Immigration reform and citrus harvest mechanization in a world

of uncertainty

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Abstract

The prospect of immigration policy reform has renewed growers' concerns about serious labor

shortages and labor cost increases which may require mechanization in some specialty crop

operations. We focus on the Florida citrus industry, evaluating the economic potential for

mechanical harvesting relative to manual harvesting in a risky environment. Alternative labor

market conditions are examined using the entity discounted cash flow (DCF) approach. In addition,

uncertain variations in citrus yields, prices and production and harvesting costs are incorporated

to mirror the producer's uncertain environment. The analyses provide estimates for the required

threshold of potential gains from mechanization over hand harvesting for the adoption of

mechanical harvesting in the uncertain, risky real world.