This paper provides a very broad understanding of the workings of a modern fiat monetary system that is applicable to countries that are autonomous issuers of currency in a floating exchange rate system.
Introduction

In this paper, I will explain why Modern Monetary Realism best describes most modern fiat monetary systems. The systems that are applicable to this discussion include nations that are autonomous issuers of their own currency and exist within a freely floating exchange rate system. For this discussion, I will focus primarily on the USA although this subject can be applied to many other nations throughout the world.

Modern Monetary Realism

Modern Monetary Realism (MMR) is a description of the monetary system applicable to nations who are autonomous issuers of their currency. Modern Monetary Realism describes how a government creates, destroys and utilizes its monetary unit and also how the private sector utilizes the state’s monetary unit for its own benefit. Modern Monetary Realism is based on the following principles:

- The Federal government is the issuer of net new financial assets to the monetary system. Households, businesses and state governments are users of the currency. While banks can create credit they cannot create net new financial assets (all bank loans result in the creation of an asset and a liability).

- As the issuer of the currency, there is no solvency constraint as there might be for a household, state or business. In this regard, one must be careful comparing the federal government to a household because the federal government has no solvency constraint (i.e., there’s no such thing as the federal government “running out of money” that it can create at will). Households, on the other hand, have a very real solvency constraint.

- As the issuer of the currency, the federal government’s true constraint is never solvency, but inflation. The government must manage the money supply so as to avoid imposing undue harm on the populace via mismanagement of the money supply.

- The modern floating exchange rate system helps to maintain equilibrium and flexibility in the global economy.

- The currency unit created by the state via deficit spending can only be extinguished by payment of taxes. Therefore, a modern monetary system can best be thought of as a system of debits and credits where government deficit spending credits the private sector and payment of taxes debits the private sector. One might think of deficits as “printing money” and taxes as “unprinting money”.

**Functional Finance**

Functional Finance is based on the following principles:

- The government is an entity created by the people and for the people. It exists to further the prosperity of the private sector - NOT to benefit at its expense. If this entity is allowed to exist for its own benefit or becomes corrupted by a concentration of power or abuse of its currency issuing powers it will become susceptible to dissolution via the populace's rejection of that government.

- Governments should be actively involved in regulating and helping build the infrastructure within which the private sector can generate economic growth. The economy is a complex dynamical system with irrational participants. It cannot be expected to regulate itself or behave rationally at all times. Therefore, some level of government intervention and involvement is not only beneficial, but also necessary. Ultimately, it must be the private sector that is the driver of economic growth. While government can aid in this process it cannot be expected to be the primary driver of innovation, productivity and growth - the primary drivers of living standards and ultimately the most important linkage in currency viability.

- Money is an extension of the state and must therefore be regulated by the state; however, ultimately the private sector must accept this legal tender as the currency unit. Therefore, the private and public sectors should best be thought of as being in partnership with one another and not opposing forces. Government by the people and for the people is not the antagonist in this story, but rather an entity that should be best utilized to maximize private sector prosperity.

- Government deficit spending and tax collection should be maintained at a rate that does not impose financial hardship on the private sector. Because the Federal government is not a business or household it should not manage its balance sheet for its own benefit. Rather, taxes and government spending should be managed in a way that most benefits the private sector and encourages private sector prosperity, productivity, innovation and growth.

**Brief Historical Background**

Modern Monetary Realism is based on the understanding that most modern fiat currencies eliminate the linkage between convertible currency systems and the constraints these systems impose on its issuer. Systems such as the gold standard do not apply to the modern fiat monetary system. We do not reside in a system in which currencies have any linkage to metals therefore, such thinking is not applicable to a modern fiat monetary system, but this thinking has persisted and still clouds economic thinking to this day.

Although we no longer exist in a convertible currency system (currency being convertible into gold as was the case under the gold standard, much of economic thinking remains clouded by this era.
of money. The system underwent a paradigm shift in 1971 when Nixon closed the gold window although most of mainstream economics did not seem to recognize the importance of this event and has continued working under a false paradigm where autonomous fiat currency issuers are seen as having a true solvency constraint as opposed to an inflation constraint. This leads to misguided policy and unnecessary public harm.

**Modern Monetary Realism’s Political Agnosticism**

One important element of Modern Monetary Realism is its political agnosticism. There are components of Modern Monetary Realism that tend to be left leaning, however, there are also components of Modern Monetary Realism that are right leaning. For instance, Modern Monetary Realism is agreeable to many right leaning economists because it favors lower taxes, reducing (or ending) the Fed’s role in the monetary system and focusing on efficiency of government (reducing wasteful spending and malinvestment). Modern Monetary Realism is also agreeable to left leaning economists because it favors public purpose, government deficits, tighter bank regulations and a focus on optimizing resource utilization (hence full employment). Importantly, it is neither an offshoot of Keynesianism, Monetarism nor Austrian economics, though there are components of each involved to some extent. Rather, Modern Monetary Realism is an offshoot of many different frameworks.

**How Vertical And Horizontal Money Functions**

Modern Monetary Realism is based on a horizontal and vertical view of money. This is important in differentiating between the public and private sector and how each impacts the money supply. The vertical component describes how the consolidated government (Fed and Treasury working together) transacts with the private sector. The horizontal component describes how the banking system utilizes state issued money to transact within the banking system. It’s very important to make this distinction because only the consolidated government can create net new financial assets. All horizontal banking transactions net to zero since this always involves the creation of both an asset and a liability. As Randall Wray says:

“Credit money (say, a bank demand deposit) is an IOU of the issuer (the bank), offset by a loan that is held as an asset. The loan, in turn, represents an IOU of the borrower, while the credit money is held as an asset by a depositor.”

Banks are users of the currency introduced into the system via vertical transactions. The following description of this horizontal and vertical relationship comes courtesy of Warren Mosler:

“When the government “spends,” the Treasury disburses the funds by crediting bank accounts. Settlement involves transferring reserves from the Treasury’s account at the Fed to the recipient’s bank. The resulting increase in the recipient’s deposit account has no corresponding liability in the banking system. This creation is called “vertical,” or exogenous to the banking system. Since there is no corresponding liability in the banking system, this results in an increase of non-government net financial assets.

When banks create money by extending credit (loans create deposits), this occurs completely within the banking system and results in a liability for the bank (the deposit) and a corresponding asset (the loan). The customer has an asset (the deposit) and a corresponding liability (the loan). This nets to zero.

Thus vertical money created by the government affects net financial assets and horizontal money created by banks does not, although its use in the economy as productive capital can increase real assets.
The mistake that is usually made is comparing what happens in the horizontal system with what happens at the level of government accounting. At the horizontal level, debt is the basis for horizontal money creation. Therefore, it is often assumed that debt must be the basis for the creation of money by government currency issuance. This is not the case.

Reserve accounting uses the standard accounting identities, but the meaning of “liability” is not “debt.” The husband-wife analogy for Central Bank-Treasury accounting relationships is apt. Since a husband and wife are responsible for each others debts, neither can be indebted to the other. That is to say, reserve accounting is a fiction that does not represent real relationships, such as exist between a creditor and debtor in the horizontal system.

Moreover, government debt is not true debt either. At the macro level, the reserves that are transferred to banks through government disbursement are used to buy Treasury’s. That is, when a Treasury is bought, this involves a transfer of reserves from the buyer’s bank’s reserve account at the Fed to the government’s account (consolidating Central Bank and Treasury as “government”).

When the Treasury’s are sold or redeemed, the reserves that were “stored” at interest are simply switched back, creating a deposit again. It’s pretty much the same as buying and redeeming a CD. It’s just a switch from demand to time back to demand in a bank account, and a switch between reserves and securities at the government level. That is to say, the government doesn’t have to draw on revenue, borrow, or sell assets to cover its “debt,” as households and firms do. It’s just a matter of crediting and debiting accounts on the (consolidated) government books, even though it may appear that there is a financial relationship occurring between the CB and Treasury due to the accounting. However, it’s just a fiction.

The key takeaway here is that the government balance sheet is not like a household, business or a state. It does not "finance" spending via revenues or debt issuance. The US government, as the issuer of currency, can never be said to be “running out of money”.

It might help to think of the US government as the scorekeeper at a football game. When the government spends money into the economy they are simply crediting the scoreboard (adding points). When they tax they are debiting the scoreboard (removing points). The main point is that the scorekeeper does not have a pile of points that he/she must reach into before adding points to the board. Because the USA is an autonomous currency issuer there is no constraint on their ability to create new money. This is dramatically different from a household, business or US state. Importantly, there is no solvency constraint on the federal government in the traditional manner that we think of for a household or business. That is, there is no such thing as the federal government becoming insolvent or not being able to meet its obligations - all of which are denominated in a currency that it alone can create. Like the scorekeeper, there is no such thing as the US government "running out" of the money that it is the issuer of.

The constraint for an autonomous currency issuer is never solvency, but rather inflation. The role of the government is to maintain the money supply at a level that does not impose hardship on the private sector and helps to maximize private sector prosperity. The goal is always to maximize living standards of the currency users in accordance with public purpose. If we think of the US economy as a bathtub we can think of spending as being the faucet that adds money to the system while taxation is the drain. Over time we can expect the bathtub to grow based on our level of productivity, innovation and output, but we must be careful to ensure that we do not create money in excess of our productive capacity (water spilling out of the tub). If this occurs the
government will directly reduce the potential living standards of its citizens resulting in currency instability.

In addition, we must understand that banks are users of government money. When we go through business school we are taught that banks obtain deposits and then leverage those deposits up by 10X or so. This is why we call the modern banking system a "Fractional Reserve Banking" system. Banks supposedly lend a portion of their "reserves". There's just one problem here. **Banks are never reserve constrained!** Banks are always capital constrained. This can best be seen in countries such as Canada where there are no reserve requirements. Instead, monetary policy involves reserve maintenance in order to help the central bank hit its overnight target rate. Reserves are used for only two purposes – to settle payments in the overnight market and to meet the Fed's reserve requirements. Aside from this, reserves have very little impact on the day-to-day lending operations of banks in the USA. This was recently confirmed in a Fed paper:

"Changes in reserves are unrelated to changes in lending, and open market operations do not have a direct impact on lending. We conclude that the textbook treatment of money in the transmission mechanism can be rejected."

This is very important to understand because many have assumed that various Fed policies in recent years would be inflationary or even hyperinflationary. But all the Fed has been doing is adding reserves to the banking system in exchange for (mostly) government bonds. As we learned above, this doesn't lead to more lending and will not result in the private sector being able to access more credit. Because banks are not reserve constrained it can only mean one thing - banks lend when creditworthy customers have demand for loans. The Federal Reserve is in the business of altering the composition of outstanding financial assets in an effort to maintain a target interest rate.

Lastly, this also shows that banks create money entirely **within** the banking system. As was said above:

"When banks create money by extending credit (loans create deposits), this occurs completely within the banking system and results in a liability for the bank (the deposit) and a corresponding asset (the loan). The customer has an asset (the deposit) and a corresponding liability (the loan). This nets to zero.

Thus vertical money created by the government affects net financial assets and horizontal money created by banks does not, although its use in the economy as productive capital can increase real assets."

So, contrary to what we are all taught in school, loans actually create deposits and not the other way around as the money multiplier would have us all believe. When a bank makes a loan it debits the Loans Receivable account on its books. To balance this transaction it will create a new liability in the name of the borrower. This loan will create a deposit somewhere else in the banking system (possibly at the same bank) that will cause this new bank to also account for its new liability (the deposit) and change in reserves at the Fed. Scott Fullwiler elaborates on this confusing point:

"The bank does not "use" cash to make a loan. The loan creates a deposit. If cash is withdrawn by the borrower this reduces its deposits. So, the cash is "used" in the process of settling a borrower's withdrawal. This is the key point that confuses so many--banks don't "use" cash or reserves to make loans since those are merely bookkeeping entries. They need cash or reserves to settle withdrawals that arise from creating the loan/deposit."
It is important to note though that the banks wield enormous control over the money supply through the powers granted to them via the government. The modern banking system is fragmented in such a way so as to disperse the power of money across both the private and public sectors. This is consistent with our form of government that is structured in such a way so as to avoid providing any branch of government with unchecked powers. So while the banks wield enormous power over the money supply it is incredibly important that the check on the banking sector be enforced via regulation, but also that the government’s power over money be regulated by the people. This view of money is known as a horizontalist and verticalist view of money in heterodox economics. MMR understands that both views exist in the current monetary construct. Importantly, the vertical level (the government level) has extraordinary powers and must be utilized as efficiently as possible to ensure a smoothly functioning system. But we must not forget that the horizontal level (the banking system), as the primary issuer of credit, wields the majority of control over the money supply and our everyday economic outcomes. In this regard, one must not think that there is such a thing as a “monopoly supplier of money”. Rather, as our system is currently constructed, there is a monopoly supplier of reserves (the Fed), a monopoly supplier of government debt (the US Treasury) and a banking system that controls the majority of the money supply via the issuance of credit.

How The Machine Is Structured

The relationship between the banking system and the government is important so it is helpful to better understand this dynamic. In our credit based monetary system the banks wield enormous control over the money supply. It’s important to note that the banking system cannot issue net new financial assets (all loans result in the creation of both an asset and a liability), but this does not mean the government has a monopoly on money. Rather they have a monopoly on net new financial assets. If one wants to think of this in terms of a hierarchy you can think of this in terms of the Federal Reserve being the monopolist on high powered money, the US Treasury being the monopolist of US Government Bonds and all other forms of credit sitting below this in the hierarchy. Although the government has a monopoly on these specific forms of government money the banking system wields control over the credit system that makes up the majority of the money supply.

It might help to think of the monetary system as a machine. In this case, a hybrid car is appropriate. This will help us understand how all the parts of the system come together to generate some result. In the case of a car the obvious goal is to get from point A to point B. Our journey through life can be envisioned as an endless ride in this vehicle with our ultimate destination being a certain living standard.

Based on this we can think of the structure of the car as the laws, regulations and infrastructure of the monetary system. The car needs bumpers, air bags, break pads, sturdy structuring, durable tires, etc. These things all help to keep the car operating smoothly and safely. We can think of the banking system and government issuance of net financial assets as the power system in the car. The car uses fuel to operate, but it can also run on the alternate power source. The primary power source is the fuel portion of the car (the credit system via the banking system). But it also needs the battery power to operate at full functionality (by supplying power to the lights, windshield wipers and even powering the car if needed). We can think of the quality of economic output as the efficiency of the engine. Ultimately, the engine powers the vehicle and it’s the engine’s power and efficiency that will generate the trajectory and rate of our progress. And of course, we need competent and talented drivers who have the motivation, drive (no pun intended) and perseverance to be willing to sit behind the wheel and take control of the vehicle (as opposed to sitting in the backseat hoping the car will drive itself). We can use government to make the car operate more efficiently, hit the government turbo boosters when going uphill (recession and countercyclical spending giving the engine more power), and make the car more comfortable and fancy looking. The key point in this simple analogy is understanding that all of the parts come together to play an integral role in helping us get from point A to point B.
A Fiat System Where Everyone Still Thinks We Have A Gold Standard Constraint

Why has this thinking never changed in the USA? Despite the dramatic changes in the monetary system after the Nixon shock neo-liberalism came to dominate economic theory in the 70's and 80's. After the economic successes of the Reagan and Clinton eras there was little doubt that such thinking was accurate. Of course, we all know what happened next and now many of these neo-liberal beliefs have been pointed to as causes of the recent credit crisis.

More important is the fact that investors and economists have simply ignored the fact that the USA underwent drastic changes in 1971 when Nixon closed the gold window. In essence, the system underwent this dramatic overhaul, but the thinking never changed all that much. Overnight, theories and thinking should have been rewritten, but never truly were. Whether one likes it or not, we are operating in a truly fiat world. Therefore, the thinking and theories that are derived from this era are largely defunct. Modern Monetary Realism fills this void by describing how a state issued fiat monetary system operates.

The fixed exchange rate misconception (such as those based on the gold standard) exists even at the highest levels of government and has been propagated by many of the world's most prominent economists. I believe most people in power do not understand exactly how our monetary system works due to this fundamental flaw in our educational system - in fact, I believe 99% of the lawyers in Congress know far less than anyone thinks in terms of economics. The same can be said for many of the officials in Fed and Treasury.

But people always ask: "how could these people not get it? How can the brightest minds and the leaders of our country not understand all of this?" Well, if we review the past actions of Alan Greenspan (who has admitted to using a "flawed" model) and the actions of Ben Bernanke leading up to and in response to the household debt crisis we can see that they have substantially misinterpreted how a modern monetary system functions. In fact, in a 2008 Congressional hearing Alan Greenspan admitted that the ideological framework he had based his entire life's work on, was "flawed":

**REP. HENRY WAXMAN:** Do you feel that your ideology pushed you to make decisions that you wish you had not made?

**ALAN GREENSPAN:** Well, remember that what an ideology is, is a conceptual framework with the way people deal with reality. Everyone has one. You have to -- to exist, you need an ideology. The question is whether it is accurate or not.

And what I'm saying to you is, yes, I found a flaw. I don't know how significant or permanent it is, but I've been very distressed by that fact.

**REP. HENRY WAXMAN:** You found a flaw in the reality...

**ALAN GREENSPAN:** Flaw in the model that I perceived is the critical functioning structure that defines how the world works, so to speak.

**REP. HENRY WAXMAN:** In other words, you found that your view of the world, your ideology, was not right, it was not working?

**ALAN GREENSPAN:** That is -- precisely. No, that's precisely the reason I was shocked, because I had been going for 40 years or more with very considerable evidence that it was working exceptionally well.
So you can see that the man running monetary policy in the USA for 18 years was working under a "flawed" framework. If the Fed chief has a flawed understanding of our economic system then who can we really expect to understand all of this? It's clear to me that no one really does understand it completely and that explains, in large part, why the USA is in the position it is in today.

Much of this confusion is also derived from the gold standard in which governments were revenue constrained. The Euro system, which is also a single currency system (like the gold standard) adds significant confusion to the current environment and is often confused as a flaw in fiat money. In reality, the Euro proves why single currency systems are inherently flawed when they do not involve truly autonomous currency issuers. The nations within the Euro are analogous to the states within the USA. In this regard, they are currency users and not currency issuers. Without floating exchange rates and/or a central treasury there is no balancing mechanism that allows this currency union to function as the USA does. The gold standard imposed similar constraints on the world and put trade deficit nations at inherent risk. We can see from the Euro crisis that this sort of currency union causes massive imbalances within such currency systems. Therefore, the ideas of the gold standard and the Euro are not applicable to the monetary system in which the USA exists.

How Could It Be Possible That Our Leaders Don't Understand This?

I believe these misconceptions persist due to three primary reasons:

- First of all, this is all highly complex. Understanding the functions of a monetary system is high finance. We cannot expect everyone to understand it and we should expect most theories and outlines of the modern monetary system to be somewhat incomplete due to the dynamic existence of modern economies.

- Second, this system in its current format is not very old and most of the people in power currently were educated by a generation in which this system was not largely applicable. Despite the fact that the world changed dramatically in 1971 when Nixon closed the gold window, we continue to work under theories and textbooks that don't fully account for this change. Therefore, the theories of old run rampant in modern economic circles.

- Thirdly, politicians and ideologues have a vested interest in keeping the American public from understanding that the government is fundamentally different from a household, state or business. If the American public understood Modern Monetary Realism they might be more inclined to demand greater change - particularly in the ways that our banking system is designed.

Back To Basics

Getting back on track though - let's understand a few things first:

1. We create government in order to serve some public purpose. The state is a creature of the people. And the state's monetary unit is a creature of the state. The state taxes in order to regulate aggregate demand in the economy and not to raise "funding".

2. The bond market is a monetary tool that helps the Fed achieve monetary policy goals. It is NOT a fiscal financing tool.
3. Foreigners do not "fund" the spending of an autonomous currency issuer as there is no such thing as the scorekeeper having to obtain points in order to be able to credit the scoreboard.

4. Money must be created before government bond auctions can occur and before taxes can be enforced. Otherwise, there is no currency in the system to tax and no money to be utilized via bond auctions. This is just basic logic in terms of the way the current system works. It can be no other way.

5. Households, states, Europe and the gold standard are not remotely similar to the modern monetary system in which the Federal government of the USA functions.

A Simple Example Of A Modern Monetary System

The following example should help clarify some of the concepts mentioned above. Please excuse the simplicity, but this can be a mind-bending concept if you are textbook taught (trust me, I know the feeling) so I will keep it simple:

On a journey around the world with members of the US Navy we become shipwrecked and find ourselves on a beautiful island. There is a wonderfully productive citizenry there and they are accepting and generous of us. They are impressed by our combat training, weaponry, etc and hold us in high regard. We form a pact and what will later be known as a "government" whereby my men offer protection and safety in exchange for acceptance into their society. We agree to a government by the people and for the people and I am elected as their President. Economic activity is the heart of this country and the people are innovative, enjoy hard work and reap the benefits of their labor.

The people of this island once transacted using various items such as seashells that represented debts amongst members of the society. Luckily, these innovative folks were wise enough to create a computer system just recently. I propose that we modernize our economy and begin transacting in a fiat currency so as to make trade more convenient and efficient. Lugging around seashells grew tiresome and while they were quite pretty, they were largely useless. I issue "reserve" notes and initiate an electronic system that tracks each citizen's transactions. These notes, on their own, are not worth more than the paper they're printed on. However, they serve as a convenient medium of exchange and unit of account.

It's not free to live on the island, however, with all of these new resources and organized services. Our new government is based on the idea that we can create public services that will increase the living standards of everyone on the island. Since we are already a productive and resource rich society, we create a tax and legal system that helps to generate demand for our currency and regulate the ways our system will operate. This acts as the glue that binds our monetary system together. This makes the citizens beholden to government via the "reserve" notes. They MUST have them in their account on April 15th of every year. I've created demand while also fulfilling their desire to transact conveniently and reliably. Why would they agree to this? Because I am offering them protection among various other services in exchange for this small tax burden. Because this island has a long-standing feud with a neighboring island they are happy to pay this tax and sleep well at night. The formation of a modern monetary system has directly increased their living standards in many ways. Our currency union is bonded by this pact that was created by the people for the people's benefit.

This is exactly what the US government does. In return, they spend money on public works, create jobs, spend money on furthering our nation's prosperity (in theory at least) and protection of the nation (a military). It is essentially an acknowledgment that we are stronger as a united
As highly social animals, humans must recognize that there is a certain level of common sense behind the formation of these nations that are ruled by “governments”. We form groups because we are more likely to ensure our survival through cooperation. We don’t live in solitude. The formation of governments is nothing more than a manifestation of this fact. The evolution of the fiat monetary system is a step in this natural progression as the global economy has become increasingly complex and dynamic.

As the services offered by the state increase and grow it's possible that this tax burden could increase by necessity. It's important, however, that the role of the government not infringe on the prosperity of the private sector to an undue extent. Remember, government is a tool that is to be utilized by the citizens to further the private sector's prosperity. If the citizens on my island are productive and innovative we can expect our overall quality of life to increase. If, however, I am corrupt, mismanage my currency or produce currency in excess of my island's productive capacity I risk currency collapse in the form of the public's rejection of my currency system.

**What Gives Fiat Money Its "Value"?**

Modern Monetary Realism views money as being driven by many different factors. What backs the notes a government creates? What gives them value? Ultimately, these notes represent some amount of output and productivity that can be purchased. The notes in and of themselves have no intrinsic value, but serve as a medium of exchange that allows the citizenry to exchange various goods and services. The willingness of the consumers in the economy to use these notes is largely dependent on the underlying value of the output and/or productivity, the government's ability to be a good steward of the currency and the ability to enforce its usage. I like to think of this as an interconnected bond between these various forces. If any link in the bond is broken the nation's currency is at risk of collapse. Importantly, productivity sits at the top of this bond. After all, if a nation has nothing to produce then the formation of a monetary system serves little purpose. Further, a system that does not evolve via production can expect to become increasingly unstable over time as living standards stagnate. The government cannot force the "value" of its currency on its citizens.

![Figure 1 - The fiat currency linkages](image-url)
The value of these notes is ultimately determined by three key linkages:

1. Production
2. Currency management
3. Taxes & regulation

Production is vital in giving any currency its value. The goods and services that are produced by the citizens and the value that other citizens are willing to pay for these goods and services is what ultimately makes any fiat currency viable. Therefore, government has an incentive to promote productive output and maintain sound stewardship of its currency. Otherwise, they risk devaluing the currency and possibly threaten the stability of their currency system. Paying its citizens to sit at home doing nothing, buy cars they don't need or purchase homes they can't afford are unproductive forms of spending that are likely to turn a nation of producers AND consumers into a nation of consumers. If government is corrupt in its spending and becomes an institution that is mismanaged and detracts from the private sector's potential prosperity then it is only right that the citizens revolt, denounce the nation's currency and demand change.

The autonomous nation's government, which is the organized body formed through representation of the private sector, deems what is acceptable as currency. In the USA our representatives have deemed that the currency is the US dollar. This means that taxes are payable only in the currency that the Federal Government deems it to be. When you consume and produce in the USA you will incur a tax liability. As the state defines, this liability can only be extinguished in the currency that the government deems as legal tender. This is important because taxes act as another binding force in any fiat monetary system. You will attempt to obtain the currency of the state in order to relinquish your tax liability.

While the state plays an important role in this process, money is not necessarily valuable only because the state says it is valuable. The "value" of the currency involves other linkages. Keynes once compared money to a theatre ticket:

"money is the measure of value, but to regard it as having value itself is a relic of the view that the value of money is regulated by the value of the substance of which it is made, and is like confusing a theatre ticket with the performance."

This is an accurate portrayal of currency in a modern fiat monetary system. Government issued fiat money, in and of itself, has no intrinsic value. The theatre ticket has no value aside from the paper it is printed on, however, given the value of the performance citizens will be eager to attribute a certain value to these tickets because they are deemed by the theatre as being the tool of entry into the show. If the theatre mismanages the number of tickets in circulation they will devalue the tickets. In much the same way, the US government deems the US Dollar to be the ticket with which we can see (and interact in) the US economy. If the show is good (productivity is high), the number of outstanding tickets are not mismanaged (government doesn't spend in excess of productive capacity) and the tickets are sustained as the only form of entry into the show (the tax and legal system sustains itself) then the currency remains a viable medium of exchange. So we can see how the linkages shown above work in tandem to give a fiat currency a particular value.

There is one important fact here that cannot be overlooked, however. In order for the citizenry to transact in the currency (and ultimately pay taxes) the government must spend some amount of currency into existence FIRST. This is important to understand because notes must be issued BEFORE taxation can occur. Therefore, you can see that spending it not "funded" by taxing. In fact, it is exactly the opposite. The government is funding the private sector's ability to pay their
taxes when they spend money into existence. When the citizens pay their taxes, the government doesn't "have more money". After all, they have a computer system that credits accounts and prints up bills. It is impossible for them to "run out" of money.

But importantly, when the government taxes they are reducing the amount of currency in circulation by exactly the amount of the tax. In this sense, taxes "unprint" money. A tax reduction is the accounting equivalent of spending more money (except the money doesn't necessarily get allocated via the government political process as directly as it would via spending). From the perspective of the Federal budget, we can see that spending is like a tax cut (both tax cuts and spending add net financial assets to the private sector) and spending cuts are the accounting equivalents to tax hikes (as both reduce net financial assets to the private sector). Treasury Secretary Timothy Geithner directly stated this in a recent media appearance:

"Spending cuts are the same thing as a tax increase."

It's important to note that the government does not maintain a coercive monopoly over the people. That is, currency viability is not merely based on the government's ability to enforce its usage. As mentioned above, there are other components that play an equal or greater role in currency viability. But that does not mean that taxation and enforcement of taxation are not crucial in helping to sustain the viability of the system. Without rules and regulations that help sustain the fabric of the monetary system, the government that Americans have built long and hard to create would become increasingly fragile. The United States Secret Service was in fact created specifically for this purpose - to protect the US Dollar. There is arguably, nothing more important to government stability than maintaining the value and faith in the nation's currency.

If an economy is productive, the autonomous nation can enforce the use of said currency as the currency users will see the increases in public purpose and production as net benefits to their living standards. As long as the government is a sound steward of the currency there should always be demand for it. In other words, trust in the national currency is safe as long as the rule of law is maintained, government is a good steward of the currency and citizens are productive. If the government becomes corrupt, spends well in excess of productive capacity or mismanages the economy then there is an increasing chance of currency collapse (hyperinflation).

Inflation becomes problematic when a nation's spending outstrips productive capacity. This is a real reduction in our standard of living. Ultimately, the real benefit of our labor is the time it provides us. Adam Smith once said:

"The real price of everything, what everything really costs to the man who wants to acquire it, is the toil and trouble of acquiring it."

There is a theoretical level of infinite demand in a capitalist economy. What I mean by this is that, in an extreme sense, we can consume all that time will allow. If you were unconstrained by time you could, in theory, consume all that the producer can produce. Theoretically, this chicken and egg story can go on forever. Of course, the greatest luxury of all is quite finite. We are always constrained by time. The entrepreneur offers us the opportunity to take advantage of the ultimate luxury by giving us more time.

**How does the entrepreneurial process work to create real wealth?**

The best way to envision this idea is to use an example. Alexander Graham Bell is one of the greatest innovators in American history. So what did Mr. Bell do exactly? He created a more efficient way to communicate by inventing the telephone. Clearly, communication is a vital part of human life. And in theory, there is infinite demand over the long-term to communicate.
At some point in his life, Mr. Bell sat down and probably said something to the extent of – “it would be far more efficient if I could talk to Mr. Smith immediately as opposed to sending him a telegram”. Clearly, this desire was not unique to him. And all Mr. Bell did was fill a demand by inventing a product that helped consumers meet this demand. But the important role that Mr. Bell played in the job creation process is not that he necessarily created jobs independent of his consumers (as we showed above, they are interdependent). After all, there were plenty of messengers already employed and working before the telephone came into being (Mr. Bell actually destroyed their jobs).

What Mr. Bell did is give his consumers more time to consume other goods and services. He reduced the toil and trouble of having to acquire things by providing them with a product that made their lives more efficient and productive. Just imagine all the ways that the telephone improves our quality of life and makes us more efficient. The businessman in NYC no longer had to wait for the telegram from his business partner in Chicago to discuss their new business decisions. Instead, he picked up a telephone and a decision was made in a matter of minutes. There are innumerable (better) examples of the way that a simple innovation such as Mr. Bell’s helps us to improve productivity, efficiency and ultimately our standard of living.

**The MMR Law:** “We generate improving living standards through the efficient use of resources resulting in the optimization of time”

It’s not uncommon to hear that the US dollar has fallen 90%+ since the Federal Reserve was created. This is technically true, but despite its decline in purchasing power, our real standard of living has increased dramatically because we have become so much more productive. An American in 2011 lives a much fuller life than an American in 1913. This is because we have been afforded (through productivity) the luxury to use more time as we please.

The key point here is that improvements in our standards of living provide us with the ultimate form of wealth – they give us more time to do the things we think will help us achieve happiness (whatever that might be to any particular person). This is the ultimate form of wealth. The entrepreneur gives us more time to consume more goods and services and do the things we want in our lives. If we look at the modern economy we can see how streamlined this process has become. For instance, last night at 7 PM I put my laundry in the wash, I put the dishes in the dishwasher, ordered dinner from a local restaurant and went upstairs into my office where I did an hour of work. At 8 PM my dinner arrived, my laundry was done, I ate dinner on a fresh clean plate and I had done an hour of work in this period. Imagine trying to do all that 100 years ago? How long would it take you? Days? Perhaps even weeks? That is a remarkable increase in living standards. And why are we able to do all these things in such a condensed period of time? Why am I able to consume so much more than I could have 100 years ago? Because entrepreneurs created a machine that cleans my clothing for me, they created a machine that cleans my dishes for me, they created an oven that cooks my dinner, a car that allows the deliveryman to deliver my dinner, and invented a computer which allows me to efficiently and effectively accomplish work. We live in a remarkable world. If, as a people, we are not productive and our government is a poor steward of our currency then it’s not unimaginable that our real living standards will stagnate or even decline.

It’s important to understand in these discussions of inflation and living standards that hyperinflation is a very different phenomenon from inflation (which is quite normal in a fiat currency system). In recent years we have heard many hyperinflation predictions based on misunderstandings of banking and the monetary system. Hyperinflation is a disorderly economic progression that leads to complete rejection of the nation’s currency. It is not merely a monetary phenomenon, but primarily a political phenomenon. Throughout history, hyperinflations have tended to occur not because the state prints money, but because of exogenous factors. The primary causes have been decline in production, corruption, regime changes, ceding of monetary
sovereignty and loss of a war. These rare events have tended to lead to a decline in tax receipts or an increase in the money supply ultimately resulting in decline of the currency.9

Recapping Our Island Society

Just to recap from our island example earlier - on my island I do not borrow from governments or tax to spend as I would if my currency were backed by gold. Interestingly, I can't TAX you until I've credited your accounts with "reserve" notes. There is no money to be taxed otherwise. So, in effect, I have to SPEND in order to TAX (counter-intuitive to what you have been taught). Taxing debits your accounts (saps liquidity) and spending credits your account. On my island, I am never revenue constrained. If you don't pay your taxes I will throw you in jail and confiscate your money. But that doesn't mean I can spend more when I tax. What do I care if you send me your "reserve" notes? I can just press a button and credit my "spending" account right after I shred your tattered looking cash. This is what the US government actually does. Taxation is essentially a form of maintaining control of private sector spending. In this sense, taxes serve no funding purpose, but merely serve to regulate aggregate demand. In fact, if you pay your taxes in cold hard cash the IRS will most likely shred those dollars. They don't put them in a bag and mail them to the Treasury so they can go "spend" it. The only reason they might keep the dollars is if they are in good condition so they can go back out into circulation. When the US government wants to spend money they simply tell men and women to walk into a room and credit accounts in a computer system.

What's The Catch? This Sounds Like A Free Lunch

So what's the bogey here? What's the catch? Because surely you must be asking yourself why this sounds like a free lunch. We can just spend to our hearts content, right? Absolutely not. The bogey here is inflation which is constantly moving up and down with the amount of money in the system based on my tax rate, spending, borrowing, etc. Spending must always be done in accordance with a nation's productive capacity so as to avoid imposing undue hardship on the private via a reduction in real living standards. Thus, government cannot just spend and spend or the extra dollars in the system will chase too few goods, drive up prices and reduce living standards. It's important to understand that government cannot just spend recklessly. This is important so I'll say it again. This does not give the government the ability to spend and spend. If they spend in excess of productive capacity and tax too little they can create mal-investment and inflation resulting in lower living standards. Likewise, if the government taxes too much and spends too little they create a government surplus and private sector deficit (by accounting identity). This can result in deflation and/or excess private sector debt levels as the private sector literally suffers a dollar shortage.

Some people claim that Modern Monetary Realism says deficits don't matter. That is a vast misrepresentation of our position. Deficits most certainly do matter. Maintaining the correct level of deficit spending is, in many ways, a balancing act performed by the government. It is best to think of the government's maintenance of the deficit like a thermostat for the economy. When the economy is running cold the deficit can afford to be higher. When it is hot the deficit should be lower. Because there is no solvency concern in the USA (as there is in the revenue constrained European nations) the only concern is inflation or possible hyperinflation.

It's also important to note that spending by the government must be focused on its efficiency. If spending is misdirected or misguided there is a very real possibility that this spending will simply result in higher inflation that is not offset by increased productivity. If you pay people to sit on their couches all day long there is no reason to believe why this sort of government policy will not result in long-term economic decline in the citizenry's standard of living. Living standards, ultimately, come down to the private sector's ability to produce and innovate. The USA is extremely wealthy not because our government issues a lot of money, but because we are an extremely productive and innovative nation. The power in capitalism is the ability to offer its users
more time. Therefore, government has an incentive to promote productive output and maintain
sound stewardship of its currency.

What Role Does The Bond Market Play In All Of This?

In terms of the bond market, the issuance of bonds does not serve the same purpose it did under
the gold standard. We actually issued bonds because we were revenue constrained (not enough
gold reserves at all times to fund spending without creating inflation). In the modern monetary
system bonds fund nothing. It's important to note that the bond market is largely a relic of the
gold standard. The system did not undergo the overhaul that would have been possible in 1971
when we became a completely autonomous currency issuer. Therefore, the system of old
remains largely intact and it remains widely believed that it serves the same function that it did
under a revenue constrained monetary system.

Bond issuance is a relic of the gold standard that serves only to help the Fed hit its target interest
rate. It can also be thought of as another form of government spending because a treasury bond
is basically a savings account. Disbursements in the form of interest on US government bonds
add to the budget deficit and increase private sector net financial assets. People think this is
government "debt" because Congress mandates the issuance of bonds (this is primarily due to
misconception and the need for accountability), but it's not accurate to think of the government as
having "debt" when that liability is essentially issued to itself in a currency that it can willingly
create. As I've mentioned several times before, there is no such thing as the USA not being able
to pay off the liabilities that are denominated in a currency which it can create out of thin air.
Warren Buffett recently made this point at an investor conference:

"The United States is not going to have a debt crisis as long as we keep issuing
our debts in our own currency. The only thing we have to worry about is the
printing press and inflation."

As an autonomous currency issuer the USA simply spends money when it wants to. Like it or not,
men and women walk into a room and type numbers into computers. There is no constraint in the
government's ability to spend (except for the public's willingness to allow this spending). The
amount of spending that is done by the U.S. government is intended to meet some public
necessity or purpose (some of which is good and some of which is not) – population growth,
economic growth, public services, etc.

The issuance of government bonds is merely a monetary tool that helps the Federal Reserve to
control the overnight rate. It is not a fiscal financing tool. To understand this point we can review
government bond auctions in the USA. These auctions are carefully orchestrated events that are
designed not to fail – that's why they never do. The NY Fed describes the way in which their
operations are intricately intertwined with the US Treasury:

"Staff on the Desk start each workday by gathering information about the
market’s activities from a number of sources. The Fed’s traders discuss with the
primary dealers how the day might unfold in the securities market and how the
dealers’ task of financing their securities positions is progressing. Desk staff also
talk with the large banks about their reserve needs and the banks’ plans for
meeting them and with fed funds brokers about activities in that market.

Reserve forecasters at the New York Fed and at the Board of Governors in
Washington, D.C., compile data on bank reserves for the previous day and make
projections of factors that could affect reserves for future days. The staff also
receives information from the Treasury about its balance at the Federal Reserve
and assists the Treasury in managing this balance and Treasury accounts at commercial banks.

Following the discussion with the Treasury, forecasts of reserves are completed. Then, after reviewing all of the information gathered from the various sources, Desk staff develop a plan of action for the day.”

So let’s connect the dots here. Treasury auctions bills, notes and bonds to “finance” its spending. It announces these auctions periodically. In the case of bills it announces the auction each week on Monday and the bills are auctioned that Tuesday. This is due to a Congressional mandate because our politicians believe we must finance all of our spending via bond auctions – a myth that has persisted since moving off the gold standard.

What’s important to note here, however, is that Treasury and the Fed are working in partnership to track deposits and maintain a record of reserves in the system (Fed and Treasury are essentially the same entity as far as operations are concerned - the myth of Fed independence creates substantial confusion here). William McChesney Martin, the longest ever serving Chairman of the Fed has actually said as much:

“There was a very real point . . . that the primary direction must come from the Treasury and that anything done by the Federal Reserve must be coordinated with the Treasury.”

The whole myth of “Fed independence” generates a great deal of confusion. Make no mistake, the Fed is not an independent entity. They pass close to 100% of their profits on to the US Treasury and work in close coordination with the government in everything they do. The myth of independence is intended to create the perception of no political bias. But do not be fooled - the Fed is very much a part of the US government. They might maintain their political independence, but they are very much a part of the US government.

This coordination is important because their reserve tracking and auction operations are actually just a monetary tool and NOT a fiscal financing tool. In this regard, Modern Monetary Realism likes to view the Treasury and Fed as a consolidated entity. When the Treasury auctions off bonds it does so only after discussing matters with the Fed’s reserve forecasters. In essence, the government is soaking up reserves that had already been spent into existence in order to target the overnight rate. It can be no other way. Without Treasury having first spent the money into existence there is no money with which the Primary Dealers can “fund” the deficit. Some readers will note that the Treasury accounts at the Fed must be credited prior to spending, but it’s important to understand that settlement of auctions involves the Federal Reserve performing large scale repos to ensure that there are sufficient reserves in the banking system to settle auctions. These repos are performed with bonds already in the banking system.

None of this means auctions can’t fail. They can. But quite honestly, it wouldn’t matter all that much as the reserve drain would simply take place at a later date. The auctions are designed to succeed because they are merely targeting reserves that they KNOW are in the system. There is no red phone at Treasury that Tim Geithner uses to call China before it spends money. No red phone to Japan. There is only a phone to the Fed where reserve forecasters communicate with the Treasury and the Primary Dealers to determine the size and scope of the necessary auctions. If the Fed were to find that there were not enough reserves in the system to settle the bond auctions, as the monopoly supplier of reserves, they would make them available via the repo process. Thus, when auctions are completed the reserve drain is accomplished, Congress thinks we have “funded” our spending and we can all go along our merry way.
Most importantly though, these actions help the Fed to control its overnight target rate. Before the Fed began paying interest on reserves the lack of auctions would have resulted in excess reserves in the banking system and a loss of control of the overnight rate as banks bid down the rate in an effort to lend their excess reserves. This would drive the rate to 0%. Now, with the Fed paying interest on excess reserves, the Fed is able to maintain excess reserves in the banking system by establishing a floor at the rate of interest it pays. Contrary to popular opinion, the Fed doesn't manipulate rates lower. The Fed is always in the business of manipulating rates higher.

So you can see that this is all well orchestrated monetary policy. It is not a fiscal financing operation. The Fed and Treasury are working in tandem with the Primary Dealers to track reserves. After all, part of the agreement in becoming a Primary Dealer is to make a market in treasuries:

"The primary dealers serve, first and foremost, as trading counterparties of the Federal Reserve Bank of New York (The New York Fed) in its implementation of monetary policy. This role includes the obligations to: (i) participate consistently as counterparty to the New York Fed in its execution of open market operations to carry out U.S. monetary policy pursuant to the direction of the Federal Open Market Committee (FOMC); and (ii) provide the New York Fed’s trading desk with market information and analysis helpful in the formulation and implementation of monetary policy. **Primary dealers are also required to participate in all auctions of U.S. government debt and to make reasonable markets for the New York Fed when it transacts on behalf of its foreign official account-holders.**"

Therefore it is misleading to imply that the auctions might fail due to a lack of demand or some sort of funding failure. The Primary Dealers are required to make a market in government bonds. If they wanted, they could hedge their exposure to government bonds, but part of the agreement in becoming a primary dealer is helping the government sell their bonds so demand is never really an issue.

It's also important to understand that foreigners do not fund the spending of the USA. As a current account deficit nation, the US government can appropriately be thought of as a net currency exporter. This means that we send pieces of paper over to foreign nations in exchange for goods and services. In doing so these nations get the benefit of employing millions of domestic workers via their business partnerships with US corporations. But this doesn't mean they "own" the USA.

When China receives dollars they can only do a handful of things with these dollars. China, for the most part, chooses to invest these dollars in US Treasuries. They have attempted to use their dollars to purchase other USD denominated assets, but the US government has squashed those efforts. So, instead of leaving these pieces of paper to collect dust in vaults, they open what is the equivalent of savings account with the US government. Most importantly though, if you study the bond auction data from the USA you'll find that indirect foreign bidders make up a very small portion of the auctions. This is due to the fact that the Primary Dealers are designed to be able to take down the entire auction. As I discussed above, this is their primary role in the agreement in being a PD. So, while China can choose to buy bonds, it is by no means necessary that they do so. China could literally leave the market for US government bonds and the show would go on.

This can be best seen in a recent US government 10 year bond auction. This auction occurred just weeks after QE2 ended and just before the debt ceiling debacle occurred in July 2011 so one would have expected this to be a very unstable auction. In fact, it was business as usual. As you can see below, the US government was able to auction off $21B in 10 year notes with the Primary Dealers tendering more than 2X the entire auction. Indirect bidders tendered almost half
the auction, but were not needed at all to accomplish the reserve drain. The bid to cover at 3.1 was extremely strong.

Why does any of this matter you ask? Because once you realize that foreigners and bonds in general do not fund our spending you begin to realize that much of what your textbook taught you about our monetary system is simply not true. An autonomous currency issuer has no solvency risk unlike a nation such as Greece that exists in a single currency system with what is essentially a foreign central bank. An autonomous currency issuer is never revenue constrained.

The policy implications in such a system are astronomically different – particularly for a nation suffering a balance sheet recession (as I believe we are now). So, when you hear politicians and pundits talking about the national debt and our imminent bankruptcy you can be certain that they have little to no idea what they are actually talking about and instead are using fear mongering tactics to promote a political perspective (one that usually involves separating the middle class from its savings).

The Importance Of Understanding Sectoral Balances

The US government is never revenue constrained. They are not like a household, business or state government. We don’t need China to buy our bonds in order to spend. China gets pieces of paper with old dead white men on them in exchange for real goods and services. They can either hold that money in a checking account at the Fed OR they can do what they wisely do and invest those pieces of paper in what is actually a savings account at the Fed. We also don’t need taxes to spend although taxes play a vital role in helping to regulate aggregate demand. It can be helpful to understand this concept by understanding some simple accounting identities behind government spending.
The deficit of the entire government (federal, state, and local) is always equal (by definition) to the current account deficit plus the private sector balance (excess of private saving over investment). To be more precise: net household financial income = current account surplus + government deficit + $\Delta$business non-financial assets. The private sector surplus represents the net saving of the private sector (households and businesses) from income after spending, while the public sector deficit is the government’s deficit. This is the essence of the sectoral balances approach made famous by the late great Wynne Godley. It can be visualized with the following diagram:

(Figure 3 - Sectoral Balances)
The sectoral balances can be broken down according to GDP:

\[
\text{GDP} = C + I + G + (X - M)
\]

\( C \) = consumption  \\
\( I \) = investment  \\
\( G \) = government spending  \\
\( X \) = exports  \\
\( M \) = imports  \\

Or stated differently;

\[
\text{GDP} = C + S + T
\]

\( C \) = consumption  \\
\( S \) = savings  \\
\( T \) = taxes

From there we can conclude:

\[
C + S + T = \text{GDP} = C + I + G + (X - M)
\]

If rearranged we can see that these sectors must net to zero:

\[
(I - S) + (G - T) + (X - M) = 0
\]

\( I - S \) = private sector balance  \\
\( G - T \) = public sector balance  \\
\( X - M \) = foreign sector balance
You can see this different version of the above chart in visual form by viewing the sectoral balances in the USA going back to 1952:

(Figure 4 - Sectoral Balances part 2)

What you can essentially see here is that the USA has run budget deficits for the majority of the last 60 years (in fact well over 200 years). More importantly, however, the domestic private sector balance has remained in surplus until the late 90's.

The Importance of Understanding $S = I + (S-I)$

It's important to take the private sector component in the sectoral balances one step further or the reader might confuse the true driver of economic growth as being the government and not the private sector. Although government can help to drive economic growth (if used properly) we should not forget that investment is the backbone of private sector equity. This simple rearrangement of the private sector component highlights this fact and helps to avoid thinking that $I > S$ might be a negative for the economy when the reality is that a high level of investment is generally good for the economy.

If we rearrange the above sectoral balances equation we can arrive at a very important identity:

$$S - I = G - T + X - M$$

$$S = I + (G - T) + (X - M)$$

Which rearranges to:

$$S = I + (S - I)$$

We can also think of this from the National Income Accounting equation:
\[ C + I + G + (X - M) = C + S + T \]

Which rearranges to:

\[ (S-I) + (T-G) + (M-X) = 0 \]

Which rearranges to:

\[ I = S + (T-G) + (M-X) \]

This helps to show the reader that wealth creation is not just achieved through government deficit spending, but largely occurs independent of government. On this point it's important to understand the difference between real wealth and financial wealth. A good way to think about all of this is to understand that the private sector can create real wealth entirely independent of the government. A farmer does not need the government to turn 1 cow into 10. The farmer has achieved real wealth creation regardless of the government's spending position. What the government must generally do over time is help to facilitate the wealth accumulation process by providing the net financial assets to help the private sector monetize this real wealth. If the government never makes the dollars available then the farmer cannot sell his farm, his cows or reinvest in his farm using the domestic unit of account. But it's important not to put the cart before the horse here. It's best to think of government as being a facilitator of wealth creation and not the driver. Hence, our focus on \( S=I+(S-I) \) with the emphasis on the idea that "the backbone of private sector equity is I, not Net Financial Assets." The idea is not novel, but simply clarifies the understanding of the private sector component.

When one connects the dots between production and the MMR Law you can begin to understand why private sector production matters so enormously to the living standards of the society. In this regard, I is the core of improved living standards, because it is through I that we create things that make us more productive and therefore give us more time. Resources precede money. Not the other way around. But we must maintain a balance here and never forget that government is an important facilitator of the wealth accumulation process who wields powerful tools that can aid us in driving demand, stabilizing economic growth and helping to improve overall living standards.

"Money" Is Not "Wealth"

The sectoral balances show that the government can wield incredible control over the private sector’s net financial assets. But this accounting identity does not merely mean the government can spend money and make the population wealthy. Money is not wealth. Money is simply the medium of exchange that allows citizens to exchange and transact in the underlying goods and services. If a government spends money in excess of a nation’s underlying productive capacity it will devalue this "money" and generate inflation. This would result in too much money chasing too few goods. So, the key for government is to balance the amount of money in the system in order to keep the temperature just right - not too hot and not too cold. So, Modern Monetary Realism does not claim that the government can just recklessly spend.

But it’s important to note that if Americans are to transact in the currency of the US government then the government must first issue the currency before it can be used to transact. For instance, just ask yourself what would happen if the government imposed a one time 100% asset tax? The private sector would instantaneously be without money. How would they spend? How would they invest? How would they pay taxes? The economy would collapse and the government would be “rich”. The government balance sheet would be clean, but the private sector balance sheet would be destroyed. Not a plan for economic prosperity. After all, we do not run our government for the benefit of government, but for the benefit of the private sector. Government is merely a tool that can be utilized to further private sector prosperity.
Another example that readers might find helpful is the idea of private sector savings being government dissavings. We often hear pundits and economists say that the US government should pay off the national debt. But paying off the national debt would involve eliminating all of the savings bonds in the US economy. This is why you never hear your grandmother say "I wish Uncle Sam would pay off the national debt so I could get rid of these savings bonds!". The entire concept of paying off the national debt is nonsensical. Government debt merely represents a private sector savings accounts. Moving money from a savings account to a checking account (the logical equivalent of paying off the national debt) only eliminates a form of savings account that the private sector relies upon heavily.

Is Time The Ultimate Form of Wealth?

The reason why any society forms in the first place is because we have a collective understanding that we can achieve a better overall living standard if we leverage one another’s strengths and abilities. I have argued that human beings are the ultimate pack animals even though we like to think of ourselves as rugged individualists. This basic innate understanding is what drives us to need one another and understand that we are better off in groups than we are alone.

Our monetary system is simply an evolution of this understanding from spoken bonds (and even unspoken bonds) to written bonds. But the goal of a society has not changed despite the fact that the tools we use have changed. The end game has always been the same. It is the desire to generate improving living standards through the efficient use of resources resulting in the optimization of time. The element of time, in my opinion, is the key piece of this puzzle. The true holy grail of modern macro is not price stability or full employment. It is time. Time is the ultimate form of wealth in a modern society. It is through time that we are able to live fuller and more meaningful lives. What you do with your time is up to you. But the key is that having more time means being able to do more of what you want to do. In theory, we can consume and produce an infinite amount given the time. But time, as we all know, is not infinite for finite creatures. Again, I introduce the "MMR Law":

“We generate improving living standards through the efficient use of resources resulting in the optimization of time”

This is a powerful concept and one that can change the way modern societies approach economics, public policy and every day life. When one understands that time is the ultimate form of wealth their perspective is dramatically altered and the playing field is changed. And while full employment and price stability are admirable goals, they become secondary to this understanding that sits above them in the hierarchy of societal goals.

Conclusion

In sum, most of what we have been taught in school is based on a now defunct monetary system (the gold standard). Modern Monetary Realism seeks to describe the operational realities of a modern fiat currency system. While its description of the modern monetary system is accurate, it is by no means a holy grail. And those who apply policy prescriptions are merely utilizing the realities of the system to apply what they believe are sound uses of the system. It does not mean the government can just credit accounts and create real wealth.

One of the key understandings here is that government can be used as a tool to help the private sector to achieve prosperity. I think it’s important to understand that government is not always bad or that government spending is always evil. In fact, government serves a vital purpose within our society. How involved that government is in the day to day lives of its citizens is to be decided by the citizens themselves.
I believe Modern Monetary Realism provides a more accurate portrayal of the monetary system in which we reside in the USA and in many other autonomous countries throughout the world. It is my hope that a greater understanding of our monetary system will result in a less dogmatic, more pragmatic and more rational perspective of our economy so as to help us all in achieving the prosperity we desire.
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* This paper will be updated and improved periodically, if not frequently.

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