

2007-06-14

## PRESS RELEASE

## The flattening of the yield curve: causes and economic policy implications

(Article published in the Economic Review, June 2007)

The risk-free yield curve, namely the graph representing the link between interest rates and the time to maturity of government bonds, is an important information source for central banks. Thus, the slope of the yield curve – measured as the difference between long-term and short-term interest rates – is traditionally regarded as a relatively reliable leading indicator of economic activity, since a narrowing of the rate differential is usually followed a few quarters later by a marked slowdown of the economy, while a widening generally is accompanied by an acceleration of economic growth. Long-term yields also provide information on long-term inflation expectations, and hence on the credibility of monetary policy.

Since mid 2004 there has been a marked flattening of the risk-free yield curve not only in the euro area but also in the United States, where the curve has actually been slightly inverted since mid 2006, raising numerous questions about the future economic trend and, to a lesser extent, about inflation expectations. This article examines the factors behind that flattening and their implication for the quality of the signals provided, both by the yield curve as a leading indicator of economic activity, and by long-term interest rates as an indicator of the inflation expectations of the economic agents.

Analysis has shown that, apart from the tightening of monetary policy, reasons for this phenomenon lie in a substantial fall in the risk premium and, in particular, its real component over the period from mid 2004 to mid 2005. Analysis also suggests that this contraction of the risk premium was caused mainly by strong demand for government bonds on the part of atypical investors, and particularly Asian central banks and pension funds. These investors, especially the Asian central banks, have preferred to hold US securities. However, as a result of the progressive integration of the financial markets, these factors have also had an impact in the euro area.

As the reduction in the inflation risk premium makes only a small contribution towards lowering the overall risk premium, the reliability of break-even inflation rate as an indicator of inflation expectations is not really affected. The break-even inflation rate is defined as the difference between a nominal bond yield and the real yield on an inflation link-indexed bond with a similar maturity and issuer. However, the existence of an – admittedly small - inflation premium incorporated in break-even inflation does render that indicator imperfect. Since 2004, break-even inflation rate has hovered around 2.1 p.c. which, taking account of this risk premium, corresponds to price stability as defined by the ECB Governing Council. This therefore suggests that the European monetary authorities have been successful in firmly anchoring inflation expectations.

Conversely, analysis has shown that the quality of the yield curve as a leading indicator of the business cycle is affected by the contraction of the risk premium. It is precisely because the flattening of the yield curve is due to a change in the risk premium rather than a revision of interest rate expectations that the current behaviour of the yield curve should not be interpreted as a sign heralding a marked slowdown in economic activity. After several quarters of exceptional growth, however, a return to sustainable growth may be expected. In the current context of significant variations in the risk premium, it is therefore essential to consider these changes when using the yield curve as a leading indicator of economic activity.

Finally, the flattening of the yield curve may also have more direct implications for the conduct of monetary policy. Generally speaking, the contraction of the risk premium is accompanied by an easing of financial conditions, which tends to stimulate aggregate demand. Such a situation may therefore generate inflationary pressures. Consequently, the monetary authorities need to exercise greater vigilance in order to ensure medium-term price stability. That increased vigilance is particularly necessary if the risk premium reduction is not due to a change in the macroeconomic fundamentals. In the latter case, there is also the risk of a

possible upward correction to long-term interest rates. However, it should also be noted that, at present, the demand displayed by atypical investors seems to be more structural than the demand resulting from the "flight to quality" which caused the decline in the risk premium during 1997-1998. The reduction in the risk premium between June 2004 and June 2005 therefore appears to be more persistent than that seen between mid 1997 and the end of 1998.