Box 3

DEMAND FOR BONDS BY INSTITUTIONAL INVESTORS AND BOND YIELD DEVELOPMENTS IN THE EURO AREA

Long-term bond yields in the euro area and in other major markets have been at very low levels in recent years. There is evidence supporting the view that low long-term bond yields reflect, to a large extent, unusually low levels of bond market risk premia, especially in real terms.[1] Several arguments put forward to explain low risk premia in the global bond markets point to certain groups of investors having considerably stepped up their demand for longer-dated bonds, pushing up long-term bond prices and depressing yields accordingly. For example, it is argued that a much increased demand for US bonds from in particular Asian central banks (investing accumulated foreign exchange reserves) and oil-exporting countries (recycling windfall profits from the strong increases in commodity prices) had such effects on US bond yields in recent years, which were then transmitted to the euro area and other major markets reflecting the high degree of substitutability between government bonds in the developed countries.

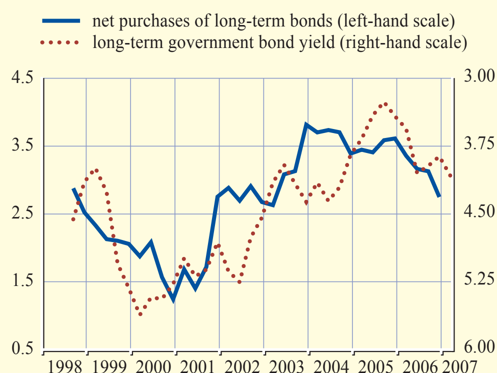
In the same vein, it has also been argued that institutional investors have shown a stronger demand for bonds related, among other things, to changes in the regulatory framework and in accounting rules, as well as to the ageing of the population and increasing life expectancies. This box presents some preliminary and purely descriptive evidence regarding the demand for long-term bonds from euro area insurance corporations, pension funds and mutual bond funds and its potential impact on long-term interest rates in the euro area.

Chart A plots the annual net purchases of long-term bonds by euro area insurance corporations and pension funds (as a percentage of the total outstanding amount of euro-denominated long-term government bonds) and the euro area ten-year government bond yields (plotted on an inverted scale) since the third quarter of 1998. Because a higher demand for bonds would, all else being equal, lead to lower bond yields, the chart may suggest that the bond demand from euro area insurance corporations and pension funds might indeed have played a role in driving euro area long-term bond yield developments in recent years. Periods of increasing and high

1 See the box entitled "Recent developments in long-term real interest rates" in the April 2005 issue of the Monthly Bulletin; I. Alexopoulou, F. Drudi and J. Scheithauer, "What accounts for the low level of interest rates?", background paper to CGFS Paper No 27 on the BIS website; and the box entitled "Long-term real and inflation risk premia in the euro area bond market" in the April 2007 issue of the Monthly Bulletin.

Chart A Net purchases of long-term bonds by euro area insurance corporations and pension funds

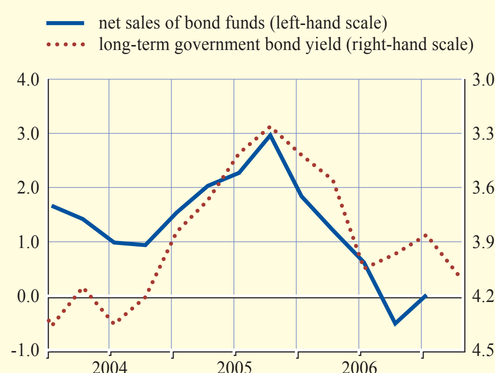
(annual flows as a percentage of outstanding euro-denominated long-term government bonds; percentages per annum)



Sources: ECB and Reuters.
Notes: Long-term bonds refer to long-term securities other than shares. Government bonds refer to debt securities issued by the euro area general government.

Chart B Net sales of bond funds

(annual flows as a percentage of outstanding euro-denominated long-term government bonds; percentages per annum)



Sources: ECB, EFAMA and Reuters.
Notes: Bond funds refer to UCITS bond funds. Government bonds refer to debt securities issued by the euro area general government.

demand for bonds were typically associated with declining and low long-term government bond yields. This seems to be confirmed by Chart B, which plots the annual net sales of bond funds and the long-term bond yields in the euro area since the fourth quarter of 2003. The chart indicates that the lowest level of bond yields in recent years occurred at the times of the highest demand for bond funds.

However, the share of net purchases of long-term bonds by euro area insurance corporations and pension funds (as a percentage of the total outstanding amount of euro-denominated long-term government bonds), despite having increased, remained relatively modest at around 3.5%. Moreover, available evidence suggests that the direct effects of changes in pension and accounting regulations on long-term interest rates are quite limited, with estimates of up to -15 basis points.[2] Finally, it is also possible that this observed pattern of co-movement reflected common third factors. For example, during the IT-driven stock market bust which started in 2000, insurance corporations' and pension funds' increased bond demand reflected their desire to gradually reduce the share of equities in their asset portfolios. At the same time, the end of the technology boom was associated with a period of weaker economic activity and lower inflationary pressures in the euro area which, in turn, also contributed to lower bond yields.

All in all, the graphical illustrations of this box suggest a negative relation between the developments in the demand for bonds by institutional investors and long-term bond yields in the euro area. This pattern of co-movement is largely consistent with the hypothesis that stronger bond demand from institutional investors contributed to lower bond yields. However, the quantities involved are rather modest in terms of outstanding long-term government bonds (see Charts A and B), which tends to be an argument against the presumption that the stronger

2 See Table 4 in "Institutional investors, global savings and asset allocation", CGFS Paper No 27, 2006; and Table 5 in G. Rudebusch, E. Swanson and T. Wu, "The bond yield 'conundrum' from a macro-finance perspective", Federal Reserve Bank of San Francisco Working Paper No 2006-16, 2006.

bond demand from euro area institutional investors has had a major impact on long-term bond yields. At the same time, it has to be borne in mind that the presented analysis is very partial and that other demand and supply factors play a role in determining long-term bond yields and could have likewise led to the observed co-movement between institutional investors' bond demand and bond yields. In particular, the data featured in this box only relate to the demand for bonds by euro area residents (and only for one specific sector), whereas in a global environment of highly integrated products and financial markets euro area bond yields tend to be strongly affected by international factors.[3] Additional effects on euro area yields might thus be due to increased demand for long-term bonds from institutional investors from outside the euro area either by expanding their investment in euro area assets directly or via spillover effects from global bond markets.

3 See the box entitled "The developments of international linkages between government bond yield curves in the euro area and the United States" in the March 2007 issue of the Monthly Bulletin.