

AS.180.102 (04): Elements of Microeconomics

Chapter 22 - The Theory of Consumer Choice

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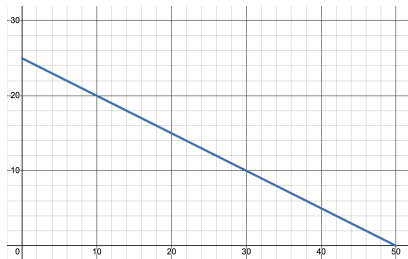
Outline

Main Takeaway

This chapter goes back to thinking about tradeoffs and thinking at the margin. What do we gain and what do we lose from consuming one more or one less.

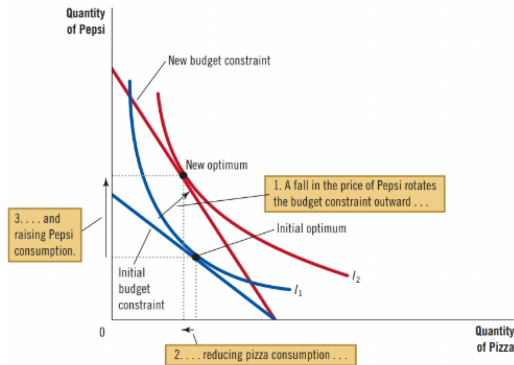
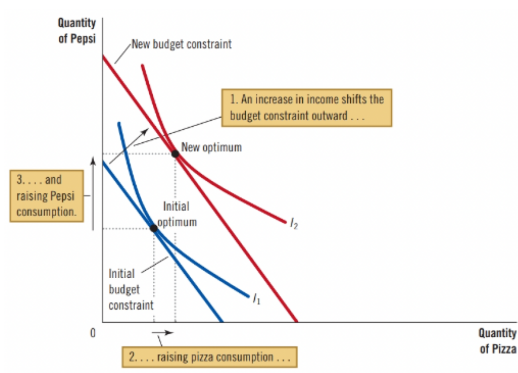
Budget Constraints

- Represents the limit of combinations of goods that the consumer can afford
- When prices are quantity invariant, this will always be a straight line
- ① Suppose a consumer has a budget of \$100. They consume two goods: apples and bananas. The price of apples is \$2 per unit, and the price of bananas is \$4 per unit. What is the equation for the consumer's budget constraint?
 - ① Find intercepts
 - ② Find $\Delta Y / \Delta X$



Changes in Price vs Budget

- The budget constraint will shift when
 - ① there is a change in our budget (we can now afford more of everything)
 - ② there is a change in price (we can afford more of that one product)



Indifference Curves

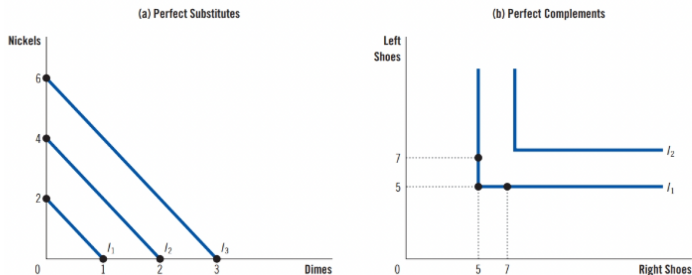
- Represents the combinations of goods from which the consumer derives the same utility
- 4 properties of indifference curves

Indifference Curves

- Represents the combinations of goods from which the consumer derives the same utility
- 4 properties of indifference curves
 - ① Higher curves are preferred to lower ones
 - ② They slope downward
 - ③ They do not cross
 - ④ They are bowed inward
- Why do these all make intuitive sense?

Different Products' Indifference Curves

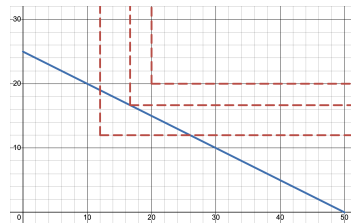
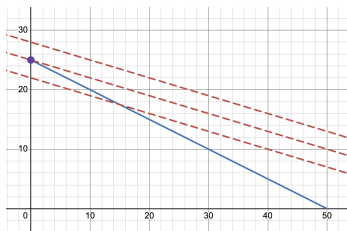
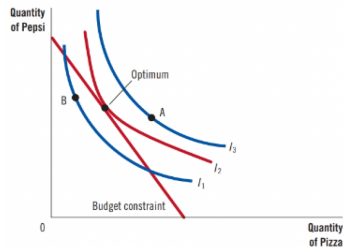
- Depending on the setting and the type of product, indifference curves will look different



- What would the indifference curves look like for two goods; one you really despise and one you like?
- What happens when we graph the indifference curves of different consumers?

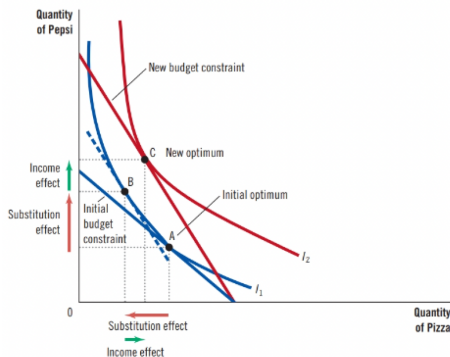
Finding the optimal bundle

- The optimum is where the indifference curve is just *touching* the budget constraint - the indifference curve is *tangent* to the budget constraint



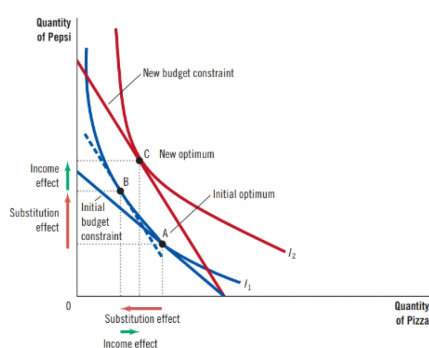
Income and Substitution Effects

- **Substitution Effect:** The change in consumption from moving to a different point on the **same** indifference curve
- **Income Effect:** The change in consumption from moving to a point on a **different** indifference curve



Graphing Income and Substitution Effects

- Follow these 4 steps when graphing the income and substitution effects:
 - 1 Draw a line parallel to the *new* BC that is tangent to the *original* IC
 - 2 Find the tangency point of this line and the original IC
 - 3 Calculate change in quantity from *original* optimum to tangency point - **substitution effect**
 - 4 Calculate change in quantity from tangency point to *new* optimum - **income effect**



Example of Different Outcomes

- Consider a situation where you order both a soft drink and pizza together. The pizza shop has weeks in which they have deals on pizzas that make them cheaper.
 - ▶ Show using budget constraints and indifference curves how this decrease in the price in pizza could lead you to either consumer more, less, or the same amount of soft drinks.

