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Here's a Tip for You!

All of us know what inflation does to our money. It makes our money worth less! Thus, TIPS (Treasury Inflation Protected Securities) were introduced in the US with considerable fanfare in 1997. Recently, federal agencies and corporations have begun issuing a twist on TIPS with great success. The twist is a type of security informally known as CIPS (Corporate Inflation Protected Securities). As we will explain, CIPS are a significant improvement on TIPS with some additional benefits.

First, let's review the mechanics of TIPS. TIPS are government securities structured to maintain their "real value" in an inflationary environment. The principal is adjusted for inflation using the CPI Index and the semi-annual interest payments change accordingly. At maturity, TIPS are redeemed at the greater of their inflation-adjusted principal or their original par amount.

Figure 1

Example: $1000 TIPS security
3% semi-annual coupon

Inflation: 1% over 6 months
1st inflation-adjusted principal:
$1000 x 1% = $1010
1st semi-annual coupon payment:
$1010 x (3%/2) = $15.15
Inflation: 2% over next 6 months
2nd inflation-adjusted principal:
$1010(1.02) = $1030.20
2nd semi-annual coupon payment:
$1030.20 x (3%/2) =$15.45
Total TIPS coupon payments:
$15.15 + $15.45=$30.60

In the example in Figure 1, we use a $1000 TIPS security with a 3% coupon. We assume inflation of 1% for the first 6-month period and 2% for the next 6-month period. After the first year, an investor buying the TIPS would have received $30.60 in coupon payments and the $1000 bond would have had its principal adjusted to $1030.20. In comparison, a standard $1000 Treasury security would have paid a total of $30 in coupon payments and the principal would have remained constant at $1000.

One of the difficulties of TIPS is measuring the interest rate risk (duration). Since the duration of a TIPS security is a function of changes in real rates **and** inflation, it is different from the duration of an equal maturity treasury. When we compare the relative price behavior between the two (beta), we find that they had a very low correlation in 1997. Now, as inflation and interest rates have declined, their correlation has increased and is close to one. This "beta shift" has made TIPS riskier in a rising rate environment and difficult to own in the context of a larger portfolio. Unlike TIPS, CIPS should have little to no "beta shift." CIPS maintain their value in an inflationary environment by having their coupon, not their principal, change with inflation. The CIPS interest rate resets monthly off of the CPI Index plus some spread. In addition, since the CIPS interest payments are made monthly, their duration should be short and stable like other floating rate securities.

In addition to "beta shift," another TIPS shortcoming is "phantom income." Taxable investors must pay annual federal taxes on coupon payments and on principal inflation-adjustments in the year adjustments occurred--even though principal cash flow is not received until maturity! In Figure 2, we use the same $1,000 TIP security with a 3% semi-annual coupon. However, we now assume 5% inflation over the next 6 months and a 30% tax rate. As the example illustrates, negative cash flow is possible from owning TIPS in a higher inflation environment. Meanwhile, CIPS do not have "phantom income." With CIPS, the principal stays constant preventing any negative cash flow and making the accounting easier.

Figure 2

Example: $1000 TIPS security
3% semi-annual coupon
30% tax rate

Inflation: 5% over 6 months
inflation-adjusted principal: $1000 x 5% = $1050
semi-annual coupon payment: $1050 x (3%/2) = $15.75
ordinary income=coupon payment + change in the principal:
$15.75 + $50 = $65.75
taxes due: 30% x $65.75 = $19.73
net cash flow = coupon payment - taxes due:
$15.75 - $19.73 = **-$3.98**

So, what can investors do to protect their principal against higher inflation while avoiding complications? The "tip" is in the "CIP!" Because agencies and corporations, and not the US government, issue CIPS, they even provide investors with some additional yield over TIPS. Recently, several CIPS deals have been priced including a $750 million FNMA security. But like most "tips," it won't be long before the word spreads!

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A copy of our Form ADV, Part II is available upon request.
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