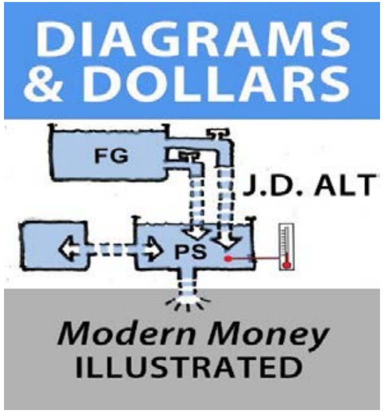
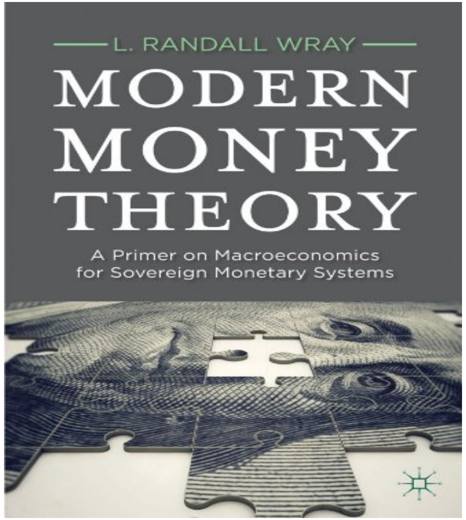
Monetary Reforms, Revolutions, and Utopias: A Critical Analysis of New Money Paradigms

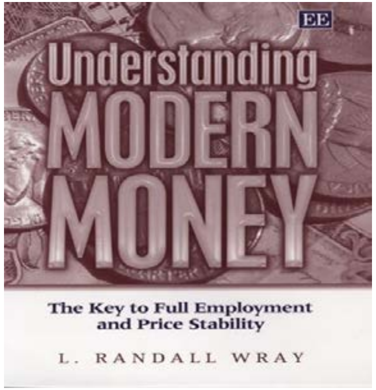
John Bradford, Ph.D.

ISTC 2014

I. Modern Money Theory

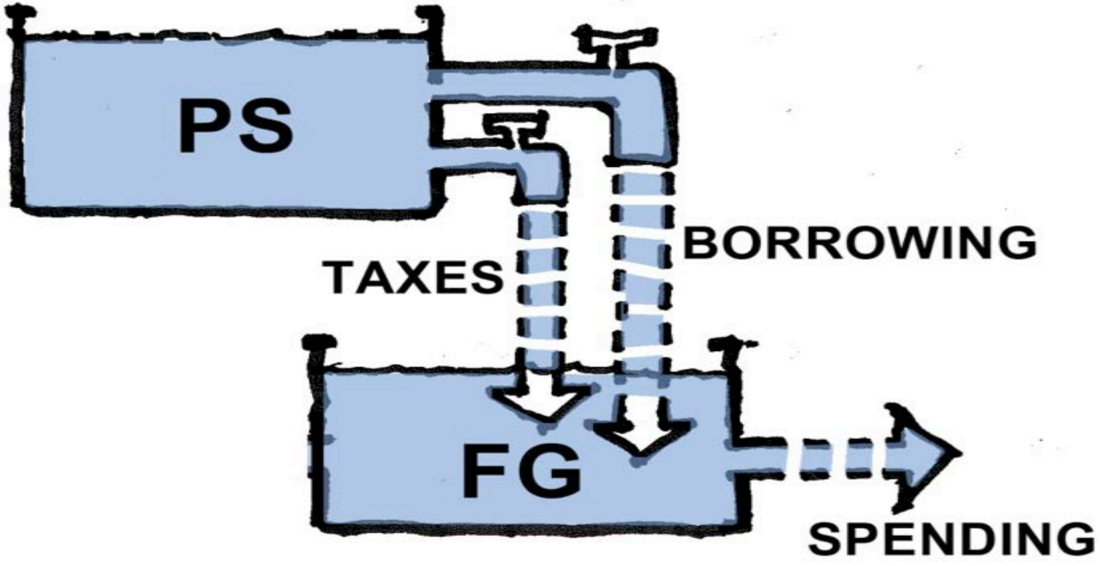






A sovereign government that issues its own currency cannot *run out of* that currency.

Conventional Model of Government Spending



PS = private sector

FG = Federal Government

Diagrams & Dollars
by J.D. Alt
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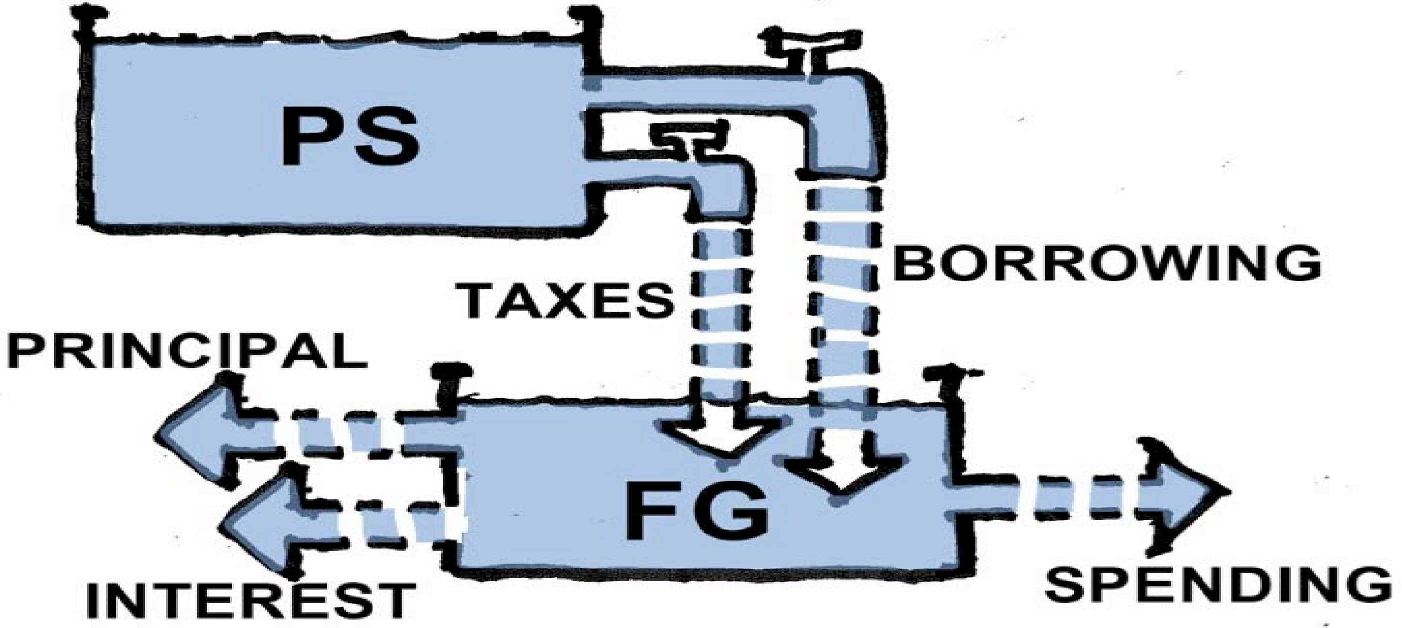
Including debt repayments…



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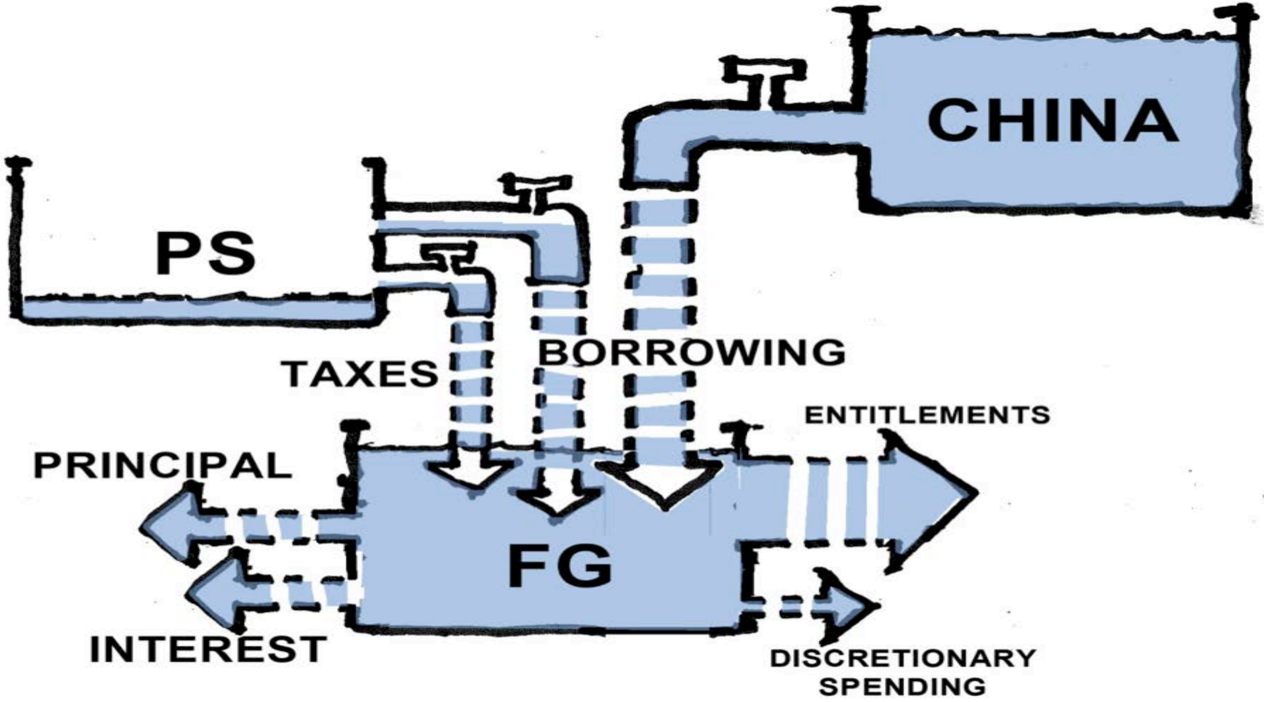
Entitlement spending, China, ….



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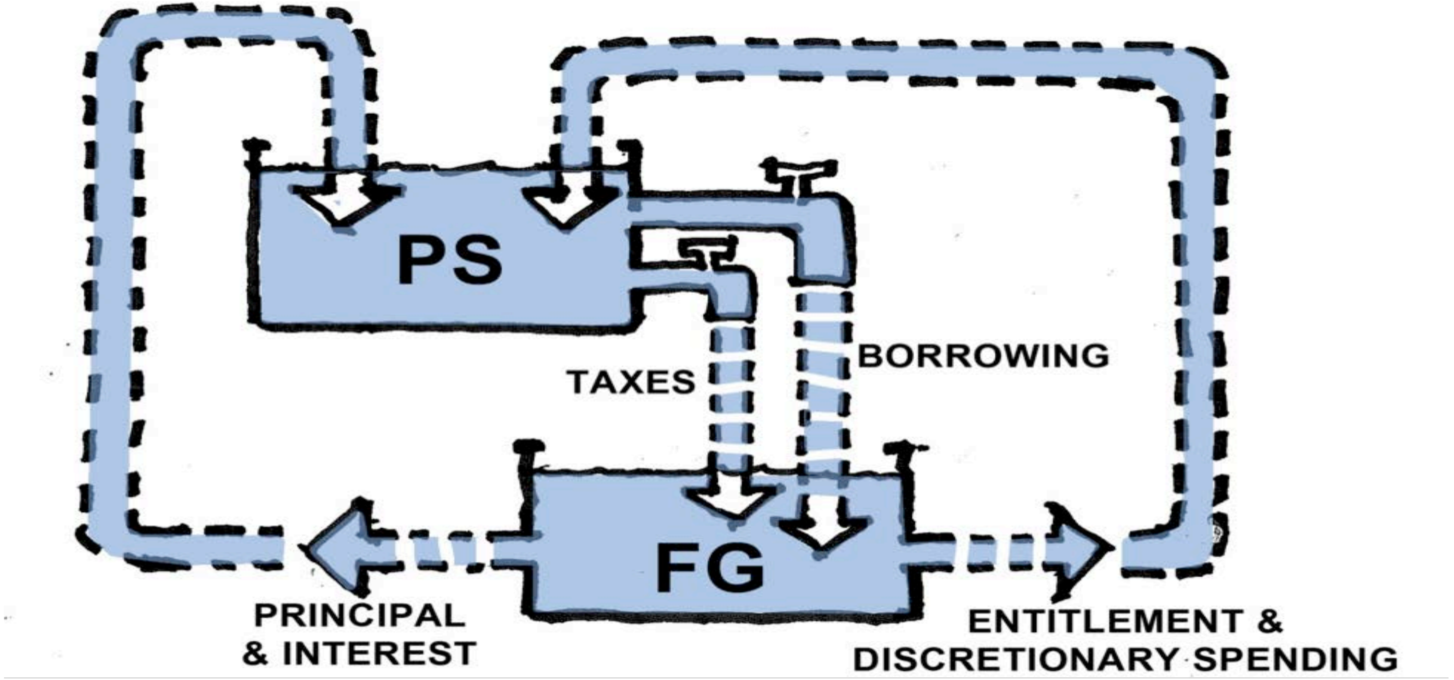
Reality check…
Where does federal spending go?



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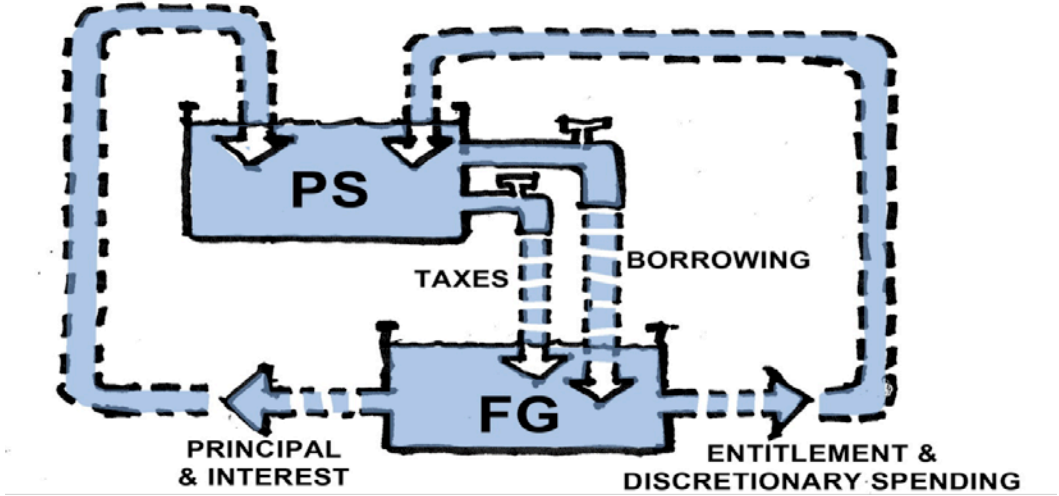
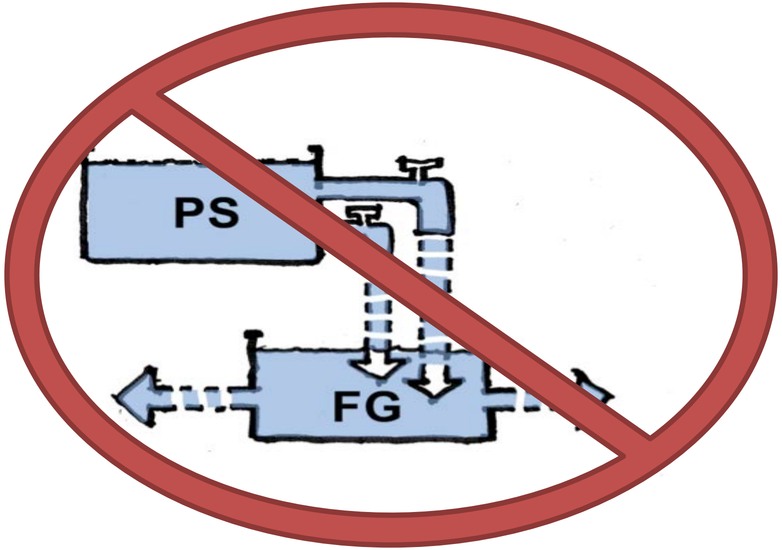
GOVERNMENT SPENDING GOES BACK INTO THE PRIVATE SECTOR.

But if this model is right, we still have a hopeless budgetary problem…



THE FUNDAMENTAL FLAW…



"*only* the sovereign U.S. Government can issue U.S. Dollars…"

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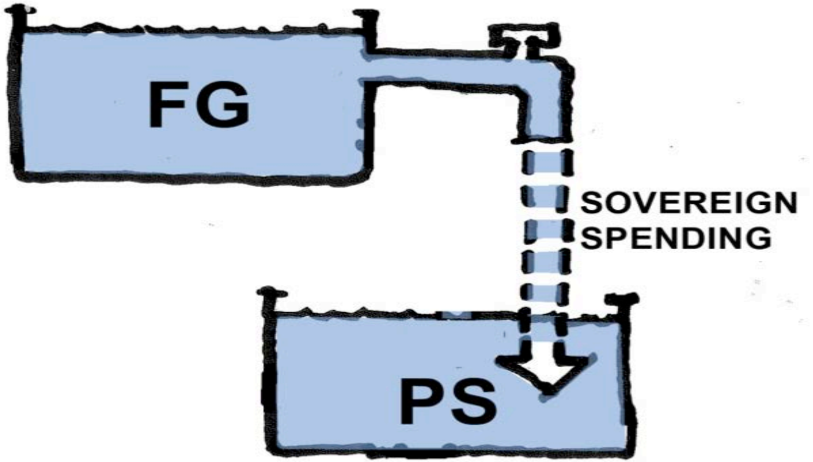
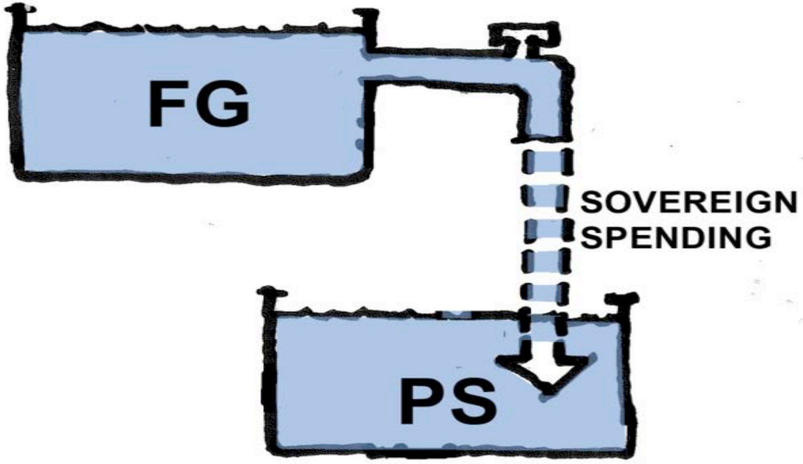
REPLACE WITH SOVEREIGN SPENDING…



”*only* the sovereign U.S. Government can issue U.S. Dollars…”

MMT:
Government Finance Process

STEP ONE: Government spends by *creating new money.*



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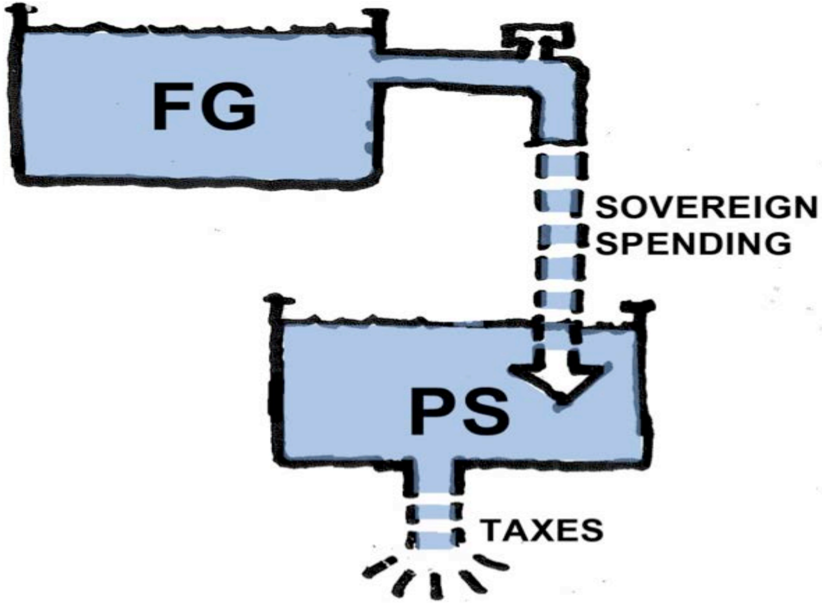
MMT:
Government Finance Process

STEP ONE: Government spends by *creating new money.*

STEP TWO: Taxes remove/ destroy money.



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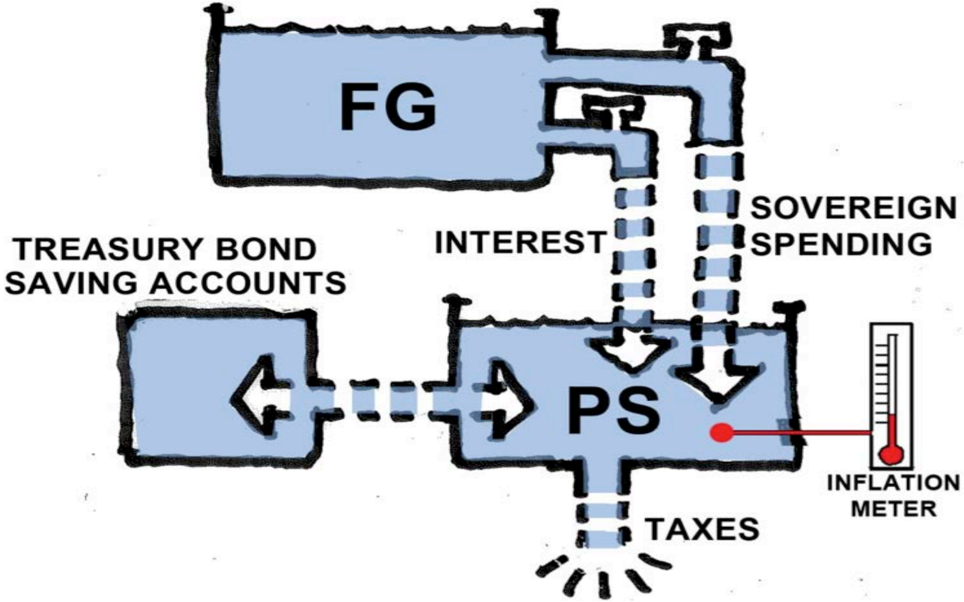
MMT:
Government Finance Process

STEP ONE: Government spends by *creating new money.*

STEP TWO: Taxes remove/ destroy money.

STEP THREE: Bond Sales *temporarily* remove money.



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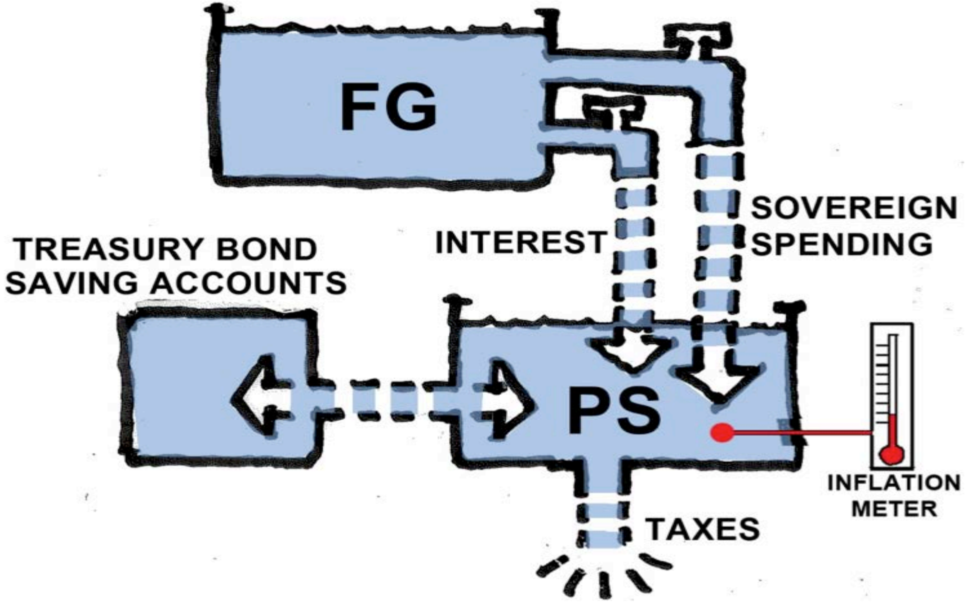
MMT:
Government Finance Process

According to MMT, Taxes and bonds do NOT finance govt spending: spending via new money creation *always comes first.*



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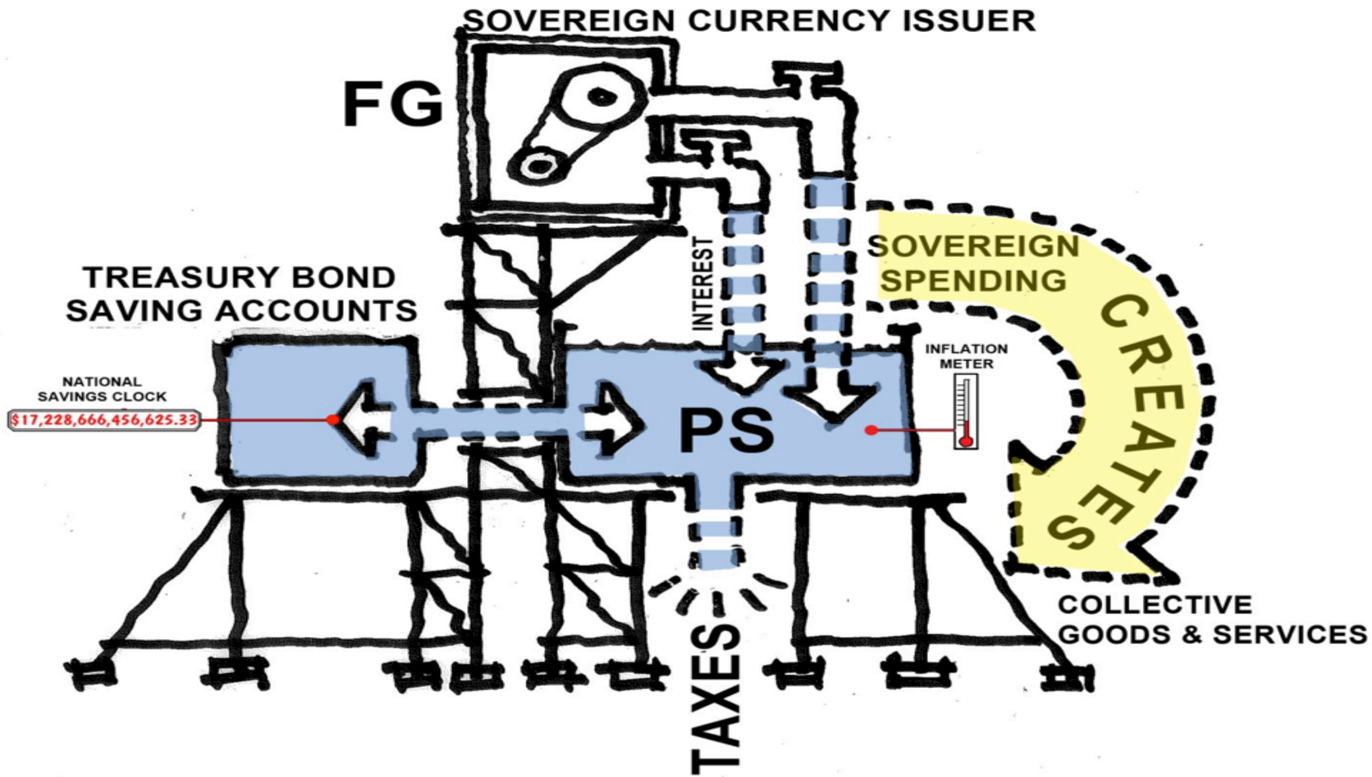
Full MMT Model of Sovereign Spending



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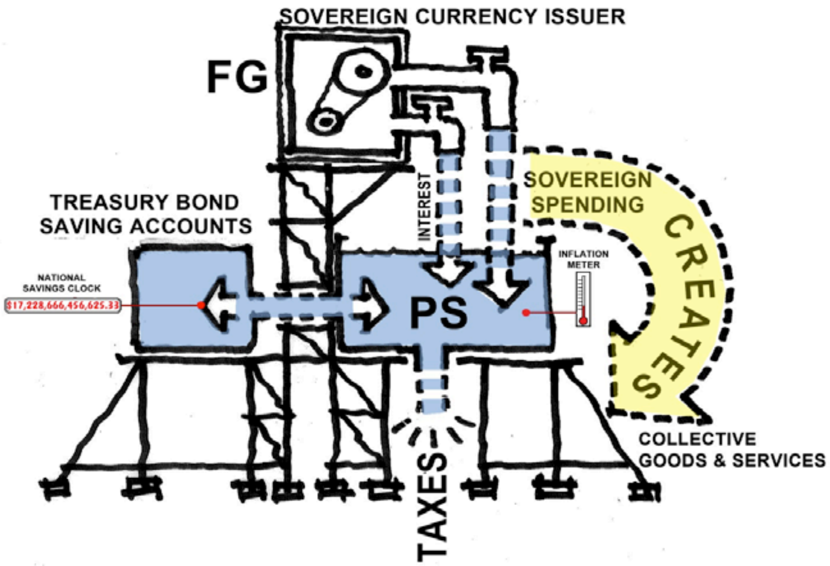
MMT:
Lessons and Implications

- **SPENDING CREATES NEW MONEY** (i.e. new high-powered money by crediting bank reserves)



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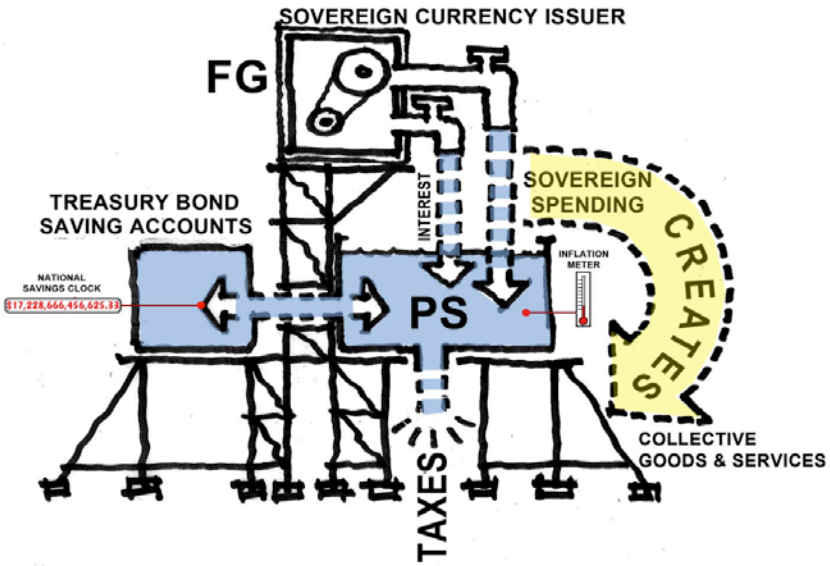
MMT:
Lessons and Implications

- **SPENDING CREATES NEW MONEY** (i.e. new high-powered money by crediting bank reserves)
- ***For MMT, money-creation is *NOT an alternative* to Taxation or Borrowing.**



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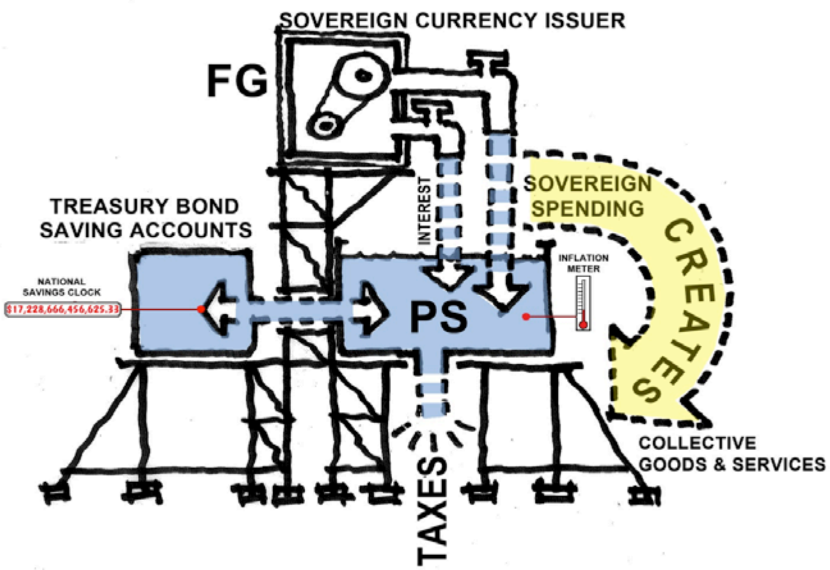
MMT:
Lessons and Implications

- **Sovereign currency issuers have NO budgetary constraints…**
  (constraints are political or self-imposed; unlike households)
- **Can afford to buy anything sold in that currency**
- **Money is not a ‘thing’ which can be scarce; it is not a *thing* at all!**



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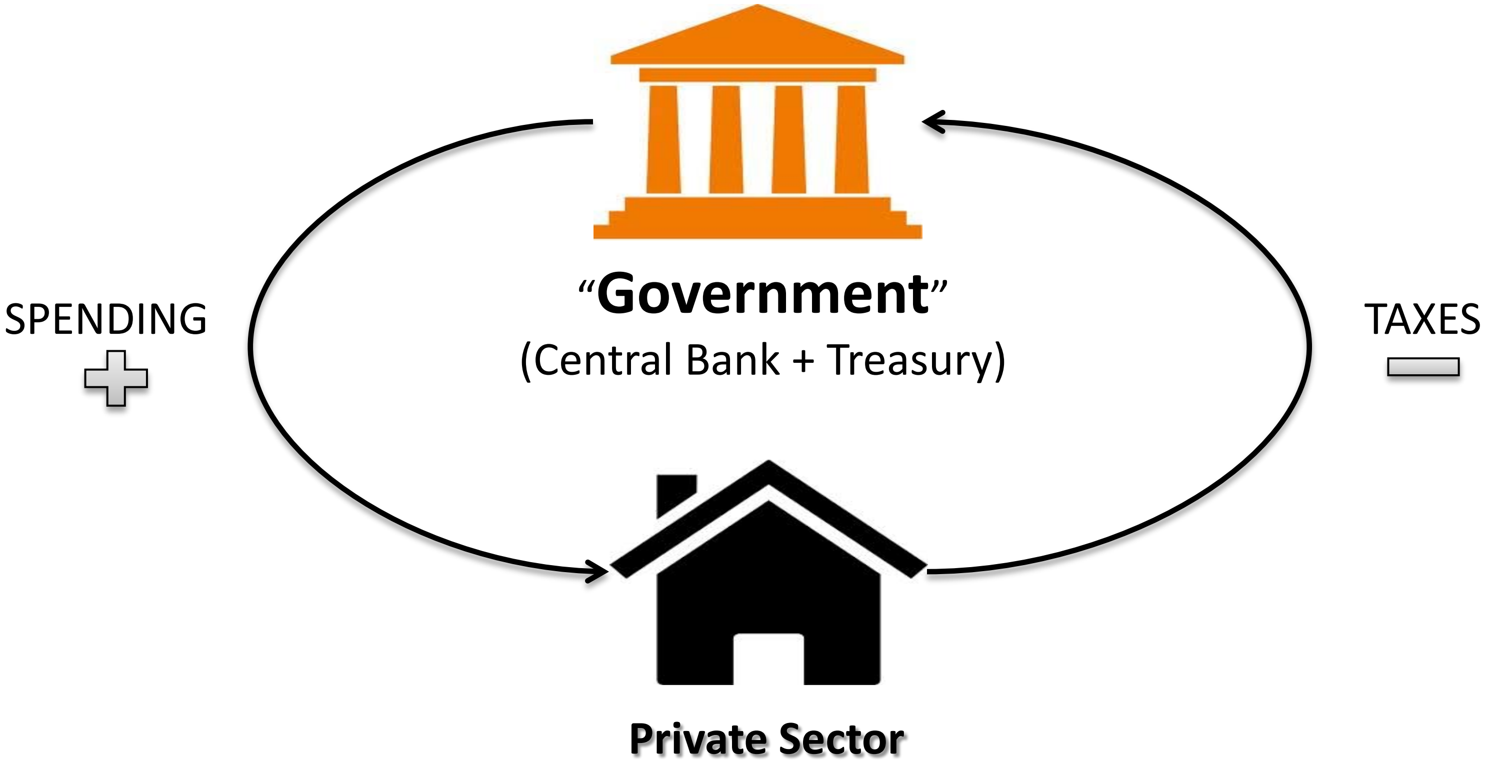
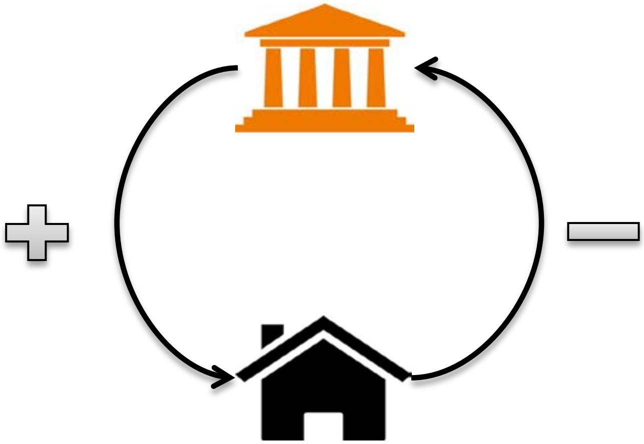
TAX REVENUE < SPENDING



TAX REVENUE < SPENDING

- Federal deficits are normal; surpluses are temporary.
- Why? A government cannot collect in taxes more money than it has issued.
- Deficit spending → new/net money



Accounting Fundamentals

Accounting Fundamentals

Consider a banker and a borrower ‘Bob’

Banker

ASSETS	**LIABILITIES**
ZERO	ZERO

“Bob”

ASSETS	**LIABILITIES**
ZERO	ZERO

Accounting Fundamentals

Banker

$100

“Bob”

ASSETS	LIABILITIES
ZERO	ZERO

ASSETS	LIABILITIES
ZERO	ZERO

Banker creates new money by “lending” to Bob, say $100…

Accounting Fundamentals

Banker

$100 →

"Bob"

ASSETS	LIABILITIES
ZERO	ZERO

ASSETS	LIABILITIES
ZERO	ZERO

$100 is credited to Bob's checking account (+ $100 assets), which Banker promises to redeem in cash (Bank's $100 liability)

Accounting Fundamentals

Banker

$100

"Bob"

ASSETS	LIABILITIES
--	$100

ASSETS	LIABILITIES
$100	--

$100 is credited to Bob's checking account (+ $100 assets), which Banker promises to redeem in cash (Bank's $100 liability)

Accounting Fundamentals

$100

IOU $100

Banker

"Bob"

ASSETS	LIABILITIES
$100	$100

ASSETS	LIABILITIES
$100	$100

Bob also *owes* $100 + interest (Bob's liability); and the Banker is *owed* $100 + interest (Banker's assets)

National 'Debt' = National 'Savings'

<u>ASSETS</u> (what I own, and what is *owed to* me)	**<u>LIABILITIES AND NET WORTH</u>** (what I owe)
Financial Assets (FA) Real Assets (RA)	Financial Liabilities (FL) Net Worth (NW)

WHY DOES THIS MATTER?

PUBLIC DEBT = PRIVATE SAVINGS

Public liabilities = Private assets

PUBLIC DEBT = PRIVATE SAVINGS

Non-Public Sector
Businesses, Households
(ignoring foreign sector)

<u>**ASSETS**</u>	<u>**“Liability”**</u>

<u>**ASSETS**</u>	<u>**Liability**</u>
	--

PUBLIC DEBT = PRIVATE SAVINGS

Non-Public Sector
Businesses, Households
(ignoring foreign sector)

ASSETS	"Liability"

ASSETS	Liability
	--

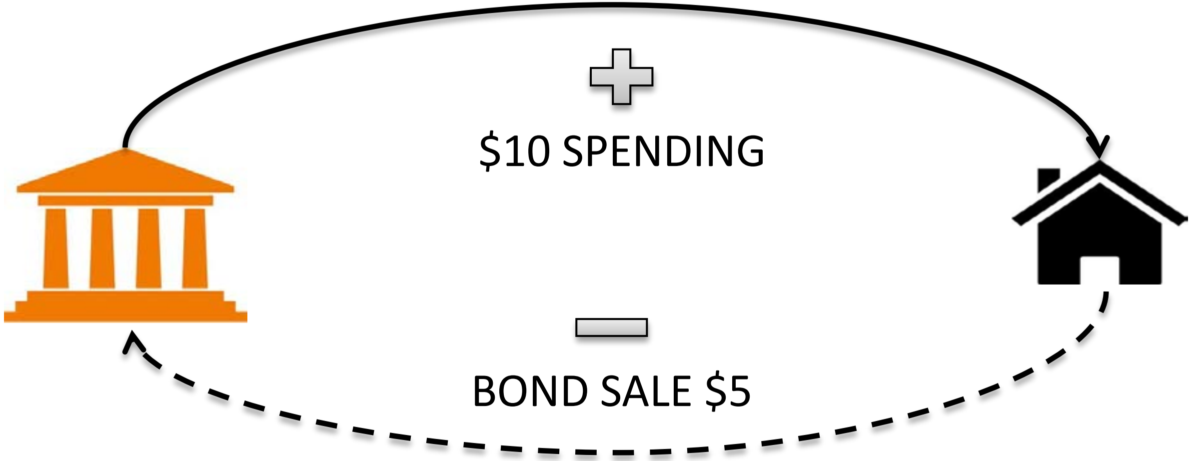
PUBLIC DEBT = PRIVATE SAVINGS

Note: the $100 is a "liability" of the govt by convention only! It is an "IOU" of the government in the sense that it must accept back as a means of settling tax obligations.

ASSETS	"Liability"
	$10cash

ASSETS	Liability
$10cash	--

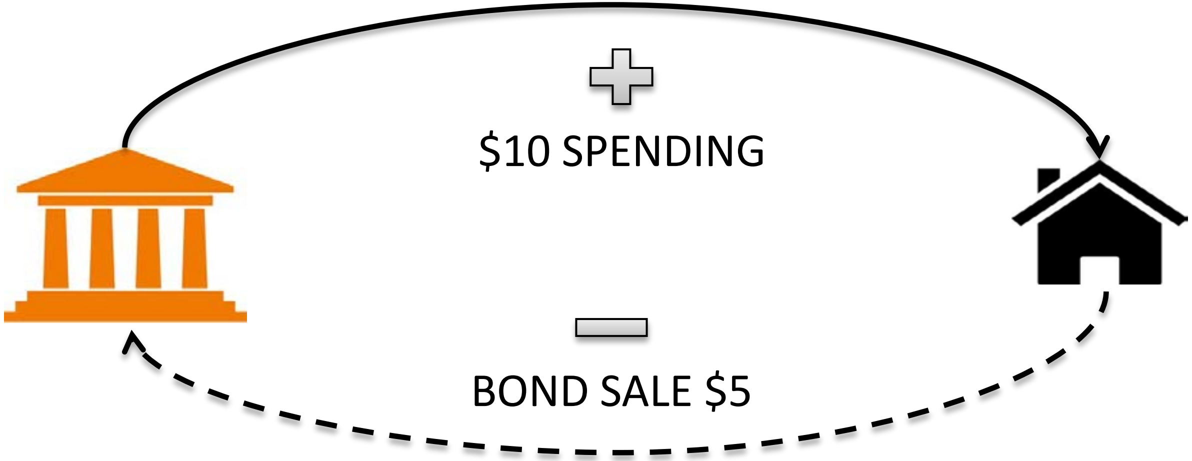
PUBLIC DEBT = PRIVATE SAVINGS



ASSETS	“Liability”
	$10cash

ASSETS	Liability
$10cash	--

PUBLIC DEBT = PRIVATE SAVINGS



ASSETS	"Liability"
	$5 cash $5 IOU

ASSETS	Liability
$5 cash $5 IOU	--

Opposing Views on 'Austerity'

Conventional

- Persistent deficits should be avoided
- Austerity is the remedy for too much 'borrowing.'
- **NO PAIN, NO GAIN**

Austerity protests in Greece

MMT

- Persistent deficits are normal.
- Austerity is unnecessary and self-imposed.
- **ALL PAIN, NO GAIN!**

MMT and Neo-Chartalism

- ***"TAXES DRIVE MONEY"***
  - **People accept money as a *means of exchange* so long as people will need money to pay taxes and other involuntary obligations.** (Taxation is a Sufficient, but not a Necessary condition.)
  - **State or Legal Theories of Money have a long history…**

MMT and Neo-Chartalism

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Aristotle: "Money (*nomisma*) by itself is but a mere device. **It has value only by law (*nomos*) and not by nature.**"

MMT and Neo-chartalism

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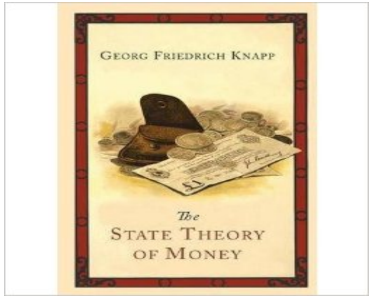
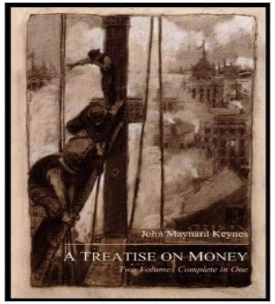
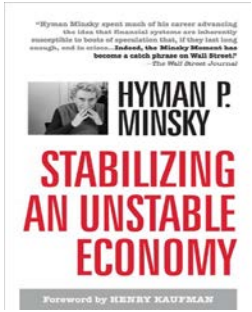


Knapp's *State Theory of Money* (1895); (English 1925)



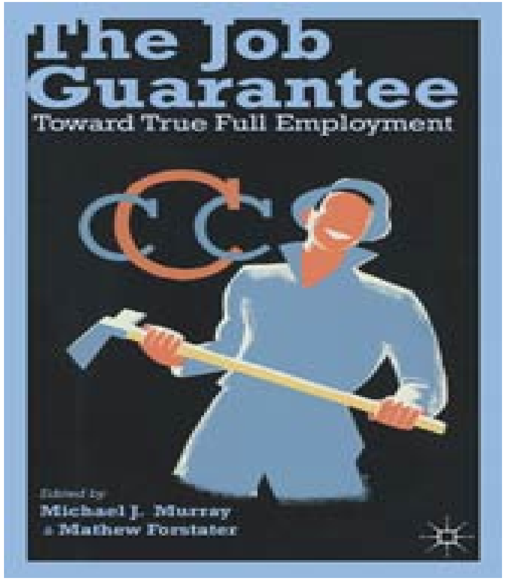
Keynes *A Treatise on Money* (1930)



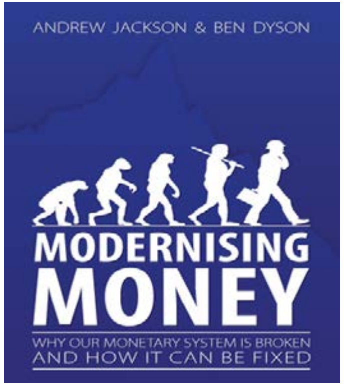
Minsky *Stabilizing an Unstable Economy* (1986)

MMT Policy Implications

1. National Deficits and Debts are not problems in themselves; they are usually sustainable and to be expected.
2. **E**mployer of **L**ast **R**esort **(ELR)** – i.e. the ***Job Guarantee.***
   – Replace old gold standard with a new ***labor standard*** of money.

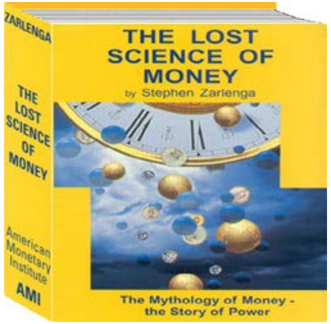


II. MONETARY REFORMERS



PositiveMoney

American Monetary Institute (AMI)



Dennis Kucinich's Monetary Reform Bill HR 2990

www.positivemoney.org   www.monetary.org   sovereignmoney.eu

Monetary Reform Goes Mainstream?

FINANCIAL TIMES

April 24, 2014 1:32 pm

Strip private banks of their power to create money

By Martin Wolf Author alerts

The giant hole at the heart of our market economies needs to be plugged

COMMENT

Strip private banks of their power to create money

Martin Wolf

WP/12/202

IMF Working Paper

The Chicago Plan Revisited

Jaromir Benes and Michael Kumhof

Abstract

At the height of the Great Depression a number of leading U.S. economists advanced a proposal for monetary reform that became known as the Chicago Plan. It envisaged the separation of the monetary and credit functions of the banking system, by requiring 100% reserve backing for deposits. Irving Fisher (1936) claimed the following advantages for this plan: (1) Much better control of a major source of business cycle fluctuations, sudden increases and contractions of bank credit and of the supply of bank-created money. (2) Complete elimination of bank runs. (3) Dramatic reduction of the (net) public debt. (4) Dramatic reduction of private debt, as money creation no longer requires simultaneous debt creation. We study these claims by embedding a comprehensive and carefully calibrated model of the banking system in a DSGE model of the U.S. economy. We find support for all four of Fisher's claims. Furthermore, output gains approach 10 percent, and steady state inflation can drop to zero without posing problems for the conduct of monetary policy.

AMI Proposals

(and MMT criticisms)

1. **Enable Treasury to create new money***
   - i.e. to *spend money into existence*, currently the Fed *lends money into existence.*
   - Bank of England already has this power.
   - **MMT argues that this is already the case everywhere!*

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2. **Prohibit money creation by private banks**
   - 100% Reserves; abolish Fractional Reserve Banking… Irving Fisher, etc.
   - ***MMT* ignores that most money is created by private banks; does not address fractional reserve banking.**

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   – 100% Reserves; abolish Fractional Reserve Banking… Irving Fisher, etc.
   – ***MMT* ignores that most money is created by private banks; does not address fractional reserve banking.**
3. **Massive spending (infrastructure, etc.)**

Federal Budget Financing in the U.S.

(mainstream account)

IOUs (Bonds) →

← **Money as Debt**

Federal Reserve creates money and pays Treasury.

Federal Reserve

US Treasury

Whatever bonds the other banks do not purchase, the Federal Reserve purchases.
The Federal Reserve can exercise a power that the Treasury cannot: it can simply create the money *from nothing.* But it creates this money *as public debt, i.e. the government's liability to the Fed.*

HOW IS MONEY CREATED?

Two views:

1. ***Exogenous Money*** **and the Money Multiplier Myth…**
2. ***Endogenous Money*** **– banks create money independent of their reserve position**

HOW IS MONEY CREATED?

Two views:

1. ***Exogenous Money*** **and the Money Multiplier Myth…**
2. ***Endogenous Money*** **– banks create money independent of their reserve position**

"In the modern economy, most money takes the form of bank deposits. But how those bank deposits are created is often misunderstood: **the principal way is through commercial banks making loans. Whenever a bank makes a loan, it simultaneously creates a matching deposit in the borrower's bank account, thereby creating new money.**"

-Bank of England's Quarterly Bulletin 2014 Q1

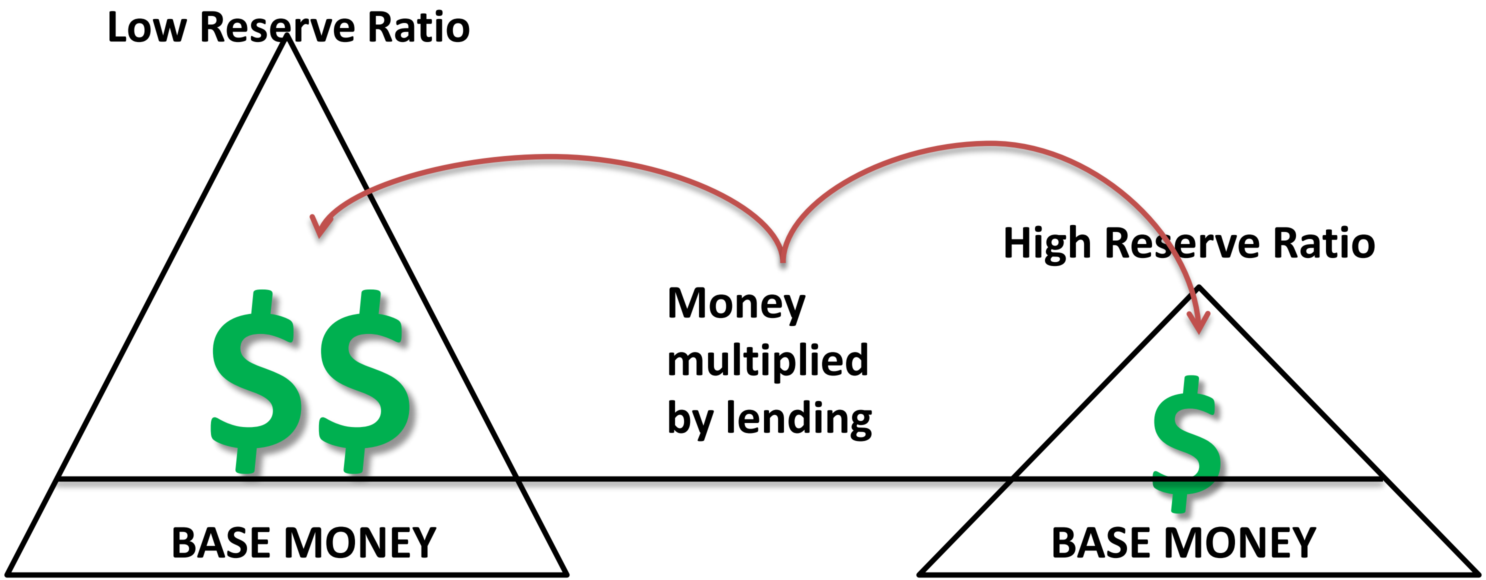
Money Multiplier Myth

Two Steps:

1. The 'Fed' *lends new money into existence* to banks.
2. These private banks then take this new money and create 10x this amount through fractional reserve banking. This process is called the **money multiplier process**.
   – The total amount created will be equal to the inverse of the reserve ratio.

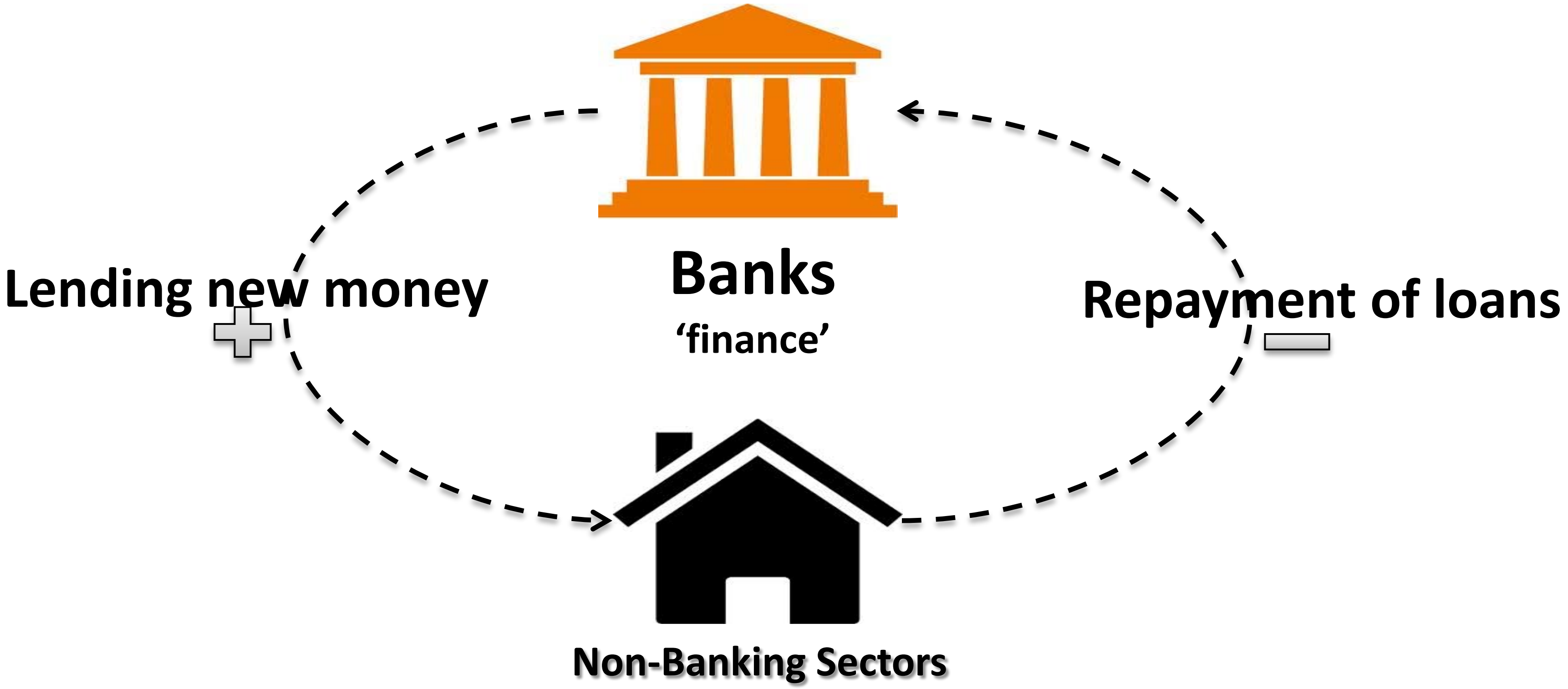
Banks artificially create money in the economy by making loans based on fractional reserve banking. In this example, what started out as 100 units of money deposited becomes 171 units of money loaned.

Money Multiplier Myth



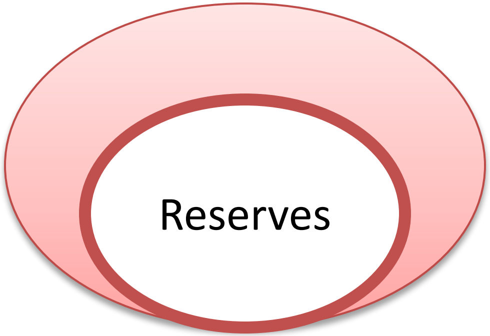
RESERVE RATIO DETERMINES STEEPNESS OF PYRAMID SIDES

‘Bank Money’ creation and destruction



Endogenous Money

- ***Banks create money by making loans.*** In other words, ***loans create deposits.***
  - Investment ≠ Savings (Contra IS-LM; 'loanable funds', etc.)
  - Central banks *do not* restrict lending by limiting the supply of reserves. Instead, they accommodate banks, supplying reserves as needed *ex post*



BALLOON METAPHOR

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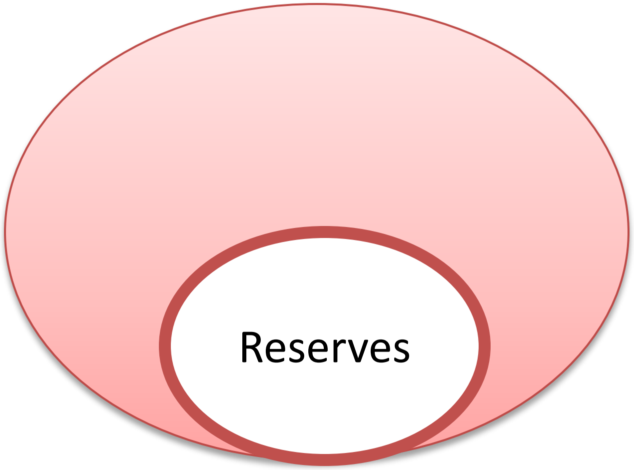

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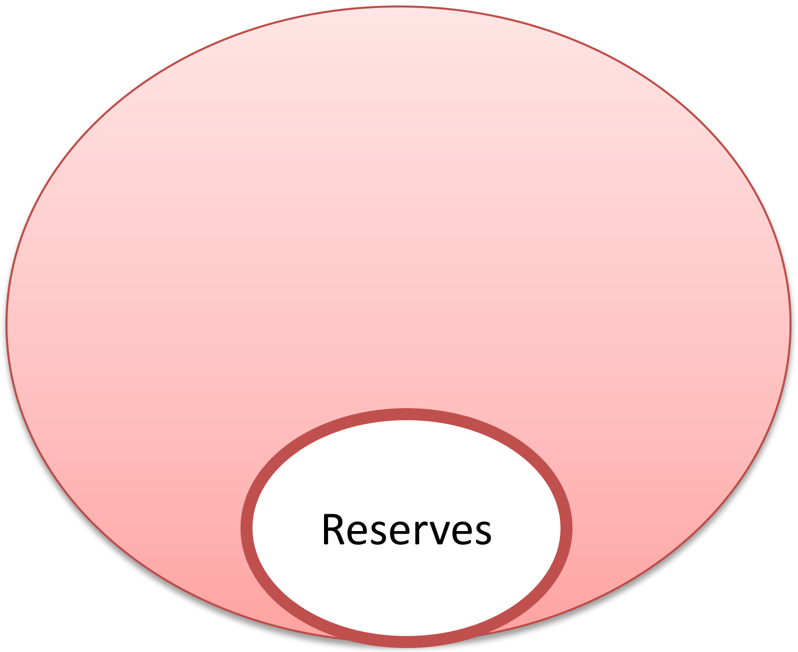
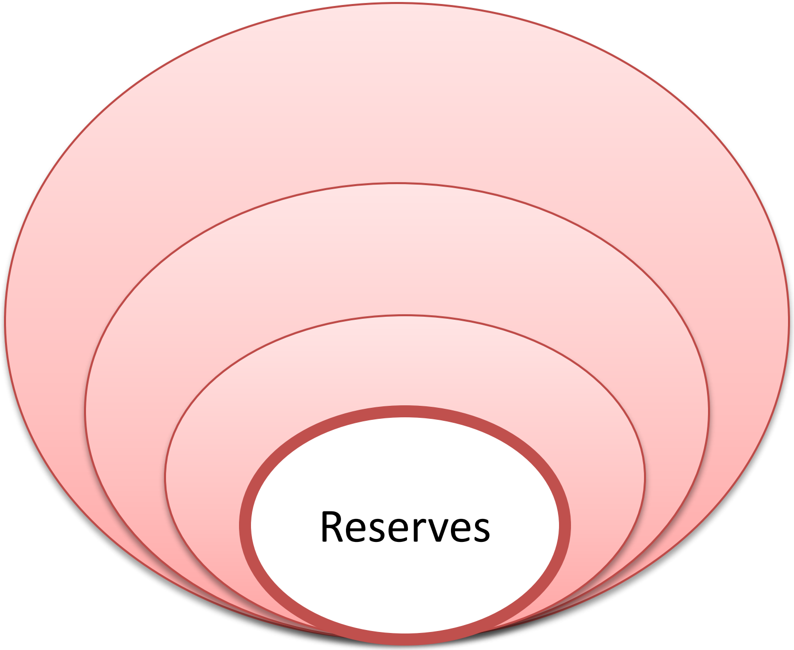


BALLOON METAPHOR

Endogenous Money

- Bank lending is primarily determined by (and constrained by) *the willingness of banks to lend*, i.e. on their expectations of profitability of lending and hence, their *confidence* in the overall economy.



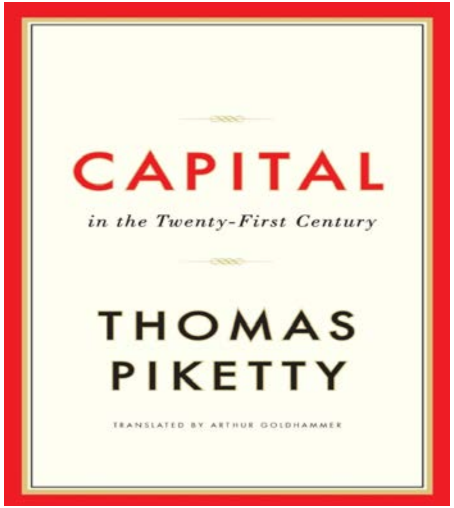
BALLOON METAPHOR

III. Bank Money and Inequality

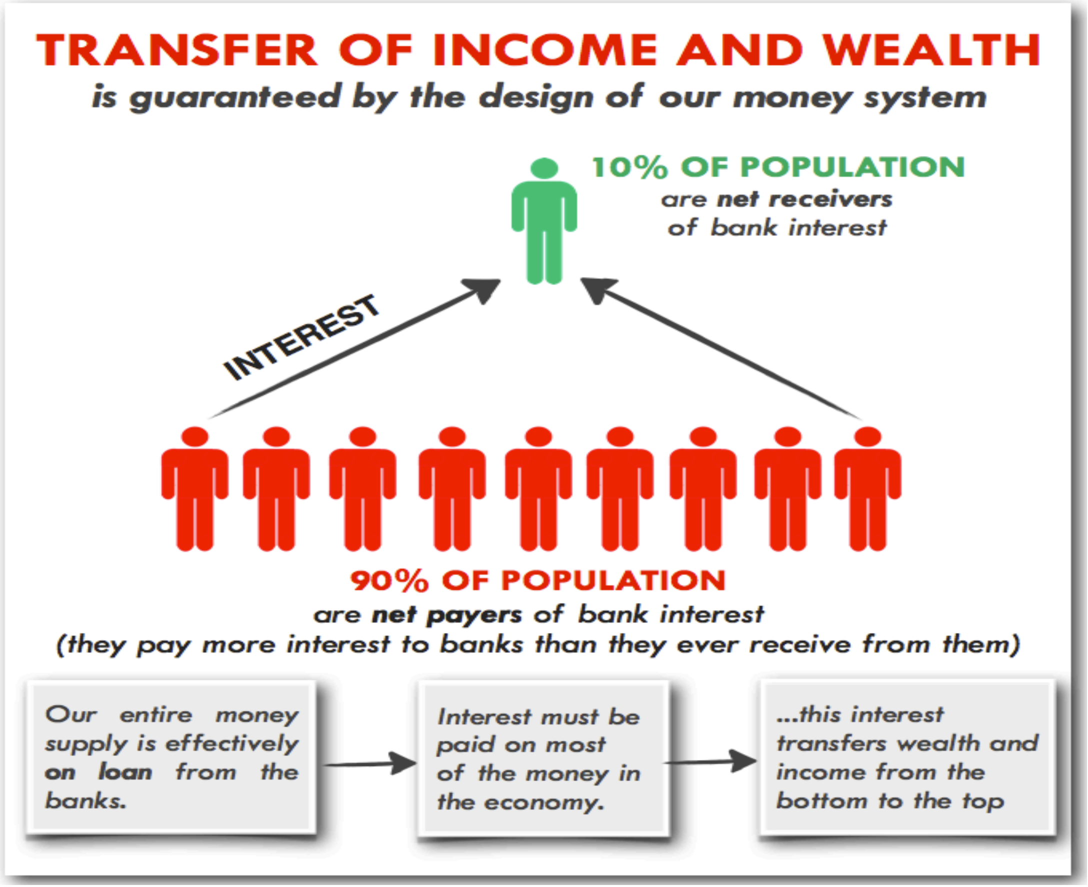
- In Picketty's *Capital*, growing inequality is explained with a simple formula:

r > g

- "When the **rate of return on capital** exceeds the **rate of growth of output and income** … capitalism automatically generates arbitrary and unsustainable inequalities…"
- **MIGHT OUR MONETARY SYSTEMS EXPLAIN THIS RETURN ON CAPITAL?**



Does our monetary system exacerbate inequality of wealth and income?



www.positivemoney.org

Bank Money and Inequality

- **Here is what happens when $10 of interest is applied: Banker's assets increase $10, and "Bob's" liabilities increase $10. This is a net transfer of wealth of $10.**

Banker

$100

IOU

$110

"Bob"

ASSETS	**LIABILITIES**
Bob's IOU worth $110	$100 cash (loaned to Bob)

ASSETS	**LIABILITIES**
$100 cash	**$110 DEBT**

Bank Money and Inequality

- **The application of interest makes the financial *assets* of the banker and the financial *liability* of the borrower GROW EXPONENTIALLY.**
- **Assets still equal Liabilities in the aggregate, *but the net financial wealth of the bank increases by the same amount as the net financial wealth of the borrower decreases.***

Banker

Net transfer of $10

“Bob”

ASSETS
Bob’s IOU worth $110

LIABILITIES
$110 DEBT

Bank Money and Inequality

- ***Unlike governments and unlike banks, "Bob" can only acquire the money to repay his liability from somewhere else. From where?***
- ***In the aggregate, all new money comes either from the government (in the form of deficit spending) or from banks (in the form of private loans').***

Banker

Net transfer of $10

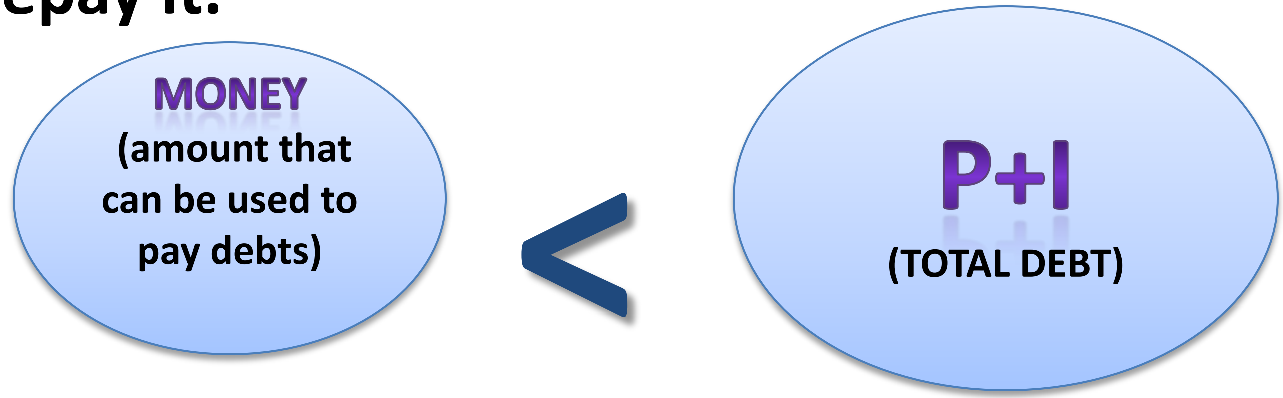
"Bob"

ASSETS
Bob's IOU worth $110

LIABILITIES
$110 DEBT

Bank Money and Inequality

- New money (i.e. credit) is primarily *loaned* into existence by private banks.
- Because of the application of interest, total debt will always exceed the size of the existing money supply to repay it.



Bank Money and Inequality

1. The current system functions like a pyramid scheme: **it is built on the expectation of infinite, exponential growth.**
2. This is impossible, because aggregate *financial wealth always nets to zero. (assets=liabilities).*
3. **Interest payments generally do not recycle back into the general population as earned income.**

Bank Money and Inequality

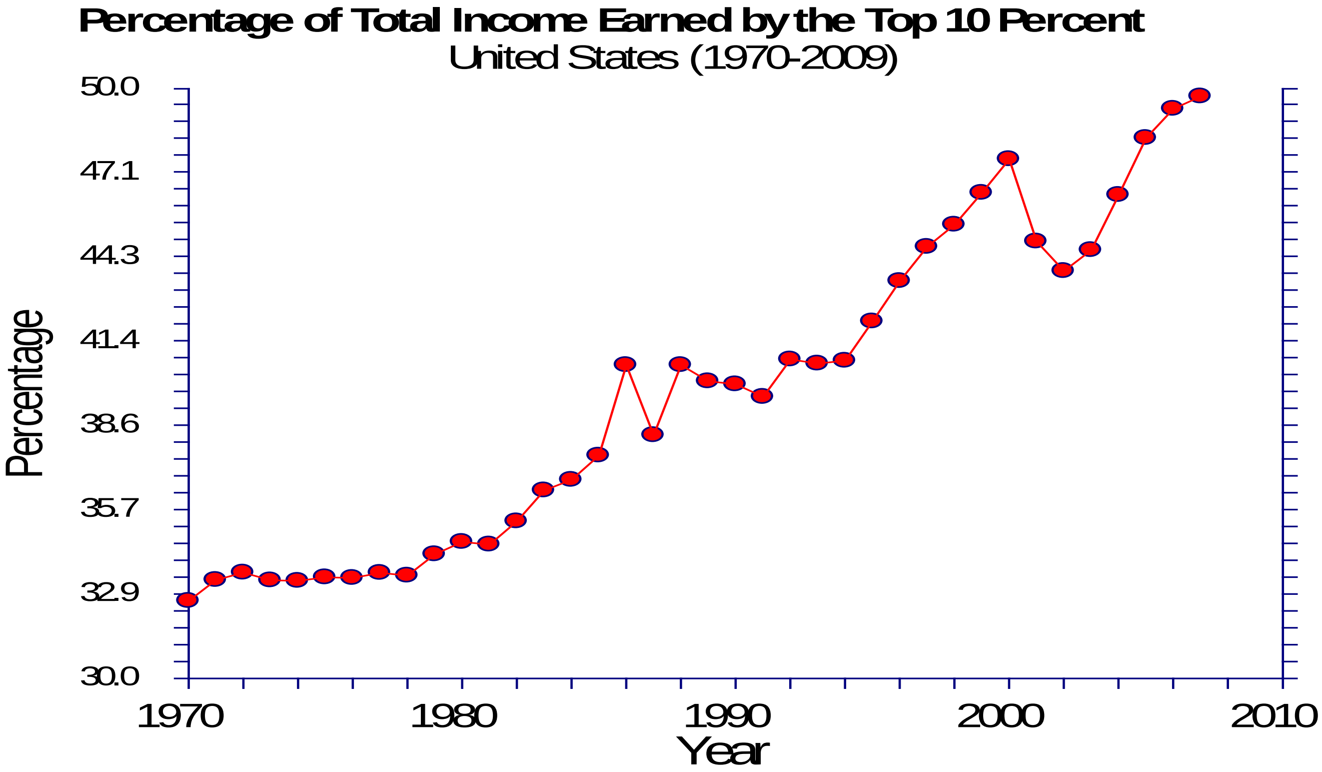
- **COMPOUNDING INTEREST → INEQUALITY**
- **Compounding interest means that creditors exponentially expand their *claims on wealth.***

Bank Money and Inequality

- The debt pyramid is like a game of musical chairs: in the aggregate, the total liability of the borrowers can only be paid off (cancelled) with the creation of new money,
- New (net) money comes from only two possible sources:
    1. Private banks, which will lend the money, thus reinforcing the debt cycle, or
    2. Government, which can deficit spend, i.e. spend more than it collects in taxes, thus adding net reserves to the system.

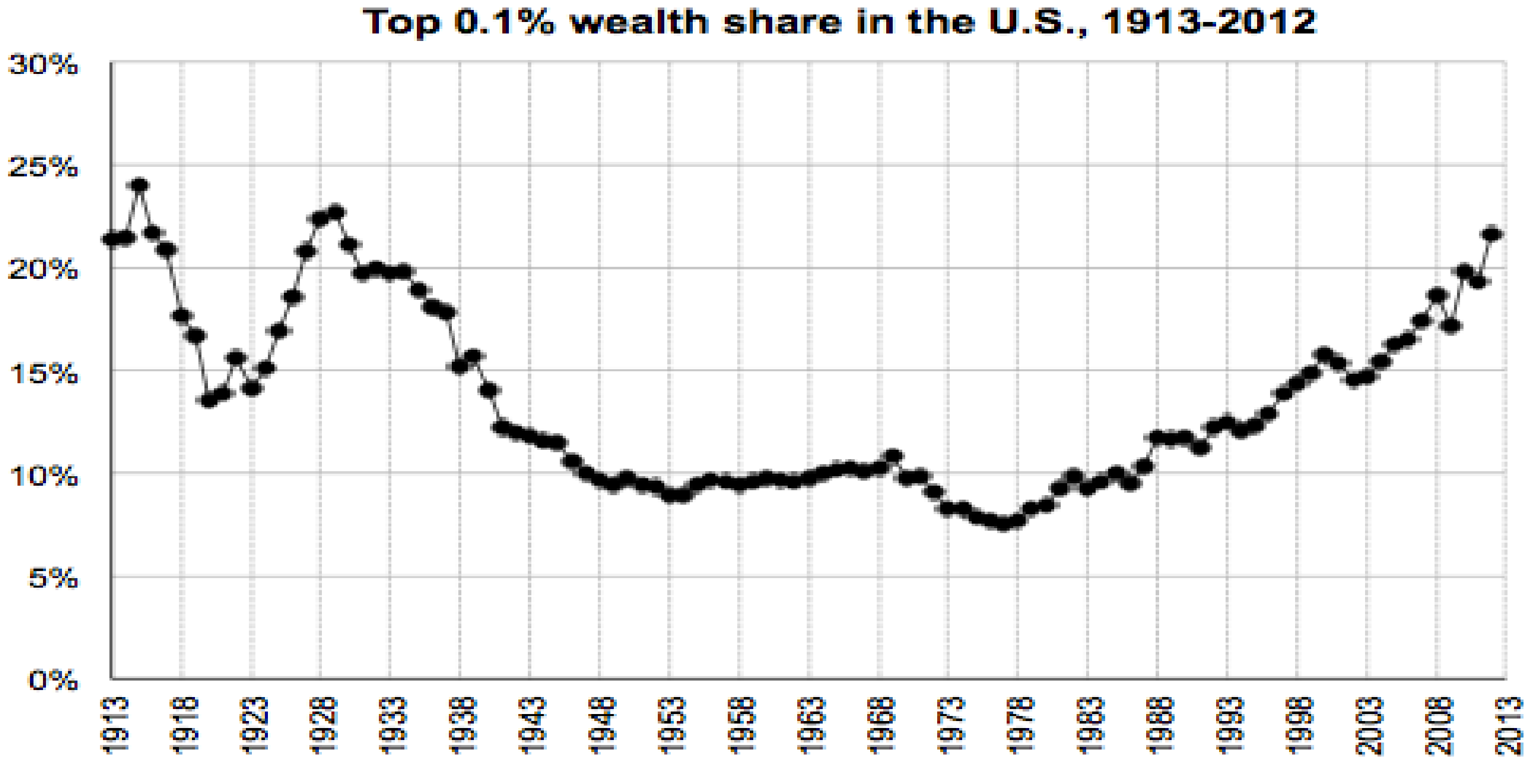
Income earned by the top 10%

(1970-2010)



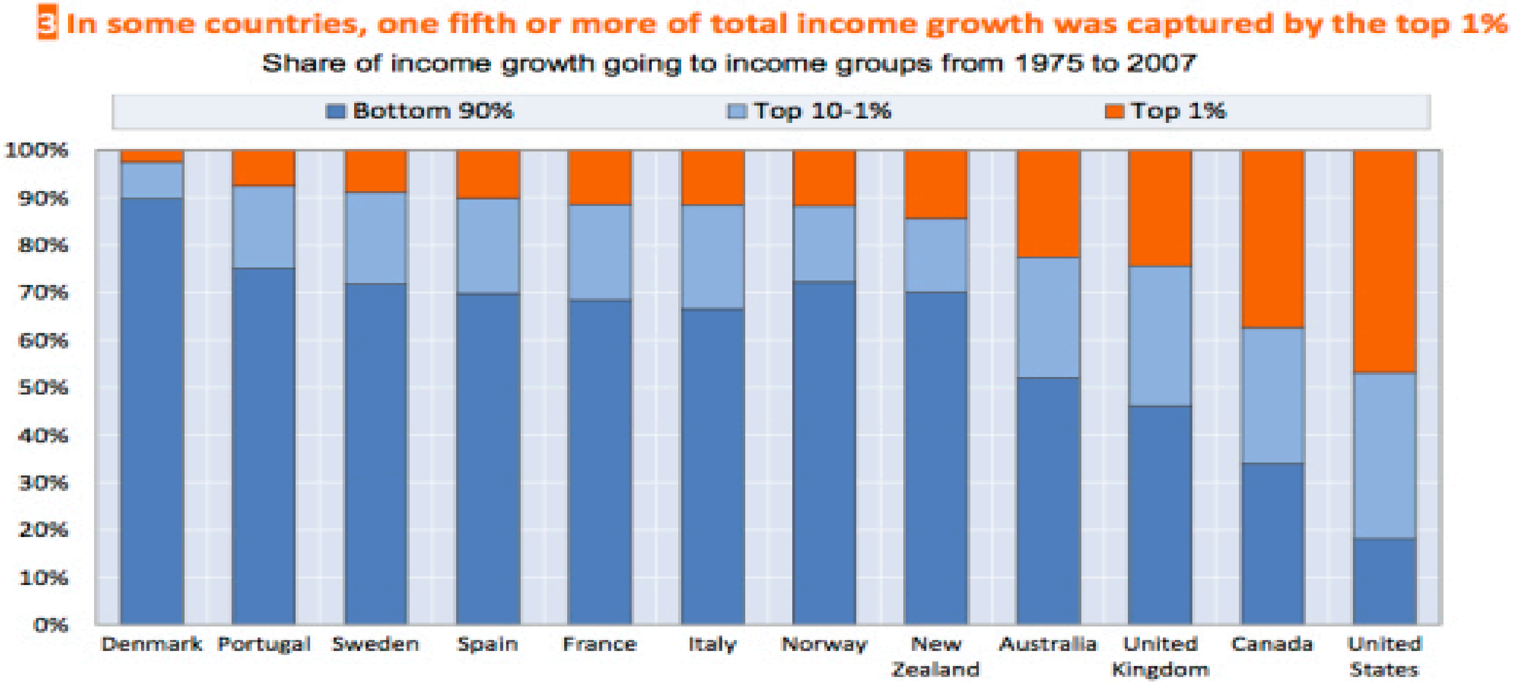
Source: Picketty and Saez

Wealth Inequality in the US



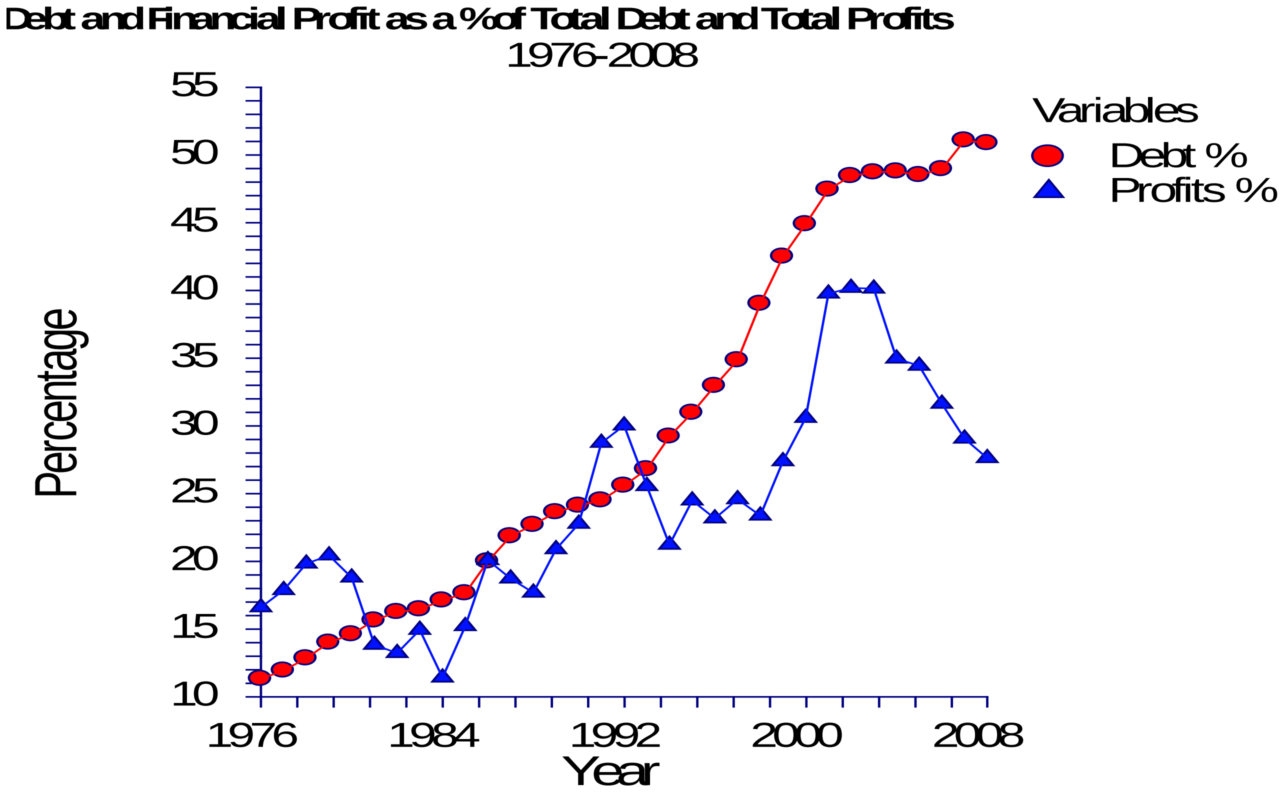
Share of income growth going to top 1%

12 countries 1975-2007



Note: Incomes refer to pre-tax incomes, excluding capital gains
Source: OECD calculations based on the World Top Income Database.

Financial Debt and Profits

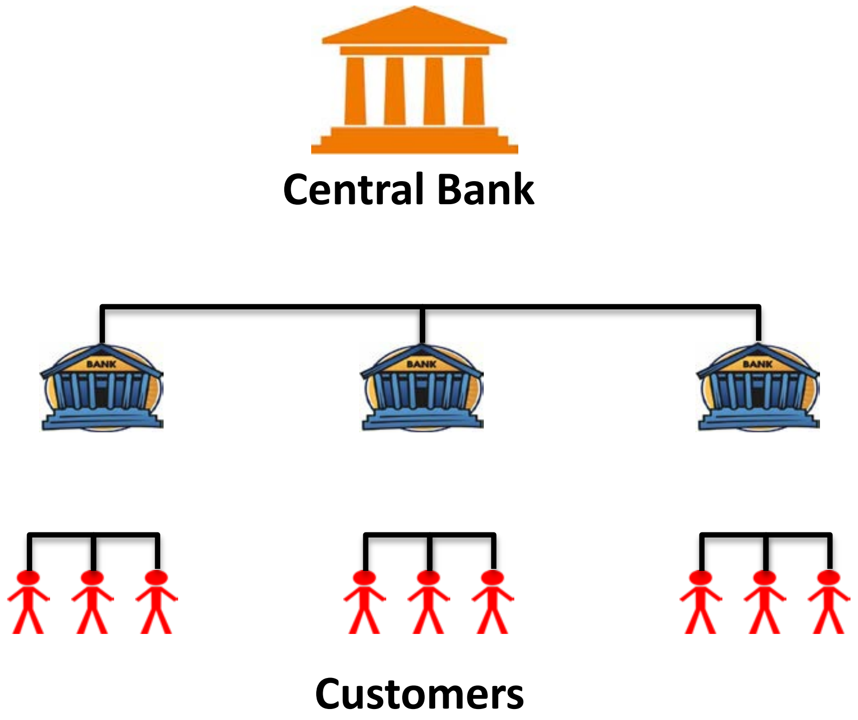


Hierarchy of Payments

<u>**TWO TYPES OF MONEY:**</u>

1. ***Central bank reserves –*** Banks need these reserves in order to settle net transactions with other banks.

2. ***Deposits -*** we make payments between each other using ***deposits***, created by banks when making loans.



OPEN QUESTIONS

1. Why does the Treasury have to ‘borrow’ money from the Fed? If it doesn’t, as MMT claims, why does everyone think it does? Wouldn’t it be a good idea codify this into law?
2. To what extent does the application of interest exacerbate inequality? Does the universal expectation of growth (implied by interest) make perpetual growth a requirement for our economy and hence, guarantee its unsustainability?

Federal Reserve

US Treasury