

Finance in Montana

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Gravity and the Next War



Those who know me know I enjoy cycling throughout the United States. The day's journeys are long, grueling but at the same time thought provoking and invigorating. Cyclists note the landscape and imagine odd connections.

The Grand Coulee Dam is a man made structure. Dry Falls, 40 miles to the south-east is a natural structure carved out 10,000 years ago. Both are superlative in size and in historical importance. The Grand Coulee Dam was built during the Depression between 1933 and 1942. Its generating power is a staggering 6,809 mega-watts and is the largest electrical generating facility in the United States. It is said that the power from Grand Coulee allowed the United States to confidently win a two ocean World War. The dam's power supported the aluminum plants of the Pacific Northwest Women fabricated the aluminum into bombers and support aircraft. Over seven hundred steel naval ships were constructed and christened in the naval yards of the Puget Sound. Disquietingly, Grand Coulee provided power for our nation's nuclear weapons arsenal. I visited Grand Coulee on a hot summer afternoon. On that day, according to the green computer monitor, the Columbia River water quietly pounded out 3300 megawatts of power.



Forty miles is not long on a bike. 10,000 years ago an ice dam broke in Sandpoint Idaho. That dam held and released the equivalent water volume of both Lake Huron and Lake Michigan into the Columbia River valley in less than a 48 hour period. During those two days, the daily water flow was equivalent to combined water flows of every single river on planet Earth. The water poured over the Dry Falls at over 60 miles per hour. The flows carved out the scablands of Eastern Washington State and eventually deposited debris fields clear to Astoria, Oregon. The power that carved out the Columbia Gorge is a staggering sight to behold. Dry Falls is still visible but only a trickle of water remains.

I connect these two events as these are physical systems of immense power. One artificial and the other natural and uncontrolled. Both are powerful systems of potential or stored energy we can see and feel. There is nothing illusory or intangible about the Grand Coulee Dam. In today's dollar the dam would cost at least \$5 billion. A staggering return on a small investment, a war won and a century of prosperity for the American Northwest. That investment continues its dividends payments today.

Let's pause and think on this statistic: the generating capacity of Three Georges Dam is 22,500 Megawatts. Three times the size of Grand Coulee.

Well enough of history. Today we are facing a peacetime tsunami of monetary creation. Much like the waters of the Great Missoula floods, that tsunami will flow "where money is" -- the gravity theory of money. Regulatory constraints, artificial wage constraints, and taxing costs are mere boundaries when matched with the greatest monetary invention in history: the foreign exchange currency swap.

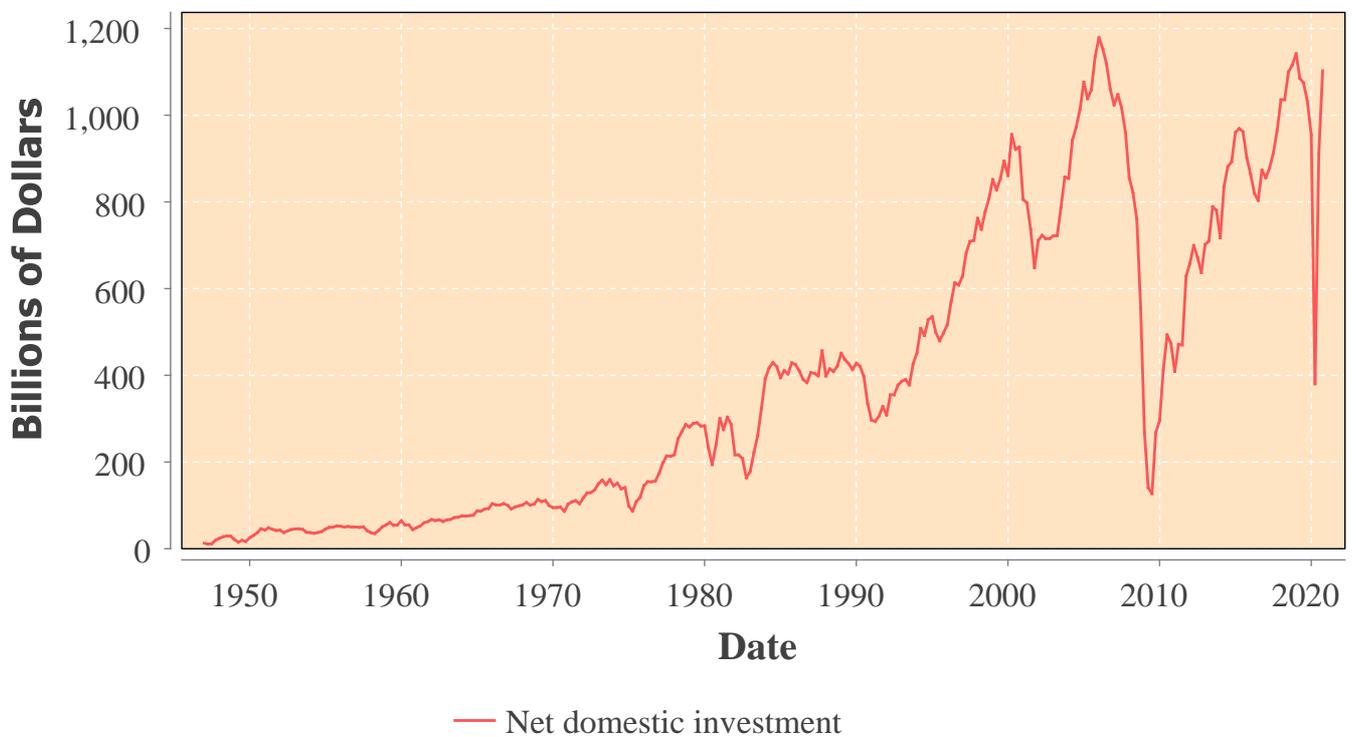
The currency swap, invented by the Medici family in the 15th century, allowed any Florin deposit to be converted into a deposit of any other European currency risk free ([Herstatt](#), a later creation, notwithstanding). It is a remarkable instrument we learn only in passing in our economics classes. The Dollar has since replaced the Florin and every young intern working in a treasury/foreign department witnesses the incredible power of such a lowly instrument. In money center banks, the

two departments are traditionally joint efforts in unregulated redistribution of money to lands where money yields the highest rates of return.

Mr. Powell and Mrs. Yellen urge Congress to 'go big' on fiscal stimulus. Congress eagerly complied as free money gained but not earned easily wins the minds of our supple voters. Money will be deposited into checking accounts everywhere. Some invested, spent and yes taxed. Retail sales will rise, the money flowing into pockets of wage earners and the residual to cash accounts of dividend paying stocks. Very little will be invested into infrastructure. Investors will reap the final product of monetary creation and investors will ultimately transfer that cash toward investment overseas. Little will be spent to enrich our national infrastructure. The Grand Coulee Dam is now a historical oddity quietly reaping dividends.

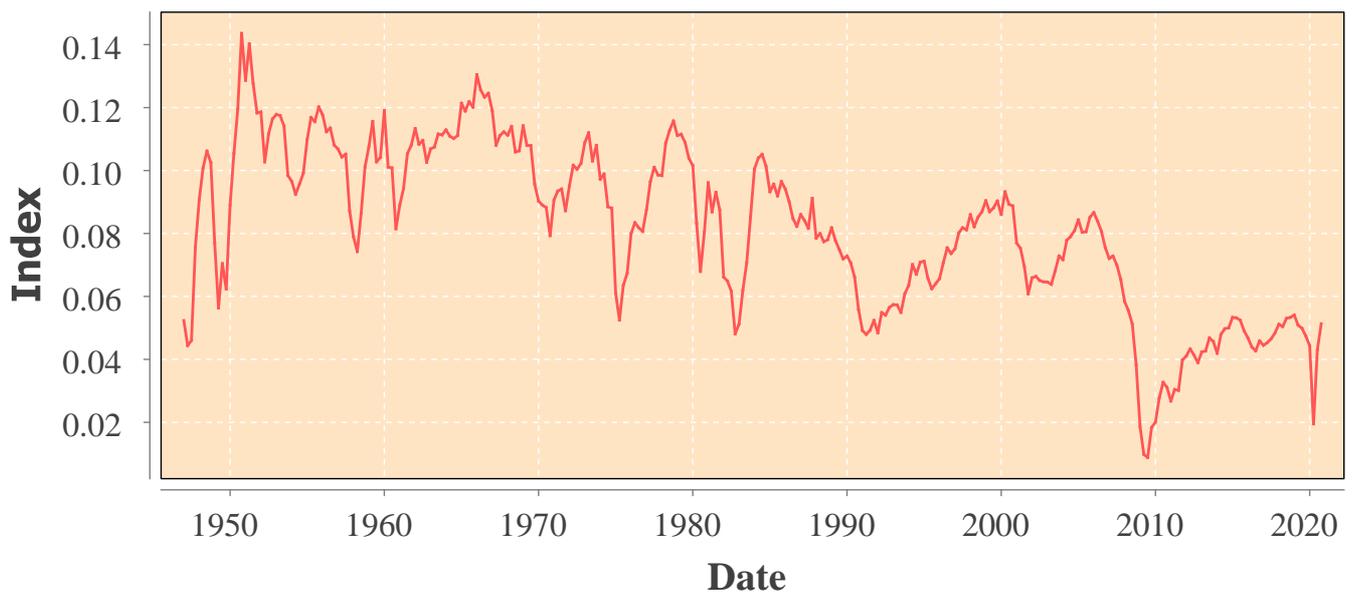
Do I have proof? Yes. Let's take a look at the data.

Net domestic investment



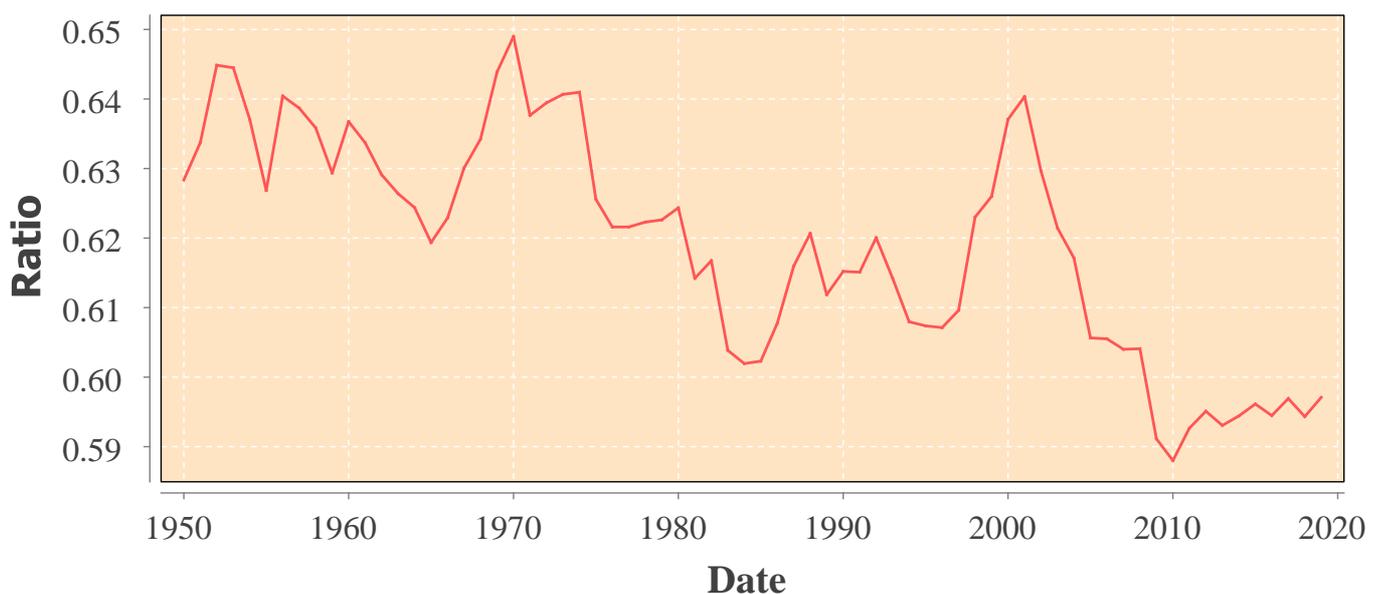
It is clear that on a nominal basis Net Investment in the United States is increasing. A good sign as our population increases and our standard of living demands more consumption. Looking at Net Investment as a ratio of notional GDP we see another story.

Net domestic investment/Gross Domestic Product



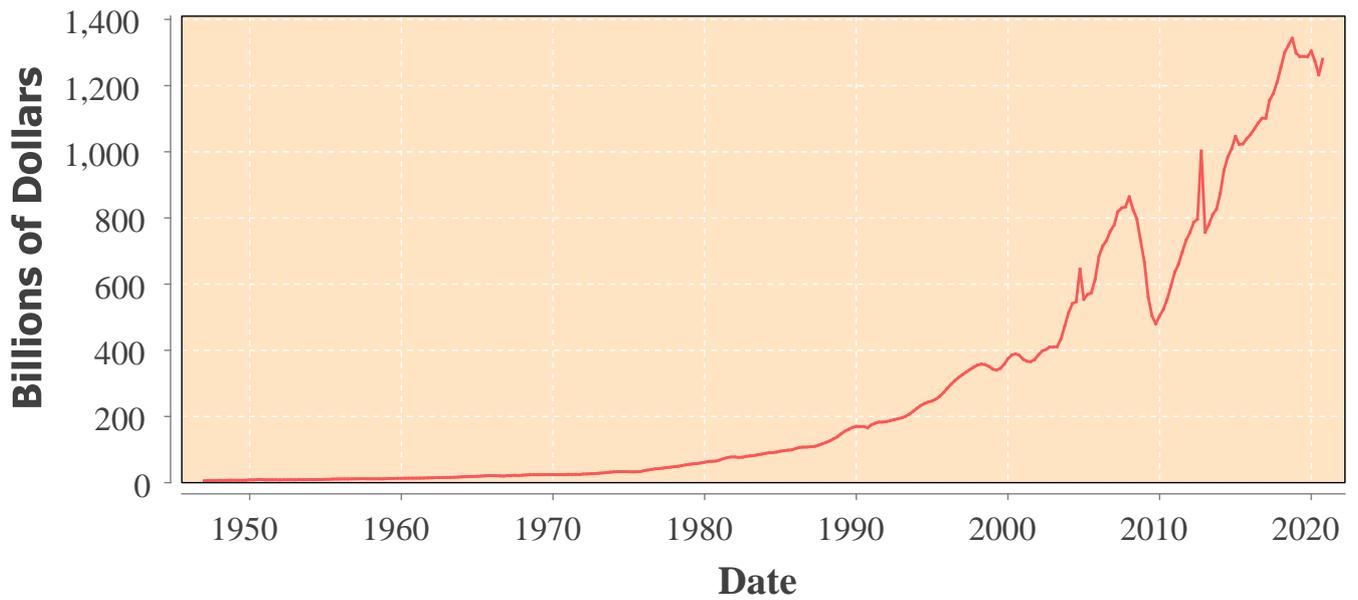
In the early 1950s, Net Investment in the United States was a staggering 14 percent of notional GDP. Since 2010 that figures hovers at the 5 percent level or 20 years. Levels as low as 1 percent are not uncommon. Since 1953 there have been [10 recessions](#). Each time our political leaders used a combination of monetary and fiscal policy to 'jump start' the economy. Yet, in each recession Net Investment declined. Not only did Net Investment decline, so did returns to Labor. The identity share to capital (100 minus Labor) therefore increased.

Share of Labour Compensation in GDP at Current National Prices for United States



Again, let's us look at the data.

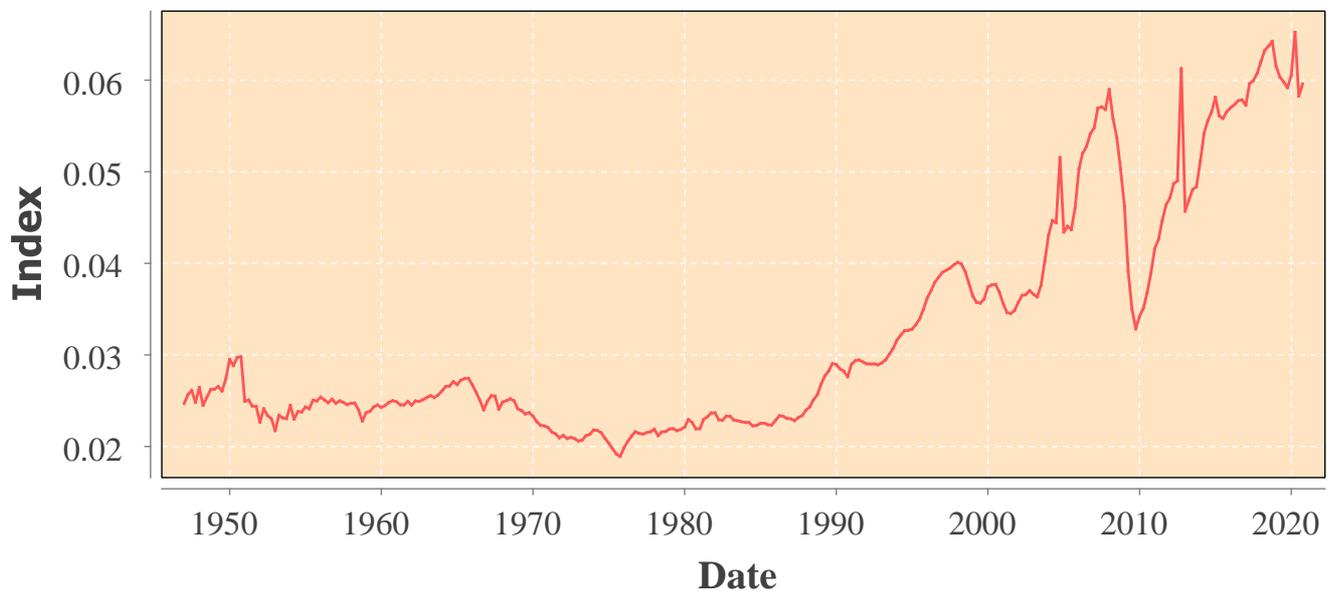
Personal income receipts on assets: Personal dividend income



— Personal income receipts on assets: Personal dividend income

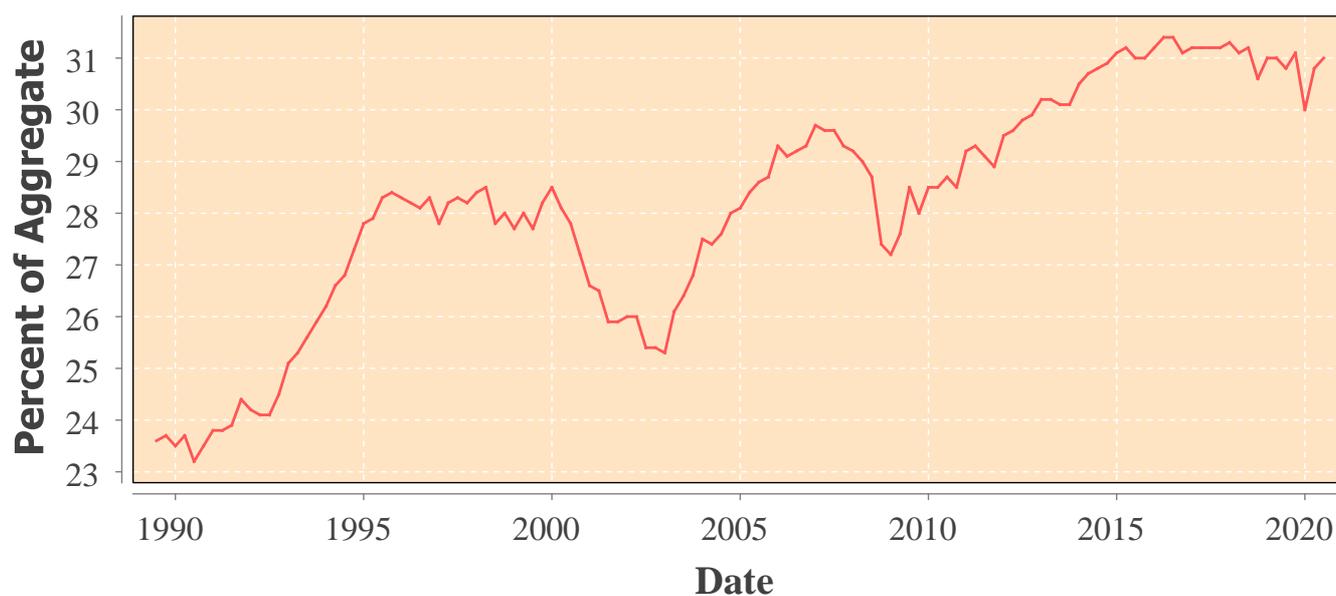
Normalizing by GDP,

Personal income receipts on assets: Personal dividend income/Gross Domestic Product



— Personal income receipts on assets: Personal dividend income/Gross Domestic Product

Share of Total Net Worth Held by the Top 1% (99th to 100th Wealth Percentiles)



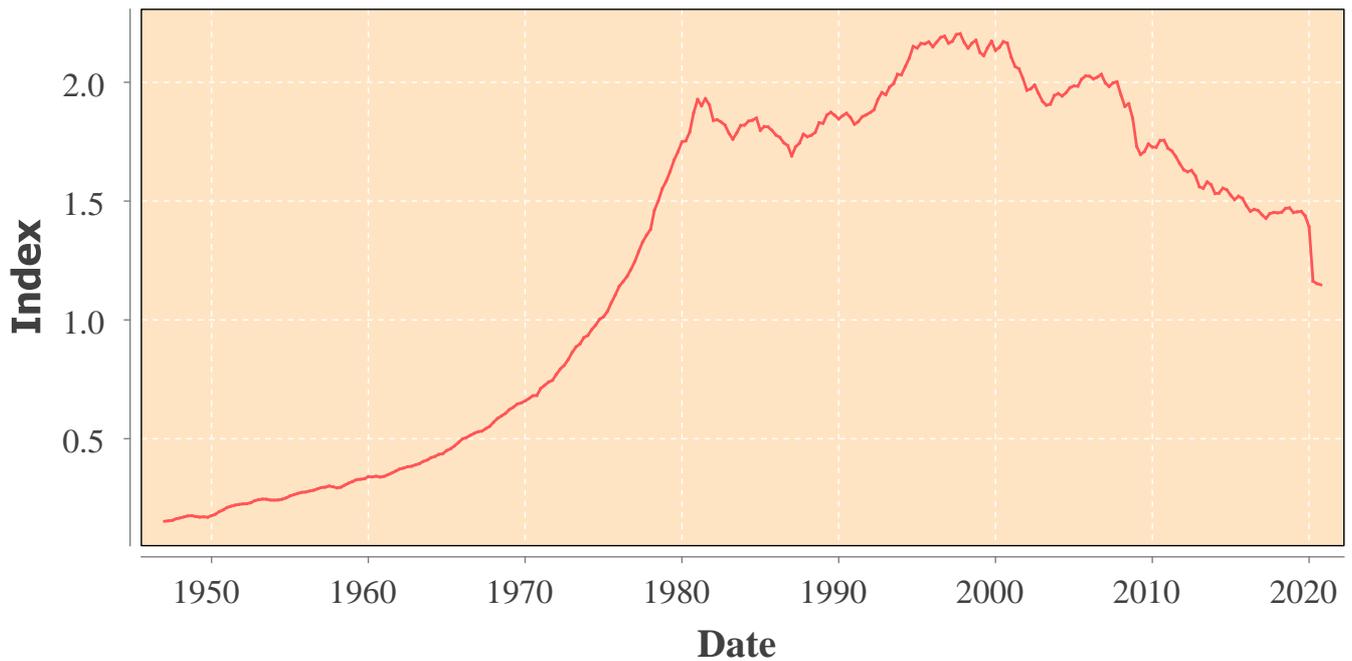
— Share of Total Net Worth Held by the Top 1% (99th to 100th Wealth Percentiles)

Owners of capital are dutifully enriched by free flows of capital. Domestic labor markets must complete with labor markets abroad. The result should not be a surprise. If capital is not invested in our home country, then workers and left scramble for the remaining capital intensive jobs. We have created an economic system of musical chairs for labor. Again let's hear what Milton Friedman and Anna Schwartz has to say

The price and output movements of the post-World War I years in this country were, of course, part of a worldwide movement. Throughout most of the world, for victors, vanquished, and neutral alike, prices rose sharply before or into 1920 and fell sharply thereafter. About the only countries that avoided the price decline were those that were to experience hyperinflation. Though many national currencies—and among them some of the most important, like the pound sterling and the French franc—were not rigidly tied either to gold or to the dollar, central bank policies nevertheless produced linkages sufficiently strong to result in a common movement of prices in most national currencies. Flexible exchange rates were regarded as a transitory expedient pending a return to gold, and monetary authorities everywhere sought to facilitate such a return to fixed parities. The results were therefore similar to those that would have been experienced with fixed parities. The monetary actions, taken by authorities anxious to stabilize exchange rates as a step in the return to gold, transmitted the effect of movements in balances of trade and in capital in much the same way that gold flows would....

The point being that the relic, gold, as a monetary system has an automatic equilibrium solution. This equilibrium is true as long as the gold supply increases with the economy. Our fiat currency system would also be stable if money supply grew at the rate of economic expansion. Sadly, the goal of Congress is to win votes and discipline is not a vote getter. Let's look at GDP as a ratio of Money Supply or velocity

Gross Domestic Product/M2 Money Stock

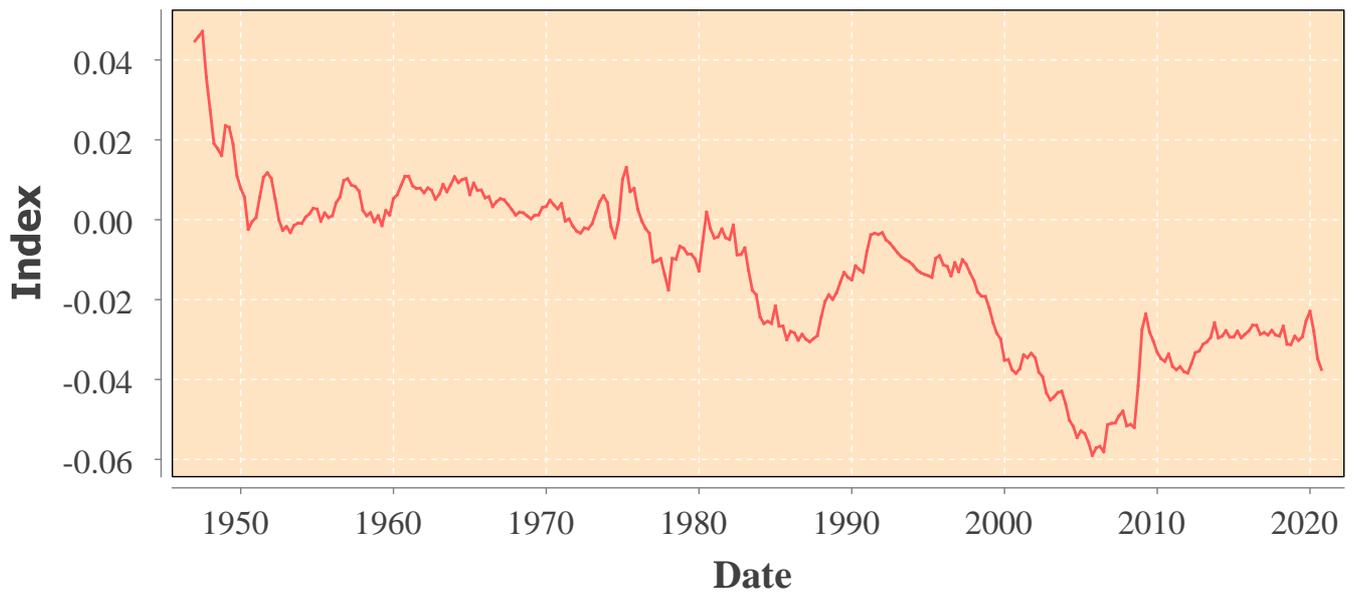


— Gross Domestic Product/M2 Money Stock

So what is happening here? Since 1995, additional money create lead to a decline in the GDP to Money Ratio. Each bail out only serves to bail out our national competitors. Our domestic investors reap the benefits such off-shore activity, yet the United States has reached a point where the marginal return for newly printed new monies is offset by the increase in dividend returns and not in Net Investment. Another way to think of the problem. Continuous borrowing to pay for projects or social policies that yield negative Net Present Value (NPV) are disinvestments. Even missile silos must earn a rate of return in national security. Borrowing to fund consumer spending is by definition a disinvestment policy and squanders national wealth. There is a certain physics in finance, the gap in negative NPV must be filled. We all make negative NPV decisions, but successful investors ensure they hold a diverse portfolio of positive NPV projects to fill the NPV hole. For the last quarter century, the Federal Reserve monetized sizable negative NPV projects (housing, overgenerous pensions, dubious political earmarks and a Rube Goldberg collection of corporate and social subsidies. Monetization essentially balances one ugly NPV system of equations.

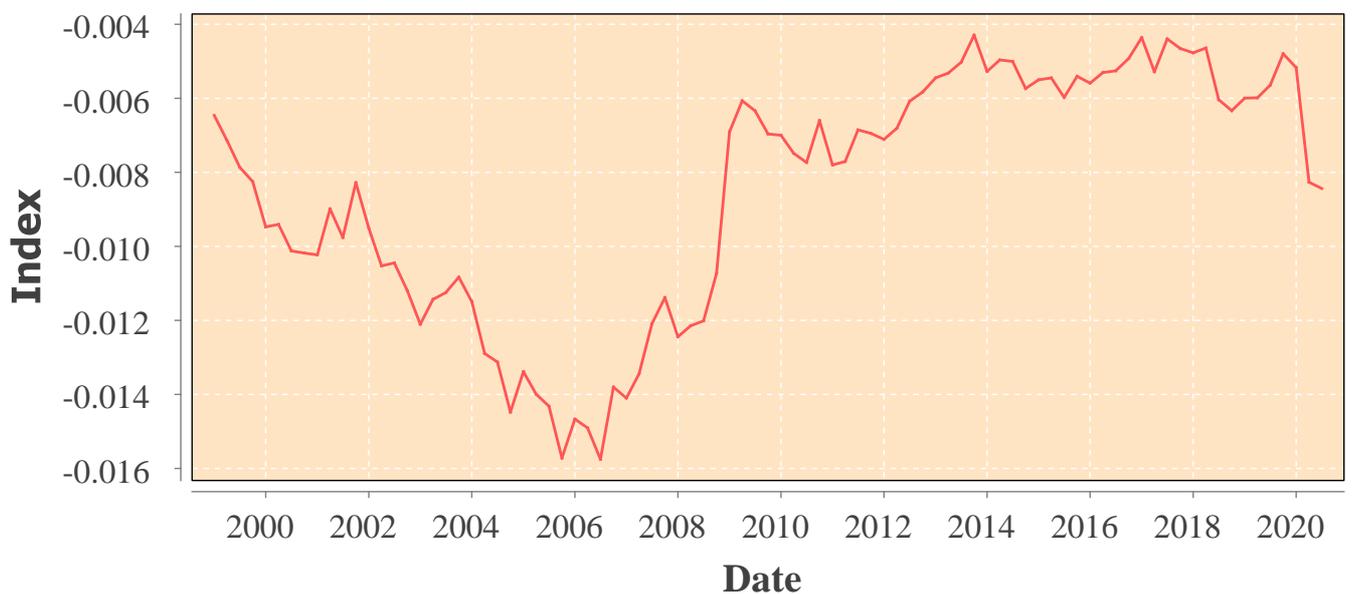
Dividend returns are the only reason the current system is sustainable. Our consumer culture creates ever increasing trade deficits. The returning dividends ensure the current account remains in balance.

Net Exports of Goods and Services/Gross Domestic Product



— Net Exports of Goods and Services/Gross Domestic Product

Balance on current account/Gross Domestic Product



— Balance on current account/Gross Domestic Product

Consumption and the Wealth Tax

The Great Pandemic Stimulus packages are efforts to restart the consumer economy. The question for every detective is 'who benefits'? Well, [China now lead the world in Net Investment](#). Lower interest rates might help the U.S. Treasury finance its growing debt obligations, but force investors, especially retirees, to increase their risk profile by seeking higher yielding assets offshore. Combine lower interest rates with regulatory strangulation (think Keystone XL pipeline) also

conspire to reduce Net Domestic investment. We observe 2700 miles of steel yielding only tumbleweed. Talk about wasted capital!

To add insult to injury, the United States is considering a 2 percent wealth tax to finance a sizable infrastructure bill. Good, but the devil is in the details. Good infrastructure investment should yield a positive Present Value. Appropriate borrowing, liabilities matching assets life, is good policy. Selling national assets to pay for more negative NPV projects is a road to ruin as the aforementioned dividends balancing the current account return will slowly disappear. Who gains? The buyers who purchase forced asset sales. Given that so much of the national wealth is concentrated to few hands, the question now becomes, do we have enough domestic savers who can and are willing to absorb annual asset sales? If not, then foreign sovereign funds are the most logical buyers. What Congress on Earth so eagerly disinvests its national assets?

The Next War

This next section is not my professional expertise. Regardless, market makers and investors often discuss outcomes of extreme events. Tail events are low probability but high cost scenarios. Always keep your put count positive.

And what does this have to do with the next war? Well, first the United States must not enter into a war it can not win. China's productive capacity is far superior in quantity. Our liberalist monetary system created a militaristic juggernaut off-shore. [The Thucydides Trap](#) is an emotional response for a declining power. Brett Butler's famous speech on '[cotton and arrogance](#)' comes to mind. One Air Force general recently stated. 'we are going to lose fast'. Traders easily script a story where the United States surrenders Guam and more in a conventional war. Hawaii's loss would be tail event and option traders always worry about the tail.

Second, I'll quote [the diplomat Metternich](#) 'The obvious is always least understood'. Nor should we endure the expense of a [Dreadnought](#) arms race. Diplomacy is cheaper. Not so much with China. China is convinced they have the power and will to win. Instead, formulate a diplomatic strategy so that in winning China has much to lose. India and other Asian nations are not willing puppets of a Communist dictatorship. Diplomacy must also include our Southern Continent and Central America. Such close investments would reap obvious returns. That group's population is north of 500 million and rich in resources. The continent also splits the oceans -- every young lad played the Milton Bradley game of Risk. Our southern democracies are weak but the population is willing when investment garners returns to their pocketbooks. Sure bribe a few dictatorships but Metternich was never fickle with 'the balance of powers'. Democratic Europe should similarly focus its efforts the former colonial nations of Africa. Aid to both Continents will alleviate emigration pressure for its citizen. Right now America and Europe are so steadfastly creating a monetary fire-hose and the resulting liquidity flows to our militaristic competitor. Redirect those flows with economic credits to our re-discovered partners. Democracies trade with Democracies.

Third, it will be difficult to prevent Taiwan from falling into China's orbit. Admission of a losing trade is no sin. Just make the economic bill painful for all nations who defy the natural path of Democracy.

Forth and finally, to paraphrase John Galt to the Government, 'Get the hell out of the way'. An ever changing regulatory environment akin to George Akerlof's paper, '[The Market for Lemons](#)', is a national disgrace. Give investors the incentive to invest in the home country they so dearly love.

Safe investing and stay healthy my friends.