§ 359.11 What is the semiannual inflation rate?

The index used to determine the semiannual inflation rate is the non-seasonally adjusted CPI-U (the Consumer Price Index for All Urban Consumers for the U.S. City Average for All Items, 1982-84=100) published by the Bureau of Labor Statistics of the U.S. Department of Labor. (For further information on CPI-U considerations, see appendix C to part 359 at section 1.) The semiannual inflation rate reflects the percentage change, if any, in the CPI-U over a six-month period. We announce this rate twice a year, in May and November. The semiannual inflation rate we announced in May 2002 reflects the percentage change between the CPI-U figures from the preceding March 2002 and September 2001. The rate of change over the six-month period, if any, will be expressed as a percentage, rounded to the nearest one-hundredth of one percent. More specifically, the semiannual inflation rate will be determined by the following formula (the resulting rate will be rounded to the nearest one-hundredth of one percent):

\[
\text{Semiannual inflation rate} = \frac{\text{CPI}_{\text{Current}} - \text{CPI}_{\text{Prior}}}{\text{CPI}_{\text{Prior}}} 
\]

§ 359.12 What happens in deflationary conditions?

In certain deflationary situations, the semiannual inflation rate may be negative. Negative semiannual inflation rates will be used in the same way as positive semiannual inflation rates. However, if the semiannual inflation rate is negative to the extent that it completely offsets the fixed rate of return, the redemption value of a Series I bond for any particular month will not be less than the value for the preceding month. The composite rate will always be greater than or equal to 0.00%.

§ 359.13 What are composite rates?

Composite rates are single, annual interest rates that reflect the combined effects of the fixed rate and the semiannual inflation rate. The composite rate will always be greater than or equal to 0.00%.

§ 359.14 How are composite rates determined?

Composite rates are set according to the following formula (See appendix A to part 359 for examples of calculations involving composite interest rates.):

\[
\text{Composite rate} = \left(\text{Fixed rate} + 2\right) + \text{Semiannual inflation rate} + \left[\text{Semiannual inflation rate} \times \left(\text{Fixed rate} + 2\right)\right] \times 2 \quad 2
\]

§ 359.15 When is the composite rate applied to Series I savings bonds?

The most recently announced composite rate applies to a bond during its next semiannual rate period. A bond’s semiannual rate periods are consecutive six-month periods, the first of which begins with the bond’s issue date. 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. For example, 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 the rate we announced the previous November. This rate will determine interest earnings for your bond for the next six months, through the end of September.

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Example for I bonds issued May 2002–October 2002:

- Fixed rate = 2.00%
- Inflation rate = 0.28%
- Composite rate = \( \left[\left(2.00\% + 2\right) + 0.0028 + \left(0.0028 \times 0.0200 + 2\right)\right] \times 2 \)
- Composite rate = \( \left[\left(0.0100 + 0.0028 + 0.000028\right) \times 2 \right. \)
- Composite rate = 0.012828 × 2
- Composite rate = 0.025656
- Composite rate = 0.0257 (rounded)
- Composite rate = 2.57% (rounded)
be the rate announced the previous May. This rate will determine interest earnings for your bond through the end of the following March. However, if you purchased a bond instead in May, its semiannual rate periods begin in May and November. Therefore, the composite rates announced in May and November will apply immediately to this bond. (See appendix C to part 359 at §2 for a discussion of rate lag.)

§ 359.16 When does interest accrue on Series I savings bonds?
(a) Interest, if any, accrues on the first day of each month; that is, we add the interest earned on a bond during any given month to its value at the beginning of the following month.
(b) The accrued interest compounds semiannually.

§ 359.17 When is interest payable on Series I savings bonds?
Interest earnings are payable upon redemption.

§ 359.18 Is the determination of the Secretary on rates and values final?
The Secretary’s determination of fixed rates of return, semiannual inflation rates, composite rates, and savings bonds redemption values is final and conclusive.

§ 359.19 How is interest calculated?
We base all calculations of interest on a $25 unit. We use the value of this unit to determine the value of bonds in higher denominations. The effect of rounding off the value of the $25 unit increases at higher denominations. This can work to your slight advantage or disadvantage, depending on whether we round the value up or down.3

3For example: A composite rate of 2.57% will result in a newly purchased $25 unit increasing in value after six months to $25.32, when rounded to the nearest cent. Thus, a $5,000 bond purchased at the same time as the $25 unit will be worth $5,064 after six months ($5,000 divided by $25) × $25.32 = $5,064.) In contrast, if it applied directly to a $5,000 bond, the rate would render a value of $5,064.25 after six months, a difference of 25 cents. (This example does not include any discussion of the three-month interest penalty that applies if you redeem a bond less than five years after its issue date.)