



Barick Chung

Employment:
2014-present Senior Lecturer, Department of Economics, CUSZ – Shenzhen.
2012-2014 Lecturer, School of Economics and Finance, University of Hong Kong.
2006-2012 Instructor, Department of Economics, CUHK – Hong Kong.

Education:
2003-2007 Ph.D. (Business) Indiana University – Bloomington.
1987-1991 BS.Sc. (Economics) Chinese University of Hong Kong – Hong Kong.

Research paper:
Chung, Barick, "Two Level Price Discrimination and Vertical Relationship" (March 05, 2012). Available at SSRN: <http://ssrn.com/abstract=1997070>.

Homepage: Deleted
Facebook: Deleted
Wechat ID: barickchung

11:46:42

1

ECO 2011 (Sections L07-10) Basic Microeconomics

Barick Chung
Department of Economics
235-18822
Zhiren Building, 409
barickchung@cuhk.edu.cn

11:46:42

2

Optimal choice

11:46:42

3



Pindyck and Rubinfeld, 2014, p.86:

The consumer's problem is to maximize satisfaction, given the limited budget available to them.

The optimal bundle satisfies two conditions:

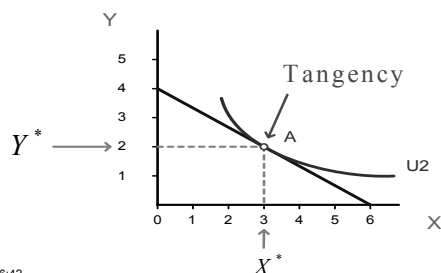
- 1) It must be located on the budget line.
- 2) It must give the consumer the most preferred combination of goods and services.

Two conditions

11:46:42

4

Bundle A is optimal:



11:46:42

5

Tangency implies:

- (i) The optimal bundle $\{X^*, Y^*\}$ lies on the budget line:

$$P_X \cdot X^* + P_Y \cdot Y^* = I$$

- (ii) The slope of the budget line (i.e., negative price ratio) is equal to the slope of indifference curve (i.e., negative marginal rate of substitution) at the optimal bundle $\{X^*, Y^*\}$:

Slope of budget line = $-\frac{P_X}{P_Y}$

Slope of indifference curve =

$$-MRS_{X,Y}(X,Y)$$

Optimization condition is:

$$\frac{MU_X(X^*, Y^*)}{P_X} = \frac{MU_Y(X^*, Y^*)}{P_Y}$$

11:46:42

6



Pindyck and Rubinfeld, 2014, p.96:

Equal Marginal principle is the principle that utility is maximized when the consumer has equalized the Marginal utility per dollar of expenditure across all goods.

$$\frac{MU_X}{P_X} = \frac{MU_Y}{P_Y}$$

11:46:42

7

My remark #10a:

The consumer's problem is to solve:

$$\{X^*, Y^*\} \text{ solves } \left\{ \max_{X,Y} U(X,Y) \quad \text{s.t.} \quad P_X \cdot X + P_Y \cdot Y = I \right\}$$

11:46:42

8



Pindyck and Rubinfeld, 2014, p. 89:

A **corner solution** is a situation in which the Marginal rate of substitution of one good for another in a chosen market basket is not equal to the slope of the budget line.

max U s.t.
no solution
✓ solution ← corner
interior

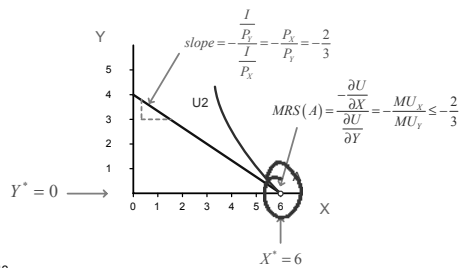
11:46:42

9

Remark #15:

Corner solutions arise at a "corner."

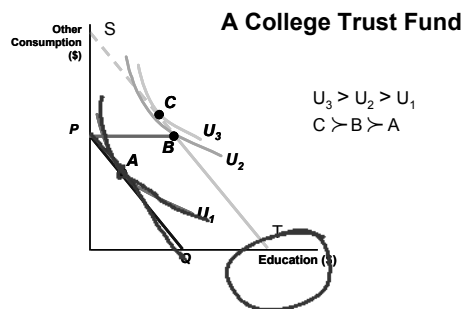
Corner solutions



11:46:42

10

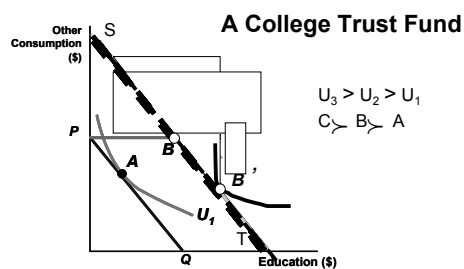
- A: Consumption before the setting up of the trust fund (The trust fund shifts the budget line)
- B: Requirement that the trust fund must be spent on education
- C: If the trust could be spent on other goods



11:46:42

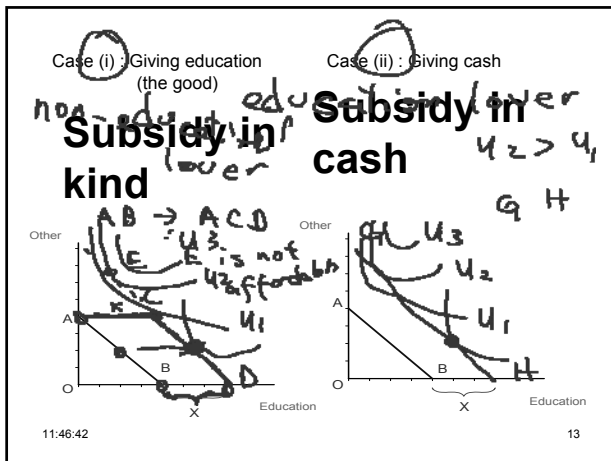
11

- A: Consumption before the setting up of the trust fund (The trust fund shifts the budget line)
- B: Requirement that the trust fund must be spent on education
- C: If the trust could be spent on other goods



11:46:42

12



The end

11:46:42

14
