

Why Has House Price Dispersion Gone Up?

(with Pierre-Olivier Weill)

Abstract

We set up and solve a spatial, dynamic equilibrium model of the housing market based on two main assumptions: households flow in and out metropolitan areas in response to local wage shocks, and the housing supply cannot adjust instantly because of regulatory constraints. In our equilibrium, house prices compensate for cross-sectional wage differences. We feed the 30-year increase in cross-sectional wage dispersion that we document based on metropolitan-level data, into the calibrated model and solve for the transitional dynamics. The model quantitatively matches the observed 30-year increase in the level and dispersion of house prices across U.S. metropolitan areas. The calibration also reveals that a baseline level of housing supply regulation is important. Indeed, the effect of wage dispersion on the non-structure component of house prices, which reflects the value of relaxing the supply regulation, accounts for most of the increase in level and dispersion. Finally, the welfare costs of housing supply regulation are large in the presence of increasing wage dispersion.