

Referee report on “Urban House Prices: A Tale of 48 Cities”

The authors construct a dataset based on internet offer prices for flats in 48 European cities (within the Euro zone and outside) located in 24 countries for the first half of 2012 and determinants of apartment prices using OLS and quantile regressions. The dataset was retrieved by downloading apartment price data from a number of apartment search engines.

Two major points, namely how to retrieve representative apartment prices per city and how to control for confounding factors should be addressed, as well as a number of minor issues.

Calculating representative apartment prices per city

The dependent variable is created by calculating mean house price values. A number of economic variables are regressed on these average values to retrieve the determinants of house price levels.

While being an interesting question in general, the authors do not pay enough attention to fundamentals explaining house price differences. Instead of constructing the expected price for a standard apartment (same size, location, age, distance from city center, furnishing, schools in neighborhood, etc.) they use the average price which certainly is distorted. Hedonic regressions might help to extract “standard” apartments.

Furthermore, it is difficult to interpret average OLS fitted values as fundamental prices. A number of other definitions for fundamental prices exists, such as the relationship between the costs of renting versus the price of buying or the number of years required to refinance an apartment purchase via rents, etc.

Control for confounding factors

The authors abstract from macroeconomic circumstances, different tax policies and housing and income subsidies, as well as from monetary policy settings. Housing subsidies/tax subsidies are important and missing in an international comparison. How many apartments are owned by the government, or by housing co-operatives?

In a number of studies user costs have been named to be an important driver for house price levels. The authors do not include user costs in their study. If mortgage rates are not included a significant determinant of house price developments is missing. The amount of mortgage loans is not sufficient.

The authors use population density as a measure for the demand for housing. Often high house prices can be observed if a mismatch between supply in housing and demand for housing exists. Therefore it might be helpful to also include the mismatch between supply and demand for instance by the number of new residents moving to a city and the number of newly constructed apartments or by the vacancy rate. Some reported overvaluations might become obsolete if user costs and the mismatch between supply and demand are controlled for.

How are construction costs controlled for? Less material (heating, etc.) is required to build an average apartment house in Lisbon compared to Oslo.

The used price per square meter depends on the reported square meters. Are square meters measured in the same way in all covered European countries? For instance, how are sloping roofs, cellars and balconies accounted for? Otherwise a bias might be introduced.

A questions which comes into mind is how are city limits defined? Is Heathrow part of London? Is Potsdam part of Berlin?

The overall price level in the economy and exchange rates should be controlled for. Comparisons of house prices across European countries are difficult given different exchange rate regimes. To check for the robustness of results for London, Istanbul, Moskva purchasing price parities and others might be used. For instance, given the strong currency depreciations of the Russian Ruble, the housing market in Moskva might be undervalued these days instead of overvalued as the results suggest for 2012. The same holds true for Odessa and others. The Turkish Lira has lost one third of its value against the Euro from 2005 to the first months of 2012. Therefore the stated undervaluation of flat prices in Istanbul is no surprise and can partly be attributed to the exchange rate effect.

Minor issues

Can the authors provide more descriptive statistics on the data (explanatory variables)?

The authors claim that one major contribution of their work is the construction of a European regional dataset on house prices. Yet the dataset is biased towards German (7), Russian (7) and Ukrainian (4) cities. All other countries are represented by only one or two cities.

It would be nice if the authors could report how many and what kind of outliers have been removed. Do the outliers share common features?

The results have so far only been compared to results on German house price levels. It would be nice to extend the comparison with findings in the literature also for other real estate markets.