

OUTLINE — October 24, 2018

- Consumption Spending & Its Determinants
 - Saving
 - Consumption Spending Depends upon . . .
- Multiplier
- Closing an Output Gap

PS 3 due 10/31-11/1 in section
bCourses quiz due Tues 10/23 11:59 pm
Midterm 2 on Tues., Nov 6, 8-9:30 pm

Definitions: Consumption & Saving

- **Consumption**
 - Household (and nonprofit organizations) spending for final goods and services
- **Saving**
 - Any use of disposable income other than consumption

- **Saving rate**

Consumption Spending Multiplier Process Closing an Output Gap Multiplier Formula

Personal Saving Rate, 1950-2018



Consumption Spending

- C depends upon
 - YD
 - wealth
 - interest rates (i)
 - credit availability
 - expectations

Consumption Spending Multiplier Process Closing an Output Gap Multiplier Formula

Marginal Propensity to Consume

- $mpc =$
- For the economy as a whole, $mpc < 1$
- $\Delta C =$

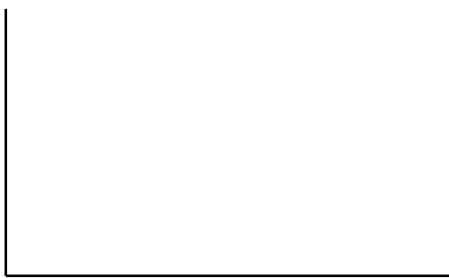
Consumption Spending Multiplier Process Closing an Output Gap Multiplier Formula

Consumption Spending

- $C = f(YD, \text{wealth}, i, \text{credit availability}, \text{expectations})$
- But can only graph in 2 dimensions . . .

Unemployment Inflation Macro Equilibrium **Consumption**

Macro Equilibrium ($Y=AD$)



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Changes in Equilibrium

What happens to equilibrium output (Y_E) if planned spending increases initially by 100?

Any initial Δ spending results in a much larger ΔY_E because

- 1) Δ spending $\rightarrow \Delta$ output
- 2) Δ output $\rightarrow \Delta Y$
- 3) $\Delta Y \rightarrow \Delta YD \rightarrow \Delta C$

Definition of size of multiplier:

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Closing an Output Gap

- Suppose
 - $Y_{FE} = \$15$ trillion / year
 - $Y_E = \$14$ trillion / year
 How big is the output gap?
- Closing an output gap requires an increase in AD
 To close the gap, how big must the initial increase in AD be?

Consumption Spending Multiplier Process Closing an Output Gap Multiplier Formula

Step 2: Allocate your monthly C

	Category	Spending
1	Housing (rent or mortgage)	
2	Food (prepared/eaten at home)	
3	Eating out & travel	
4	Car / bus / Bart (including gas & insurance)	
5	Other durable goods (electronics, appliances)	
6	Shopping! (big box stores, department stores, etc)	
7	Health care (including health insurance premium)	
8	Education	
9	Bank fees, brokerage fees, lawyers, fees, etc	
Total = \$ for consumption spending on your B&G		

Which items are likely to be imports?
 Put an asterisk next to or circle those amounts

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Multiplier Process

- On your B&G sheet
 - Your occupation & industry
 - Monthly Disposable Income ($Y+TR-TA$) & Consumption

Step 1: Calculate your monthly Saving

Step 2: Allocate your monthly Consumption across spending categories

Step 3: Listen . . . Be ready to think about how your consumption changes

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When someone is unemployed...

- Their income (Y) drops to 0
- They *may* receive unemployment benefits (part of TR)
 - Construction workers – probably not
 - Religious workers – almost surely not
 - Self-employed workers – definitely not
- Unemployment benefits replace $< \frac{1}{2}$ of income
 - Max weekly benefit varies by state (\$450 in CA, \$240 in AZ, etc)
 - Number of weeks varies by state (26 in CA & AZ, 12 in FL)
- Therefore, to keep C constant requires dis-saving
 - Drawing down savings (how much were you saving per month?)
 - Going into debt (but remember . . . you have to pay that back)
- Alternative: cut C when lose your job

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Unemployment Insurance (a TR)

- Replacement rate (benefits as % of usual wage)
 - U.S. average: 46% replacement rate
 - Most generous (52-57% replacement): HI, PA, ND, KS, NJ
 - California: right at national average
 - Least generous (31-42% replacement): AK, LA, IL, TN, MO
- Length:
 - Standard = 26 weeks
 - Some states fewer weeks
 - Federal extensions to 99 weeks post-2009 but that bill has expired
- Data: calendar year 2016
- Original source: https://ows.doleta.gov/unemploy/repl_ratio/repl_ratio_rpt.asp

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Step 3: An event!

- Listen for the event
 - Does the event affect you?
 - What's your occupation & industry?
 - How will you react?
 - Is your income rising or falling?
 - Will you increase your C? Decrease C? Keep it the same?
 - Which components of spending will you change?
 - Be ready with your answer!

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