

## Box 2 Bond market developments and speculative positioning in the futures markets

While longer-term trends in financial markets are ordinarily underpinned by macroeconomic fundamentals, speculative activity can play an important role in driving short-term trends and volatility. When speculative activity brings about a positioning of the market – whereby investors gain if the market moves in the expected direction – the vulnerability of the market to shocks and the potential for disruption is typically higher than under normal conditions. This can have important financial stability implications if the institutions behind the positions are highly leveraged and systemically important. This Box assesses the role of speculative activity in US bond markets.

For government bonds, market participants can take leveraged positions – involving little money relative to the size of the position – by buying or selling futures contracts. Such contracts require one participant to deliver and another to accept a government bond at a predefined date and at a pre-agreed price. Participants can use these markets either to hedge their interest rate exposures or to speculate. For instance, participants who take speculative short positions in futures contracts on government bonds usually expect bond prices to fall (i.e. bond yields to rise). If their expectation is correct, they will realise a profit either by buying back the futures contract at a lower price or by purchasing the bond in the cash market and delivering it to the counterparty to the futures contract that was initially sold at a higher price.

A widely quoted and frequently tracked source of information on speculative activity in the bond market is the weekly data provided by the US Commodity Futures Trading Commission (CFTC), an independent agency that was created by the US Congress in 1974.<sup>1</sup> The CFTC aims at protecting market users and the public from fraud, manipulation and abusive practices related to the trading of futures and options, and also at fostering open, competitive and financially sound futures and options market conditions. It is mandated to regulate futures and options markets in the US and can also impose reporting requirements on market participants. Based on these reporting requirements, the CFTC compiles data on short and long positions of participants in US futures markets including bond futures. These data are published each Friday and state the positions that were held on the preceding Tuesday. The so-called reporting firms (clearing members, futures commission merchants and foreign brokers) file daily reports with the CFTC showing the futures positions of traders that hold positions above specific reporting levels. The aggregate of all traders' positions reported to the Commission usually represents 70-90% of all positions, or the total open interest, in the market.

When an individual reportable trader is identified to the CFTC, the trader is classified as being either “commercial” or “non-commercial”, depending on the use of the futures contract. Traders that use futures contracts primarily for hedging activities are classified as commercial, while all others that are not taking positions as a hedge are classified as non-commercial. The latter

<sup>1</sup> For foreign exchange markets, there is evidence that data collected by the CFTC on speculative activity can explain much of the variance in foreign exchange rates. See, for instance, Klitgaard, T. and L. Weir (2004), “*Exchange Rate Changes and Net Positions of Speculators in the Futures Markets*”, Federal Reserve Bank of New York Economic Policy Review, May.

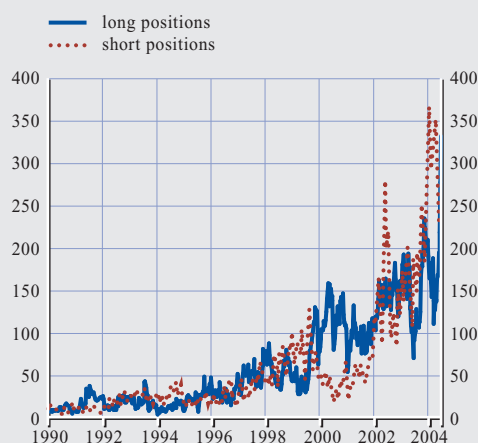
category typically includes speculators, who act on their own views about the market's likely short-term direction. Even though every purchase of a futures contract is matched by a sale so that the sum of all positions in the market is always zero, the speculative non-commercial data are thought to be revealing about short-term market positioning. This is because the commercial positions, being hedges, are usually less likely to be reversed in the short run.

The number of non-commercial positions in ten-year US Treasury futures grew significantly after 1990, but soared after 2000 (see Chart B2.1). As speculative activity growth outpaced that of commercial positioning, the share of speculative positions in total positions rose, oscillating between 15% and 20% for much of the time after January 2001 (see Chart B2.2). Net positioning can shed light on the direction in which speculators expect the market to move over the short term. After stock markets began to tumble in 2000, long positioning became substantial and bond yields were driven to historical lows. From late 2003 until mid-2004 the market built up significant short positions, as non-commercial accounts became positioned for an increase in long-term US yields. Net positioning turned positive again after August 2004 (see Chart B2.3). This repositioning did not translate into exceptionally high volatility in ten-year US Treasury yields.

In order to determine the importance of speculative positioning in driving bond market movements, a simple exercise is to measure the degree of correlation between changes in bond yields and changes in non-commercial positioning. Based on a sample of weekly data from the beginning of 2000, there appears to be little correlation between the two (see Chart B2.4). If short-term positioning was a significant factor in driving movements in ten-year US Treasury yields, then the data points should be concentrated in the upper left and the lower right quadrants, with increases (decreases) in net long positions being associated with lower (higher) government bond yields. This is however not the case, and it contrasts markedly with the findings of Klitgaard and Weir (2004) for the foreign exchange markets. This finding suggests that speculative

**Charts B2.1 Non-commercial positioning in ten-year US Treasury futures**

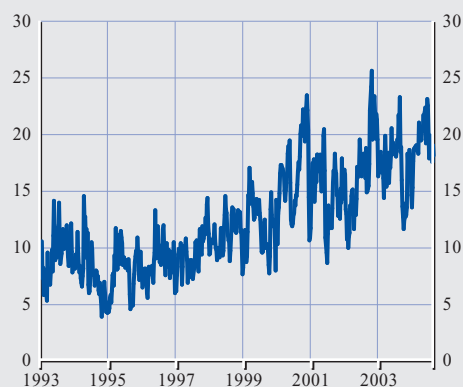
(thousands of contracts)



Source: Commodity Futures Trading Commission (CFTC).

**Charts B2.2 Share of non-commercial positions in total positions of ten-year US Treasury futures**

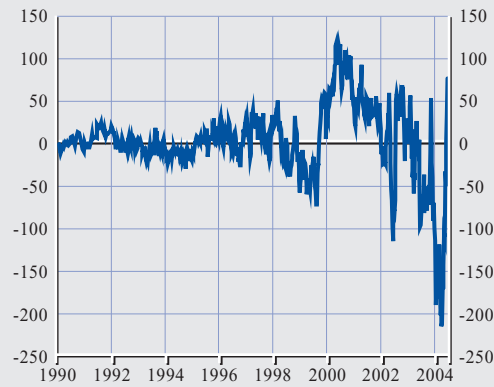
(% share)



Source: Commodity Futures Trading Commission (CFTC).

**Charts B2.3 Net non-commercial positions in ten-year US Treasury futures**

(thousands of contracts)



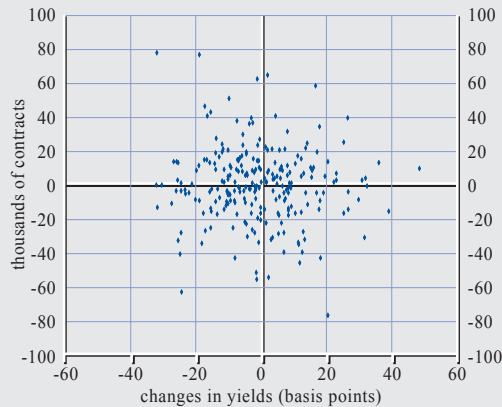
Source: Commodity Futures Trading Commission (CFTC).

positioning does not play an important role in driving US bond yields, perhaps because commercial positioning – with longer-term investment horizons – dominates positioning in the ten-year US Treasury market.

There is some evidence that from January 2000 onwards speculative activity has been associated with the level of bond yields (see Chart B2.5). As bond yields have fallen, speculative activity betting on a rise in yields has tended to build up. Likewise, when bond yields have risen, speculators have tended to lengthen their positions. Although the association is rather loose, this suggests that speculators, at least on average over the time period considered, have not tended to drive the US bond market in a destabilising way.

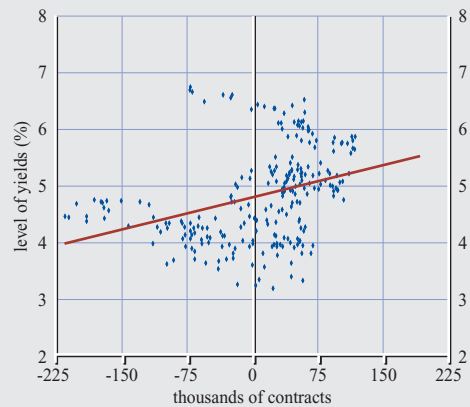
**Charts B2.4 Changes in non-commercial positions and ten-year US Treasury yields**

(weekly changes in net long positions vs. changes in yields Jan. 2000 - Oct. 2004)



**Charts B2.5 Levels of non-commercial positions and ten-year US Treasury yields**

(changes long/short positions yield levels, Jan. 2000 - Oct. 2004)



Sources: Commodity Futures Trading Commission (CFTC) and ECB calculations.