

THE NEW ENGLAND GUILD

MEMORANDUM

Treasury Inflation-Protected Securities

Description: Treasury Inflation-Protected Securities (TIPS) are bonds, backed by the full faith and credit of the US Government, with a fixed maturity date, a fixed interest coupon and a semi-annual price adjustment for the current rate of inflation as measured by the Consumer Price Index for urban consumers (CPI-U).

Return: The return on TIPS is comprised of the stated yield (currently 3.60%) plus an upward adjustment of both the principal value at maturity and the coupon equivalent to the inflation experience of the previous six months (currently 2.5% annualized). If the rate of inflation remains unchanged, this will result in a total return of 6.1%. This compares with a current yield to maturity of 6.42% on a 10 year Treasury bond maturing in 02/07. Should the rate of inflation rise, the price adjustment of the TIPS will correspondingly increase, thereby preserving the current 'real' yield of 3.6%. A similar adjustment is made to the coupon payment (currently 3.35%). If the rate of inflation declines, the adjustment will be negative. The attraction of the TIPS is its guaranteed 'real' return.

Risk: Because the price of the TIPS will be adjusted semi-annually for actual inflation, inflation-risk is essentially removed from the security. Further, because TIPS issues are government guaranteed, credit risk is minimal as is call risk. Consequently, price volatility of the TIPS issues will be significantly less than nominal bonds of comparable maturities. The only influence on interim price volatility is a change in investor 'real' return requirements and supply/demand pressures which may be influenced by shifts in investor inflation expectations. While the empirical history is limited, it is likely that the price volatility of TIPS will be closer to that of 1-3 year treasury issues than to 10 year government bonds. A final limitation on risk is that a minimum par value of 100 is guaranteed at maturity even if inflation is negative over the period.

Taxes: Taxable income on TIPS issues includes both coupon income plus the semiannual price adjustment for inflation. Since the price adjustment can only be realized when the bond either matures or is sold, an investor is annually liable for taxes on a component of income for which he may not have received cash. This can be a problem for those investors with a tight match of cash flows.

Liquidity: For small investors liquidity is not an issue. TIPS issues are traded similarly to other treasury issues at similar commission costs and spreads. Because the total amount of TIPS outstanding at this time is still limited, however, liquidity may be an issue for institutional investors, and this could create larger than normal supply/demand influences on price volatility.

Valuation: One of the attractions of TIPS issues is the ability to calculate the inflationary expectations of investors. This is determined by subtracting the yield on TIPS securities from that of comparable maturity. As a result, TIPS issues can be evaluated either on the basis of their absolute level of 'real yield' or on their implied attraction given embedded inflation expectations. Historically treasury bonds have provided a real return of between 2% and 4%. Typically TIPS issues will out-perform comparable nominal treasuries when inflation expectations are rising, and will under-perform when inflation expectations are falling.

Portfolio Management Considerations: TIPS offers attractive opportunities for improving a portfolio risk and return characteristics. This is because their expected total return will be roughly comparable to 10 year treasuries, assuming no changes in inflation, but their volatility will be more comparable to shorter maturity treasuries. As a result, they can be used in place of either longer maturity treasuries (because they offer comparable return with less risk) or very short duration treasuries (because they offer higher real returns with comparable risk). When using TIPS in place of nominal treasuries, a portfolio is able to assume more risk in other holdings (e.g., equities). It is generally preferable to use TIPS in tax-deferred portfolios since many investors may be confused and surprised by the tax effects.

An administrative disadvantage is that currently the inflation factor adjustment must be manually calculated and daily prices, therefore, may not reflect true market price (similar to GNMA's). Brokers maintain current factors and have them available to provide current information for trading purposes, but this information has not yet automated into pricing files.

Summary of Advantages/Disadvantages: In summary, TIPS offer inflation protection as a security with low volatility, no credit risk, and high liquidity. They can be expected to out-perform bonds in an environment of rising inflation. Their drawbacks are that they will not perform as well as bonds in an environment of falling inflation and that they do have some undesirable tax effects. Further, they are a new security to US markets thereby offering a limited history by which to observe their patterns of behavior.