Economics 001
Principles of Microeconomics
Professor Arik Levinson

- Lecture 10
  - preferences and demand (continued)
  - applications


Example: Food Stamps
("SNAP" as of 10/1/2008)

- Food Stamp Act of 1964
- USDA Thrifty food plan
  - benefits=(cost of TFP) - 0.30 x (income)
- 45 million people in FY 2011 (14% of US)
- 21 million households (18% of US)
- > $72 Billion in 2011
- Average monthly benefit = $284 per household
  $134 per person

- Overhead 4.7%

Food Stamp Program Participation and Costs			
Fiscal Year	Average Participation	Average Monthly Benefit Per Person	Total Annual Benefits
	--Thousands--	--Dollars--	--Millions of Dollars--
1992	25,407	68.57	20,905.7
1994	27,474	69.00	22,748.6
1996	25,543	73.21	22,440.1
1998	19,791	71.12	16,890.5
2000	17,194	72.62	14,983.3
2002	19,096	79.67	18,256.2
2004	23,858	86.03	24,629.8
2006	26,672	94.31	30,185.2
2008	28,409	101.52	34,608.4
2009	33,490	125.31	50,359.9
2010	40,302	133.79	64,704.4
2011	44,709	133.85	71,812.2

Food Stamps and the Household Budget

- income= $1000/month
- stamps = $200/month
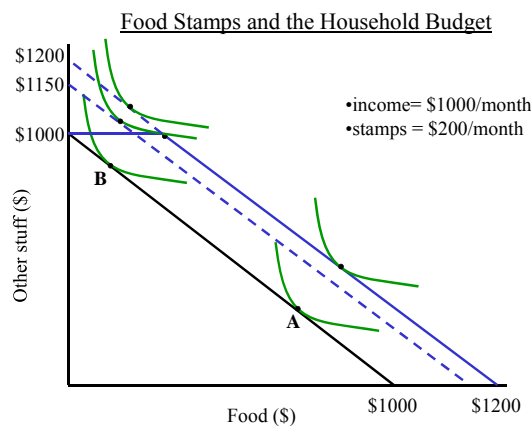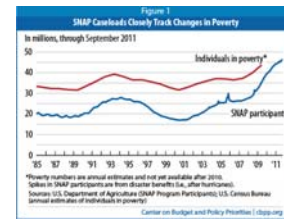
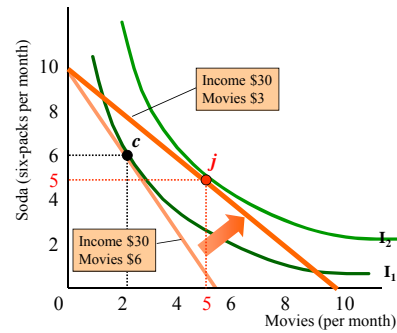# Substitution Effect and Income Effect

Substitution effect

The effect of a change in price on the quantity bought when the consumer (hypothetically) remains indifferent between the original and the new situation.
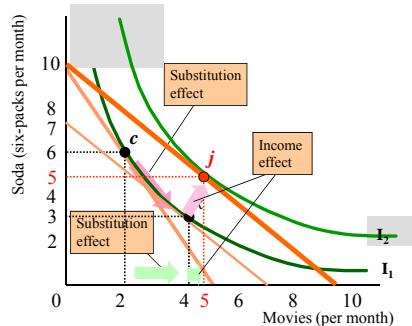
Substitution Effect and Income Effect

Income effect

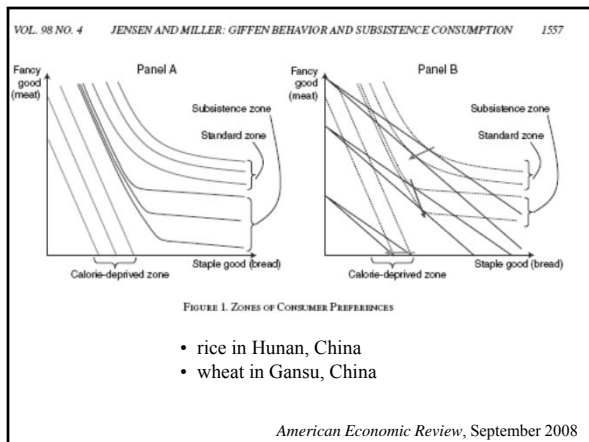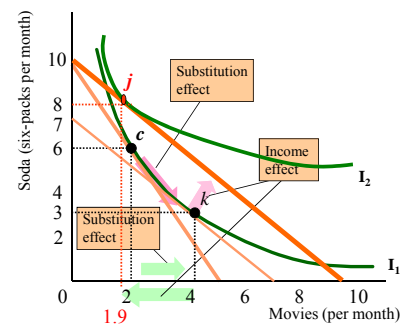The change in consumption that results from a change in the consumer's income, ceteris paribus.
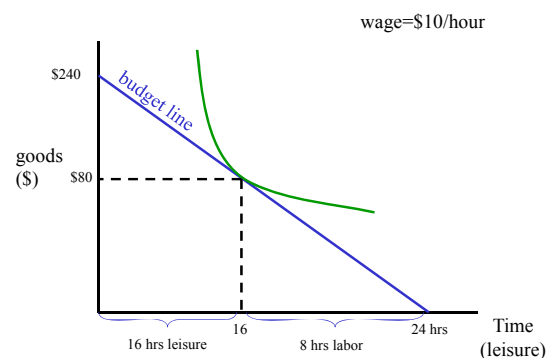

Price Effect (again)

Soda (six-packs per month)

Income $30
Movies $3

c

j

Income $30
Movies $6

I₂

I₁

Movies (per month)

Substitution Effect and Income Effect

Soda (six-packs per month)

Substitution effect

Income effect

c

j

Substitution effect

I₂

I₁

Movies (per month)

Upward sloping Demand (!?)

Soda (six-packs per month)

Substitution effect

j

c

Income effect

k

I₂

Substitution effect

I₁

1.9

Movies (per month)

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Panel A   Panel B

Fancy good (meat)

Subsistence zone

Standard zone

Calorie-deprived zone   Staple good (bread)

FIGURE 1. ZONES OF CONSUMER PREFERENCES

- rice in Hunan, China
- wheat in Gansu, China

American Economic Review, September 2008

Labor supply

wage=$10/hour

$240

goods ($)

budget line

$80

16 hrs leisure   16   8 hrs labor   24 hrs

Time (leisure)

Suppose tax=30%

wage=$10/hour

$240

budget line

goods ($) $80

work more   16   work less   24 hrs   Time (leisure)
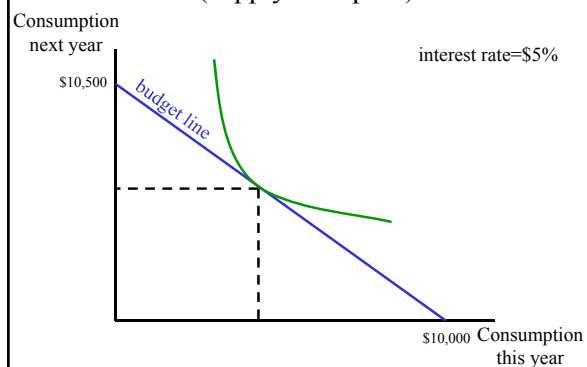
Two effects of a wage increase

- 1) opportunity cost of leisure higher
  - so work more
  - (substitution effect)
- 2) budget possibilities larger
  - so work less (if leisure a normal good)
  - (income effect)
- 3) Question:
  - why does income effect work in opposite direction to substitution effect?

Elasticity of labor supply in the USA

- η^{LS} for men $\approx$ 0.1

- η^{LS} for women $\approx$ 0.9

Savings decisions (supply of capital)

Consumption next year

interest rate=$5%

$10,500

budget line

$10,000 Consumption this year

Suppose we tax interest income

Consumption next year

interest rate=$5%
tax rate = 50%

$10,500

$10,250

budget line

save more   save less $10,000 Consumption this year

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