CHAPTER 5: AGGREGATE DEMAND AND SUPPLY

PREAMBLE

- Level of production and GDP rise over time as the size of the labour force grows, the amount of capital stock in the economy grows, and our technological knowledge advances.
- Production and GDP do not rise at a steady nor constant rate:
  - In years where sales rise, product rises.
  - This leads to increases in hiring, decreases in the rate of unemployment, and increases in levels of income.
  - In years where sales fall, production falls as well.
  - This leads to lay-offs, increases in the rate of unemployment, and decreases in levels of income.

PREAMBLE

- Conclusion: there is a trend which pushes up production and incomes, but short term fluctuations can lead to economic booms and economic recessions.
- The aggregate demand-aggregate supply model (AD-AS model) allows us to analyze changes in both real GDP and the price level simultaneously, providing insight on inflation, unemployment, and economic growth.

5.1 POTENTIAL GDP

- Updated definition of economic growth as an increase in an economy's capacity to produce (i.e. maximum level of production when at full employment).
- Potential GDP: the total amount that an economy is capable of producing when all of its resources are being fully utilized (also called full employment GDP or economic capacity).
- Without increases in potential GDP, sustained growth in the future is limited.

5.1 POTENTIAL GDP

- In the first PPC, the economic growth achieved by moving from point A to B cannot be sustained since the economy’s potential level (PP curve) has not changed. The growth in the second PPC is more likely to be sustained since potential has similarly increased (and thus there is more room for future growth).

5.1 POTENTIAL GDP

- What an economy is capable of producing is not affected by the prices at which those goods are sold.
- A higher price level would raise nominal GDP, but leave potential real GDP unaffected.
- Note that potential GDP is just a benchmark of what an economy could produce, but it does not tell us what an economy actually is producing.
Sources (Determinants) of Economic Growth

1. Labour
   - Increase in labour force (via a higher population or higher participation rate) will enable a country to produce more, but size is not the only factor
   - Quality of labour force is important and the prime source of economic growth (particularly the mobility and ability of a highly educated workforce)
   - Where historically successfully economies moved from an emphasis on agriculture to an one on manufacturing, future successful economies must shift from manufacturing to a information-communications base

2. Physical capital
   - An economy with a higher capital-labour ratio will be an economy with higher labour productivity
   - Machinery can help a worked produce more efficiently
   - i.e. Using a tractor to harvest crops as opposed to picking by hand
   - Increase in capital stock is the result of more investment spending (physical increase in the economy’s plant and equipment)

3. Technological change
   - An increase in the number of machines so as to extract more resources is not enough; the type of machinery must also be constantly improving so as to extract more resources more efficiently
   - Stimulated by spending (both in the public and private sectors) on research and development

4. Natural resources
   - Amount and quality of resources leads to easier growth
   - This was historically true of Canada, in which early development was linked to lumber, fish, grain, and materials, though these are no longer sufficient for present-day growth
   - Read Robinson Crusoe example on p. 161
   - Complete self-test on p. 161

- Labour productivity: measure of the amount of output produced per unit of labour input during a specific time
  - Labour productivity = output per period ÷ units of labour
  - E.g. Assume 100 workers produce 6000 tonnes of paper in a week. Labour productivity = 6000 ÷ 100 = 60 tonnes of paper per unit of labour (or per worker).
- Human capital: the accumulated skills and knowledge of human beings
  - An economy’s government must encourage human capital investment via well-funded and innovative education efforts

5.1 POTENTIAL GDP

Potential GDPs

Real GDP

A positive change in any of the determinants of economic growth will result in a rightward shift of the potential GDP curve
Economic Growth and the Business Cycle

- Potential GDP tends to increase by small, regular amounts each year (though it is not regularly recorded or measured by Statistics Canada).
- Potential GDP grew by about 3% each year in the 1990s.
- Actual economic growth is not as steady, can vary year to year, and can even be negative.
- Average annual rate of growth for 1988 to 2001 is 2.6%, though no single year hit this exact number (see Table 5.1).

Business cycles: the expansionary and contractionary phases in the growth rate of real GDP

- Recession: contractionary phases (of 6 months or more) characterized by a decline in total output, income, and employment rates.
- Trough: part of a recession or depression, when output and employment reach their lowest levels.
- Recovery: expansionary phases in which there is growth in the areas of output and employment (as recovery reaches full employment, the price level may begin to rise).
- Peak: phase during which economy is at full employment and the level of output is at or very near to the economy's capacity.

5.1 POTENTIAL GDP

- The average long-run growth rate is positive for most economies while year-to-year fluctuations can be unsteady—leading the economy to experience business cycles.