Summary for non-specialists
Economic Papers No. 388/ November 2009
Economic Papers 2009

Determinants of intra-euro area government bond spreads during the financial crisis

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The financial crisis period was accompanied by a strong rise in euro area government bond yield spreads, in sharp contrast to the period following the advent of the euro during which bond yield spreads had converged steadily. Starting in summer 2007, and especially after September 2008, sovereign bond spreads vis-à-vis the German Bund increased in particular for countries whose public finances appeared most at risk (e.g. Ireland, Spain and Greece). However, also countries that were considered to be relatively stable and low-risk (e.g. Austria) faced higher risk premiums.

This paper provides an empirical assessment of the determinants of 10-year government bond spreads in the euro area (with Germany as a benchmark) with a special focus on the period following the collapse of Lehman in September 2008. We find that compared to other asset classes like equities and corporate bonds, the adjustment in yield differentials during the period of intense financial market turbulences was much stronger. This may be explained by a risk transfer effect from the private to the public sector amid the announcement of the national financial rescue packages in autumn 2008. These comprehensive measures, though successful to the extent that they reduced spreads in private bond markets, came at the cost of increasing the level of government bond risk premia.

Our empirical analysis on the determinants of yield spreads is based on both panel and time-series estimations using weekly as well as quarterly data. Interest rate spreads over German government bonds are regressed on a number of variables including bid-ask spreads as a measure of liquidity risk and the levels of public debt, fiscal and current account balances as measures of credit risk. We also control for investors' general risk aversion by constructing a composite risk indicator based on the volatility of stock markets, spreads on AAA- and BBB-corporate bonds and the volatility in the euro/yen exchange rate. Possible changes in relationships related to the financial market crisis are taken into account, not only by including separate crisis dummies, but also by interacting these with domestic variables to detect changes in interest rate responses to domestic fundamentals.

The results suggest that yield differentials within EMU primarily mirror changes in investors' preferences and an associated repricing of risk. Specifically, we find that the degree of general risk perception has played a crucial role in explaining euro area sovereign bond yield differentials during recent quarters.

Taken alone, the role played by domestic factors such as default risk or bond market liquidity is small, but non-negligible. A deteriorating domestic outlook for fiscal deficits, including the medium term budgetary costs of financial support operations, is associated with higher bond yields. The impact of deteriorated fiscal balance remains limited as our estimates show that, on average, a deterioration by 1 percentage point in deficit (versus Germany) imply a rise by 2.4 basis points in the government bond yield spread (versus Germany). As regards the importance of liquidity considerations, our results are more mixed depending on the specification and time frequency of the data used.

Our findings also point to significant interaction of general risk aversion and domestic macroeconomic fundamentals. Domestic factors have become clearly more important in times of financial stress, when international investors started to discriminate more between countries. The combination of high risk aversion and deteriorated current account positions in particular tend to magnify to a large and significant extent the incidence of deteriorated public finances on government bond yield spreads. The importance of current account deficits for yield spreads provides support to the idea that the distinction between private and public debt becomes blurred in times of financial stress as investors account for the possibility that the government is forced to take over private debt.

Overall, our results suggest that an improvement in global risk perception will lead to a further narrowing of intra-euro area bond yield differentials. This is because the strong rise in financing costs by sovereign issuers since September 2008 maybe explained, to a certain extent, by the correction of abnormally narrow spreads in the pre-crisis period, when domestic risk factors resulted in small yield differentials. Moreover, government bond yield spreads can be expected to remain elevated compared to the pre-crisis period since debt levels have increased significantly in a number of countries (compared to the German benchmark) and the contingent liabilities assumed by the public sector in rescuing the financial sector will continue to weigh on the outlook for public finances. Looking further ahead, greater market discrimination across countries may provide higher incentives for governments to attain and maintain sustainable public finances. Since even small changes in bond yields have a noticeable impact on government outlays, market discipline may act as an important deterrent against deteriorating public finances. In the medium- and long-run this may thus play in favour of greater sustainability of public finances.