

Monetary Operations and Government Finance:

An Application of Minsky's Hierarchy of Money

Contrasting Views: What is Money?

Conventional Economics

- Nature & Origin of Money
 - Barter Story
 - Emerges Spontaneously
 - "Stateless"
 - Medium of exchange
 - Money is What Money Does
- Why is it Accepted?
 - Gold?
 - Legal Tender?
 - Fiat?

Modern Money Approach

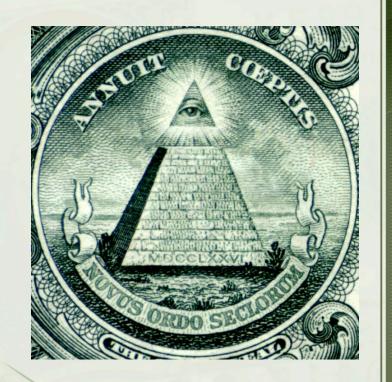
- Nature & Origin of Money
 - Authorities Played Central
 Role in Emergence of Money
 - Unit of Account
 - Money Represents a Social Debt Relationship
 - Two-Sided, Balance Sheet
- Why is it Accepted?
 - Taxes Create Demand for Currency
 - Hierarchy or Debt Pyramid

Why Government Money is "Special"

"Anyone can create money. The 'trick' is to get it accepted."

-- Hyman Minsky, 1986

"Acceptability, which is its all important feature, stands or falls with the state."



-- Abba Lerner, 1941

Understanding the Hierarchy

- Minsky explained that anyone can offer to go into debt (i.e. issue IOUs)
- The trick is to get someone to agree to hold those debts/
- Money is created as credit-debt relationships are recorded
- Not all money is created equal
- Most parties must pay with debt of someone higher in pyramid
- Government is special has the ability to make and enforce tax laws on the one hand and the power to create or destroy money by fiat on the other
- The U.S., Canada, the U.K., Japan, and Australia all control the money at the top of their pyramids -- sovereign

"The government, just like every American household, has to live within its means."

-- Ross Perot

The Importance of Sovereignty



The United States government has run "out of money."

-- President Barack Obama

The Household Budget Constraint

- How much money can YOU spend?
 - Everything you receive (earned and unearned) after taxes
 - Plus everything you can borrow
- When it comes to buying things in the US, there is only one way to make final payment
- High-Powered Money (i.e. government money)
- At the end of the day, every purchase involves transferring government liabilities to the seller
 - EXAMPLE: Purchase a meal with a credit card. Pay your Visa bill with check drawn on your bank. Results in transfer of government liabilities (bank reserves) from your bank to Visa's bank, and from Visa's bank to the restaurant's bank
- YOU are the user of the government's currency

Is the Federal Government Like a Household?

- Is the Government's Ability to Spend Limited by its Ability to Raise Money by Taxing or Borrowing?
- NO!
- The Government is the **issuer** of the currency
- Those of us in the private sector have to earn or borrow US dollars <u>before</u> we can make payments
- The federal government must spend first
- Government spending is not operationally constrained by revenues (tax payments and borrowings)
- The only relevant constraints are <u>self-imposed</u>
 - **Debt Ceiling** Rules
 - Treasury **Overdraft**
 - Direct "Monetization" by the Fed

How Does the Federal Government Spend?

- By Writing Checks on its Account at the Federal Reserve
- Coordination of Treasury Operations Creates the <u>Illusion</u> that Taxes and Bonds Help the Government "Pay For" its Purchases
 - TT&L Accounts
- But that is Not What's Really Going On
- Should not Even think of the Government as "Having" or "Not Having" Any Money
- Government is Simply the Scorekeeper

What Happens When the Government Spends?

- Treasury Issues a \$100 million Check to Halliburton
 - The Fed Marks down the Treasury's balance -\$100,000,000
- Halliburton Deposits the Check into its Account at BoA
 - BoA marks up Halliburton's balance + \$100,000,000
 - The Fed marks **up** the size of Bank of America's reserve account at the Fed + \$100,000,000
- What are the EFFECTS of the Treasury's Spending:
 - The Monetary Base increases by \$100,000,000
 - The "Money Supply" (M1) increases by \$100,000,000
- LESSON: Government Spending creates new money (M1) and leads to an increase bank reserves (HPM)

What Happens When the Government Collects Taxes?

- You write a \$5,000 check to the IRS on your account at Wells Fargo
 - Wells Fargo marks down the balance in your account -\$5,000
- The IRS deposits the check into the Treasury's account at the Federal Reserve
 - The Fed marks **up** the balance in the Treasury's account +\$5,000
 - The Fed marks down the balance in Wells Fargo's Reserve Account -\$5,000
- What are the Effects of Paying Taxes?
 - The monetary base decreases by \$5,000
 - The money supply decreases by \$5,000
- LESSON: Paying taxes destroys money (M1) and leads to a decrease in bank reserves (HPM)

What If You Pay Your Taxes with Cash?

The government will destroy the money by throwing it in a shredder.

Then Why Bother Collecting Taxes?

- When we pay our taxes (by cash or check), we are merely returning the government's own liabilities
- It does not "get" anything that it can use to make future purchases
- So why does it bother taxing us?
- Two Reasons:
 - To Maintain Demand for Government Currency
 - Taxes give value to government money
 - They get us all working and producing things in order to earn US dollars
 - This allows the government to buy things with its otherwise worthless paper
 - To Regulate Aggregate Demand
 - Too much spending power causes inflation
 - Too little spending power causes unemployment and recessions

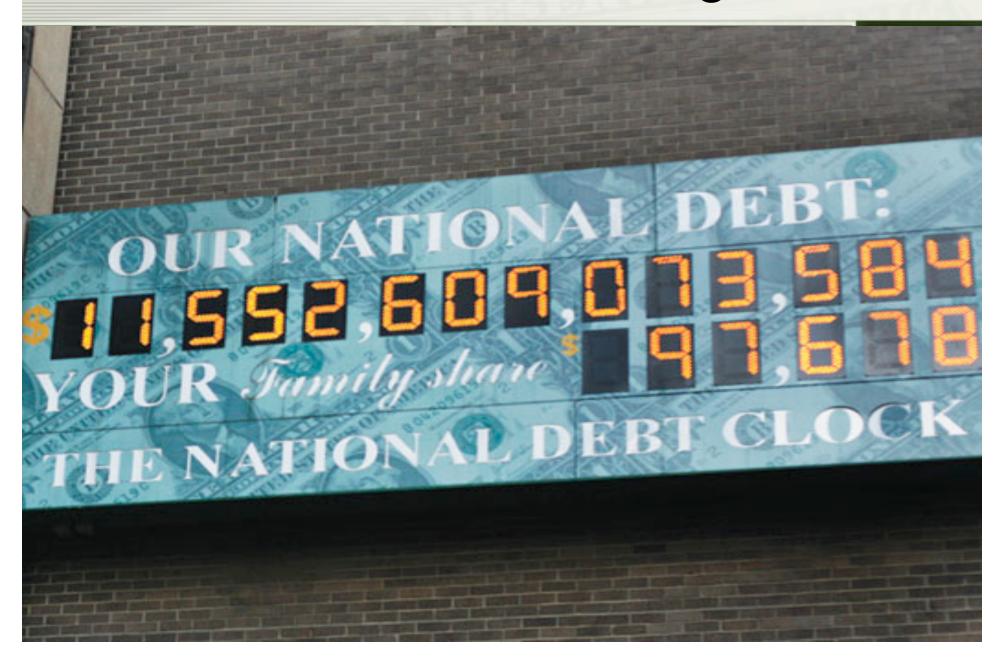
What About Bond Sales?

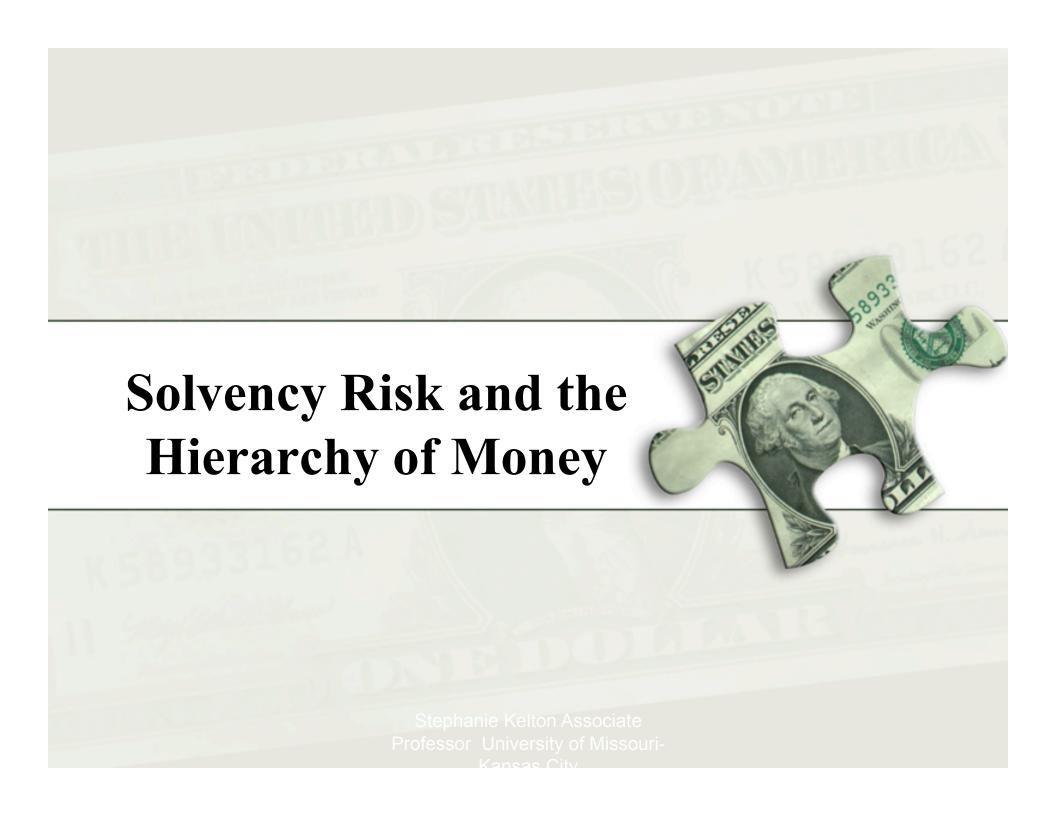
- Doesn't the government have to "borrow" to cover any shortfall (deficit)?
- And isn't there some limit a "tipping point" to the amount of money it can safely borrow?
- What if the interest payments become "too big"?
- What if **foreigners** (China) decide to stop buying US government securities?

What are Government Bonds?

- Nothing more than a savings account at the Fed
- You part with dollars **today** and receive your dollars plus interest at a **future** date
- When the government sells bonds, funds are moved from checking accounts (used to purchase the bonds) into "savings accounts" (called Treasury securities)
- As bonds mature, the 'debt' is paid as the Fed shifts the dollar balances from the savings accounts at the Fed (Treasury securities) back into the checking accounts at the Fed (reserve accounts)

The World US Dollar Saving Account





Can the Government Run Out of Money?

- The US Government Cannot Run out of Money any more than Yankee Stadium can run out of points!
- As Bernanke explained to Scott Pelley on '60 Minutes' in 2009:

(PELLEY): Is that tax money that the Fed is spending?

(BERNANKE): It's not tax money. The banks have—accounts with the Fed, much the same way that you have an account in a commercial bank. So, to lend to a bank, we simply use the computer to mark up the size of the account that they have with the Fed.

No Solvency Risk for Sovereign Issuers of Non-Convertible Currencies



"[A] government cannot become insolvent with respect to obligations in its own currency. A **fiat money system**, like the ones we have today, can produce such claims **without limit**.

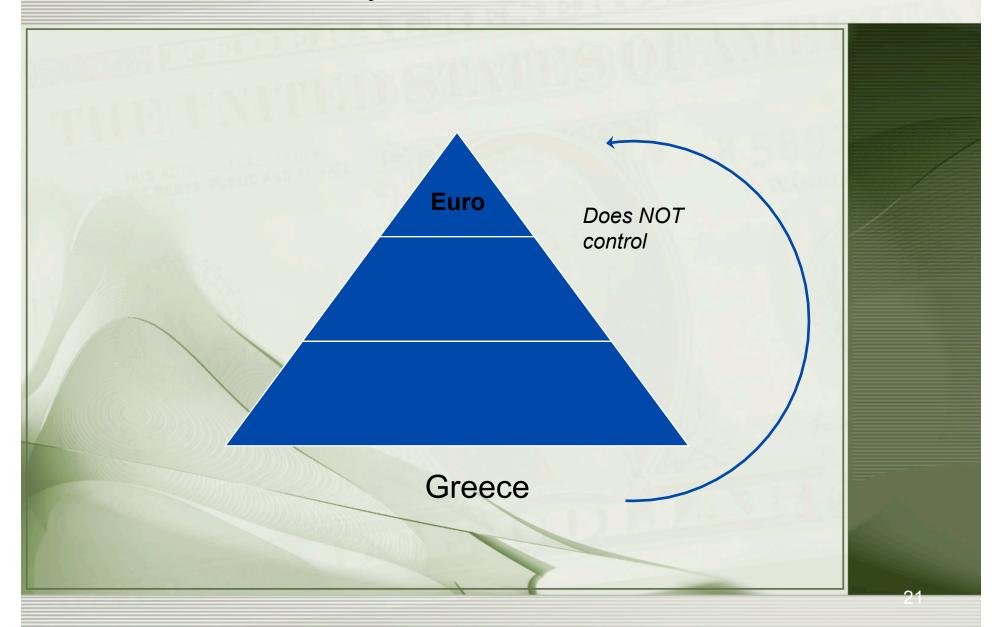
Then Why are the PIIGS in Trouble?

- If governments can simply create money, then why can't Greece get a loan?
- All 16 members of the EMU gave up their sovereign currencies in order to use the **stateless** currency known as the euro
- This means that default risk (i.e. solvency) is a legitimate issue
- Every one of these governments could default on their debts if they are unable to raise enough money by taxing or borrowing from those who already **have** euros

They are All *Users* of the Currency

	GREECE	SPAIN	FRANCE	ITALY	CALIFORNIA	ILLINOIS	NEW YORK	NEW JERSEY	TEXAS
	A2	Aaa	Aaa	Aa2	Baa1	A2	Aa3	Aa3	Aa1
POPULATION	11.1 Mln	45.6 Mln	62.6 Mln	58.1 Mln	36.9 Mln	12.9 Mln	19.5 Mln	8.7 Mln	24.8 Mln
NOMINALGDP	\$342.3 Bln	\$1,463 Bln	\$2,634 Bln	\$2,090 Bln	\$1,850 Bln	\$633.7 Bln	\$1,144.5 Bln	\$475 Bln	\$1,224 Bln
GDP PER CAPITA	\$30,219	\$31,016	\$42,091	\$34,954	\$42,696	\$49,124	\$58,692	\$50,919	\$38,575
GOV. DEBT	\$377.5 Bln	\$931.1 Bln	\$2,000 Bln	\$2,333 Bln	\$89.0 Bln	\$24.2 Bln	\$56.9 Bln	\$31.0 Bln	\$12.6 Bln
DEBT/GDP	108.00%	62.30%	76.70%	112.80%	4.81%	3.82%	4.97%	6.53%	1.03%
DEBT / REVS	273%	167%	162%	240%	101%	89.3%	72.9%	108.4%	13.85%
DEBT/CAPITA	\$33,407	\$19,795	\$31,949	\$40,103	\$2,412	\$1,876	\$2,918	\$3,563	\$508
DEFICIT	\$21.4 Bln	\$174.8 Bln	\$183.6 Bln	\$115.8 Bln	\$18.9 Bln	\$17.8 Bln	\$11.4 Bln	\$12.2 Bln	\$0.00
DEFICIT/GDP	6.40%	12.27%	7.03%	5.60%	1.08%	2.81%	1.00%	2.57%	0.00%
UNEMPLOYMENT	9.70%	20.50%	9.50%	9.10%	13.20%	12.20%	9.40%	9.70%	7.50%

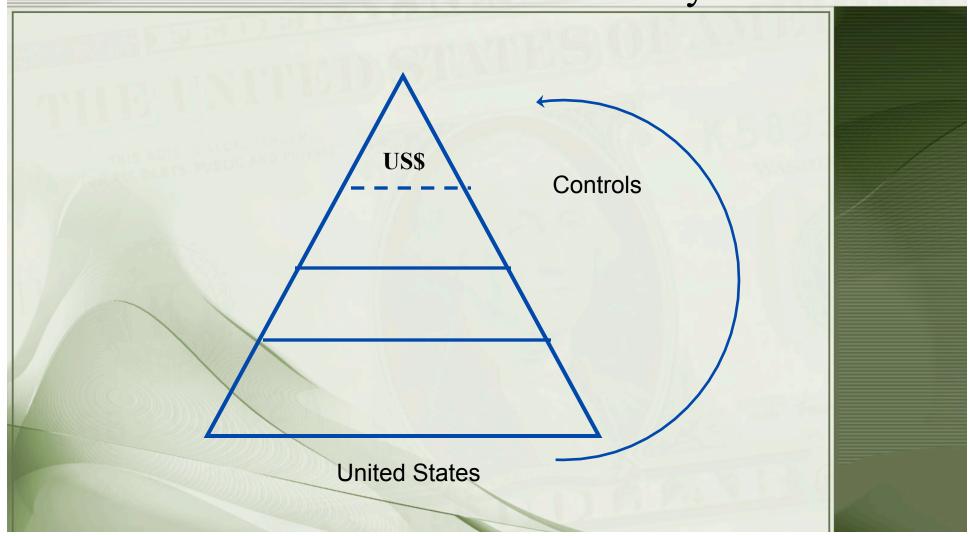
The Hierarchy for a Member of Euroland



Similar Problems Arise with 'Convertible' Currencies

- The euro is a fiat currency, but it is not sovereign
 - Governments that use it cannot create it at will
 - This makes Euroland governments users of the currency and exposes them to default risk
- There were also crises in Mexico (1995), Southeast Asia (1997) and Russia (1998)
- In each of these cases, governments had their own currencies, but they pledged to convert them, at a fixed price, into another nation's currency
- As a result, they became **users** of their own currencies

The US Can Control its Currency ... and its Economic Destiny



There is no REVENUE constraint for government's that control the money that sits at the top of the hierarchy

Concluding Lesson

- Governments that control their own currencies can exercise great power
 - Coordinate Fiscal and Monetary Operations
 - Don't Have to Let Financial Markets Dictate Terms
 - Can Spend First and Borrow (or not) Later
 - Can "Afford" Anything for Sale in Domestic Unit of Account
- With great power comes great responsibility
- As early as 1964, Minsky encouraged the US to reclaim its hierarchy by abandoning the Bretton Woods System
- Only then would it be possible to stabilize our unstable economy