

Comments on the paper “Urban House Prices: A Tale of 48 Cities”

Dear authors,

First of all, I liked the paper, found it interesting, and enjoyed reading it. The data set is extremely useful and quite impressive.

There are a few issues which I find a bit problematic, and I have a few suggestions on how to possibly improve the paper.

1. I have a bit of an issue with what exactly is measured. It is not really “house prices”, because you do not observe the prices at which the houses are sold. It is the value of the first offer by the seller. Usually, if I am not mistaken, this is more of an upper bound, because the seller will decrease the price gradually if the apartment is not sold at the current price, and because the final price is a matter of negotiation between the parties. In some cases, the final price might be higher than the first offer, but I would argue this is usually not the case.
2. Moreover, I wonder why in some countries, there are so many, and in others so few apartments on offer online. Might this be because the proportion of flats being sold via internet differs between countries? I believe that many flats do not even appear online because they are directly sold through an agency, especially high-price flats. I was wondering if the apartments on offer online are somehow selective.
The analysis is still absolutely worthwhile, it should just be made clear what the implications and limitations may be of the way that you measure house prices, and what kind of bias(es) might have been introduced by it.
3. I was wondering how you define “city”. Does it include suburbs?
4. I was wondering why you do not control for housing stock, presumably because you do not have the data. Population size per se is not problematic if there is a large stock of maybe even empty housing, like it was the case in Berlin for a long time.
5. Also, and even more importantly, instead of using population and population density, I would rather use *change* in population as a determinant. When the population grows faster than the housing stock, that pushes up prices. And when the population shrinks or grows more slowly than in the past, housing will be widely available which will presumably cause prices to fall. It should be possible to get that data at the city level.
6. I thought it was unclear how and why you exclude outliers. E.g. what does it mean to be an outlier for “area”? Do you have any idea how the outliers might have been caused? Does it change the results to leave them in?
7. Page 3: I would like you to make clearer that all the factors you include are demand side factors, whereas your dependent variable is the offer made by the supply side. This is not per se problematic but I found it a bit confusing.
8. I don’t understand why you include a Euro area dummy, but no country dummy. I understand why you would not want to include a country dummy, namely because you don’t have more than one observation for some countries and thus the dummy would eat up all of the remaining

variance, and also because you are not interested in “cultural” factors, which I like in principle. But I need better reasons for including the Euro dummy.

9. This is a small issue: Not all tables and figures are mentioned in the text. I would mention them or leave them out.
10. This one is a bigger issue. I am not so sure that you do not have an endogeneity problem with house prices and population size. I find it very well possible that people are deterred from moving to a city if the housing prices are crazily high. In fact, I would never move to Paris because housing there is insane, even taking into consideration income levels (as you also find). Well, maybe not “never”, but it is and has been a factor in my decision-making. If you proxy the number of housing units demanded in some way by the population, you get a classical demand-supply-simultaneous equations model, which you could solve in principle if you found one factor that is only relevant for supply (e.g. construction cost) and one that is only relevant for demand (e.g. unemployment). I don’t know if this is possible to do as a robustness check here, maybe not due to data restrictions and also because distinguishing between demand for rental flats and for property is messy, but then you should argue better why you think that endogeneity is not a problem here.
11. P. 13, Table 1: The numbers don’t add up correctly in the line “Total Income” (12+3 is not 14).
12. P. 20, Table 8: I would have been really interested in the values for the Gini coefficient. Maybe not absolutely necessary, but would be nice.
13. P. 22 Table 10: Please make the table nicer and more readable by adding little stars for significance and by explaining the abbreviations of the regressors in a caption. Also, it confused me that you said that you retained only the variables with at least 5% significance level, but some of them actually had a lower significance level.
14. P. 24. This is a very nice graph.
15. P. 25 This is not a very nice graph, and not very readable (at least in black and white). I would kick it out, since you find the information elsewhere in the paper.
16. I also really liked the robustness checks and the graphs on p. 27.
17. P. 30 I thought about including a “capital city” dummy. Have you tried that?

I hope this helps! Again, I enjoyed the paper, thank you!