Box 3
Residential real estate prices in capital cities: a review of trends

Heterogeneous regional developments in housing markets may be a cause for concern from a financial stability perspective. Although diverging developments at the regional level could be justified by fundamentals, such as differences in regional income, employment, population dynamics and amenities, they could also signal excessive exuberance of house prices in certain areas, for example due to the strong presence of foreign buyers. In this case, regional developments may spill over to adjacent locations or the entire country via “ripple effects”, with regional price developments potentially ending up leading the housing cycle at the country level. Thus, a close monitoring of regional residential real estate price trends seems warranted, as they may provide an early indication of a potential build-up of vulnerabilities in housing markets at the national level. Moreover, exuberant house price developments in certain regions could, in principle, threaten the stability of financial institutions with mortgage exposures concentrated in those regions. This is especially the case in the context of a low interest rate environment spurring a potential search for yield.

Since 2010, residential property prices in capital cities have grown more strongly than the respective country averages across the euro area\(^{24}\) (see Chart A). The aggregate euro area picture masks not only diverging developments at the country level, but also heterogeneous trends at the regional level. In fact, in recent years, real house prices have tended to grow faster or decline  

\(^{24}\) Data on house prices in capital cities were collected for 11 euro area countries (Austria, Belgium, Estonia, Finland, France, Germany, Ireland, Italy, Spain, Slovenia and the Netherlands) and aggregated at the euro area level.
less in capital cities than at the national level – a development observed, in particular, in Austria, Germany, France, the Netherlands and, to a lesser extent, in Estonia and Ireland (see Chart B). This divergence was not apparent during the upturn in the early 2000s, when prices in capital cities moved broadly in line with the national aggregates.

**Chart C**

Higher prices in capital cities are not associated with overvaluation in the euro area

**Chart D**

Current price increases in selected cities appear more moderate than seen in previous episodes of house price exuberance

For the euro area as a whole, stronger price increases in capital cities do not generally indicate a potential build-up of vulnerabilities. Higher house price increases at the regional level could, however, spill over to an entire country and thus possibly fuel overvaluation pressures. However, for the euro area as a whole, stronger price increases in capital cities observed since the beginning of 2010 have not translated into sizeable overvaluations (see Chart C). Still, developments are rather heterogeneous across countries and caution is warranted when interpreting results, given the uncertainties surrounding such estimates and prevalent data limitations. Moreover, in the context of recent strong price increases in large cities, an analysis of co-movements in house prices across and within countries might shed light on whether prices in capital cities are becoming more closely linked than in the past across the euro area. While such a

---

25 This finding is confirmed by Granger-causality tests showing that in most countries there is no systematic pattern of the capital city price to aggregate country price ratio leading valuation estimates.

26 In particular, partial data coverage – dictating the choice of the sample and the length of the time series – and limited data comparability across countries are important caveats. In addition, house price developments in the capital city of a country may not always be representative of those in other big cities in the same country.
link might be consistent with stronger integration within the euro area, it could also indicate that
prices in capital cities are increasingly being driven by common euro area factors rather than
domestic factors, which would be consistent with a stronger influence of international investors. In
this context, prices in large cities might decouple from local fundamentals. Preliminary results from
this investigation – applying a time-varying loading factor model – provide no clear evidence of
convergence across or within countries. It may also be noted that, at present, price increases in
selected capital cities with estimated overvaluations, including Berlin and Vienna, 27 appear more
moderate than developments previously experienced in capitals where house price exuberance
was followed by a correction, such as Madrid and Amsterdam (see Chart D).

All in all, a close monitoring of regional house price developments is important from a
financial stability perspective. Recent price trends in selected euro area capital cities indicate
stronger price dynamics than for the national aggregate, while being more moderate than those
seen in earlier episodes of regional house price exuberance. Still, regional house price
developments could pose challenges in the medium term when accompanied by a strong growth of
mortgage loan financing amid weaker lending standards. Thus, developments should be carefully
monitored. That said, macroprudential instruments (in particular those under national competence)
geared towards mitigating potential financial stability risks from banks’ real estate exposures can, in
principle, also be used at the regional level, thus helping to mitigate possible risks to financial
stability. In addition, by construction, borrower-based instruments like DSTI and DTI when activated
at the national level are likely to be more binding in regions where housing price and credit
developments strongly outpace household income growth than in regions where such
developments stay more in line with each other.

27 See Monthly Report, Deutsche Bundesbank, February 2017, which suggests overvaluation in German
towns and cities (in particular the seven biggest ones), and Schneider, M., Wagner, K. and Waschiczek,