#### 180.101 Elements of Macro - TA Section - Week 15

Qingyuan Fang

qfang6@jh.edu

Slides on https://github.com/QingyuanFang/TA\_ElementsOfMacro

Dec 2nd, 2024

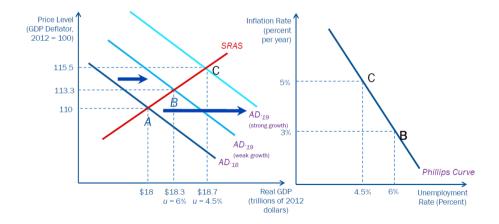
### Connection between AD-AS Model and Other Models

 $\bullet$  AD curve  $\leftrightarrow$  AE model

AD-AS model

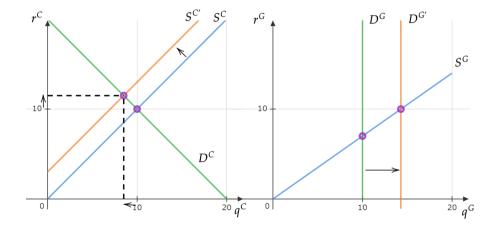
- ◆ AS surve ↔ Phillips curve
- AD-AS model and the loanable funds model
  - Government building infrastructure
  - Fed monetary easing

## Phillips Curvce and Aggregate Supply Curve

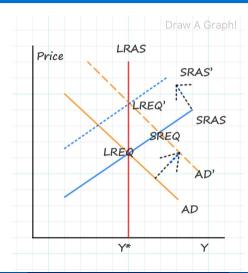


### Government Builds Infrastructure

0000



# Fed Monetary Easing



#### Debt and Deficit

- **Deficit/Surplus**: Government spending Government revenue. This is a **flow** concept.
- **Debt**: The cumulative amount of deficits over the years is what the government owes to its investors. This is a **stock** concept.

### Fiscal Policy v.s. Monetary Policy

- Organization
  - FP: Treasury
  - MP: The Central Bank
- Relationship with the government
  - FP: Always part of it
  - MP: Can be super-national (ECB), or can be legally independent from the administrative branch, i.e. Federal Reserve Bank system, or even private owned, i.e. Bank of England until nationalization in 1946, or part of the government like in most developing countries
- Objectives
  - Shared: managing AD
  - FP: Balancing government budget, wealth redistribution through tax
  - MP: Stable price level, low unemployment, stable value of currency
- Tools
  - FP: Tax, government purchases, transfers
  - MP: Interest rate, money supply

# Fiscal Policy v.s. Monetary Policy (Continued)

- Mechanism via which it affects AD
  - FP: Higher government spending directly increases AD; Income tax cut increases disposible income of households, thus increases C: Investment tax credits increase I
  - MP: Expansionary MP makes it easier to borrow by firms, thus increases *I*. It also makes it less attractive to save money, thus increases *C*.
- Notes
  - FP: The implementation takes time. More discretionary.
  - MP: Timely and responsive. Tend to be more rule-based.

### The Limits of Fiscal Policy

- Future tax increases  $(G \uparrow, C \downarrow)$ 
  - Debt needs to be re-payed at some point. If households fear that an increase in fiscal stimulus now will result in higher taxes in the future, they will save accordingly. As a result, they spend less of the money than we would like.
  - Note, that this depends heavily on liquidity constraints. If someone needs the money for
    consumption today, they will spend it, even though taxes might increase in the future.
    Therefore, stimulus checks have been targeted to the poorer households who have the highest
    MPCs.
- Crowding out effect  $(G \uparrow, I \downarrow)$

## Quick Recap - TA Sections

#### **Download:** https://github.com/QingyuanFang/TA\_ElementsOfMacro

- Growth accounting, compounding growth, annualized growth rate, slope
- PPF, opportunity cost, absolute & comparative advantage, terms of trade
- Obemand and supply, market equilibrium, GDP (& other measures)
- Labor force statistics
- Nominal vs real, inflation (CPI, deflator), LTSG
- Aggregate expenditure model, unintended change in inventories, multipliers
- Fisher equation, bond (price, coupon, yield), infer market expectations, Phillips curve
- (Extended) loanable fund model
- Quantity theory of money, Taylor rule, extended loanable fund model
- AD AS model
- Fiscal policy

