

Referee's report on "Date-Stamping US Housing Market Explosivity"

This paper applies two methods to identify the periods in which the housing prices exhibited bubbles in the US between 1830-2013. The presumption is that house price determinants follow a similar path to the general price level in the economy, and if house prices deviate from the general level this indicates a bubble. Then it is a matter of defining what constitutes a deviation and this paper makes some choices based on some methods from the literature. This approach has the advantage of economizing on data, all it requires is a housing (real) price index. One of the methods identifies three periods of deviations from stationarity (overlooking a few shorter-lived explosivity periods that fit the definition given in the text). The other method identifies another (and more crowded) set of explosivity periods. A brief discussion matches both sets of results to historical events that are likely to have interactions with the abnormal movements in housing prices.

This is a question that would draw interest of readers from diverse backgrounds. The paper itself, in the introduction, does a good job of motivating the reader on the general importance of housing price movements. The text, however, is not very accessible to a non-specialist like myself. Possibly related to my ignorance of the methods, regarding the many specific choices made in estimation, it is nearly impossible to speculate on the implications of alternative choices. This becomes especially confusing when the two methods give different results. Alternative choices could result in even more different results. I am not sure what the benchmark is in this situation to compare different sets of results. Why are these two results presented and why are they better than those would be obtained under many alternative specifications? I think the paper overlooks the necessity and significance of such a discussion.

The paper makes it clear that its goal is not to give policy suggestions against bubbles, etc, and just wants to identify the periods. How about using these approaches for prediction? One cannot help but wonder the predictive use of these methods, and if there's some ground for this, it could make the paper much more interesting.

A minor thing: colors of lines in figure 2 do not match the discussion in the text.