

White Paper

Investing through the business cycle

Understanding how the business cycle works and impacts investment returns can help long-term investors.

Many factors can influence investment returns, but at a basic level the business cycle is perhaps the most important factor driving investment performance. That's because changes in value for a company's outstanding stock and bond issues are based in large part on the dynamics of a business's bottom-line performance: revenue, expenses, earnings and growth. These factors often fluctuate among individual businesses and industry sectors as the business cycle evolves.

The success of any particular investment decision or strategy may depend on understanding what conditions are often present in each phase of the business cycle and identifying how the business cycle transitions from one stage to the next.

In this white paper, we provide a framework to help investors evaluate investment decisions at any point in the business cycle and set reasonable expectations for future investment performance. We also discuss how shifts in the business cycle can influence investors' portfolio allocation decisions.

Key highlights

- Investment returns are driven in large part by changes in the business cycle.
- Certain asset classes and investment types have historically performed better than others in different stages of the business cycle.
- ➤ A deeper understanding of the influence of the business cycle on investment performance can help investors over the long term.



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The dynamics of the business cycle

Cycles are a natural phenomenon in a developed economy. Business activity rises as companies innovate and produce new products and services. They also create jobs that help individuals build their purchasing power.

Eventually, business activity declines as companies and markets mature, current innovations and improvements have lesser impacts, consumer spending slows and economies slide into recession.

Slowdowns in business and economic activity are painful for companies and individuals alike, but they can be beneficial, too. Recessions offer opportunities for businesses to re-organize their operations and rebuild for

future growth. The cyclical nature of economic activity provides businesses with the impetus to invest in the present and grow for the future.

Individuals can participate in these economic opportunities through the investment markets. The returns investors achieve on their investments are driven in large part by changes in the business cycle. Understanding how changes in these factors impact the business cycle can help investors make informed investment decisions.



Identifying business cycles

There are different types of cycles present in a developed economy. Market cycles are short-term and driven largely by emotional factors such as investor sentiment. Secular cycles are much longer, typically running over several decades, and are capable of transforming an economy on a large scale (e.g., the transition from a manufacturing to a service economy).

Business cycles fall somewhere in between, at least in terms of duration, generally lasting five to 10 years. Much like the passing of a 24-hour day, a full rotation of the business cycle will have two phases — expansion and recession. Expansion would take place during the day when business activity picks up, people are working and economic growth is positive. Recession would occur at night when business activity slows down, fewer people are working and economic growth stagnates or contracts.

Different cycles for different parts of the overall economy

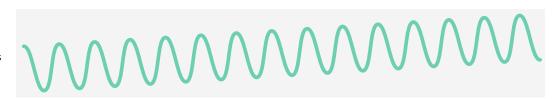
Secular cycles are long-term and transformational, lasting over many decades. For example, the change from the industrail to the information economy was a secular cycle change.

Business cycles are complete cycles of expansion, recession and recovery, typically lasting between 5-10 years.

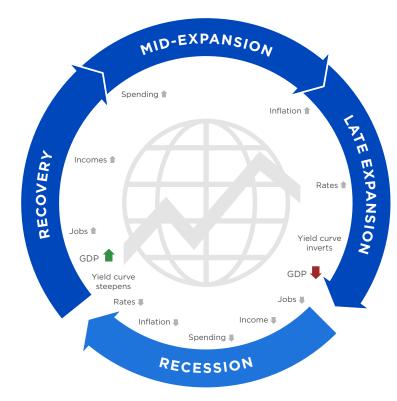




Market cycles are short-term cycles of booms (bull markets) and busts (bear markets), lasting as little as a few months



Expansion is made up of three stages. The early stage of expansion is defined by recovery from the previous recession, as negative economic growth turns a corner and business activity begins to pick up. In mid-expansion, business activity is steady and economic growth is positive for consecutive quarters. In a late expansion, the cycle reaches maturity where economic growth peaks and business activity moderates before sliding into a recession.



*Actual timing of economic indicators may change based on the cycle.

Investors can read different economic barometers such as employment, inflation, Gross Domestic Product (GDP) growth and others to help identify where we are in the current business cycle. Some measurements may show changes before others and follow a pattern for the duration of an expansion or recession.

For example, employment is one of the earliest indicators to show improvement during the early expansion phase or weakness during recessions. Changes in personal incomes typically follow changes in employment, as workers can command higher salaries in a robust job market. Higher income typically leads to more consumer spending, which promotes more business activity and sustains the cycle. It's important to note, however, that these indicators haven't always followed a set pattern during previous expansions and recessions, as we will see later in this discussion.

Where we are in the business cycle? Ask these questions...

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Business conditions

- Are companies reinvesting in their core businesses or diversifying into new industries?
- ► Is credit readily available?
- ► Are businesses able to affect prices or sales in their favor?
- Are earnings growing or contracting?

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Macroeconomic conditions

- Is the overall economy in expansion or recession mode?
- Is inflation rising or falling, or are prices stagnating or in a period of deflation?
- Are new jobs being created? Are workers able to find fulltime work?
- Are central bank monetary policies accommodative or restrictive?

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Market conditions

- What is investor sentiment at the moment? Are investors more willing to accept risk, or are they fearful and seeking safety?
- Do investors favor stocks of large companies over small, or vice versa?
- Are investors keen on businesses with strong potential for growth, or are they mindful of risk and seeking value-oriented stocks?

How does the economy change through the business cycle?

Cycle phase	Expansion	Recession
Economic growth (GDP)	Business activity increases as the economy recovers from recession.	Business activity slows as higher prices and interest rates constricts spending.
Employment	Businesses add workers to meet a surge in demand.	Businesses lay off workers as demand decelerates.
Personal income	Paychecks rise as businesses entice workers with higher wages.	Lack of new jobs dampens the demand for higher wages.
Consumer spending	Consumers spend larger paychecks on more goods and services.	Smaller paychecks reduce consumer demand.
Inflation	Higher consumer demand raises prices in markets. Falling demand lessens the upward pressure on prices.	
Interest rates	The Fed raises interest rates to cool an overheating economy	The Fed lowers interest rates to reignite growth and business activity.



The yield curve as a business cycle indicator

One of the more reliable indicators of business cycle transition is the U.S. Treasury yield curve. In the last 50 years, every recession in the U.S. economy has been preceded by an inversion in the yield curve.

First, let's define what the yield curve is and how it works. The yield curve represents current interest rates for U.S. Treasury debt securities at all issued maturities, from four weeks (the shortest term) to 30 years (the longest term). In a growing economy, the yield curve is upward sloping -- short-term interest rates are lower than long-term rates. This shows a healthy environment for the economy, where investors are seeking higher returns (yield) in exchange for assuming greater risk (in longer-term bonds.)

But the yield curve is never static. In fact, it moves as the business cycle evolves, which helps explain why an inverted yield curve is often seen as a recessionary signal.

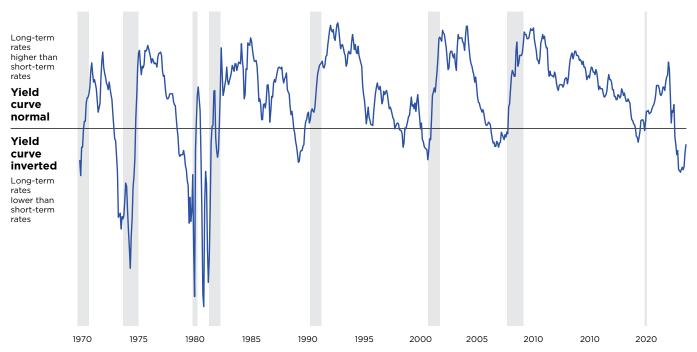
The yield curve flattens or inverts when short-term interest rates rise or long-term interest rates fall, or both. Long-term rates may fall as investors fear widespread business slowdowns and flee stocks in favor of the relative safety of bonds. (Bond prices increase as more buyers enter the bond market, which lead interest rates to fall.)

Short-term rates rise when the Federal Reserve hikes the Fed funds target rate (the interest rate that the Fed sets for short-term borrowing by its member banks, which in turn sets the rate the banks use to lend to businesses and consumers.) The Fed funds rate is the primary monetary tool available to the Fed for cooling or stimulating economic growth. A lower Fed funds rate encourages banks to lend, which is why interest rates at the short-term end of the yield curve are typically low in a growing economy.

Raising the Fed funds rate has the opposite effect, discouraging lending and borrowing to help cool an overheating economy, as it lifts the short end of yield curve. The yield curve may flatten (short-term rates rise and long-term rates fall) in the late expansion phase or as the Federal Reserve seeks to lessen the impact of potential slowdown or recession. When the curve inverts (short-term rates are higher than long-term rates,) it shows that investors believe a recession is near. History has proven this to be the case; over the last 50 years, a recession has occurred on average 16 months after the inversion of the yield curve.

U.S. Treasury yield curve as a recession indicator

Spread (percentage-point difference) between 10-year U.S. Treasury note yields and the Federal funds target rate, 1970 to October 2023



Source for chart data: Federal Reserve Bank of St. Louis (Treasury and Fed funds data); National Bureau of Economic Research (Recession dates)

Date of yield curve inversion	Feb 1973	Sep 1978	Sep 1980	Dec 1988	Jun 1998	Jun 2006	Jun 2019	Average (1972-2022)
Months until recession starts	9	16	10	19	33	18	7	16

How business cycles can guide portfolio decisions

A rising economic tide will generally lift all businesses, but certain businesses — and by extension, their investments — may perform better than others in the various stage of the business cycle.

These performance differences exist across different asset classes, investment categories, industry sectors, countries and regions. Because performance can vary among investments at different points in the business cycle, understanding the business cycle can help investors achieve their performance goals through informed portfolio allocation decisions.

Asset allocation decisions

In a typical business cycle, investors' appetite for risk increases with the higher prospects for growth that come in an early expansion. Stocks are preferred to bonds, and equity asset classes that are more growth-oriented and have a higher risk profile tend to perform well. This would include stocks of mid-size and small companies, as well as emerging market equities.

Once the expansion is well established and economic growth moderates, the stocks of larger companies tend to do well, often outperforming higher-risk small-cap stocks. As the expansion reaches maturity and the threat of recession looms, investors look to reduce their exposure to riskier assets. A "flight to safety" to higher-quality and fixed-income asset classes typically occurs, and bonds tend to outperform stocks during recessions.

1	Recovery	Mid-expansion	Late expansion	Recession
Asset classes that have outperformed	Small-cap stocks Emerging market stocks Commodities	Large-cap stocks Mid-cap stocks Intermediate-term U.S. bonds	International stocks Global real estate U.S. corporate high-yield bonds	Commodities Emerging market stocks Mid-cap stocks
Asset classes that have underperformed	Large-cap stocks International stocks International bonds	Emerging market stocks International bonds Commodities	Intermediate-term U.S. bonds International bonds Commodities	Large-cap stocks International stocks Global real estate

Sector allocation decisions

Business activity naturally booms during cyclical expansions, and younger, more growth-oriented firms and industries often enjoy strong spurts of growth that make their investments attractive early in these cycles. When the inevitable recession arrives, business activity doesn't cease entirely. Historical performance shows that certain industry sectors tend to outperform others when the business cycle is in recession.

In the early stages of business cycle expansion, industrial and technology companies benefit from increased demand as businesses begin to reinvest in their operations when growth resumes after recession. Financial stocks become more attractive as the renewal of business activity increases the demand for borrowing.

As the expansion strengthens, so does consumer confidence, helping to drive higher demand for discretionary goods. But as the pace of growth decelerates, sectors that offer steadier performance such as health care and energy tend to outperform. The looming slowdown also dampens demand for technology products and weakens consumer discretionary spending. Businesses that experience steady consumer demand even during economic slowdowns, such as consumer staples and health, tend to outperform during recessions.

	Recovery	Mid-expansion	Late expansion	Recession
Sectors that have outperformed	Industrials	Financials	Materials	Consumer Staples
	Technology	Consumer Discretionary	Energy	Health Care
Sectors that have underperformed	Energy	Materials	Consumer Discretionary	Industrials
	Telecommunications	Utilities	Technology	Financials

Business cycles impact long-term investment strategies

Uncertainty about the future direction and pace of economic growth can lead to unpredictability in the financial markets. Investors face a greater degree of risk as the business cycle transitions from one stage to the next. But risk also creates opportunity for informed investors to seek outperformance through prudent asset allocation decisions while the business cycle changes.

While business cycle changes and fundamental performance often do not make headlines, these factors are primary drivers of the long-term investment returns. Company fundamentals such as earnings, revenue, cash flow and debt levels are key indicators for long-term investors to monitor as they make investment decisions. It's also important for investors to make these decisions in context with their investment time horizon and risk tolerance.



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