Chapter 13: Economic Fluctuations

Learning Objectives

After studying this chapter, you should be able to

13.1 Explain the phenomenon of business cycles

13.2 Understand and describe the phases of the business cycle

13.3 Explain how a business cycle affects different sectors of the economy

13.4 Understand economic theories of business fluctuations

13.5 Explain the role of politics in economic fluctuations

13.6 Discuss the real business cycle

13.7 Discuss policymakers' ability to control the business cycle

13.8 Understand how economists forecast business cycles

Assess Your Knowledge

1. What are business cycles?

2. What is a recession?

3. What would you expect to happen to investment if income increases?

4. Mention two factors that could cause economic fluctuations.

The Meaning of Business Cycles

LO 13.1 Explain the phenomenon of business cycles

Business Cycles

Economic activity fluctuates over time, alternating between periods of expansion and contraction. These fluctuations typically affect many sectors of the economy simultaneously. The recurring pattern of rising and falling output, employment, and income is referred to as the business cycle. The term is somewhat misleading, as it implies a predictable, regular pattern—something the economy does not follow. Business cycles do not occur at fixed intervals and vary in duration and intensity. For this reason, some economists prefer the terms economic fluctuations or business fluctuations to emphasize the irregular and unpredictable nature of these movements.

business cycles, economic fluctuations, or business fluctuations alternating periods of economic expansions and contractions

Booms and busts

Booms and busts describe the alternating phases of economic expansion and contraction within the broader context of business cycles. A rise in income typically initiates a boom—higher incomes lead to increased spending, which reduces inventories below desired levels. Firms respond by increasing production, driving up GDP. But this expansion does not persist indefinitely. Once inventories are replenished and demand stabilizes, firms reduce their orders. Suppliers scale back output, sometimes shutting down plants or laying off workers. A bust follows, marked by declining production, rising unemployment, and slower growth. These alternating booms and busts constitute the core pattern of cyclical economic activity.

boom *a period of economic expansion*

bust *a period of economic contraction*

Phases of the Cycle

LO 13.2 Understand and describe the phases of the business cycle

Phases of a cycle

Although **business cycles** do not follow a fixed or predictable schedule, they tend to move through four recurring **phases**: **trough**, **expansion**, **peak**, and **contraction**. A **trough** marks the lowest point of economic activity, typically associated with high **unemployment** and low **output**. An **expansion** follows, as output and employment begin to rise. The peak represents the highest point of the cycle, where the economy reaches full or near-full capacity. After the peak, a contraction begins, marked by falling output, declining investment, and rising job losses. Figure 13.1 illustrates these phases, showing how real GDP fluctuates around a long-term upward trend.

Reading Comprehension

1. What are business cycles?
2. How appropriate is the term "cycles" as applied to economic fluctuations?

Trough

The trough marks the lowest point in the business cycle. Actual output is significantly less than potential output. Unemployment is high, expectations about the future are pessimistic, and investment is low. Total demand for consumer goods and services is weak. Moreover, banks have more funds available for loans due to a shortage of willing borrowers. If the decline in output and rise in unemployment are severe, the economy enters a depression, a prolonged period of low economic activity and severe unemployment.

trough *the lowest point in the business cycle*

depression *an economic period characterized by low economic activity and severe unemployment*

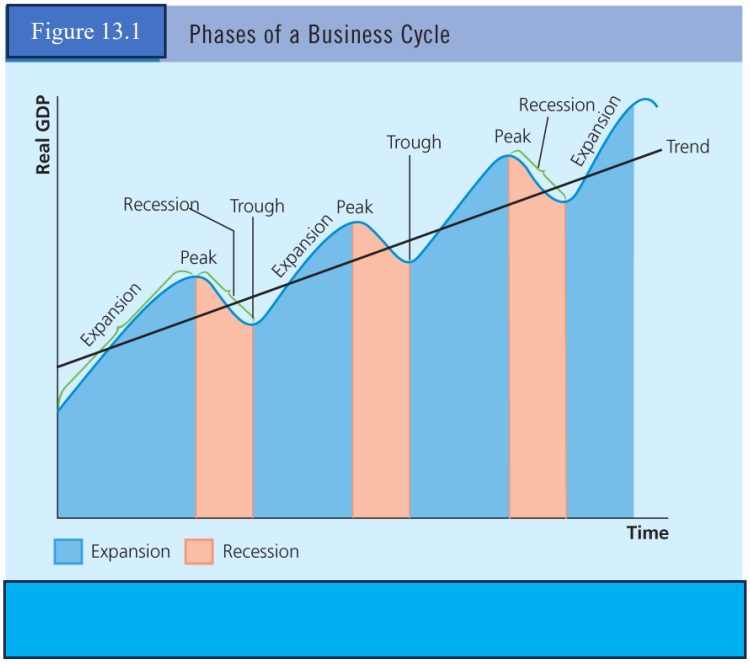
Expansion

The **expansion** phase follows the **trough**, ushering in a period of rising **output**, **employment**, and **income**. As production accelerates, firms hire more workers, and **consumption** increases in response to higher earnings. Business sentiment improves, triggering renewed **investment** in

machinery, facilities, and inventory. Households grow more confident about future prospects. Politically, expansion benefits incumbents, as public approval tends to rise alongside economic performance—often prompting governments to call elections. Because it signals a rebound from stagnation or decline, this phase is also referred to as a **recovery**.

expansion or recovery the phase of the business cycle characterized by an increase in employment, income, and economic activity in general

Figure 13.1 Phases of a Business Cycle



Peak

The peak marks the point at which the economy reaches full capacity. At this stage, economic activity is at its highest level. Because resources are fully employed, further increases in demand trigger rising prices rather than higher output. In fact, prices often begin to increase even before the peak is reached.

> **peak the phase of the business cycle in which economic activity has reached its highest point**

Recession

A **recession** begins after the **peak**, marking a period of **economic contraction**. As **consumption** and **investment** fall, businesses reduce output, postpone new projects, and lay off workers. Many

firms that earned profits during the expansion phase begin to fail, and **unemployment** rises across sectors. Real GDP declines, and economic confidence weakens. This phase typically creates political pressure on incumbent governments—unless conditions are expected to deteriorate further, in which case early elections may be called.

Canada experienced a major recession during the **2008–2009 global financial crisis**, when collapsing credit markets and declining global demand led to widespread job losses and a sharp drop in real GDP. In **2023**, the country again entered a **technical recession**, with real GDP declining for two consecutive quarters—Q2 and Q3—due to high interest rates, weak investment, and reduced household spending (Statistics Canada, Table 36-10-0104-01).

Although a recession is often defined as two or more consecutive quarters of falling real GDP, this definition remains contested. Economists argue that recessions also involve rising unemployment, contracting investment, and business failures, all of which contribute to their economic and social impact.

recession *a phase of the business cycle characterized by economic contraction*

Cycle Duration and Intensity

Business cycles vary widely in **length** and **intensity**, making prediction difficult. Some recessions are short and shallow—such as the 1970 downturn—while others are deep and protracted. The Great Depression of the 1930s lasted nearly a decade, marked by massive unemployment and collapsing output. The 2008–2009 global recession, triggered by financial sector failures and a housing market collapse, caused steep declines in GDP across advanced economies. More recently, the 2020 COVID-19 recession was unusually sharp, with a sudden drop in employment and output, but it was also brief due to rapid fiscal and monetary responses.

Reading Comprehension

1. What are the phases of a business cycle? Mention the characteristics of each phase.
2. A popular definition of a recession is a decline in GDP for two or more consecutive quarters. Why is this definition unpopular among many economists?

Expansion phases also differ in duration. The boom of the 1960s lasted nearly a decade, supported by rising incomes, investment, and exports. In contrast, some expansions—like the 1976 recovery—were too short to fully absorb unemployed resources, leaving traces of the previous downturn. Because of these irregularities, economists prefer to speak of economic fluctuations rather than fixed cycles.

Sectoral Impact of Business Cycles

LO 13.3 Explain how a business cycle affects different sectors of the economy

Uneven Effects Across Sectors

While **business cycles** affect the entire economy, their **impact varies by sector**. Industries producing **durable consumer goods**—such as automobiles, appliances, and furniture—and **capital goods**—including construction equipment, machinery, and buildings—tend to be the most **cyclical**. During recessions, firms often **delay investment**, choosing to **maintain** rather than **replace** capital. Similarly, households postpone major purchases, prioritizing repairs over new acquisitions.

These behaviours lead to sharp declines in demand for durable goods. In contrast, producers of **nondurable goods**—such as food or basic services—are less affected. During upswings, however, the same sectors that suffer in downturns experience the **strongest rebound**. Business optimism revives investment in capital goods, and consumers catch up on deferred purchases, stimulating production and employment in these industries.

Non-Durables and Services

Producers of **non-durable goods** and **essential services** are less exposed to **business cycle fluctuations**. Expenditures on **necessities**—food, medication, utilities, and school supplies—tend to remain steady regardless of income changes. Unlike capital or durable consumer goods, these purchases cannot easily be postponed.

Some service sectors even experience **countercyclical demand**. During downturns, repair technicians, mechanics, and upholsterers often see increased business as consumers and firms shift from replacement to maintenance. As a result, these industries provide a stabilizing effect on employment and income during recessions, though they benefit less from the rapid growth seen in booms.

Reading Comprehension

1. Why do business cycles severely affect manufacturers of capital goods and durable consumer goods?
2. In what way are service industries and producers of non-durable consumer goods insulated from the effects of business cycles?

Economic Theories of Business Fluctuations

LO 13.4 Understand economic theories of business fluctuations

Economists have developed a range of theories to explain the alternating periods of expansion and contraction in economic activity. These theories differ in whether they emphasize changes in demand,

supply, policy, technology, or psychology. Some are rooted in classical assumptions of market efficiency, while others challenge those assumptions by pointing to market imperfections and institutional failures.

The following sections present the most influential theories of business cycles—beginning with the Keynesian tradition, then turning to competing frameworks.

Keynesian theory

Keynesian theory views business cycles as demand-driven fluctuations in output and employment. The economy can remain below full employment for extended periods because of insufficient spending. The government can play a stabilizing role by adjusting public expenditure and influencing expectations. The Keynesian framework includes several distinct but related theories.

Keynesian theory offers several explanations for business cycles; all rooted in the idea that fluctuations in **aggregate demand** drive changes in output and employment. Within this framework, different theories highlight distinct causes of instability—**weak consumption**, **volatile investment**, **fiscal shocks**, and **shifts in expectations**. Each helps explain why the economy can deviate from full employment for prolonged periods and why government intervention may be needed to restore stability.

Underconsumption Theory

This theory emphasizes that rising income leads to a higher share of saving and a lower share of consumption. If saving exceeds planned investment, total demand falls, leading to reduced output and rising unemployment. During the Great Depression, consumption collapsed, and although households saved, businesses cut investment. This imbalance prolonged the downturn.

Investment Instability Theory

Investment, especially inventory investment, is highly volatile. Firms increase stockpiles during expansions but cut production sharply when demand slows, triggering a chain reaction of layoffs and falling income. In the 2020 downturn, global uncertainty led firms to freeze investment and draw down inventories. The restocking surge in 2021 contributed to rapid output recovery.

Fiscal Policy Theory

Large changes in government spending can fuel booms or deepen recessions. While spending during crises can support recovery, abrupt fiscal tightening can reduce demand and trigger contraction. COVID-19 relief programs in 2020–2021 supported household income and business survival. Their removal in 2022 created a fiscal drag, especially in sectors reliant on subsidies.

Expectations Theory

Expectations shape business confidence and future-oriented decisions. Keynes described these shifts in sentiment as **animal spirits**—irrational but powerful forces behind economic fluctuations.
The collapse of trust in financial markets in 2008 halted investment and triggered global recession. Similarly, renewed optimism after the rollout of vaccines in 2021 revived spending and hiring.

New Keynesian theory

Keynesian theory explains **business cycles** as fluctuations in aggregate demand that affect output and employment. According to this view, the economy can remain below full employment for extended periods because of insufficient demand. Keynesians reject the classical assumption that prices and wages adjust quickly to restore equilibrium. Instead, they argue that policy intervention—especially **fiscal policy**—can help stabilize the economy. Within the Keynesian tradition, several distinct but related theories describe the causes of economic fluctuations.

Underconsumption Theory

This theory emphasizes that as income rises, households save more and consume a smaller portion of their income. If planned investment does not rise to offset this increased saving, total demand falls. Output and employment decline. During the **Great Depression**, this dynamic contributed to a prolonged slump. Households saved, but firms refused to invest, resulting in unused capacity and mass unemployment.

Investment Instability Theory

Investment, especially inventory and fixed investment, is highly sensitive to expectations and interest rates. Firms build inventories during expansions but cut production abruptly when demand slows. These fluctuations cause cascading effects on output and jobs. In **2020**, uncertainty and lockdowns caused firms to freeze investment and deplete inventories. The **restocking surge of 2021** helped drive a rapid rebound in output.

Fiscal Policy Theory

Changes in government spending can amplify business cycles. A stimulus boosts demand during recessions; austerity can deepen downturns. In **2020–2021**, fiscal stimulus programs—including the Canada Emergency Response Benefit (CERB) and wage subsidies—supported household income and business survival. Their withdrawal in 2022 imposed a **fiscal drag**, especially on sectors dependent on public support.

Expectations Theory

Keynes emphasized the psychological role of **expectations** or “animal spirits” in driving investment and consumption. Shifts in sentiment can lead to abrupt changes in economic activity. In **2008**, the collapse of trust in financial markets halted investment and triggered a global downturn. In contrast, **vaccine rollout optimism in 2021** stimulated hiring and spending, contributing to economic recovery.

New Keynesian Theory

New Keynesian economics builds on Keynes’s original insights but adds **microeconomic foundations** to explain why prices and wages are slow to adjust. It emphasizes price and wage **rigidities** that prevent the economy from returning to full employment after a shock. In **2009**, and again during the **COVID-19 recession**, wages and prices did not fall fast enough to correct the downturn. Monetary and fiscal policy—**stimulus packages, low interest rates, and emergency lending**—were required to revive demand.

These models now guide central bank strategy. The Bank of Canada, for instance, uses New Keynesian models to set interest rates and target inflation. The 2020–2021 pandemic response—marked by swift intervention and extended stimulus—reflected this framework's central lesson: without intervention, demand shortfalls can produce persistent recessions.

Real business cycle theory

Real Business Cycle (RBC) theory rejects demand-side explanations and argues that cycles result from **real shocks**—changes in productivity, resource availability, or taxation. These shocks cause optimal changes in work effort, output, and consumption. The economy is assumed to be self-adjusting, with no need for policy intervention.

The **1973 oil shock** reduced global productivity, which RBC theorists interpreted as a real supply disruption rather than a demand collapse. Similarly, labour shortages and transport delays during the 2020 pandemic were seen as real shocks to supply capacity.

RBC theory has been criticized for downplaying unemployment and financial instability, but its emphasis on productivity shocks remains influential in academic and policy modelling.

Monetary theory

Monetary theory explains economic fluctuations as outcomes of changes in the money supply and credit conditions. When credit expands, interest rates fall, encouraging investment and spending. When credit contracts, interest rates rise, reducing borrowing, spending, and employment.

The 2008 financial crisis triggered a global credit freeze—banks withheld lending, investment stalled, and unemployment surged. Central banks responded with near-zero interest rates and quantitative easing to restore confidence. During the 2020 pandemic, the Bank of Canada acted swiftly, reducing policy rates to 0.25% and purchasing large volumes of government bonds to sustain liquidity and economic activity. Monetary theory informs central bank strategies, particularly interest rate targeting, to manage inflation and stabilize the business cycle.

Innovations theory

Introduced by **Joseph Schumpeter**, this theory views cycles as the result of waves of innovation. Breakthroughs in technology or business methods trigger rapid investment, output growth, and employment. As the initial momentum fades, a slowdown follows—until the next wave of innovation appears. The **IT boom of the 1990s** drove productivity and investment. After the **dot-com crash in 2001**, a short recession followed. A new growth wave emerged in the late 2000s through **smartphones and digital platforms**.

Innovations theory sees the economy as driven by entrepreneurship and creative destruction, not just demand and supply balances.

Political business cycle theory

This theory suggests that governments manipulate economic policy—especially spending and interest rates—to influence election outcomes. Before elections, they adopt expansionary policies to stimulate employment and income. After elections, they often impose austerity or fiscal restraint to contain inflation or rebalance budgets, producing short-term cycles in economic activity.

In Canada, federal budgets have shown pre-election spikes in infrastructure and social spending. For instance, in the 2015 election year, the federal government increased spending on transit, family benefits, and public sector employment. Similarly, the 2021 election year saw enhanced pandemic relief programs, expanded childcare commitments, and targeted stimulus to sectors hit hard by COVID-19. These measures supported short-term growth and public support.

After elections, post-budget restraint has followed. In 2016, the government slowed infrastructure rollout to contain deficits. In 2022, as inflation rose, temporary pandemic programs were phased out, and new fiscal measures focused on deficit reduction and supply-side reforms.

Political business cycle theory underscores how electoral incentives—rather than just macroeconomic fundamentals—shape the timing, composition, and intensity of fiscal interventions. Its relevance is heightened in systems where central banks are not fully independent, though in Canada, the Bank of Canada maintains operational autonomy in monetary policy.

Multiplier–Accelerator Theory

The multiplier–accelerator theory explains how small shifts in income can lead to large fluctuations in output. It combines the multiplier, which links changes in income to consumption, with the acceleration principle, which connects investment to changes in output growth.

The acceleration principle states that a rise in income induces businesses to expand capacity, leading to higher investment. If firms anticipate continued demand, they increase capital spending to meet future sales. This investment raises income further, producing a feedback loop.

This theory helps explain how expansions can accelerate and how slowdowns may deepen. In 2023, rising demand in housing and retail triggered increased investment in real estate and logistics, temporarily boosting GDP (Statistics Canada, 2024). By early 2024, as demand plateaued, investment slowed, reinforcing the economy's deceleration (Statistics Canada, 2024a; Statistics Canada, 2024b).

> ***acceleration principle or accelerator*** *the theory that an increase in income leads to an accelerated increase in investment*

According to the acceleration principle, a change in income induces an amplified change in investment. Table 13.1 below illustrates the operation of this principle.

The Capital–Output Ratio and Induced Investment

Table 13.1

Table 13.1

The Acceleration Principle

Year	Total Output	Required Capital Stock	Investment
1	50	200	0
2	52	208	8
3	52	208	0
4	54	216	8
5	56	224	8
6	58	232	8
7	59	236	4
8	62	248	12
9	66	264	16
10	70	280	16

Suppose there is no depreciation of capital. In that case, **gross and net investment are equal**. Also assume that $4 of capital is required to produce $1 of output per year, which implies a **capital–output ratio of 4:1**—the ratio of capital stock to annual output.

Spending $4 to generate $1 of output may appear unwise. But the investment is justified if the $4 produces $1 of output every year, indefinitely. In this context, the stream of returns offsets the initial cost.

Table 13.1 illustrates this relationship. To generate an annual output of $50,000, a capital stock of $200,000 is needed. When output increases to $52,000 in Year 2, the capital stock must reach $208,000, requiring $8,000 of investment.

If output grows at a constant rate, investment stays steady. This pattern appears between Years 4 and 6. When output growth slows, as in Years 6 to 7, investment drops. If output rises more rapidly, investment climbs—as shown from Years 7 to 9.

Investment varies in proportion to changes in output. Given a **capital–output ratio of 4:1**, required investment equals the change in output multiplied by 4. This simple relationship is known as the **acceleration principle** or the **accelerator**.

The formula for the required investment can be developed by using simple algebra. We will have K = required capital stock and Y = total output/income.

$$\text{Let } K/Y = \upsilon, \text{ where } \upsilon \text{ is constant}$$

$$\text{Then } K = \upsilon Y$$

$$\Delta K = \upsilon \Delta Y$$

That is,

$$I = \upsilon \Delta Y$$

where I is the required investment.

The following is an illustrative example:

Example: Given a capital–output ratio of 4, how much investment is required to increase output from \$56 000 to \$58 000?

Solution:

$$K/Y = \upsilon = 4; \Delta Y = 2000$$

$$I = \upsilon \Delta Y$$

$$I = 4 \times 2000 = 8000$$

The required investment is \$8000.

Realism of the Accelerator Theory

The accelerator theory is a model based on simplifying assumptions. It assumes that rising demand for

consumer goods automatically triggers demand for the capital goods needed to produce them. This assumption implies that there is no excess capacity in the consumer goods industries.

In reality, firms sometimes operate below full capacity. When they do, they are unlikely to invest in new equipment immediately. Instead, they tend to utilize existing idle resources first.

The theory also assumes that capital goods industries have unused capacity and can expand production instantly. But in practice, supply constraints may delay their response. When demand for capital goods rises, producers may need time to increase output or acquire inputs, delaying investment.

Explaining the Multiplier–Accelerator Theory

The interaction between the multiplier and the accelerator can generate large swings in economic activity. Paul Samuelson (1915–2009) showed that this interaction can drive the business cycle. During expansion, rising income stimulates investment through the accelerator. The increase in investment then amplifies income through the multiplier.

As the economy nears full capacity, the growth of output slows. Slower output growth reduces the incentive to invest, and the resulting decline in investment, through the multiplier, leads to an even sharper drop in output. This feedback loop intensifies the business cycle, producing alternating periods of rapid expansion and contraction.

The multiplier–accelerator interaction magnifies the business cycle

Causes of Business Cycles

Multiple factors influence business cycles, but investment appears to be the most volatile component.

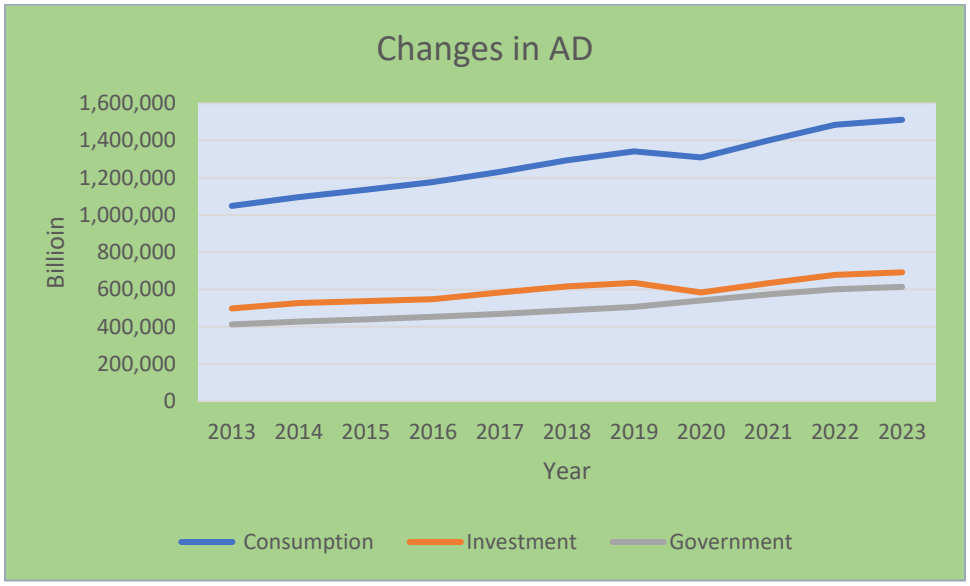
Figure 13.2 offers insight into spending patterns in Canada between 1990 and 2009. Diagram A shows that consumer spending rose steadily, while private investment and government spending fluctuated more widely. Diagram B highlights the most unstable component—inventory investment, which varied sharply from year to year.

This volatility supports the theory that swings in investment—especially changes in inventories—play a central role in economic fluctuations. Inventory cycles, in particular, illustrate how shifts in business expectations about future demand can trigger abrupt changes in production.

Still, no single factor explains the entire cycle. Business fluctuations likely result from a combination of factors—investment dynamics, fiscal policy shifts, and monetary conditions.

Figure 13.2 Possible Causes of Economic Fluctuations

Diagram A: Consumption, investment, and government spending in Canada, 2013-2023



Source: Statistics Canada, Statistics Canada's Table 36-10-0109-01 ,

Controlling the Business Cycle

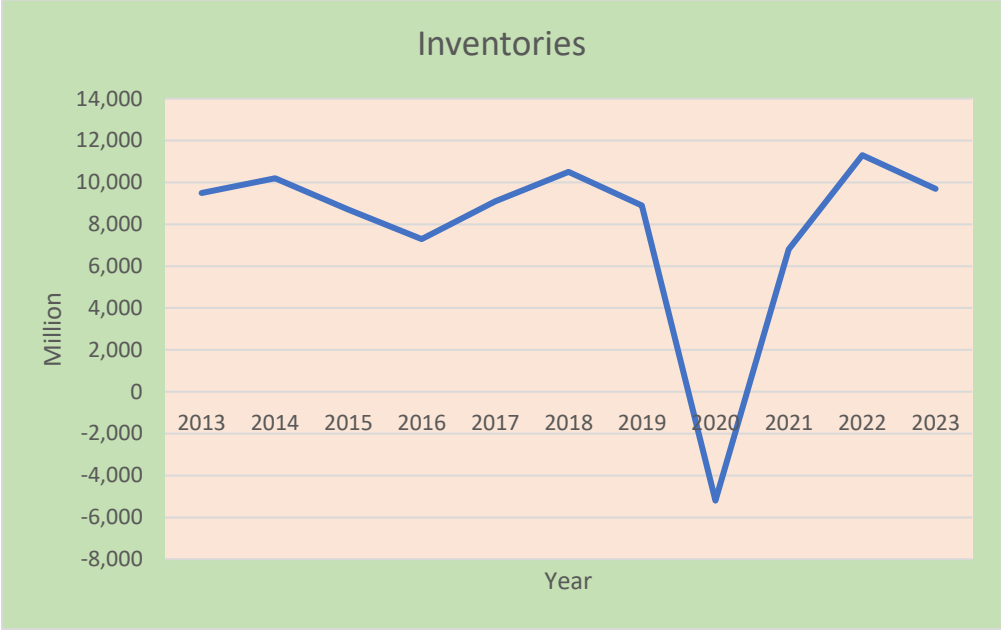
LO 13.7 Discuss policymakers' ability to control the business cycle

Have We Conquered the Business Cycle?

Understanding economic fluctuations has helped reduce their severity, but the business cycle has not been eliminated.

After the rise of Keynesian economics and the publication of *The General Theory*, many economists believed that business cycles could be managed through macroeconomic policy. By adjusting government spending, taxation, and interest rates, policymakers hoped to stabilize output and employment.

Diagram B: Inventory component of investment



Source: Statistics Canada, Statistics Canada's Table 36-10-0109-01

Canada’s experience between 1992 and 2008—sixteen years without a recession—strengthened this optimism. Some believed business cycles were becoming a relic of the past. That confidence was shaken by the 2008–2009 recession, which exposed the limitations of existing policy tools and models.

A second sharp downturn occurred in 2020, triggered by the COVID-19 pandemic. Public health restrictions, supply chain disruptions, and global uncertainty caused a sudden contraction in output and employment. Real GDP fell by 5.1% in 2020—the largest annual decline since the Great Depression (Statistics Canada, 2024, https://www150.statcan.gc.ca/n1/daily-quotidien/210302/dq210302a-eng.htm).

There is broad agreement that improved forecasting and more responsive policy frameworks have helped reduce the frequency and depth of business cycles. Major depressions, like the one in the 1930s, now appear unlikely.

Still, our understanding remains incomplete. Private investment, inventory adjustments, fiscal policy changes, and external shocks continue to generate fluctuations. We have not yet developed the precision needed to fine-tune the economy or eliminate instability entirely.

Managing economic fluctuations remains an ongoing task, shaped by evolving theories, new data, and unpredictable shocks.

Reading Comprehension

1 Briefly explain each of the following theories of the business cycle:

   a. The volatile investment theory

   b. The innovations theory

   c. The monetary theory

2. Explain how each of the following can be destabilizing:

   a. Consumer spending

   b. Government spending

   c. Multiplier–accelerator interaction

3. Briefly explain the principle of acceleration.

4. What relation, if any, exists between the accelerator and the capital–output ratio?

Forecasting Business Cycles

LO 13.8 Understand how economists forecast business cycles

Forecasting the Business Cycle

Accurately predicting business cycles would strengthen our ability to stabilize the economy, but forecasting remains imperfect. Economists have made progress in anticipating economic fluctuations, yet economics is not an exact science. Forecasts are informative and widely used, but they are subject to uncertainty and revision. One basic forecasting tool is the use of economic indicators. These indicators fall into three categories: leading, coincidental, and lagging.

Leading indicators turn before the economy does. They tend to decline before a peak and rise before a trough. Examples include stock prices, new orders for durable goods, and the rate of change in the money supply.

Coincidental indicators move in sync with the business cycle. Their peaks and troughs coincide with those of the broader economy. Examples include real GDP, employment, and corporate profits.

Lagging indicators follow the cycle. They decline after a peak and recover after a trough. Examples include inventories and personal income.

Although these indicators help economists assess turning points, the timing and magnitude of fluctuations remain difficult to forecast with precision. Unexpected shocks and policy changes can quickly alter the economic outlook.

Reading Comprehension

1. To what extent can policymakers control the business cycle?
2. Discuss the view that macroeconomic policies are useless against the business cycle.

leading indicators *economic variables that turn downward before the cycle peak and upward before the trough*

coincidental indicators *variables that coincide exactly with the business cycle*

lagging indicators *variables that turn downward after the peak and upward after the trough*

Limitations of Forecasting with Leading Indicators

Economists use leading indicators to anticipate turning points in the business cycle, but these signals are not always reliable.

When leading indicators rise, economists expect a recovery. When they fall, they anticipate a slowdown. For example, rising stock prices or a surge in new orders for durable goods may signal that a trough is near, while a decline in these indicators may suggest the economy is approaching a peak.

Yet forecasting is more complex than tracking a set of indicators. Leading indicators can produce false signals, predicting turning points that do not occur.

To improve accuracy, economists combine indicator analysis with other tools—statistical models, sectoral data, and policy assessments. Despite decades of refinement, forecasting remains an uncertain task, and continuous effort is devoted to improving the reliability of existing tools and developing new methods.

Indicators of Economic Expansion and Slowdown as Forecasting Tools

Another approach used to forecast general business activity is to examine indicators that suggest either expansion or slowdown. This method helps forecasters identify conditions that usually appear before the economy grows or contracts.

Indicators of economic expansion are signs that the economy is likely to grow. These include:

- **A fall in the unemployment rate** – More people find jobs, which raises incomes and boosts consumer spending.
- **Falling interest rates** – Borrowing becomes cheaper, so households and businesses are more likely to take loans and spend.
- **An increase in purchasing intentions** – Consumers say they plan to buy more goods, which signals stronger future demand.
- **A fall in the saving rate** – Households choose to spend more of their income rather than save, supporting short-term growth.
- **An increase in construction** – More homes and buildings are being built, which adds jobs and increases demand for materials.
- **An increase in purchases of consumer durables** – Households buy more long-lasting goods like cars and appliances, showing confidence in their financial situation.
- **An increase in marriages and new families** – New households spend more on housing, furniture, and services.
- **Rising real wages** – Workers earn more after adjusting for inflation, giving them more money to spend.
- **Increased business investment** – Companies spend more on equipment and buildings, expecting stronger future sales.
- **Positive manufacturing and services PMIs** – Surveys show that businesses expect more orders and plan to hire or produce more.
- **Rising stock market indices** – Investors expect future profits to increase, which reflects confidence in the economy.
- **Increased government infrastructure spending** – The government builds roads, schools, or transit systems, creating jobs and increasing demand.

Indicators of economic slowdown

They are signs that growth is weakening or that a recession may be approaching. These include:

• Rising inflation: Prices increase too quickly, reducing what people can buy with their income.
• Contractionary monetary and fiscal policies: Higher interest rates or lower government spending reduce total demand in the economy.
• Falling foreign demand: Other countries buy fewer Canadian goods, which hurts exports and production.
• Rapid increases in the price of oil or energy: Businesses face higher costs, and households spend more on fuel and utilities, leaving less for other purchases.
• Instability in the foreign exchange market: Large swings in the exchange rate make trade and investment decisions riskier.
• A huge and mounting public debt: High debt may limit future government spending or raise interest costs.
• An inverted yield curve: Short-term interest rates rise above long-term rates, which often signals a future recession.
• Credit tightening or falling bank lending: Banks lend less, making it harder for consumers and businesses to borrow and spend.
• Rising business bankruptcies: More companies fail, which leads to job losses and less investment.
• Supply chain disruptions: Shortages or delays in getting parts or materials reduce output and raise costs.
• Geopolitical uncertainty or war: Conflict or tension disrupts trade and discourages investment.

This method helps forecasters interpret real-world signals without relying only on mathematical models. It is especially useful when the economy is affected by sudden shocks or unpredictable global events.

Interpreting Indicators to Forecast the Business Cycle

On the basis of macroeconomic theory, the forecaster must assess the situation by evaluating how these indicators influence aggregate demand and supply. If indicators of economic expansion appear stronger than those pointing to slowdown, the forecaster will expect an increase in overall economic activity. On the other hand, if signals of contraction outweigh the expansionary forces, the forecast will point toward a recession.

Lessons from the 2008–2009 and 2020 Recessions

History teaches important lessons—provided we are willing to learn from it. The 2008–2009 recession revealed several weaknesses in modern economies and reinforced earlier insights. The 2020 recession, triggered by the COVID-19 pandemic, introduced new risks and confirmed that the business cycle remains unpredictable and difficult to manage. Together, these two recessions provide a useful set of reminders:

1. **We still do not fully understand business cycles.** Both episodes revealed that new shocks—financial in 2008, health-related in 2020—can disrupt economic activity in ways that traditional models do not anticipate.
2. **A financial crisis can spill over into the real economy.** The collapse of banks and credit institutions in 2008 led to job losses and reduced production. This confirmed that financial instability affects output, employment, and consumption.
3. **A public health crisis can also cause a severe downturn.** The pandemic-induced restrictions in 2020 caused the steepest annual drop in Canada's GDP since the Great Depression, even without a financial crash (Statistics Canada, 2024, https://www150.statcan.gc.ca/n1/daily-quotidien/210302/dq210302a-eng.htm).
4. **Timely and large-scale monetary and fiscal policies can reduce the severity of a recession.** Both recessions showed that interest rate cuts, government transfers, and emergency spending can support recovery and stabilize demand.
5. **A credit crunch can cripple the economy.** In 2008, banks limited lending to households and firms, which deepened the downturn. Without credit, consumption and investment fall rapidly.
6. **The business cycle remains unconquered.** Despite better forecasting and stronger policy tools, recessions still occur. Sudden shocks—financial, health-related, or geopolitical—can trigger widespread economic disruption.
7. **Firms of all sizes are vulnerable to downturns.** Both global corporations and small local businesses experienced losses, layoffs, or closures in both recessions.
8. **Forecasting remains difficult.** Leading indicators and models provide signals, but unexpected events can change the course of the economy quickly and sharply.

These lessons highlight the need for continued research, flexible policy tools, and better coordination between financial, health, and economic institutions.

This method relies on weighing competing pressures and judging their likely effect on output, employment, and inflation.

BUSINESS SITUATION 13.1

You are a business analyst, and you have been asked to forecast the probable course of GDP for the near future. You examine the leading indicators and observe that they indicate an upward tendency.

What would you conclude about the probable future course of GDP?

The answer to this Business Situation can be found in Appendix A.

Table 13.2 A list of economic indicators

Indicator Type	Economic Signal	Explanation
Fall in unemployment rate	Expansion	More people find jobs, raising incomes and spending
Falling interest rates	Expansion	Cheaper borrowing encourages loans and purchases
Increase in purchasing intentions	Expansion	Consumers plan to spend more, boosting future demand
Fall in saving rate	Expansion	Households spend more instead of saving
Increase in construction	Expansion	More building activity increases jobs and material demand
Increase in purchases of consumer durables	Expansion	Confidence rises as households buy long-lasting goods
Increase in marriages and new families	Expansion	New households spend more on housing and goods
Rising real wages	Expansion	Purchasing power increases, supporting consumption
Increased business investment	Expansion	Firms expect higher sales and expand capacity
Positive manufacturing and services PMIs	Expansion	Businesses expect more orders and plan to produce more
Rising stock market indices	Expansion	Investor optimism about future growth
Increased government infrastructure spending	Expansion	Public projects create jobs and raise demand
Rising inflation	Slowdown	Rising prices reduce purchasing power
Contractionary monetary and fiscal policies	Slowdown	Higher rates or cuts in spending reduce demand
Falling foreign demand	Slowdown	Fewer exports lower production and income
Rapid increases in oil or energy prices	Slowdown	Higher costs reduce consumption and firm profits

Instability in foreign exchange market	Slowdown	Uncertainty discourages trade and investment
Mounting public debt	Slowdown	Debt limits future spending or raises interest costs
Inverted yield curve	Slowdown	Short-term rates exceed long-term rates, signaling recession
Credit tightening or falling lending	Slowdown	Reduced access to credit slows spending and investment
Rising business bankruptcies	Slowdown	More business failures lead to job losses and less investment
Supply chain disruptions	Slowdown	Shortages and delays lower output and raise costs
Geopolitical uncertainty or war	Slowdown	Conflict disrupts trade and deters investment

Reading Comprehension

1. What are leading indicators? How can they be used to forecast business cycles?
2. List four important lessons that can be learned from the 2008–2009 and 2020 recessions.

Review

1. Review the learning objectives listed at the beginning of the chapter.
2. Have you accomplished all the objectives? One way to determine this is to answer the Reading Comprehension Questions at the end of each section. This will help you assess the extent to which you have accomplished the learning objectives.
3. If you have not accomplished an objective, review the relevant material before proceeding.

Key Points to Remember

1. **LO 13.1, 13.2** The economy is subject to periods of economic fluctuations or business cycles. Each cycle has its own peculiarities, but we can identify four phases common to all cycles: trough, expansion, peak, and recession or contraction.

2. **LO 13.3** Business cycles affect the entire economy, but they affect different sectors differently.

3. **LO 13.4** Among the theories advanced to explain business cycles are the underconsumption theory, the volatile investment theory, the government spending theory, the expectations theory, the innovations theory, the monetary theory, and the multiplier–accelerator theory.

4. **LO 13.4** The acceleration principle states that investment depends on the rate of change of income. As income increases, the demand for consumer goods increases. A larger capital stock is required to produce a larger volume of consumer goods. Investment will then increase.

5. **LO 13.5** The political business cycle is the result of changes in government spending and taxes by elected government officials in an attempt to secure their political positions rather than to stabilize the economy.

6. **LO 13.6** The real business cycle theory states that business fluctuations are due mainly to aggregate supply shocks.

7. **LO 13.7** Although business cycles are not a thing of the past, economists have made progress in understanding them and in formulating policies to reduce their frequency and severity.

8. **LO 13.8** Leading indicators tend to turn downward before the peak and upward before the trough. Economists use leading indicators to help them forecast business cycles. They also use favourable and unfavourable factors.

Problems and Exercises