The Production Function for Housing: Evidence from France

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ABSTRACT: We propose a new non-parametric approach to estimate the production function for housing using information about land prices and expenditure on non-land inputs. Our estimation treats output as a latent variable and relies on the variation in land prices across locations for parcels of similar sizes. We implement our methodology on recently-built single-family homes in France. We find that the production function for housing is well approximated by a Cobb-Douglas function. After correcting for differences in user costs between land and non-land inputs, we obtain a share of land of 25% in the production of housing and strong evidence of constant returns. Consistent with this, we also estimate an elasticity of substitution between land and non-land inputs very close to unity.

Key words: housing, production function.

JEL classification: R14, R31, R32

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