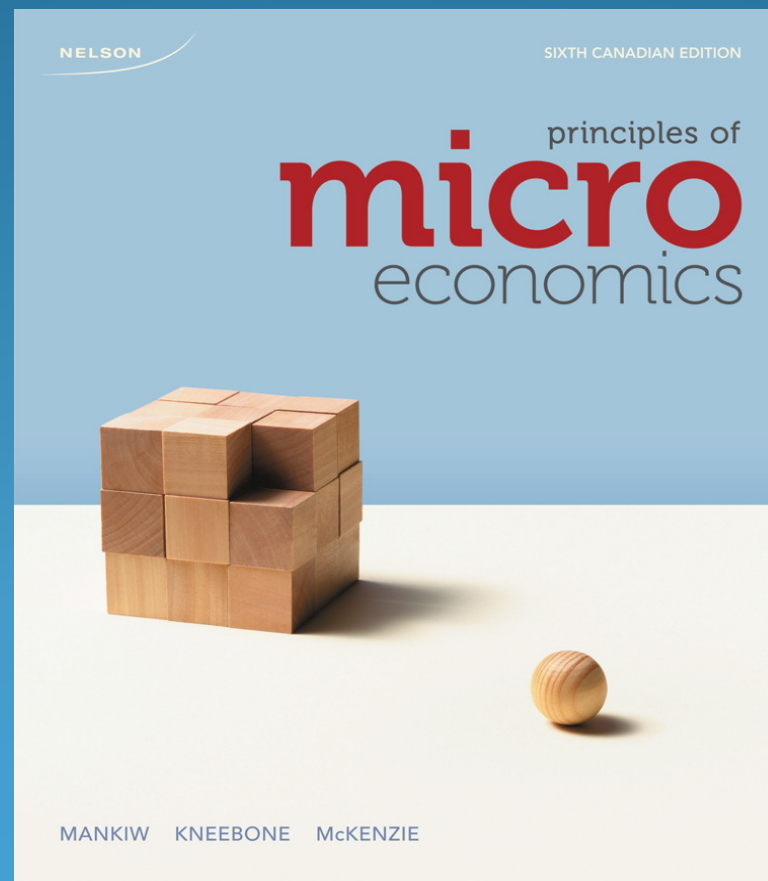


ECO1104

INTRODUCTION TO MICROECONOMICS

Ten Principles of Economics (Ch. 1)

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Economics Is ...

- ... the study of how *scarce resources* are *allocated* among *alternative uses* to satisfy *human wants*
- Resources are scarce (limited in supply) in most situations
- The price of resources reflects their value/importance and is the mechanism by which they are allocated among economic agents (consumers, firms, resource owners)
- Resources (labour, capital, natural) may be consumed or used to produce various goods in alternative uses
- Economics is concerned only with how much people are willing to pay for what they want

Economists study ...

- How people *make decisions*
 - How much to work and save, what to buy and how to invest their savings
 - What resources and technology to use to produce a good, and what to produce
- How people *interact* with each other
 - How prices and quantities of goods are determined
- The forces and trends that affect the *economy as a whole*
 - Business cycles, growth, unemployment, inflation and events in other economies

Macroeconomics & Microeconomics

- The two traditional *subfields* of economics
- ***Microeconomics*** studies how households and firms make decisions and interact; for example,
 - How market power affects production and price
 - How tariffs affect consumers, producers and society
- ***Macroeconomics*** studies the overall economy; for example
 - How a tax cut can stimulate economic growth
 - How increasing the money supply causes inflation
- Both are ***closely intertwined***
 - The overall economy is composed of millions of households and firms
 - Any policy to promote economic growth needs to understand how that policy affects individual household and firms

Unifying ideas

- While many faceted, economics is unified by 10 central ideas or principles
- We will review these *10 principles* in a few moments
 - Four relate to how people make decisions
 - Three relate to how people interact
 - Three relate to how the economy as a whole works
- As we go through the course material, we will explore the 10 principles more fully

How People Make Decisions

Principle #1: People Face Tradeoffs

- All decisions involve *tradeoffs*
 - Examples:
 - Going to a party the night before your midterm leaves less time for studying – this may be career limiting !!
 - Having more money typically means working more, which leaves less time for leisure
 - Protecting the environment takes resources away from producing other goods and may take time away from other activities
- A noted tradeoff exists between *efficiency* and *equity* because these desirable goals often conflict
 - Efficiency is getting the most from resources (size of the pie)
 - Equity is sharing resources fairly within a society (who eats it)
 - Example: A progressive tax system (like Canada's) reduces the incentive to work

How People Make Decisions

Principle #2: The Cost of Something Is What You Give Up to Get It

- Making decisions requires comparing the costs and benefits of alternative choices
- The **opportunity cost** of any item is whatever must be given up to obtain it
- It is **the relevant cost for decision making**
- Examples: The opportunity cost of...
 - ... going to college for a year is not just the tuition, books, and fees, but also foregone wages
 - ... seeing a movie is not only the price of admission, but also the value of time spent in the cinema instead of elsewhere

How People Make Decisions

Principle #3: Rationale People Think at the Margin

➤ *Rational people:*

- Systematically and purposefully do the best they can to achieve their objectives
- Make decisions by evaluating costs and benefits of *marginal changes* – incremental adjustments to an existing plan

➤ Examples:

- When a student considers whether to go to college for an additional year, he may compare the fees and foregone wages to the extra income he could earn with the extra year of education
- When a manager considers whether to increase output, he/she will compare the cost of the needed labour and materials to the extra revenue generated

Question

- You plan to sell your 1996 Mustang
 - You have already spent \$10,000 on repairs
 - At the last minute, the transmission dies
 - You can pay \$600 to have it repaired, or sell the car “as is”
- In each of the following scenarios, should you have the transmission repaired? Explain.
 1. Blue book value is \$6,500 if transmission works; \$5,700 if it doesn't
 2. Blue book value is \$6,000 if transmission works; \$5,500 if it doesn't

Answer

- Cost of fixing the transmission = \$600
 1. Blue book value is \$6,500 if transmission works; \$5,700 if not
 - Benefit of fixing the transmission = \$800 ($\$6500 - 5700$)
 - It's worthwhile to have the transmission fixed
 2. Blue book value is \$6,000 if transmission works; \$5,500 if not
 - Benefit of fixing the transmission is \$500 ($\$6,000 - 5,500$)
 - Paying \$600 to fix transmission is not worthwhile
- **Observation:** The \$10,000 you spent previously on repairs is irrelevant to your decision to proceed or not with fixing the transmission
 - What matters is the cost and benefit of the marginal repair

How People Make Decisions

Principle #4: People Respond to Incentives

- An *incentive* is something that induces a person to act, i.e., the prospect of a reward or punishment
- Rational people *respond* to incentives
- Examples:
 - When gas prices rise, consumers ...
 - ... buy more hybrid cars and fewer gas guzzling SUVs
 - When cigarette taxes increase, teen smoking ...
 - ... falls

How People Interact

Principle #5: Trade Can Make Everyone Better Off

- Rather than being self-sufficient (do everything themselves), people can specialize in producing one good or service, and exchange it for other goods, to *improve their well-being*
- Countries also benefit from trade and specialization:
 - Get a better price abroad for goods they produce
 - Buy other goods more cheaply from abroad than could be produced at home
 - Access a greater variety of goods, including goods they might not be able to get at all (e.g., fresh produce year-round)

How People Interact

Principle #6: Markets are Usually a Good Way to Organize Economic Activity

- A **market** is a group of buyers and sellers of a **good** (may be geographically dispersed)
- **Organizing economic activity** entails determining: what goods to sell, how to produce them, how much of each to produce, and who gets them
- A **market economy**:
 - Allocates resources through the free, decentralized and self-interested decisions of buyers and sellers as they interact in markets to determine market prices
 - Sets market prices that reflect each good's value to buyers and cost of production to sellers
 - Often organizes economic activity in a way that maximizes economic well-being (i.e., is **efficient**)

How People Interact

Principle #7: Governments Can Sometimes Improve Market Outcomes

- Key roles for government are to define property rights and to enforce them (with police and the courts)
 - People are less inclined to work, produce, invest, or purchase if large risk of their property being stolen
- But markets can sometimes fail to allocate society's resources efficiently
- Causes of market failure include:
 - Externalities, when the production or consumption of a good affects third parties (e.g., pollution imposes costs on society)
 - Market power, small numbers of buyers or sellers have substantial influence on market price (e.g., a monopoly is a single seller)
- In such cases, public policy *may promote efficiency*
- Of course, government may also alter market outcomes to promote a more desirable distribution of resources (equity) – possibly at the expense of efficiency

How the Economy as a Whole Works

Principle #8: A Country's Standard of Living Depends on Its Ability to Produce Goods & Services

- Living standards vary greatly across countries and over time
 - Average income in rich countries is more than 10 times average income in poor countries
 - Canada's standard of living today is 8 times larger than 100 years ago
- **Productivity** is the most important determinant of living standards
 - It is the amount of goods produced per hour of a worker's time
 - It depends on the equipment, knowledge and skills, natural resources, and technology available to workers
- Other factors (e.g., labour unions, foreign competition) have far less impact on living standards

How the Economy as a Whole Works

Principle #9: Prices Rise When the Government Prints Too Much Money

- Inflation is the increase in the general level of prices
- ***In the long run***, inflation is almost always caused by excessive growth in the quantity of money, which causes the value of money to fall
- The faster the government creates money, the greater is the inflation rate
- Inflation per year in Canada averaged about:
 - 8% per year in the 1970s (overall price level more than doubled)
 - 2% per year in the 1990s (overall price level rose by 22%)

If π is the inflation rate and n is the number of years, then $(1 + \pi)^n$ tells us how much the price level increases

How the Economy as a Whole Works

Principle #10: Society Faces a Short-Run Tradeoff between Inflation and Unemployment

- Many economic policies push unemployment and inflation in opposite directions *in the short-run* (a few years)
- Examples:
 - An income tax cut can increase consumer demand and output and reduce unemployment, but will also increase the overall price level
 - By reducing interest rates, an increase in the money supply can increase investment and output, and reduce unemployment, but will also increase the overall prices level
- The costs of inflation can become huge if inflation is too high
- How policy instruments should be used to control an economy is subject to much debate

Recap: 10 Principles of Economics

- The four principles of *how people make decisions* are:
 - People face tradeoffs
 - The cost of something is what you give up to get it
 - Rational people think at the margin
 - People respond to incentives
- The three principles of *how people interact* are:
 - Trade can make everyone better off
 - Markets are usually a good way to organize economic activity
 - Governments can sometimes improve market outcomes
- The three principles of *how the economy as a whole works* are:
 - A country's standard of living depends on its ability to produce goods and services
 - Prices rise when the government prints too much money
 - Society faces a short-run tradeoff between inflation and unemployment