

Does the DiPasquale-Wheaton Model Explain the House Price Dynamics in China Cities?

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Summary

The “overheating” of the Chinese housing market in recent years has caught the attention of policy makers, the research community, as well as the general public. The aim of this paper is to study factors affecting the housing price and construction in Mainland China. We estimate a version of the DiPasquale-Wheaton (1994)¹ model with four major Chinese cities: Beijing, Tianjin, Shanghai and Chongqing and we find that the model works surprisingly well with the China city-level data.

We find that the housing price growth is positively affected by the household income growth but negatively affected by the housing stock growth. Moreover, our result shows that the housing price is serially correlated, especially for the quarterly frequency. We adopt the interpretation of Wheaton (1999)² that this is due to the sluggish adjustment of housing stock, which has been repeatedly documented.

This study also finds that the housing construction is negatively affected by the land price and the housing stock in the previous period. In addition, the housing started is also serially correlated. Our results suggest that the factors affecting housing construction may differ across the four cities.

¹ DiPasquale, D. and W. Wheaton (1994), “Housing Market Dynamics and the Future of Housing Prices,” *Journal of Urban Economics*, 35: 1-27.

² Wheaton, W. (1999), “Real Estate “Cycles”: Some Fundamentals,” *Real Estate Economics*, 27(2): 209-30.