

# ITALIAN TREASURY BONDS INDEXED TO EUROZONE INFLATION (BTP€)

Italian Treasury Bonds indexed to Euro-zone inflation are securities issued by the Italian state that provide investors with protection against increases in inflation. Both the principal of the notes to be redeemed at maturity and their coupons, payable half-yearly, are recalculated taking into account inflation in the Euro-zone, as measured by the Harmonised Index of Consumer Prices (HICP), excluding tobacco.

Monthly data for the Eurostat index may be found online, at the website of the Statistical Office of the European Communities, at the following address: <http://europa.eu.int/comm/eurostat/>.

As a result of the indexation mechanism employed, at the notes' maturity their holders shall be recompensed for any loss in purchasing power that has occurred over the term of the notes. The return of the subscribed nominal amount of BTP€ notes is in any event ensured: if, over the term of the security, there is a fall in prices, the amount redeemed at maturity shall be no less than the notes' nominal value of 100.

Whenever, in accordance with the relevant offering circular, the bond is paid before the maturity date, the payable amount means (i) the principal amount multiplied by the inflation index ratio or, where such inflation index ratio is lower than one, the principal amount; together with (ii) accrued interest calculated as described at point 1.2.7. The relevant inflation index ratio is determined in accordance with the offering circular.

Coupons payable to subscribers are in variable amounts but will ensure a steady return in real terms, that is, in terms of purchasing power. The amount of each coupon is calculated by multiplying the fixed interest rate, established upon issue, by the principal amount subscribed, adjusted for inflation between the interest commencement date and the coupon's payment date.

## ***BTP€ MAIN FEATURES***

<b>Currency</b>	Euro.
<b>Maturity</b>	5, 10, 15 and 30 years.
<b>Remuneration</b>	Floating semi annual coupons in arrears, indexed to the Eurostat Harmonised Index of Consumer Prices, excluding tobacco, possible discount at issuance and revaluation of principal at maturity.
<b>Auction mechanism</b>	Marginal auction with discretionary determination of price and quantity issued, with constraint on the maximum amount to offer.
<b>Auction frequency</b>	Monthly.
<b>Settlement Dates</b>	T+2 on the primary market and T+3 on the secondary market.
<b>Market Conventions</b>	Actual/actual for the yield calculation and the accrued interest.
<b>Redemption</b>	Single payment at maturity; the amount of principal is revalued on the basis of the Indexation Coefficient for the relevant maturity date, it cannot be less than the securities nominal value.

## ***PRACTICAL INFORMATION ABOUT BTP€i***

*Some useful information about the features and functionality of this instrument are outlined below.*

- 1. INVESTING IN BTP€i**
- 2. INDEXATION**
- 3. AUCTION MECHANISM**
- 4. MINIMUM DENOMINATION**
- 5. MATURITY**
- 6. NOTICES REGARDING THE NOTES**

### **1. INVESTING IN BTP€i**

BTP€i notes are issued with maturities of 5, 10, 15 and 30 years. They are variable, medium-long term bonds, particularly suited for investors who require six-month payments linked to inflation rates, in particular that of the euro area, and who intend to preserve over time the real value of the capital invested.

Until September 2004, BTP€is were issued exclusively by way of placement syndicates created for this purpose. In September 2004, for the first time, the auction procedure was also adopted (for the issuance of the third tranche of the 10-year BTP€i). These notes are issued through a marginal auction, with discretionary decision of the auction price and of the nominal amount issued within an interval communicated in advance. For the acquisition of bonds, the subscription price is obtained by multiplying the auction price (marginal price), which is expressed in “real” terms – that is, net of the indexing component – by the Indexation Coefficient referring to the payment date of the auction (see point 1.2.1).

For 2005 the Treasury will, as a rule, issue these bonds monthly, on the basis of market conditions, making use of both auctions and placement syndicates. Once the auction procedure has been selected, the issuance will take place in the second half of the month, on the business day preceding the medium-long term auction. The Treasury will announce the bonds in issuance, and the respective maximum quantities to be offered, with the first announcement of the end-month auction of medium-long term bonds, or four business days prior to the auction.

BTP€i notes can be bought and sold, before maturity, by institutional investors on the regulated secondary market (MTS), for transactions of not less than 2.5 million euro; private citizens, on the other hand, can carry out these transactions on the regulated secondary market for retail investors, the MOT (*Mercato Telematico delle Obbligazioni e dei Titoli di Stato*), for a minimum amount of 1,000 euro.

The price quote of BTP€is on the secondary market is done in “real” terms; thus the quoted price does not take into account the indexing component. The selling price, or the price at which the BTP€i notes are bought or sold on the market, is, rather, obtained by multiplying the quoted price by the Indexation Coefficient relative to the date of payment of the transaction.

Furthermore, for BTP€is the separation of the coupon components from the “principal” of the bond (*coupon stripping*) is allowed. The minimum amount of the separation request, to be made at Monte Titoli S.p.A., is 1,000 euros; the maximum amount that can be separated must not exceed 50% of the outstanding bond.

## 2. INDEXING

BTP€ notes shall provide constant rates of interest in real terms, in terms of purchasing power, fixed at their date of issue (known as the real annual coupon rate). The variable amount of the half-yearly coupons is calculated by multiplying half the annual real coupon rate by the nominal principal amount recalculated as at the coupon's payment date.

The recalculated nominal principal amount is the subscribed nominal principal amount multiplied by the Indexation Coefficient at the coupon's payment date.

### 1.2.1 The Indexation Coefficient

The Indexation Coefficient (the "IC") is calculated on the basis of the rate of inflation measured by the Harmonised Index of Consumer Prices for the Euro area, excluding tobacco, calculated and published each month by Eurostat (the "Eurostat Index").

The coefficient allows the calculation of values for the adjustment of the nominal principal amount, for a day  $d$  of a month  $m$ , on the basis of price inflation.

The IC is calculated using the following formula:

$$IC_{d,m} = \frac{\text{Reference Inflation}_{d,m}}{\text{Base Inflation}}$$

where *Reference Inflation* is the rate of inflation described in the preceding paragraph; and *Base Inflation* was the value of Reference Inflation as at the interest commencement date.

Only six decimal places of the value of the Coefficient calculated in this manner are considered, the value's fifth decimal place being subject to rounding.

On a monthly bases, the Ministry of the Economy and Finance publishes daily values for the Indexation Coefficient in the Public Debt Statistics section of the Public Debt website.

### 1.2.2 Reference Inflation

"Reference Inflation" for a particular date (a day  $d$  of a month  $m$ ) is calculated on the basis of the Eurostat Indices for the two and three months prior to the month in which the calculation is being made, in accordance with the following formula:

$$IR_{d,m} = IE_{m-3} + \frac{d-1}{gg} * (IE_{m-2} - IE_{m-3})$$

where:

$IR_{d,m}$  is the Reference Inflation of day  $d$  of month  $m$ ;

$IE_{m-3}$  is the Eurostat Index value for the month three months prior to that in relation to which the calculation is being made;

$IE_{m-2}$  is the Eurostat Index value for the month two months prior to that in relation to which the calculation is being made;

$d$  is the day of the month in relation to which the calculation is being made; and

$gg$  is the actual number of days in month  $m$ .

The Coefficient having been calculated in this manner, only its first six decimal places are considered, the value's fifth decimal place being subject to rounding.

For further information, please see the numerical example of the value of reference inflation for inflation-linked Treasury Bonds, published on this website.

### **1.2.3 Changes to published values of the Eurostat Index**

If values of the prices index should be altered after their initial publication, calculations shall continue to apply the values published prior to such alteration.

### **1.2.4 Eurostat Index Not Published**

If the Eurostat Index is not published within a suitable period in relation to a month  $m$ , a Substitute Index (“SI”) shall be used, calculated in accordance with the following formula:

$$IS_m = IE_{m-1} \times \left( \frac{IE_{m-1}}{IE_{m-13}} \right)^{1/12}$$

The Substitute Index shall be applied in determining payments for interest and the redemption of principal that are to be made prior to the publication of the definitive values for the index. Payments made on the basis of the Substitute Index shall not be subject to subsequent correction.

### **1.2.5 Redemption of Principal**

The principal to be redeemed at maturity shall be calculated by multiplying the subscribed nominal principal amount by the Indexation Coefficient, calculated as at the maturity date. The coefficient takes into account the variation in prices that has occurred over the term of the notes.

If the value of the Indexation Coefficient for the maturity date is less than one, the amount of the principal redeemed shall be the nominal value of the notes. Consequently, if over the term of the notes there is a reduction in prices, the amount redeemed at maturity shall be in any event equal to the notes’ nominal value (of 100).

### **1.2.6 Half-yearly coupons**

Gross half-yearly amounts of interest shall be calculated by multiplying the coupon rate by the notes’ minimum amount for subscription (in relation to which see paragraph 1.3) and the Indexation Coefficient as at the coupon’s payment date.

The amount so calculated, including at least ten decimal places, shall be multiplied by the number of multiples of the minimum denomination comprising the nominal amount in relation to which payment is to be made. For the purposes of payment, the calculated value is rounded to the second decimal place.

### **1.2.7 Accrued interest**

Accruing interest shall be calculated by multiplying the accrued interest for the coupon, calculated in accordance with the conventions used for Treasury Bonds, by the Indexation Coefficient for the day to which the calculation relates.

If BTP€ notes are bought or sold at any date between coupon payment dates, the purchaser shall pay to the seller the amount of interest accrued from the last coupon payment date to the transaction’s settlement date (day  $d$  of month  $m$ ).

The calculation of the coupon amount (CA) occurs in two stages.

1. The percentage of the coupon that has accrued to the settlement date of the transaction (“CA%”) is calculated,

$$CA\% = \text{Coupon \%} * \frac{\text{relevant days}}{\text{days between payment of two coupons}}$$

where “relevant days” means the number of days from the payment date of the previous coupon, and the settlement date (day *d* of month *m*).

2. The figure obtained is then multiplied by the subscribed amount of principal, recalculated as at the settlement date (equal to the nominal amount subscribed, multiplied by the Indexation Coefficient):

$$CA_{d,m} = CA\% * \text{Nominal Amount} * IC_{d,m}$$

### 3. MINIMUM DENOMINATION

BTP€ notes may be subscribed in a minimum nominal amount of euro 1,000 and in multiples thereof.

### 4. AUCTION MECHANISM

BTP€s are offered through a marginal auction with discretionary determination of price and quantity issued within an interval communicated in advance. There is also a mechanism of speculative bid exclusion. This mechanism is showed in detail in every issue decree. The same decree sets supplementary placement terms, reserved to specialists in Government bonds, technically assuming the shape of a following tranche. Only specialists who took part in the every last auction, can have access to this supplementary placement.

The amount of any bid cannot be less than 500,000 euro.

Bidders can submit prices with a minimum tick of one cent of euro or multiples thereof.

The execution of the operations concerning BTPs auction is responsibility of Bank of Italy.

For each security to be issued, auction fees will be applied based on the residual maturity, which will be set calculating the number of days between the auction settlement date and the maturity date, according to the table below:

Type of security	Time-to-maturity days interval		Fees
BTP€ 5 Years	1461	2738	0,3%
BTP€ 10 Years	2739	4562	0,4%
BTP€ 15 e 30 Years	4563	999999	0,4%

### 5. MATURITY

Currently BTP€ notes have a maturity of 5, 10, 15 and 30years.

### 6. NOTICES REGARDING THE NOTES

All notices regarding subsequent issues of Treasury Bonds linked to European inflation shall be published on the Public Debt website, at the pages “[BTP€ offering announcements](#)”, where details may also be found of their tax regime.

Daily values for the Indexation Coefficient, for use in the calculation of the adjusted principal as at the particular date, shall be published on the same website and published each month by the leading press agencies specialising in the distribution of financial information.