

Economics for Business Environment

Unit 2

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Lecture Outline

- ① Introduction
- ② Demand
- ③ Consumer Theory
- ④ Conclusion

Intended Learning Outcomes

Today we take the first step towards understanding how markets work.

After this lecture you should be able to understand and analyse:

- How the demand side of the economy works.
- How the behaviour of people and their economic interactions form demand.

Main Assumptions

- The model is based on Adam Smith's "invisible hand" ('The Wealth of Nations', 1776)
- Markets are organized in the most efficient way (i.e. perfect competition)

Definition

Ceteris Paribus: Latin phrase meaning "other things equal" or "other things held constant".

Main Assumptions

Perfect Competition.

1. Many buyers and sellers in the market.
2. Each buyer and seller has perfect information
3. Buyers and sellers are 'price takers'.
4. Freedom of entry and exit to and from the market.
5. Goods produced are identical.

The Law of Demand

Law of Demand

The law of demand states a negative relationship between price and quantity demanded. A higher price leads to a lower quantity demanded and a lower price leads to a higher quantity demanded.

- Demand refers to the amount of some good or service consumers are willing and able to purchase at each price.
- **Demand curves** (graphs) and **demand schedules** (tables) are tools used to summarize the relationship between quantity demanded and price.

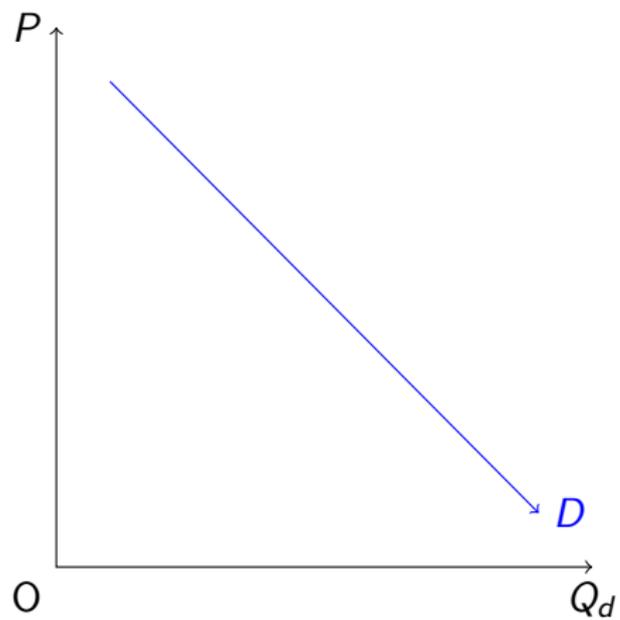
Demand curves and schedules

- The demand curve and the demand schedule are different representations of the same thing.
- The **demand equation**

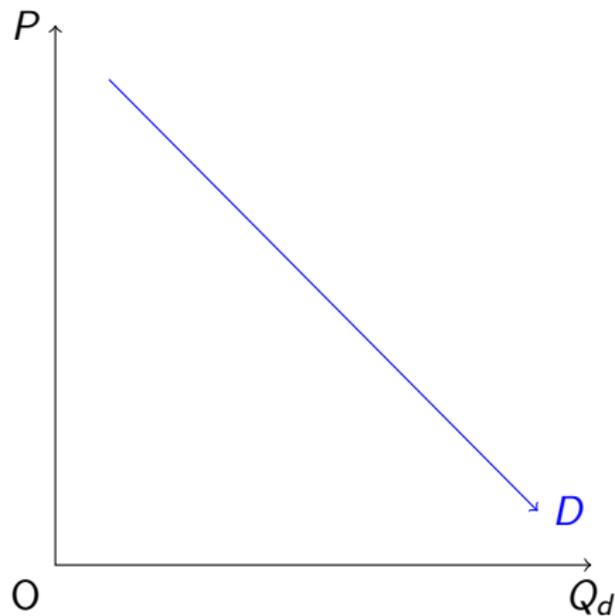
$$Q_D = a - b * P$$

Where Q_D is the quantity demanded, P is the price of the good, a is the intercept and b is the slope parameter

Demand curves and schedules



Demand curves and schedules



Price	Quantity
£1	18
£2	15
£3	12
£4	9
£5	6
£6	3

Table: Demand schedule

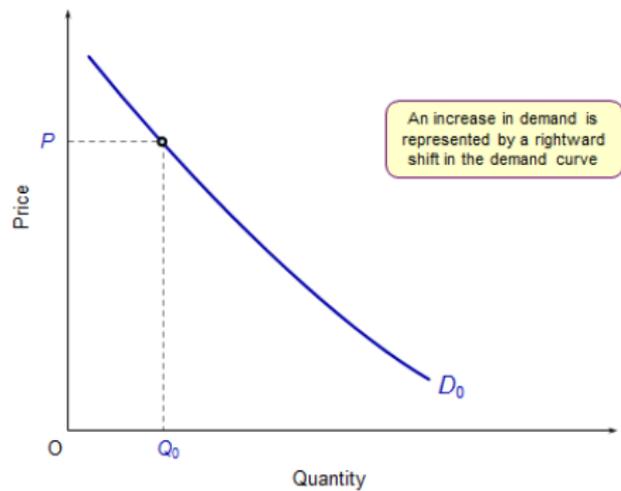
Factors that influence demand

Any change in price level represents a movement along the same demand curve. The demand curve will shift if any other factor that affects demand changes.

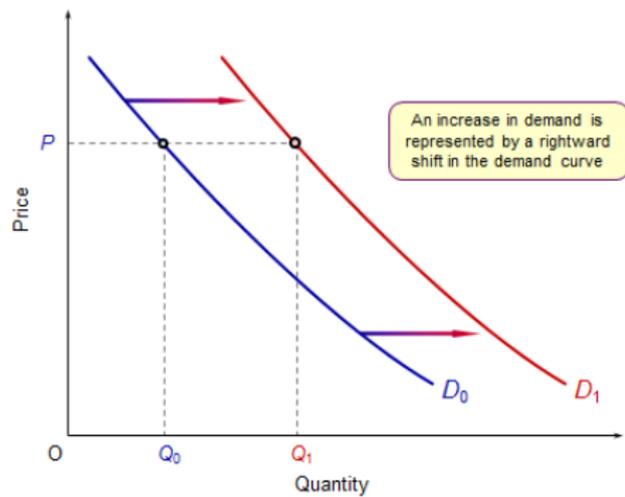
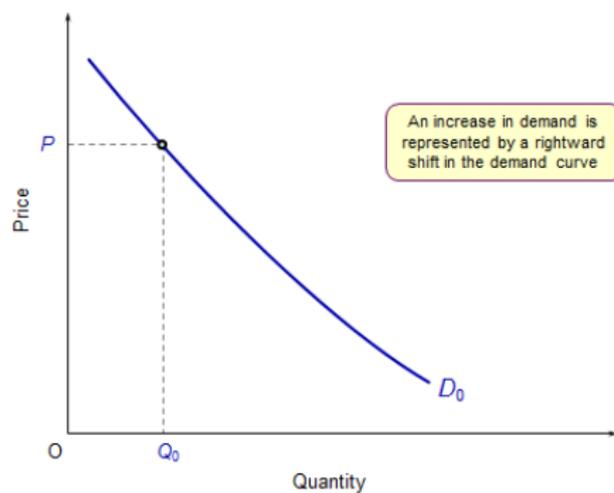
Income

- A change in income will affect the quantity demanded at any price.
- For example, if your income increases you are able to buy more of the same good at a certain price level.
- As a result, the whole demand curve shifts to the right.

Demand and Income



Demand and Income



Factors that influence demand

- *Tastes and Preferences*. If a good becomes a trend more people will be willing to buy it at a given price level.
Examples?
- *Prices of other goods (Substitute/complementary)*. The prices of related goods may affect the quantity demanded.
- Substitute goods are goods which may replace each other in use. Examples.
- Complementary goods are goods which may be consumed together. Examples.
- *The nature of the good*: normal, inferior, luxury.

Consumer Theory

- The demand curve for a good or service represents the quantity needed at every price level.
- All the factors mentioned before affect the whole demand curve.
- This means that they affect the quantity demanded at the same price level.
- How?
- Through the utility and the budget constraint.

Consumer Preferences

- One of the main assumptions of this simple model is that every individual has (and knows their) preferences.
- For example you know if you like tea or coffee more.
- You decide what to consume based on the pleasure that any economic (or not) activity yields.

Consumer Preferences

- Because it is difficult to measure the pleasure that every individual gets from consuming a good or service, economists came up with the term ***utility***.

Definition

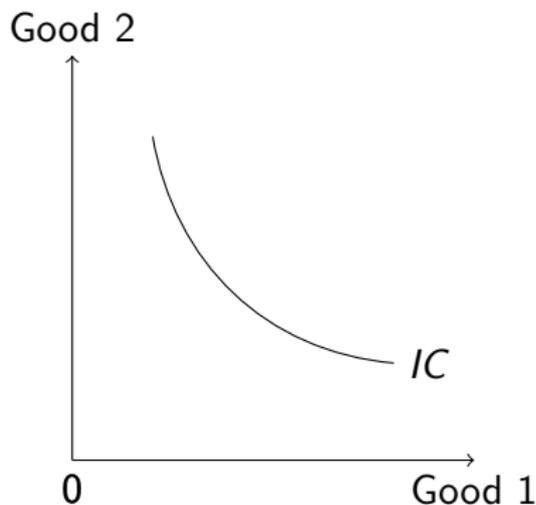
Utility: The satisfaction gained from the consumption of a good.

Consumer Utility

- The utility and the preferences of a consumer are graphically represented by the ***Indifference Curves (IC)***.

Consumer Utility

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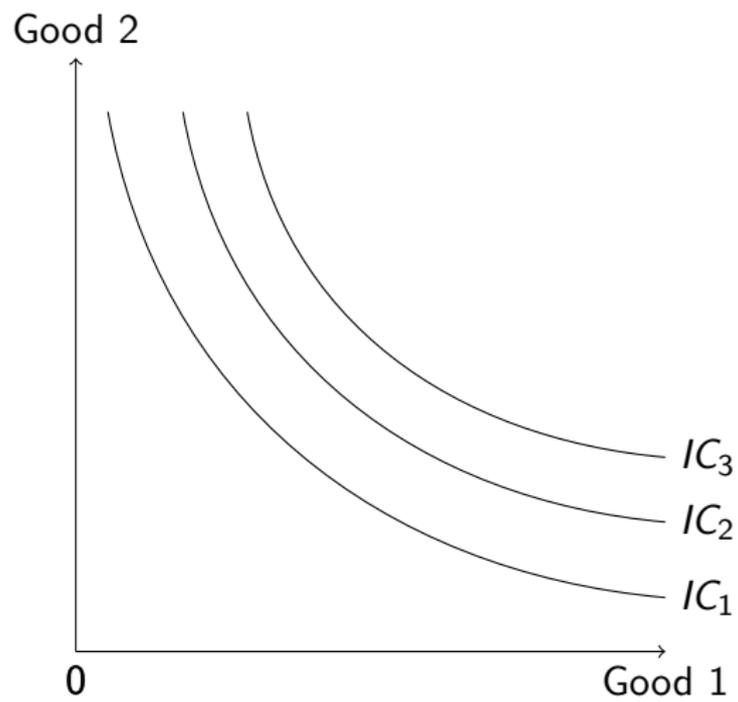
Consumer Utility

- The consumer prefers the bundles that give more pleasure, i.e. more utility.
- Total utility is the satisfaction consumers' gain from consuming a product. The marginal utility of consumption is the increase in utility the consumer gains from an additional (marginal) unit of that good.

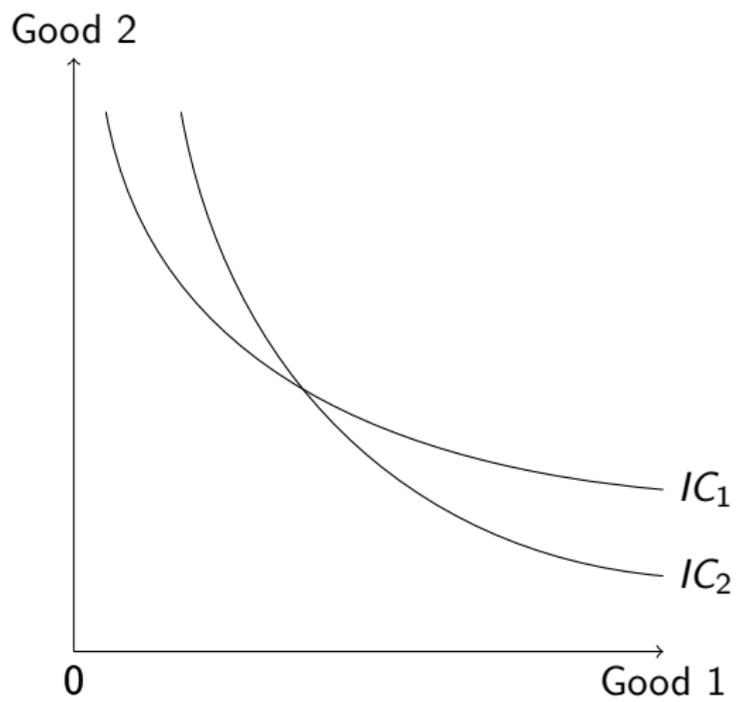
Consumer Choice

- Property 1: Higher indifference curves (further to the upper right) are preferred to lower ones.
- Property 2: Indifference curves are downwards sloping.
- Property 3: Indifference curves do not cross.
- Property 4: Indifference curves are bowed inward.

Property 1



Property 3



Consumer Choice

- The slope of an indifference curve is the marginal rate of substitution (MRS).
- The marginal rate of substitution depends on the amount of each good the consumer is currently consuming.
- people are more willing to trade away goods that they have in abundance
- less willing to trade away goods of which they have little
- The slope of an indifference curve is not constant throughout its length but changes at every point.

Consumer Utility

- If bundle A gives more utility than bundle B then the consumer will choose A.
- If two (or more) bundles give the same utility then the consumer is indifferent between them.
- The IC shows the bundles of consumption that yield the same utility, i.e. make the consumer equally happy.

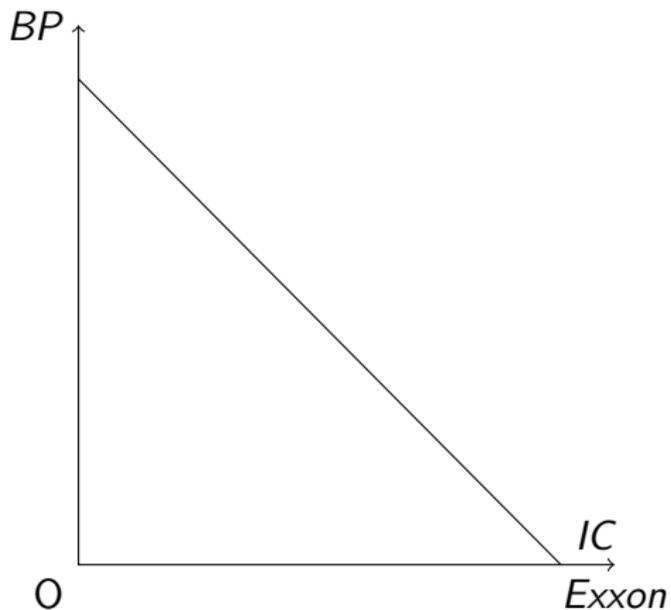
Diminishing marginal utility

Law of Diminishing Marginal Utility

The more of a product you consume over a given period of time, the less additional utility you gain from one more unit.

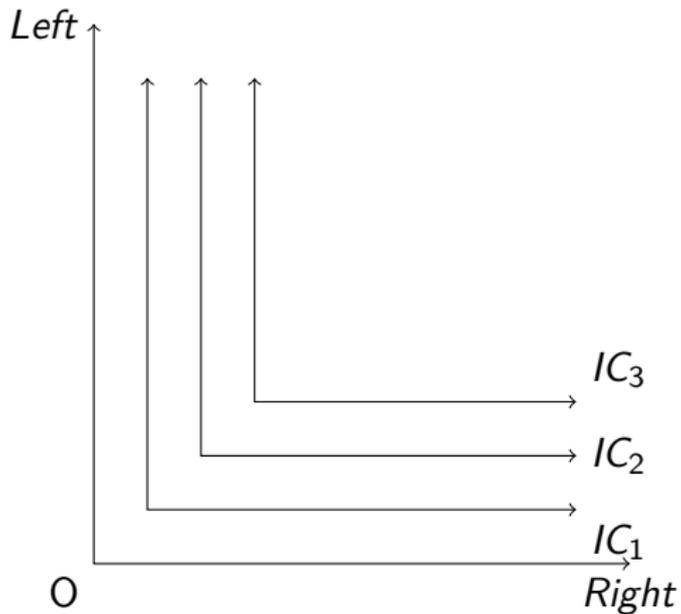
Utility: Perfect Substitutes

BP or Exxon petroleum?



Utility: Perfect Complements

What about shoes?



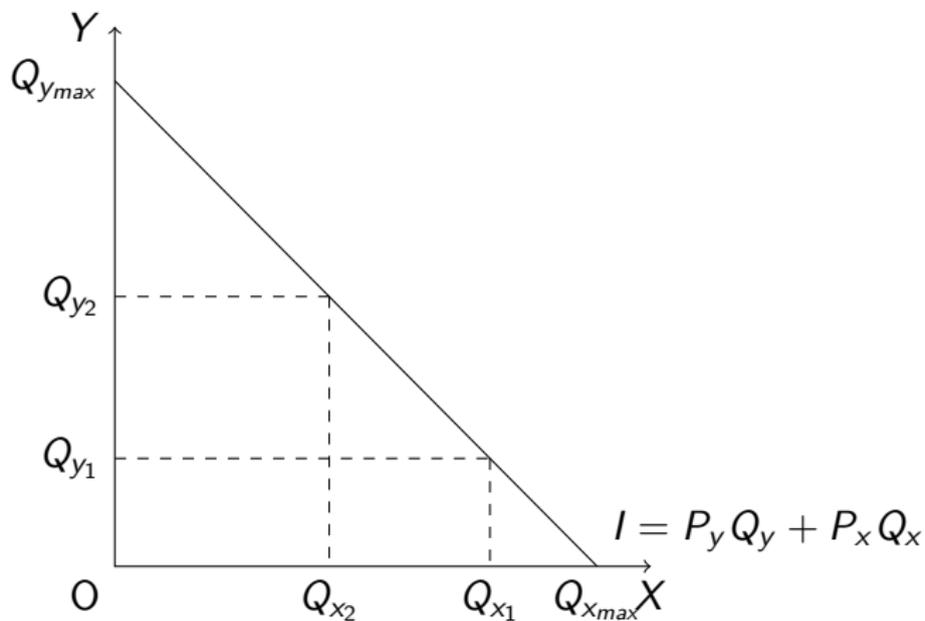
Budget Constraint

- In order to consume (purchase goods and services) you need money.
- As a result, the amount of money you have for spending will determine what and how much you will consume.
- ***Budget constraint.***

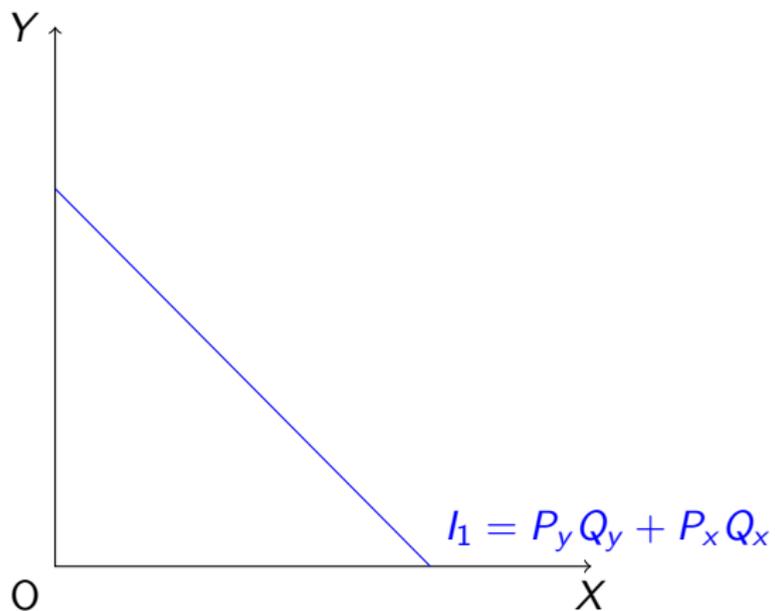
Budget Constraint contd.

- The budget constraint represents all the possible bundles of goods that you CAN afford.
- $I = P_x Q_x + P_y Q_y$
- Your income is split into the expenditure on good X plus the expenditure on good Y.

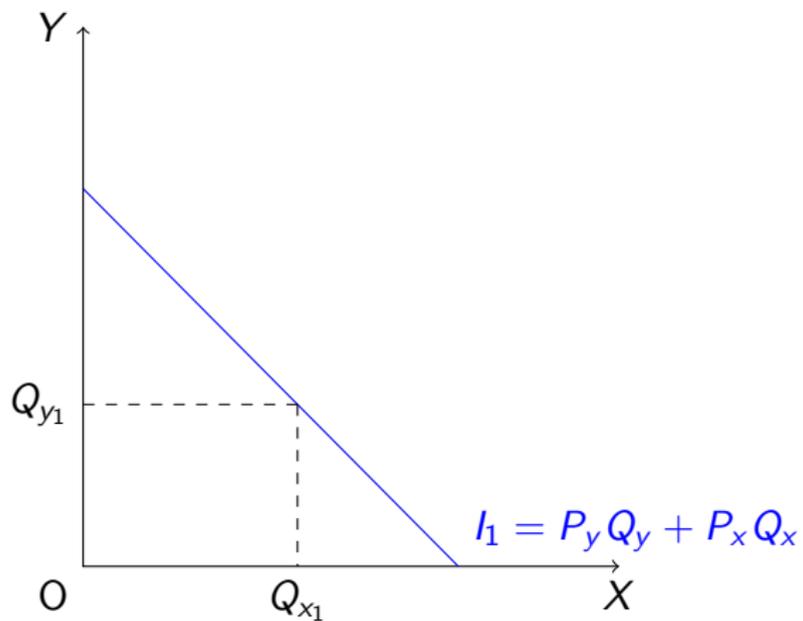
Budget Constraint: Graph



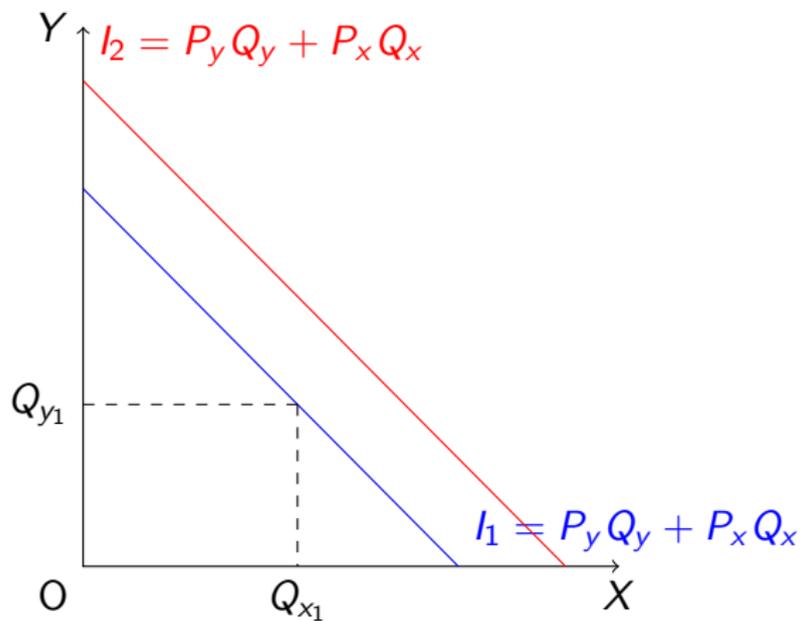
Budget Constraint: Δ Income



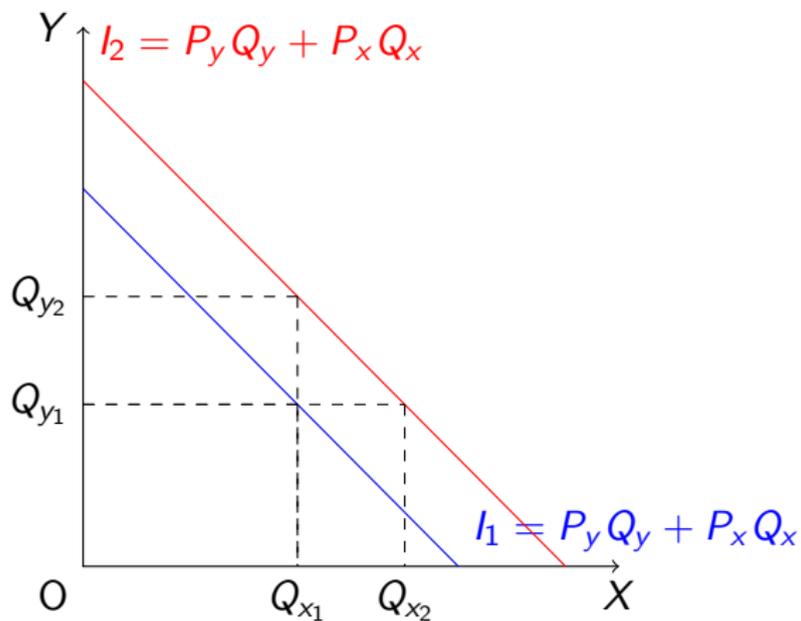
Budget Constraint: Δ Income



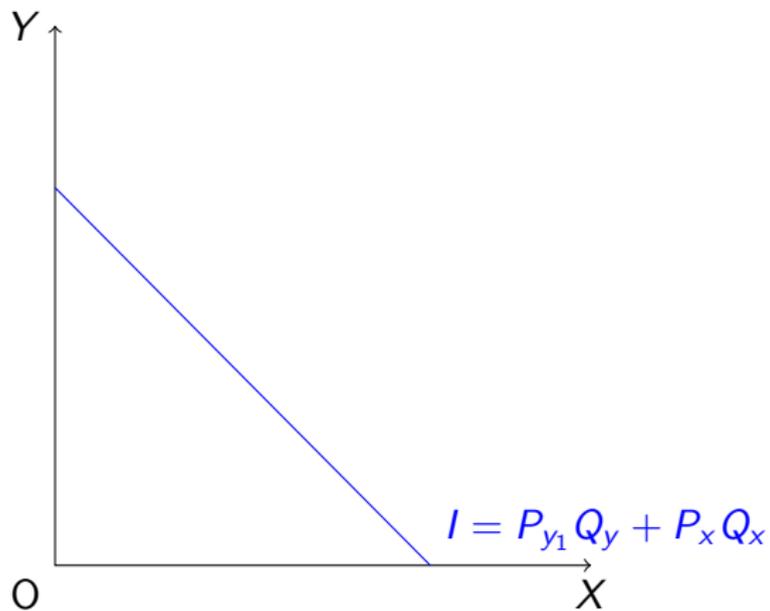
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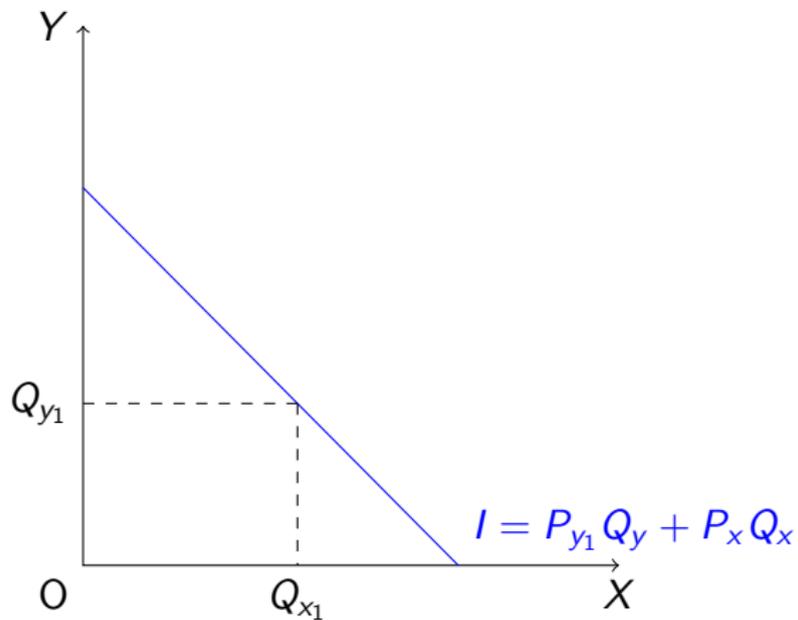
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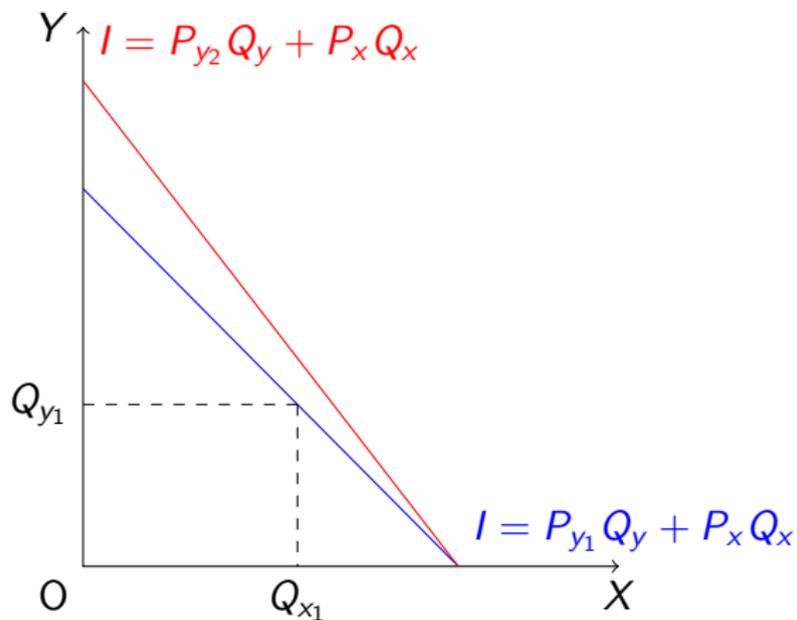
Budget Constraint: Δ Price



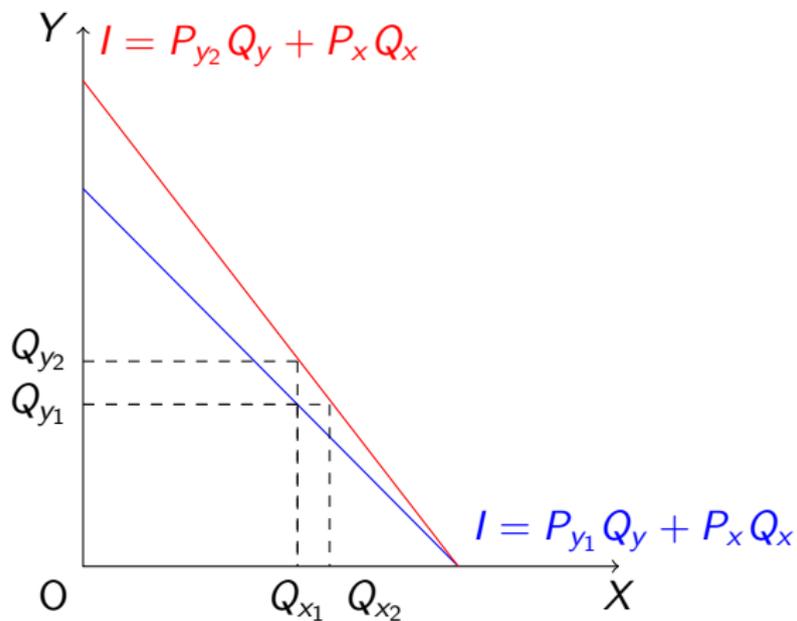
Budget Constraint: Δ Price



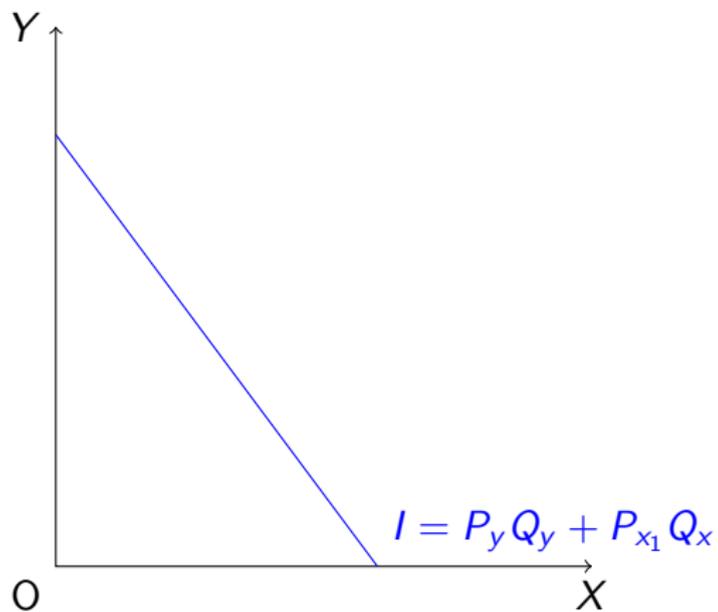
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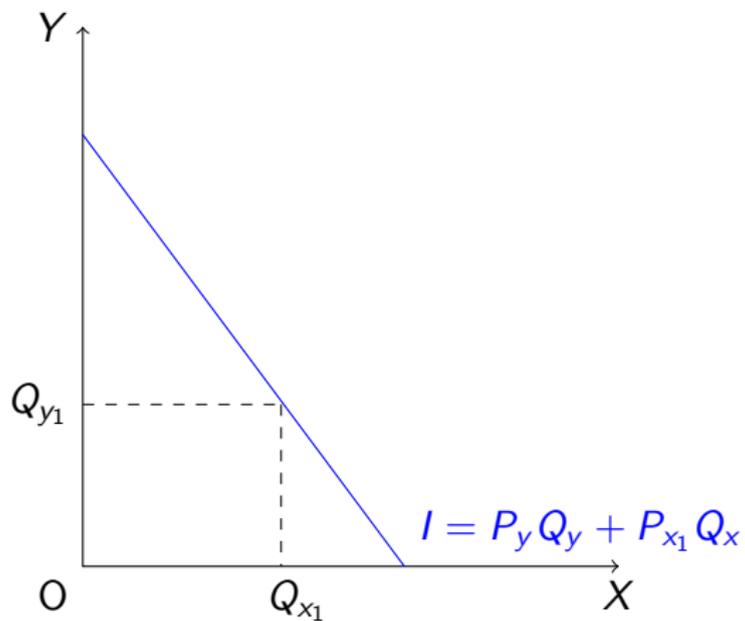
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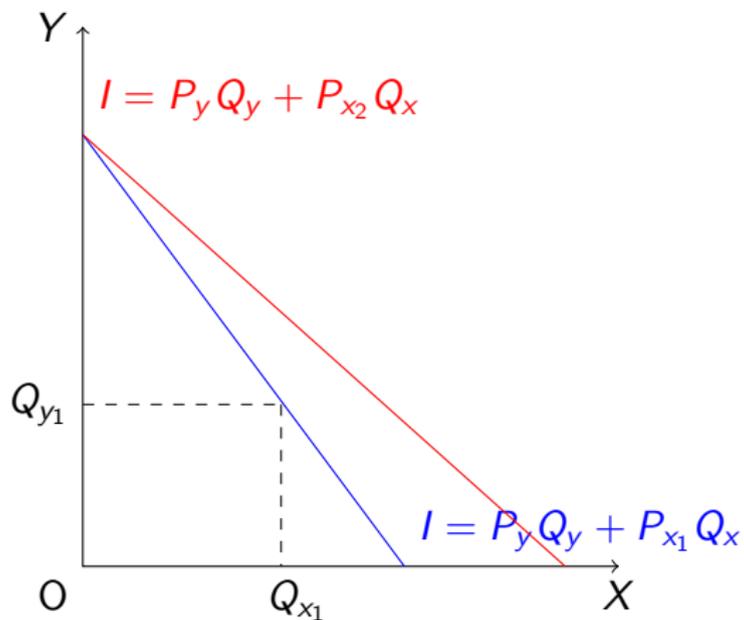
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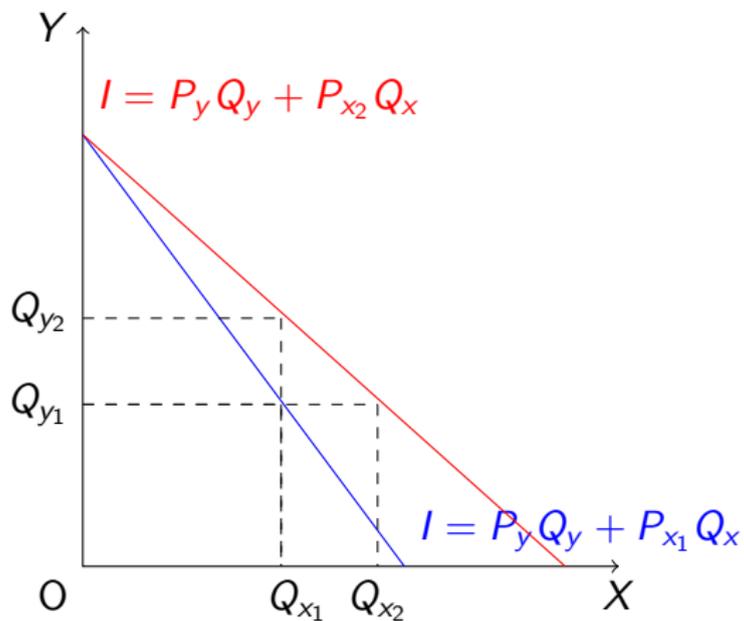
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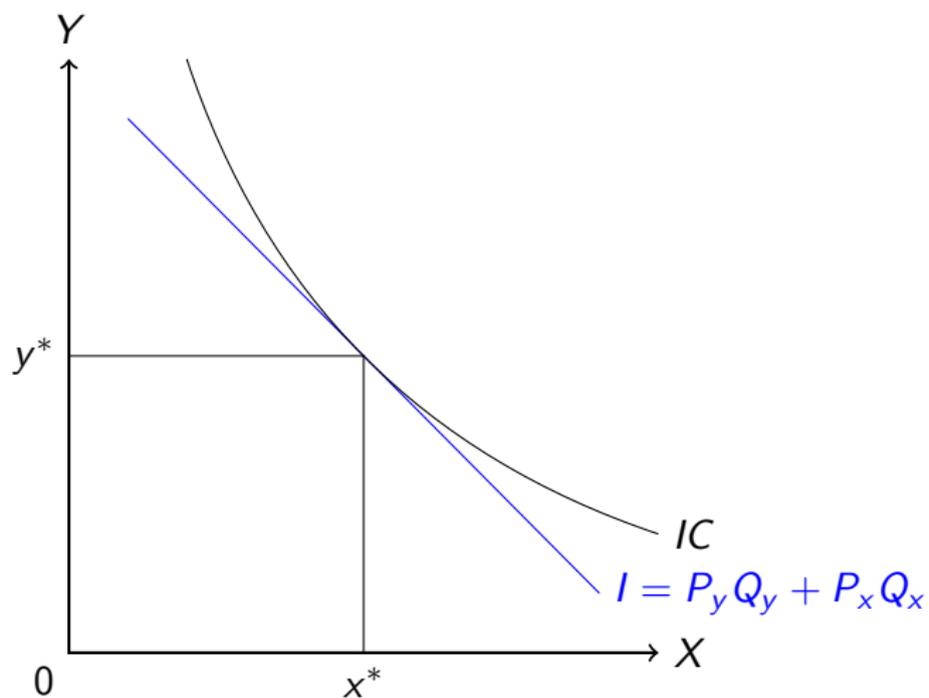
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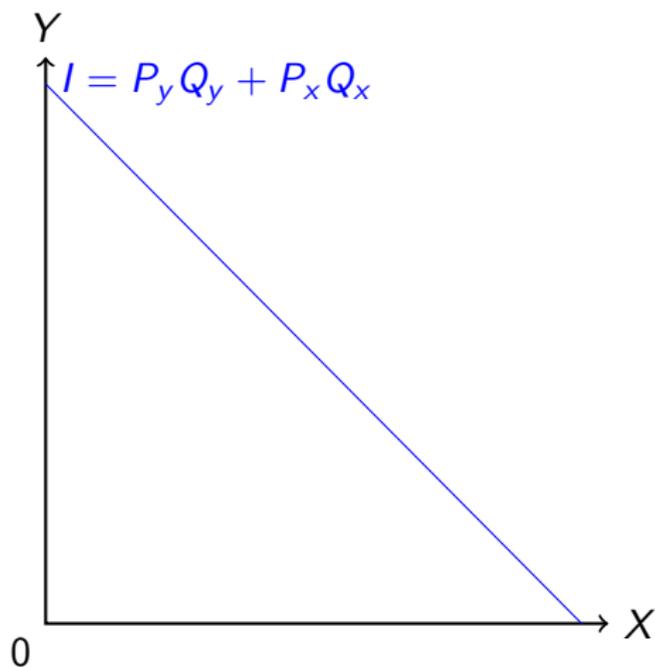
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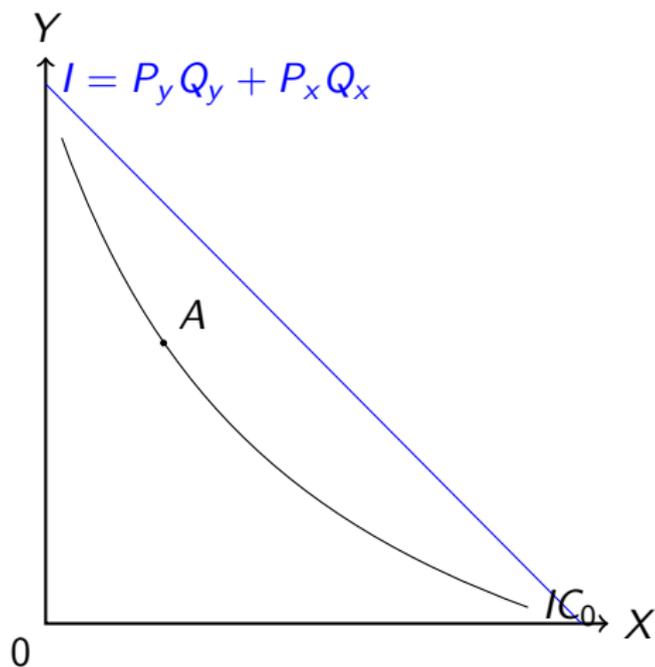
Consumer Choice: Optimal Choice



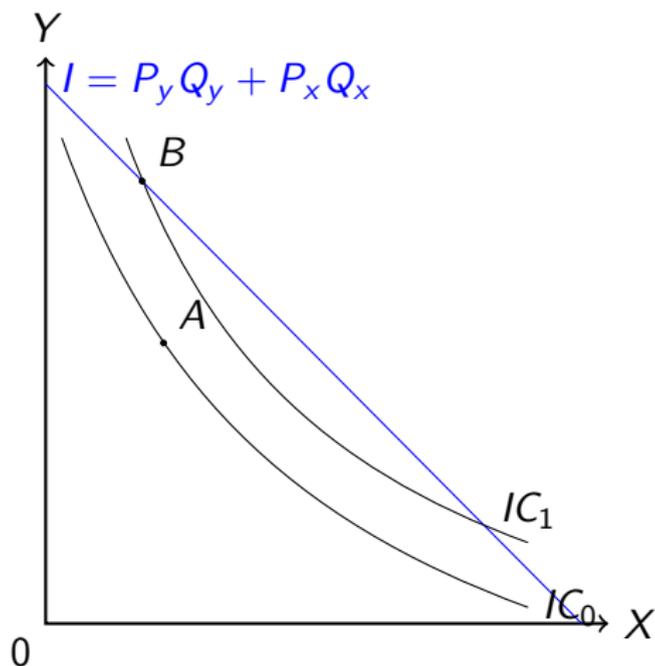
Consumer Choice: Optimal Choice



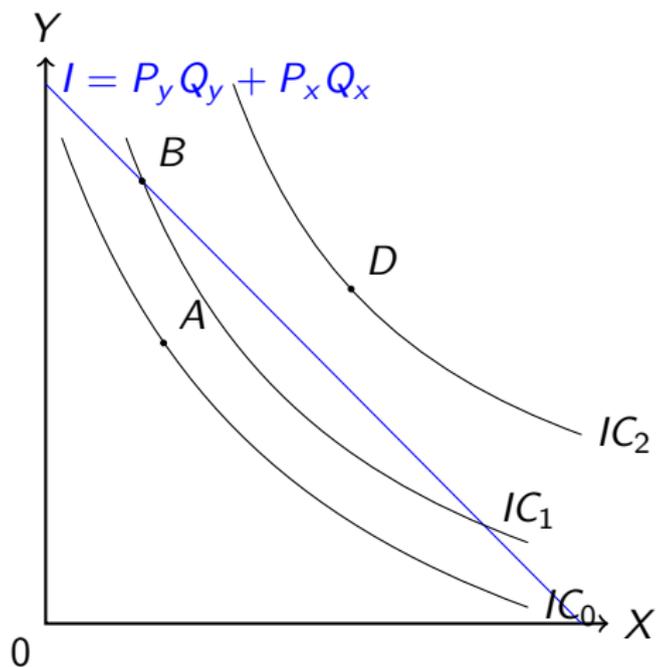
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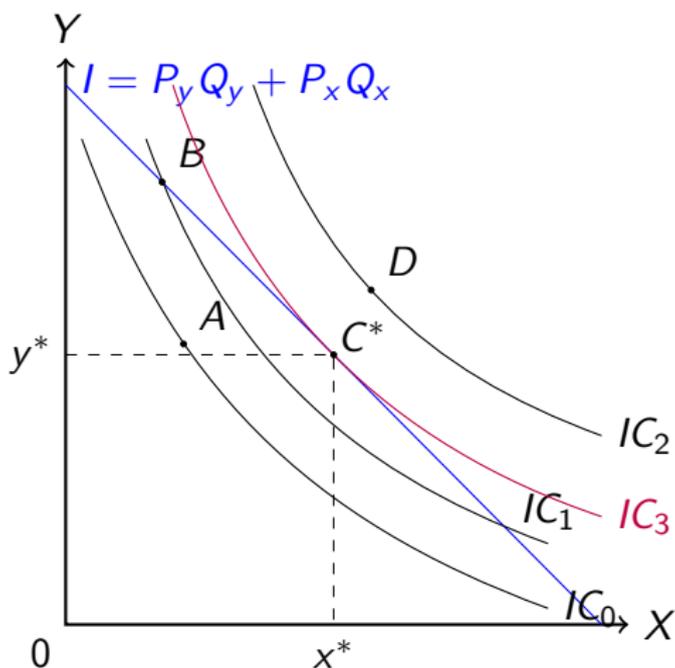
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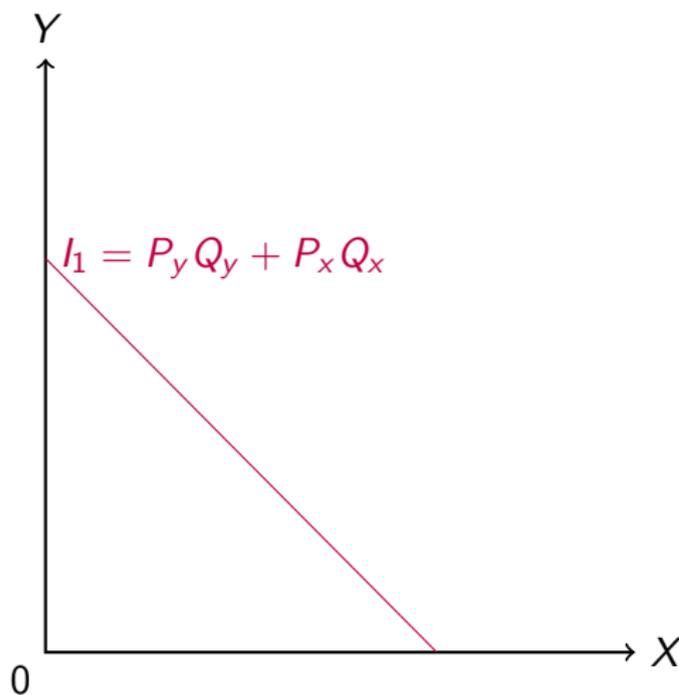
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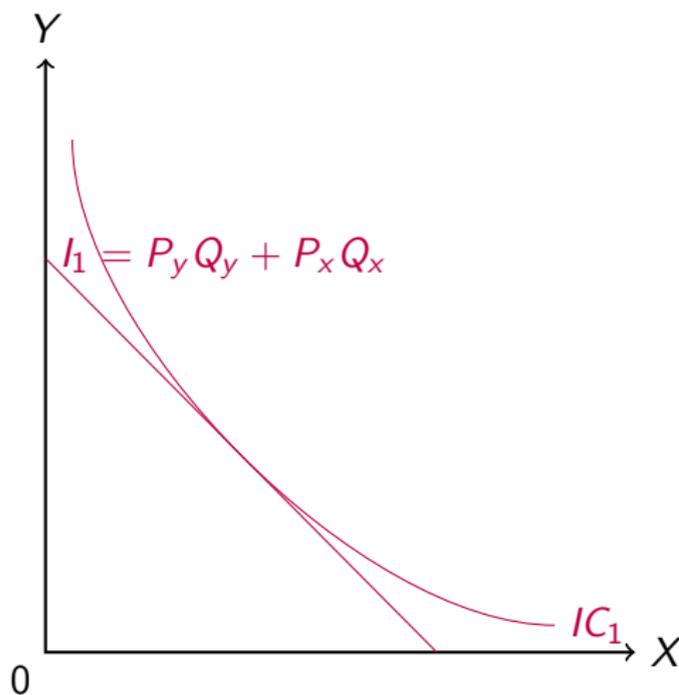
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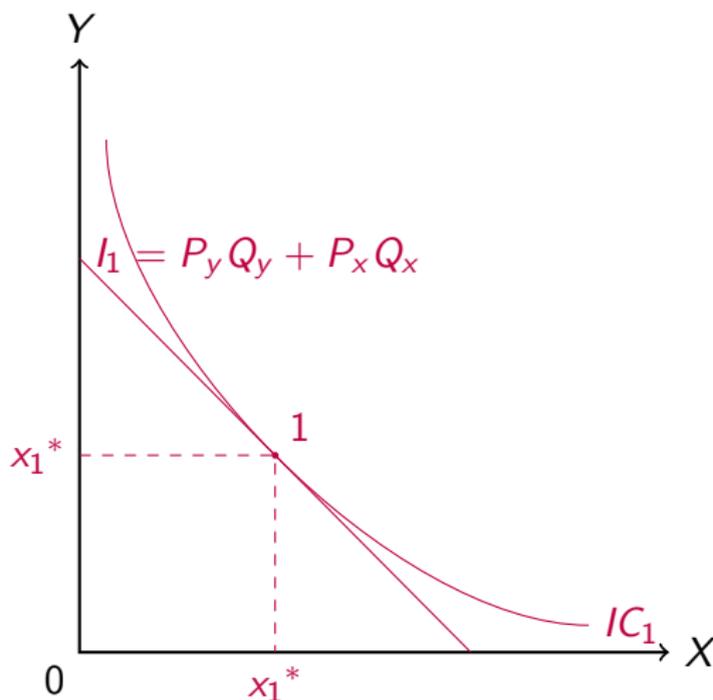
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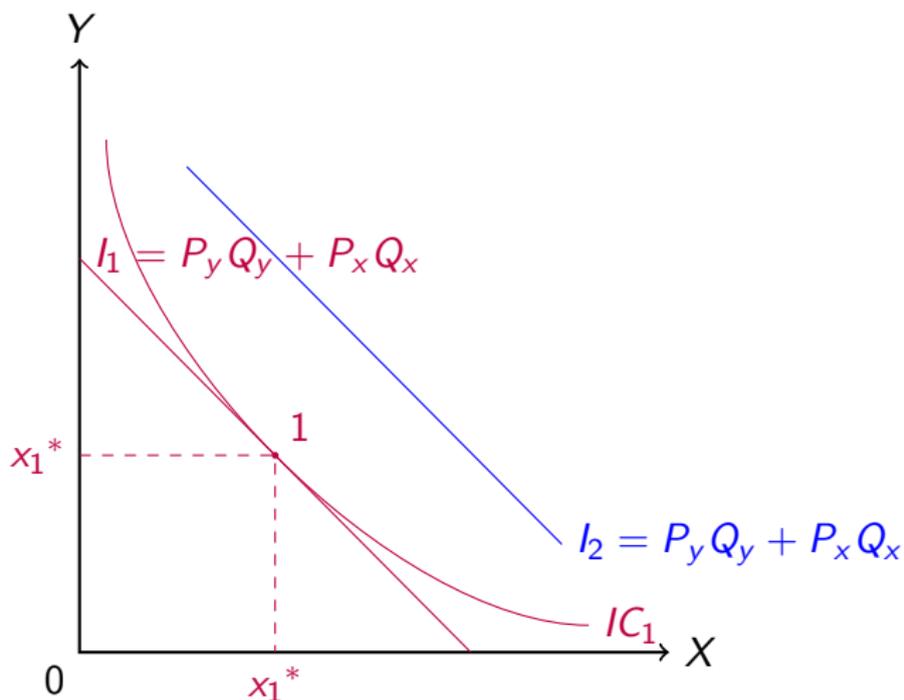
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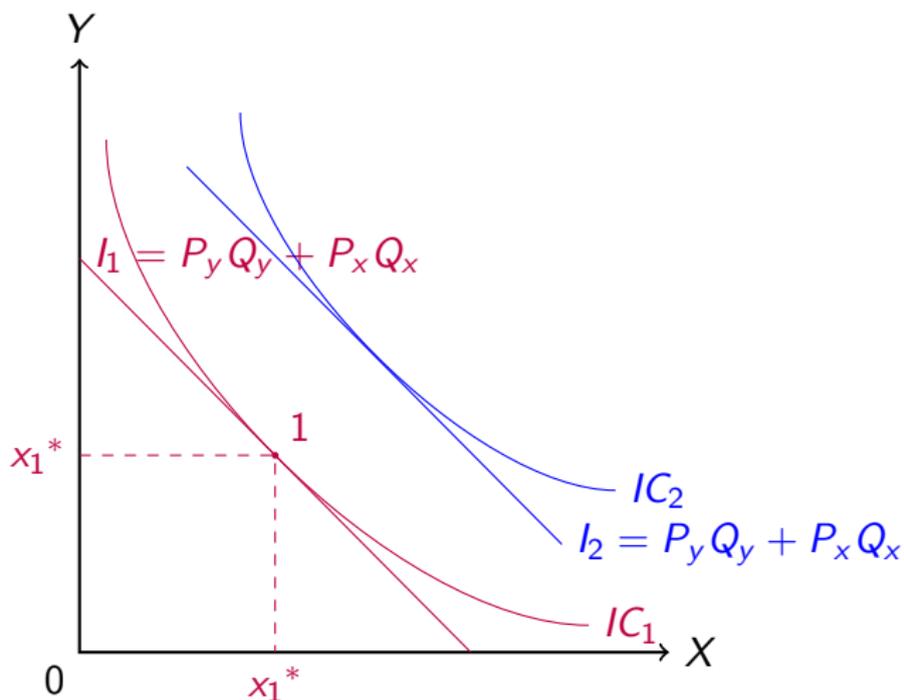
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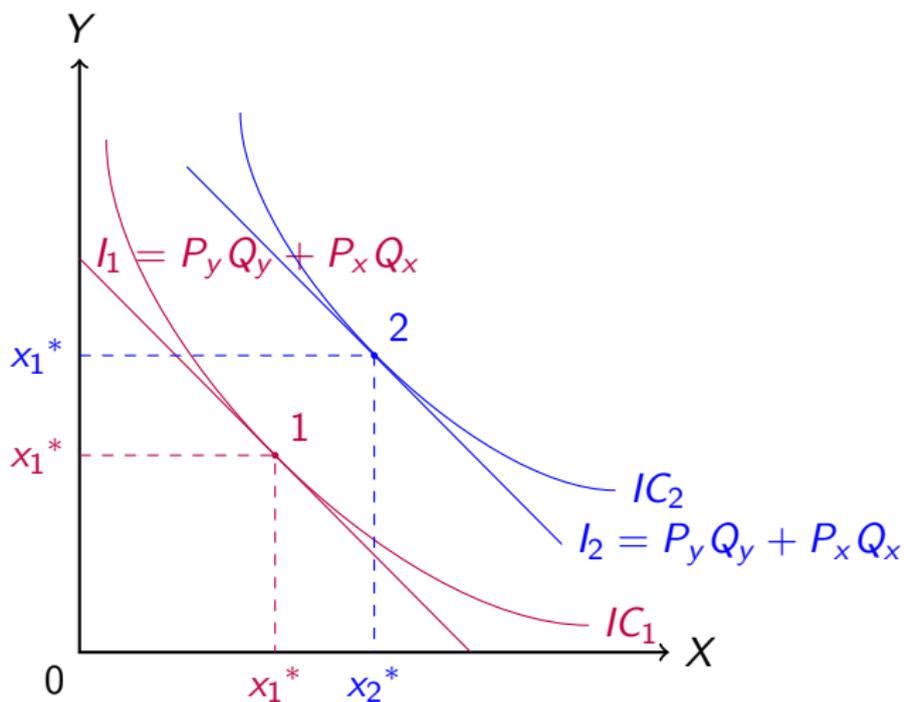
Consumer Choice: Optimal Choice

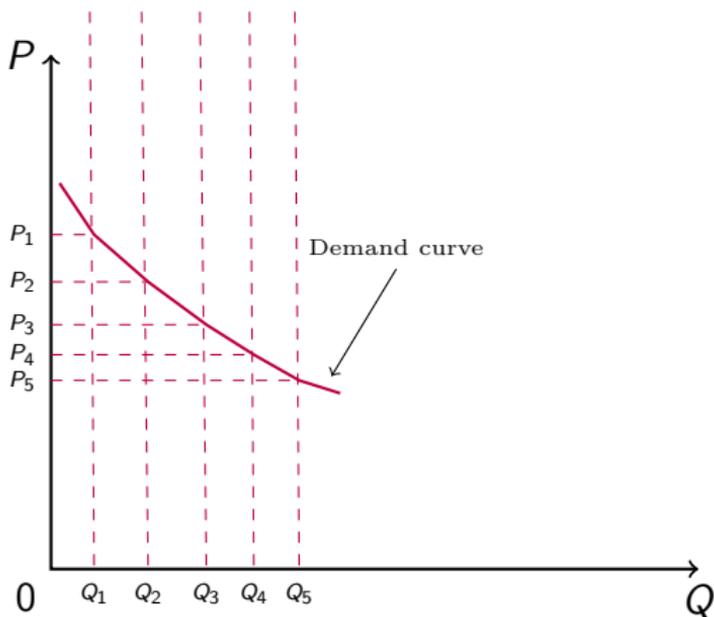
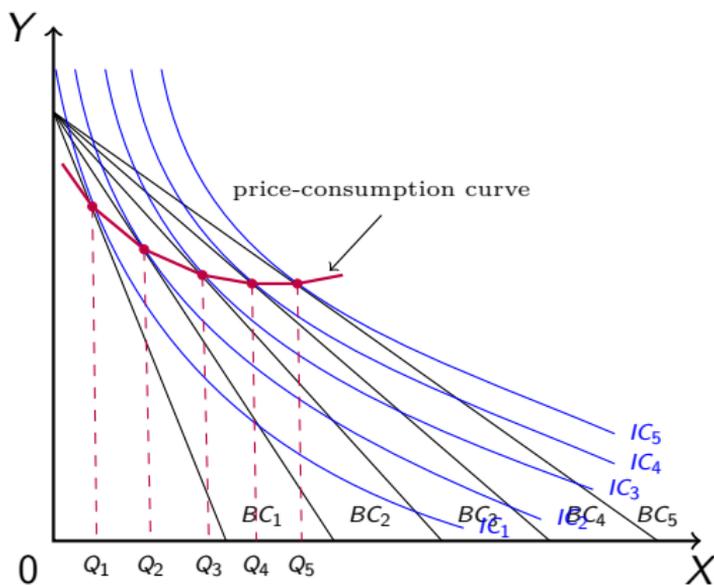


Consumer Choice: Optimal Choice



Consumer Choice: Optimal Choice





Consumer Utility

- Collecting all the optimal points of consumption for different price levels
- Yields the price-consumption curve
- That defines the demand curve

Next time

- Supply Curve
- What is the mechanism of supply?
- Background.
- Firm Theory.

What We Learned Today

- Demand refers to the amount of a good that consumers are willing to purchase at a price level.
- It is a downward slope curve because it represents a negative relationship between price and quantity demanded.
- Changes in the price level are illustrated by a movement along the same demand curve.
- The demand curve will shift if any other factor changes.

What We Learned Today

- The preferences of individuals are represented by a Utility Function
- The IC is the graphical representation of all consumption bundles that yield the same level of satisfaction to the consumer.
- The budget constraint determines how much we can consume.
- The optimal choice for the consumer is the point where the IC and the BC touch.

Conclusion

- Review today's lesson.
- Read the relevant chapters in the book (Ch.3 pg 31-38 and Ch.5, including all boxes and case studies)
- Search online for more sources.
- Ask questions in seminar if anything is unclear.
- Do self-test questions at the end of the chapter and online.