Lecture 10(ii) Announcements

Midterm Mon Nov 12, 7pm-8pm

- **Bring: Ruler, #2pencils, Univ. ID**

- Question and Answer Sessions
- Wed: 4-5:30: Anderson 310
- Wed: 7:30-9: Anderson 210
- Thur: 3:30-5 : Anderson 210

Office Hours:
Today (Wednesday) 1:30-3:30
plus Friday 9:30-10:30.
Hanson 4-135

Lecture

1. Election Results for Carbon Policy Platforms

2. Application of consumer theory to food stamps

3. Broader applications of consumer theory in social sciences. Rational Choice Theory and Crime

4. If time take questions about the exam.

1. Election Results
(For 3 policies at Canvas)

1. A gradual increase in the gas tax.

Yes 72%
No 28%

(Instructors/TAs 63% yes)

2. Increased subsidies for public transit.

Yes 63%
No 37%
(Instructors/TAs 58% yes)

3. Subsidize carbon capture (including carbon farming and large scale bioenergy with carbon capture and storage)..
Yes: 55% ,
No: 45%

(Instructors/TAs 58% yes)

4. State of Washington policy actually on the ballot

- enact a carbon emissions fee of $15 per metric ton of carbon beginning on January 1, 2020
- increase the fee by $2 annually until carbon goals met
- use the revenue to fund various programs and projects related to the environment.

Actual Vote in State of Washington

Yes 44%
No 56% FAILS

Econ 1101 vote:

Yes 81%
No 19% FAILS

(Instructors/TAs late vote, only 8 replies but all yes)

2. Give Cash Instead of Food Stamps?

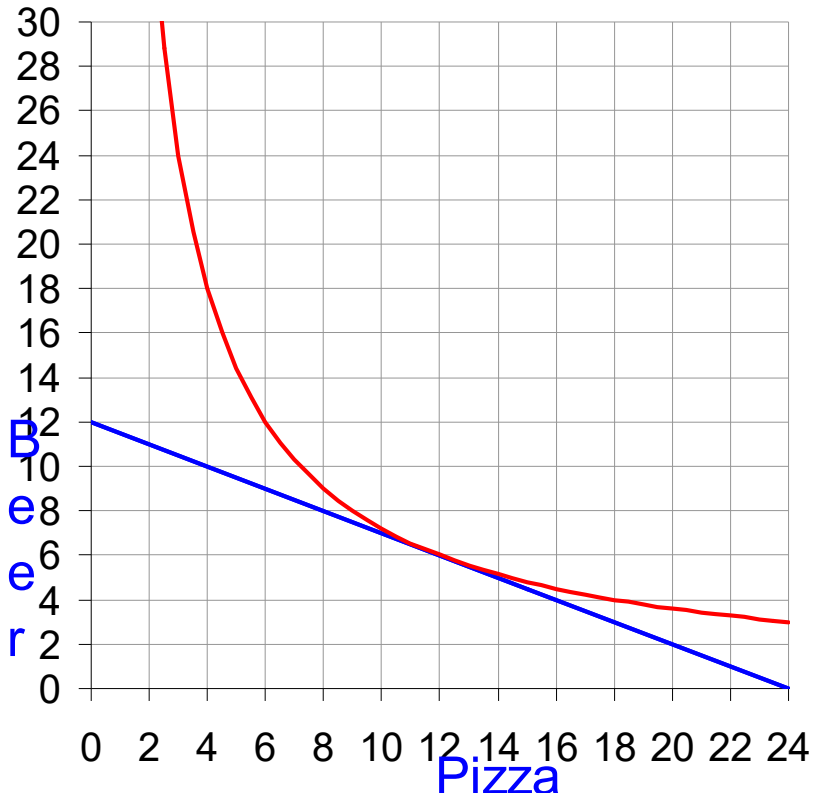
Go back to our earlier case where Goldy has an income of $24 and faces prices:
P_{pizza} = $4, P_{beer} = $2

Suppose President Kaler (the government) offers Goldy pizza stamps worth $3 per pizza (subsidy, like food stamps)

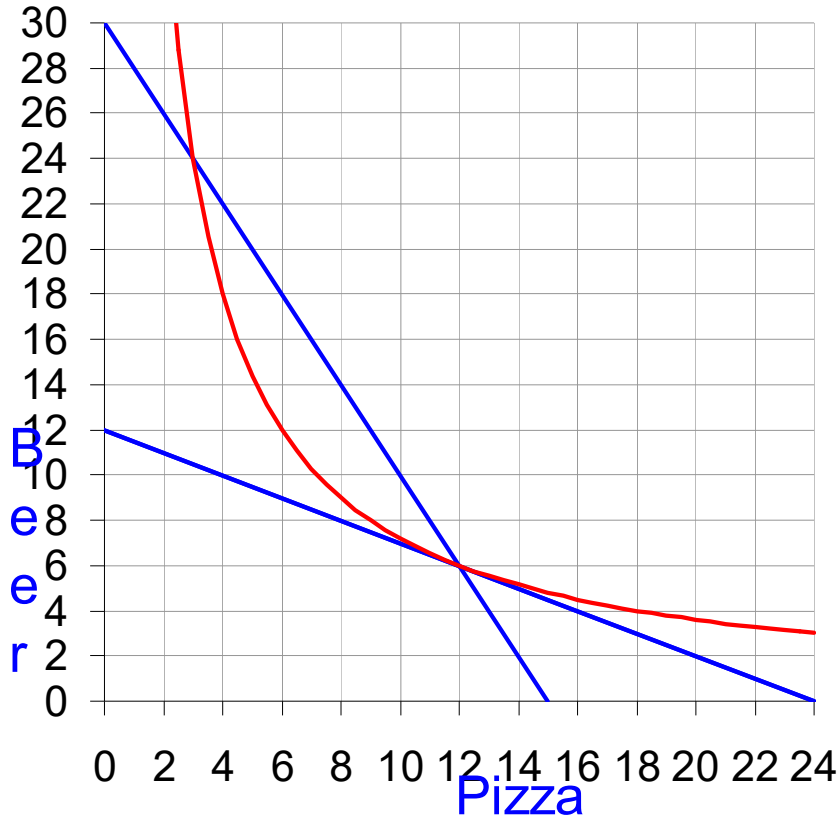
So effective price faced by Goldy is P_{pizza} = $1.

Choice with pizza stamps (subsidy)
12 pizza
6 beer

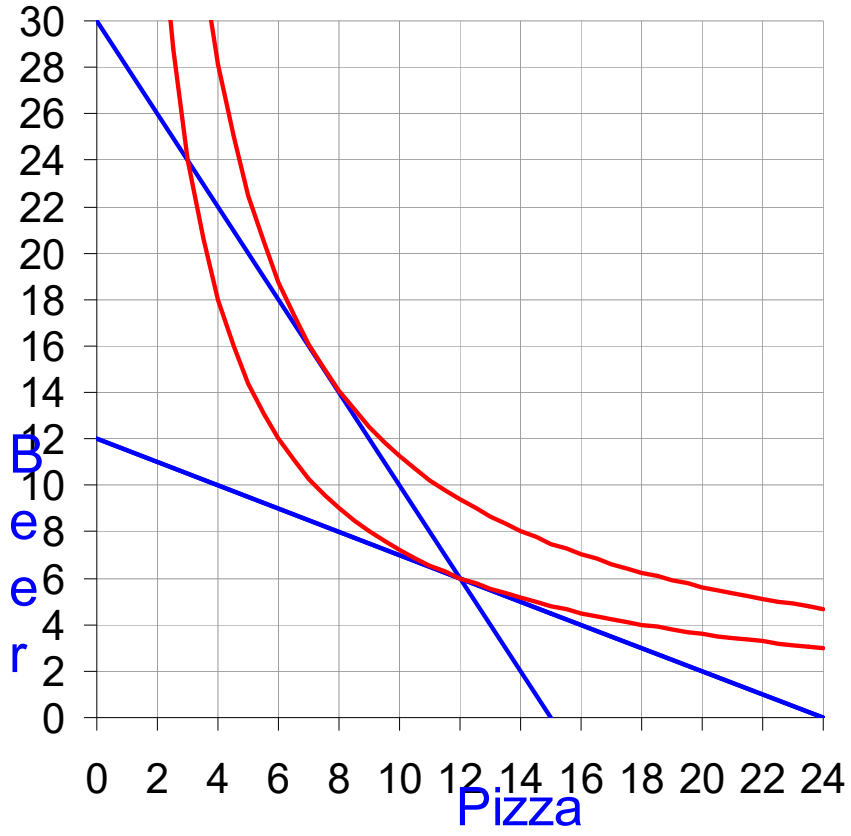
Costs government $3×12 = $36



Suppose the government gives $36 in cash: (so Goldy has $24+$36 = $60) Budget constraint goes through original choice but with new slope.



Get to new higher level of utility!
Consume
7.5 pizza
15 beer



Goldy better off with cash.
The Government (Kaler) spends $36 either way

Give cash, get
Pareto Improvement!

Same point from before that subsidies lead to deadweight loss.
But fancier pictures!

What is this analysis missing?

(i) Externalities?

Suppose Goldy has kids. We want him feeding them pizza, not beer! Pizza stamps (food stamps) not so bad.

(ii) Can be difficult to tell who needs help. So providing a homeless shelter (rather than giving cash) sorts out people who need it.

3. Rational Choice Theory and Crime

This course satisfies liberal education requirements for social science. As such, it is useful to discuss the place of economics more generally in social science.

The approach of economics, modeling decision makers as rational agents solving a maximization problem, subject to constraints (like maximizing utility subject to a budget constraint), has had wide application in social science.

- In sociology, it is applied to analyze criminal behavior. This branch of

sociology (or criminology) is called rational choice theory.

- It is also applied to analyze family decisions (whether or not to get married, have a kid,....
- In political science it is applied to analyze whether or not an individual votes. And if the individual votes, it is applied to study how the individual votes.

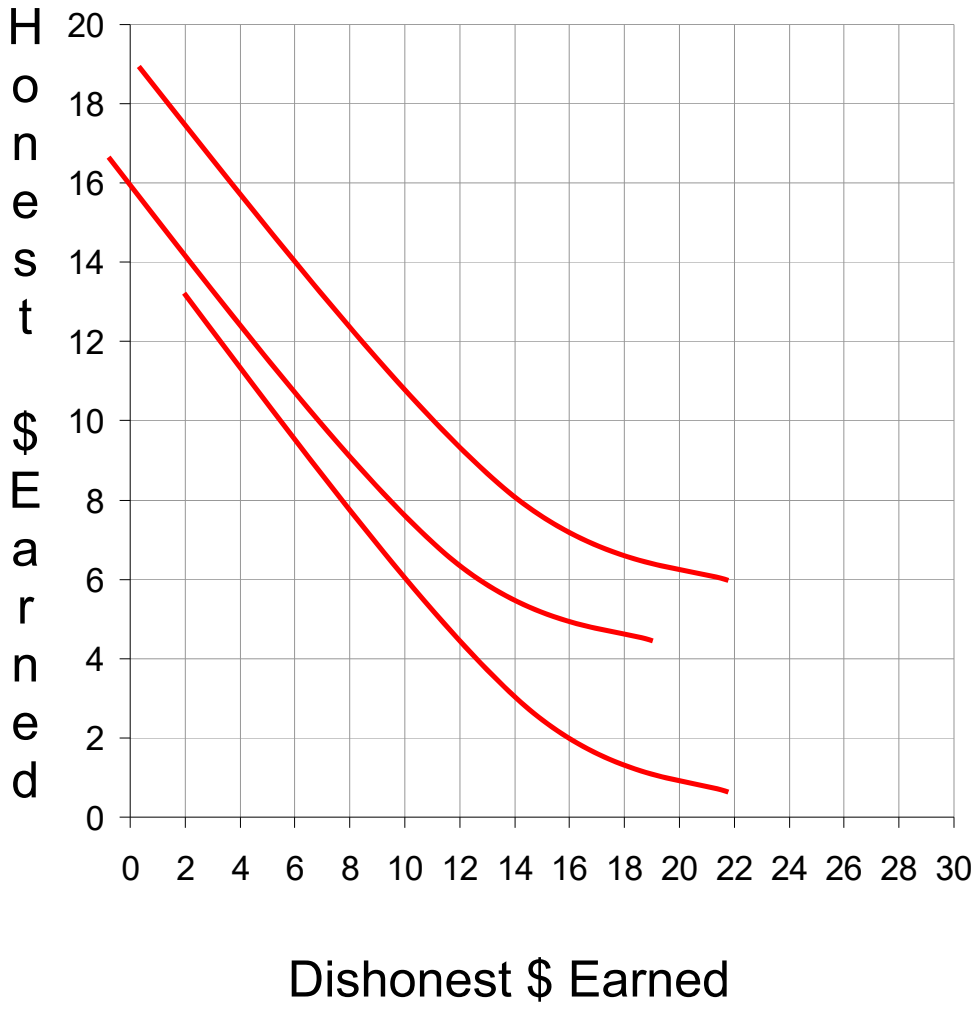
Let's work through a simple example of rational choice theory applied so the analysis of the incentive to commit a crime. In addition to illustrating the point, the example provides a nice review of income and substitution effects.

Setup:

- Freddie has 10 hours a day to work.
- Can earn $1 an hour through honest means
- Initially can earn $2 an hour through dishonest work (e.g. selling drugs)
- The graph shows Freddie's indifference curves between honest money and dishonest money.
- Plot Freddie's budget constraint.

Optimal choice of dishonest $ earned is _____ and honest $ earned _____

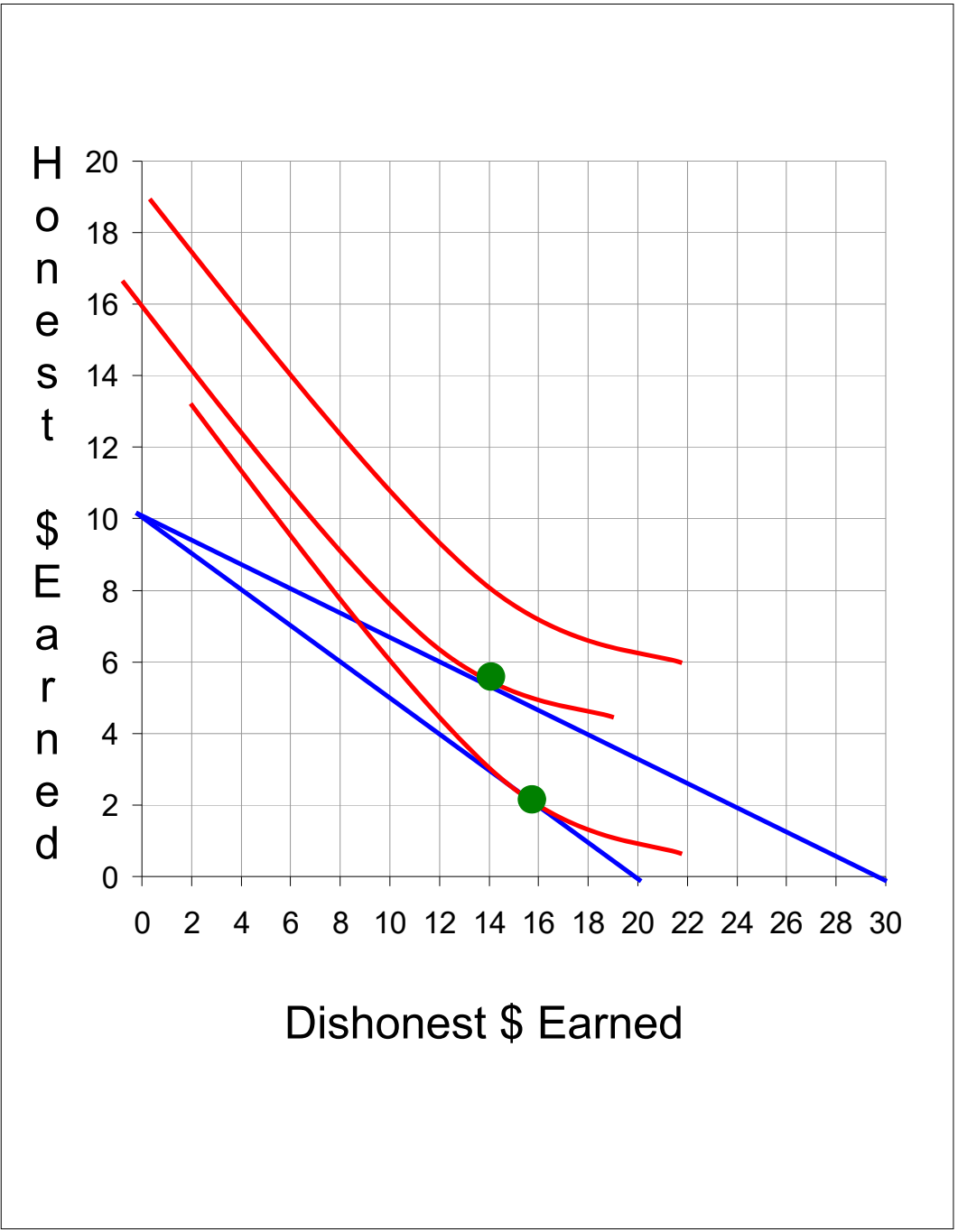
Now suppose can earn $3 an hour through dishonest work?



The return to dishonest work goes up, but Freddie chooses to commit less crime and spends more time on honest work!

Think about this in terms of an income and substitution effect.

Dishonest income is an _____ good.


Honest $ Earned
20
18
16
14
12
10
8
6
4
2
0
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
Dishonest $ Earned