Farmland Rental Rates: Does Organic Certification Matter?

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ABSTRACT *We estimate U.S. organic farmers' marginal willingness to pay to rent an acre of certified organic land relative to conventional farmland. Using a selection-on-observables design and farm-level data on farmland rental rates, organic status, and many conditioning variables, we address the role of profitability in mediating the effect of organic status. We find a 26% rental rate premium for organic farmland not driven by higher profits on organic farms. This premium is a modest incentive for landowners but a barrier for tenants to convert to organic farming practices, which may explain limited growth in U.S. organic acreage.* (JEL Q11, Q15)

1. Introduction

Demand for organic food has led a growing number of farms to adopt certified organic production practices. In 2016, 2.7 million acres of farmland were used to produce certified organic crops in the United States. Although these are less than 1% of total U.S. cropland, current organic acreage is the result of 2.5% year-over-year growth from 2008 to 2016 (National Agricultural Statistics Service 2017). Growth in U.S. organic acreage has lagged growth in the value of organic production and retail sales. Over the same period, the value of U.S. organic crop production and retail food sales both grew by about 10% annually (Organic Trade Association 2016; National Agricultural Statistics Service 2017). Potential explanations for faster growth in the value of organic production relative to acreage include the allocation of organic acres to higher-value crops, organic crop yield growth, and increasing price premiums for organic crops (Oberholtzer, Dimitri, and Greene 2005; McBride et al. 2015).

Growth in organic acreage is partly constrained by the organic certification process. Cropland must be farmed according to organic production practices that forbid the use of synthetic fertilizers and pesticides for three years before production can be labeled for sale as organic. This constraint implies land that can produce certified organic crops will be in limited supply in the short run. The combination of higher-value crops, output price premiums, and inelastic farmland supply may generate economic rents that are bid into input prices, so that organic land will be priced at a premium to conventional land. In aggregate, data on U.S. farms appear to bear this out. The USDA Agricultural Resource Management Surveys (ARMS) conducted between 2003 and 2011 showed median cash rental rates paid by organic farms for cropland were 23% higher than rental rates paid by conventional farms. Median reported cropland values were 26% higher for organic farms.

Although there is an extensive literature on the value of farmland and the myriad characteristics that give it value (e.g., Palmquist 1989; Plantinga, Lubowski, and Stavins 2002; Borchers, Ifft, and Kuethe 2014; Severen, Costello, and Deschênes 2018), no study has attempted to estimate the value of organic land.[1] Aggregate differences in rental rates

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[1] Technically, the output is certified organic, not the land itself. However, we and others such as the USDA National