Introduction to Business Cycles

- The business cycle is a central concern in macroeconomics, because business cycle fluctuations are felt throughout the economy.

Introduction to Business Cycles (continued)

- The two basic questions are:
  - What causes business cycles?
  - How policymakers should respond to cyclical fluctuations?
Introduction to Business Cycles (continued)

- Classical economists view business cycles as representing the economy's best response to disturbances in production and spending.

Introduction to Business Cycles (continued)

- Keynesian economists argue that because wages and prices adjust slowly, disturbances in production and spending may drive the economy away from its most desirable level of output and employment for long periods of time.

What is a Business Cycle?

1. Fluctuation of "aggregate economic activity".
2. Expansions and contractions.
   - Contraction (recession or depression)
   - Trough
   - Expansion (boom)
   - Peak
What is a Business Cycle?
(continued)

   – Prices, productivity, investment, and unemployment have regular patterns of behaviour.

What is a Business Cycle?
(continued)

4. Recurrent but not periodic.
   – It does not occur at regular, predictable intervals and does not last for fixed, predetermined length of time.

5. Persistence.
   – Once an expansion or contraction begins it tends to continue for a period of time.

The Canadian Business Cycle

• In 1873-1914 there were almost as many months of contraction as months of expansion.
• In 1945-2001 the number of months of expansion outnumbered the month of contraction by more than five to one.
The Canadian Business Cycle (continued)

• The worst economic contraction in the history of Canada is the Great Depression of 1930s.
• Strong economic recoveries are associated with World War I and World War II.

Have Business Cycles Become Less Severe?

• Real GDP growth and the unemployment rate are measured to be less volatile after 1945. The volatility may look lower due to poor quality of pre-1929 data.
• Further studies seem to confirm that cycles have been significantly moderated in the postwar period.

Are Business Cycles Made in Canada?

• The historical data show a strong coincidence between cycle turning points in Canada and the US.
• A study of business cycles in six major countries shows that a significant component of the business cycle does seem to be made in Canada.
The Business Cycle Facts

• Knowing the business cycle facts is useful for interpreting economic data and evaluating the state of the economy.
• They provide guidance and discipline for developing economic theories of the business cycle.

The Business Cycle Facts (continued)

• Two important characteristics of the cyclical behaviour:
  – the direction in which a macroeconomic variable moves relative to the direction of aggregate economic activity;
  – the timing of the variable’s turning points relative to the turning points of the business cycle.

The Business Cycle Facts (continued)

• A procyclical variable moves in the same direction as aggregate economic activity.
• A countercyclical variable moves oppositely to aggregate economic activity.
• An acyclical variable does not display a clear pattern over the business cycle.
The Business Cycle Facts (continued)

- A leading variable’s turning points occur before those of the business cycle.
- A coincident variable’s turning points occur around the same time as those of the business cycle.
- A lagging variable’s turning points occur later than those of the business cycle.

Production

- Production is a coincident and procyclical variable.
- Industries that produce more durable goods or capital goods are more sensitive to the business cycle than the industries producing nondurable goods.

Expenditure

- Consumption and fixed investment expenditures are procyclical and coincident.
- Inventory investment is procyclical, leading, and strongly volatile.
Expenditure (continued)

- Consumption of durable goods, fixed investment, and residential investment are strongly procyclical.

Expenditure (continued)

- The trade balance is procyclical and leading. It usually falls sharply before recessions.
- Business cycles are often transmitted between countries through the trade balance.

Employment, Unemployment and Labour Productivity

- Employment is strongly procyclical and coincident.
- The unemployment rate is strongly countercyclical and coincident.
- Average labour productivity tends to be procyclical and to lead the business cycle.
Real Wage

- In Canada, the average real wage for the economy is acyclical or mildly procyclical.
- A study based on disaggregated data finds that the real wage is procyclical.
- The conclusions about cyclicality of real wage remain elusive.

Money Growth and Inflation

- The money growth is procyclical and leads the cycle as well as it leads the CPI inflation.
- Inflation is procyclical, but with some lag.

Financial Variables

- Stock prices are generally procyclical and leading the cycle.
- Nominal interest rates are procyclical and lagging.
- The real interest rate is acyclical. It may reflect the facts that individual business cycles have different sources of cycles.
Business Cycle Analysis
Preview

- Economic shocks are typically unpredictable forces hitting the economy (e.g. new inventions, weather, government policy).
- An economic model describes how the economy responds to various economic shocks.

Aggregate Demand and Aggregate Supply Model

- Both the classical and the Keynesian model theories can be presented within a single aggregate demand – aggregate supply (AD-AS) model.

AD-AS Model (continued)

- The components of the AD-AS model are:
  - the aggregate demand curve;
  - the short-run aggregate supply curve;
  - the long-run aggregate supply curve.
The AD Curve

- The AD curve slopes downward.
- When the price level is higher, people demand less goods. But it is not because of the income effect of a change in the price level.

The AD Curve (continued)

- The AD shifts when, for a specific price level, non-price factors change the aggregate demand for goods.

The SRAS Curve

- The SRAS is a horizontal line.
- It captures the idea that in the short run, the price level is fixed and firms are willing to supply any amount of output at that price.
The LRAS Curve

- The LRAS is a vertical line. In the long run all firms will adjust their prices so that they can produce at their normal level of output.
- For the economy as a whole it will be the full-employment level of output, $Y$.

Aggregate Demand Shocks

- An aggregate demand shock is a change in the economy that shifts the AD curve.
- An adverse AD shock shifting the AD curve down will cause output to fall in the SR, but not in the LR.

Aggregate Demand Shocks (continued)

- Classical economists think that the LR equilibrium will be restored quickly. Little is gained by the government trying to fight recession.
Aggregate Demand Shocks (continued)

- Keynesians argue that prices do not adjust quickly, the recession is prolonged, and the government can help to fight it.

Aggregate Supply Shocks

- Classical economists view aggregate supply shocks as the major force behind changes in output and employment.
- An adverse AS shock shifts the LRAS curve to the left thus reducing long-run output and increasing long-run price level.

Aggregate Supply Shocks (continued)

- Keynesians agree with the long-run effects the supply shocks can have, but view the adjustment process to the new equilibriums differently.
End of Chapter