

## Box 2

### Deriving inflation expectations from inflation index-linked bonds

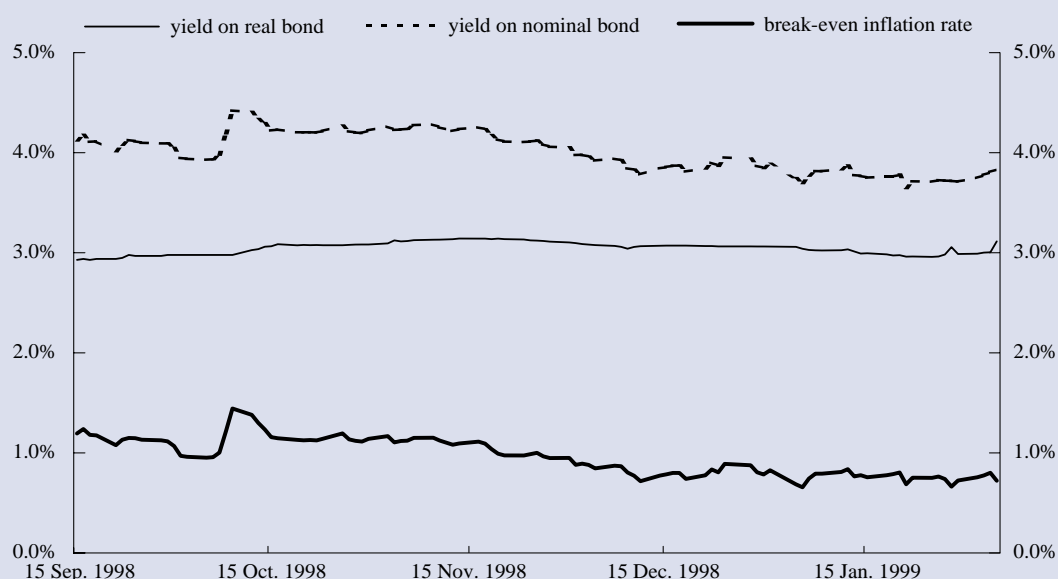
In general, a comparison of the yields on inflation index-linked bonds and those from nominal fixed income securities with similar maturities can provide some insight into inflation expectations in the economy. Until recently inflation index-linked bonds had not been issued in the euro area. Indeed, the French Treasury issued the first such inflation-indexed bond ("OATi" or *Obligation Assimilable du Trésor Indexée*) in September 1998. This bond will mature in 2009 and it carries a 3% real coupon that is paid annually. The nominal coupons on this bond are calculated ex post and the indexing lag is at most three months. The coupon and principal payments of the OATi are linked to the French consumer price index (CPI) excluding tobacco prices.

The differential between a long-term nominal bond yield and the real yield available on an index-linked bond of the same maturity is generally known as the "break-even inflation rate". This is because, under this rate of inflation, the expected nominal return to an investor will be the same regardless of whether the investment is made in a fixed nominal income or an index-linked bond. However, the break-even inflation rate is not a direct measure of inflation expectations. First of all, it also contains an inflation risk premium to allow for the additional uncertainty faced by an investor in a fixed income bond due, in particular, to the volatility of inflation. Furthermore, it reflects a premium related to the relatively lower level of liquidity that usually characterises index-linked bond markets. While the existence of an inflation risk premium implies that the break-even inflation rate overestimates true market expectations of inflation, the liquidity premium works in the opposite direction. However, the narrowness of the spread currently observed between quoted bid and ask prices for the OATi tends to suggest that the liquidity premium may be of a limited magnitude only.

The chart below shows recent break-even inflation rates which are derived from a comparison of the rate on the OATi that will mature in 2009 and the rate on a comparable fixed nominal income OAT (which carries a fixed 4% nominal coupon and matures in 2009). It shows that the break-even inflation rate has declined more or less continuously since the OATi was issued and reached a level of around 0.8% in early February 1999. To the extent that the aforementioned risk premia are assumed to have been relatively stable over time, it may be inferred that market expectations concerning long-term inflation in France have fallen as well. It is important to reiterate that the measure of inflation used in the OATi is a variant of the French CPI. Hence the OATi can only provide information on inflation expectations in France and not on those for the euro area as a whole. Nonetheless, to the extent that French inflation expectations are indicators of inflation expectations in the euro area as a whole, break-even inflation rates in France may provide useful indicative information regarding financial market expectations in the euro area more generally.

#### Break-even inflation rate calculated for the French CPI (excluding tobacco prices)

(in percentages)



Sources: French Treasury, ISMA and Reuters.