

Information Asymmetry and Energy Efficiency: Evidence from the Housing Market

November 27, 2017

Abstract

Current policies addressing the carbon externality from energy consumption in the building stock often hinge on the assumption that markets efficiently capitalize the energy performance of assets. This paper uses different identification strategies to examine the capitalization of energy efficiency in the housing market, addressing methodological shortcomings in the existing literature. The results indicate that energy efficiency is capitalized into home prices, but OLS estimates are biased downwards: using the IV approach, we find that as the level of energy efficiency increases by ten percent, the market value of the dwelling increases by around 2.2 percent. These results are confirmed in a repeat-sales analysis. Importantly, examining the role of energy performance certificates (EPCs), we document that the extent of capitalization of energy efficiency is not affected by the presence of an EPC, questioning the need for such government-imposed certification programs.

JEL Codes: D12, Q51, R21

Keywords: energy efficiency, information asymmetry, house prices, energy labels, regression discontinuity