

A Portfolio Approach to Inflation Protection

As the economy struggles to recover from the recent severe recession there is growing concern about inflation. An inflating economy is characterized by a rising cost of goods and services. The consumer price index (CPI-U),¹ which contracted by 1.4 percent for the 12-month period ending June 2009 (the official end of the recession), was up 3.6 percent for the 12-month period that ended in May 2011.² Inflation becomes troublesome as it erodes purchasing power. Adding to the concern, the recent upward trend in inflation has occurred during a period of relatively weak economic growth. Soaring debt levels have constrained the federal government's ability to use fiscal measures to stimulate the economy, leaving responsibility to the Federal Reserve and its low-interest-rate monetary policy.

This *Segal Advisory* explores the impact of inflation on asset values and addresses the strengths and weaknesses of various investment strategies for gaining inflation protection. Two primary themes emerge. First, rather than tracking the trajectory of inflation, investors are better served monitoring real, or after-inflation, interest rates. Second, individual inflation-hedging strategies have varying degrees of effectiveness under different market and economic conditions. Therefore, Segal Advisors recommends blending strategies to meet expectations and objectives.

¹ The CPI-U measures changes in the prices of a basket of goods and services.

² The May CPI data, which was published on June 15, was the most recent available at the time this *Segal Advisory* was published.

INFLATIONARY PRESSURES

The following developments are triggering concern about rising inflation:

- ***The Rising Cost of Energy and Food*** Over the 12 months that ended May 2011, the Bureau of Labor Statistics' overall energy index increased 21.5 percent, the gasoline index increased 36.9 percent, and the food index increased 3.5 percent. While food and energy prices are generally more volatile than other consumer prices, and economists will often look to CPI net of food and energy, or core CPI (1.5 percent as of May), a clear trend has developed in recent years, with food and energy prices driving increases in the CPI-U, also known as headline CPI.³
- ***An Extended Period of Aggressively Easy Monetary Policy*** The Federal Reserve's federal funds rate, the interest rate used for lending among depository banks, has been near zero since late 2008. After directing the federal funds market to the lower bound of zero, the Federal Reserve then began "quantitative easing": expanding the money supply and using the funds to purchase securities in the open market.⁴ Owing to the unprecedented nature of these actions, the cumulative

³ Headline CPI and core CPI are discussed in each issue of *Synopsis*, Segal Advisors' quarterly publication on financial market conditions, which can be accessed from the following web page: <http://www.segaladvisors.com/publications-and-resources/>

⁴ Those extraordinary measures, the most recent of which consisted of the unprecedented purchase of up to \$600 billion in U.S. Treasuries from late last year through June, are described in an online supplement to this *Segal Advisory*, "Quantitative Easing: Less Than Zero": <http://www.segaladvisors.com/publications/july11SA supp.pdf>

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impact of quantitative easing remains unclear. However, it is clear that this "easy" monetary policy has promoted negative real interest rates, which result when the yield on an interest-bearing obligation is below the rate of inflation. (Negative real interest rates are discussed in the text box on page 2, "Negative Real Interest Rates: Shifting Debt Burden from Borrower to Lender.")

- ***The Expansion of Federal Government Debt*** Gross federal debt as percentage of gross domestic product (GDP), which had been steadily rising since the early 1980s, accelerated during the recent recession as the federal government undertook countercyclical spending in an attempt to induce economic growth, and offset the impact of contraction. According to the Office of Management and Budget, federal debt as a percentage of GDP is estimated to reach 99 percent this year, a level not experienced since the years immediately following World War II. Thus far, monetary policy actions have eased the burden on the Treasury by facilitating a negative real interest rate for its debt obligations.

Table 1 summarizes how these broad asset classes have reacted historically during periods of inflation and deflation.

INFLATION HEDGES AND PORTFOLIO POSITIONING

Table 2 lists a broad range of inflation-hedging strategies offered in both public and private markets. Most private-market investments are offered as interests in limited partnerships (e.g., an interest in a hedge fund). These private-market vehicles are expected to provide higher long-term returns because they are generally less liquid, meaning that they are not readily marketable. Accordingly, these investments should only be entered into as a long-term commitment — perhaps about 10 years. Therefore, they may not be appropriate for any portfolio with liquidity needs or pension plans with near-term, cash-flow issues.

The following text discusses practical aspects of implementing these inflation-hedge strategies in portfolio positioning:

➤ *Inflation-Linked Securities*

The best-known inflation-linked securities are Treasury Inflation-Protected Securities (TIPS), which represent an elegant and low-cost means to access inflation protection. However, it is noteworthy that TIPS' relative performance can suffer when monetary policy eventually tightens to rein in inflation expectations, and real interest rates on traditional (nominal) fixed-rate bonds increase.

➤ *Gold* From a global perspective, inflation-induced currency value reduction results in losses on investments denominated in the debased currency.⁶ However, gold prices can experience significant

volatility. Moreover, unlike commodities generally, other than investor sentiment regarding currency, there is no economic basis for gold price fluctuation. Essentially, a gold investment is more an expression of a view on currency, and less directly linked to inflation. While the two are related, Segal Advisors believes that other investment strategies are better suited to address more directly asset-value erosion from inflation.

Table 1: Asset Class Valuation During Periods of Inflation and Deflation

Asset Class	Inflation	Deflation
Treasury Bonds	Lower	Higher
Corporate Bonds*	Mixed	Mixed
Equities	Mixed	Lower
Commodities	Higher	Lower
Commercial Real Estate	Higher	Lower

* As noted in the accompanying text, the two components of a corporate bond — a Treasury risk-free rate and a credit-risk premium — have inverse reactions to inflation and deflation.

Source: Segal Advisors

Table 2: Inflation-Hedging Strategies

	Market ¹	Comments about the Inflation Hedge
Inflation-Linked Securities²	Public	Because coupon income is linked to inflation, the investor's purchasing power is protected against an erosion of value during a period of higher inflation.
Gold³	Public	Although currencies are no longer tied to a gold standard, investors often use gold as a store of value through a period of declining currency value, generally caused by inflation.
Commodities⁴	Public	Commodities offer reasonable inflation hedges. Commodity prices will generally trend higher with inflation, but are also subject to significant price volatility. Commodities are subject to supply-and-demand trends within their markets.
Real Estate Investment Trusts (REITs)	Public	The rental-income component of REIT returns is generally correlated with inflation. However, REIT returns are correlated ⁵ with stocks, sometimes distorting the inflation hedging impact.
Listed Infrastructure	Public	These funds, as well as companies, often include contractual inflation escalators.
Global Tactical Asset Allocation (GTAA)	Public/Private	These investments have an absolute return objective that may be benchmarked to inflation. A range of public and private strategies are available.
Hedge Funds	Private	To achieve an absolute return objective, hedge funds use a wide range of strategies that are generally non-correlated with public markets, particularly equities.
Private Infrastructure	Private	These assets will often have contractual revenue streams that include inflation escalators, permitting price increases that track inflation.
Private, Commercial Real Estate	Private	Commercial real estate values are generally well correlated with inflation over a long horizon.
Private Timber and Farmland⁶	Private	Timber and farmland values are correlated with inflation, but subject to supply-and-demand pressures in specific markets.

¹ The type of market is important because investments made in a public market are liquid, whereas investments made in a private market are illiquid.

² Inflation-linked securities are bonds that have their coupon adjusted up and down in accordance with inflation.

³ Gold can either be purchased directly or through exchange-traded funds. Although gold is a commodity, it is listed separately here because it differs from other commodities in that it has no direct role in economic activity. In contrast to energy and industrial metals that are used in production of goods and agricultural commodities, gold is only a store of value.

⁴ Commodity investments can be made through futures contracts using passive and active strategies.

⁵ Correlation measures the relationship between two investment vehicles. A correlation of 1.0 means that the two move in perfect tandem. A correlation of zero means the relationship between them is totally random.

⁶ Private timber and farmland is a type of real estate that derives value from commodity prices.

Source: Segal Advisors

⁶ "Debased currency" is currency that has lost value because of indirect actions. "Devalued currency," on the other hand, is the result of an overt change in a fixed exchange rate, such as the one maintained by China.