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Economic Incentives to Supply Safe Chicken to the National School Lunch Program

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What Is the Issue?

The Agricultural Marketing Service (AMS) of the U.S. Department of Agriculture (USDA) purchases chicken and other agricultural commodities for USDA food programs, including the National School Lunch Program (NSLP). Chicken products have been the source of foodborne illness outbreaks and subject to recalls in recent years, although they have not been identified as a source of foodborne illnesses in schools.

This report focuses on the effectiveness of reputation as an incentive for producers to supply chicken to AMS for the NSLP that exceeds industry averages on food safety tests. Suppliers of raw chicken to AMS for the NSLP must meet the same standards imposed on all slaughter establishments by USDA's Food Safety and Inspection Service (FSIS). Raw chicken suppliers, however, vary in the degree to which they exceed those standards. On the one hand, they have an incentive to reduce costs, including those associated with food safety controls, because it allows them to be more competitive in bidding on contracts and increases their profit margins. On the other hand, they have an incentive to reduce *Salmonella* levels in their products to lower the risk of causing foodborne illness outbreaks and, therefore, being forced to recall products. These reputation effects may be especially important with regard to high-profile customers such as the NSLP. Economists have found that suppliers suffered significant declines in stock prices and lost sales after recalls of meat and poultry damaged their reputations for food safety. Anecdotal evidence also indicates that some firms incurred high liability costs for recalls affecting human health.

What Did the Study Find?

Using *Salmonella* and other data covering the 2006–12 period, this study examined the performance on *Salmonella* spp. tests by suppliers of raw chicken to AMS for the NSLP relative to commercial-only chicken slaughter establishments, which supply the commercial market and are not registered with AMS to supply the NSLP. It then evaluated separately the performance of inactive AMS suppliers (those eligible to bid on raw chicken contracts that do not bid during a given year) and of active AMS suppliers, relative to commercial-only suppliers.

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Findings suggest that AMS supplier concerns about increased scrutiny and the associated reputation effects when supplying the NSLP encouraged modestly better performance on *Salmonella* tests, offsetting incentives to underinvest in food safety to lower the costs of production.

Among the findings:

- Suppliers of raw chicken to AMS for the NSLP had modestly better performance on *Salmonella* spp. tests (a measure of food safety performance) than commercial chicken slaughter establishments.
- The performance on *Salmonella* spp. tests of active AMS raw chicken suppliers modestly exceeded that of inactive AMS raw chicken suppliers and commercial-only suppliers not registered with AMS to supply AMS.
- The performance on *Salmonella* spp. tests of inactive AMS raw chicken suppliers (AMS-registered suppliers not bidding on AMS contracts) was roughly the same as that of chicken slaughter establishments not registered to supply AMS over 2006-12.
- Reputation effects appear to incentivize modest improvements in performance on *Salmonella* spp. tests of raw chicken suppliers.

These findings may shed light on the food safety benefits associated with a less stringent and lower cost approach that relies on reputation for food safety enforcement, compared with a more costly approach relying on enforceable standards.

How Was the Study Conducted?

Probit regressions using data covering the 2006-12 period were employed to compare the performance of three groups of chicken slaughter establishments—active AMS suppliers, inactive AMS suppliers, and commercial-only suppliers—on *Salmonella* spp. tests. Hypothetical test standards, more stringent than the FSIS tolerance levels, were used. Data were obtained from FSIS and AMS. The FSIS data included *Salmonella* spp. test results, USDA administrative data, and information on establishment characteristics provided by Dun & Bradstreet, Inc. to FSIS. AMS data included *Salmonella* spp. test results and contract bidding data.