

Box 13

ASSESSING INSURERS' INVESTMENT RISKS

Investment risks are usually one of the most important types of risk an insurance company is confronted with. To mitigate investment risks, insurers often invest in various markets to spread their exposures. It is, therefore, important to analyse the conditions in the markets in which insurers invest and to combine this information with that on insurers' investment exposures to assess insurers' investment risks. This box proposes some measures of investment uncertainty, from an insurer's perspective, for the key markets in which insurers invest. It combines these measures with investment exposure data for a sample of large euro area insurers to assess their overall level of investment risk.

Large euro area insurers are most exposed to government and corporate bonds, equities, structured credit products and commercial property (see Chart 5.7). To assess the level of uncertainty and likelihood of investment losses in these markets from an insurer's perspective, some composite indicators for the different markets can be constructed. The indicators need to include measures of volatility to capture the uncertainty in the markets. In addition, the levels of prices and yields are also important for insurers as, for example, a prolonged period of low equity prices or low bond yields increases the likelihood that insurers will have to report investment losses on their investment. It also reduces the possibilities for insurers to generate investment income.

Chart A depicts some indicators constructed to capture the level of uncertainty for the main markets in which insurers invest. The chart shows the level of each indicator on the dates specified compared with its "worst" level (highest or lowest level depending on what is worse from an insurer's investment perspective) since January 1999. The computation of the composite indicators was based on the simple average of its scaled components. An indicator value of one therefore means that conditions in that market are the worst since January 1999.

It should be noted that these are rudimentary indicators, and comparisons of levels across indicators should be made with care, in particular as they do not take into account the risk characteristics across the different markets. For example, government bonds are arguably a safer investment

than equities, but this is not accounted for in the indicators. Nevertheless, the indicators are useful to monitor developments and the level of uncertainty in the different markets.

The indicators are computed as follows:

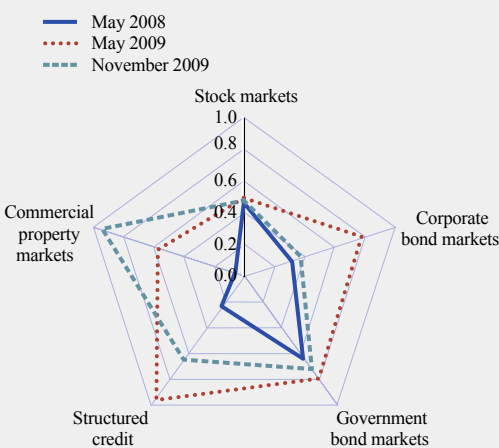
- “Stock markets” is the average of the index level and the price/earnings ratio of the Dow Jones EURO STOXX 50 index;
- “Corporate bond markets” is the average of euro area A-rated corporations’ bond spreads and the actual and forecast European speculative-grade corporations’ default rates;
- “Government bond markets” is the euro area ten-year government bond yield and the option-implied volatility for ten-year government bond yields in Germany;
- “Structured credit” is the average of euro area residential mortgage-backed securities and European commercial mortgage-backed securities spreads; and
- “Commercial property markets” is the level of year-on-year changes in euro area commercial property prices and rents.

The levels of uncertainty in the markets in which insurers invest have shifted markedly during the current financial crisis (see Chart A). At present, the likelihood of investment losses for insurers is lower than it was at the time of finalisation of the June 2009 FSR (in May 2009) for all markets except commercial property, where historically high declines in property values and rents in the euro area have recently increased the associated investment risk for insurers (see Chart A).

Analysing the conditions in different markets is, however, not enough to form an assessment of the total level of investment risks confronting insurers, as the levels of, and changes in, insurers’ investment exposures also have to be considered. To account for this, Chart B shows the indicator values depicted in Chart A but weighted by the investment exposure for a sample of large euro area insurers (as shown in Chart 5.7).

Chart A Investment uncertainty map for euro area insurers

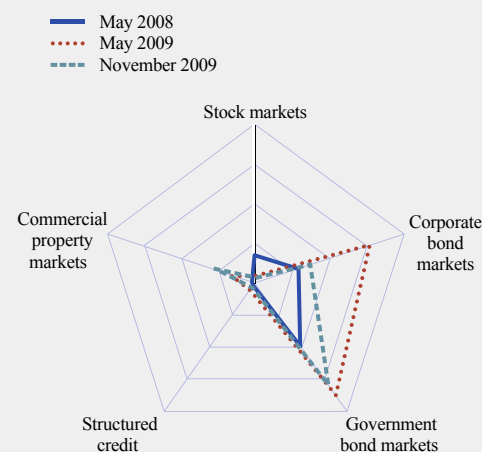
(the level of uncertainty increases with the distance from the centre of the map)



Sources: ECB, Bloomberg, JPMorgan Chase & Co., Moody’s, Jones Lang LaSalle and ECB calculations.

Chart B Investment uncertainty map for euro area insurers weighted by investment exposures

(the level of uncertainty increases with the distance from the centre of the map)



Sources: Bloomberg, JPMorgan Chase & Co., Moody’s, Jones Lang LaSalle, individual institutions’ financial reports and ECB calculations.

The high and recently increasing investment exposure to government and corporate bonds, together with the still rather high uncertainty prevailing in these markets, indicates that losses on bond holdings are one of the key investment risks that insurers are currently confronted with (see Chart B). Furthermore, although the uncertainty in equity markets remains comparable with that at the time of finalisation of the June 2008 and June 2009 FSRs (see Chart A), insurers' portfolio reallocations away from equities during the financial crisis have led to a decrease in the equity investment risk for insurers (see Chart B). Finally, insurers continue to be exposed to the weak conditions in commercial property and structured credit markets, but thanks to the, in general, rather low levels of exposures to these markets, the risks for insurers from such investments appear to be manageable, although it should be noted that exposures vary significantly across institutions.