trying to Reverse It*. New York: Alfred F. Knopf, 2018.

⁴³ Data from Economic Policy Institute: <https://www.epi.org/productivity-pay-gap/>

⁴⁴ Petrou, Karen. *Engine of Inequality: The Fed and the Future of Wealth in America*. New York: John Wiley & Sons, 2021.

⁴⁵ Barkai, Simcha. "Declining Labor and Capital Shares," *Journal of Finance*, 2020, vol. 75, issue 5, pp. 2421-2463.

buying up weaker ones should more accurately be called “competition” destruction. Firms that survive economic downturns are not necessarily more efficient, but just have more cash reserves to ride out a downturn. Tepper and Hearn (2019) reveal in great detail the surprising quasi-duopolies in such industries as beer and glasses in their book “The Myth of Capitalism” which could have been more specifically titled “The Myth of Competition.”⁴⁶

John Locke’s original conception of gaining ownership of land and other forms of capital through the sweat equity of labor quickly reverted back to ownership of capital by an elite class (i.e. the nobility). Labor saving technologies such as automated vehicle production and mountaintop removal in coal extraction have dominated over labor augmenting technological change provided by computers generating a need for computer programmers or Amazon’s need for delivery drivers (soon to be replaced by driverless vehicles). Future economic prospects remain bleak for unskilled and semi-skilled labor. However, it is important to note that real capital has not won. As Barkai (2020) has revealed, the ultimate winner is profits (and, in particular, profits in the form of financial capital in the stock and bond markets). The shares of labor and real capital have declined significantly while that of profits has increased substantially.

Today the huge pile up of wealth at the top of the wealth pyramid has flooded the financial markets with money and has driven interest rates down toward zero. But this money has not primarily gone into productive investment in real capital, but instead driven up stock and bond prices as alternatives to investment in the real economy. Why invest in improvements in real productivity when you can make a lot more money in the financial economy? Ultimately the financialization of our economy has become a drag on productivity and not a catalyst for it.

Baby boomers are now at the opposite end of the life cycle. Whereas, in their productive years they contributed strongly to aggregate demand and provided the government with revenue through income and earnings taxes, now they are retiring. Boomers are in the downsizing cycle of life, while reducing their overall aggregate demand and contribution to government revenues, their need for government support through Social Security and Medicare has increased.

Baby boomers hoping for a well-financed retirement found that the interest rates on their savings accounts and certificates of deposit (CDs) were generating very little money. Given the low interest rates the shift in retirement from portfolios that emphasize stock gains to portfolios more highly focused on fixed income investments such as bonds did not help. Nor did the shift over the years from defined benefit retirements programs to defined contribution programs which just shifted the investment risk over from employer to employees. Consequently, aggregate demand has become weak relative to aggregate supply.

Union membership has fallen from 35 percent after World War II to less than 10 percent of the workforce today. Labor substituting technology has reduced labor’s share of the money flow. Apple, Google and Facebook use much less labor relative to capital than industrial age firms such as General Motors, Whirlpool and Kodak. Moreover, a greater proportion of the wage bill in today’s high-tech firms goes to highly paid computer engineers, who along with doctors, lawyers and bankers, capture the greatest amount of labor income in our economy. Such high paid workers put a greater proportion of their money flow into the financial markets and a much smaller proportion into consumption of newly produced goods and services. Bidding up the price

⁴⁶ Tepper, Jonathan with Denise Hearn. *The Myth of Capitalism: Monopolies and the Death of Competition*. Hoboken, NJ: John Wiley & Sons, 2019.

of exclusive real estate or expensive paintings and other rare artifacts does little to stimulate production in the real economy.

Unskilled and less-skilled workers along with workers whose skills have or are becoming outdated (soon to be joined by drivers replaced by driverless vehicles) are unable to buy back the value of the goods and services they are producing. Deflation with many prices falling has been masked by rising prices in health care and education, which provide additional money flow to already highly educated and wealthy individuals and institutions. Consequently, with little money flow going to those with limited resources, we have seen a dramatic drop in aggregate demand in recent decades. Only an occasional round of government stimulus spending has temporarily strengthened demand to avoid sliding into an economic downturn and recession.

Those attempting to defend extreme income and wealth inequality often cite skill-based technical progress as the reason so many are left behind. While it is important to invest a lot more in the education and training of our workforce, the greatest disparity is not between those with or without a college degree, but between an upper echelon of mainly college-degree holders and all others with a college degree. Extreme economic inequality is driven by the winner-take-all structure of our corporate and political institutions and less on education, initiative, innovation and creativity. In particular, those who have caught on early in life in the enormous wealth that can be built over time in the stock market have won out over those who spent most of their years in debt and/or invested in savings accounts and certificates of deposit. Some have been lucky in investing in particular companies and industries that have done particularly well, but many have gotten quite wealthy just investing in broad market index funds which have followed the extraordinary rise in the stock market. Consequently, the elderly find themselves in two distinct classes: (1) those who put their money in savings accounts and certificate of deposit with low interest rates that have returned very little, and (2) those who have invested in the stock market and have, for the most part, done extremely well.

While the introduction of disruptive innovations can be quite rewarding as in the case of Steve Jobs with Apple Computer and Mark Zuckerberg with Facebook, most such innovative disruption come from outside of the established corporate and political order, but nevertheless tend to contribute to extreme economic inequality rather than mitigating it because of the underlying rules and regulations that favor those both willing and able to contribute large sums of money to the campaigns of our political leaders to rig the system in favor of the financial elite. This further enhances and expands aggregate supply relative to aggregate demand.

VI. The Role of Government in Maintaining a Healthy Economy

Government Response to Weak Aggregate Demand

In recent years the government has recognized the need to fill in for inadequate aggregate demand in order to reduce unemployment and avoid political unrest. Various stimulus programs and unpaid-for tax cuts have temporarily provided the additional money needed to make up for the shortfall in the money flowing to workers. While initially seen as temporary, deficit spending is becoming more of a permanent feature of our economy. This was not originally intended or anticipated, but, given our distorted money flow, is necessary to avoid what would otherwise be a never ending recession.

When the economy is at full employment, the government can “crowd out” private consumption and investment directly through taxation or indirectly through deficit spending in financial markets by selling Treasury securities to obtain funding for government expenditures and drive up interest rates. On the other hand, when demand is insufficient to fully employ the economy’s resources, the government can “crowd in” private investment and consumption by expenditures that stimulate the economy and encourage consumption. For example, government infrastructure expenditures can employ otherwise unemployed workers who spend their wages on the purchase of new goods and services, and thus produce an upward growth spiral. New or renewed roads, bridges and tunnels paid for by the government can reduce the cost of transport for business. Thus, government spending can encourage and enhance consumer demand and private investment.

Globalization and automation have provided a strong and robust aggregate supply. With the collapse of the Soviet Union in 1991 and China’s shift from state socialism to state capitalism under Chairman Deng, the world-wide supply of labor available for capitalist production expanded enormously. The creation and rapid spread of the Internet and the transportation revolution in expanded air and sea transport has made a wide variety of goods and services available at low prices. The large pool of cheap labor in world-wide production and the ease of international communication and transportation has further undermined the power of workers in the United States. The supply-side problem that existed after World War II has been replaced with a demand-side problem. We are now facing an immediate drop in aggregate demand due to COVID-19 and a chronic shortfall in aggregate demand due to a distorted money flow that has redirected money from workers to the owners of capital. Money that used to flow to Main Street has been redirected to Wall Street. Only high levels of stimulus spending have enabled the United States to avoid a prolonged recession.

For most of the past century, consumers used cash and checks, and, more recently, credit cards to finance their purchases. Before the Internet, electronic money was not a realistic option for controlling the money flowing directly to consumers. Some money might eventually trickle down to consumers through the financial market, but the Federal Reserve had no direct path to consumers. The Federal Reserve needs a new policy tool to give it direct access to adjust consumer demand to maintain full employment on one hand and avoid excessive inflation on the other.

Some researchers at Federal Reserve banks have realized that Bitcoin and other cryptocurrencies may not be just another passing fad but could ultimately present a real challenge to the Federal Reserve control over the money supply. Recall that when automobiles

were first introduced in the late 1880s and early 1900s, a combination of bad roads, few sources of gasoline, and frequent flat tires convinced people that they were just a passing fad of a few rich people but with little importance for the general population. As with the automobile, cryptocurrencies may very well turn out to be a lot more important than just some passing fad.

With the wealthiest 10 percent owning approximately 84 percent⁴⁷ of the assets in the New York financial markets, any money the Federal Reserve injects into the financial markets goes primarily to that top 10 percent. While workers have relatively high marginal propensities to consume new goods and services with money flowing into jobs, the wealthiest people are much more likely to forgo additional consumption and redirect additional money right back into the financial markets.

Even if the Federal Reserve pumps large amounts of money into the financial markets, and enough of that money trickles down to the real economy, there is still the issue of the long lag time required to fully realize the impact on jobs and prices. Imagine that you had a car where there was a significant lag between the time you turn the steering wheel and the time your car's wheels actually turn. A deer jumps out in front of your car, and you immediately turn the steering wheel. You are going to hit that deer, or, in this context, generate excessive inflation. A more immediate and less expensive way is needed for the Federal Reserve to avoid generating unexpected inflationary episodes.

⁴⁷ Wolff, Edward N. "Household Wealth Trends in the United States, 1962 to 2016: Has Middle Class Wealth Recovered?" National Bureau of Economic Research (NBER) Working Paper 24085, November 2017. DOI 10.3386/w24085 .

VII. The Nature of Economic Instability

Distorted Money Flow Undermines Economic Stability

We are now facing an unbalanced money flow with so much money piling up in the financial markets that new productive investments in the real economy are hard to find so companies redirect their earnings into stock buybacks and increased dividends which do not increase productive capacity or real output. What is the point of adding another line of production if you can't sell all that you are producing with your existing lines of production? And if you did want to add to your productive capacity, why would you do it in the United States where labor is more expensive than many alternative overseas locations? But money flowing abroad to create new production facilities often doesn't get into the foreign exchange markets to drive down the value of the U.S. dollar because countries such as China require that U.S. dollars acquired by Chinese companies in China be turned in to the Chinese government in exchange for yuan so that the Chinese government can send those same U.S. dollars right back into the New York financial markets via their sovereign wealth funds purchasing U.S. Treasury securities. At the end of the day, such money flowing abroad to finance new production facilities just adds to global oversupply before flowing right back again into the New York financial markets.

Meanwhile workers are unable to buy back the value of the goods and services they are producing. Consumer demand, which traditionally accounted for 70 percent of national output, has fallen as more and more money has flowed to the wealthiest individuals and corporations. To compensate for inadequate consumer demand, government expenditures in the form of unpaid-for tax cuts and expenditures have filled in for the inadequacy of new investments and consumer demand to keep national output from falling in an economic downturn. This is not an occasional problem, but a chronic problem such that as more and more money piles up on Wall Street the federal government must provide more debt-financed stimulus money in one form or another to compensate so that Main Street can buy back the value of the goods and services it is producing to keep the economic engine running and avoid a recession.

Ironically, what is bad news for the real economy is good news for the stock market. As more and more money has flowed to the top of the wealth pyramid, the financial markets in general and the stock market in particular have become more and more separated from the real economy. Stocks prices may pause, but ultimately prices in the stock market shake off difficulties in the real economy to rise higher and higher as money continues to flow into the financial markets.

Not only does the amount of money continue rising in the stock market, but the speed of the turnover of money within the stock market is increasing as well. Electronic trading has greatly increased the volume of activity and new financial derivatives have increased the number of tradable financial products such as mortgage-backed securities (MBS), collateralized debt obligations (CDO) and credit default swaps (CDS). Leveraged ETFs such as UDOW, SDOW, TQQQ, SQQQ, UPRO, SPXU and the like thrive on quick turnover in an increased volume of buying and selling. New investment brokers such as Robinhood (HOOD) have enticed millennials and young people to get caught up in the stock market mania. With exceptionally low interest rates, bond market investments, certificates of deposit, and savings accounts have become almost equivalent to just holding cash.

The stock market is extremely sensitive to whatever the Fed says and does, because the tools that the Fed currently has work through the financial markets, with a rather indirect and limited influence on the real economy. To the 10 percent wealthiest people, the stock market is the economy. That is where they make a great deal of their money. As long as most of the money keeps flowing to the wealthiest people, the laws of supply and demand ensure that the stock market will keep rising, with less and less sensitivity to what is going on in the real economy. Meanwhile, most other people and the government will accumulate more and more debt in the face of near-zero interest rates.

The fundamental problem is that capitalism is not going to work all that well for you if you don't have any capital. Thomas Piketty's book, *Capital in the 21st Century*, provided clear evidence that over most of history the return to financial capital has been higher than the growth rate of the economy. This should be no surprise, because the relative return to labor has declined as variable costs in the form of labor have fallen relative to fixed costs rising in the form of capital. Labor's share of the economy has fallen but the share of real capital has fallen as well, as financial capital in the form of profits has come to dominate. Real capital investment and productivity have stagnated while the return to financial capital in the form of profits has grown to gain a greater and greater share of our economy's overall value. It has become clear that capitalism won't work for you if you don't have any financial capital.

According to John Locke, we are supposed to gain capital through sweat equity. But this hasn't been happening. As an owner of lots of stock, I know that hard work pays off. Except not for the worker. I want my workers to work hard and generate lots of profits, because their hard work pays off for me in generating high profits with big dividend payments and increases in stock valuations. Free enterprise is supposed to maximize worker incentives. But I don't have to do any work at all to get lots of money through ownership of capital. It is all about stock ownership. Invest early and invest often. The whole point of one's career is to make the transition from getting your money from labor to getting your money from capital (stocks and bonds). Once you are getting sufficient money from capital, you can retire. I can just check my stock valuations from time to time, take a few minutes to set my limit orders and stop-loss orders, and head out to the golf course or lounge around all day.

Is this the best incentive maximization structure for our free enterprise market economy or is there something wrong here? Does maximizing **shareholder value** instead of maximizing **stakeholder value** just mean focusing on cutting costs to increase margins to inflate the current stock price in the short run and treating workers as just another factor input such as steel or plastic instead of recognizing the role of efficiency wages in driving workers to work harder and smarter. A bonus structure at a McDonald's restaurant can serve as an efficiency wage in recognizing that workers are not just another factor input, but can be motivated by incentives to pick up trash, keep tables clean, be nice to customers and get along with fellow employees. When CEOs from various companies serve on each other's corporate boards with no labor representation, the focus is on maximizing shareholder value and CEO compensation.⁴⁸

For the economy as a whole, the problem is not only maintaining the proper quantity of money, but also directing the flow of money to ensure that interest rates do not continue to stay close to zero. This means maintaining a proper balance between aggregate demand and

⁴⁸ Clifford, Steven. *The CEO Pay Machine: How It Trashes America and How to Stop It*. New York: Penguin Random House, 2017.

aggregate supply. The *money flow paradigm* recognizes that it is not just the amount of money that matters, but where it is flowing and what the velocity of money is in that particular money flow. Money flowing to workers has a high turnover in the purchase of goods and services and, therefore, a high monetary velocity, while money flowing to wealthy individuals and corporations inflates stock and bond prices, but does little to increase consumer demand.

The difference between whether you are part of the poor getting poorer or the rich getting richer depends on which side of the interest rate you are on. If when interest rates rise, you say “Great, I will be earning more money” then you are part of the rich getting richer, but if you say “Oh no, I will now have to pay more on my debt” then you are part of the poor getting poorer. Low interest rates discourage savings and encourage debt.

Our distorted money flow will only get worse if we do not redirect money from the financial markets to raise interest rates and get more money to flow into the real economy to increase consumer demand when appropriate. Unlike the 1945 to 1980 period, the problem now is not excess demand and insufficient supply, but insufficient demand and excess supply. The fundamental problem now is that due to both technical and political causes, too much money is flowing into our financial markets and too little money is flowing to consumers.

By focusing on maintaining stability and wealth in the stock market and ignoring the huge buildup of debt among middle class Americans, the Federal Reserve has been systematically contributing to income inequality in America without fully realizing it.⁴⁹ The fundamental problem is that the Federal Reserve has been trying to control the economy using the supply-side tool of manipulating interest rates in the New York financial markets and lacks a demand-side tool to maintain full employment and stable prices.

⁴⁹ Petrou, Karen. *Engine of Inequality: The Fed and the Future of Wealth in America*. New York: John Wiley & Sons, 2021.

VIII. Federal Reserve Monetary Policy

Federal Reserve Needs Demand Side Policy Tool

In 1913 the responsibility for maintaining an adequate money flow was given to the monetary authorities at the Federal Reserve Board of Governors. However, the policy tools available to the Federal Reserve have proven inadequate to sustain a reasonable balance between aggregate demand and aggregate supply in the face of extreme income and wealth inequality.

The problem is that those tools are focused almost exclusively on adding or removing money from the New York financial markets. With the high levels of income and wealth inequality, there is already too much money piling up in the financial markets. Interest rates are already too low. Very little of the money given to Wall Street bankers in exchange for their public or private securities trickles down to the average consumer. Instead of stimulating the economy, the Federal Reserve just pushes up stock and bond prices and contributes to the widening wealth gap.

Consequently, fiscal policy has had to intervene to make up the difference. As a result, it has been necessary to increase the national debt and to keep increasing the debt ceiling to accommodate higher and higher levels of national debt. Any individual or business compiling such a high level of debt would be in danger of default and bankruptcy. However, the Federal government has both the power to print money (through the Federal Reserve) and the power to tax. Not to mention the power of eminent domain and police power. The size of the national debt is not a problem as long as the supply of money doesn't get so large as to drive up consumer demand to the point of generating excessive levels of inflation. See Kelton(2020)⁵⁰ for a more extensive treatment of this issue.

Moreover, in spite of the high levels of national debt, the interest rates on the national debt remain exceptionally low and the value of the United States dollar remains strong in foreign exchange markets. The demand for dollars has remained strong partially due to its role as the world's primary reserve currency. If the bond vigilantes were worried about the viability of U.S. Treasury securities, they would demand a higher interest rate of those securities. Since the interest rate of those securities has remained low, the market is not perceiving any increased risk with holding U.S. treasuries. The U.S. dollar and U.S. Treasury securities remain strong.

But in addition, the United States faces a clever strategy by nations wishing to continue to sell a large amount of goods and services to the United States. Ordinarily, a country purchasing a lot from other countries would through such purchases inject a lot of its currency into international currency exchanges and end up driving down the value of its currency. But, as mentioned above, China and other countries dependent on a strong U.S. demand for their products have bought up those U.S. dollars and invested them right back into the United States by purchasing a large amount of U.S. Treasury securities. This tactic has kept the U.S. dollar strong in international markets while contributing to the excess liquidity in U.S. financial markets that has held down interest rates.

With such a large amount of low-wage labor abroad producing such a substantial supply of inexpensive goods and services, the threat of inflation remains low with generally weak

⁵⁰ Kelton, Stephanie. *The Deficit Myth: Modern Monetary Theory and the Birth of the People's Economy*. New York: Hachette Book Group, Inc. 2020.

demand for new goods and services as most Americans are themselves deep in debt and living paycheck to paycheck due in part to the low interest rates but primarily due to the diversion of the money flow away from the average worker and toward wealthy individuals and corporations who contribute very little to aggregate demand and are not inclined to invest in real productive capacity in face of the supply glut from abroad. Consequently, we continue to see earnings going into stock buybacks, enlarged dividends and investments abroad in low-wage countries instead of into the creation of new plant and equipment within the United States.

Senators Ron Wyden (D-Oregon) and Sherrod Brown (D-Ohio) have introduced a tax on stock buybacks as a small step in addressing this problem. *The Stock Buyback Accountability Act (2021)*⁵¹ levies a two percent excise tax on money spent by companies on buying back shares of their own stock. Another approach to restoring a balance in our national money flow would be to apply the same tax rates to all money earned in the stock market as is applied to money earned from labor. The current system of charging as little as fifteen percent on long-term capital gains is just blatant discrimination in favor of the wealthiest Americans who get most of the capital gains and against everyone else. When we build an aircraft carrier someone has to pay for it. Because the wealthy pay less, everyone else must pay more in taxes. Average Americans are not fully aware of this disparity, while the wealthy have better tax advisors and lobbyists to ensure that they get every possible break in the tax system. However, more and more wealthy Americans are becoming aware of the damage our distorted money flow is playing in contributing to instability and low economic growth, not to mention excessive inequality, and want to correct this problem and pay their fair share in taxes.

With the release of over a billion people from relatively unproductive communist regimes in the 1990s and early 2000s, a vast global supply chain developed to provide high quality products at low prices enabled by low wages. Unskilled and semi-skilled workers in the United States and other developed countries could not compete effectively against such a vast global supply of low wage workers. For a more thorough analysis of this problem see Alpert (2013).⁵²

The aging of the populations in developed countries also weakened demand for goods and services since the elderly tend to have lower marginal propensities to consume than younger families with comparable levels of income and wealth. This is partially due to the empty nest effect of children leaving to form new households and the accumulation over time of clothing, furniture and other accessories as people get older and no longer feel the need to keep up with the latest fashions and gadgets.

Consequently, aggregate demand has fallen to unprecedented lows relative to the enormous global aggregate supply. Money that would have normally flowed to Main Street was diverted to Wall Street. Federal government deficit spending became essential to counter potentially high levels of unemployment because with huge amounts of money piling up in financial markets driving down interest rates, the Federal Reserve is impotent in being stuck with tools designed to work through the supply side when the fundamental economic stability problem is poor money flow to the demand side.

⁵¹ Brown, Sherrod (Senator, D-Ohio) and Ron Wyden (Senator, D-Oregon). *The Stock Buyback Accountability Act*. Washington, DC: The United States Senate, 2021.

⁵² Alpert, Daniel. *The Age of Oversupply: Overcoming the Greatest Challenge to the Global Economy*. New York: Penguin Group, 2013.

Restoring the Money Flow Back to the Demand Side

While more and more money piles up in our financial markets, less and less money is being made available for the common property resource investments that are needed to increase our productivity and economic growth. States have sharply cut back their support of public universities. We are told that additional money will not improve public education while wealthier districts provide substantial funding for their schools through property taxes with many of their students going on to college while poorer districts with much lower property values are unable to provide adequate funding to provide a comparable education for their children who face much poorer prospects for further education or training. Young people with great teaching potential are being diverted to higher paying occupations in the face of low pay for teachers in public schools. The need to retrain our workers with 21st century skills for new 21st century jobs will become glaringly obvious when 3.5 million truck, bus, taxi and delivery drivers lose their jobs to autonomous vehicles in the coming decade.

Other common property resource problems include repairing our infrastructure which has been deteriorating rapidly with unnecessary damage to cars, trucks and buses, not to mention trains and planes using outdated and poorly maintained facilities. Research funding for the *National Science Foundation* (NSF) and the *National Institutes for Health* (NIH) could enable individual researchers and their research teams to solve problems of a common property resource nature, where private businesses are unable to capture sufficient individual returns to warrant investment. The essential role of government research as the basis for much of the private entrepreneurial progress has been well-established by Mariana Mazzucato in several publications in recent years as referenced earlier.

The fundamental failure of our economic system is the failure to recognize that the free enterprise system is the creation of government and does not and cannot exist apart from government. The rules and regulations that the government sets up are the foundation of the free enterprise system. Special interests have played a substantial role in determining those rules and regulations that have distorted the money flow in our economy to the extent that workers can no longer afford to buy back the value of the goods and services they have created. Money that should have gone toward innovation and expansion has instead gone to artificially driving up the company's share price in the short run. Corporations have been engaged in redirecting the money flow away from the middle and lower level employees and toward the top echelon of corporate management. Government then steps in with deficit spending to make up the difference to keep our economy's resources fully employed. The *money flow paradigm* requires that to return to a full employment economy with a balanced federal budget requires that the government make the fundamental changes needed to correct the distorted money flow.

The first and foremost reform needed is to substantially change our tax code. Clearly dividends and capital appreciation should be taxed at the same rate as employee earnings. A key aspect of reforming the tax code is in understanding the fundamentals of human motivation and incentives. While the absolute amount of money that a poor person has is key to paying the rent, buying food and arranging for transportation to work, the absolute value of money becomes less and less important as a person acquires greater amounts of money while the relative amount of money becomes more and more important.

Everyone wants a sense of self-worth in some form or another. Feeling “good” about yourself does not necessarily require virtue. After all, a burglar feels good for pulling off a clever burglary. People without much wealth look to other measures of their self-worth. A good pianist may see piano playing ability as a measure of self-worth, whereas a weight-lifter may consider the greatest weight lifted as such a measure. The wealthier an individual becomes, the more likely they will consider their wealth as some measure of their self-worth. For the wealthiest individuals, improving their ranking on the Forbes list of wealthiest people may become one of their primary concerns. The motivations and work incentives of the wealthiest people are not reduced in paying their taxes, despite their strong aversion to paying any tax at all, as long as their relative wealth position is not altered. At high income levels it is clearly relative wealth and not absolute wealth that really matters.

One behavioral economics study found that people preferred a situation where they had \$1.1 million dollars and their colleague had \$1 million dollars over a situation where they had \$3 million dollars and their colleague had \$4 million dollars. Clearly in this case their relative ranking was more important to them than the absolute amount of money they had. This is reflected in their marginal propensity to consume. When wealthy individuals obtain more money they do not suddenly decide to buy a new car or go to that fancy restaurant, because they already have as nice a car as they want and are already going to as many fancy restaurants as they want. Most of any additional money the wealthy acquire goes into investments in the financial markets and are not used for additional consumption. This is in sharp contrast to poor and middle class people who have much higher marginal propensities to consume.

With this incentive structure in mind, it is important to reconsider our tax system to raise enough revenue to inject money into our economy for important fiscal policy common property resource initiatives such as infrastructure improvements, support for education, and *National Science Foundation* (NSF) and *National Institutes of Health* (NIH) research support.

Diverting money from the wealthiest individuals and corporations will help move money out of our financial markets and into the hands of workers and consumers who will actually spend it to increase overall aggregate demand for goods and services, and, thereby, maximize employment and growth. If enough money can be removed from the financial markets, interest rates will rise to encourage savings and discourage the buildup of excessive debt. With more savings, a job loss or medical issue will not force a family to abruptly reduce their expenditures. In the aggregate this will ensure a more stable level of consumer demand and greater stability for our economy overall. When enough money is flowing to the average consumer to sustain an adequate level of consumer demand, government debt can then be slowly and systematically reduced and eliminated, except for the occasional need to fend off economic downturns.

Probably the least disruptive taxes are our estate and inheritance taxes, as long as we make provision for the continuance of businesses such as family farms, which, if sufficiently large to exceed the lower limit (\$12.06 million dollars for the 2022 tax year) required for taxation, could be converted to family trusts. Estate taxes could be used to extend the Social Security system to future generations because in 2020 Baby Boomers controlled about 53 percent of the nation’s wealth, with Generation X having about 6 percent and Millennials about 4 percent.

Another obvious tax target would be the tax on dividends and both short-term and long-term realized returns on capital. This would remove money directly from the financial markets with the dual purpose of raising interest rates and providing funding for common

property resource expenditures as well as increasing the demand for goods and services generally.

To the extent that deficit spending generates even a modest level of unexpected inflation, it is essentially a tax on the real value of wealth. When monetary policy helps drive down risk-free interest rates such as those associated with short-term U.S. Treasury bills to below the rate of inflation, conservatives often refer to this situation as one of financial repression. In effect this is just another way of imposing a wealth tax, which, when unexpected, can benefit debtors at the expense of creditors. However, such a wealth tax may benefit the economy as a whole if it shifts enough of the money flow to consumers to increase consumer demand when aggregate demand is otherwise inadequate to maintain full employment and maximum economic growth.

IX. New Demand-Side Federal Reserve Policy Tool

Federal Reserve Bank “FedAccounts” for Everyone⁵³

Even without monetizing the national debt, the existence of such debt bypasses the purpose of setting up the Federal Reserve system in the first place. Do we or do we not want the professionals in the Federal Reserve to control the money supply? Do we really want to undermine the system we set up that was intended to avoid giving the overall control of money to the politicians? If we are serious about separating the taxing and spending functions of our economy from the control of the money supply, then we need to consider providing the Federal Reserve with policy tools that will enable it to carry out its assigned responsibility of maximizing employment while avoiding excessive price inflation.

During periods such as in the decades following World War II when aggregate demand is strong and aggregate supply is weak, monetary policy can be used to ensure that financial markets have adequate funds that can be provided for investment in the real economy. Corporations that want to expand their productive capacity can issue new shares of stock or issue new corporate debt in the New York financial markets.

But as in recent decades when aggregate demand is weak and aggregate supply is strong, corporations have no incentive to expand their productive capacity. Why add another line of production when your existing lines of production are not fully utilized due to inadequate consumer demand? When demand is weak, pumping a lot of money into the financial markets to lower interest rates is ineffective in encouraging the expansion of production. What the Federal Reserve needs is a demand-side tool to directly stimulate demand instead of trying to use an old, out-of-date supply-side tool that doesn't work in a futile attempt to have money trickle down to the consumer.

On the other hand, when demand is too strong, such that too much money is chasing too few goods, and productive capacity and employment are already maximized, raising interest rates in New York financial markets does the opposite of what is needed to stop excessive inflation. It suppresses supply, when the real problem is excessively strong demand for the existing inadequate supply of goods and services.

When the Federal Reserve raises interest rates, it suppresses supply for seasonal, cyclical and other businesses that depend on short term liquidity to maintain and establish inventory and cash flow. It suppresses business. For example, farmers borrow money from the financial system to pay for seed, fertilizer and irrigation in the spring and to pay workers to harvest the crop in the fall, and pay it back after the harvest is sold. Many retail businesses do not make a profit until the holiday season at the end of the year. With all the fixed costs they have to absorb during the year, they only get their head above water in the fourth quarter. If borrowing to cover those fixed costs earlier in the year becomes too expensive, then they must cut back their business operations to reduce those fixed costs enough to survive until the fourth quarter.

⁵³ Just as behavioral economics was developed with the help of psychology professors Daniel Kahneman and Amos Tversky, lawyers John Crawford, Lev Menand and Morgan Ricks have played a key role in formulating the presenting the idea of establishing “FedAccounts” in response to the proposals for creating a **Central Bank Digital Currency** (CBCD).

But production is cut back when borrowing costs increase as interest rates rise. This traditional approach suppresses both supply and demand as workers find less work and their incomes fall. High interest rates also cause businesses to put off long-term investments in plant and equipment that would increase supply. The economy slides into recession. In addition to causing recessions, the Federal Reserve's traditional policies have led to ever greater levels of income and wealth inequality as explained by Petrou (2021).⁵⁴

Inflation occurs when too much demand for goods and services is chasing too little supply. The financial markets exist to offer liquidity to businesses to maintain or expand the supply of goods and services. Countering the rapidly rising prices requires increasing supply while reducing demand. Current supply shortages call for encouraging supply. *But the traditional Federal Reserve policy approach will do the opposite of what is needed.*

Sure, suppressing business to lay off workers to reduce demand will work if you slam on the brakes hard enough. But trashing our economy to stop inflation is not necessary. What the Federal Reserve is missing is a demand-side tool to ratchet down demand when markets for goods and services become overheated.

If everyone was given a Federal Reserve savings account (FedAccount)⁵⁵, then when inflation threatens, the Fed could offer a high interest rate in such accounts when needed to encourage individuals to save money and reduce consumer demand when too much money is chasing too few goods causing excessive inflation. After all, the whole point of the existence of interest rates is to entice people to delay consumption now in return for having more money later.

To focus on consumers with high marginal propensities to consume and to avoid competing with regular commercial banks, the interest rate in these FedAccounts could be applied to a maximum of some relatively small base amount such as \$5,000 or \$10,000 depending upon the state of the economy and the need to encourage or discourage consumer demand. Money placed in these FedAccounts by the individual or the government above the base amount would not earn interest.

Under the Postal Savings Act of 1910, our post offices served as banks for 56 years from 1911 to 1966. You could go to any of our 34,000 post offices to cash a check or set up a savings account. The Public Banking Act, which was recently introduced in the Congress to create postal savings accounts, could be modified to provide the Federal Reserve with a demand-side tool to curb excessive inflation without throwing our economy into a recession.

Demand can be tamped down and supply encouraged by recreating the postal savings FedAccounts and offering high interest rates in those savings accounts on balances up to some specified limit, such as \$10,000 (with no interest earned on amounts above that limit), while leaving the rates in the New York financial markets relatively low to stimulate, not suppress, supply.

Higher interest rates will encourage savings. Saving more and spending less is obviously what is needed when too much money is chasing too few goods. If we offer high enough interest

⁵⁴ Petrou, Karen. *Engine of Inequality: The Fed and the Future of Wealth in America*. New York: John Wiley & Sons, 2021.

⁵⁵ Ricks, Morgan; Crawford, John; Lev Menand. "FedAccounts: Digital Dollars." *George Washington Law Review*, vol. 89, issue 1, January 2021. <https://www.gwlr.org/vol-89-no-1/>

rates in postal savings accounts dispersed in our 34,000 post offices around the country, excess demand can be reduced enough to stop inflation without forcing the economy into an unnecessary recession. This approach withdraws money from the economy by offering a return on investment, not by taxation. People will still be able to purchase their necessities, but will be motivated to delay or cut back on luxuries until the economy cools off and postal bank interest rates return to normal.

This will especially benefit the elderly who need a good return on their savings to help finance their retirement. Having more people save more money will also serve as an automatic stabilizer by providing people with the savings they need to ride out economic downturns, which, in turn, will make such downturns shorter and less extreme.

In the face of weak demand and strong supply, the Federal Reserve can only carry out its mission of maintaining full employment with reasonably stable prices with a new tool aimed directly at controlling the overall level of consumer demand. Such an effective tool to adjust consumer demand to keep the economy at full employment without excessive inflation is the creation of Federal Reserve personal savings accounts for all persons over 18 who have a Social Security number. These Federal Reserve personal savings accounts, set up through the system of 34,000 post offices throughout the United States, could provide the Fed with direct and immediate control over consumer demand. Everyone with a social security number would get an account with a \$1,000 which could not be withdrawn until after age 70. However, any interest earned and any additional money deposited by the individual or by the government could be withdrawn at any time.

The Fed could then inject money into these accounts when the economy slowed and recession threatened. When excessive inflation threatens, the Fed could offer exceptionally high interest rates on savings in these accounts. As an alternative to buying and selling securities in financial markets to regulate the money available for Wall Street investments, the Fed needs to establish these individual bank accounts so that the Fed can inject money directly into the real economy on Main Street as needed to maintain full employment or offer high interest rates in these accounts when inflation is getting out-of-hand. For more details, see Marsh (2020).⁵⁶

The COVID-19 crisis provides an excellent example of why these Federal Reserve bank accounts are needed. Instead of relying on the politicians in Washington to authorize the U.S. Treasury to send out checks in a rather haphazard and unreliable manner, the Federal Reserve could act quickly and reliably to inject money into these Federal Reserve personal bank accounts. These bank accounts could be accessed directly in a highly secure manner with a person's pre-registered smartphone or through any post office or bank.

On the other hand, at some point the federal government may discover that it has overstimulated the economy causing excessive inflation. The whole point of the existence of an interest rate is to delay consumption. By offering high enough interest rates in these accounts, the Federal Reserve could encourage Americans to delay consumption by moving more of their money back into their Federal Reserve savings account rather than spending it.

With the establishment of Federal Reserve individual savings accounts, the Fed would finally have a direct way of controlling aggregate demand through Main Street and not just aggregate supply through Wall Street. This would provide a much tighter and direct effect on

⁵⁶ Marsh, Lawrence C. *Optimal Money Flow: A New Vision on How a Dynamic-Growth Economy Can Work for Everyone*. Kansas City, MO: Avila University Press, 2020.

consumer demand, requiring less money than the current trickle-down approach, which works, if at all, with a long delay and little effect.

Is Congressional authorization of Federal Reserve savings accounts realistic?

In 2018 Senator Kirsten Gillibrand (S.2755) and Representative Evette Clarke (H.R.5816) introduced **The Postal Banking Act** which would restore the post office banks that existed under The Postal Savings Act of 1910 for 56 years from 1911 to 1966. In 2020 Representative Rashida Tlaib introduced "The Automatic Boost to Communities Act," H.R. 6553, 116th Congress and Representative Maxine Waters introduced "The Financial Protections and Assistance for America's Consumers, States, Businesses, and Vulnerable Populations Act," (H.R. 6321) 116th Congress which also provided for FedAccounts.

Their goal was to help the poor and underprivileged (especially racial minorities), otherwise known as the unbanked or underbanked, who are driven deep into debt by loan sharks, pawn shops, payday lending and "cash now" opportunists, when they just need to cash a check, transfer money to a friend or relative, or get a small loan. This was endorsed by the Biden-Sanders Unity Task Force which calls for "bank accounts and real-time payment systems through the Federal Reserve and easily accessible service locations, including postal banking." Baradaran (2015)⁵⁷ extensively examines the plight of the unbanked and underbanked in her book "How the Other Half Banks."

By combining the concern for concern for poor and disadvantaged people with the need to maintain full employment through much tighter control of the demand for goods and services without increasing taxes or the national debt, a sufficient large coalition of senators and representatives could be put together to pass a version of **The Postal Banking Act** that would give the Federal Reserve the needed authority to maintain full employment while maximizing economic growth without excessive inflation.

Postal banking is not a new idea. Under **The Postal Savings Act of 1910** our post offices served as banks for 56 years from 1911 to 1966. The key to fully funding post office pensions is to place the responsibility for the pensions with the Federal Reserve, which would oversee the postal banking services under **The Postal Banking Act**. The Fed is entirely self-financed with money earned from its investments and fees from its member banks. The Fed earns so much money it typically donates at least \$60 billion to the U.S. Treasury each year.

Ironically, it is the need of low-income people for money to meet immediate needs that makes them especially useful for macroeconomic stability for the nation as a whole. When the Federal Reserve was established in 1913, it was given monetary stability tools aimed at controlling the economy through the supply side. This made sense when growing populations and powerful working-class organizations ensured a strong flow of money to the demand side. In the decades following World War II with the GI bill and baby boom, strong demand for goods and services enabled monetary policy to influence both the unemployment rate on one hand, and the rate of inflation on the other, through manipulation of interest rates in New York financial markets. With strong aggregate demand and weak aggregate supply, supply-side economics was alive and well.

⁵⁷ Baradaran, Mehrsa. *How the Other Half Banks: Exclusion, Exploitation, and the Threat to Democracy*. Cambridge, MA: Harvard University Press, 2015.

But in recent years as a result of automation, globalization and the aging of our population, the Fed has become impotent as strong demand and weak supply have given way to weak demand and strong supply, resulting in very low interest rates. With such weak demand, worthwhile investments in the real economy are hard to find with the stock market becoming a separate economy for the wealthy. The huge incomes of the rich drive up stock prices with virtually no trickle down from Wall Street to Main Street.

Growing income inequality has diverted huge quantities of money to the stock market. Too much money is flowing to the wealthy, who have low marginal propensities to consume, and too little to low-income consumers with their high propensities to consume. Meanwhile, after the release of over a billion people from communist regimes in the 1990s, especially in China, a vast global supply chain has developed. Aggregate supply has become stronger than ever before as aggregate demand has become weaker.

With so little money flowing to the American people, they can no longer afford to buy back the value of the goods and services they are producing. Federal deficit spending is used to make up the difference in order to keep the workforce fully employed. The aging of the baby boomers, whose demand for goods and services generally drops as they get older, exacerbates this deficiency in aggregate demand. With aggregate supply very strong, the key to controlling the economy has shifted to the weaker demand side.

Clearly what is needed for better control of aggregate demand is a new tool for the Federal Reserve. To directly influence consumer demand, the Federal Reserve needs to establish a Federal Reserve highly-secure cybersecurity block-chained savings account for every American with banking services accessed directly through the Internet, through private banks and ATMs for a fee, and through the more than 30,000 post offices nationwide so that the Federal Reserve can inject money directly into the real economy on Main Street as needed to maintain full employment. Since the Federal Reserve can create money out of "thin air," this would not increase taxes or add to the national debt.

On the other hand, when excessive inflation threatens, the Federal Reserve could offer an unusually high interest rate on the first \$10,000 in such accounts when needed to encourage individuals to save money, thereby reducing aggregate demand. In other words, postal banks can distribute cash when demand is weak and, alternatively, raise interest rates to increase savings -- were demand to become too strong -- to stop excessive inflation.

The COVID-19 crisis provides an excellent example of why these FedAccounts are needed. Instead of relying on a slow and complicated agreement to authorize the U.S. Treasury to send out checks in a rather haphazard and unreliable manner, the Federal Reserve could act quickly and reliably to inject money into these FedAccounts. These accounts could be accessed directly in a highly secure manner using block chain algorithms at any post office, ATM or private bank for a fee, or with a person's smartphone. This would enable you to pay someone for cutting your grass, raking your leaves or shoveling your snow in an immediate and direct smartphone-to-smartphone transfer.

Federal Reserve individual FedAccounts would finally give the Federal Reserve a direct way of controlling aggregate demand through Main Street and not just aggregate supply through Wall Street. This would give the Federal Reserve a much tighter direct impact on consumer demand, requiring less money than the current trickle-down approach, which works, if at all, with a long delay and little effect. The Federal Reserve would finally have a demand-side tool.

It is time to face the fact that the tools available to the Federal Reserve are not designed to address the problem of inadequate aggregate demand. Both progressives who want to help low-income people with banking and conservatives who want greater postal profitability and strong economic growth with additional taxation, increases in the national debt or the triggering of uncontrolled inflation should support **The Public Banking Act**.

X. Summary and Conclusion

Our Distorted Money Flow

Before 1974 worker productivity was matched with worker compensation. After 1974 worker productivity continued to grow but worker compensation flattened out in real terms. After 1974 workers' hard work paid off. But not for the workers. Workers' hard work paid off for the investors who became the primary beneficiaries of the new emphasis on maximizing shareholder value. A combination of increasing shareholder wealth and "pay-to-play" politics diverted money flow from worker pay to the stock market, preventing workers from having enough money to buy back the value of the goods and services they were creating.

Money flowed into the New York financial markets to drive up stock and bond prices and drive down interest rates. This distorted money flow has led to growing private debt, increasing federal debt, and the Federal Reserve flooding the financial markets with money ultimately leading to inflation and then recession as the Fed plans to raise interest rates to tank the economy in an attempt to stop too much money chasing too few goods and services. The problem is that the Fed only has supply-side tools when what it really needs is a demand-side tool to directly adjust consumer demand.

Two Invisible hands

Adam Smith's invisible hand was supposed to ensure competition where businesses competed to provide the best quality products and services at the lowest possible prices. In the labor market individual jobs were supposed to compete for individual workers. If one job offered too low a wage, it would lose out to a competing job that offered a higher wage. If one potential worker demanded too high a wage, that worker would lose out to a worker willing to work for a slightly lower wage. The efficient equilibrium wage would be achieved with each job competing for each worker.

But that invisible hand, the left invisible hand, was soon countered by a second invisible hand, the right invisible hand. The right invisible hand was market power. When jobs conspired together in blocks they could outcompete the individual workers by forming an oligopsony of jobs offering a block of jobs which refused to compete with one another and conspired together to set a lower wage than the competitive equilibrium wage.

In the 1950s and 1960s these job blocks were countered by workers forming unions and demanded that the old competitive equilibrium wages be restored and maintained. The result in the 1950s and 1960s was a balanced money flow that allowed workers to buy back the value of the goods and services they were producing without having to go into deep, ever-increasing debt to maintain the old equilibrium standard of living.

Later the government would assist the workers with **federal debt** that augmented the workers' **private debt** in achieving an adequate money flow to workers to allow them to buy back the value of the goods and services they were producing. The Federal Reserve has attempted to provide additional help in **pumping money** into the economy from time to time, although much of that money stayed in the financial markets driving up stock and bond prices and driving down interest rates with little showing up to strengthen consumer demand.

Wealth Piles Up On Wall Street

Maximizing shareholder value and rigging the tax system to enable wealthy individuals and corporations to avoid paying much, if any, taxes, shifted the tax burden onto the middle class. The middle class had to make up for the revenues lost through the tax loopholes⁵⁸ (e.g. IRC-469, IRC-482, etc.). With the exception of some overseas investments in production facilities to take advantage of cheap labor, the wealthy could no longer find productive or satisfying ways to spend their money so their money flowed into the New York financial markets driving up stock and bond prices with a corresponding drop in interest rates.

To further augment chronic weak demand, the Federal Reserve flooded the financial markets with money while lowering interest rates both directly and indirectly. In desperation to keep demand up to reestablish or maintain full employment, Congress passed stimulus measures and infrastructure spending programs that were only nominally paid for by taxes and other possible revenues. For the elderly and others trying to maintain savings accounts and other FDIC-insured instruments such as certificates of deposit, the extremely low interest rates meant very little return on their meager investments, but also low loan rates that encouraged extreme levels of borrowing driving middle-class and lower-class individuals deep into debt.

Economists often note with concern the exceptionally low savings of most American families with many unable to come up with as little as \$400 in an emergency. But where is the incentive to save money when interest rates are extremely low and sometimes the nominal interest rate falls below the rate of inflation producing a negative real interest rate? It makes more sense to spend the money now before it loses even more value. This behavior increases demand relative to supply even more so that inflation rises even faster. This upward spiral can turn into an economy experiencing hyper-inflation.

Distorted International Money Flow

Not only has a disproportionate amount of money been flowing to wealthy individuals and corporations, but a disproportionate amount of real wealth has been going to some of the wealthiest nations, especially the United States. Developing countries, especially China, have been taking their resources and working hard to produce products to sell to the United States and other developed countries. In response China and the other exporting countries have been receiving U.S. dollars and other leading currencies. Instead of selling these excess dollars into the foreign exchange markets to drive down the value of the dollar, which would drive down the prices of U.S. exports and increase the prices of products and services entering the United States, these excess dollars have been used to purchase treasury securities in U.S. financial markets.

This distortion in the flow of U.S. dollars has been reinforced by the use of the U.S. dollar as the world's reserve currency. As world trade expands, the demand for U.S. dollars in foreign exchange markets increases making U.S. exports even more expensive and U.S. imports cheaper for the cash-strapped lower and middle classes.

⁵⁸ Marsh, Lawrence C. *Optimal Money Flow: A New Vision on How a Dynamic-Growth Economy Can Work for Everyone*. Kansas City, MO: Avila University Press, 2020.

The World in Disequilibrium

Politicians bemoan the fact that the United States is a current account deficit nation with the U.S. trade deficit, in particular, getting worse over time. China and other developing countries tend to be trade surplus countries. But what does this mean in real terms? These developing countries combine their natural resources with the hard work of their people to produce products for export to the United States and other rich countries. Meanwhile, the United States and other trade deficit countries produce relatively less for export to the developed world. What this means in real terms is that the developed countries provide lots of goods and services for the rich countries and the rich countries provide goods and services for themselves and other rich countries. The rich get richer in real terms while the poor continue working hard for the rich. Technically it is not slavery or colonial exploitation, but it has a certain similarity.

But from the point of view of America's poor and elderly, this is a blessing. The reserve currency status of the U.S. dollar and the tendency for countries obtaining dollars to invest them in U.S. financial markets and especially in U.S. Treasury securities in particular leave fewer U.S. dollars in the foreign exchange markets so the value of the U.S. dollar remains strong. This means that the U.S. can import high quality products and services at very low prices. The poor and the elderly who are on fixed incomes benefit enormously from these low prices in local discount stores.

Losing Good Jobs to Other Countries

We are told that the benefits flowing from the flood of cheap imports come at the expense of U.S. workers who lose their jobs to workers in the developing countries. However, this assumes that the quantity and quality of jobs in the world is fixed, and we must fight over them. This is certainly not true and the recent shortage of workers in the developed countries demonstrates that at least demonstrates the quantity of jobs is not fixed. Economists know the idea that there are a fixed number of jobs as the *lump of labor fallacy*.

The quality of jobs is a bit more complicated since it depends on the amount of relevant human capital that people have acquired. But the recent demand for labor is not just for burger flippers in fast food restaurants, but also for truck drivers and others drawing better salaries. With the recent pandemic and the aging of the population, there is a strong demand for nurses and other critical care professionals. Government policies must be directed toward helping people meet the licensing and other qualification requirements needed to obtain the high quality jobs that are in high demand. Obtaining a college degree can make a big difference in earnings, but so can the obtaining of technical skills through specialized training and internships.

The Fundamental Problem of Distorted Money Flow

Before John Locke (1632-1704)⁵⁹ all natural resources were said to be owned by God or the Natural Spirits (in the case of the native Americans). Later the King, Emperor, Pharaoh, or Tsar was said to have been given dominion over the natural resources by God. You could not hunt deer in the forest or catch fish in the stream without permission of the King. But John Locke argued that you owned your own labor and by imbuing your labor into a natural resource such as land, you gained ownership of that natural resource. Farmers and craftsmen made their own tools, which established their ownership of those tools. With “40 acres and a mule” settlers

⁵⁹ Locke, John. *Two Treatises of Government*. London: Awnsham Churchill, 1689.

could establish their right to a farmstead on the frontier. A person could gain capital in the form of natural resources through what today might be called “sweat equity.” Hard work paid off. This way of acquiring capital provided important incentives for Adam Smith’s invisible hand of competition to pay off. In this version of free enterprise you competed for capital through hard work and sweat equity.

In the 1950s and 1960s smaller companies treated employees like family and kept the same workers for many years while larger companies paid their workers well because of strong labor unions that made those companies share some of their profits with their employees. But starting in the 1970s maximizing shareholder value began to become the central and only purpose of many large companies. Employees began to be treated as just another factor input. Without union and/or government oversight, workers killed in coal mine accidents were quickly replaced from the “reserve army of the unemployed.” Coal mine safety was treated as just another annoying union demand or just more government regulation overreach.

But in the late 1990s I bought some company stock with some money I had inherited from my grandfather and checked off the box “reinvest dividends.” I discovered that the hard work by the company employees paid off big time! But not for them. I have “earned” a 6,700 percent return as a result of their hard work. But I hadn’t done anything to assist the company in generating those profits over those 30 years, other than initially providing some of the money that I had inherited from my grandfather. For a while I had even forgotten that I owned the stock.

What about incentives? **Maximizing shareholder value** appears to be an alternative to **maximizing employee incentives** to work hard and earn more money from rising company profits. You drive a truck for forty years but gain no sweat equity or stock ownership for your work (except for UPS and a few other rare cases). Dropping efforts to enhance community and stakeholder value in favor of maximizing shareholder value has undermined the free enterprise story of free market incentives benefiting us all through free and fair competition. For a more detailed discussion of this issue see Stout (2012).⁶⁰

Moving On Up vs. Going Nowhere

The United States ranks as one of the lowest in social mobility among the nations of the developed world. The Horatio Alger story of “rags to riches” is the rare exception. If you start out in a poor family, chances are that you will end up in a poor family, and vice-versa for rich kids. As Paul Krugman⁶¹ and others have pointed out, the most important choice you make in life is in choosing your parents. Choosing rich and well-educated parents who are well-invested in the stock market is critical to getting ahead in life. If you fail to choose your parents carefully, you will almost surely fail in life. We celebrate the exceptions where a person from a poor family is successful in life, but this is but a distraction from the reality of the exceptionally little amount of social mobility in the USA.

⁶⁰ Stout, Lynn. *The Shareholder Value Myth: How Putting Shareholders First Harms Investors, Corporations, And The Public*. San Francisco: Berrett-Koehler, 2012.

⁶¹ Krugman, Paul. *Arguing with Zombies: Economic, Politics, and the Fight for a Better Future*. New York: W. W. Norton & Company, 2020.

The Mysterious Magical World of Free Enterprise

In theory the free enterprise system is the most wonderful and most productive system in the world. It rewards hard work. Your compensation directly corresponds to your effort and ability. Free enterprise maximizes efficient resource allocation and economic growth. Businesses compete intensely to provide consumers with quality products at very low prices. Consumers do nothing but act as free riders reaping the benefits of all this amazing competition. Adam Smith's story of an invisible hand creating intense competition maximizing quality and available quantity while driving down prices to the lowest possible level all plays out flawlessly. It is also a very democratic system. You can buy most anything without any discrimination based on your race, sex, ethnicity, religion, native origin, sexual preference, or transgender status. I love this world of free enterprise.

The free enterprise story performs gloriously and amazingly until it bumps into the real world. The compensation for your effort and ability in employment is systematically and widely discounted if you are a woman or a person of color, not to mention a host of other discriminatory factors. Competition for your labor services is muted by employers forming jobs in blocks that refuse to compete with one another and fix all wages within those employment blocks.

At the aggregate wholesale level, very few markets are truly and fully competitive as documented by Tepper and Hearn (2019).⁶² Many industries are dominated by one, two, or a few giant companies that leave little room for competition. In the Internet space, network effects reinforce this concentration in social media outlets. Facebook, LinkedIn, and Nextdoor are dominant in their domains. The provision of electricity, water, sewers, highways, tunnels, bridges and various methods of mass transportation lack much, if any, competition. Surprisingly, the beer industry is dominated by two big conglomerates, as is the supply of eyeglasses. If you think that you are living in a world of intense competition, you are being fooled by a multitude of brands owned by a single company which controls the market. See Teachout (2020) for more details on the dominance of powerful companies.⁶³

As noted in chapters above, there are really two invisible hands. One invisible hand is the invisible hand that turns the greed of individuals into benefits for all. It is the invisible hand of competition that spreads the wealth democratically to all consumers. But Adam Smith mentions another tendency, which may be called the second invisible hand. Smith⁶⁴ said: "People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices."

This second invisible hand is the invisible hand of economic power. Whereas the first invisible hand works to spread the wealth, the second invisible hand works to concentrate the wealth in a smaller and smaller group of wealthy corporations and individuals. The power of this second invisible hand turns Schumpeter's creative destruction into **competition destruction** where smaller upstarts are bought up by their bigger rivals or crushed in an economic downturn. This second

⁶² Tepper, Jonathan with Denise Hearn. *The Myth of Capitalism: Monopolies and the Death of Competition*. Hoboken, NJ: John Wiley & Sons, 2019.

⁶³ Teachout, Zephyr. *Break 'Em Up: Recovering Our Freedom from Big Ag, Big Tech, and Big Money*. New York: St. Martin's Publishing Group, 2020.

⁶⁴ Smith, Adam. *An Inquiry Into The Nature and Causes of The Wealth of Nations*. London: W. Strahan and T. Cadell, 1776.

invisible hand reinforces the labor market power of firms controlling **blocks of jobs** and crushes the balancing force of unions attempting to counter the monopsony power of the companies controlling those blocks of jobs.

The first invisible hand attempts to match ability, creativity and hard work with the rewards that emanate from those efforts and abilities. The second invisible hand allows CEOs to bring to their board of directors other friendly CEOs who are eager to raise the compensation of each of their CEO friends. Instead of rewarding the hard work and ingenuity of their employees, these CEOs focus the company's resources to maximize shareholder value.

Instead of offering incentives to the people who can contribute the most to the company by their hard work and expertise, the company rewards those who offer little except some of their otherwise idle cash. Those who work the hardest, create the most value and need to be rewarded for their hard work take second place to the goal of maximizing CEO and shareholder compensation, including with large stock dividends and driving up stock prices with large stock buy-back purchases. Clearly, the system rewards those with the power to reward themselves. People who are not in a position to determine their own compensation are allocated little when the second invisible hand is able to override Adam Smith's first invisible hand.

The Role of Government

Most people realize that the free market system cannot operate efficiently without any government participation. Absolute freedom without government would mean that the big guy gets what he wants, and everyone else gets whatever the big guy casts aside. The big guy is free to do what he wants, while you are free to do what the big guy tells you to do. Community-wide freedom involves a tradeoff between more freedom for some (the smaller, weaker ones) and less freedom for others (the bigger, stronger ones). It should be no surprise that companies and individuals who are constrained by government regulation and control will complain about their lack of freedom to do whatever they want.

People are generally aware of governments' important role in dealing with negative externalities (e.g. air and water pollution) and positive externalities (e.g. subsidized vaccinations for a contagious disease). In these cases all of the costs would not be properly matched with all of the benefits without government intervention. The government's role in dealing with the detrimental effects of monopolies, oligopolies as well as monopsonies and oligopsonies in overcoming higher prices and lower quantity and quality is also generally understood.

What people often fail to understand is the role of government in bringing about overall economic efficiency in dealing with distortions in the flow of money. The **money flow paradigm** sees this as the most important role of government. There is a natural tendency for money to flow to the top of the income and wealth scale. We live in a winner-take-all economy where the superstars take home the lion's share of the income and wealth.

The former chair of the University of Chicago economics department, Sherwin Rosen, revealed this many years ago in his "Superstars" paper.⁶⁵ The real reason that the superstars make so much more money than the runner ups placing second is not any enormous difference in the superstars marginal contribution but in our limited mental energy in being able to process and keep track of so many players in so many realms. According to the pure efficient market

⁶⁵ Rosen, Sherwin. "The Economics of Superstars." *The American Economic Review*, 71(5), 845-858, December 1981.

theory of free enterprise, every transaction should at least on average represent a complete analysis of all the possible contributions of all of the possible players.

But as Dan Ariely and many others have pointed out, this is impossible in the face of limitations of the human brain as revealed in actual behavior in the real world.⁶⁶ Contagion effects and irrational exuberance are well-known to have distorted markets for extended periods. But how can we correct the free enterprise system of this major systematic defect? The key to answering this question is in realizing that the system will ultimately break down unless the government plays the essential role of predistribution and redistribution of income and wealth. The special tax loopholes for the wealthy must go (predistribution) and the wealthy must pay higher taxes (redistribution) if we are to avoid the ultimate collapse of the free enterprise system. Government must be recognized, not as an outside force interfering with the free enterprise system, but as the very heart of the free enterprise system central to ensuring its longevity.

The Role of the Federal Reserve Bank

In addition to maintaining financial stability in the banking system the Federal Reserve is tasked with controlling inflation and keeping unemployment to a minimum. In 1913 this responsibility was transferred to the Federal Reserve, because the politicians in the Congress realized that their own politically motivated interference in the money supply was hard to control. Printing money to keep voters happy was too much of a temptation. Giving the Federal Reserve's responsibility for inflation and unemployment would also give Congress someone else to blame if unemployment rose as the Federal Reserve tightened the money supply to slow price increases.

The Federal Reserve's supply-side approach of manipulating interest rates in New York financial markets works as long as demand is strong and supply relatively weak. When interest rates are relatively high, lowering them can effectively stimulate business activity. However, as John Maynard Keynes and others have pointed out, once nominal interest rates fall below the rate of inflation making real interest rates negative, this supply-side approach no longer works. Lowering interest rates in that environment is like stepping on the gas when your car's transmission is in neutral. The gears go around and around, but the car goes nowhere.

On the other hand, when excessive inflation is the problem, raising interest rates in New York financial markets reins in business, but slows demand for goods and services only indirectly by bringing about cutbacks in hours worked and increased layoffs. When enough workers have lost their jobs, consumer demand falls sufficiently to halt excessive price increases. This brutal approach is not necessary. What the Federal Reserve is missing is a demand-side tool to stop inflation when the economy is overheated and to stimulate consumer demand in an economic downturn.

A New Demand-Side Tool for the Federal Reserve Under the Public Banking Act

It is time to face the fact that our free enterprise system does not automatically bring aggregate demand and aggregate supply into balance in a reasonable amount of time without government assistance. While in theory and in the long run such a balance between aggregate demand and

⁶⁶ Ariely, Dan. *Predictably Irrational: The Hidden Forces That Shape Our Decisions*. New York: HarperCollins, 2018.

aggregate supply might be achieved, as John Maynard Keynes famously said: "In the long run, we are all dead."

Don't repeat our historically dysfunctional approach to stopping price inflation. It unnecessarily throws many workers out of work and cuts the hours of many more. Raising interest rates in New York financial markets suppresses supply for seasonal and cyclical businesses that depend on short term liquidity to maintain and establish inventory and cash flow. It suppresses business.

But inflation occurs when too much demand for goods and services is chasing too little supply. The financial markets exist to offer liquidity to businesses to maintain or expand the supply of goods and services. Countering the rapidly rising prices caused by current supply shortages requires encouraging supply. But the Federal Reserve does the opposite of what is needed.

Sure, suppressing business to lay off workers to reduce demand will work if you slam on the brakes hard enough. But trashing our economy to stop inflation is not necessary. What the Fed is missing is a demand-side tool to ratchet down demand when markets for goods and services become overheated. But House of Representatives bill, H.R.8721, Public Banking Act submitted last year by Rep. Rashida, Rep. Ocasio-Cortez, and seven other representatives could be easily modified to provide the Federal Reserve with a demand-side tool to curb excessive inflation without throwing our economy into a recession.

Demand can be tamped down and supply encouraged by recreating the postal savings accounts that existed in the United States from 1910 to 1966 and offering high interest rates in those accounts on balances up to some specified limit, while leaving the rates in the New York financial markets relatively low to stimulate, not suppress, supply.

Higher interest rates will encourage savings. Saving more and spending less is obviously what is needed when too much money is chasing too few goods. If we offer high enough rates in postal bank accounts dispersed in our 34,000 post offices around the country, excess demand can be reduced enough to stop inflation without forcing the economy into an unnecessary recession. This approach withdraws money from the economy by offering a return on investment, not by taxation. People will still be able to purchase their necessities, but will be motivated to delay or cut back on luxuries until the economy cools off and postal bank interest rates return to normal.

With reasonable limits on the savings and loan amounts restricted to one account per person or small business, these postal banks can avoid interfering with the normal functioning of the commercial banking industry. Of course, banks will oppose any intrusion onto their turf, but the broader benefit to the country as a whole must be taken into account.

When the opposite conditions develop with low demand, high unemployment, and the start of a deflationary cycle, postal banks could offer small loans at relatively low interest rates to individuals and small businesses. Such a loan program has already been proposed in bills formulated in both the Senate and the House in the last few years. These bills are aimed at helping people who were living paycheck to paycheck and suddenly faced job loss, a medical emergency, an automobile accident, or some other event that forced them to go to loan sharks, pawn shops, payday loan dealers, or "cash now" providers who typically charge exorbitant interest rates.

Postal bank accounts can reach the unbanked and underbanked, and generally those with the highest marginal propensities to consume. Directly targeting demand through postal bank accounts will be much more cost effective in offering more bang for the buck, using less money and less disruption of our economy than current Federal Reserve stabilization strategies.

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