

## Box 6

### INDICATORS FOR DETECTING POSSIBLE VALUE MISALIGNMENTS IN COMMERCIAL PROPERTY MARKETS

Commercial property loans represent a considerable proportion of most banks' assets and, given their tendency to exhibit strong pro-cyclical volatility,<sup>1</sup> embed financial stability risks that tend to crystallise in property value downturns. At the level of individual commercial properties, well-accepted metrics exist for assessing valuations – which, typically, involve discounting the future income stream the properties are expected to generate.<sup>2</sup> At the aggregate level, however, widely accepted valuation metrics are more scarce – not least given a lack of suitable data (particularly acute in the case of euro area countries). One alternative approach to detecting possible value misalignments in commercial property markets, which is explored in this box, can therefore be to compare property values with some macroeconomic variables – since commercial property values tend to follow economic developments rather closely – and some aggregate commercial property data that can give indications of the demand and supply factors in commercial property markets.

Using macroeconomic data as a benchmark, three broad sets of indicators can be computed for the euro area countries for which data are available. The first set compares commercial property values with variables that proxy macroeconomic conditions with a strong bearing on property demand: *overall GDP*, since commercial property markets tend to follow business cycle developments rather closely, and *private consumption* and *employment*, since they are important determinants of the demand for retail shop and office space respectively. The second set of indicators compares commercial property values with variables associated with future income streams of properties – notably *rents* and *initial yields* – loosely fitting into a standard dividend-discount asset-pricing framework.

While these indicators provide some insight into valuations, they are subject to several caveats, which can be grouped into four categories. First, owing to the fragmented and opaque nature of commercial property markets in many countries, official data on, for example, commercial property values and rents do not exist for most euro area countries. This box therefore uses data from private sources, which only cover larger cities and only prime property. Second, long time series are not available, which hampers the analysis significantly.<sup>3</sup> Third, the indicators do

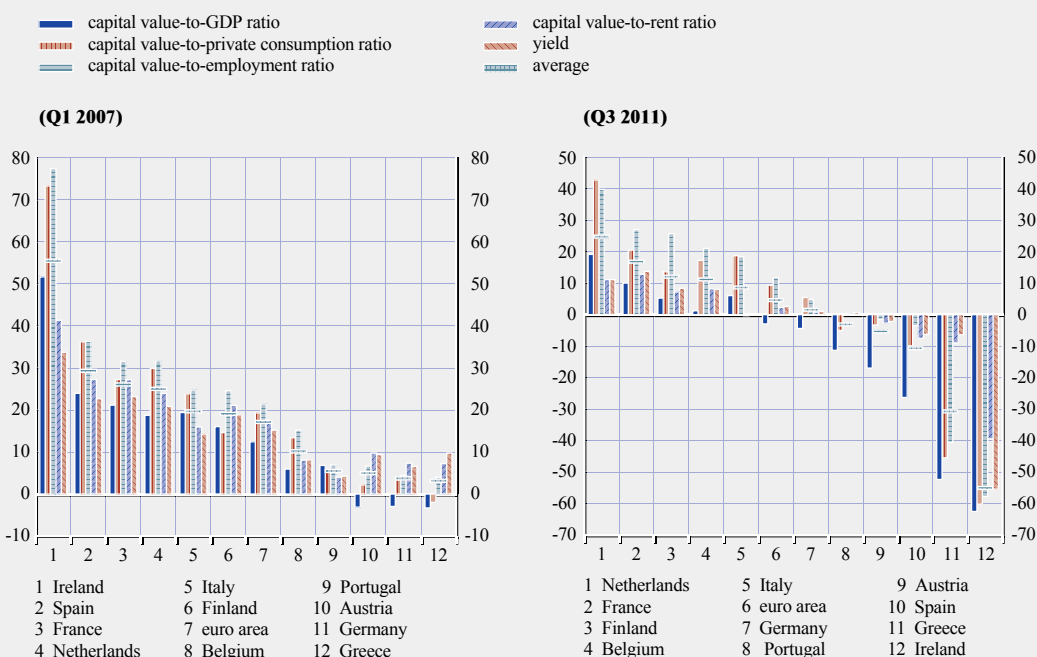
1 See, for example, ECB, “Commercial property markets – financial stability risks, recent developments and EU banks’ exposures”, 2008.

2 The most commonly used methods are (i) the cost approach, (ii) the sales comparison approach and (iii) the income approach.

3 The box used quarterly data from 2007 and annual data from 1997 (from 1999 for Greece and from 2002 for Portugal) that were interpolated to create a quarterly time series.

**Chart A Value misalignment indicators for prime commercial property in selected euro area countries**

(percentage deviation from average values from Q1 1997 to Q3 2011)



Sources: Jones Lange LaSalle, ECB and ECB calculations.

not take into account the influence of factors such as commercial property supply elasticity or national tax treatments, which are factors that can have a significant impact on property values. Fourth, prime commercial property values often adjust more rapidly than macroeconomic aggregates or variables that proxy cash flows. For example, rents in lease contracts are often fixed for some years, and some countries have rent controls that mute the fluctuation of rents. As a result, negative values for the misalignment indicators can therefore be a result of the fact that capital values have adjusted faster than the denominators of the indicators, so that they are not necessarily an indication of an undervaluation of commercial property.

Notwithstanding these caveats, the indicators suggest that at the beginning of 2007, a period when commercial property markets in most euro area countries reached their recent peaks (see Chart A), commercial property markets in most euro area countries showed signs of heightened valuations in comparison with previous norms over the past decade. After 2007, commercial property values fell considerably in most countries, which led to adjustments to the indicators of value misalignments (see Charts A and B). The adjustments were rather broadly based across the five different indicators.

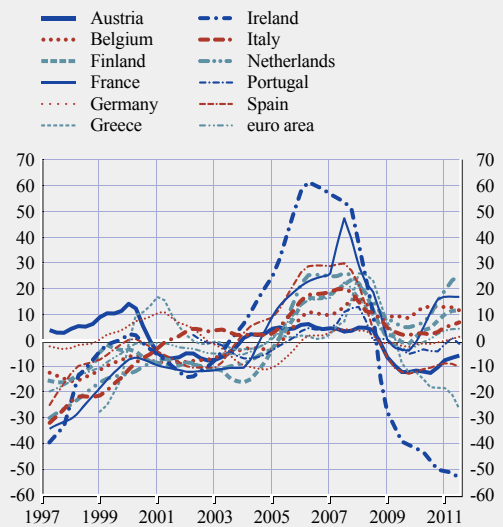
At the moment, the indicators suggest that commercial property values for the euro area as a whole are not greatly misaligned in terms of the price movements recorded since the mid-1990s, although there are significant cross-country differences. At the level of individual countries, the amplitude of the cycle is eye-catching in Ireland, Greece and, to some degree, Spain (see Chart B). The large negative values, however, to some extent reflect the caveats mentioned earlier. Most importantly, in the case of Ireland, Greece and Spain, the analysis is particularly hampered by

the relatively short time series available, which results from the fact that the high increases in value seen during the boom period from 2003 to 2007 had a marked impact on the average historical values, with which current levels are compared.

All in all, these measures of misalignment suggest that the decline in values seen in most euro area countries since 2007 has substantially reduced the average overvaluation of commercial property in most countries. Nevertheless, some countries are still showing signs of overvaluation and some have even witnessed renewed increases in the misalignment indicators in recent quarters. Despite several caveats, they present a means of augmenting analysis based solely on comparisons of value developments with some benchmarks illustrating possible value misalignments.

**Chart B Average value misalignment of prime commercial property in selected euro area countries**

(Q1 1997 – Q3 2011; percentage deviation from average values from Q1 1997 to Q3 2011; two quarter moving average)



Sources: Jones Lange LaSalle, ECB and ECB calculations.