INFLATION-PROTECTED BONDS: A LOOK AT THE NEW I BOND SERIES

By Paul Jessup

The new I series of savings bonds promises a fixed rate of return for many years, semiannual adjustments that protect investors from inflation, plus certain tax advantages—all backed by the full faith and credit of the U.S. government.

The U.S. Treasury now offers I bonds, a new series of savings bonds. While close cousins of series EE bonds, I bonds provide direct protection against the risks of inflation. I bonds were first offered in September 1998. So far, individual investors and the media have paid little heed to them. Yet, I bonds offer a contract and terms that make sense for certain individuals. They are not complex, and they merit review by independent-minded investors.

CORROSIVE INFLATION

Inflation—especially when unexpected—erodes the buying power of an investor's income and assets. For example, if inflation is 3% per year, in 10 years an investor's current $1,000 will be worth about $740 in today's buying power. Just to keep pace with such inflation, this investor needs to seek annualized returns that exceed the annual rate of inflation.

In recent years, inflation as measured by the consumer price index (CPI), has been low in the U.S. But in some prior years, inflation was high and corrosive. Other national economies provide current examples of high and volatile rates of return.

To try to protect their assets from inflation risk, rational investors seek returns that exceed expected rates of inflation. Such predictions are imperfect. Some investors turn to so-called "real assets," like gold and real estate, that may increase in value during inflationary periods. These assets, too, have been imperfect inflation hedges.

So what about a contract, signed by the U.S. government, that promises a fixed rate of return for many years, plus semiannual adjustments that specifically protect an investor from the persistent erosion and possible ravages of inflation? Such are I bonds.

HOW I BONDS WORK

Twice a year, in May and in November, the U.S. Treasury announces a fixed interest rate that will apply to all I bonds purchased in the new six-month period. This fixed rate will be constant for 30 years, unless a buyer redeems the bonds prior to that time. So far there have been three offering periods. In the first one, the announced fixed rate was 3.4%. In the next two periods, the announced rate was 3.3%. By themselves, these are not noteworthy numbers.

But each six months the U.S. Treasury adds to the fixed rate an adjustment that compensates an I-bond holder for inflation during a prior six-month period. This semiannual inflation adjustment is based on the CPI for all urban consumers (CPI-U), as published by the U.S. Department of Labor. In the initial three periods, the semiannual adjustments were 0.62%, 0.86%, and 0.86%.

In each six-month period, the U.S. Treasury announces a total earnings rate that combines the fixed rate *and* the inflation adjustment. For the initial three offering periods, the earnings rates were 4.66%, 5.05%, and 5.05%, respec-

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tively. (These annualized earnings rates are not simple additions of a fixed rate and the inflation adjustment. Rather, they reflect compounding of semiannual numbers.) Thus, over time, an I bond purchased in any six-month period continues to earn the fixed rate announced for that purchase period. Its actual earnings rates build on this base, as adjusted semiannually for changing inflation.

Like EE bonds, an I bond's earnings rates accrue over time until it matures in 30 years or until its holder redeems it. Earnings rates are added monthly and compounded semiannually. One cannot know to what value an I bond will grow in a specific future period. Yet one can be confident of earning an I bond's ongoing fixed rate *plus* the systematic adjustments for actual future inflation.

COMPETITIVE RATES

Like other direct obligations of the U.S. Treasury, I bonds are backed by the full faith and credit of the U.S. government. They have no default risk.

First, consider a long-term perspective as to returns from U.S. Treasury securities.

During the lengthy period of 1926–98, Ibbotson Associates reports that the average rate of inflation, as measured by the CPI, was 3.1%. During the same period, the average return on U.S. Treasury bills was 3.8%. Thus, bills provided a "real" (inflation-adjusted) return of 0.7%.

During the same lengthy period, the average return on intermediate-term and long-term U.S. Treasuries was just over 5.0%. Adjusted for inflation of 3.1%, these longer-term bonds provided a real return of about 2.0%.

In contrast, the initial offerings of I bonds promise "real" (inflation-protected) returns of 3.4% and 3.3%. By historical standards, this is not bad.

Second, investors can review current posted rates for various federally insured consumer deposits. For example, in July 1999, reported rates on bank short-term certificates of deposit (CDs) were in the range of 4.0% to 4.5%. While they exceed the fixed rates on new I bonds, these rates fall below the announced earnings rates in the initial periods.

TAX ADVANTAGES

The preceding comparisons involve pretax figures. However, like EE bonds, I bonds have specific tax merits for individual investors.

As with other U.S. Treasury securities, interest from I bonds is exempt from state and local income taxes. Such an exemption does not apply to interest earned on consumer CDs.

As with EE bonds, holders of I bonds can choose to *defer* federal taxes on the periodic returns they earn on their I bonds. Thus, for as long as 30 years, an I bond can continue to increase in value without its holder having to pay taxes on its accruing interest.

As with EE bonds, once past an initial holding period of six months, a holder of I bonds can choose *when* to redeem some or all of the bonds. Some holders will likely wait until they retire, when they expect to be in a lower tax bracket. Some may choose to redeem I bonds in other years when they expect to be in a lower tax bracket, perhaps because of a transition in employment or a period of extended non-earning leave.

Thus, as with EE bonds, holders of I bonds can redeem them at times that best seem to fit their circumstances. Holders have ongoing options to redeem ("put") the bonds when it best suits them.

LIMITED RISK, LIMITED RETURN

I bonds limit many of the risks faced by most bond investors. For example, I bonds have no default risk.

As their hallmark, I bonds provide specific contractual protection against inflation. Unlike most other bondholders, owners of I bonds do not have to try to predict and outguess future inflation. They own an asset designed to protect them against future inflation—whatever its amount and duration.

Unlike marketable bonds, I bonds cannot decline in value. Like EE bonds, over time they continue to increase in value until a holder chooses to redeem them or they mature. Even in a rare case of a decline in the CPI-U, by contract I bonds do not decline in value. They maintain their same value until an uptick in the CPI-U triggers renewed accrual of interest.

I bonds have no call risk. Holders can own their bonds for up to 30 years. The contract does not allow the U.S. Treasury, as issuer, to call the bonds prior to maturity. Yet once six months have passed, holders are free to redeem their bonds. I bonds thus provide "downside" protection to their holders.

The downside to these bonds is that holders forego opportunities to have price gains and high returns if market interest rates were unexpectedly to fall. In addition, the yields are on average lower than can be obtained from other types of bonds.

CONVENIENCE AND COST

Similar to EEs, I bonds come in a range of denominations. These span from $50 to $10,000. For most buyers, uncertain as to when they will redeem some bonds, it makes sense to diversify among several smaller units rather than buy one large denomination.

Unlike EEs, which are sold for one-half of their face amount, I bonds are sold at their face amount. On this initial amount, accrued earnings rates build over time.

It is relatively convenient for investors to buy I bonds. Most banks and thrifts act as agents for

the U.S. Treasury. These agents accept purchase forms and full initial payments. They then forward the orders to the Federal Reserve System, which processes them and soon sends the bonds to their purchasers. There are no purchase fees.

Purchasers must wait six months before they can first redeem an I bond. Also, a purchaser forfeits three months of earnings if he or she decides to redeem a new bond within five years of its issue date.

Any eligible person can buy up to $30,000 per calendar year.

As with EEs, purchasers of I bonds can select from among several forms of owner registration.

When they choose to redeem some I bonds, holders can again use convenient agents that stand ready to redeem the bonds at their current accrued value. An agent provides immediate funds to a redeeming holder. Here, too, there are no fees.

CONTRASTS TO EE BONDS

EE savings bonds pay market-based rates that are 90% of the average yield on marketable five-year Treasury securities. These market-based rates provide some inflation protection to holders. If expected inflation rises, then interest rates will likely rise in order to provide “real” (inflation-adjusted) returns to lenders.

In contrast, I bonds are designed to specifically protect their holders from inflation. They have a contractual inflationary adjustment as part of their total earnings rates.

EE savings bonds are sold at half of their face amount. A person can buy up to $15,000 (purchase price) in any one year. In contrast, I bonds are sold at face amount, and a person can buy up to $30,000 per year. With the two series now available, a person can purchase up to $45,000 per year.

The U.S. Treasury guarantees that an EE bond will at least double in value by its first 17 years. Thus, for example, if one buys an EE for $500, its accrued value will grow to at least $1,000 at that point. (This doubling in 17 years implies an annualized compound rate of just over 4%.) I bonds contain no such guaranteed minimum return.

A new EE bond matures in 30 years. However, at the beginning of the 17th year, its terms can be amended until the 30th year. A new I bond similarly has an initial maturity of 30 years. It has its fixed rate for the full 30 years. But unlike an EE, an I bond’s terms cannot be amended within the 30-year period.

Subject to some conditions, EE holders can convert their bonds to series HH bonds that pay current semiannual interest. Holders of I bonds do not have this exchange option.

EEs and I bonds share a common feature in that qualifying holders of either series can have tax-advantaged interest if they apply it to eligible post-secondary educational expenses.

I OR EE?

I bonds provide specific inflation protection, such that a holder is confident of earning a “real” (inflation-adjusted) return over time. EE bonds, with their specific market-based rates, are likely to provide similar, but indirect, protection against fluctuations in inflation.

Beyond this contractual difference, the two series are very similar.

Of course, one need not choose between I or EE; investors could acquire some of each over time.

To learn more about each series, visit the www.publicdebt.treas.gov Web site.

A SOLID BASE

Financial markets are driven, in large part, by commissions, fees, and marketing. Financial institutions and their representatives have their own products to offer to individual investors. They have little reason to cite the relative merits of savings bonds.

Viewed alone, savings bonds seem super-safe and stodgy.

But for certain buyers, savings bonds offer attractive features, such as inflation protection, tax-deferred earnings, redemption “put” options, and zero commissions.

Over time individuals can build their holdings of savings bonds—even as they build other elements of their total portfolios, such as retirement accounts, mutual funds, and direct holdings of bonds and stocks. The savings bonds offer investors a solid base around which they can perhaps better accept and manage the volatility of other financial assets. ✦