Using Visual Metaphors

Bypassing words to reach understanding

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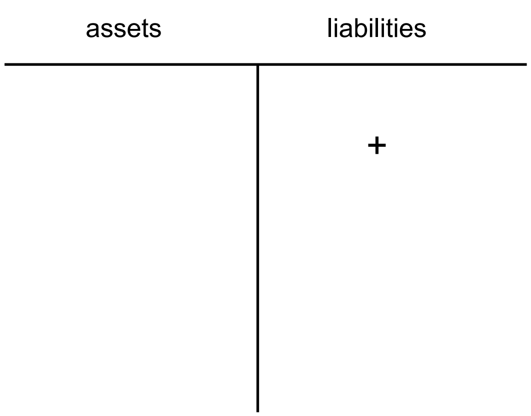
MR. BENNET
MR. MERKLEY

Topic: the government* doesn't need to finance spending

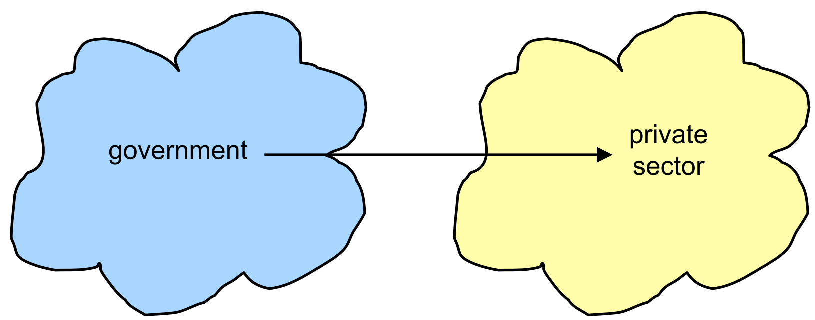
A. Spending is liability creation, a balance sheet metaphor

B. Adding/removing reserves to/from the private sector creates/destroys money

A.



B.



*the US government and other governments with sovereign fiat currencies and floating exchange rates. Examples will use "government" to mean the US government.

Metaphor A: T-accounts

- T-accounts, which compare assets and liabilities, are a metaphor similar to scales
- They compare relative amounts and the net difference between two items

assets	liabilities
	+

The government doesn’t have to finance its spending.

The government spends by creating a liability

Government

Banks

Households and businesses

	Government assets	Government liabilities	Banks assets	Banks liabilities	Households and businesses assets	Households and businesses liabilities
Govt deficit spending:		+ Federal Reserve credit to bank	Reserve balance at the Fed +	+ Customer demand deposit	Deposit at bank +	

- Spending creates a liability.
- This is normal government operations, not particular to “quantitative easing” or “printing money”.
- It doesn’t sell bonds or collect taxes before it spends, it simply spends.
- Deficit spending is by definition spending more than tax revenue collected during a given period. This spending is not necessarily “financed” by bonds in advance.
- Spending adds reserves to the private sector (including banks and households and businesses).

The government doesn't have to finance its spending.

The government spends by creating a liability

	Government: assets	Government: liabilities	Banks: assets	Banks: liabilities	Households and businesses: assets	Households and businesses: liabilities
Govt deficit spending:		+ Federal Reserve credit to bank	Reserve balance at the Fed +	+ Customer demand deposit	Deposit at bank +	
Taxes collected:		-	-	-	-	

- When the government collects taxes, the process reverses the balance sheet entries, lowering the business' deposit amount, the associated assets and liabilities at the bank, and reduces the amount of the government liability outstanding

The government doesn’t have to finance its spending.

The government spends by creating a liability

Government

Treasury

Federal Reserve

Private Sector

Banks

Households and businesses

	Treasury assets	Treasury liabilities	Federal Reserve assets	Federal Reserve liabilities	Banks assets	Banks liabilities	Households and businesses assets	Households and businesses liabilities
Govt deficit spending:	Balance at Fed –	nets out		– Treasury balance + Federal Reserve credit to bank	Reserve balance at the Fed +	+ Customer demand deposit	Deposit at bank +	

- Dividing the government into the Treasury and the Fed still results in a net liability being created by the government. Intra-government accounting nets to zero.
- The bank assets and liabilities resulting from the government spending are of equal amounts and also net to zero.
- In summary, government spending creates a net liability in the government sector and a net asset in the private sector (banks and households and businesses together).

The government doesn't have to finance its spending.

Spending creates money, taxation destroys it.

assets	liabilities
Reserve balance at the Fed +	

- There isn't usually much "printing" when "printing money".
- Fed Reserves balances as inter-bank currency: banks don't settle with paper money, they credit and debit Federal Reserve balances

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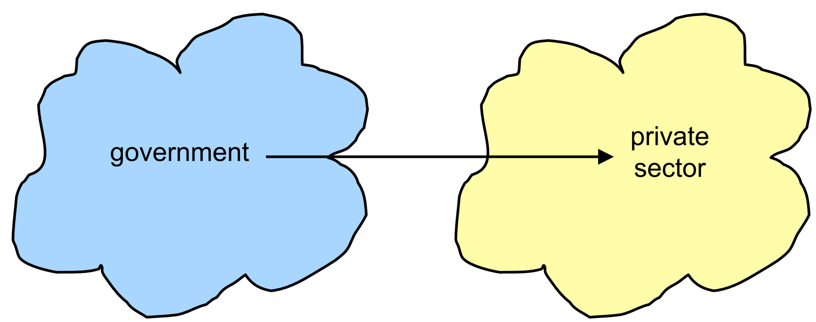
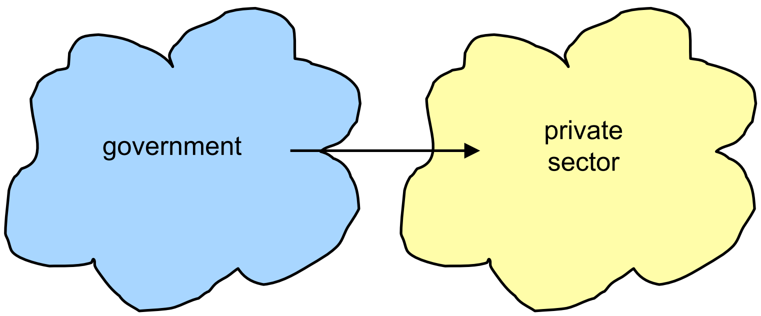


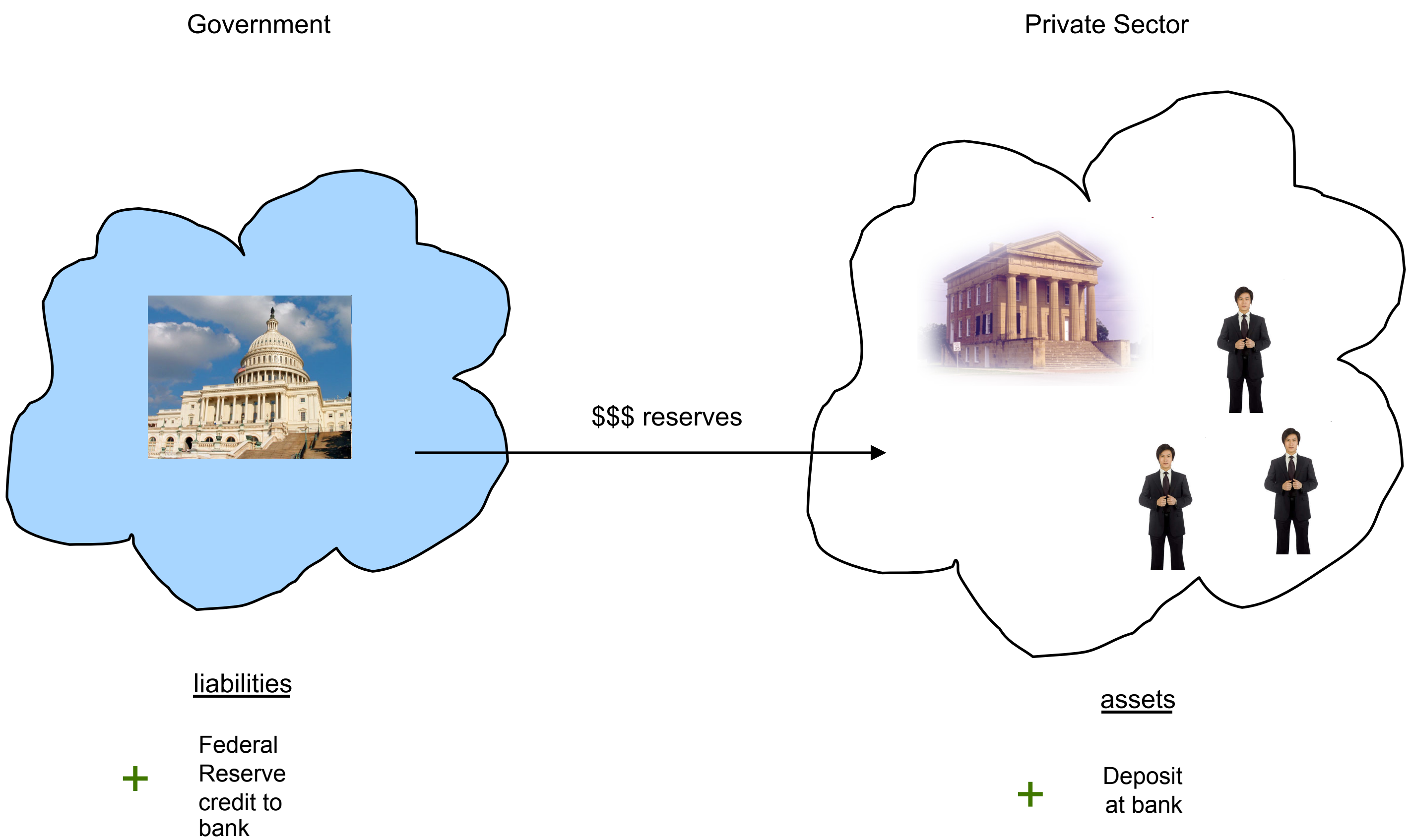
Metaphor B: sectors

- Sector diagrams are similar to enclosed parcels of land
- They are separated, mutually exclusive zones.



The government doesn’t have to finance its spending.

Spending creates money, taxation destroys it.



- Government spending adds reserves to the private sector, in the form of a Federal Reserve credit, which an individual or business sees as a demand deposit balance.
- Taxation reduces the reserves in the private sector. Paying taxes reduces a private sector entity’s balance and reduce the government’s liability, aka high powered money.

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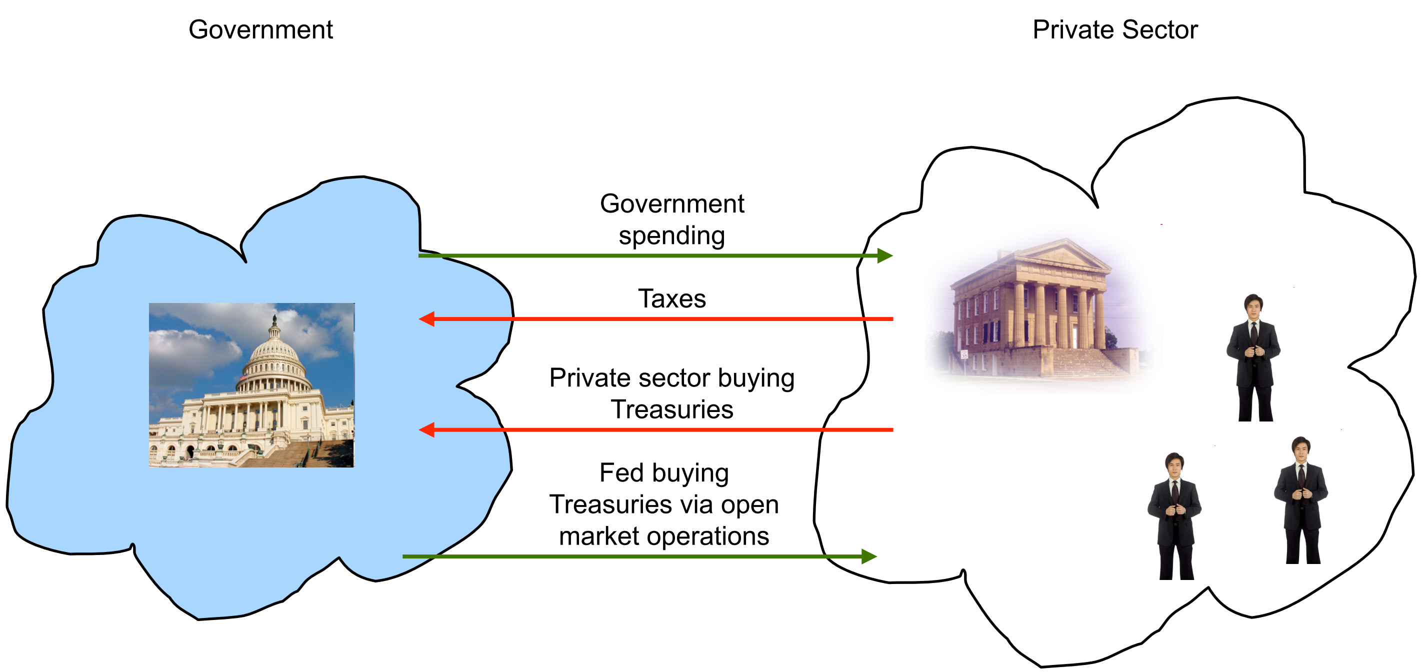
Spending creates money, taxation destroys it.



- Sources of changes in reserve amounts
- Only transactions with the government can insert or remove reserves from the private sector. That is, the government controls the mechanisms for adjusting the amount of reserves in the system.

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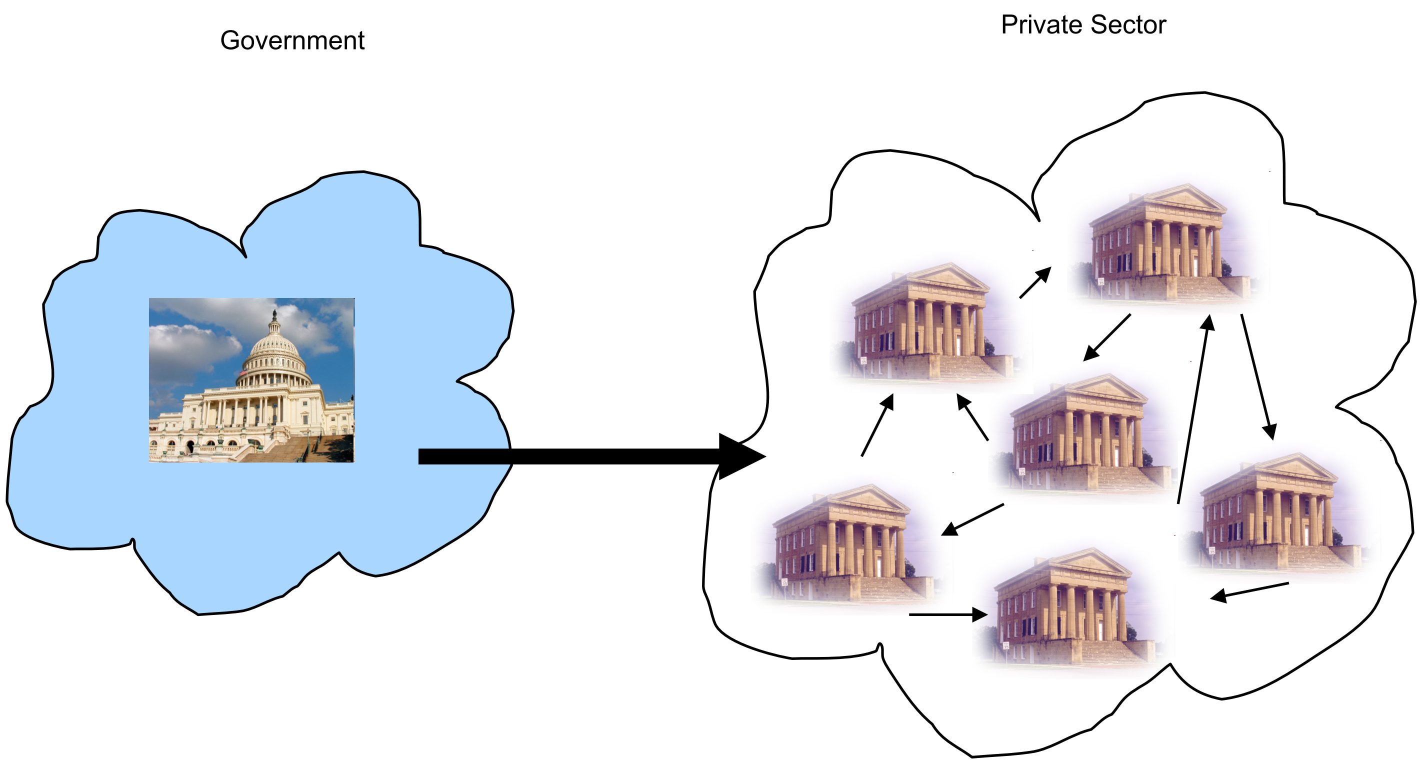

- Only the government can add new money to the private sector
- Banks can lend and borrow among themselves, but no new money is created in aggregate: liabilities and assets net out.

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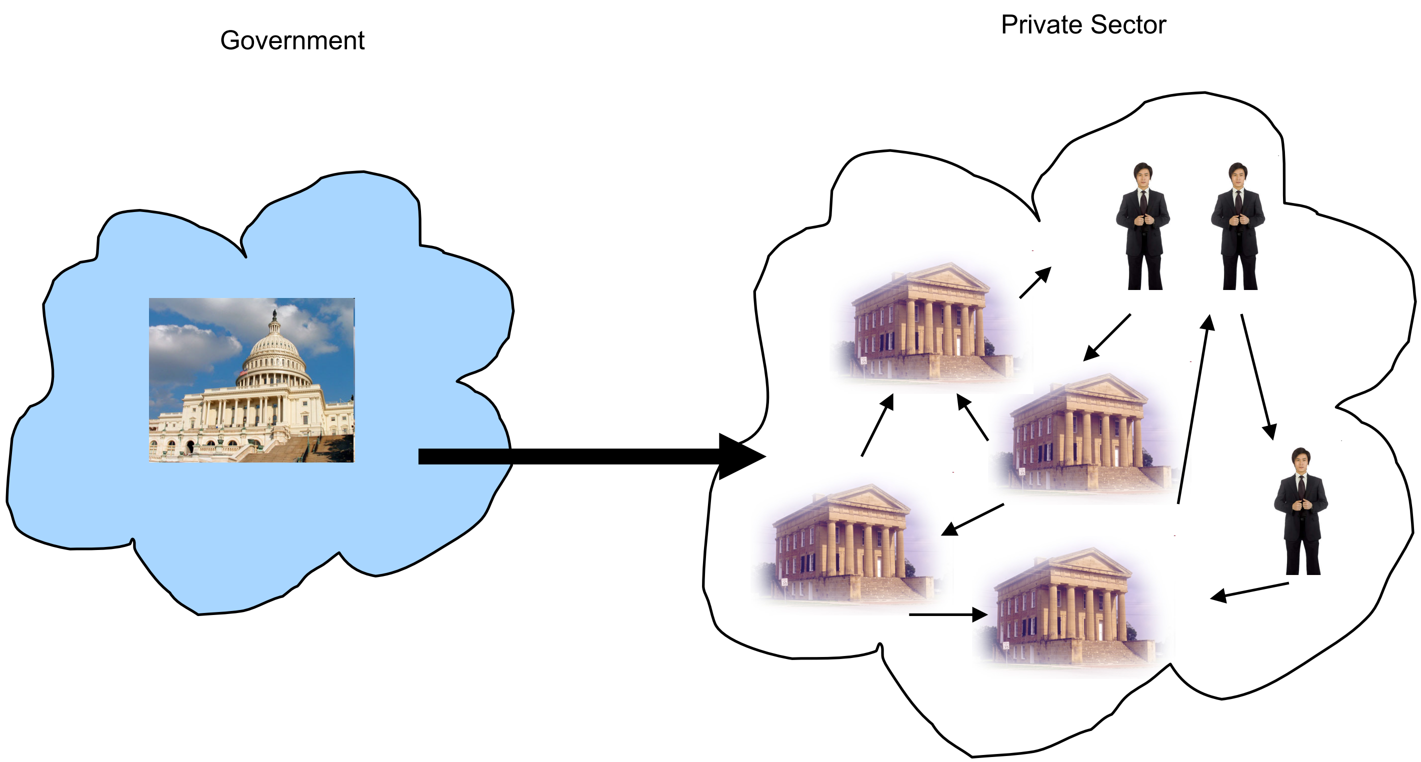

- Government money is different from private sector credit. Banks create credit when they lend but lending and borrowing activities don't increase the amount of government money in the system. However, demand for loans can increase the amount of reserves required by the private sector, which is accommodated by the Fed.
- Private sector money doesn't leave the private sector. The government doesn't "spend" private sector credit.

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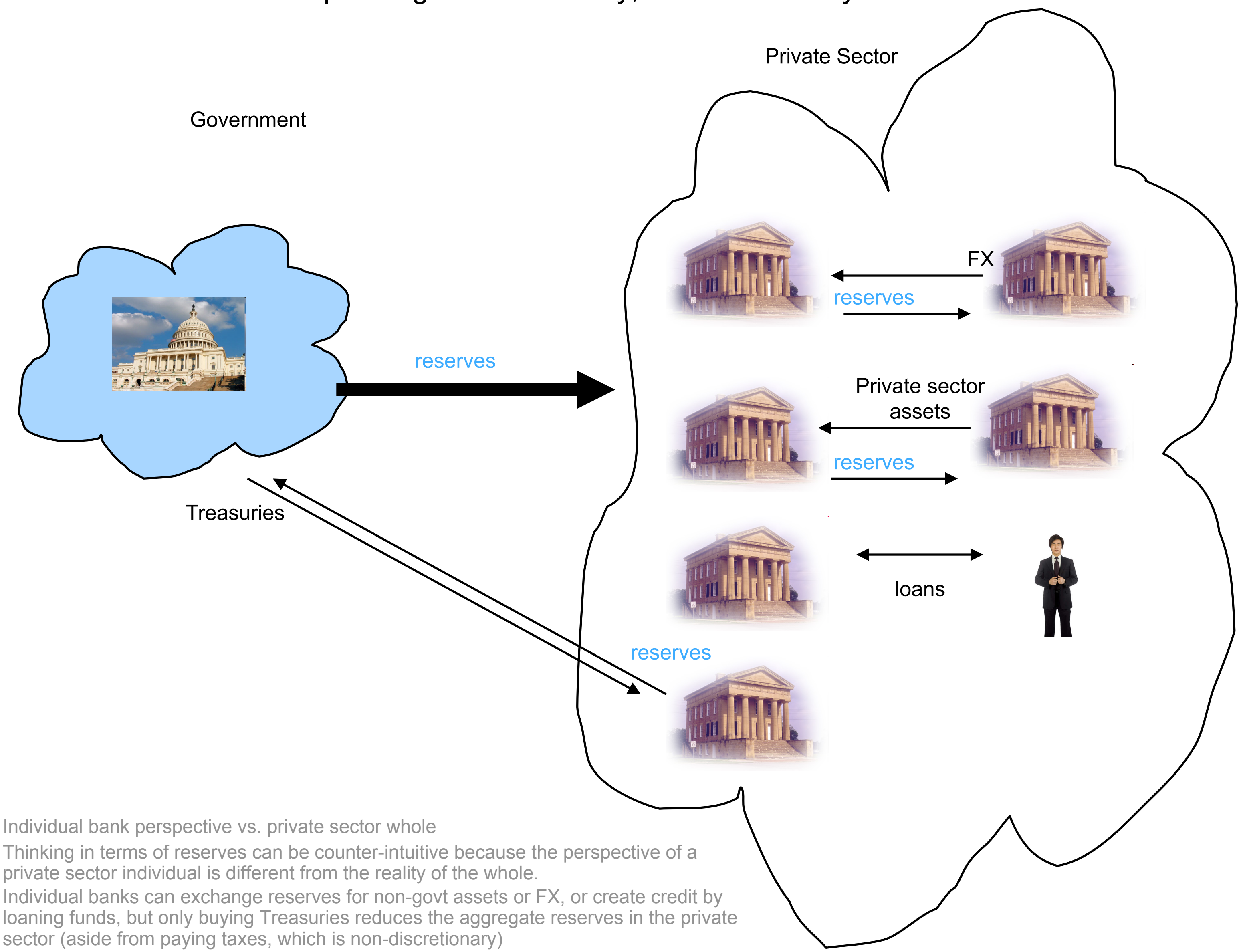


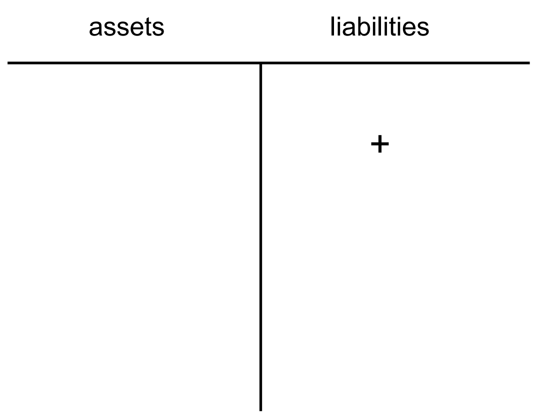
- Individual bank perspective vs. private sector whole
- Thinking in terms of reserves can be counter-intuitive because the perspective of a private sector individual is different from the reality of the whole.
- Individual banks can exchange reserves for non-govt assets or FX, or create credit by loaning funds, but only buying Treasuries reduces the aggregate reserves in the private sector (aside from paying taxes, which is non-discretionary)

Conclusion

T-accounts and sector metaphors emphasize two different concepts central to Modern Money Theory and Functional Finance:

- liability creation and
- government money vs. private sector credit

A.



B.