Economic growth: an increase in an economy’s real GDP per capita ("per head", or real GDP divided by the country’s population) or an increase in the economy’s capacity to produce (potential GDP).

To receive the benefits of growth, real GDP must grow faster than the population.

Since GDP is measured using the market value of final goods produce, it is possible for GDP to increase year to year simply because market prices rose.

Thus begins the distinction between nominal GDP and real GDP.

Nominal GDP: value of GDP in terms of the prices prevailing at the time of measuring (i.e., using current market prices).

To calculate, multiply the quantity produced in that year by the current market prices of that year.

If current market prices rise but production stays the same (or even falls), nominal GDP can still increase.
4.1 ECONOMIC GROWTH

- Real GDP: value of GDP measured in terms of the prices prevailing in a given base year (i.e. consistent prices used in calculations from year to year)
- Removes the effect of an price increase skewing GDP
- The increase in real GDP from year-to-year will be less than the increase in nominal GDP

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty Year 1</th>
<th>Prices Yr 1</th>
<th>Nominal GDP Year 1</th>
<th>Qty Year 2</th>
<th>Prices Yr 2</th>
<th>Nominal GDP Year 2</th>
<th>Real GDP Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine</td>
<td>100</td>
<td>$100</td>
<td>$1,000</td>
<td>120</td>
<td>$120</td>
<td>$1,440</td>
<td>$1,200</td>
</tr>
<tr>
<td>Km of road</td>
<td>50</td>
<td>$300</td>
<td>$15,000</td>
<td>60</td>
<td>$250</td>
<td>$15,000</td>
<td>$12,000</td>
</tr>
<tr>
<td>Bread</td>
<td>500</td>
<td>$2</td>
<td>$1,000</td>
<td>500</td>
<td>$2.50</td>
<td>$1,250</td>
<td>$1,200</td>
</tr>
<tr>
<td>Cars</td>
<td>25</td>
<td>$800</td>
<td>$20,000</td>
<td>25</td>
<td>$820</td>
<td>$20,500</td>
<td>$20,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>542,000</strong></td>
<td></td>
<td></td>
<td><strong>549,200</strong></td>
<td></td>
<td></td>
<td><strong>49,200</strong></td>
</tr>
</tbody>
</table>

**Canada’s Growth:**

<table>
<thead>
<tr>
<th>Year</th>
<th>Nominal GDP</th>
<th>Real GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1,341,248</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>1,500,396</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>1,633,648</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>1,661,399</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>1,696,941</td>
<td></td>
</tr>
</tbody>
</table>

4.1 ECONOMIC GROWTH

- GDP deflator: a measure of the price level of goods included in the GDP, which is calculated by dividing the nominal GDP by the real GDP & multiplying by 100
- Used to discover how much of the increase in nominal GDP can be attributed to an increase in price changes

\[
\text{GDP deflator} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100
\]

\[
\text{GDP deflator}_{\text{year 2}} = \frac{45,200}{49,200} \times 100 = 92.2\%
\]

Therefore, the price level between years 1 and 2 rose by 9% (compare 109 to the base value of 100).
4.1 ECONOMIC GROWTH

Real GDP per capita:
- Accounts for price inflation AND population increase
  (Recall also that while real GDP may have risen, so too
  may have population—and if so, the average person may
  be no better off than before despite the rise GDP)

\[
\text{Real GDP per capita} = \frac{\text{Real GDP}}{\text{Population}}
\]
\[
\text{Real GDP per capita} = \frac{966,000,000}{30,500,000} = \$31,672
\]

4.1 ECONOMIC GROWTH

Real GDP per capita (continued):
- The increase can be expressed as a percentage:

\[
\text{Economic growth rate} = \left( \frac{\text{Increase in real GDP per capita}}{\text{Real GDP per capital (previous yr)}} \right) \times 100
\]
\[
\text{Economic growth rate (1999)} = \left( \frac{30,463}{30,463} \right) \times 100 = 100 \%
\]

Economic growth enables us to have greater material wealth and enables society to better meet the social needs of its population.

As little as a one percent change in the growth rate can have a large impact.

E.g. Canada’s nominal GDP in 2000 was $1056 (current prices), meaning a 1% growth would lead the economy to increase by 10.6 billion, which divided by 10,000 families in Canada equates to an additional $1,060 per family every year.
4.1 ECONOMIC GROWTH

- GDP is a measure of market activity and production, not a measure of economic welfare (i.e., whether people are "better off") nor an indication of the quality or type of goods produced.
- Gun and economics textbooks are rated equally if they are priced the same.
- Any services (child care, housework) that were once done freely by family and friends are now paid for, thus potentially skewing GDP to look as though growth has occurred.

4.2 UNEMPLOYMENT

- Unemployment, which occurs when an economy is not producing at full capacity, can apply to any 3 factor markets (labour, land, or capital).
4.2 UNEMPLOYMENT

There are four types of unemployment:

- Frictional unemployment is due to being temporarily between jobs or looking for a first job
- Employment benefits allow people to accept periodic layoffs without actively searching for other work
- Continuous inflow of new people into the labour market
- Structural unemployment results from structural changes in an economy’s industries
  - Emerging industries, “sunset” (fading) industries, and industries that suddenly die affect employment
  - May lead to a mismatch between people and jobs

4.2 UNEMPLOYMENT

There are four types of unemployment (continued):

- Cyclical unemployment occurs as a result of recessionary phase of the business cycle
  - Due to fluctuations in output and spending
  - Expansion: full employment (i.e. only frictional and structural employment exist, zero cyclical employment)
  - Natural rate of unemployment: unemployment rate at full employment; the lowest unemployment rate an economy can achieve without accelerating inflation

4.2 UNEMPLOYMENT

There are four types of unemployment (continued):

- Seasonal unemployment is due to the seasonal nature of some occupations and industries
- Reasons for increases in the natural rate of unemployment (compared to 20-30 years ago):
  - Changes in employment insurance (EI)
  - Longer job search times
  - Increase in number of people entering the labour force