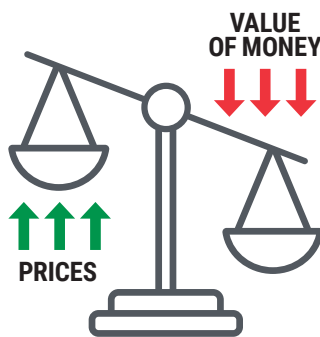


Understanding Inflation

Inflation affects all aspects of the economy, from consumer spending, business investment and employment rates to government programs, tax policies, and interest rates.

Understanding inflation is crucial to investing because it can reduce the value of investment returns. With inflation rising recently after several years of relative calm to its highest level in four decades, investors may benefit from knowing the factors driving inflation, the impact on their portfolios, and steps to consider as the investment landscape shifts.



For illustrative purposes only.

WHAT IS INFLATION?

As an economy grows, businesses and consumers spend more money on goods and services. In the growth stage of an economic cycle, demand typically outstrips the supply of goods, and producers can raise their prices. As a result, the rate of inflation increases.

Inflation is a sustained rise in overall price levels. Moderate inflation is associated with economic growth, while high inflation can signal an overheated economy.

If economic growth accelerates very rapidly, demand grows even faster and producers raise prices continually. Supply constraints can also drive prices higher absent any material change in demand. An upward price spiral, sometimes called “**runaway inflation**” or “**hyperinflation**,” can result.

In the U.S., the inflation syndrome is often described as “too many dollars chasing too few goods;” in other words, as spending outpaces the production of goods and services, the supply of dollars in an economy exceeds the amount needed for financial transactions. The result is that the purchasing power of a dollar declines.

HOW IS INFLATION MEASURED?

When economists and central banks try to discern the rate of inflation, they generally focus on “core inflation,” such as “core CPI” or “core PCE.” Unlike the inflation, **core inflation** excludes food and energy prices, which are subject to sharp, short-term price swings, and could give a misleading picture of long-term inflation trends.

Cost-Push Inflation in Context

Higher oil prices and global supply chain disruptions are examples of the causes of cost-push inflation.



EXAMPLE OF HIGHER OIL PRICES

- Higher oil prices have driven price increases across sectors of the global economy.
- In 2020-2022, oil inventories have hit low levels, causing prices to rise amid surging COVID-19 reopening demand and lagging supply.
- Rising oil prices take money out of the pockets of consumers and businesses.
- Economists view oil-price hikes as a “tax” that can affect economic conditions.



SUPPLY CHAIN DISRUPTIONS

- Supply chains worldwide drastically slowed since the emergence of the coronavirus in early 2020 due to disruptions in shipping and labor.
- This has caused shortages in materials and, in turn, higher prices for goods.
- The war in Ukraine has contributed to supply disruptions and higher prices.

There are several regularly reported measures of inflation that investors can use to track inflation. In the U.S., the Consumer Price Index (CPI), which reflects retail prices of goods and services including housing costs, transportation, and healthcare, is the most widely followed indicator. The Federal Reserve prefers to emphasize the Personal Consumption Expenditures Price Index (PCE). This is because the PCE covers a wider range of expenditures than the CPI. The official measure of inflation of consumer prices in the UK is the Consumer Price Index (CPI), or the Harmonized Index of Consumer Prices (HICP). In the eurozone, the main measure used is also called the HICP.

WHAT CAUSES INFLATION?

Economists do not always agree on what spurs inflation at any given time, but in general they bucket the factors into two different types: **cost-push inflation** and **demand-pull inflation**.

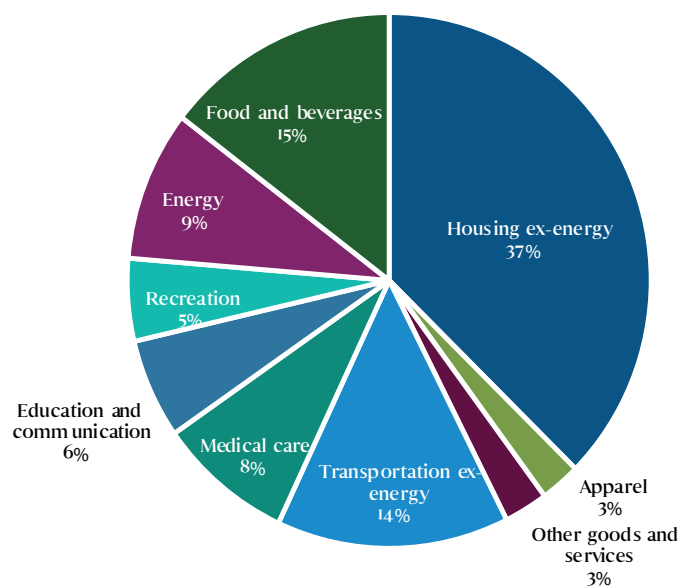
Rising commodity prices are an example of cost-push inflation because when commodities rise in price, the costs of basic goods and services generally increase.

Demand-pull inflation occurs when aggregate demand in an economy rises too quickly. This can occur if a central bank rapidly increases the money supply without a corresponding increase in the production of goods and service. Demand outstrips supply, leading to an increase in prices.

HOW CAN INFLATION BE CONTROLLED?

Central banks, such as the U.S. Federal Reserve, European Central Bank, the Bank of Japan and the Bank of England attempt to control inflation by regulating the pace of economic activity. They usually try to affect economic activity by raising and lowering short-term interest rates.

U.S. Consumer Price Index (CPI) Weights



* As of 30 September 2022 SOURCE: Bureau of Labor Statistics*

Management of the money supply by central banks in their home regions is known as **monetary policy**. Raising and lowering interest rates is the most common way of implementing monetary policy.

However, a central bank can also tighten or relax banks' reserve requirements. Banks must hold a percentage of their deposits with the central bank or as cash on hand. Raising the reserve requirements restricts banks' lending capacity, thus slowing economic activity, while easing reserve requirements generally stimulates economic activity.

A government at times will attempt to fight inflation through fiscal policy. The government can attempt to fight inflation by raising taxes or reducing spending, thereby putting a damper on economic activity; conversely, it can combat deflation with tax cuts and increased spending designed to stimulate economic activity.

HOW DOES INFLATION AFFECT INVESTMENT RETURNS?

Inflation poses a "stealth" threat to investors because it chips away at real savings and investment returns. Most investors aim to increase their long-term purchasing power. Inflation puts this goal at risk because investment returns must first keep up with the rate of inflation in order to increase real purchasing power.

For example, an investment that returns 2% before inflation in an environment of 3% inflation will actually produce a negative return (-1%) when adjusted for inflation.*

Also, importantly, changes in the inflation rate can have a different impact on various asset classes. For example, historically stocks and nominal fixed income have exhibited a negative response to upside surprises in inflation. This may result in a positive stock / bond correlation during periods of higher inflation and challenge traditional diversification. In contrast, real assets like commodities and Treasury Inflation-Protected Securities (TIPS), display a positive sensitivity historically.

WHAT MAY INFLATION MEAN FOR INVESTORS?

Very high inflation tends to have a negative impact on assets such as stocks and bonds. Maintaining a constant allocation to inflation-hedging assets can help investors cushion their portfolios against unexpected spikes.

WHAT STEPS CAN INVESTORS TAKE TO MITIGATE INFLATION'S IMPACT ON PORTFOLIOS?

Amid a rising inflation environment and constantly changing investment conditions, investors may want to consider inflation-mitigating assets, as well as to keep in mind the core tenets of investing—maintaining a well-diversified portfolio, regular rebalancing, and ensuring investments remain aligned with long-term goals.

Key Terms To Know

Commodities: A commodity is food, metal, or another fixed physical substance that investors buy or sell, usually via futures contracts.

Correlation: A statistical measure of how two securities, such as equities, bonds, commodities, move in relation to each other.

Disinflation: A period of time when economic growth begins to slow, demand eases and the supply of goods increases relative to demand, and the rate of inflation usually drops.

Equities: Ownership or proprietary rights and interests in a company.

Fixed Income: Securities/Investments in which the income during ownership is fixed or constant. Generally refers to any type of bond investment.

Hyperinflation: When economic growth accelerates very rapidly, and demand grows even faster, producers may also raise prices continually.

Stagflation: A period of inflation combined with low growth and high unemployment.

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