

Econ 1101

Spring 2013

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Announcements

- Go to recitation this week to get assigned to a group for your second platform debate!
- Also, you will do a monopoly worksheet this week that will be very helpful

Agenda

- Broader applications of consumer theory in social sciences.
 - Rational Choice Theory and Crime
- Application of consumer theory to food stamps

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 who solve 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.

Moreover...

- 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 to 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.

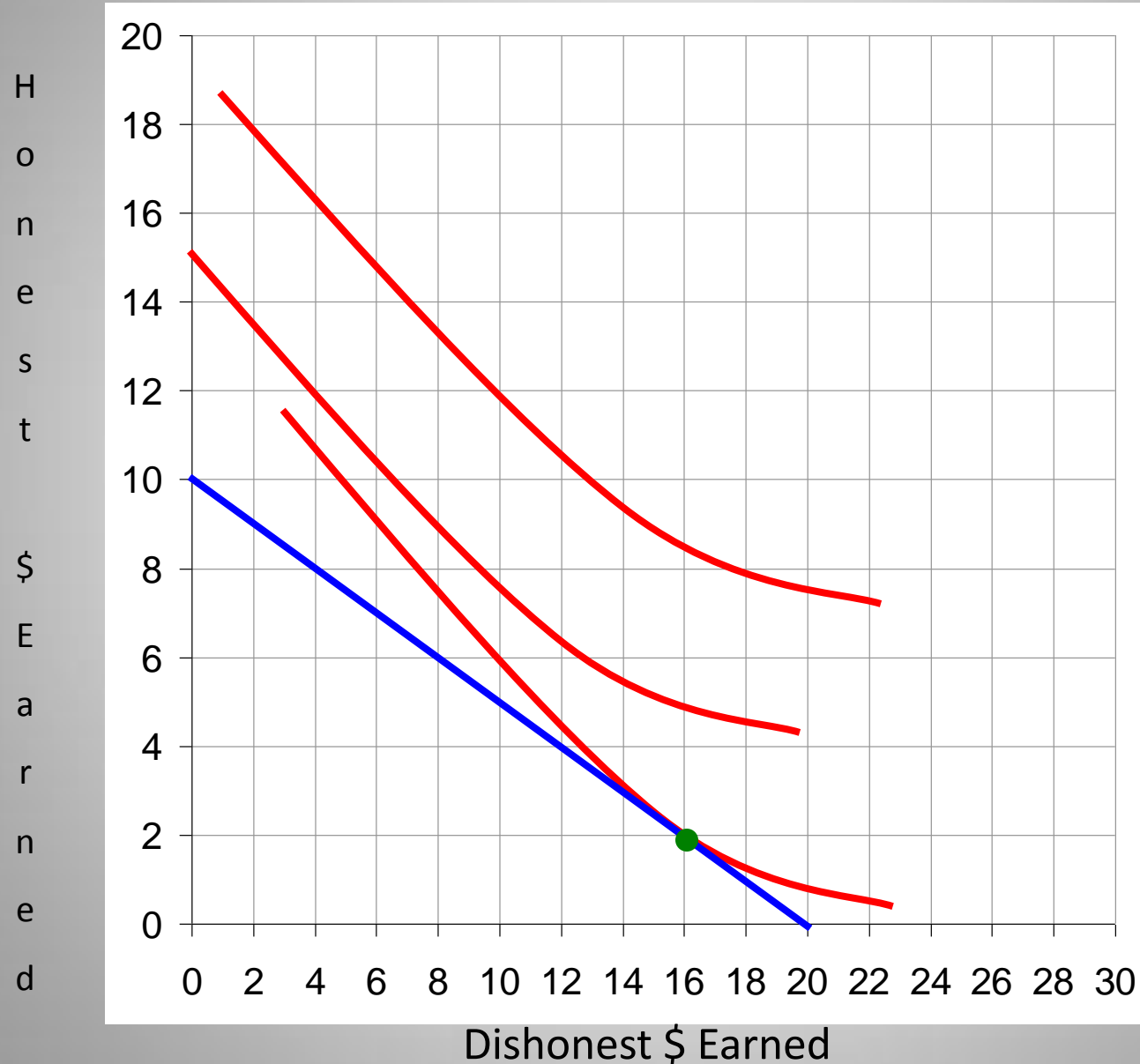
- Optimal choice of dishonest \$ earned is 16 and honest \$ earned 2

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

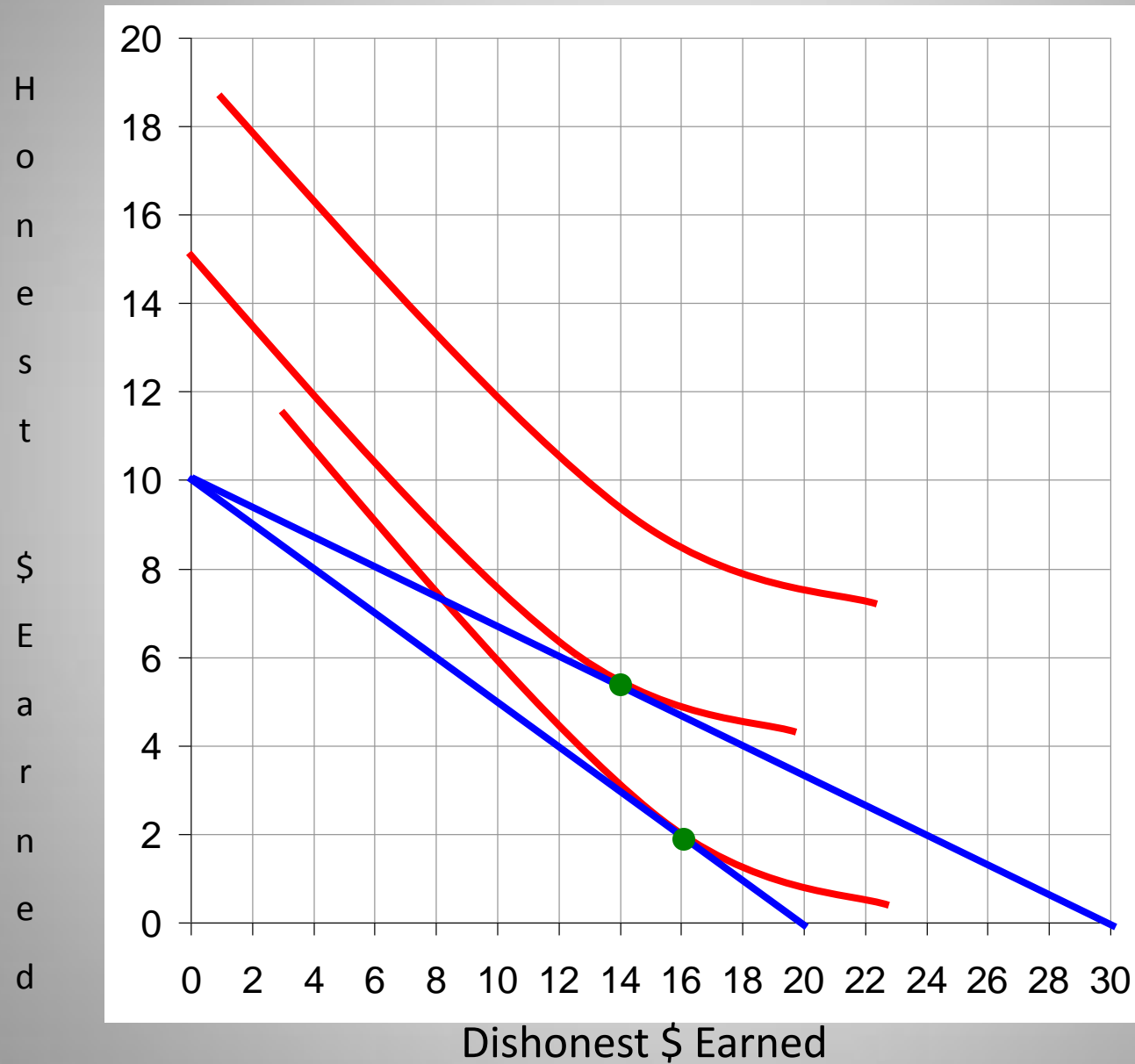
Freddie has 10 hours a day to work.

Can earn \$1 an hour through honest means

Initially can earn \$2 an hour through dishonest work (e.g. selling drugs)



Now earns \$3 for dishonest work instead of \$2



- 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 inferior good.

Give cash instead of food stamps?

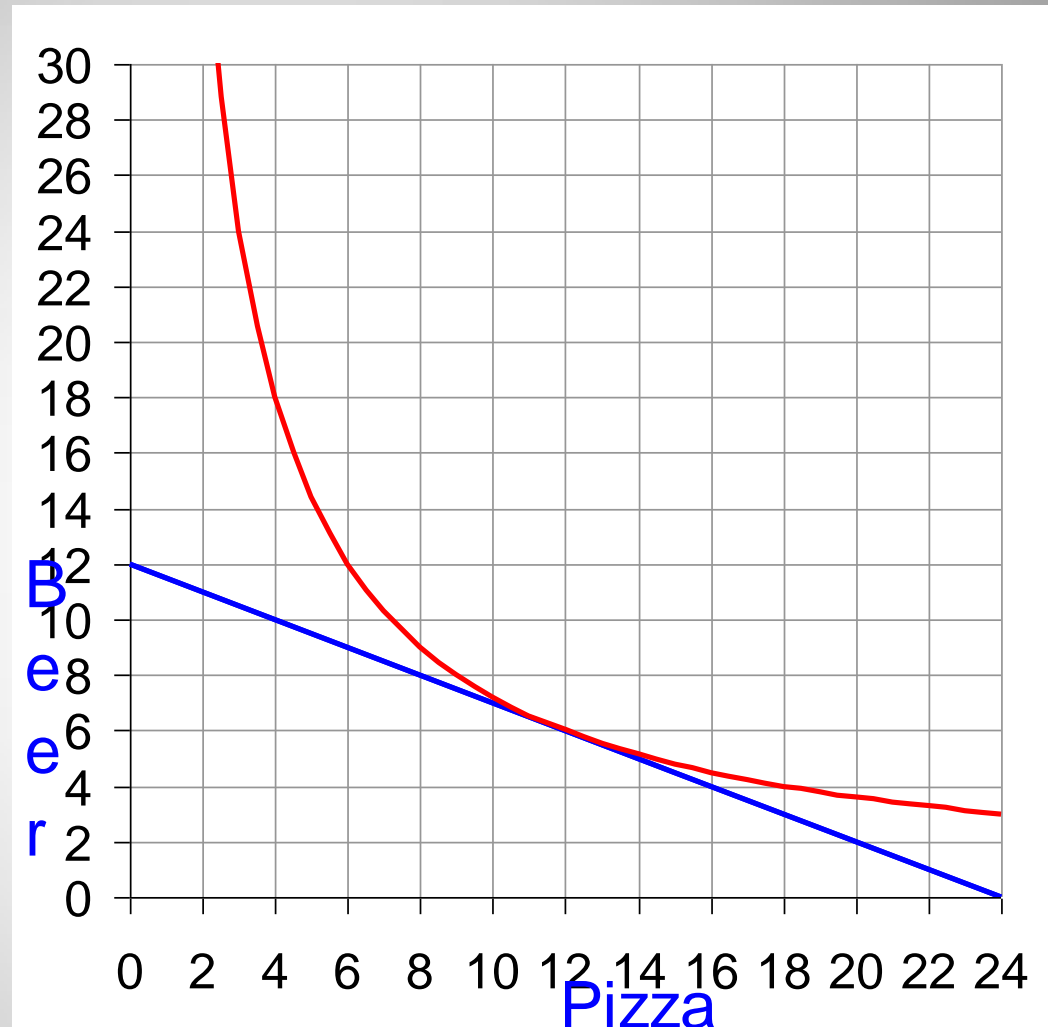
Go back to our earlier case where Louie has an income of \$24 and faces prices:

- $P_{\text{pizza}} = \$4$, $P_{\text{beer}} = \$2$
- Suppose Scrooge McDuck (the government) offers Louie pizza stamps worth \$3 per pizza (subsidy, like food stamps)
- So effective price faced by Louie is $P_{\text{pizza}} = \$1$.

Choice with
pizza stamps
(subsidy)

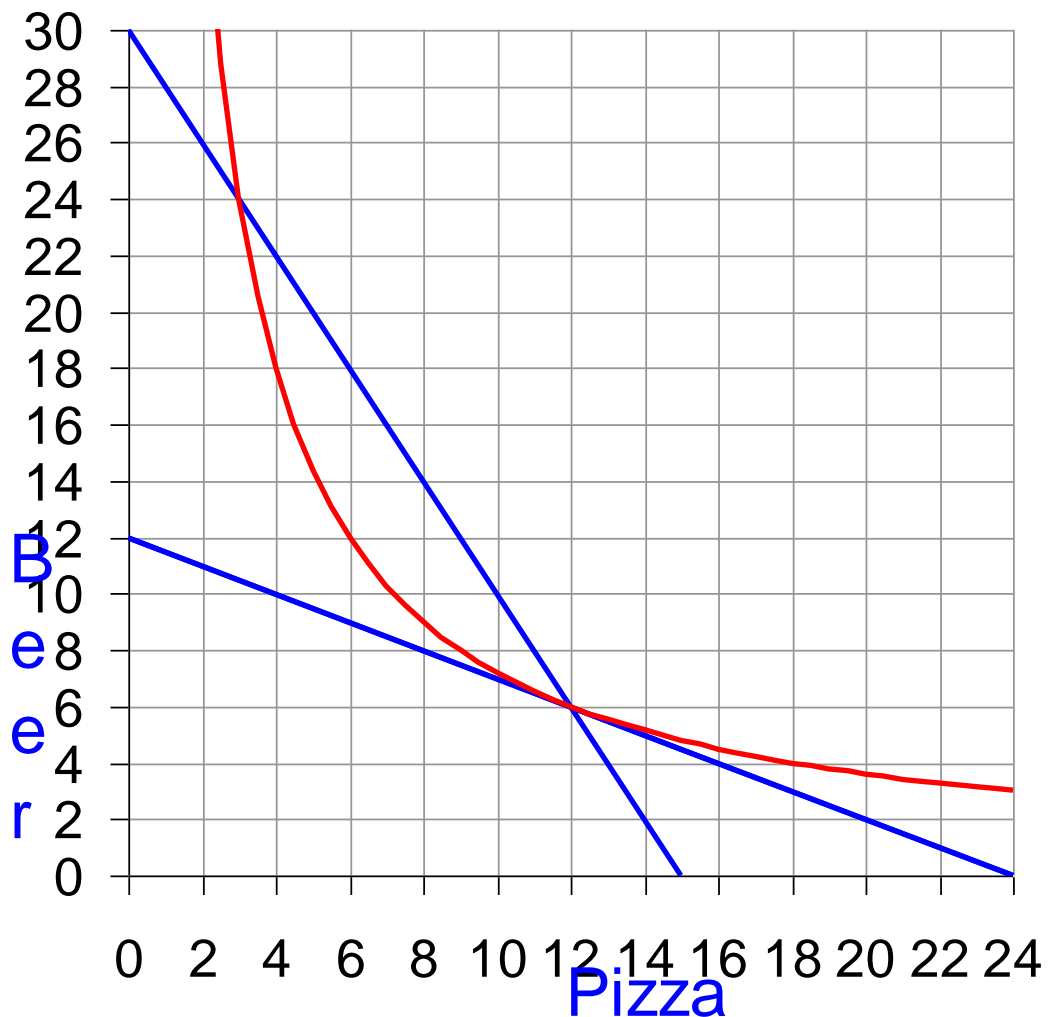
- 12 pizza, 6
beer

This costs
government
 $\$3 \times 12 = \36



Suppose the government gives \$36 in cash: (so Louie has $\$24 + \$36 = \$60$)

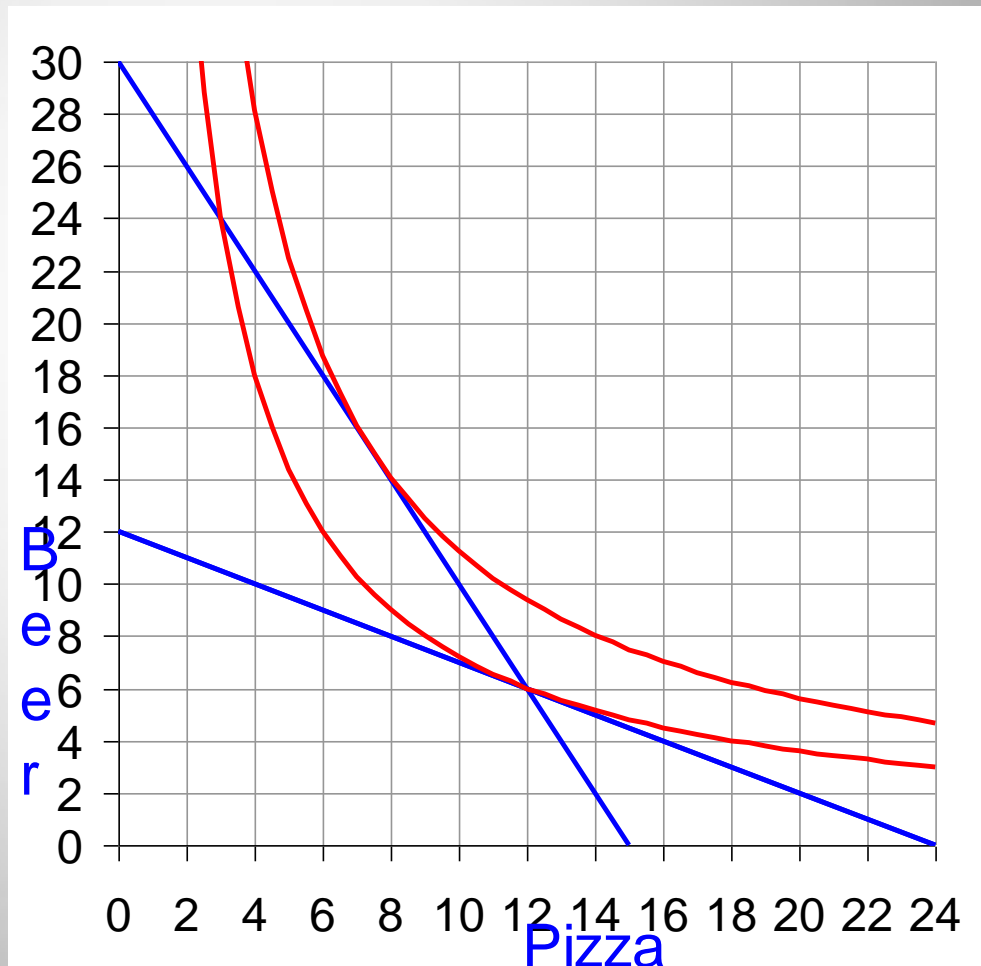
Budget constraint goes through original choice but with new slope.



Get to new higher level of utility!

Consume:

- 7.5 pizza, 15 beer



Louie better off with cash.

- The Government (McDuck) spends \$36 either way
- Give cash, get Pareto improvement!
- Same point from before that subsidies lead to deadweight loss. But fancier pictures!

So can we say based on this diagram that food stamps are a really bad idea?

What is this analysis missing?

(i) Externalities?

Suppose Louie 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.