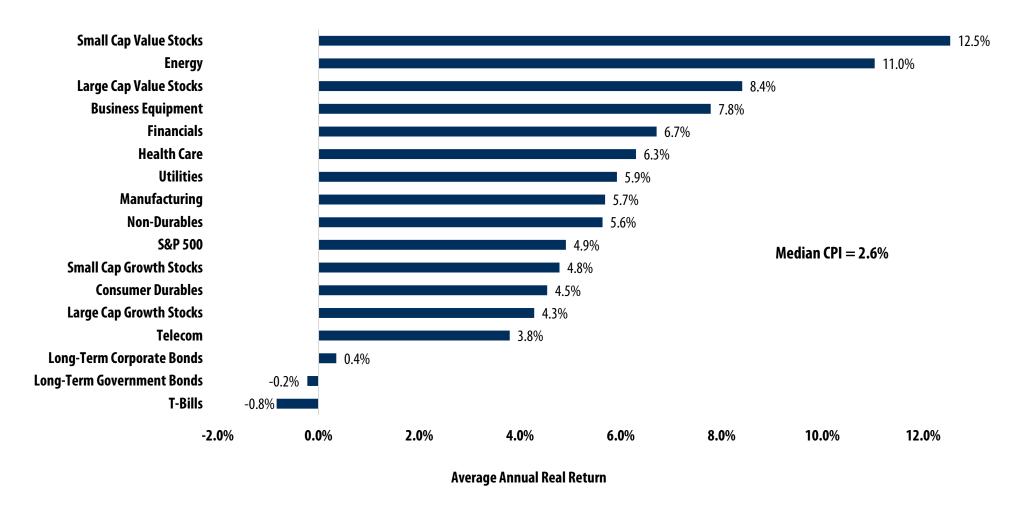






AVERAGE REAL RETURNS DURING YEARS WHEN INFLATION IS GREATER THAN THE MEDIAN 1927-2021



Sources: Ken French Data Library, Bloomberg. As of 12/31/2021. **Past performance is no guarantee of future results.** This example is for illustrative purposes and does not represent any actual investment. Returns are average annual total real returns during years when inflation was higher than 2.6% at year-end. Returns are based on results from Kenneth R. French data library using the CRSP database. Universe includes all NYSE, AMEX & NASDAQ stocks. Value represents the lowest 30% of price-to-books (value stocks). Growth represents the highest 30% of stocks while large cap stocks are the largest 30% of stocks in the universe, respectively. Industries represent the Standard Industrial Classification (SIC) industries for each company.

Purchasing Power of the U.S. Dollar

1980 - 2021



- America entered the 1980s in the midst of Paul Volcker and the Federal Reserve lifting interest rates to combat double-digit inflation. This painful but necessary tightening of monetary policy served to bring inflation back down.
- From an average annualized pace of 7.4% in the 1970s, inflation averaged 5.1% in the 1980s, 2.9% in the 1990s, 2.6% in the 2000s, and averaged less than 2% (1.7%) in the 2010s.
- While the timeline displayed over this chart primarily saw inflation in the 2-3% range, the impact of inflation compounds over time.
- From the start of 1980, the purchasing power of a dollar fell more than 70% by the end of 2021.
- We believe investors should always consider the impact of inflation on returns over time.

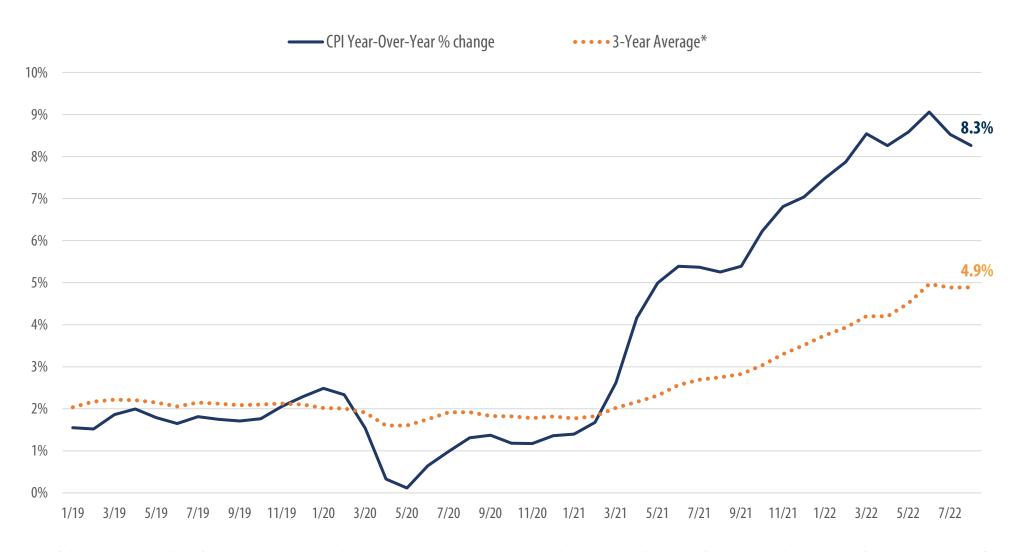
VALUE OF THE U.S. DOLLAR



Source: U.S. Bureau of Labor Statistics (BLS), First Trust Advisors L.P. The U.S. dollar is measured by year-over-year change in CPI-U. This chart is for illustrative purposes only and not indicative of any actual investment.



YEAR-OVER-YEAR CHANGE IN THE CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS IN THE U.S.

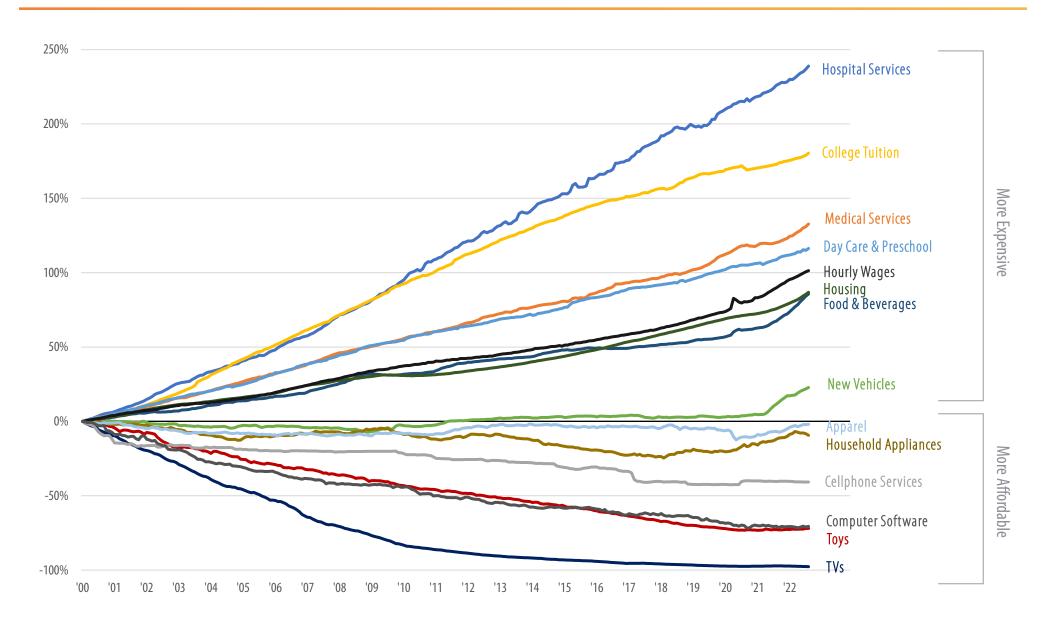


Source: Bureau of Labor Statistics, Statista. Monthly data from 1/2019 – 8/2022. *Average annual change in the Consumer Price Index (CPI) over the previous three years. Not seasonally adjusted. For illustrative purposes only and not indicative of any investment. CPI measures Inflation (the average change in prices over time that consumers pay for a basket of goods and services).

Price Changes: Consumer Goods, Services and Wages

Since 2000

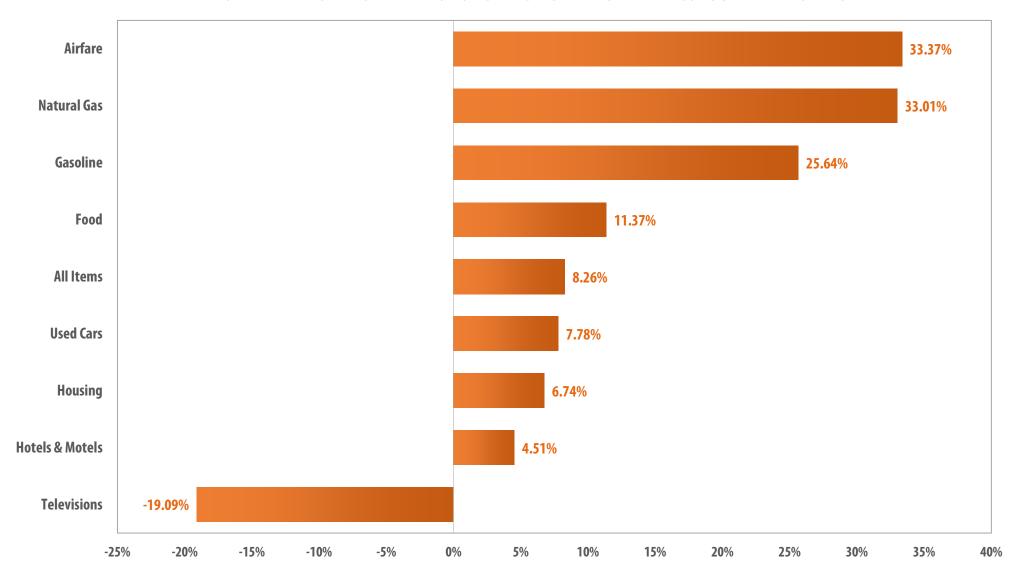




Source: Bureau of Labor Statistics, Carpe Diem/AEI. Monthly data from January 2000 to August 2022. Chart shows cumulative changes indexed to January 2000. All data seasonally adjusted with the exception of Cellphone Services and Computer Software.



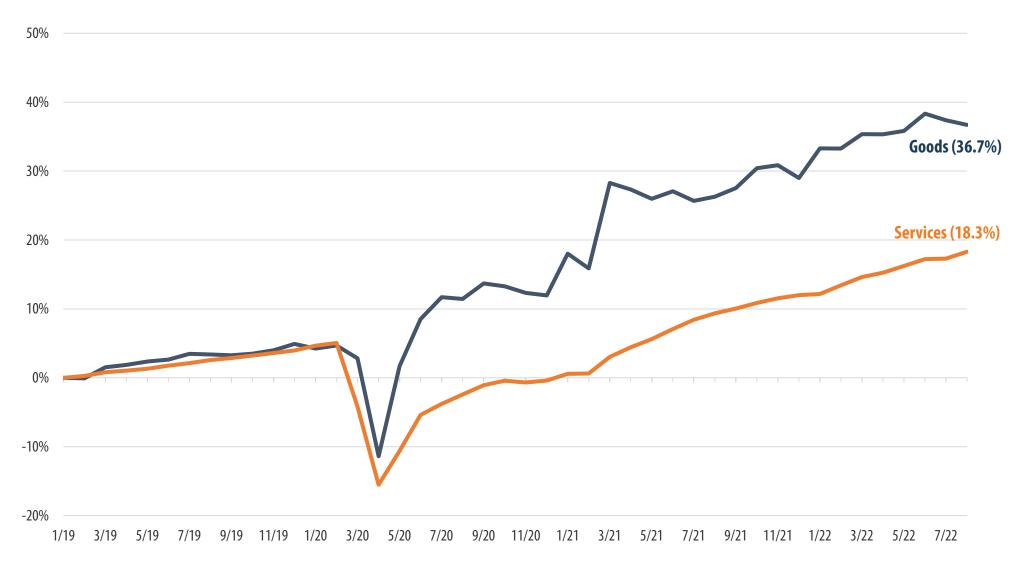
YEAR-OVER-YEAR CHANGE IN PRICE OF SELECTED ITEMS IN THE CONSUMER PRICE INDEX



Source: Bureau of Labor Statistics. As of 8/2022. The Consumer Price Index (CPI) measures inflation (the average change in prices over time that consumers pay for a basket of goods and services).



CUMULATIVE PERCENT CHANGE: JANUARY 2019 - AUGUST 2022



Source: Federal Reserve Bank of St. Louis. Cumulative percent change in personal consumption expenditures from January 2019 through August 2022, seasonally adjusted.



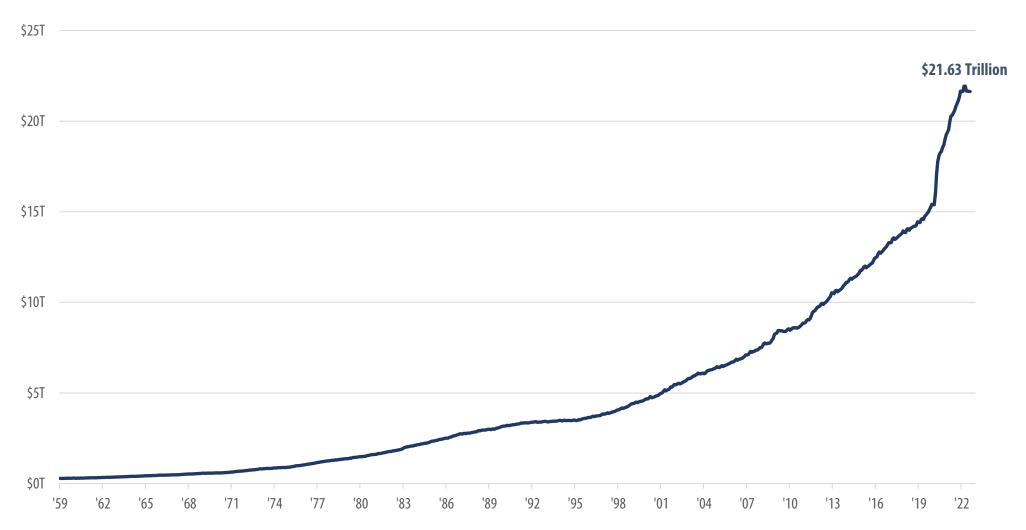
PERCENT INCREASES: CONSUMER PRICE INDEX AND AVERAGE HOURLY EARNINGS



Source: Bureau of Labor Statistics. Monthly data from January 2020 to August 2022. Chart shows cumulative changes indexed to January 2020. The Consumer Price Index measures inflation (the average change in prices over time that consumers pay for a basket of goods and services). The information presented is not intended to constitute an investment recommendation for, or advice to, any specific person. By providing this information, First Trust is not undertaking to give advice in any fiduciary capacity within the meaning of ERISA, the Internal Revenue Code or any other regulatory framework. Financial professionals are responsible for evaluating investment risks independently and for exercising independent judgment in determining whether investments are appropriate for their clients.



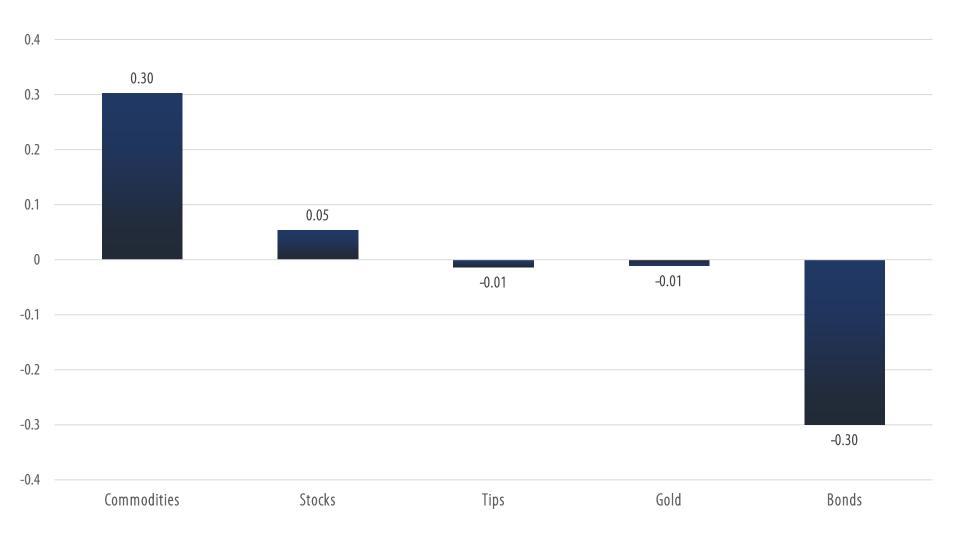
CURRENCY IN CIRCULATION (TRILLIONS OF DOLLARS)



Source: Federal Reserve Bank of St. Louis. Monthly data from January 1959 — August 2022, not seasonally adjusted. M2 includes hard currency, checking deposits, savings deposits, small denomination time deposits and retail money market funds.



HISTORICAL CORRELATION OF RETURNS TO U.S. INFLATION



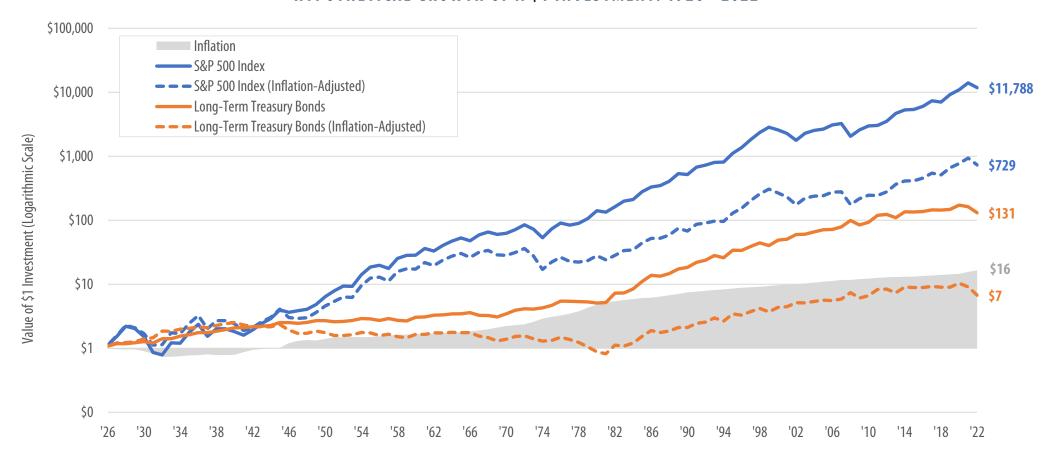
Source: Bloomberg 10/31/2005 — 8/31/2022. **Past performance is no guarantee of future results.** This chart is for illustrative purposes only and not indicative of any actual investment. **Commodities** are represented by the Bloomberg Commodity Index, a broadly-diversified index designed to provide exposure to commodities via futures contracts. **Bonds** are represented by the Bloomberg U.S. Aggregate Bond Index, a broad-based, market capitalization-weighted bond market index representing intermediate term investment grade bonds traded in the U.S. **Stocks** are represented by the S&P 500 Index, an index of 500 companies used to measure large-cap U.S. stock market performance. **Tips** are represented by the Bloomberg US Inflation Notes Index, which measures the performance of the US Treasury Inflation Protected Securities (TIPS) market. **Gold** is represented by the current exchange rate Gold (XAU) in which the gold spot price is quoted as USD per troy ounce. **Inflation** is represented by the Consumer Price Index (CPI-U) which measures the average change in prices over time that consumers pay for a basket of goods and services. Indexes are unmanaged and an investor cannot invest directly in an index.

Inflation vs. Stocks and Bonds



It can be tempting to shy away from risk in investing, especially during times of market turmoil, but the reality is that all investments carry some degree of risk. The chart below shows the hypothetical growth of \$1 and the effect inflation has historically had on two types of investments -- stocks and bonds. This chart shows taking on a certain amount of risk can be necessary to stay ahead of inflation and should be factored in when assessing long-term financial goals.

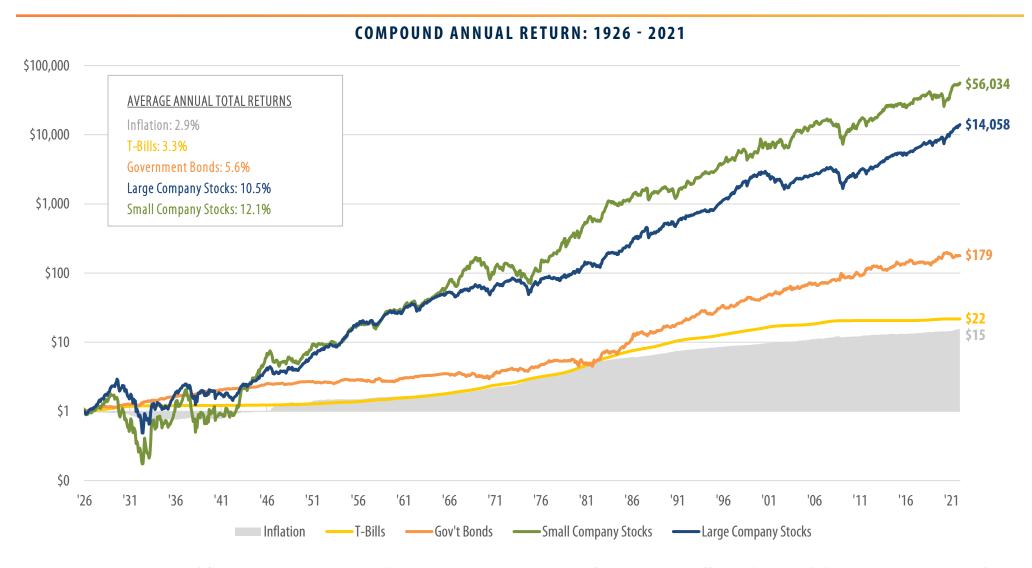
HYPOTHETICAL GROWTH OF A \$1 INVESTMENT: 1926 - 2022



Source: Ibbotson Associates, U.S. Bureau of Labor Statistics. Hypothetical growth of a \$1 investment made on 12/31/1925. Data shows total returns through 8/31/2022 (latest data available). **Past performance is no guarantee of future results.** This chart is for illustrative purposes only and not indicative of any actual investment. These returns were the result of certain market factors and events which may not be repeated in the future. The asset classes shown here offer different characteristics in terms of income, tax treatment, capital appreciation and risk. U.S. government securities are subject to interest rate risk but generally do not involve the credit risks associated with investments in other types of debt securities. As a result, the yields available from U.S. government securities are generally lower than the yields available from other debt securities. Common stocks are subject to risks, such as an economic recession and the possible deterioration of either the financial condition of the issuers of the equity securities or the general condition of the stock market.

Inflation is represented by the Consumer Price Index (CPI-U) which measures the average change in prices over time that consumers pay for a basket of goods and services. The **S&P 500 Index** is an unmanaged index of 500 companies used to measure large-cap U.S. stock market performance. Investors cannot invest directly in an index. Index returns do not reflect any fees, expenses, or sales charges. **Long-Term Treasury Bonds** are U.S. government bonds that have maturities longer than 10 years.





Source: Ibbotson Associates. Hypothetical growth of a \$1 investment made on 12/31/1925. Data is monthly and shows total returns through 12/31/2021. **Past performance is no guarantee of future results.** This chart is for illustrative purposes only and not indicative of any actual investment. These returns were the result of certain market factors and events which may not be repeated in the future. **Inflation** is represented by the Consumer Price Index (CPI-U) which measures the average change in prices over time that consumers pay for a basket of goods and services. **Treasury Bills (T-Bills)** are represented by the 30-day U.S. Treasury bill. **Government Bonds** are represented by the 20-year U.S. Government bond. **Small Company Stocks** (Ibbotson Small Company Stocks Index) are represented by the fifth capitalization quintile of stocks on the NYSE from 1926 to 1981 and the performance of the Dimensional Fund Advisors (DFA) Micro Cap Fund thereafter. **Large Company Stocks** (Ibbotson Large Company Stocks Index) are represented by the S&P 500 Composite Index (S&P 500 Index - an index of 500 companies used to measure large-cap U.S. stock market performance) from 1957 to present, and the S&P 90 from 1926 to 1956. Indexes are unmanaged and investors cannot invest directly in an index. Index returns do not reflect any fees, expenses, or sales charges.

The asset classes shown here offer different characteristics in terms of income, tax treatment, capital appreciation and risk. U.S. government securities are subject to interest rate risk but generally do not involve the credit risks associated with investments in other types of debt securities. As a result, the yields available from U.S. government securities are generally lower than the yields available from other debt securities. Common stocks are subject to risks, such as an economic recession and the possible deterioration of either the financial condition of the issuers of the equity securities or the general condition of the stock market.