#### **Chapter 5**

- **5.1 Macroeconomic Goals**
- 5.2 Employment and Unemployment
- **5.3 Different Types of Unemployment**
- 5.4 Inflation
- 5.5 Economic Fluctuations

- What are the three major macroeconomic goals in Canada?
- Are these macroeconomic goals universal?

What are the three major macroeconomic goals in Canada?

- Maintain employment of human resources at relatively high levels.
- Maintain prices at a relatively stable level.
- Achieve a high rate of economic growth.

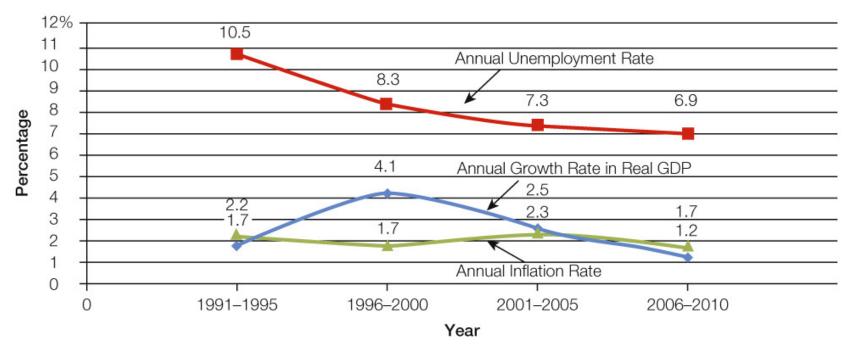
What are the three major macroeconomic goals in Canada?

**Economic Growth** 

- Gross domestic product (GDP) the total value of all final goods and services produced in a given time period.
- Real gross domestic product (RGDP)
  measures output adjusted for any price
  increases.

What are the three major macroeconomic goals in Canada?

Canadian Economic Growth, Unemployment Rates, and Inflation Rates, 1991–2010



SOURCE: Statistics Canada.

Are these macroeconomic goals universal?

Other Goals: In addition to these primary goals, other economic issues sometimes take precedence:

- "quality of life" has prompted some societies to try to reduce "bads" such as pollution and crime, and increase goods and services such as education and health services.
- "fairness" in the distribution of income or wealth.
- Another goal pursued in many nations at one time or another has been self-sufficiency in the production of certain goods or services, such as food and energy.

What are the consequences of high unemployment?

- What is the unemployment rate?
- Are unemployment statistics accurate reflections of the labour market?
- What are the categories of unemployment?
- What is the labour force participation rate?

What are the consequences of high unemployment?

- Financial uncertainty.
- Anxiety, tension, and despair.
- Loss of potential output to society.
- Potential consumption is reduced.

What is the unemployment rate?

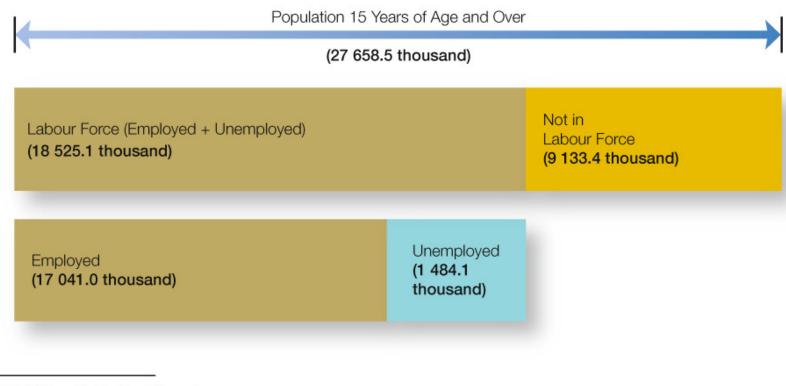
The Unemployment Rate

- Labour force persons 15 years of age and over who are employed or are unemployed and seeking work.
- Unemployment Rate percentage of the people in the labour force who are unemployed.

UE rate = (# of unemployed / Labour force) x 100

What is the unemployment rate?

The Canadian Labour Force, 2010



SOURCE: Statistics Canada.

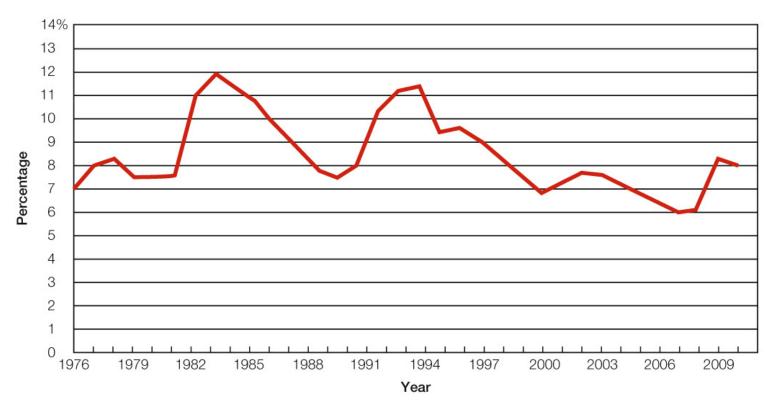
Are unemployment statistics accurate reflections of the labour market?

**Unemployment Statistics** 

- Discouraged workers individuals who have left the labour force because they could not find a job.
- Part-time workers counted as fully employed.
- Underground (illegal) workers not counted in statistics.

What is the unemployment rate?

Unemployment Rate 1976-2010



SOURCE: Statistics Canada.

What are the categories of unemployment?

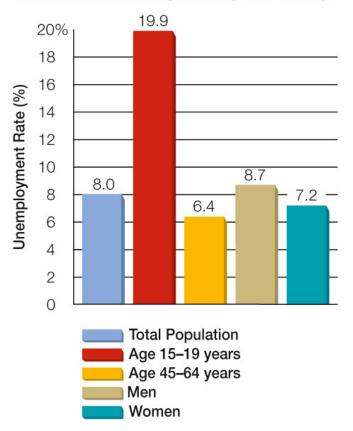
The Unemployed

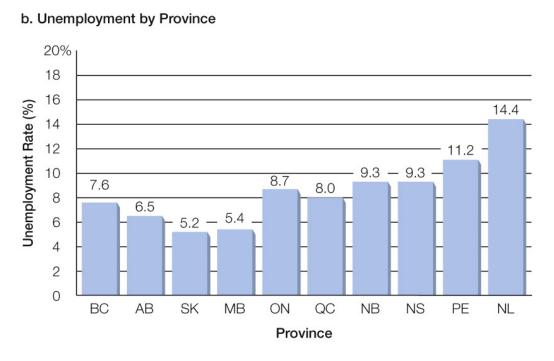
- Unemployment varies by region and population segment.
- Tends to be higher among teenagers, men, and residents of Newfoundland and Labrador.

What is the unemployment rate?

Unemployment Rate 1976-2010

a. Canadian Unemployment, by Sex and Age





What are the categories of unemployment?

- Reasons for Unemployment
  - Job losers laid off or fired.
  - Job leavers quit.
  - Re-entrants worked before, now re-entering the labour force.
  - New entrants entering the labour force for the first time, primarily teenagers.
  - Underemployed skills higher than required for the job.

What are the categories of unemployment? Duration of Unemployment

- Long-term unemployment (> 13 weeks) accounts for 40 to 50% of total unemployment.
- Duration of unemployment is greater when unemployment rate is high.

What is the labour force participation rate? Labour Force Participation Rate

- Percentage of the population (aged 15 years and over) that is in the labour force.
- Since 1976, labour force participation rate increased from 61.5% to 67.6%.
  - Entry of baby boomers into the labour force
  - Increased participation of women

#### What is frictional unemployment?

- Frictional Unemployment
  - Unemployment from normal turnover in the economy.
  - Short term, such as temporary layoffs or changing jobs.
  - UE insurance can increase this type of unemployment.
  - By-product of labour force mobility.

What is structural unemployment?

- Structural Unemployment
  - Workers lack the necessary skills for jobs that are available
  - Have skills that are no longer in demand.
  - Result of a changing, dynamic economy.
  - Government training programs help reduce structural unemployment.

What is cyclical unemployment?

- Cyclical Unemployment
  - Due to short term cyclical fluctuations in the economy.
  - Occurs during a recession due to inadequate demand.
  - Viewed as especially correctable through government policies.

What is the natural rate of unemployment?

- Natural Rate of Unemployment
  - The "average" unemployment rate.
  - Equal to the sum of frictional and structural unemployment.
  - Change with technological, demographic, institutional, and other conditions.
  - Currently between 6% and 7% in Canada.

What is the natural rate of unemployment?

- Full Employment
  - Potential output the amount of real output the economy would produce if all of its resources were fully employed.
  - At the natural rate of unemployment, with no cyclical unemployment.

- Why is the overall price level important?
- How is inflation measured using the Consumer Price Index (CPI)?
- Who are the winners and losers during inflation?
- What are the costs of inflation?
- What is the relationship between inflation and interest rates?

Why is the overall price level important?

- Inflation
  - A rise in the overall price level.
  - Price level the average level of prices in the economy.
  - Inflation decreases the purchasing power of money.
  - Consumers and producers have difficulty in coordinating their plans and decisions.

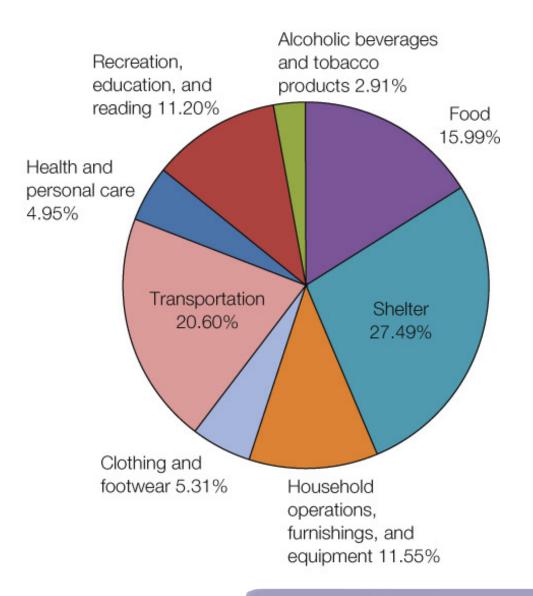
Why is the overall price level important?

- Deflation
  - A decrease in the overall price level.
  - Results in an increase of the purchasing power of money.
  - Any sharp, unanticipated change in price level requires policy response.

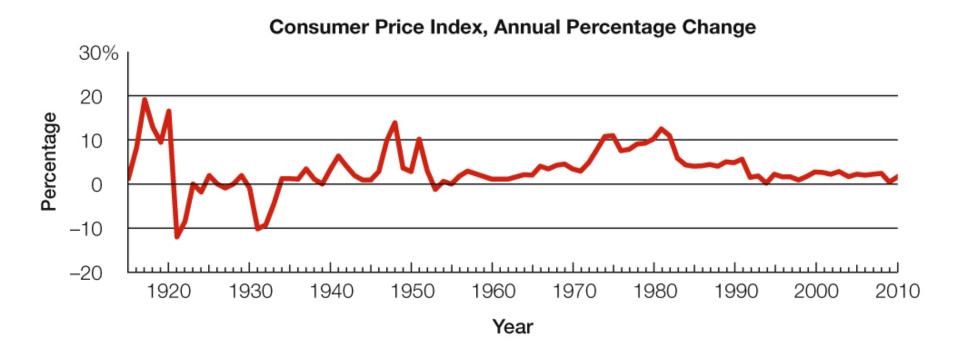
How is inflation measured using the Consumer Price Index (CPI)?

- Consumer Price Index (CPI)
  - A measure of the prices of a basket of consumable goods and services.
  - Used as a standard measure of inflation.
  - Since 1992, Canada's inflation rate has remained below 3% annually.

How is inflation measured using the Consumer Price Index (CPI)?



Who are the winners and losers during inflation? The Inflation Rate in Canada, 1915–2010



SOURCE: Statistics Canada.

Who are the winners and losers during inflation?

- Lowers income in real terms for people on fixed-dollar incomes.
- Erodes the real wealth of the creditor.
- Hurts people whose incomes are tied to long term contracts.

Who are the winners and losers during inflation?

- Debtors pay back dollars worth less in purchasing power.
- Firms that can raise prices may have revenue gains greater than increases in costs.

What are the costs of inflation?

- Redistributes income, causes uncertainty.
- Discourages investment and economic growth.
- Can raise one nation's price level making its goods and services less competitive internationally.
- Unchecked inflation can lead to hyperinflation and economic breakdown.

#### What are the costs of inflation?

- Inflation distorts the information that flows from price signals.
- Uncertain if price increase is inflation or due to relative scarcity of good.
- Menu costs costs of changing posted prices.
- Shoe leather costs costs incurred when individuals frequently reduce their money holdings.

What is the relationship between inflation and interest rates?

- Nominal interest rate the reported interest rate, not adjusted for inflation.
- Real interest rate the nominal interest rate minus the inflation rate; also called the inflation-adjusted interest rate.

Real interest rate = Nominal interest rate minus inflation rate

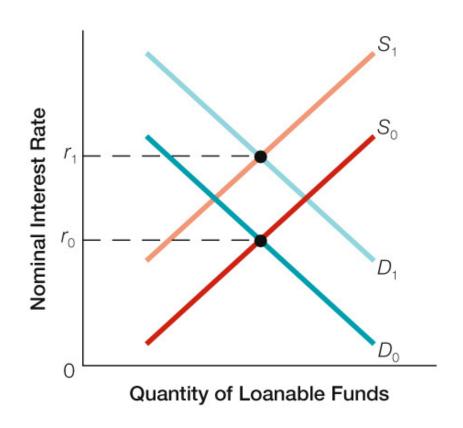
What is the relationship between inflation and interest rates?

- If inflation is expected:
  - Creditors less willing to lend; supply shifts left.
  - Borrowers more anxious to borrow; demand shifts right.
  - Interest rate increases.
  - Quantity depends on relative size of shifts.

What is the relationship between inflation and interest rates?

#### **Nominal Interest Rates**

Nominal interest rates are determined by the intersection of the demand and supply curves for loanable funds. The lower the interest rate (price), the greater the quantity of loanable funds demanded, ceteris paribus;



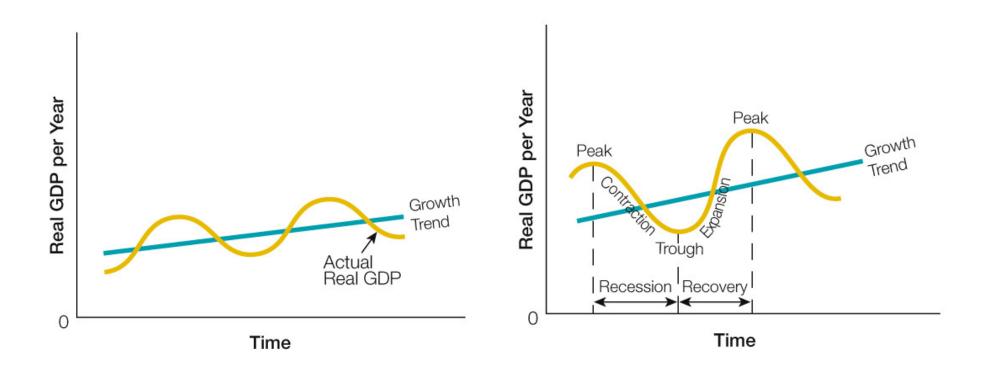
What is the relationship between inflation and interest rates?

- If inflation is anticipated accurately, creditors will not lose nor will debtors gain.
- Some groups try to protect themselves from inflation by using cost-of-living clauses in contracts.

- What are short-term economic fluctuations?
- What are the four stages of a business cycle?
- How long does a business cycle last?

What are short-term economic fluctuations?

- Business cycle short-term fluctuations in the economy relative to the long term trend in output.
- Four cycles expansion, peak, contraction, trough.



- Expansion when output (real GDP) is rising significantly
- The period between the trough of a recession and the next peak.
- Unemployment is falling, spending is increasing.

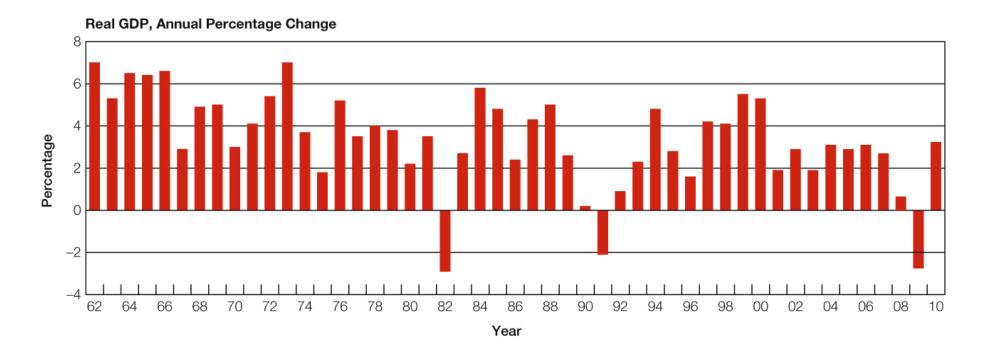
- Peak when output is at its highest point.
- When an expansion comes to an end.

- Phases of a Business Cycle
  - Contraction when the economy's output is falling.
  - Measured from the peak to the trough.
  - Spending on investment and durable goods falls sharply.
  - Also called a recession.

- Phases of a Business Cycle
  - Trough when output stops declining.
  - When business activity is at its lowest point in the cycle.
  - Unemployment is relatively high; may remain so well into expansion.

What are the four stages of a business cycle?

■ Growth in Canadian Real GDP, 1962–2010



SOURCE: Statistics Canada.

How long does a business cycle last?

- No uniformity to a business cycle's length.
- Depression severe recession, or contraction in output.
- Boom period of prolonged economic expansion.

How long does a business cycle last?

- Economists gather statistics on economic activity in the immediate past.
- Using past historical relationships, formulate econometric models.
- Not always accurate but helpful in planning.

How long does a business cycle last?

- Leading economic indicators factors that typically change before changes in economic activity.
- Provide warning of a likely downturn, but not depth or duration.