

Question 2: Chicken Feed Merger

You are an associate in Able & Baker LLP. Partner Sophia Costello has just received a call from Melissa Smith, the CEO of National Chicken Feed Corporation (NCF), a large independent (nonintegrated) multimill manufacturer and seller of chicken feed in the United States and a longtime client of the firm. Smith has spoken informally over dinner with Walter Henderson, the CEO and majority owner of Henderson Mills, a smaller multimill manufacturer and seller of chicken feed in southern Georgia, southern Alabama, and Florida, about acquiring Henderson for \$210 million in cash. Smith says that Henderson appears very interested.

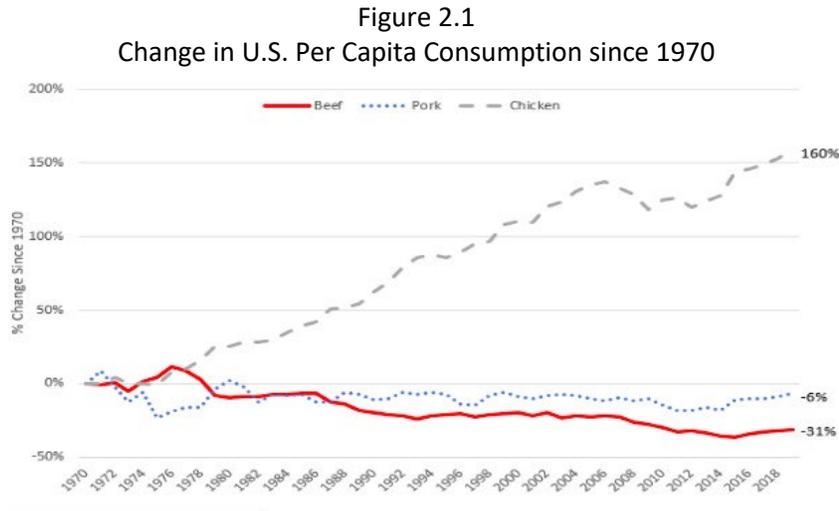
Before proceeding with more formal negotiations, Smith would like the firm to prepare a plan for performing a full merger antitrust analysis. Although NCF has acquired other chicken feed companies, all have been in areas where NCF does not operate. If the transaction proceeds, this will be NCF's first acquisition of a competitor. Smith does not know much about merger antitrust law, but from what she reads in the newspapers about the new activism of the antitrust enforcers in the Biden administration (especially at the Federal Trade Commission), she has some concerns. Smith believes she and her senior executives need some education about merger antitrust law and a plan for conducting an antitrust analysis that will give her some confidence in predicting the likely outcome of any federal merger antitrust review. (Smith is a former management consultant with McKinsey & Co. and so likes detailed plans.) Smith also would like any suggestions the firm may have about what they should be saying—or not saying—in their documents and emails as they continue their internal analysis of the transaction. Finally, Smith would like an estimate of how much this merger antitrust analysis will cost.

Costello has asked you to prepare the first draft of a memorandum to Smith responding to all her requests except for the cost estimate (Costello says she will do that once the plan is finalized). In particular, Costello would like you to draft a memorandum on how to conduct the antitrust analysis to determine what are the product and geographic relevant markets in issue, who are the participants in this market and what are their market shares, whether the *PNB* presumption is triggered and what additional theories of anticompetitive harm might apply against the transaction. Costello also would like to address how we should identify and assess any downward price pressure defenses the parties might have. Costello believes it would be most helpful to Smith if, for each element of the prima facie case and each defense, the memorandum briefly explained the judicial and merger guidelines standards and then listed the questions that need to be answered to assess the application of these standards to the transaction. If the facts as we know them suggest how the law might apply to an element—say, for example, the dimensions of the relevant product market—the memorandum should identify the possible application as well as questions we should ask to test the suggestion. Smith has not asked for any thoughts on what risk-shifting provisions Henderson might demand or how NCF should respond to them, and Costello thinks it would be premature to address risk-shifting provisions in the memorandum since no antitrust analysis has yet been conducted.¹

This is what you know about the chicken feed business from your past work with Henderson and from public sources:

¹ Smith says that we should assume when preparing the plan that Henderson will be fully cooperative in answering our questions and providing documents and data for our review.

Hen and egg production were common on most farms at the turn of the century and production was primarily for home use. Before the 1950s, most farms raised chickens, but meat was a byproduct of the egg enterprise. Since then, however, consumption of chicken meat and eggs has skyrocketed. In 2017, the year of the most recent Census of Agriculture, farmers in the United States produced 8.9 billion birds for meat and 109.2 billion eggs.² That year, U.S. sales of poultry and eggs totaled \$49.2 billion and accounted for about 12.7% of total U.S. agriculture sales.³



Source: Glynn T. Tonsor, Jayson L. Lusk & Ted C. Schroeder, Impacts of New Plant-Based Protein Alternatives on US Beef Demand (Cattlemen’s Beef Promotion and Research Board Jan. 17, 2021), <https://www.agmanager.info/livestock-meat/meat-demand/meat-demand-research-studies/impact-new-plant-based-protein-0>.

Chickens fall into two basic categories: meat-producing (called “broilers”) and egg-laying (“layers”). Broilers are very efficient at converting feed to meat, producing approximately one pound of bodyweight for every two pounds of feed they consume. In 2017, the United States produced more than 8.9 billion broiler chickens with a value of roughly \$31.7 billion.⁴ A healthy laying hen will lay eggs for several years. A hen begins to lay at approximately 18 weeks of age and can lay up to 250 eggs the first year.⁵ Egg counts will naturally decrease each following year, with hens entering egg retirement around years six or seven.⁶

² U.S. Dep’t of Agriculture, National Agricultural Statistics Service, *2017 Census of Agriculture Highlights: Poultry and Egg Production* (July 2020) (number of chicken farms), <https://www.nass.usda.gov/Publications/Highlights/2020/census-poultry.pdf>; U.S. Dep’t of Agriculture, National Agricultural Statistics Service, *Agricultural Statistics 2020*, at VIII-28, tbl. 8-38 (meat). VIII-33, tbl. 8-48 (eggs) (2020). The Department of Agriculture conducts the Agriculture Census every five years.

³ *2017 Census of Agriculture Highlights*, *supra* note 2.

⁴ *Agricultural Statistics 2020*, at VIII-28 (Table 8-38), *supra* note 2.

⁵ Patrick Biggs, *How Long Do Chickens Lay Eggs? Goals for Laying Hens* (undated), <https://www.purinamills.com/chicken-feed/education/detail/how-long-do-chickens-lay-eggs-goals-for-laying-hens>.

⁶ *Id.*

While 164,099 farms sold poultry and eggs in 2017, only 44,260 (27%) specialized in poultry and egg production.⁷ These specialized farms, however, accounted for 98.4% of all poultry and eggs sold.⁸ Specialized chicken farms are scattered across the country. Three states (Georgia, North Carolina, and Arkansas) sold more than \$5 billion in poultry and eggs in 2017, accounting for 32.5% of total sales. Another 15 states (including Alabama) had between \$1.0 and \$4.9 billion in poultry and eggs sales. These 18 states accounted for 88% of poultry and eggs sales in 2017.⁹

About 97% of specialized chicken farms are family farms.¹⁰ The average specialized farm had 134 acres, average sales of \$1,133,207, and net cash farm income of \$389,897.¹¹ The production costs of farms specializing in poultry and egg production totaled \$33.3 billion. The largest expense item was feed, which totaled \$18.4 billion, or 55% of total production costs.¹²

On a given day, farm inventory included 1.6 billion broilers and 368 million layers. In 2019, broilers consumed 60.8 million tons of feed, while layers consumed 19.2 million tons.¹³ Farmers purchase their chicken feed from chicken feed mills. These mills manufacture chicken feed using various mixes of readily available raw materials, including ground corn, corn offal, soybean meal, distillers' dried grains with solubles (DDGs), wheat offal, fish meal, bone meal, table salt, vitamins, l-lysine, and d-methionine. The production process for chicken feed is simple and straightforward: receiving and cleaning the raw materials, crushing the raw materials, batching, mixing, pelleting, and packaging. The production equipment for manufacturing poultry feed is readily available from commercial equipment suppliers in a variety of different capacities.

Broilers and layers require different mixes of raw materials ("diets"). In addition, diets differ for chickens at different stages of their development: baby chicks require different diets than mature birds. Almost all feed producers offer several branded chicken feed products with what each producer believes is the "best" diet for a broiler or a layer. Some companies—especially the smaller ones—will work with the farmer to create a customized diet to the farmer's specifications. Chicken feed is manufactured using a batch process, and the same equipment is used to create and package any mix of raw materials. Chicken feed mills, however, do tend to use dedicated equipment to produce "organic" feeds to avoid contamination with non-organic materials.

Chicken feed may be processed into three forms for sale to farmers:

1. *Pellets* are processed by grinding up the ingredients and molding them into an oblong shape. They are by far the most common form of chicken feed.

⁷ The Department of Agriculture uses the North American Industry Classification System (NAICS) to define a specialized farm, which in this case means a farm where 50% or more of a farm's sales come from poultry and eggs.

⁸ *2017 Census of Agriculture Highlights*, *supra* note 2.

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.*

¹³ Institute for Food Education and Research, *2020 Animal Feed/Food Consumption, COVID-19 Impact Analysis* 48 (broilers) 50 (layers) (Dec. 2020).

2. *Mash* is an unprocessed form of feed composed of ground-up grains and other ingredients. Mash is most commonly fed to chicks since it is easier for them to consume, although there is typically considerable waste from uneaten mash.
3. *Crumbles* are pellets that have been broken up. The texture is not as fine as mash, so it is easier for chicks to manage and significantly reduces waste.

The same production lines can be used to make all three forms of feed. Mash skips the pelleting stage, and crumbles use a crumbler to crack or roll the pellets to create a feed with a softer consistency in a smaller size. All mills produce all three forms of feed.

Chicken feed producers range from large integrated producers to small independent feed mills. Five large integrated producers—Tyson's Foods, Pilgrim's Pride, Perdue, and Sanderson Farms—control over 60% of the broilers produced in the United States. These companies both own chicken farms and contract with other farms to supply broilers. In either case, the integrated company supplies the feed for the chickens. Independent farms—that is, farms not under contract with an integrated company—purchase their feed requirements from either integrated feed mills or independent feed producers.

Of the 80 million tons of chicken feed consumed each year in the United States, integrated mills provide 36.5 million tons to their company-owned farms and farms under contract. This leaves an addressable market for independent mills of 43.5 million tons. Integrated mills sell about 8.0 million tons into the independent farm market and independent mills sell the remaining 35.5 million tons.

Notably, integrated mills and most independent mills differ significantly in the range of diets they produce. Integrated mills, which primarily supply farms in their system and seek uniformity in their flocks, have standardized their products and only produce five or six diets. Independent mills, on the other hand, have the flexibility to produce dozens if not hundreds of diets to order to meet the particular specifications of their customers. Indeed, most independent mills will work with farmers to design unique customized diets. Integrated mills do not provide this service.

Farmers typically order bulk poultry feed directly from the mill or through local farm shops, which then forward the order to the mill. Many farmers will enter into annual feed supply contracts with a mill. The order or contract will specify the feed manufacturer, diet, and volume of feed they wish to purchase. Once the mill receives the order, it either takes the feed from recent stock or manufactures it to order, in either case ensuring that the feed is fresh. The mill then ships the feed directly to the farmer in bulk feed trucks. Mills typically sell to customers within 100 miles trucking distance of the mill site, although mills will sell to larger customers at further distances and absorb some of the transportation costs in order to be competitive.

NCF is an independent feed producer with 42 mills located in North Carolina, Arkansas, and northern Georgia, one of the largest chicken-producing regions in the United States. NCF's mills are on the larger size for independent mills, producing an average of 120,000 tons of feed per mill annually. NCF's mills are also very efficient and contribute on average \$23 per ton in profit or \$2.76 million per mill per year. NCF's total annual production is 5.04 million tons, on which it earns a profit of \$116 million per year. NCF is currently valued at \$1.75 billion, or a little over 15 times earnings.

NCF supplies small- to large-sized independent farms. NCF has a total of 7,200 customers nationally. On average, NCF supplies 700 tons annually to each customer, on which it earns a profit of \$16,100.

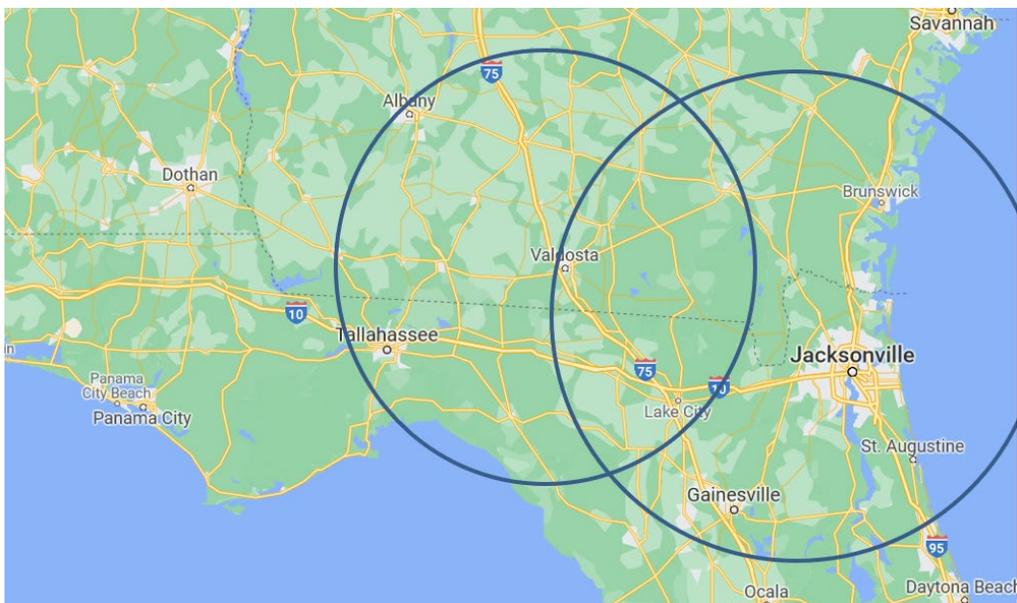
NCF recently opened a new 100,000-ton mill in Brunswick, GA, to supply the growing number of chicken farms in southeastern Georgia, Florida, and Alabama. The mill ships feed within 125 miles of the mill and is NCF's only mill that can competitively supply feed to chicken farms in this service area.

Henderson is a privately owned independent feed producer started in the 1950s by the Henderson family. Today, the company owns and operates ten mills located in southern Georgia, southern Alabama, and Florida. Henderson's mills are on the small size, averaging only 67,000 tons per mill of feed annually. Henderson's mills are old and not very efficient and contribute on average only \$21 per ton in profit or about \$1.4 million per mill per year. Henderson's total annual production is 670,000 tons, on which it earns a profit of \$14.07 million per year. Under family management, NCF estimates that Henderson's going concern value is \$183 million, or a little over 13 times earnings.

Henderson supplies primarily to small to medium-sized independent farms and rarely ships to farms located more than 100 miles trucking distance from its mills. Henderson has a total of 1625 customers. On average, NCF supplies 400 tons annually to each customer, on which it earns a profit of \$16,100.

Henderson's Valdosta mill is about 122 miles trucking distance from NCF's Brunswick mill. Valdosta supplies customers within 100 miles of the mill and so competes for customers that lie in the intersection of the draw areas of the Valdosta and NCF Brunswick mills. Henderson's Valdosta mill is its only mill that can competitively supply any customers that a NCF mill can also serve.

Figure 2.2
Draw Areas of the NCF Brunswick and Henderson Valdosta Mills



In her conversation with Ms. Costello, Ms. Smith explained that NCF is attractive as an acquisition target for several reasons. First, the acquisition would give NCF ten plants well-situated in the southern Alabama-southern Georgia-Florida region into which NCF is very interested in entering with a significant presence. Second, the acquisition would give NCF an established customer base in the areas in which the Henderson mills operate, so NCF would not have to compete with other mills for customers to baseload its plants. Third, Henderson is a “sleepy” family company that NCF believes is overpaying the family employees and operating well below its profit and growth potential as a company. NCF believes it can significantly reduce Henderson’s overhead expenses and operating costs, improve its productive efficiency, price its products more aggressively, and thereby significantly improve its profitability. Fourth, all of the Henderson mills have both the necessary permitting to operate and the land to significantly expand the capacity of the plants. NCF plans to expand the capacity of the Henderson plants in anticipation of growing demand in order to grow the business. Finally, the Henderson family is willing to sell at only a 15% premium above going concern value. Apparently, the younger generation is not interested in running the business, Walter Henderson is more than ready to retire, and an all-cash transaction for \$210 million (including over \$27 million in a deal premium) makes the transaction attractive to the Henderson family.

Figure 2.3
Medium-Sized Bulk Feed Truck



Chicken Feed Merger

Note: I have not included any discussion of the boilerplate in this outline. I have attempted to be reasonably complete in drafting a plan for a complete antitrust analysis. Given the time limits on the exam, I did not expect you to come near this level of completeness. Rather, I focused on the extent to which the answer spotted the most important issues to explore and identified the most important questions to ask for each issue.

INTRODUCTION

1. Assignment calls for a memorandum outlining a *plan to perform a full merger antitrust analysis* to determine:
 - a. The product and geographic relevant markets in issue
 - b. Who are the participants in this market and what are their market shares
 - c. Whether the *PNB* presumption is triggered
 - d. What additional theories of anticompetitive harm might apply against the transaction
 - e. If there are any downward price pressure defenses
2. For each element of the *prima facie* case and each defense, the memorandum should:
 - a. Briefly explain the judicial and merger guidelines standards
 - b. List the questions that need to be answered to assess the application of these standards to the transaction.
 - c. If the facts as we know them suggest how the law might apply to an element—say, for example, the dimensions of the relevant product market—the memorandum should identify the possible application as well as questions we should ask to test the suggestion
3. Finally, the memorandum should include suggestions about what the client should be saying—or not saying—in their documents and emails as they continue their internal analysis of the transaction ^{14,15}

¹⁴ A number of students attempted to do a substantive analysis of the merger based on the facts presented in the hypothetical. That was not the assignment and the hypothetical deliberately did not include sufficient facts to do a meaningful substantive analysis. Rather, the assignment called for a *plan* for doing the antitrust analysis, including *identifying the questions* that need to be addressed in order to do the analysis. The focus of the assignment was to identify the areas that need to be explored in the antitrust analysis and the associated questions that the analysis should address.

Also, a number of students provide their thoughts on the strategy and tactics of defending the deal. This was premature—an objective analysis needs to be performed first before jumping into how to optimize the defense of the transaction. But since I did not explicitly ask for a plan for an *objective* merger antitrust analysis, I consider the strategic and tactical ideas in grading the answer. Not surprisingly, given that an objective antitrust analysis had yet to be performed, most of the strategic and tactical ideas left much to be desired.

¹⁵ The assignment did not specify whether the plan for the merger antitrust analysis was to address only the substance or also include the inquiry and relief risk. I accepted either interpretation and graded the answer with a somewhat lower standard for the level of detail on the substantive aspects if the answer also addressed inquiry and relief risks (but not too much lower since most of the additional text involved boilerplate).

KEY POINTS

1. Client National Chicken Feed (NCF) in the initial stages of negotiating an acquisition of Henderson Mills, two independent (nonintegrated) multiplant chicken feed companies
2. NCF operates nationwide; Henderson only in southern Georgia, southern Alabama, and Florida
3. Two kinds of chicken farms: multiproduct and specialized (i.e., 50% or more of farm sales come from chickens)
 - a. 97% of specialized farms are family farms (by number of farms)
 - b. 3% must be industrial farms (probably integrated farms)
4. Three types of specialized chicken farms:
 - a. Farms owned and operated by large vertical integrated companies
 - b. Family farms that contract to sell their production to integrated companies for processing
 - c. Independent family farms
5. Feed is the largest expense: 55% of total production costs
6. Two categories of chickens: Broilers and layers—required different “diets” (feed composition)
7. Chickens at different stages (chicks, mature birds) can also require different feed types
8. Forms of chicken feed: Pellets, mash, crumbles
9. Farmers purchase feed from chicken feed mills
 - a. All diets and feed forms can be produced on essentially the same equipment
10. Types of feed producers:
 - a. *Integrated*: Part of large vertically integrated operations;
 - b. *Independent*: Feed companies that are not owned by an integrated company
11. Relation of customers to feed producers
 - a. Integrated and contract farms must purchase feed from affiliated integrated feed producer
 - b. Independent farms can purchase feed from either an integrated or independent mill
12. Integrated mills offered only five or six standardized diets
13. Independent mills offer both standardized diets and diets customized to the farmer’s specification
14. Mills typically sell (ship) to customers located within 100 miles of the mill
15. NCF
 - a. 42 mills—larger than average independent mill
 - b. Very efficient (\$23/ton profit)
 - c. Supplies small- to large-sized independent farms
 - d. *Only overlap*: NCF Brunswick with Henderson Valdosta¹⁶

¹⁶ The hypothetical stated: “Henderson's Valdosta mill is about 122 miles trucking distance from NCF's Brunswick mill. Valdosta supplies customers within 100 miles of the mill and so competes for customers that lie in the intersection of the draw areas of the Valdosta and NCF Brunswick mills. Henderson's Valdosta mill is its only mill that can competitively supply any customers that a NCF mill can also serve.” Some of you incorrectly read the last sentence to say that the NCF Brunswick and Henderson Valdosta mills were the only mills that serve the overlap

16. Henderson:

- a. 10 mills—on the small size
- b. Supplies small- to medium-sized independent farms
- c. Old and not very efficient (\$21/ton profit)

17. Deal rationale

- a. Gives NCF ten mills with only one (incomplete) overlap
- b. Provides NCF with an established customer base in Henderson’s addressable market
- c. Henderson is a “sleepy” family company—NCF can significantly reduce costs
- d. NCF plans on expanding the capacity of the Henderson plants in anticipation of growing demand in the area
- e. Available at a low price and a below-market premium

PLAN FOR THE ANTITRUST ANALYSIS

Some basic document requests¹⁷

Please provide copies of the following documents to the extent they exist. As new responsive documents are prepared, please send them to us prior to finalization for review.

1. NCF’s strategic plan for each of the last three years. If regional plans exist and are readily available, please provide those as well.
2. Any internal or external market research report on supermarket competition prepared within the last three years.
3. Any “Item 4(c) documents”, that is, any studies, surveys, analyses, or reports prepared by or for the NCF’s officers or directors that evaluate or analyze the proposed transaction with respect to markets, market shares, competition, competitors, potential for sales growth, or expansion into product or geographic markets.
4. Any “Item 4(d) documents” that is, any Confidential Information Memoranda (“CIM”) (if you received on in connection with the sale of Henderson), third-party advisor documents, or documents analyzing synergies or efficiencies that might arise out of the transaction.
5. Any documents that analyze or otherwise assess competitors in the Georgia-Florida-Alabama region (especially any documents that discuss Henderson).
6. Any documents prepared in the regular course of business that provide market shares in all or any part of the Georgia-Florida-Alabama region.
7. Any document that addresses how the NCF sets its prices generally or in the Georgia-Florida-Alabama region in particular.
8. Any planning documents discussing the methodology for opening or closing mills, including any programs or models used to analyze new mill locations, expansions, or closures.

area, thus making this a merger to monopoly in the area. All the sentence said is the Brunswick and Valdosta were the only mills of the merging parties that overlapped.

¹⁷ I did not specifically ask for a preliminary document request to the client. I should have. Very few students considered documents and no one considered them systematically. I did not count the lack of document requests against the grade.

9. Any other documents that address the rationale for the transaction (including the most recent financial model).
10. Any documents that address likely present or future changes to business strategies as a result of the transaction.

Prima facie case

1. Relevant product market

Hypothesis: Manufacture and sale of chicken feed (all forms; all diets)

- a. *Brown Shoe* outer boundaries/reasonable interchangeability of use
 - i. Is there any other type of feed other than the type of conventional chicken feed the merging parties produce that chicken farmers feed to their chickens to sustain them? (H: No—Would show little or no interchangeability of use with conventional chicken feed¹⁸)
 - ii. If the price of conventional chicken feed from all producers increased by 10%, would chicken farmers switch some or all of their purchasers to a different type of feed? (H: No—Would show low cross-elasticity with other types of feed)
 - iii. If the price of conventional chicken feed from all producers increased by 10%, by how much—if any—would chicken farmers reduce the quantity of conventional chicken feed they purchased (H: Little or no reduction—Would show that the demand for chicken feed was inelastic)
 - iv. Assume that a chicken farmer has several chicken feed suppliers, each competitive with the others, from which it could purchase its feed. Now assume that the supplier it uses increases its price by 10% while the other suppliers continue at their original prices. Would the farmer switch suppliers? (H: Yes—Would show high cross-elasticity among conventional feed suppliers)
- b. “Practical indicia”
 - i. Does the industry or public recognize chicken feed as a separate economic entity? (H: Yes)
 - ii. Does conventional chicken feed have peculiar characteristics and uses? (H: Yes—only used to feed chickens)
 - iii. Does the manufacture of conventional chicken feed require unique production facilities? (H: Yes)

¹⁸ The “H:” at the beginning of the parenthesis indicates my hypothesis how I expect the question likely to be answered given the facts as we now them. But the reason we are asking the questions in doing the analysis is both to confirm the facts and to obtain sufficient evidence to prove them to investigating agency and, if necessary, the court.

- iv. Does conventional chicken feed have distinct customers? (H: Yes—Chicken farmers)
- v. Does conventional chicken feed have distinct prices? (H: Yes)
- vi. Is aggregate demand sensitive to price changes? (H: No—Would show demand is inelastic)
- vii. Is conventional chicken feed manufactured and sold by specialized companies (H: Yes)

c. Targeted customer market 1: Independent chicken farms

Hypothesis: Relevant market limited to independent chicken farms

- i. Confirm that chicken farms that contract with integrated chicken producers must purchase their feed from an affiliated feed company and cannot purchase from an independent feed producer (such as the margining parties)

d. Targeted customer market 2: Small- and medium-size chicken farms

Hypothesis: Relevant market limited to small- and medium-size chicken farms

- i. List all chicken farms currently supplied by each of the merging parties (including the type of farm, delivery address, quantity and dollar amount of purchases last year)
- ii. To the extent known, provide a list of all independent chicken farms in southern Georgia and northern Florida (including their headquarters address, the addresses of each constituent chicken farm, the type of farm, its size, and an estimate of each farm's annual unit and dollar volume of chicken feed purchases) [the **chicken farm list**]
- iii. To the extent known, provide a list of all independent chicken feed producers in southern Georgia and northern Florida (including their headquarters address, the addresses of each chicken feed mill, and an estimate of their annual unit and dollar volume) [the **chicken feed producer list**]
- iv. What is the largest chicken farm in southern Georgia and northern Florida supplied by an independent chicken feed producer and identify the farm, the quantity of feed purchased monthly, and the farm's feed supplier?

e. Cluster market 1:

Hypothesis: All diets and forms of chicken feed constitute a cluster market

- i. How do diets differ from one another? Describe the production process for producing a diet to a given specification. Is the same equipment used in producing each type of diet or do some diets require different or specialized equipment?

- ii. How many diets does each of the merging parties provide?
- iii. How many diets does a typical independent feed supplier provide?

f. Cluster market 2:

Hypothesis: All diets and forms of chicken feed excluding standardized diets offered by integrated feed suppliers constitute a cluster market

- i. How many diets do integrated feed producers offer? (H: Only a few standardized diets)
- ii. Do integrated feed suppliers in southern Georgia/northern Florida offer nonstandardized diets?
- iii. Do integrated feed suppliers create customized diets to a farmer's specifications?

g. Customized diets

Query: Are customized diets (that is, diets produced to a farmer's specifications) part of the chicken feed cluster market and not a separate product market?

- i. What percentage of chicken farmers require customized diets made to their individual specifications? (H: Very few)
- ii. What percentage of chicken farmers that create a customized diet abandon that diet within one year of adoption and return to a regular diet?
- iii. Will the merging parties create customized diets to a farmer's specifications? (H: Yes) What are the annual unit and dollar volume of customized diets sold by each of the merging parties in the last year? What percentage of total annual unit and dollar feed sales are customized diets? (H: Small)
- iv. What, if any, services do each of the merging parties offer to farmers who are interested in possibly creating a customized diet? Is there a separate charge for these services? If so, what is the charge?
- v. Will other independent feed producers typically create customized diets to a farmer's specifications? (H: Yes) For a typical feed producer that offers custom diets, what percentage of total annual unit and dollar feed sales are these customized diets? (H: Small)
- vi. What, if any, services do feed producers that will create customized diets typically offer to farmers who are interested in possibly creating a customized diet? Is there a separate charge for these services? If so, what is the charge?
- vii. How, if at all, do the prices differ between customized diets created to a farmer's specification and diets on the producer's regular product list?

- viii. (HMT) If a farmer's supplier of a customized diet increased its prices by 10% but all other feed suppliers in the area held their prices for customized diets constant, what would the farmer do?
 - ix. (HMT) If a farmer's supplier of a customized diet increased its prices by 10% and all other suppliers in the area also increased their prices by 10%, what would the farmer do?
 - h. Hypothetical monopolist test (for each product grouping identified above)
 - i. What is the percentage margin on conventional chicken feed?
2. Relevant geographic market
- a. Observations
 - i. NCF's Brunswick mill and Henderson's Valdosta mill are the only two mills that compete with one another
 - ii. The relevant geographic market is the intersection of the 75% draw areas of each mill (Sysco/US Foods)
 - b. Plot the locations of the customers of each mill on a map
 - c. Determine the circular areas around each of NCF's Brunswick mill and Henderson's Valdosta mill that draws 75% of their respective sales
 - d. Determine the overlap of these two 75% draw areas (under Sysco/US Foods, this is the **relevant geographic market**)

NOTE: Perform this analysis separately for each potential relevant product identified above

3. Market participants, market shares, and *PNB* presumption
- a. Plot the locations of every mill within 100 miles of any farm in the overlap area to determine possible market participants
 - b. Determine the 75% draw areas for each of these mills
 - c. Determine which mills have 75% draw areas that completely overlap the relevant geographic market (together with NCF's Brunswick mill and Henderson's Valdosta mill, these are market participants in the relevant market)
 - d. Estimate the sales that each market participant in the relevant geographic market, add any additional sales that the mill would likely make if the prices in the relevant geographic area increased by 5% (holding prices in all other areas constant), and calculate market shares
 - e. Calculate the share of the combined company, the postmerger HHI and the delta (to see if the *PNB* presumption is predicated)
 - f. To test the sensitivity of the market shares, estimate the total sales of each mill participant (not just its sales limited to the relevant geographic market), calculate

market shares and compare the resulting merged company share, the postmerger HHI and the delta to those in 3(e) to see if there is a competitively meaningful difference.

- g. Examine the mill and customer locations maps to see if anything suggests that the Sysco/US Foods analysis provides a faulty competitive prediction.

NOTE: Perform this market analysis separately for each of the potential relevant products

4. Additional theories of anticompetitive harm

a. Observation

- i. We do not know anything about competitors in the relevant geographic market at this point, so we cannot form any hypotheses on whether there are any applicable additional theories of anticompetitive harm. We can only ask the basic predicate questions.
- ii. The questions should be asked separately for each potential relevant product.

b. Coordinated effects

i. Premerger susceptibility

1. How many firms are market participants?
2. Are prices and other terms of sale transparent to competitors?
3. What are the price dispersions among different types of products in the relevant product market?
4. Do the firms in the relevant market belong to a trade association or other organization that could serve as a forum to exchange information or otherwise facilitate tacit collusion?
5. Is there any history of lawful or especially unlawful cooperation among the firms in the relevant market?

ii. Postmerger enhancement

1. How many firms will remain in the relevant market after the merger?
2. Has either NCF or Henderson been disruptive in any way in the relevant market (e.g., engaged in aggressive pricing)

c. Unilateral effects

- i. Are NCF's Brunswick mill and Henderson's Valdosta mill uniquely close competitors in the relevant geographic market in any potential relevant product for any customers?

- ii. If so, in what products and for each such product, what is the product, who are the customers, who are the next closest competitors, and how close are they to the merging firms?
- d. Elimination of a maverick
 - i. Covered above

Defenses

5. Entry/expansion/repositioning

- a. How many new mills have entered in Georgia, Florida, or Alabama in the last seven years? Identify each mill and give its location, date of entry, estimated cost, whether it is integrated or independent, products produced, capacity, total sales, and sales (if any) in the relevant geographic market.
 - i. Same question for mill expansions
- b. Are there any indications that a new mill will enter to serve one or more customers in the relevant geographic area? If so, provide all available details.
 - i. Same questions for mill expansions
- c. What would it take to build a chicken feed mill to serve small- to medium-sized chicken farms?
 - i. Are there any material barriers to entry?
 - ii. How much land would be needed?
 - iii. Any environmental or other permits? If required, how long would it take and how much would it cost?
 - iv. How big a building would be required? Could an existing building be repurposed or would a new building be necessary?
 - v. What kind of equipment would be required and what is the acquisition cost?
 - vi. What kind and how many trucks would be required and what is the acquisition cost?
 - vii. What kind and how many employees would be required? What would their annual salaries be?
 - viii. How long would it take to build such a mill beginning with the purchase of suitable vacant land and what would be the total cost?
 - ix. What does the load on the mill have to be for the mill to break even?
 - x. What would it take for a new mill to obtain customers? Are there any reputational barriers to entry? How difficult will it be for the mill to obtain enough customers to make a reasonable return on its investment?

- xi. How much of the cost of a new mill could be recovered if the mill went out of business (that is, what is the liquidation value and what are the sunk costs)?
 - d. What kinds of firms, if any, could reasonably reposition their existing production lines for other products into the production of chicken feed? Give details.
- 6. Power buyers
 - a. How, if at all, could a customer in the relevant geographic area protect itself from an anticompetitive price increase by the combined company? By all firms serving the relevant geographic market?
 - b. How many customers does the NCF Brunswick mill have in the relevant geographic market and what is the share of Brunswick's sales does each customer account?
 - c. How many customers does the Henderson Valdosta mill have in the relevant geographic market and what is the share of Valdosta's sales does each customer account?
- 7. Efficiencies
 - a. What is the financial model for the acquisition? How does NCF expect to make money from the acquisition?
 - b. What, if any, benefits will the acquisition provide customers in the relevant geographic market? What support in documents or otherwise is there for any customer benefits?
 - c. If there are benefits to customers, could these benefits be provided to customers without the acquisition? If so, how?
 - d. What will customers say about the acquisition? Will they support it and, if so, why? Will they oppose it and, if so, why? Will they be neutral and, if so, why?
 - e. What alternatives, if any, did NCF consider to acquiring Henderson?
- 8. Failing firm
 - a. Is either NCF or Henderson unable to pay its bills?
 - b. What is the liquidation value of Henderson?
 - c. Have other firms shown any interest in acquiring Henderson (regardless of the price they would be willing to offer)?
 - d. If Henderson were put up for auction, would other firms have any interest in bidding?
- 9. Possible settlement relief
 - a. If the reviewing agency required NCF to divest either the Brunswick mill or the Valdosta mill to avoid a court challenge, would NCF agree to such a divestiture?

If so, which mill would NCF want to divest? (H: Henderson's Valdosta mill) How difficult would it be to find a buyer for the mill to be divested?

- b. If NCF was unwilling to divest one of the two mills, would it prefer to litigate or to terminate the acquisition agreement?