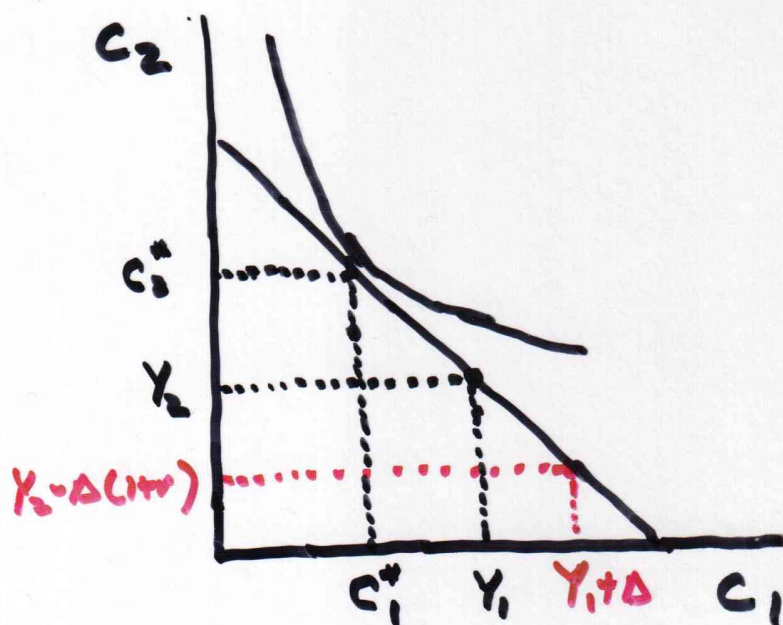


## Topics for Today

- 1.) The Effects of Fiscal Policy
- 2.) Ricardian Equivalence
- 3.) Govt. Spending + the Current Acct.
- 4.) Stochastic Infinite Horizon Models of the Current Acct. (Separate Slides)

# The Effects of Fiscal Policy

- When studying the effects of fiscal policy it is useful to distinguish between the effects of government spending (i.e., changes in  $G$ ), and the effects of how a given amount of spending is financed (i.e., changes in taxes)
- Under certain conditions, changes in the timing of taxes are irrelevant. This irrelevancy proposition is known as Ricardian Equivalence
- Suppose taxes decrease by  $\Delta$   
 $\Rightarrow$  Future taxes must increase by  $(1+r)\Delta$



The tax cut just shifts the household's (after-tax) endowment to the lower right. It doesn't change the budget constraint itself, and so therefore, doesn't change the household's choices.

# Ricardian Equivalence

R  
Ricardian Equiv.  $\equiv$  Government's Intertemporal Budget Constraint  
+ Fisherian Model of Consumption

Govt. Intertemporal Budget

$$G_1 + \frac{G_2}{1+r} = T_1 + \frac{T_2}{1+r}$$

Consumers Budget Constraint

$$C_1 + \frac{C_2}{1+r} = Y_1 - T_1 + \frac{Y_2 - T_2}{1+r}$$

$$= Y_1 + \frac{Y_2}{1+r} - \left( T_1 + \frac{T_2}{1+r} \right)$$

PV of Govt. Spend;

Note,  $T_1 + \frac{T_2}{1+r}$  doesn't change unless govt. spending changes. Deficit financed tax cuts, which just re-arrange the timing of taxes, do not affect the consumer's budget constraint, and therefore consumption.

## Caveats to Ricardian Equivalence

- 1.) Myopia. Maybe households are too short-sighted to realize their taxes will be higher in the future.
- 2.) Selfishness. Maybe people don't care about what happens after they die.
- 3.) Imperfect Capital Markets. Maybe governments + households face different interest rates.
- 4.) Distorting Taxes.

## Government Spending

- Unlike tax policy, changes in  $G$  definitely impact the household sector, since they influence the resources available to the private sector.
  - $G \uparrow \Rightarrow$  Household wealth  $\downarrow$
  - $G \downarrow \Rightarrow$  Household wealth  $\uparrow$
- We know that Fisherian/PIT household will spread out the effects of govt. spending. For example, an anticipated increase in future govt. spending will cause current household consumption to fall
- Consequently, when studying the effects of govt. spending on saving it is important to know whether the spending change is perceived to be temporary or ~~permanent~~ permanent.

# Examples

1.)  $\Delta G_1 > 0$        $\Delta G_2 = 0$

} Temporary  
Increase in  
Govt. Spending

$C_1 \downarrow$  (but not as much as  $G_1 \uparrow$ )

$\Rightarrow$  Current Aggregate Saving  $\downarrow$   
[i.e.,  $(Y - C - G) \downarrow$ ]

$\Rightarrow CA \downarrow$

2.)  $\Delta G_1 = 0$        $\Delta G_2 > 0$

} Anticipated  
Increase in  
Future Govt.  
Spending

$C_1 \downarrow$

$\Rightarrow$  Current Aggregate  $\uparrow$   
Saving

$\Rightarrow CA \uparrow$

3.)  $\Delta G_1 = \Delta G_2 > 0$

} Permanent  
Increase  
in Govt.  
Spending

$C_1 \downarrow$  by the same amount  
as  $G_1 \uparrow$

$\Rightarrow$  No effect on Aggregate Saving

$\Rightarrow \Delta CA = 0$