

OUTLINE — November 6, 2019

- Overview of Policy
 - Contractionary and Expansionary Policy
 - Monetary and Fiscal Policy
- Fiscal Policy
 - Effect on GDP in the short run
 - Deficits and Debt
 - Concerns regarding deficit spending

Midterm #2 is tonight

(if that's news, we should talk...)

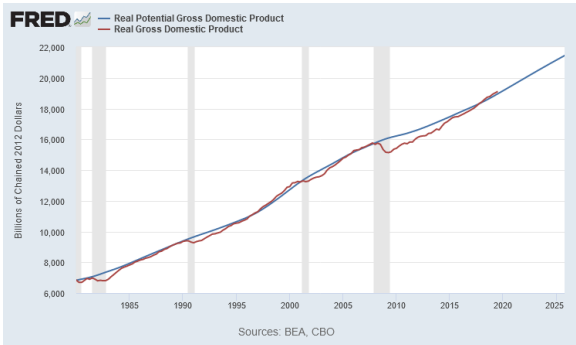
MT #2 reflection will be due on bCourses by 11/13 7 pm

Review: PPF & AD

- Productivity & supply of inputs ("supply side")
 - Determine location of PPF; determines Y_{FE}
- Aggregate demand ("demand side")
 - Determines whether economy is on its PPF; determines Y_E
- $Y_E = Y_{FE}$?
 - Economy is on its PPF
- $Y_E < Y_{FE}$?
 - Economy is inside its PPF

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Potential (Y_{FE}) & Actual (Y_E) GDP



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How close an output gap?

- Any initial increase in AD will help close an output gap
 - C
 - I
 - G
 - EX
 - IM
- And the initial increase in AD will kick off multiplier process
 - Total $\Delta Y =$

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Three types of policy

| Monetary Policy | Fiscal Policy | Credit Policy |
|--|---|---|
| Federal Reserve (Fed) Interest rates & money supply | Congress & President G, TR, and TA | Combination of Fed & Congress Policies & laws relating to mortgage and consumer credit: <i>Availability, marketing, consequences of default</i> |

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Direct, Indirect, Expansionary, Contractionary.

| | |
|--|--|
| <ul style="list-style-type: none"> ▪ Direct Policy <ul style="list-style-type: none"> ▪ Directly changes some component of AD ▪ Expansionary Policy <ul style="list-style-type: none"> ▪ Increases (expands) GDP | <ul style="list-style-type: none"> ▪ Indirect Policy <ul style="list-style-type: none"> ▪ Changes some other economic variable, which eventually changes AD ▪ Contractionary Policy <ul style="list-style-type: none"> ▪ Decreases (contracts) GDP |
|--|--|

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Monetary Policy Overview

Conducted by the Federal Reserve

- U.S. central bank established in 1913
- Headquarters in Washington DC
- Board of Governors
- 12 regional Federal Reserve Banks

The Twelve Federal Reserve Districts

Addresses and phone numbers
Banks
Branches

San Francisco
New York
Philadelphia
Cleveland
Richmond
Atlanta
Chicago
St. Louis
Minneapolis
Kansas City
Dallas
San Francisco Board

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The Fed

- Federal Reserve Board (7 people)
 - Chairman Jerome Powell
 - 6 additional members of the board
 - All appointed by the President & approved by US Senate
 - 14 year terms, to limit political influence

- Fed's Mission – a “dual mandate”
 1. Maximum **employment**
 2. Stable **prices**

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Monetary Policy

- **Who:** Federal Open Market Committee (FOMC)
- **What:** Changes in interest rates & money supply
- **How:** Majority decision of the 12 members of the FOMC (7 members of the Federal Reserve Board, President of the Federal Reserve Bank of New York, and 4 other Federal Reserve Bank presidents)

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Monetary Policy

| | Contractionary Policy | Expansionary Policy |
|-----------------|-----------------------|---------------------|
| Indirect Policy | | |
| Direct Policy | | |

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Fiscal Policy

- **Who:** Congress with the approval of the President
- **What:** Changes in G, TR, and TA
- **How:** Bills approved in committee, passed by both houses of Congress, (perhaps then a compromise bill to reconcile differences between the Senate & House versions), then signed into law by the President



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Fiscal Policy

| | Contractionary Policy | Expansionary Policy |
|-----------------|-----------------------|---------------------|
| Indirect Policy | | |
| Direct Policy | | |

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How gov't spends money matters!

Suppose spending multiplier = 4

Direct Policy Action

Suppose $\Delta G = 50$

So, initial Δ spending =
and $\Delta Y_E =$

Indirect Policy Action

Suppose $\Delta TR = 50$

So, initial Δ spending =

and $\Delta Y_E =$

Government spending has a greater effect on GDP than do changes in taxes or transfer payments

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Assuming what . . .

- Step 1 of multiplier process is initial change in AD
 - ΔG
 - ΔTR
 - ΔTA

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Who gets their taxes cut matters!

Suppose mpc of high income = 0.3, mpc of all others = 0.8

Cut taxes of high income by \$1 trillion per year

Suppose $\Delta TA = -1,000$

$\Delta YD =$
initial Δ spending =
and $\Delta Y_E =$

Cut taxes of everyone else by \$1 trillion per year

Suppose $\Delta TA = -1,000$

$\Delta YD =$
initial Δ spending =
and $\Delta Y_E =$

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Deficits and Debt

- **Budget Deficit or Budget Surplus**
 - If, in one year, $G + TR > TA$: **budget deficit**
 - If, in one year, $TA > G + TR$: **budget surplus**
 - $G + TR =$ Government outlays
 - $TA =$ Government receipts
- **Government debt**
 - Cumulative total, since 1790, of annual budget deficits minus annual budget surpluses
 - Government borrows by issuing IOUs: government bonds

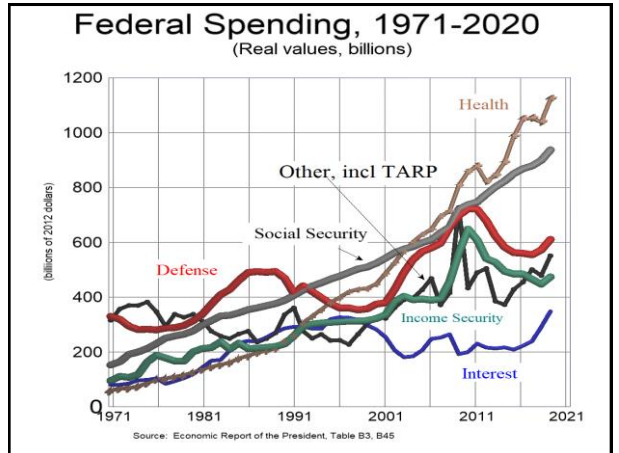
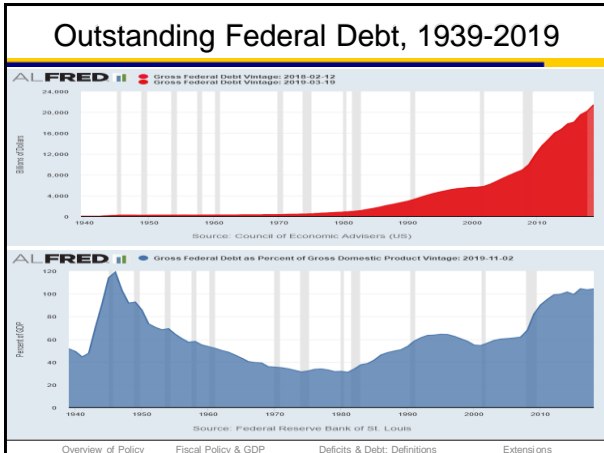
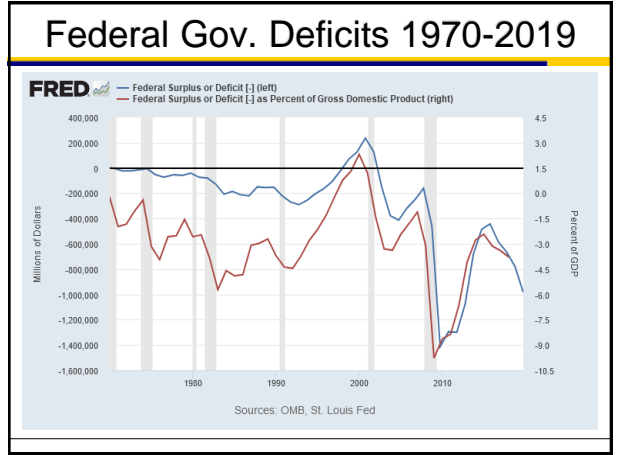
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Fiscal Policy Effect on Deficit

- Expansionary fiscal policy

- Contractionary fiscal policy

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Fiscal policy & Output gap

- If we are trying to close an output gap, fiscal policy should be expansionary
 - That is, increase budget deficit this year relative to last year
- **But!** If there is no output gap, expansionary fiscal policy may be *too* expansionary
 - Does fiscal policy affect PPF? Or just affect AD?
 - Pushing economy beyond PPF can trigger inflation

Overview of Policy Fiscal Policy & GDP **Deficits & Debt: Definitions** Extensions

Fiscal Policy Complications

- This is summary slide
- Concerns
 - Temporary vs. permanent fiscal stimulus
 - Are we shifting only AD, or AD & PPF?
 - Structural vs. cyclical deficit
 - How does government pay its bills when run a deficit?
 - Hint: By borrowing
 - Impact on interest rates
 - "Crowding out" of investment?

Fiscal Policy: Effect on GDP Deficits & Debt: Definitions **Deficits & Debt: Concerns**

Automatic vs Discretionary Policy

Automatic stabilizers

- Changes in TA & TR **automatically** caused by recession (or recovery)
- Example
 - Recession makes TA fall & TR grow
- Effect
 - Recession → Deficit grows

*Leaving this to the book
(read the book!)*

Discretionary fiscal policy

- Congressional **decisions** to fight recession
- Example
 - ARRA of 2009
- Effect
 - Discretionary fiscal policy to fight a recession → Deficit grows

Fiscal Policy: Effect on GDP Deficits & Debt: Definitions **Deficits & Debt: Concerns**

Temporary or Permanent Stimulus

- "Priming the pump"
 - A process of getting water flowing in a pump, and then the water *just keeps on flowing (even after the "priming" stops)*
- Does Government spending "prime the pump?"
 - What process keeps aggregate demand high after temporary increase in G ends?



Fiscal Policy: Effect on GDP Deficits & Debt: Definitions **Deficits & Debt: Concerns**

Are we shifting only AD, or AD & PPF?

- To shift PPF, need more inputs or higher productivity
- Some fiscal policy can shift both AD & PPF
 - Example: infrastructure spending
- But much fiscal policy shifts only AD
 - Example: tax cuts, transfer payments, some types of G
- When $Y_E < Y_{FE}$, expansionary fiscal policy helps close the output gap
- When $Y_E = Y_{FE}$ already, expansionary fiscal policy pushes economy beyond PPF
 - $Y_E > Y_{FE}$ typically leads to problems with inflation

Review Questions Deficits & Debt: Concerns Overview: Monetary policy Banks, Money, Interest Rates

Structural vs Cyclical Deficit

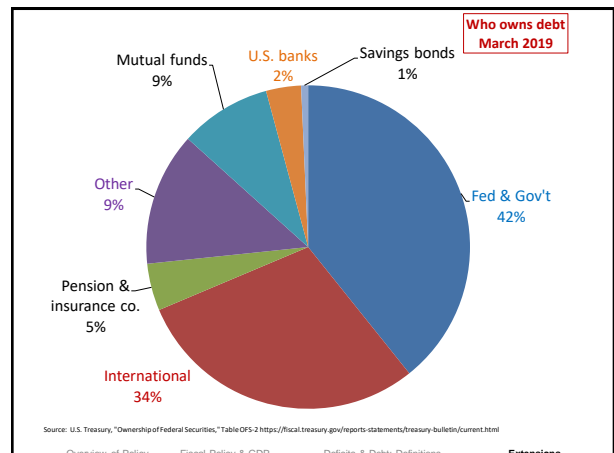
- A counterfactual question: How big would the deficit be if the economy were at full employment (eg, 4%)?
- How much larger is the actual deficit when unemployment is above full employment rate of 4 percent?
- It is problematic (many say) when the structural deficit > 0

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How pay bills when run a deficit?

- Federal government does **not** "print money" to pay its bills
 - Deficit? **Federal government borrows**
 - Annual borrowing = $(G + TR) - TA$
 - Borrow by issuing "Treasuries" = I.O.U. from government
 - "Maturity" = how many months/years until fully repaid
 - Bills: Called "T-Bills"; Short-term, mature in 1 year or less
 - Notes: Mature in 2 to 10 years
 - Bonds: Long-term, mature in 20 to 30 years
- Who lends?
 - Everyone (see pie chart from Nov. 8)

Review Questions Deficits & Debt: Concerns Overview: Monetary policy Banks, Money, Interest Rates



Concern: Impact on Interest Rates

- Market for loanable funds



- *But ... Are assumptions of model valid in this case?*

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What if Supply changes too?

- Market for loanable funds



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