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Economic
Research
Report
Number 27

October 2006

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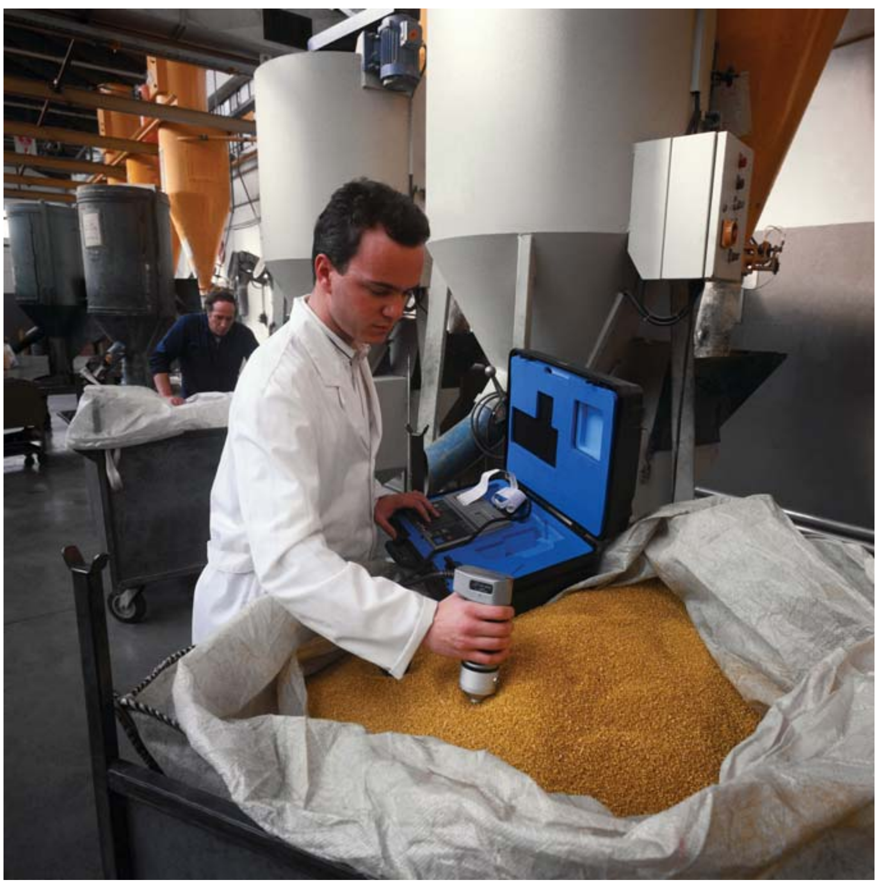

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National Agricultural Library Cataloging Record:

Michael Ollinger, Sang V. Nguyen, Donald Blayney, Bill Chambers, and Ken Nelson

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(Economic research report (United States. Dept. of Agriculture. Economic Research Service) ; no. 27)

1. Food industry and trade—Mergers—United States.

2. Food industry and trade—Labor productivity—United States.

I. Ollinger, Michael. II. United States. Dept. of Agriculture. Economic Research Service.

III. Title.

HD9005

Cover photo: Corbis.

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Abstract

Processing plants in eight major food industries were highly productive before being acquired and they significantly improved their labor productivity afterward, Economic Research Service and U.S. Census Bureau researchers found in their analysis of Census data. The plant-level data on production inputs and costs provided a detailed picture of food-production facilities involved in mergers and acquisitions. The industries are meatpacking, meat processing, poultry slaughtering and processing, cheese making, fluid milk processing, flour milling, feed processing, and oilseed crushing. The analysis suggests that mergers and acquisitions contributed to the general improvement in labor productivity, echoing an earlier ERS study. Labor productivity is defined as output per worker.

Keywords: Mergers, acquisitions, labor productivity, consolidation, structural change

Acknowledgments

The authors extend their thanks to Jeffrey Rozer, University of Nebraska; Sanjib Bhuyan, Rutgers University; Roger Schneider, Grain Inspection Packers and Stockyards Administration, USDA; Arnold Reznek, U.S. Census Bureau; David Davis, North Dakota State University; Elise Golan and Mark Denbaly, Economic Research Service, USDA; and anonymous reviewers.

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Ollinger and Blayney are agricultural economists with the Economic Research Service, U.S. Department of Agriculture. Nguyen is an economist with the Center for Economic Studies, U.S. Census Bureau. Chambers, now with the Farm Service Agency, USDA, and Nelson, now retired, are former ERS agricultural economists.

Contents

Summary

Mergers and acquisitions in the U.S. food industry have provoked controversy for many years. Critics are concerned that mergers, by reducing the numbers of firms and increasing industry concentration, make it easier for firms to increase output prices and lower wages and input prices. Others argue that mergers and acquisitions (M&As) increase efficiencies and boost productivity by allowing companies to lower costs and provide consumers with goods at lower prices.

What Is the Issue?

Until 1977, consolidation was not much of an issue for most food industries. At that time, the average four-firm concentration ratios for eight food industries—meatpacking, meat processing, poultry slaughter and processing, cheese making, fluid milk processing, flour milling, feed processing, and oilseed crushing (soybean, cottonseed, and corn)—were about 31 percent. A wave of mergers and acquisitions led to a jump in average concentration to about 44 percent by 1992. Were these M&As efficient, and did acquired companies increase their productivity after being acquired?

What Did the Study Find?

Labor productivity, or output per worker, is one measure of production efficiency. Using U.S. Census Bureau plant-level data to examine processing plants in eight food industries, ERS and Census researchers found that processing plants in eight major food industries were highly productive before being acquired and they significantly improved their labor productivity afterward. The analysis suggests that mergers and acquisitions contributed to the general improvement in labor productivity, echoing an earlier ERS study.

These results for M&As and labor productivity are not entirely consistent with previous research. Other researchers found that large acquired plants had below-average productivity prior to their acquisitions, but the ERS and Census researchers found that both large and small plants had above-average labor productivity before their mergers. Productivity growth results also differed somewhat.

These differences and substantial variation in estimated effects across the eight industries suggest that conduct and performance of individual industries differ from that of a broadly defined sector such as the entire food industry. Studies at the individual-industry level are necessary to evaluate the impact of certain types of economic activity, such as M&As.

How Was the Study Conducted?

By using plant-level Census of Manufacturers data from the U.S. Census Bureau, researchers obtained a detailed picture of plant outputs, inputs of labor and materials, costs of production, and plant assets. These data also allow researchers to trace plants across time and ownership status. The research concentrated on two merger waves, 1977-82 and 1982-87, which encompass particularly active times for M&As in an era of structural change

that persists to this day. In the productivity performance analyses, the labor productivity of plants acquired over 1977-82 and 1982-87 was compared with control groups of plants that were not acquired. For productivity growth, researchers evaluated plant productivity growth over 10-year periods (1977-87 and 1982-92).