MAKING MONEY WORK FOR US

How MMT Can Save America

L. RANDALL WRAY

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Preface

I studied with Hyman Minsky in the early 1980s when he was writing his famous 1986 book (*Stabilizing an Unstable Economy*[1]). There are two phrases in that book that I remember him saying in class:

> Everyone can create money; the problem is to get it accepted.

> The need to pay taxes means that people work and produce in order to get that in which taxes can be paid.

The first of these has to do with the creation of money – by anyone – while the second concerns why anyone would want it.

Most of my work on money for the first decade after my PhD studies concerned the first statement. It is largely about the private money system; government enters primarily as a regulator of banks and through its central bank as the provider of bank reserves. We can call that the credit money system – how private money is created when banks make loans. My first book, *Money and Credit in Capitalist Economies* (1990[2]), went through all of that, and I've continued work in that area as I examined the causes of the 1980s thrift crisis and later the 2007 collapse of the global financial system – what Minsky called money manager capitalism, analyzed in my later book, *Why Minsky Matters* (2015[3]).

However, I never forgot the other point he made: we work hard to get the *government's* money because we have to pay taxes. That had led me to the J. M. Keynes of the *Treatise on Money*[4] and to G. F. Knapp's *State Theory of*

Money[5] when I was writing my PhD dissertation in Bologna, Italy, in 1986.

I included a section on chartalism or the *state money* approach in the 1990 book, but it was brief since I was focusing on the role of credit money in the private sector. However, in the mid-1990s I returned to the role of the state in our monetary system, and discovered what I believe to be the best two articles ever written on money, by A. Mitchell Innes in 1913 and 1914. Keynes had reviewed the first one and aside from some quibbles he declared it to be correct. Unfortunately, these articles were largely forgotten until I republished them in my 2004 book, *Credit and State Theories of Money*.[6]

What struck me is that Innes was able to integrate a state money approach and a credit money approach. To understand our money, what Keynes called "modern money," you must have both. Otherwise, to borrow a metaphor, you've got Hamlet without the Prince.

A group of us first at the Levy Institute in New York and then at the University of Missouri–Kansas City (but also including others, especially Warren Mosler, Bill Mitchell, and Charles Goodhart) dug deeper into this and gradually developed what is now called Modern Money Theory (MMT). My 1998 book, *Understanding Modern Money,*[7] was the first academic exposition of the approach, which was simplified in my "primer" of 2012.[8]

MMT has been in the news constantly since 2019 – at first derided as dangerous "crazy talk," and then embraced as governments ramped up spending to deal with the global COVID-19 pandemic.

Many think we claim to have invented some stand-alone, entirely new, approach to money. That is false. We stand on *the shoulders of giants* (the third phrase I recall from

Minsky) – there is really no completely new theory in Modern Money Theory; MMT is an integration, one that integrates those two phrases from Minsky. We argue that this integration provides a new framework for analyzing monetary and fiscal policy in what we call sovereign currency nations. That framework is developed in detail in our MMT-based textbook, *Macroeconomics*.[9]

Over the past twenty-five years we have investigated all the details important to answering the question: “How does the sovereign government really spend?” While I’m sure there were economists in both the Federal Reserve Bank (Fed) and the US Treasury who understood all the operational details, these were not understood in academia or policy circles.

They mostly still are not.

But MMT has taken off; indeed, it has taken on a life of its own in the blogosphere. It is loved by many and perhaps hated by more. This current book is positioned in between the primer and an academic text, for those who already know the basics of MMT but who want to dig a bit deeper.

One of my graduate students in my class on money, who happened to be much older than the others, had to make a presentation at the end of the semester. He brought in a bag of those funny glasses that distort your vision. He asked everyone to don a pair and then began his talk. He discussed how the world had looked to him before he started the class on money – it looked just like the world looked to us now, with those funny glasses on: distorted. We looked at a fuzzy and barely comprehensible world with our impaired vision. He then proclaimed that we should take them off and look at the world anew! As we did, he told us we’d never see the world in the same way again – and that is precisely the way he felt after discovering Modern Money Theory. All those old cobwebs that had distorted his vision had been cleared away and he was ready to see the monetary world as it actually exists.

Your results may be similar.

Notes

1. Hyman P. Minsky, *Stabilizing an Unstable Economy*, Yale University Press, New Haven and London, 1986, pp. 228 and 231.

2. L. Randall Wray, *Money and Credit in Capitalist Economies: The Endogenous Money Approach*, Edward Elgar, Aldershot, 1990.

3. L. Randall Wray, *Why Minsky Matters: An Introduction to the Work of a Maverick Economist*, Princeton University Press, Princeton and Oxford, 2015.

4. John Maynard Keynes, *A Treatise on Money*, Volumes I and II, Harcourt, Brace, New York, 1930.

5. Georg Friedrich Knapp, *The State Theory of Money*, Clifton, NY, Augustus M. Kelly, 1924 (1973).

6. L. Randall Wray (ed.), *Credit and State Theories of Money: The Contributions of A. Mitchell Innes*, Edward Elgar, Cheltenham, 2004.

7. L. Randall Wray, *Understanding Modern Money: The Key to Full Employment and Price Stability*, Edward Elgar, Cheltenham, 1998.

8. That was updated in the second edition: L. Randall Wray, *Modern Money Theory: A Primer on Macroeconomics for Sovereign Monetary Systems*, Palgrave Macmillan, Basingstoke, 2015.

9. William Mitchell, L. Randall Wray, and Martin Watts, *Macroeconomics*, Red Globe Press, London, 2019.

An Introduction to Modern Money Theory

Modern Money Theory (MMT) provides a description of the way money actually works in our modern world. Money is a scary topic. It is also rather complex. So bear with me.

We will begin with a discussion of what we might call the “nature” of money – what *is* this thing we call money? When we use the term, most people will think of a shiny coin or a paper “note” or “bill” – something they can get their hands on to buy something they want. But today the vast majority of payments do not involve use of coins or notes.

Some will also think of an idealized past, when money was “backed up” by “hard” gold or silver, giving it a “real” value. They bemoan our modern money that appears to have no real or permanent value – what many call a “fiat currency.” Some even heed the call of the Ron Pauls of the world to bring back the gold standard.

And since the global economy nearly collapsed in the late “aughts” of the beginning of the twenty-first century, many – rightly – think there is something wrong with money. They want to reform our monetary system.

But if we are going to reform it, we really need to understand it.

This book will help you to understand both our private money and our government money: what money really is, where it comes from, and how it works. Along the way, we’ll see how this alternative perspective sheds light on reform – how we could change the monetary system to make it work better for *us.* This requires sweeping away mountains of misunderstanding about money.

A. MMT's Shocking Conclusions

MMT reaches conclusions that are shocking to many who've been taught the conventional wisdom. Most importantly, it challenges the orthodox views about government finance, monetary policy, the so-called inflation–unemployment trade-off, the wisdom of fixed exchange rates, and the folly of striving for current account surpluses. (If you don't know about any of those things, don't worry – indeed that might make it easier to follow what comes!)

For most people, the greatest challenge 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.

Of course, households and firms can and do become insolvent when they issue too much debt. But 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.

Governments spend first, then tax. That means tax revenue is not needed for spending. That does not mean taxes are unimportant – they serve other useful purposes. But the national government does not need to receive its own currency before it can spend – indeed, it cannot receive currency until after it spends.

Another conclusion 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 by the sovereign as something quite different from borrowing: bond sales are part of monetary policy and help the central bank to manage interest rates. Governments don’t need to borrow their own currency! As we will explain, governments spend their currency first and then receive it back in tax payment.

We’ll revisit this argument later. What is important for now is MMT’s recognition that government’s spending is never constrained by taxes or by “bond market vigilantes” who might refuse to lend. To put it as simply as possible, governments today spend by “keystrokes” that they cannot ever run out of.

It surprises most people to hear that banks operate in a similar manner. They lend their own deposits into existence and accept them in payments on loans they hold. Strange, but true!

A century ago, a bank would issue its own bank notes when it made a loan. The debtor would repay loans by redeeming bank notes. Obviously, banks had to create the notes before debtors could pay down debts using the bank notes.

However, banks gradually got out of the business of issuing notes and instead turned to deposit banking. In the US today, only the Federal Reserve Bank (the government’s bank) issues notes – our green paper currency. Private banks only issue deposits.

Banks now create deposits (not notes) when they make loans; debtors repay those loans using bank deposits (and the deposits of any US bank can be used to pay down loans at any other US bank). Almost all bank loans are repaid this way – by debiting 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: the sovereign spends currency (or central bank reserves – explained later) into existence first, and then taxpayers use the currency (or central bank reserves) to pay taxes; and banks lend their deposits into existence, then the bank's debtors use bank deposits to pay down loans.

The money is always created "out of thin air" – when the government spends or the banks lend. There's no theoretical limit to the government's ability to create its money (currency and reserves) and no limit to banks' ability to create bank money (deposits). You may find that shocking, and maybe even scary. This book will explain how money creation works and how we can use that knowledge to improve the functioning of our economy.

We will argue that the true constraints we face are real resource constraints and the limits of our knowledge. If we know how to do something, and we have the real resources (labor, natural resources, and productive capacity) required, we can find a way to afford to do it. If we have unemployed resources (most importantly labor), we can find a way to pay that labor to work. If we have idle plant and equipment, we can find the finances to put it to work, too. Importantly, if we have the resources and technology required to save the planet from climate catastrophe, we can financially afford to do it.

This does not mean government faces no constraints – it faces political constraints as well as real resource constraints. Even if politicians did not worry about "where will the money come from," they do care what money is spent on – that is, they have preferences regarding what the government should do. Further, policy often would lead to competition between the government and the private sector over use of resources. Even if there are a lot of unemployed workers and machines, it can be difficult to ensure that a new policy would not also demand resources that are already in use. In that case, the government would bid against private use of those resources. In other words, there could be a real trade-off: less private use and more public use. Since government doesn't face a financial constraint similar to that faced by the private sector (and the private sector needs to make a profit, the government doesn't), the government can win a bidding war. Not only does the government end up with the resources, the bidding war causes prices to rise. The result could be inflation.

Still, the usual situation (outside major wars) is that there are unemployed resources that could be mobilized for public programs. And if the government can surmount the political constraints, it can always afford to mobilize the unemployed resources in the public interest. Money is not the problem.

Ultimately, this should be comforting, not scary. Understanding how money really works lets us focus on the real barriers – politics, real resources, technical know-how, and inflation. In coming years we face a number of challenges – one might even claim we face existential threats perhaps greater than humans have had to deal with since they first came out of Africa. Survival of anything like organized human civilization may be in question. But the scientists claim that we have most of the know-how to tackle the challenges. MMT claims that we have the financial ability – we can finance what it takes to rise to the challenge. If we can clear away the misunderstandings, align the politics, and mobilize the resources, we can win.

We hope that this book will motivate you to pressure those with the power to take action to do what is necessary to make the world a safer and better place for humanity.

B. Themes to Be Covered

This book will provide an overview of several themes that are important to Modern Money Theory:

- What is the nature of money?
- How does private money get into the economy?
- How does the government's own money get into the economy?
- How does the government really spend?
- Can a government be forced into bankruptcy by the weight of its own debt?
- What are the true constraints we face?
- What are the trade-offs?
- Is it true that economics is a zero-sum game?
- What role does money creation play in creating financial crises?
- What can we do to promote economic and financial stability?

These issues will be developed in more detail throughout the first four chapters of the book. In chapter 1 we examine what we mean by the term "money"; in chapter 2 we look at how money gets into the economy. Chapter 3 examines whether we can have "too much money" – that is, so much that prices rise rapidly. In chapter 4 we develop an understanding of monetary "balance."

In the second half of the book, we tackle policy issues. Chapter 5 looks at the trade-offs, zero-sum economics, and potential free lunches available to policy makers. Chapter 6 looks at how we can frame issues surrounding money. Money can be a scary topic for both policy makers and the public. We need to provide a proper framing to support our desire for policy that serves the public interest.

Chapter 7 details the MMT approach to a variety of policy issues: government spending and taxing, inflation, and budget deficits. It examines the three policies that are fundamental to the MMT approach: the job guarantee to anchor the domestic value of the currency; interest rate targeting as the main tool for monetary policy; and a floating exchange rate to support domestic policy space. We close with a discussion of the state of play of MMT in Washington policy-making circles.

1
What Is Money?

A. Money Is What Money Does?

What is money? You will probably answer: “money is what I use to buy stuff.”

That is a perfectly sensible answer, defining money by its function. We call this function “medium of exchange” – you *exchange* money for the stuff you want to buy.

After a few moments of thought, you will add: “I also use money to store value – so that I can buy stuff later.” This refers to money as something you can hoard, although unlike Scrooge, you do plan to spend it, eventually – even if you are not sure what you’ll buy. Holding money lets you postpone spending.

You also might offer that you use money to pay off your debts. We can call this function the “means of payment.” Money can help you get out of debt.

You can also mention that we use money as a measuring unit, to calculate money (or “nominal”[1]) values: “I think that painting is worth a thousand dollars” or “I don’t think it is worth it to pay $350 for a Taylor Swift concert.” This is money functioning as a unit of account – sort of like using the yard or meter to measure length or the quart or liter to measure weight.

But let us go deeper. What *is* money? Can you describe what it is that you use to buy things, hoard value, and make payments on debts?

Your first thought will probably turn to paper money – the green dollar bill if you are in America, with George Washington on the front, signed by the US Treasurer and the Secretary of the Treasury. On the back it says "IN GOD WE TRUST" over the word ONE, and there's a curious picture of a pyramid with an eye at the top and some unintelligible (Latin) language.

After further inspection you find the words "THIS NOTE IS LEGAL TENDER FOR ALL DEBTS, PUBLIC AND PRIVATE," apparently confirming what you said earlier – you can pay your own (private) debts with it. (And also public debts – whatever that might mean! We'll investigate later.)

So, is money just paper? Well, certainly most paper is *not* money! And you will quickly add that not all money is *paper*. You've got a quarter in your pocket (interestingly, the US is unusual in that the largest denomination coin in common use – the quarter – has such a small value relative to that in most other developed nations). It is made of metal with a milled edge, has a picture of dear old George on the front, also trusts in God, and on the reverse side has either an eagle or, if of more recent vintage, a symbol from one of the fifty states. Is money metal? No, of course not – only these special stamped coins qualify as money – most metal, even valuable precious metal, is not money.

But what do you actually *spend* – just special pieces of paper or metal? After reflection, you note that most payments you make do not involve paper notes or metal. You use checks for many of your payments, writing a name (of a person or business entity) on the line that says "pay to the order of," then an amount, and finish with your signature. The recipient deposits your check in her bank, and your bank account is debited and hers is credited. Is that money? You can make purchases, store value, and pay down debt using checks – so checks certainly fulfill the functions of money.

Maybe the bank keeps a drawer with your name on it, filled with George Washington paper notes and metal quarters? When you write a check, maybe the bank takes money out of your drawer and puts it in the drawer of the recipient? *Hmmm. That must be a lot of work. Hundreds of millions of bank account drawers full of cash and perhaps trillions of transactions weekly – those bank gnomes must be very busy!* No, it doesn't work that way. You've probably had a peek inside your bank's vault – not nearly big enough to hold cash in an amount equal to all of the deposits of the bank's customers.

Increasingly you make payments online through electronic transfers, by providing long strings of mysterious numbers. Do banks take notes and coins out of your account and stuff them into the fiber-optic cables that link up all the computers so that they can flow to the right bank accounts? Obviously not – your computer keystrokes send instructions to the bank to make "electronic" payments for you. Are those photons that travel at the speed of light through the internet *money*? Is that what money *is*? A mere photon?

On final reflection you remember that many – maybe most – of your payments are made by submitting a (credit or debit) card to the merchant's card reader. *Is money plastic?* Or is there money somehow stored on your card and sucked out by the machine when you make a purchase? Not likely. But is this really money? You object that if you use a *credit* card, you still have to pay for the purchase later – usually through a debit to your bank account or by writing a check. But you do not pay the *store* – you make a payment to the *bank* that issued your card. That bank paid the merchant for you, and your bank makes a payment to the bank issuing the credit card when your account is debited or your check is presented for payment.

Not only is money scary but it is complicated, too! It is paper, it is metal, it is plastic, or … it is nothing but an ephemeral and quirky photon! Maybe approaching money from the perspective of the functions it serves is not the best way to do it, after all. It seems that lots of different “moneys” can be used to serve money’s functions.

B. I Owe You, You Owe Me

Let’s try to answer the question more directly: what *is* money? What do all these things (if we can call them such?) that function as money have in common? Those George Washington notes are issued by the central bank of the US, the Federal Reserve (Fed). Technically, they are “liabilities,” or I Owe You’s (IOUs), of the Fed. The demand deposits are liabilities of the banks. The credit card debt accepted by the merchant is an IOU of the bank that issued the card (and the merchant pays a fee – two or three percent of the purchase price for the “convenience” of letting you walk off with your purchases). And you, of course, owe the credit card issuer – your promise to pay is the asset of the bank that issued your card. You are likely to meet that promise using a debit from your demand deposit account at your bank – your asset, your bank’s liability.

All of these entities are tied together through a network of IOUs. We don’t want to get into complicated accounting now, but every economic entity (individual, household, firm, charitable organization, financial institution, and government) has a balance sheet (whether they know it or not!). We can think of this as a table with two columns that looks like a T (rather brilliantly, called a “T account”). We can label the left-hand side “assets” and the right-hand side