

Box 2

RECENT WIDENING IN EURO AREA SOVEREIGN BOND YIELD SPREADS

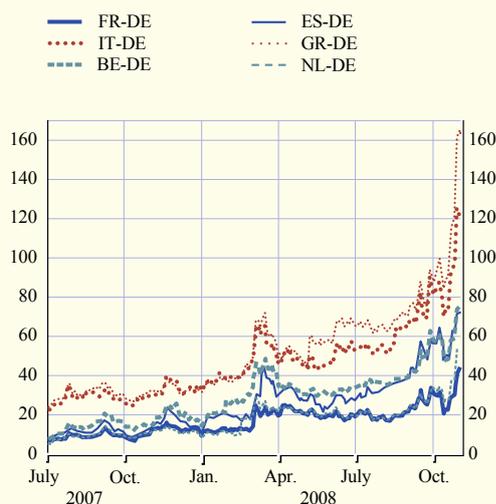
This box looks at recent developments in euro area countries' sovereign bond yield spreads and the potential roles played by credit and liquidity risk. Moreover, spread developments are analysed in relation to the countries' fiscal situation and outlook, taking account of recent government interventions to ensure the orderly functioning of financial markets. The analysis illustrates how investors discriminated between countries reflecting flight-to-quality behaviour.

In recent months, the differences between German and other euro area government bond yields have increased substantially further. Following the strong upsurge observed in the spring of this year,¹ they reached new highs in October in a general climate of major unrest on global money,

¹ See Box 3 entitled "Recent developments in government bond yield spreads" in the May 2008 Monthly Bulletin.

Chart A Ten-year government bond yield spreads against Germany

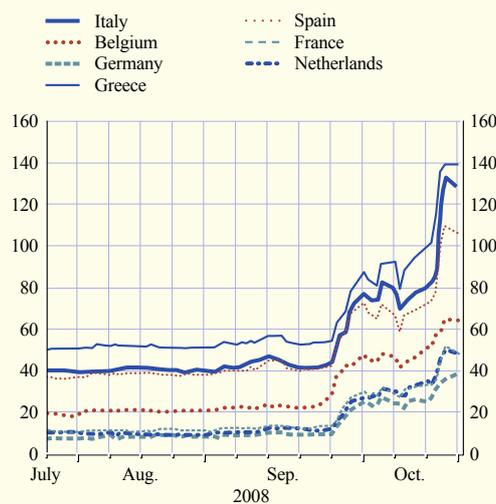
(in basis points)



Source: Bloomberg.

Chart B Countries' five-year CDS premia

(in basis points)



Source: Bloomberg.

credit and equity markets (Chart A).² After the announcement by a large number of governments of a series of measures aimed at alleviating tensions in money and credit markets, yield spreads versus Germany tightened initially quite sharply (e.g. by 15-20 basis points between Italian and German ten-year government bonds), as investors momentarily regained some confidence. However, this movement was short-lived. After these government interventions yield spreads resumed their widening trend, while in some cases the perception of risk switched from the banking sector to the government sector as shown by developments in the credit default swap (CDS) premium, a measure for the default risk of sovereign bonds (Chart B).

Indeed, some of the most affected banks saw their CDS premia decline to some extent in the wake of announcements by various governments, while sovereign debt spreads moved upwards. Even Germany's CDS premia increased after the announcement of the government rescue, while bank CDS premia decreased. Overall, both sovereign bond yields and CDS premium levels vis-à-vis Germany have moved upwards in a context of increasing differentiation between the euro area countries.

Credit risk and liquidity risk as explanatory factors

The renewed widening of sovereign spreads can be attributed to differences in the creditworthiness of the issuers (credit risk premium) and the relative liquidity of the respective bonds (the lower the liquidity yield premium, the more easily a bond can be generally traded).

Looking at these two factors in more detail, first, the recent further repricing of the euro area countries' sovereign risk is consistent with the significant rise in risk aversion observed in global

² The charts refer to the five largest euro area countries (France, Germany, Italy, the Netherlands and Spain) as well as to the high-debt countries (Belgium, Greece and Italy).

financial markets in recent weeks and months. Spreads for all classes of risky financial assets, which had already widened since the start of the sub-prime crisis, increased further in recent weeks, in particular after the failure of Lehman Brothers in September. All euro area countries have seen their credit risk premium increase, as indicated by the CDS premium (see Chart B).

Second, since the beginning of the turmoil in August 2007, liquidity in the secondary euro area government bond market has been concentrated mostly in the German government bond futures market (in the Eurex exchange), which has benefited German debt relative to other euro area sovereign debt especially at each peak in the turbulence. This might explain the fact that Germany has outperformed other euro area countries that are perceived as having the same or even a better fiscal outlook.

The drying-up of liquidity in the euro area government bond market observed in the first half of March returned in an even more severe way in the early weeks of October. On several days, market participants reported that market-making activity in all euro area government bonds except for some German ones had effectively come to a halt and that transactions could only be executed on a match-making basis, whereby a government bond dealer tries to match buyers and sellers amongst his client base without taking a position himself.

As during the period of widening yield spreads observed in the spring of this year, it is likely that both the credit risk premium and the liquidity premium have contributed to the recent further widening of sovereign bond yield spreads versus German government bonds. However, it is difficult to assess which of the two factors has had the strongest impact.

The initial sharp reduction in government bond spreads after the announcement by governments and central banks of a number of measures to alleviate tensions in the money and credit markets suggests that liquidity premium factors may have played a fairly strong role in recent weeks.

Widening spreads as a reflection of discrimination in flight-to-quality behaviour

As reported in the May 2008 issue of the Monthly Bulletin, the returns on euro area government bonds and those on the Dow Jones EURO STOXX 50 stock price index had been showing a strong negative correlation since the beginning of 2008, giving a distinct indication of flight-to-quality behaviour on the part of investors. Moreover, the fanning-out of the correlation measures in March and April (compared with the beginning of the year) was interpreted as reflecting increased discrimination among investors with respect to their flight-to-quality destinations.

From May until August – amid tentative signs of an easing of the financial market situation – correlation measures were on an upward trend, suggesting a gradual reversal of flight-to-quality tendencies. Over the same period, the degree of discrimination declined. However, in September, when the financial crisis culminated in several banks being liquidated or restructured, flight-to-quality behaviour resumed. Accordingly, the correlation metrics showed another sharp decline. Again, German (and also Dutch) government bonds seemed to once again be preferred during this phase, while Italian bonds experienced the least impact from flight-to-quality flows (see Chart C). With the announcement of rescue packages in the beginning of October, the flight-to-quality flows once again reversed sharply. However, the dispersion among issuing countries remained. While Italian and Greek bond returns are currently showing rather weak correlations with the stock

market, the respective measure for German bonds (and to a similar degree for the other countries considered) is markedly stronger.

The sustainability of public finances

The widening in sovereign bond yield spreads also reflects country-specific risk factors, notably the sustainability of fiscal positions. The latest available information (Autumn 2008 European Commission Economic Forecasts) projects, for the countries covered in this box, budget deficits of 2% of GDP or more for France, Italy, Portugal and Greece in 2008, marking a reversal of previous consolidation achievements in the former two countries. For 2009, the Commission projects a budget deficit above 3% of GDP for France, while little or no consolidation will take place in the high-deficit countries. General government debt levels remain high in Italy, Greece and Belgium.

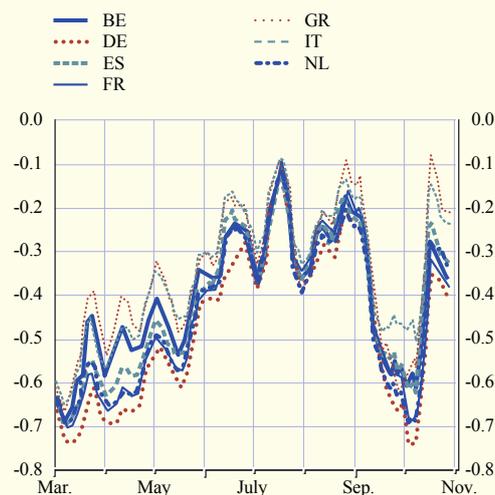
There is an additional risk that fiscal pressures may also emerge in relation to the costs of direct government intervention in support of financial institutions. Depending on the specific arrangements for such interventions (nationalisation, capital injections) and their financing, government expenditure, deficits and debt levels could rise, with possible second-round effects via higher interest burdens.³ In addition, many governments have taken on large contingent liabilities in the form of deposit and credit guarantees. Potentially lower real GDP growth over several years would put a further burden on fiscal sustainability.

A weaker fiscal consolidation outlook, together with lower growth prospects, may signal to capital markets the potential need for additional sovereign borrowing and put upward pressure on long-term interest rates through a higher credit risk premium in particular for countries with fiscal imbalances. On the other hand, given the heightened levels of risk aversion, investors have increased their demand for government debt relative to risky assets such as stocks. This is reflected in the aforementioned measures of flight-to-quality behaviour, and in estimates of nominal term premia embedded in long-term bonds, which are currently at very low levels. Finally, the rise in government debt that is likely to be needed to finance bailout packages will increase the supply of bonds and will therefore, *ceteris paribus*, tend to decrease government bond prices and increase their yields.

Summing up, in recent months the differences between German and other euro area government bond yields have increased further. Moreover, the CDS premia for insuring against default on government bonds have also increased considerably. Similar to developments in spring 2008,

Chart C Time-varying correlation between daily returns on the Dow Jones EURO STOXX 50 stock price index and ten-year government bonds

(five-day averages, 1 March 2008 to 27 October 2008)



Sources: Thomson Financial Datastream, ECB calculations.
Note: The correlations are computed using a bivariate GARCH-type model (BEKK).

³ The fiscal costs of the current financial turmoil are extremely difficult to assess. At the beginning of November 2008, the potential direct effect of announced government bailouts on euro area general government debt is estimated at €288.6 billion (about 3% of euro area GDP); the impact on the euro area government deficit of executed measures is estimated at €2.5 billion (about 0.03% of euro area GDP) and the impact on government contingent liabilities is estimated at €2 trillion (or 21% of euro area GDP).

General government balance and debt

(as a percentage of GDP)

| | Balance | | | Debt | | |
|-------------|---------|------|------|-------|-------|-------|
| | 2007 | 2008 | 2009 | 2007 | 2008 | 2009 |
| Belgium | -0.3 | -0.5 | -1.4 | 83.9 | 86.5 | 86.1 |
| Germany | -0.2 | 0.0 | -0.2 | 65.1 | 64.3 | 63.2 |
| Ireland | 0.2 | -5.5 | -6.8 | 24.8 | 31.6 | 39.2 |
| Greece | -3.5 | -2.5 | -2.2 | 94.8 | 93.4 | 92.2 |
| Spain | 2.2 | -1.6 | -2.9 | 36.2 | 37.5 | 41.1 |
| France | -2.7 | -3.0 | -3.5 | 63.9 | 65.4 | 67.7 |
| Italy | -1.6 | -2.5 | -2.6 | 104.1 | 104.1 | 104.3 |
| Cyprus | 3.5 | 1.0 | 0.7 | 59.5 | 48.2 | 44.7 |
| Luxembourg | 3.2 | 2.7 | 1.3 | 7.0 | 14.1 | 14.6 |
| Malta | -1.8 | -3.8 | -2.7 | 62.2 | 63.1 | 63.2 |
| Netherlands | 0.3 | 1.2 | 0.5 | 45.7 | 48.2 | 47.0 |
| Austria | -0.4 | -0.6 | -1.2 | 59.5 | 57.4 | 57.1 |
| Portugal | -2.6 | -2.2 | -2.8 | 63.6 | 64.3 | 65.2 |
| Slovenia | 0.5 | -0.2 | -0.7 | 23.4 | 21.8 | 21.1 |
| Finland | 5.3 | 5.1 | 3.6 | 35.1 | 31.6 | 30.2 |
| Euro area | -0.6 | -1.3 | -1.8 | 66.1 | 66.6 | 67.2 |
| Euro area* | -0.6 | -1.0 | -1.1 | 66.4 | 65.2 | 64.3 |

Source: Autumn 2008 European Commission Economic Forecasts.

* Spring 2008 European Commission Economic Forecasts.

both the credit premium and the liquidity premium have contributed to the recent further widening of sovereign bond yield spreads vis-à-vis Germany. With the government interventions in support of financial institutions in October, the flight-to-quality flows reversed temporarily, although the discrimination across issuing countries continued to some extent. Moreover, together with higher perceived country-specific risks related to the fiscal and macroeconomic outlook, overall risks to long-run fiscal sustainability clearly increased.