ECONOMIC ANALYSIS OF HIGH-SPEED ROLLER GINNING

Pratima Bhandari
Ram N. Acharya
New Mexico State University
Las Cruces, NM
Carlos Armijo
USDA/ARS
Las Cruces, NM

Abstract

The purpose of this study was to evaluate the relative cost of ginning cotton using cost data for saw gin, conventional roller gin, and high-speed roller gin (HSRG). The data used in the analysis comes from various annual audit reports. Multiple regression analysis was used to evaluate the impact of ginning technologies on ginning cost and net return. The summary statistics show that the average per bale ginning cost is highest for HSRG ($58.65), followed by conventional roller ($58.41) and saw ($47.79) gins. On the other hand, the average per bale net return is highest for HSRG ($29.64). Regression results suggest a presence of time trend implying an increasing ginning cost over time. Moreover, the cost of saw ginning is significantly lower than conventional and high-speed roller ginning. Consistent with the previous studies, the relationship between the amount of cotton ginned and the average cost of ginning is negative. These results indicate that larger gins are experiencing economies of scale and have much lower ginning costs. However, these results are based on a small sample of audit reports, mostly from 2006-2013, and may not reflect the current situation.