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Presentation

A Dynamic Model of Urban Growth and the Evolution of Rents and Prices

This paper studies the dynamics of real estate development in an urban setting that includes a fixed urban core, which houses commerce as well as residents, and an expandable suburban district, which houses residents who must commute to the urban core for work. Houses are durable and are built by forward-looking investors who choose the optimal timing and densities of their developments. We examine rents, prices and the densities of the urban core and the suburbs, and study how they change over time as the city grows. The model, which is calibrated to match the growth path of Austin in the 1995 to 2024 period, is applied to study zoning changes that can affect price levels as well as their volatilities.