

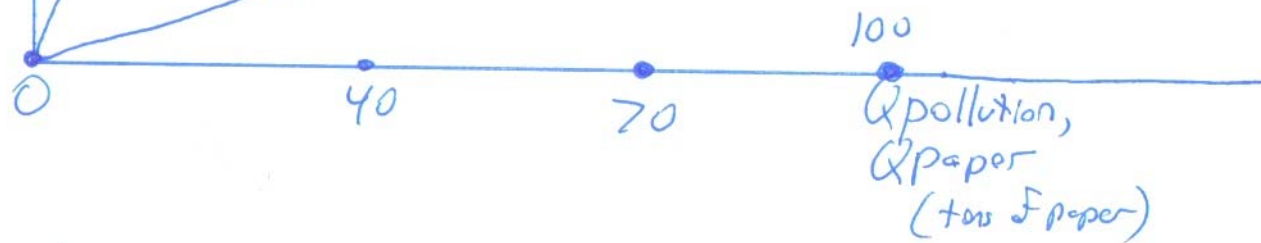
\$  
(not \$/ton)

The slope is the  
marginal cost

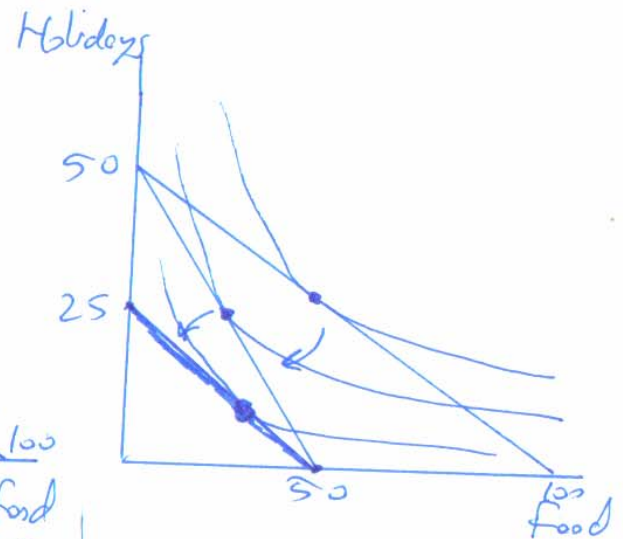
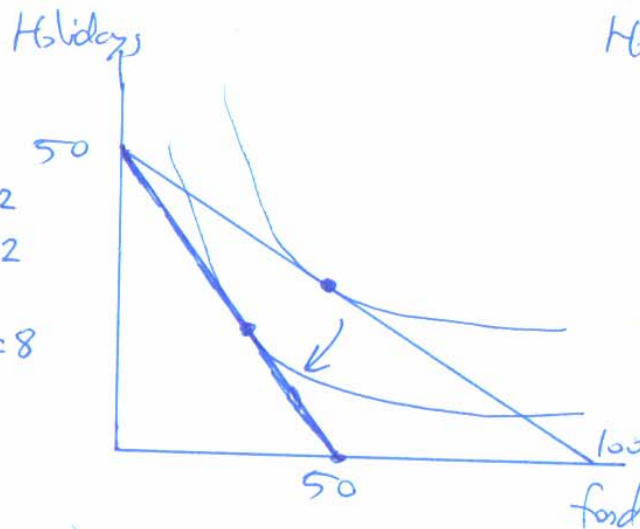
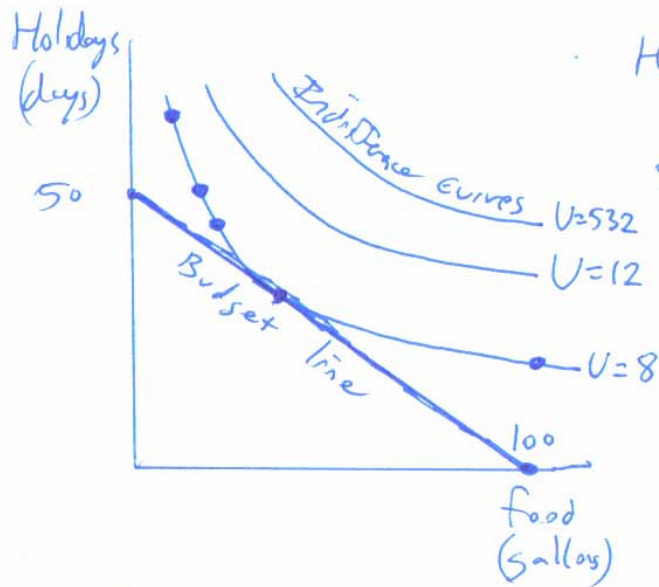
## MARGINALISM

total cost

Total  
Benefit



# Indifference Curves



$$\text{Budget} = P_{\text{Food}} \cdot \text{Food} + P_{\text{Holidays}} \cdot \text{Holidays}$$

$$\$100 = \$1/\text{gallon} \cdot \text{gallons} + \frac{\$1}{\text{day}} \cdot \text{days}$$

Opportunity cost of holidays?

2 gallons/day

OC of food?  $\frac{1}{2}$  day/gallon

New opportunity cost of holidays?

1 gallon/day

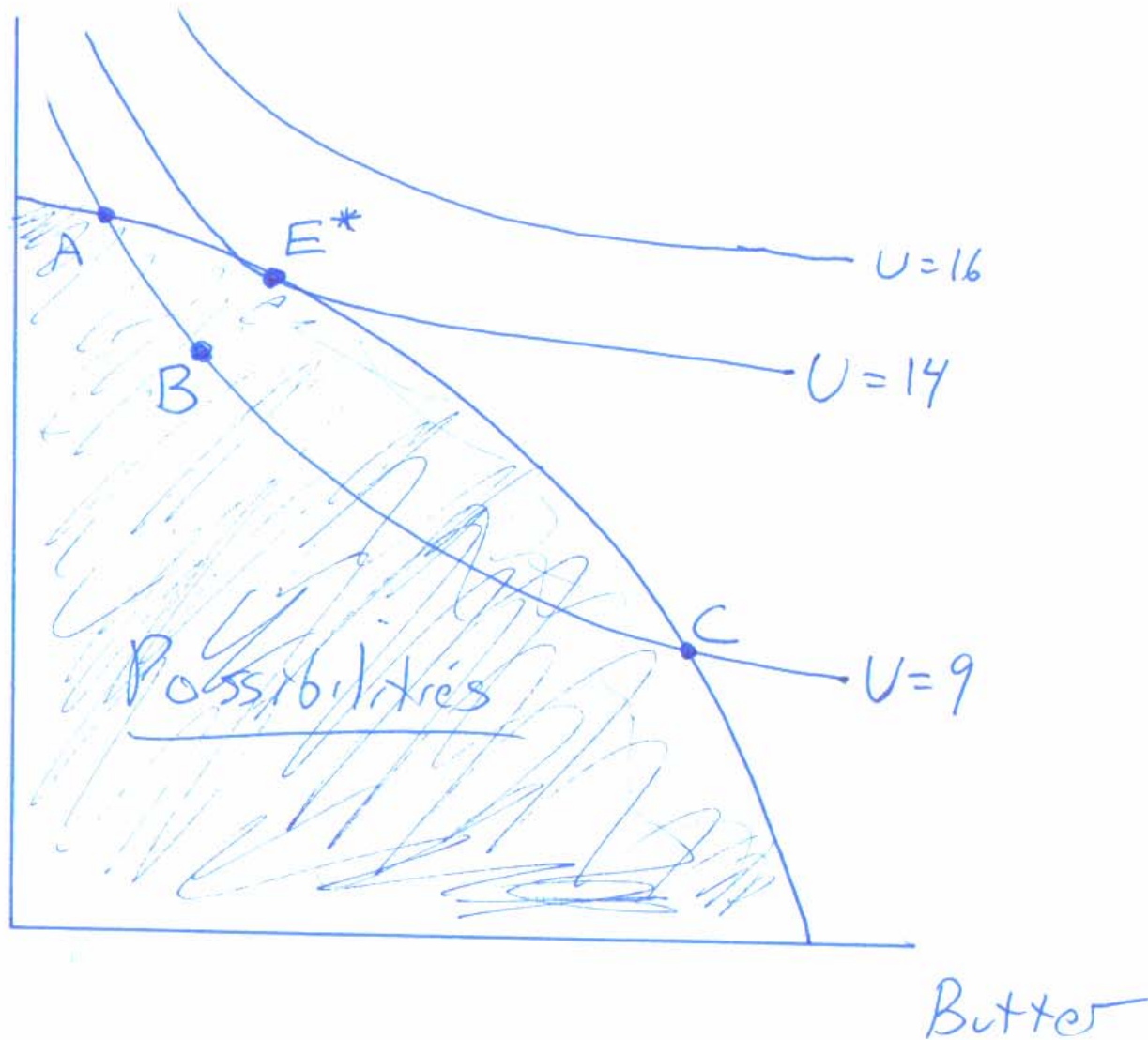
100% tax on food

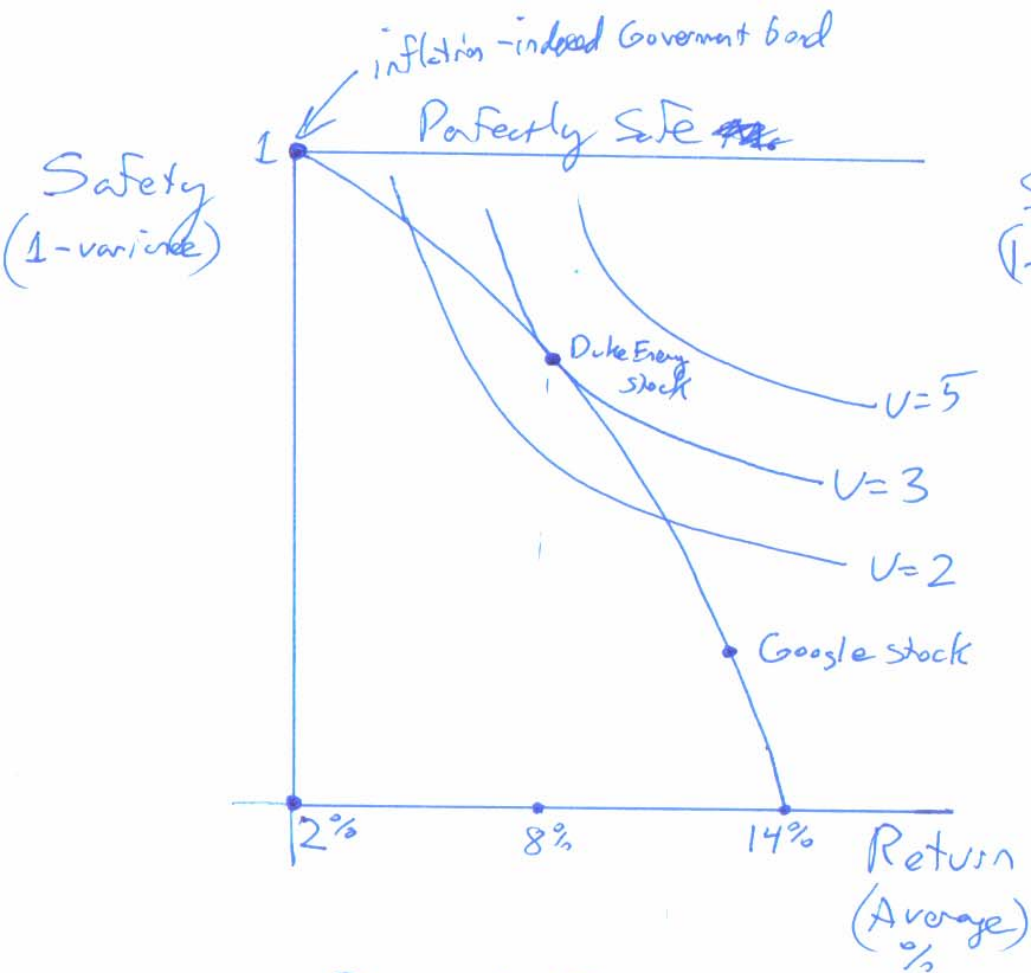
100% tax on everything -  
Food and holidays

Income Effect: real income  
has fallen in half.

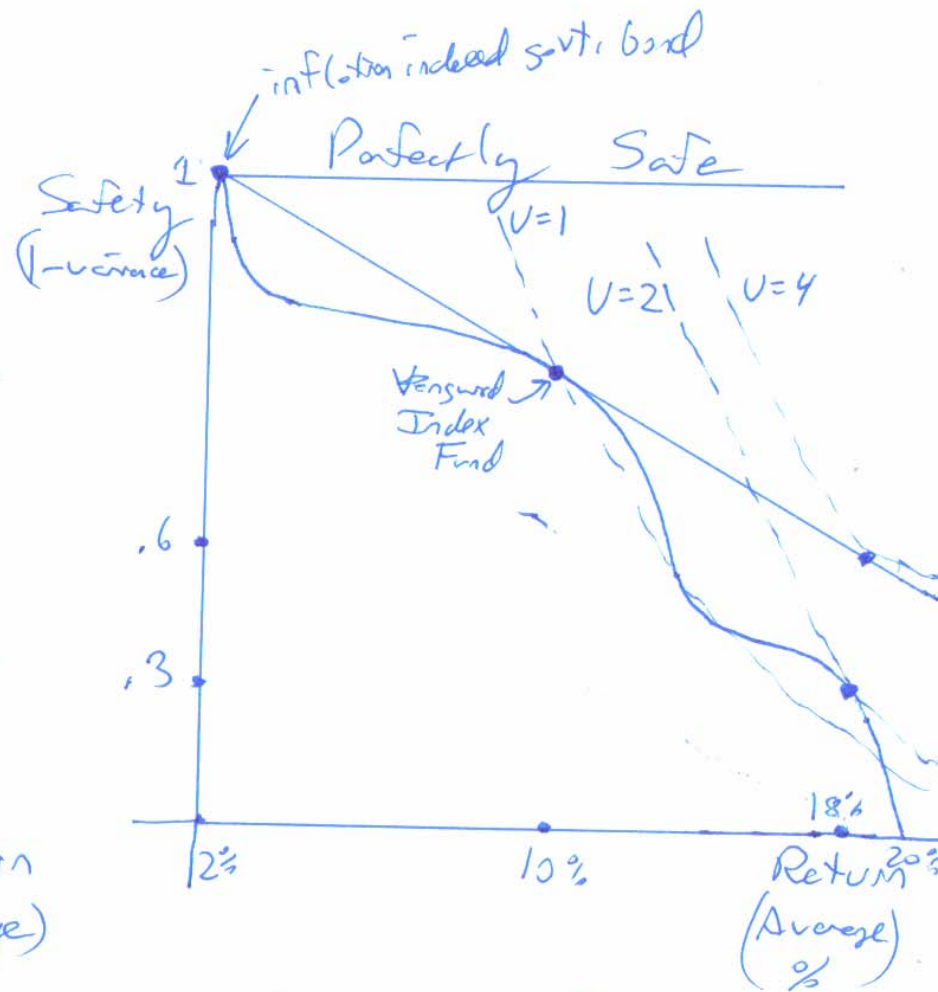
Guns

Hitler's Indifference  
Curves for Germany





Personal Investment



Borrowing Helps - Leverage