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# Introduction

**Overview of Bonds.** Series I bonds are a type of United States Savings Bond offered by the Department of the Treasury. The United States backs these bonds with its full faith and credit.

A bond earns interest through application of a composite rate. The composite rate consists of a fixed rate that remains the same for the life of the bond and an inflation rate that is subject to change twice a year. Interest accrues monthly and compounds semiannually.

A bond can earn interest for up to 30 years and interest earnings are payable upon redemption. However, you cannot redeem a bond until six months after its issue date. (The issue date of a bond generally is the first day of the month in which you purchased the bond.) Furthermore, if you redeem a bond before it turns five years old, you'll forfeit the three most recent months' interest on that bond.

Interest earnings on bonds are exempt from State and local income taxes, but bonds are subject to State and local estate, inheritance, gift, and other excise taxes. Interest earnings also are subject to Federal taxes. The Big Picture—Bonds and Your

**Portfolio.** We've designed Series I bonds to be low-risk investments for the public. As with any investment, you should reflect on whether Series I bonds meet your investment goals.

With investments generally, the longer your investment horizon, the more risk you may be willing to accept. The greater the risk you assume, the larger the return you may earn. However, greater risk also exposes you to an increased possibility of loss.

In addition, you also should consider whether and how to diversify your investment portfolio. By placing your investment eggs in different baskets, you can reduce your potential loss if some of your investments don't perform well. On the other hand, diversification means that some of your investments won't perform as well as others.

Keeping your investment goals in mind, you can use this information statement to help you evaluate the extent to which Series I bonds should be a part of your portfolio.

# What Are Inflation and Deflation?

Series I bonds earn interest based on a composite rate that is indexed to inflation. Because we index these bonds to inflation, a little background on inflation and how it's measured may be useful to you.

Inflation is an economy-wide increase in costs and prices over the nation's entire cost and price structure. In contrast, deflation is a decrease in these costs and prices. Inflation can hurt the relative value of a fixed-value investment while deflation can improve its relative value. Series I bonds are designed to prevent the uncertainty that cost and price changes can have on fixed-price investments.

**Example:** Suppose that you invest \$100 for one year at a simple interest rate of 6% and that inflation for the year is 2%. Ignoring any tax consequences, at the end of the year your investment would be worth \$106. However, the value of your investment would be somewhat offset by inflation that has caused items that cost \$100 the year before to cost \$102.

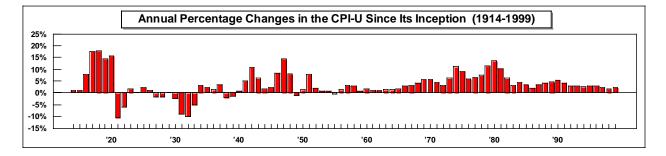
On the other hand, if there was deflation of 2% during the year, it would cost only \$98 to buy what \$100 would have purchased the year before. Deflation would increase the relative value of your investment.

Inflation and deflation are difficult to measure, leading to the creation of several

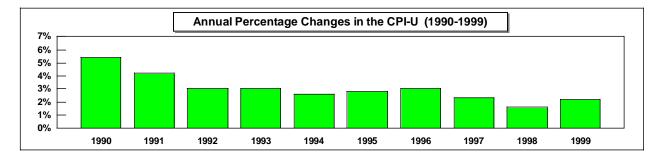
measurement techniques. Perhaps the best known of these measurements is the Consumer Price Index (CPI). The Bureau of Labor Statistics (part of the Department of Labor) calculates the CPI. The CPI is a measure of the average change over time in prices paid by consumers for a fixed market basket of consumer goods and services. The Bureau of Labor Statistics bases the CPI upon the prices of about 90,000 items. The broadest, most comprehensive CPI is the Consumer Price Index for All Urban Consumers: U.S. City Average for All Items (CPI-U). We index the interest rate for Series I bonds to the CPI-U.

The CPI-U that the press frequently reports is the seasonally adjusted CPI-U. As the name implies, the seasonally adjusted CPI-U attempts to account for seasonal influences upon cost figures. However, we use the non-seasonally adjusted CPI-U for Series I bonds. The seasonally adjusted CPI-U is subject to revision for a period of up to five years, which makes its use problematic in calculating interest earnings for bonds. The non-seasonally adjusted CPI-U is generally not subject to revision. Furthermore, we have designed Series I bonds to be long-term investments, making seasonal adjustments unnecessary.

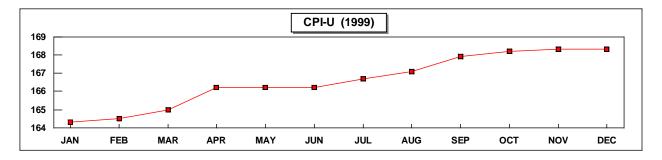
On the next page, we've provided examples of CPI-U figures since its inception, over a ten-year period, and over a one-year period.



This graph shows, on a year-by-year basis, annual percentage changes in the CPI-U since its inception. For instance, the average of costs and prices as measured by the CPI-U for 1993 was 3.0% greater than the average of costs and prices for 1992. The average of costs and prices as measured by the CPI-U for 1955 was 0.4% less than the average of costs and prices for 1954. However, keep in mind that occasional technical changes in the CPI-U complicate exact comparisons between years.



This graph shows, on a year-by-year basis, annual percentage changes in the CPI-U between 1990 and 1999. (The first graph also shows these percentage changes, but this graph shows the changes in closer detail.) For instance, the average of costs and prices as measured by the CPI-U for 1999 was 2.2% greater than the average of costs and prices for 1998.



This graph shows, on a month-by-month basis, the CPI-U during 1999. In calculating the CPI-U, the Bureau of Labor Statistics currently uses the average cost of goods and services between 1982-1984 as a reference base of 100. For instance, if the average cost of goods and services during 1982-1984 is set at \$100, then the average cost of goods and services during January 1999 was \$164.30, and \$168.30 during December 1999. Please note that the Bureau of Labor Statistics hasn't adjusted the figures to account for month-to-month price variations that may be due only to seasonal changes.

## How Does a Bond Increase in Value?

It's important to understand how we use inflation and deflation (as measured by the CPI-U) in calculating the value of a Series I bond.

**Composite Rate.** A bond accrues earnings based on both a *fixed rate* of return and a *semiannual inflation rate*. A single, annual rate called the composite rate reflects the combined effects of the fixed rate and the semiannual inflation rate. We've designed the composite rate to protect the relative value of your investment from the effects of inflation. We announce these rates at the beginning of each May and November.

**Fixed Rate.** The fixed rate is a rate selected by us. We announce this rate twice a year. The fixed rate that is in effect when a bond is issued applies until the bond stops increasing in value upon reaching the end of its maturity period, 30 years after its issue date. Thus, the most recently announced fixed rate applies only to bonds purchased during the six months following its announcement.

Semiannual Inflation Rate. The semiannual inflation rate reflects the percentage change in the CPI-U over a sixmonth period. We announce this rate twice a year, in every May and November. The semiannual inflation rate we announce in May reflects the percentage change between the CPI-U figures from the preceding September and March. Similarly, the semiannual inflation rate we announce in November reflects the percentage change between the CPI-U figures from the preceding March and September. As you can see, there is a delay between the months covered in a measurement period and the date of the inflation rate announcement.

We'll spare you all the mathematical details (they're in our regulations at 31 CFR part 359 if you really want to read about it), but you should know that the formula used to calculate the composite rate is more complicated than simply adding together the fixed rate and the semiannual inflation rate. Using this formula, a bond's composite rate will be higher than its fixed rate if the semiannual inflation rate reflects any inflation. In other words, inflation will cause a bond to earn additional interest. Likewise, a bond's composite rate will be lower than its fixed rate if the semiannual inflation rate reflects any deflation. Deflation will cause a bond to increase in value slowly, or not increase in value at all. However, even if deflation becomes so great that it would reduce the composite rate to below zero, we won't allow the value of a bond to decrease from its most recent redemption value.

Please note that the composite rate isn't equivalent to an annual percentage yield (APY), which financial institutions must disclose when detailing terms of certificates of deposit and other financial offerings. You cannot make direct comparisons between the composite rate and the APY. **Semiannual Rate Periods.** A bond's semiannual rate periods are consecutive sixmonth periods, the first of which begins with the bond's issue date.

Why are semiannual rate periods important? It's not until a bond enters a new semiannual rate period that the most recently announced composite rate begins to apply. This means that there can be a delay of several months from the time of a composite rate announcement to the time that rate determines interest earnings for a bond.

> **Examples:** If you purchased a bond in April, its semiannual rate periods begin every April and October. At the beginning of the semiannual rate period in April, the most recently announced composite rate would have been that which we announced the previous

November. This rate will determine interest earnings for your bond for the next six months, through the end of September. At the beginning of the semiannual rate period in October, the most recently announced composite rate would have been that announced the previous May. This rate will determine interest earnings for your bond through the end of the following March.

By contrast, if you purchased a bond in May, its semiannual rate periods begin in May and November. Accordingly, the composite rates announced in May and November will apply immediately to this bond.

The chart on the next page may help you understand when a composite rate applies to a bond, depending on the bond's issue date.

### How Semiannual Rate Periods Determine when an Announced Composite Rate Begins to Apply to a Bond

If Your Bond Has an Issue Date of	Then Its Semiannual Rate Periods Begin Every	And We Announce the Rate that Applies During a Rate Period In
January 1	January 1	November (of the previous year)
	July 1	Мау
February 1	February 1	November (of the previous year)
	August 1	Мау
March 1	March 1	November (of the previous year)
	September 1	Мау
April 1	April 1	November (of the previous year)
	October 1	May
May 1	May 1	May
	November 1	November
June 1	June 1	May
	December 1	November
hales 4	July 1	May
July 1	January 1	November (of the previous year)
August 1	August 1	May
	February 1	November (of the previous year)
September 1	September 1	May
	March 1	November (of the previous year)
October 1	October 1	Мау
	April 1	November (of the previous year)
November 1	November 1	November
	May 1	Мау
December 1	December 1	November
	June 1	Мау

#### Notes:

- (1) We announce rates every May and November, on the first day of the month that we're open for business. A rate applies when a bond enters a semiannual rate period that begins on or after the month of the rate announcement.
- (2) We add interest earned during each month of a rate period to a bond's value on the first day of the following month. However, a three-month interest penalty applies if you redeem a bond before it turns five years old.

Accrual of Interest. Interest on a bond accrues on the first day of each month. In other words, we add the interest earned on a bond during any given month to its value at the beginning of the following month.

**Example:** If you redeem a bond on January 31, none of the interest earned in January will be included in its value. If you wait one more day and redeem the bond on February 1, the value of the bond will reflect interest earned during January.

Accrued interest is payable upon redemption, though a three-month interest penalty applies if you redeem a bond before it turns five years old. (See "Interest Penalty for Early Redemption," below.)

**Compounding.** For determining future interest accruals, the accrued interest on a bond compounds semiannually, at the beginning of each semiannual rate period.

**Issue price.** We offer Series I bonds at face value, which means that the purchase price of a bond is the same as its denomination. This differs from Series EE bonds, which we offer at 50% of the face value.

**Purchase Limitation.** You can purchase no more than \$30,000 in bonds in your name during any calendar year. The limit applies separately for bonds that you purchase in an individual capacity and for those you purchase in a fiduciary capacity. The limitation doesn't apply to bonds on which you name yourself as a beneficiary, as opposed to those on which you name yourself as an owner or coowner.

#### Base Denomination for Calculations of Interest. We base all

calculations of interest on a hypothetical bond with a denomination of \$25. (We do so even though the lowest actual denomination for a bond is \$50). We use the value of this hypothetical bond to determine the value of bonds in higher denominations purchased at the same time. The effect of rounding off the value of the \$25 bond increases at higher denominations. This can work to your slight advantage or disadvantage, depending on whether we round the value up or down.

> **Example:** A composite rate of 5.07% will result in a newly purchased hypothetical \$25 bond increasing in value after six months to \$25.63, when rounded to the nearest cent. Thus, a \$5,000 bond purchased at the same time as the hypothetical \$25 bond will be worth \$5,126 after six months ([\$5,000  $\div$  \$25] x \$25.63 = \$5,126). In contrast, if it applied directly to a \$5,000 bond, the rate would render a value of \$5,126.75 after six months, a difference of 75 cents. (Please note that this example doesn't include any discussion of the three-month interest penalty that applies if you redeem a bond less than five years after its issue date.)

**Redemption.** You may not redeem a bond until six months after its issue date.

### **Interest Penalty for Early**

**Redemption.** If you redeem a bond that is less than five years old, you'll forfeit the three most recent months' interest on that bond. However, the bond's redemption value will never be less than what you paid for it. **Example:** Suppose that you purchase a bond in January and decide to redeem it later that year in October. We'll calculate the redemption value as if you had redeemed it three months earlier, in July.

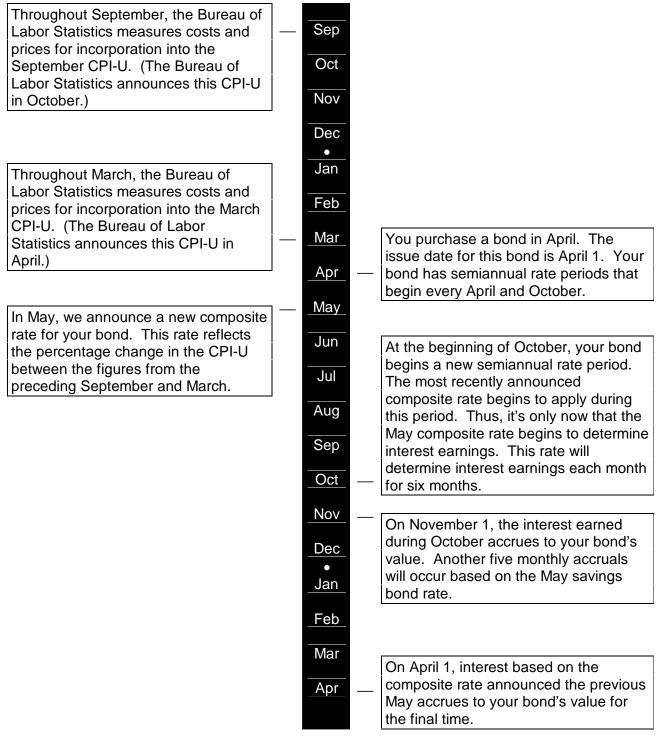
A Few Words about Time Lag. As mentioned earlier, there is a delay between the end of a six-month period used to measure the change in the CPI-U and the announcement date of a composite rate. Depending on the issue month of a bond, there may also be an additional delay. This delay is between the date of a composite rate announcement and the date that the composite rate determines interest earnings for the bond. Once the rate begins to apply, it'll continue to do so for the next six months. Finally, interest earned from the rate during any month doesn't accrue to the bond's value until the beginning of the following month. These delays can result in a significant time lag between the end of the six-month period used to measure the percentage change in the CPI-U and the date that the measurement of this change finally impacts your bond's value.

**Example:** The percentage change in the CPI-U between the figures from September and the following March is

reflected in the composite rate we announce at the beginning of May. If you own a bond with an issue date of April 1, the composite rate we announce in May won't apply to your bond until October 1, when your bond enters a new semiannual rate period. This composite rate will determine interest for the next six months, through March of the following year. Interest earned each month accrues on the first day of the following month.

Thus, in this example your bond will earn its first interest from the May rate in October, and that interest will be credited to your bond on November 1. Your bond will earn interest from the May rate for six months, from October through the following March, so that the last accrual date based upon this rate will be April 1. (Please note that this example doesn't include any discussion of the three-month interest penalty that applies if you redeem a bond before it turns five years old.)

The timeline on the following page may help you understand the above example.



### How Time Lag Impacts the Value of a Bond

**Note:** This timeline example doesn't reflect the three-month interest penalty that applies if you redeem a bond before it turns five years old.

### **Contingencies Relating to the**

**CPI-U.** Inflation and deflation are difficult to measure and there are measures of inflation other than the CPI-U. The CPI-U is subject to changes that could affect your bond. The CPI-U could even be discontinued. You should be aware of circumstances that may cause us to alter or discontinue our reliance upon the CPI-U.

*Revised CPI-U.* If a previously reported CPI-U is revised, we'll continue to use the previously reported CPI-U in calculating rates.

**Rebased CPI-U.** If the CPI-U is rebased to a different year, we'll continue to use the CPI-U based on the base reference period in effect when the bond was first issued, as long as that CPI-U continues to be published.

**Unreported CPI-U.** If the CPI for a particular month isn't reported by the last day of the following month, we'll announce an index number based on the last available 12-month change in the CPI. Any calculations of our payment obligations on a bond that rely on that month's CPI will be based on the index number that we've announced.

**Discontinued or Fundamentally Altered CPI-U.** If the CPI-U is discontinued or (in our judgment) fundamentally altered in a manner materially adverse to your interests, we'll substitute an appropriate alternative index.

Technical changes to the CPI-U by the Bureau of Labor Statistics to improve its

accuracy won't be considered fundamental. Technical changes include, but aren't limited to:

- the way specific items (such as apples or major appliances) are priced for the index;
- (2) the way individual price quotations are used to construct component price indices for these items;
- (3) the method for combining these component price indices to obtain the comprehensive, all-items CPI; and
- (4) the procedures for incorporating new goods into the index and making adjustments for quality changes in existing goods.

One technical change to the CPI previously made by Bureau of Labor Statistics was to introduce probability sampling to select the precise items for which prices are collected and the stores in which collection takes place. Other technical changes have involved how the Bureau of Labor Statistics measures price movements of major components, such as shelter costs for homeowners in the early 1980's and medical care costs beginning in 1997. In addition, changes in the CPI-U to account for the fact that consumers often respond to rising prices by shifting to lower-cost substitutes qualify as technical changes. In contrast, a decision by the Bureau of Labor Statistics to replace the monthly CPI-U with an annual measure of consumer prices would qualify as a fundamental change.

## How Is Interest Treated for Tax Purposes?

**Taxable Interest.** Any increase in the value of your bond above what you paid for it is interest, which may be subject to taxation.

**State and Local Taxes.** Interest earnings on bonds are exempt from State and local income taxes. However, bonds are subject to State and local estate, inheritance, gift, and other excise taxes.

**Federal Taxes.** You must pay all Federal taxes imposed by the Internal Revenue Code of 1986 (as amended) on the interest your bonds earn.

**Reporting Basis.** You may use either the *cash basis method* (deferred reporting) or *accrual basis method* (annual reporting) for reporting interest for Federal income tax purposes. Under the cash basis method, you may defer Federal income tax until the year the bond ceases to earn interest or is redeemed or otherwise disposed of, whichever occurs first. This means that you can't defer reporting Federal income tax on a bond that is no longer earning interest, even if you haven't redeemed the bond. Under the accrual basis, you report interest each year as it accrues. The cash basis method applies unless you choose the accrual basis method by reporting the increase in redemption value as interest each year.

In deciding which method to use, you should consider two additional factors. First, you must use the same method for all Series EE, Series E, or Series I bonds you own or may later purchase. Second, if you elect the accrual basis method, you only may switch to the cash basis method with the permission of the Internal Revenue Service (IRS). (If you use the cash basis method, you may switch to the accrual basis method without the permission of the IRS.)

**Reissuance**. A reissuance (reregistration) of a bond that impacts the rights of any of the persons named on the bond may have a tax consequence. More information on this subject is available in IRS Publication 550, "Investment Income and Expenses." This publication is available at the Internet site of the IRS, <*www.irs.gov*>.

**Education Bond Program.** You may be able to exclude from your Federal income taxes all or a portion of a bond's interest if you use the interest to pay for qualified educational expenses. Additional details regarding the education bond program are available in IRS Publication 17, "Your Federal Income Tax," Publication 550, "Investment Income and Expenses," or Publication 970, "Tax Benefits for Higher Education." These publications are available at the Internet site of the IRS, <www.irs.gov>.

## Where Can I Find Additional Information?

You can find comprehensive details on the offering, terms, and conditions of Series I bonds in parts 359 and 360 of title 31 of the Code of Federal Regulations. The regulations deal with various topics not covered in this information statement, including procedures for buying, redeeming, replacing, and reissuing (re-registering) bonds. The regulations and additional informal guidance on savings bonds are available from the Internet site of the Treasury Department's Bureau of the Public Debt, *<www.savingsbonds.gov>*. The site also includes a savings bond calculator and a downloadable program called the "Savings Bond Wizard" that allow you to keep track of the current redemption value of all savings bonds you may have purchased since 1941.

**Note:** This document is explanatory only. It's not an offer of bonds and doesn't have the force of law. The Code of Federal Regulations provides the offering, terms, and conditions of Series I savings bonds. This document doesn't supplement or modify the official texts.

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