Modern Money Theory (MMT) seems to confuse two groups of otherwise sympathetic economists. First there are those like Paul Krugman who are generally of the Keynesian persuasion and who like MMT’s “deficit owl” approach. I think Krugman would really like to stop worrying about the deficit so that he could advocate an “as much as it takes” approach to government spending. The problem is that he just cannot quite get a handle on the monetary operations that are required. Won’t government run out? What, is government going to create money “out of thin air”? Where will all the money come from?

He really doesn’t understand that “money” is key stroke records of debits and credits. He still thinks banks take in deposits and then lend them out. He starts to tear his hair out whenever someone tries to correct him on this. He’s wedded to the deposit multiplier idea he got from his Econ 101 textbook.

The other group that is otherwise sympathetic is the Post Keynesians. They understand banking. They know that “loans create deposits”. They know the “deposit multiplier” is actually a “divisor”, as “deposits create reserves”. (Not in any metaphysical sense but rather in the sense that an interest rate-targeting central bank always accommodates the demand for reserves.) However, they cannot understand how a sovereign government spends. Doesn’t it have to borrow the currency from private banks? Like Krugman, they argue that (given modern arrangements), government cannot spend by “keystrokes”.

So here’s an attempt to put the fears of Krugman and Post Keynesians to rest. There is
a symmetry between bank lending and government spending.

I also hope to help clarify things for a third group—the "debt-free money" folks who want Uncle Sam to spend "debt-free money". Short answer: depending on how you look at it, he either already does, or cannot ever do so.

Here we go with the basics of MMT.

For the past four thousand years ("at least", as John Maynard Keynes put it—see note at bottom), our monetary system has been a "state money system". To simplify, that is one in which the state chooses the money of account, imposes obligations denominated in that money unit, and issues a currency accepted in payment of those obligations. While a variety of types of obligations have been imposed (tribute, tithes, fines, and fees), today taxes are the most important monetary obligations payable to the state in its own currency.

There is an approach that begins its analysis of money from this perspective, now called Modern Money Theory (MMT). It is based on the work of Keynes, but also on others such as A. Mitchell Innes, Georg F. Knapp, Abba Lerner, Hyman Minsky, Wynne Godley, and many others—stretching back to Adam Smith and before. It "stands on the shoulders of giants", as Minsky put it.

Its research has stretched across the sub-disciplines of economics, including history of thought, economic history, monetary theory, unemployment and poverty, finance and financial institutions, sectoral balances, cycles and crises, and monetary and fiscal policy. It has largely updated and synthesized various strands of theory, most of it heterodox—outside the mainstream.

Perhaps the most important original contribution of MMT has been the detailed study of the coordination of operations between the treasury and the central bank. The central bank is the treasury's bank, making and receiving payments on behalf of the treasury. The procedures involved can obscure how the government "really spends". While it was obvious two hundred years ago that the national treasury spent by issuing currency, and taxed by receiving its own currency in payment, that is no longer so obvious because the central bank stands between the treasury and recipients of government spending as well as between treasury and taxpayers making payments to government.

However, as MMT has shown, nothing of substance has changed—even though taxpayers today make payments from their private bank accounts, and banks make the tax payments to treasury for their depositors using reserves held at the central bank. And when treasury spends, its central bank credits reserve accounts of private banks, which credit deposit accounts of recipients of the government spending.

In spite of the greater complexity involved, we lose nothing of significance by saying that government spends currency into existence and taxpayers use that currency to pay their obligations to the state.
MMT reaches conclusions that are shocking to many who've been indoctrinated in the conventional wisdom. Most importantly, it challenges the orthodox views about government finance, monetary policy, the so-called Phillips Curve (inflation-unemployment) trade-off, the wisdom of fixed exchange rates, and the folly of striving for current account surpluses.

For most people, the greatest challenge to near-and-dear convictions is MMT's claim that a sovereign government's finances are nothing like those of households and firms. While we hear all the time the statement that “if I ran my household budget the way that the Federal Government runs its budget, I’d go broke”, followed by the claim “therefore, we need to get the government deficit under control”, MMT argues this is a false analogy. A sovereign, currency-issuing government is NOTHING like a currency-using household or firm. The sovereign government cannot become insolvent in its own currency; it can always make all payments as they come due in its own currency.

Indeed, if government spends currency into existence, it clearly does not need tax revenue before it can spend. Further, if taxpayers pay their taxes using currency, then government must first spend before taxes can be paid. Again, all of this was obvious two hundred years ago when kings literally stamped coins in order to spend, and then received their own coins in tax payment.

Another shocking truth is that a sovereign government does not need to “borrow” its own currency in order to spend. Indeed, it cannot borrow currency that it has not already spent! This is why MMT sees the sale of government bonds as something quite different from borrowing.

When government sells bonds, banks buy them by offering reserves they hold at the central bank. The central bank debits the buying bank’s reserve deposits and credits the bank’s account with treasury securities. Rather than seeing this as borrowing by treasury, it is more akin to shifting deposits out of a checking account and into a saving account in order to earn more interest. And, indeed, treasury securities really are nothing more than a saving account at the Fed that pay more interest than do reserve deposits (bank "checking accounts") at the Fed.

MMT recognizes that bond sales by sovereign government are really part of monetary policy operations. While this gets a bit technical, the operational purpose of such bond sales is to help the central bank hit its overnight interest rate target (called the fed funds rate in the US). Sales of treasury bonds reduce bank reserves and are used to remove excess reserves that would place downward pressure on overnight rates. Purchases of bonds (called an open market purchase) by the Fed add reserves to the banking system, prevent overnight rates from rising. Hence, the Fed and Treasury cooperate using bond sales/bond purchases to enable the Fed to keep the fed funds rate on target.

You don’t need to understand all of that to get the main point: sovereign governments don’t need to borrow their own currency in order to spend! They offer interest-paying treasury securities as an instrument on which banks, firms, households, and foreigners can earn interest. This is a policy choice, not a necessity. Government never needs to sell bonds before spending, and indeed cannot sell bonds unless it has first provided the currency and reserves that banks need to buy the bonds.
So, much like the relation between taxes and spending—with tax collection coming after spending—we should think of bond sales as occurring after government has already spent the currency and reserves.

Most Americans are familiar with the phrase “raise a tally”, which referred to the use of notched “tally sticks” that served as the currency of European monarchs. The sticks were split (into a stock and stub) and matched by the exchequer on tax day. The crown’s obligation to accept his tally debt was “wiped clean” just as the taxpayer’s obligation to deliver the tally debt was fulfilled. Clearly, the taxpayer could not deliver tally sticks until they had been spent.

It surprises most people to hear that banks operate in a similar manner. They lend their own IOUs into existence and accept them in payment. A hundred years ago, a bank would issue its own banknotes when it made a loan. The debtor would repay loans by delivering bank notes. Banks had to create the notes before debtors could pay down debts using banknotes.

In the old days in the US, notes issued by various banks were not necessarily accepted at par—if you tried to pay down your loan from St. Louis Bank using notes issued by Chicago Bank, they might be worth only 75 cents on the dollar.

The Federal Reserve System was created in part to ensure par clearing. At the same time, we essentially taxed private bank notes out of existence. Banks switched to the use of deposits and cleared accounts among each other using the Fed’s IOUs, called reserves. The important point is that banks now create deposits when they make loans; debtors repay those loans using bank deposits. And what this means is that banks need to create the deposits first before borrowers can repay their loans.

Hence, there is a symmetry to the way the sovereign spends currency (or central bank reserves) into existence first, and then taxpayers use the currency (or central bank reserves) to pay taxes.

Sovereigns spend first, then tax. In that sense, they do not “need” tax revenue in order to spend. This does not mean that sovereigns can stop taxing, however. MMT says that one of the purposes of the tax system is to “drive” the currency. One of the reasons people will accept the sovereign’s currency is that taxes need to be paid in that currency. From inception of the currency, no one would take it unless the currency was needed to make a payment. Taxes and other obligations create a demand for the currency that can be used to make the obligatory payments.

Note that we can say something similar about banknotes and bank deposits. Part of the reason we will accept them in payment is because “we” (at least, many of us) have obligations that need to be paid using banknotes or bank deposits. We’ve got a mortgage debt, or a credit card debt or a car loan debt—all of which normally are paid by writing a check on our bank deposit account. We can fill-up that account by accepting checks drawn on other bank deposit accounts, and with the Fed ensuring par clearing, our bank will accept those checks.

While there is a symmetry between government currency issue and private bank issue of notes or deposit,
there are also asymmetries.

Government imposes a tax obligation on (at least some) citizens. Private banks rely on customers voluntarily entering into an obligation (that is, they decide to become borrowers). We can all “choose” to refuse to become borrowers, but as they say, the only thing certain in life is “death and taxes”—these are much harder to avoid. Sovereign power is usually reserved to the state. This makes its own obligations—currency and reserves—almost universally acceptable within its jurisdiction.

Indeed, banks and others normally make their own obligations convertible into the state’s obligations. This is why we call bank checking accounts “demand deposits”: banks promise to exchange their own obligations to the state’s obligations on “demand”.

For this reason, MMT talks about a “money pyramid”, with the state’s own currency at the top. Bank “money” (notes and deposits) are below the state’s “money” (reserves and currency). We can think of other financial institution liabilities as below “bank money” in the pyramid, often payable in bank deposits. Lower still we find the liabilities of nonfinancial institutions. And at the bottom we might find the IOUs of households—again normally payable in the obligations of financial institutions.

A lot of people have great difficulty in getting their heads around all this “money creation” business. It sounds like alchemy or even fraud. Banks simply create deposits when they make loans? Government simply creates currency or central bank reserves when it spends? What is this, creation of money out of thin air?

Yes, indeed.

Hyman Minsky used to say that “Anyone can create money”; but “the problem lies in getting it accepted”. You must understand that “money” is by nature an IOU. You can create a dollar-denominated “money” by writing “IOU five dollars” on a slip of paper. Your problem is to get someone to accept it. Sovereign government has an easy time finding acceptors—in part because millions of us owe payments to government.

Bank of America has an easy time finding acceptors—in part because millions of us owe payments to Bank of America, in part because we know we can exchange deposits at the bank for cash, and in part because we know the Fed stands behind the bank to ensure par clearing with any other bank. However, very few people owe you, and we doubt your ability to convert your IOU to Uncle Sam’s IOU at par. You are low in that money pyramid.

Both Uncle Sam and Bank of America are constrained in their “money creation”, however. Uncle Sam is subject to the budget authority that is provided by Congress and the President. Occasionally he also bumps up against the crazy (yes, crazy!) Congressionally-imposed “debt limit”. Congress and the President could and should remove that debt limit, but we surely do want a budgeting process and we want to ensure that Uncle Sam is constrained by the approved budget.
Still, Uncle Sam ought to be spending more whenever we've got unemployment.

Bank of America is subjected to capital constraints and limits on the types of loans it can make (and types of other assets it can hold). Yes, we freed the banks from most regulations and supervision over the past couple of decades—to our regret. Those with the "magic porridge pot" do need to be constrained. Banks can, and frequently do, make too many (bad) loans—which can bubble up markets and create solvency problems for them and even for their customers. Prudent lending is a virtue that ought to be required.

The problem is not the "thin air" nature of the creation, but rather the quantities of "money" created and the purposes for which it was created. Government spending for the public purpose is beneficial, at least up to the point of full employment of the nation’s resources. Bank lending for public and private purposes that are beneficial publicly and privately is also generally desirable.

However, lending comes with risk and requires good underwriting (assessment of credit worthiness); unfortunately our biggest banks largely abandoned the underwriting process in the 1990s, with disastrous results. One can only hope that policy-makers will restore the good banking practices that were developed over the past half-millennium, shutting down the largest dozen global banks that have no interest in good banking.

Some have given up hope in our banking system. I’m sympathetic to their pessimistic views. Some want to go back to “greenbacks” or to the Chicago Plan’s “narrow banks”.

Some even want to eliminate private money creation! Have the government issue “debt-free money”? I’m sympathetic, but I don’t support the most extreme proposals even if I support the goals. Such proposals are based on a fundamental misunderstanding of our monetary system.

Our system is a state money system. Our currency is government’s liability, an IOU that is redeemable for tax obligations and other payments to the state. The phrase “debt-free money” is based on a misunderstanding. Remember, “anyone can create money”, the “problem is to get it accepted”. They are all IOUs. They are either spent or lent into existence. Their issuers must accept them in payment. They are accepted by those who will make payments, directly or indirectly, to the issuers.

In the developed nations we have thoroughly monetized the economies. Much (maybe most) of our economic activity requires money, and we need specialized institutions that can issue widely accepted monetary IOUs to enable that activity to get underway.

While our governments are large, they are not big enough to provide all the monetary IOUs we need for the scale of economic activity we desire. And we—at least we Americans—are skeptical of putting all monetized economic activity in the hands of a much bigger government. I cannot see any possibility of running a modern, monetized, capitalist economy without private financial institutions that create the monetary IOUs needed to initiate economic activity.
The answer, it seems to me, to our current financial calamities does not reside in elimination of our for-profit financial institutions, even if I do see a positive role to be played by new public financial institutions (maybe some national development banks and some state development banks and a revived postal saving system?).

We do, however, need fundamental reform—including downsizing (probably breaking up or closing) of the behemoths, greater oversight, more transparency, prosecution of financial fraud, and putting more of the "public" in our "public-private partnership" banking institutions.


Filed under: Uncategorized (http://www.economonitor.com/lrwray/category/uncategorized/)

Comments (21)

Paulmeli (http://intensedebate.com/people/paulmeli) 0p 6 +1 days ago (#IDComment846736663)

"Sovereigns spend first, then tax…"

Not only that, in between spending and taxing comes income, which is a prerequisite for taxation.

For taxes to fund spending someone would have had to invent the Time Machine™ in order to bring tax revenue back from the future.

That pesky Arrow of Time that Physics and Engineering majors must learn seems to be missing from the economics curriculum.

CezaryW (http://intensedebate.com/people/CezaryW) +1 14p 6 days ago (#IDComment846743398)

Prof. Wray,

I appreciate your patience toward those holding a bit different economic models in their heads. I gave a thought to my cognitive processes I'm exposed to (as there's no chance to reliably evaluate others processes). Those kids who are exposed to your teachings are lucky. Those who have already incorporated other economic models are less lucky but still hopefully subject to develop the model which satisfy their needs. Apparently the most difficult
cases are those who invested few decades of effort and labor to develop their flawed economic models. Its not an easy thing to acknowledge yourself, that you spent many years of research operating flawed economic model. On the other hand its not so easy for those who understand the nature of money, sovereign currency implications on macro policies and ridiculous, tragic, unnecessary sufferings nations have to face, because policy-makers are not upgraded with what works. On the other hand, we are living in the era of fast spreading of information so, I hope, its relatively close to the moment when policy-makers admit :" We've known it for a long time just were figuring out how to convey it appropriately to the people". :-)

Ben Johannson · 6 days ago (#IDComment846750678) +1

I think Krugman's (and by extension post-Keynesians') problem lay in zombie and conflicting ideas rattling around their collective noggin. Krugman for example can acknowledge on his blog that a country with its own currency cannot involuntarily default, yet the very next day make a statement about current account balances that is entirely out of whack with acceptance of the former proposition.

In some ways self-directed study of economics gives an advantage, because those of us with no formal training in the field have nothing to unlearn. Concepts that twist intelligent and accomplished economists into knots are much more readily assimilated without decades of junk education getting in the way.

I would guess the same thing (in a sense) applies to heterodox economists because they have to be at least twice as good at what they do to get anyone to take them seriously. That would include a high rate of intellectual adaptability mainstream economists frequently do not develop.

EzioP1 (http://intensedebate.com/people/EzioP1) 12p · 5 +2 days ago (#IDComment847005990)

It seems to me the MMT theory is covering the country national financial management, but what about the international relations ? I mean the currency value and exchange rate for the other countries with whom each country has financial relations ? Should country A decide to issue more currency it generate a devaluation that is impacting the others. Please tell me if I missed some points ?

13 replies (javascript: collapseThread(847005990));) · active 19 hours ago

L. Randall Wray · 5 days ago (#IDComment847014670) 0

Sovereign currencies are indeed national. Countries like the USA float and that gives them more domestic policy space. Some other peg and that reduces policy space. Countries that float see their currencies "float", both up and down. There are no certainties regarding what makes them move up or down. No one has a good model of this--but the notion that budget deficits weaken currencies is clearly disproven by the abundant evidence.
That makes me think about the current Argentina situation regarding their US denominated bonds. Instead of defaulting, could they just pay them off in Argentina Pesos? And then just let the exchange rate float in response?

rakds: that's another name for default. If I promise dollars but give you pesos, I have indeed defaulted on my promise.

"Countries that float see their currencies "float", both up and down. There are no certainties regarding what makes them move up or down."

If, say the United States government, chose to purchase an additional $20 trillion in foreign goods and services next month, I think it is all but certain that the value of the dollar would decline. We can talk about money in as abstract a way as we might like but the bottom line is a unit of that currency is only worth what someone will exchange for it. EzioP1’s point, I believe, is that in a closed national system a government has considerable control over that. But in an international economy with multiple currencies that control dissolves.

The Weimar Republic never ran out of marks.

windy: weimar ran out of domestic stuff to buy. They'd sent it all abroad to earn gold to pay reparations. Empirically there is no relation between budget deficits and exchange rates. You can check it out for yourself, or just trust Alan Greenspan who also concluded that after his staff tried to find anything that would help to predict movements—but could not. Yes we could imagine an asteroid that wiped out all life in the USA. That would probably depreciate the dollar. Let’s try to get real, tho. There will come a day when the USA does indeed buy a few extra $trillion of imports and you'll see (if you are still alive) whether the dollar goes up or down.
Does this mean that gold should be treated differently than other commodities? How is Weimar buying gold with printed money - regardless of what they will do with the gold - different from Argentina buying, say, corn for their herds? I'm not trying to be difficult. But this is an aspect of MMT that absolutely escapes me. If in international trade a unit of currency represents a claim on some fraction of the issuing country's output (or capital), doesn't doubling the units in circulation ultimately halve the value of each?

windy: this was not trade, it was reparations imposed by winners on the loser of a war it started. Germany owed "hard currency" that it could not create. Keynes predicted the economic and political result in his Economics of the Peace. Absolutely predictable from the perspective of MMT. Lesson 1: don't start and lose a world war. Lesson 2: don't incur huge debts owed in anything but your own sovereign currency. This has nothing to do with "budget deficits cause inflation and currency depreciation". You learned the wrong lesson.

Fair enough, but I really wasn't so much worrying about budget deficits as M3 regardless of where it lives or who is spending it on what.

Your point on Lesson 1 is probably unanimously accepted. I still struggle with Lesson 2. Why is gold somehow different than any other commodity Weimar or Argentina or America purchases?

windy: there is something called a gold standard. It wasn't a tapioca standard. If it had been a tapioca standard, Germany would have had to export to get hard currencies convertible to tapioca. gold is a red herring. German did not need really need gold. It needed pounds. The sterling kind. It had to export to get hard currencies convertible to gold. Forget commodities. Had nothing to do with that. Never does. Point is it was a fixed exchange rate system and Germany was indebted in foreign currency.

"Weimar ran out of domestic stuff to buy". True only to the extent that the reason why there were not goods available for purchase is that no one wanted to trade real value for a worthless currency.
byz: you are confusing the chicken with the egg.

Mcwop: Germany owed war reparations in foreign currency - and it was a huge debt for the time. They had to sell marks to acquire that foreign currency driving the mark down. As the Mark declined France wanted hard goods - so Germany started sending all their productivity to France (lumber, coal) creating a shortage of goods to buy. So it was the war reparations owed in a foreign currency that was the root of the problem. A condition absent in this country and many others.

Do you mean that you haven't met any data demonstrating correlation between a currency exchange rate and some economic variable(s) ?

markgct: You mentioned "greenbacks". I know these were a fiat currency spent into the economy to pay for the civil war (sort of proof that a govt using fiat currency must spend first - it is quite obvious the govt could not get them from taxes or borrow them first). The value of greenbacks fluctuated against the dollar usually depending on how the war was going. What gave them value? And if the govt agreed to accept them for tax payment why would the value fluctuate?

Haven't studied greenbacks in detail; I did write about the confederate currency in my '98 book. Of course, we've got greenbacks now, driven by taxes, and perfectly stable value against the dollar! (They are issued by the treasury's bank, the Fed.)
I have a more general question which has me stumped (apologies if this is the wrong place). Bill Mitchell (and other MMT economists) explains the private domestic balance in the following way:

"The private domestic balance (I – S) is positive (deficit) if the private domestic sector is spending more than it is earning; and negative (surplus) if the sector is spending less than it is earning overall."

Assuming a two-sector model, is the phrase "the private domestic sector is spending more than it is earning" just mean "being taxed more than being spend into"?

1 reply · active 2 days ago

stangle: in a 2 sector model, by defition: private balance + govt balance =0. hence if private balance is in deficit, public is in surplus. So yes G<T.