An Agricultural Law Research Article

I Gave My Employer a Chicken that Had No Bone: Joint Firm-State Responsibility for Line-Speed-Related Occupational Injuries

Part 1

by

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ARTICLE

I GAVE MY EMPLOYER A CHICKEN THAT HAD NO BONE: JOINT FIRM-STATE RESPONSIBILITY FOR LINE-SPEED-RELATED OCCUPATIONAL INJURIES

Marc Linder†

"We're not trying to make shit palatable. But under the new system, we'll be able to tell you how much shit you'll be eating."†

1. "Page Upton Sinclair!"2

The insanitary conditions in which the laborers work and the feverish pace which they are forced to maintain inevitably affect their health. . . .

. . . The whole situation . . . in these huge establishments tends necessarily . . . to the moral degradation of thousands of workers, who are forced to spend their work-

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1. George Anthan, Inspectors Tell Fears for Safe Poultry, DES MOINES REG., Jan. 14, 1989, at 1A, 11A (quoting David Carney, president of the North Central Council of Food and Inspection Locals, AFL-CIO, quoting Dr. John Prucha, Assistant Deputy Administrator, USDA's Food Safety and Inspection Service, who was responding to Carney's charge that the agency would soon be requiring inspectors to "eat contamination away"). Refusing to publish the actual quotation verbatim, the newspaper substituted the word "excrement" in square brackets. Telephone Interview with George Anthan (Feb. 20, 1995).

ing hours under conditions that are entirely unnecessary and unpardonable, and which are a constant menace not only to their own health, but to the health of those who use the food prepared by them. 3

Who sets the speed of the disassembly line for 200,000 production workers in poultry processing, 4 the fastest growing factory employment in the United States 5—the workers themselves, their employers, the Occupational Safety and Health Administration (OSHA) of the Department of Labor (DOL), or the Food Safety and Inspection Service (FSIS) of the United States Department of Agriculture (USDA)? Although presumably no one is naive enough to imagine that U.S. workers have the right to co-determine the rate at which the life is sucked out of them, even cynics may be mildly surprised to learn that this basic working condition of U.S. poultry workers has never been controlled by the agency charged with protecting the safety and health of workers. Rather, the agency charged with certifying the healthiness of (dead) chickens—in collusion with the firms it is supposed to be policing—is responsible for regulating their working conditions. How did this regulatory perversion come about?

Poultry workers' lack of control over such a basic condition of their work, lives, and existence is not new. Nor is the state's failure to intervene to protect workers from overreaching employers unique. Nor, finally, is the connection between unsafe working conditions and unsafe consumer products unprecedented. This entire conflict played itself out almost a century ago in the meat packing plants of Chicago. Indeed, the epigraph to this section, which is taken from a report that President Theodore Roosevelt commissioned and transmitted to Congress in 1906 6 in the wake of Upton Sinclair's galvanizing novel, The Jungle, could just as well describe the "Animal Auschwitz" that is today's chicken processing plants. 7

3. JAMES BRONSON & CHARLES NEILL, CONDITIONS IN CHICAGO STOCK YARDS, H.R. DOC. NO. 873, 59th Cong., 1st Sess. 8-10 (1906).
6. BRONSON & NEILL, supra note 3.
Although Sinclair was motivated by a concern for the workers' safety rather than meat safety, the legislation that Congress enacted that year ignored the workers. The state's current neglect of the quasi-penal conditions to which the unremitting drive for low costs and high profits has subjected poultry workers is so systematic that the late-twentieth-century version may not even rise to the level of farcical repetition of the tragic process ninety years earlier.

One of the principal reasons that the speed of the production line has become crucially important for workers' health and safety lies in its impact on the incidence of cumulative trauma disorder. Between 1980 and 1993, repetitive trauma disorders, as a proportion of all newly reported occupational illnesses, rose from 18% to about 60%. The poultry processing industry recorded the second highest incidence of repetitive trauma disorders in 1990—696 per 10,000 full-time workers. The highest incidence was recorded in the related meat packing industry. Together, these two industries also recorded the highest number of such newly reported illnesses—35,000. In part as a result of these extraordinary rates, poultry processing and meat packing also ranked sixth and second among all industries in total case incidence rates for injuries and illnesses—42.4 and 26.9 per 100 workers respectively. The situation in 1992, the latest year for which data have been published, was similar. Meat packing and poultry slaughtering and processing plants ranked first and third in incidence rates of disorders associated with repeated trauma—1395.6 and 693.4 per 10,000 full-time workers respectively. This combined industry group accounted

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1990 (describing the conditions of chickens on factory farms); PETER SINGER, ANIMAL LIBERATION 95-119 (1990) (detailing chicken factory farming methods).
11. OCC. INJ. BY IND., supra note 10, at 6.
12. Id.
13. Id. at 2.
for 36,500 new recorded cases of such occupational related disorders, the second highest industry group figure for 1992.\textsuperscript{15}

A health hazard evaluation of the large Perdue Farms processing plant in Lewiston, North Carolina, which the National Institute for Occupational Safety and Health (NIOSH) carried out in 1989, illustrates these dangers.\textsuperscript{16} The agency found that 36\% of the employees had work-related cumulative trauma disorders during the previous year, while 20\% had current work-related disorders.\textsuperscript{17} Those working in high-exposure departments such as eviscerating and deboning were four times as likely to have experienced disorders as those in low-exposure jobs such as maintenance, sanitation, and clerical.\textsuperscript{18} More than 99\% of participants in high-exposure positions were black and 86\% were women, compared with 44\% and 63\% respectively of the low-exposure participants.\textsuperscript{19} In an industry staffed largely by unskilled and unorganized workers, many of whom are women and minorities, social-psychological factors may also explain the incidence of musculoskeletal disorders. In particular, “\textit{when} the influence over the work process is limited [and when] the work is performed under time pressure . . . the tolerance to repetitive work can be further reduced.”\textsuperscript{20}

The National Broiler Council, the companies’ trade association, and others claimed that production is so automated that chickens arrive in stores “\textit{almost untouched by human hands.”}\textsuperscript{21} If these claims were true, they would imply that only inhuman hands could withstand the pain caused by as many as 40,000 daily repetitions\textsuperscript{22} of a single defined movement. In fact, it is human hands that must make the same knife or scissors cut to slit open carcasses from

\begin{itemize}
\item \textsuperscript{15} Id. at 9.
\item \textsuperscript{17} Id. at 27.
\item \textsuperscript{18} Id.
\item \textsuperscript{19} Id.
\item \textsuperscript{20} Ása Kilbom, \textit{Repetitive Work of the Upper Extremity: Part II—The Scientific Basis (Knowledge Base) for the Guide}, 14 \textsc{Int’l J. of Indus. Ergonomics} 59, 60 (1994).
\item \textsuperscript{22} Goldofas, \textit{supra} note 21, at 26.
\end{itemize}
anus to breast or the same twist of the hand to yank out viscera at a grueling pace, set by a relentless conveyor belt and reinforced by circulating foremen, while workers are standing in pools of water and grease in temperatures that range from freezing to ninety-five degrees and being pelted by flying fat globules or dripping blood. The painful damage to tendons and nerves can permanently cripple fingers, hands, wrists, arms, and shoulders. It has required thousands of poultry workers to undergo corrective surgery and made it difficult or impossible for them to perform such simple motions or tasks as raising their arms above their heads, holding things, sweeping, washing dishes, or removing clothes from a washing machine.23

Business Week's characterization of these epidemically spreading injuries as "the first major postindustrial illness"24 must surely have been meant tongue-in-cheek. Not even Karl Marx himself could have wished for more fitting material for an update of his analysis of classical industrial capitalist exploitation than the methods of speed-up and intensification that prevail in chicken processing factories.25 The annual rate of increase in output and output per employee between 1963 and 1991 amounted to 6.2% and 2.7% respectively; during the eighteen-year period from 1973 to 1991 the corresponding figures were a far above-average 7.4% and 3.9%


respectively.26 Not surprisingly, however, "[i]increased mechaniza-
tion did not lead to safer, more healthful poultry plants."27

Efforts by workers or the state to regulate the speed of factory conveyor belts meet with massive resistance by the owners and managers of U.S. industrial firms. The speed and volume of flow, or as Alfred Chandler, the dean of United States business historians, calls it, "throughput," lies at the basis of the modern regime of mass production:

Mass production industries can then be defined as those in which technological and organizational innovation created a high rate of throughput and therefore permitted a small working force to produce a massive output.

In modern mass production... economies resulted more from speed than from size. It was not the size of a manufacturing establishment in terms of numbers of workers and the amount of value of productive equipment but the velocity of throughput and the resulting increase in volume that permitted economies that lowered costs and increased output per worker and per machine.28

Individual firms and the class of owners and investors will seek to mobilize their considerable structural power to prevail upon the state to refrain from regulatory intervention that would deprive them of what are deemed prerogatives to invest their capital and manage their businesses with as little interference from workers or the state as possible. The USDA and its subdepartments have historically proven themselves to be extraordinarily compliant or captured agencies devoted to serving the interests of agribusiness. From the perspective of the poultry processing oligopolies, lodging regulation of line-speed with the USDA would therefore be optimal. In contrast, OSHA has always been a beleaguered agency, unable to serve effectively the class interests of the workers, whom it is mandated to protect.29 Capital was, for example, extraordi-

29. See generally CHARLES NOBLE, LIBERALISM AT WORK: THE RISE AND FALL OF OSHA (1986) (explaining how and why OSHA has been unable to protect workers in the
narily successful during the 1970s in using its political-economic power to defang the radical potential inherent in the broad mandate that Congress conferred on the agency, and transformed it into a virtual captured agency during the Reagan and Bush administrations. Nevertheless, for capital, OSHA remains an untrustworthy agency to be circumvented wherever possible. With regard to linespeed, the large poultry corporations have thus far succeeded in avoiding intervention that would interrupt the maximum flow of chickens and the profit they embody.

Interest-group liberalism is not a useful approach to understanding the state’s structurally biased accommodation of one class in direct clash with its antagonistic class over one of the most critical issues—the speed at which surplus is extracted and health undermined. Abandoning neutrality and the legitimation of the social order, the state recedes into its role as a facilitator of capital accumulation scarcely less ruthless than individual capitalists themselves. Relying on hard times to convince workers that capital accumulation is a worker’s best and only friend in a world in which only consumption gives meaning to life, the state recreates instrumentalist class rule.

At a time when a market-knows-best congressional majority threatens to dismantle what little workplace safety and health protection workers have been able to wring from the national state, this Article, using the example of a particularly brutal industry, analyzes in depth how, in the absence of worker control of the process of production, government regulation has either expressly adopted (the USDA) or failed to transcend (OSHA) capital’s agenda. The study begins with an overview of the origins, development, and structure of the chicken processing industry. The focus throughout is on broilers—“young chicken[s] . . . of either sex, that [are] tender-meated”—production of which bulks three to four times larger than that of turkeys; though the production processes are similar, the rate of throughput is lower in turkey plants because the larger size and greater physical variability of turkeys have impeded mechanization and automation.

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30. Id.
32. United States Classes of Ready-to-Cook Poultry, 7 C.F.R. § 70.201(c) (1995).
33. U.S. Bureau of the Census, Statistical Abstract of the United States:
count of the legislative history of national poultry plant regulation, this Article proceeds to a detailed analysis of the evolution and consequences for workers and consumers of the USDA’s capital-biased policy of elevating throughput über alles. After exploring the lawfulness of the USDA’s line-speed regulations from the perspective of administrative law, the Article focuses on OSHA’s failure to assert its power to control line-speeds in order to hold employers to their duty to provide workers with safe employment. In the final section, conclusions are presented linking the specific case of chicken processors to the broader issues of the division of labor and the relationship between producers and consumers in an undemocratic political economy.

II. OF PULLULATING PULLETS AND POULTRYCIDE: THE RISE OF THE BROILER INDUSTRY

New technologies in poultry production made it possible to segregate out the routine, repetitive jobs so they could be centrally supervised and efficiently performed by relatively unskilled labor.34

Two decades passed between the rise of the broiler industry and Congress’s action in 1957 introducing in poultry plants the mandatory inspection that it had imposed on meat plants a half-century earlier. During this period, “[h]istorically speaking, the broiler industry . . . spr[ang] up from nothing to a gigantic business almost overnight.”35 The industry underwent an initial process of vertical integration that made large-scale operations possible by means of manifold scientific and technical advances and the merger of feed manufacturing and poultry raising, processing, and marketing in a form that left farmers who had sought to make a living in this new business extraordinarily dependent on processors.36 In the

34. NATIONAL COMM’N ON FOOD MARKETING, ORGANIZATION AND COMPETITION IN THE POULTRY AND EGG INDUSTRIES 10 (1966) [hereinafter POULTRY AND EGG].
area of mechanical and engineering technology, broiler housing design and high-volume mechanized killing and evisceration were particularly important. European firms have even developed broiler harvesters, large tractor-like machines with foam-rubber paddles that "gently sweep" broiler-house birds on to a conveyor belt at the rate of 5,000 per hour—five to eight times as many as two workers can catch manually. By the mid-1950s, one dissertation writer found it questionable whether broiler producers were farmers because the production process was "really a sort of rural manufacturing activity in which purchased raw materials—feed and chicks—are converted into broilers." Two decades later the USDA could boast that "broiler production [was] industrialized in much the same way as the production of cars."

As the young chicken arguably became "the most researched animal in this much-researched world," the development of fast-growing strains of chickens bred for meat and a new understanding of poultry nutritional requirements pushed the industry towards higher levels of production. By the early post-World War II period, the USDA characterized the industry's genetic engineering campaign ("The Chicken of Tomorrow") as "the first real demonstration of production aimed at marketing." This integrated system succeeded in reducing the amount of feed required to produce one pound of liveweight broiler meat (the feed conversion rate) by more than half from 4 pounds in 1940 to 1.9 pounds in the early 1990s. During the same period, the time required to raise a broiler chicken and take it to market was reduced from 10 weeks to 6.5 weeks. Similarly, market weight rose from 3.1 to 4.5 pounds. Less touted by the industry, however, are the unintended

43. Id.
44. Id.; see also ROBERT BISHOP ET AL., USDA, THE WORLD POULTRY MAR-
consequences of the subtherapeutic doses of antibiotics that are added to chicken feed to neutralize or minimize the stresses and economically ruinous contagions of confinement that exist in broiler houses with 40,000 other chickens: the bacteria that have become resistant to the antibiotics, such as salmonella, E. coli, and campylobacter jejuni, cause thousands of cases of diarrheal disease and deaths annually.45

In many ways the new broiler industry has mirrored the development of the meat packing industry, which preceded it by a century. At the turn of the century the fledgling meat packing industry prompted the comment that "it would be difficult to find another industry where division of labor has been so ingeniously and microscopically worked out."46 This extreme subdivision of labor enabled the oligopolies to deskill the labor force, gain control over and speed up the production process, and reconstitute the labor market. Since the late 1960s, the large meatpacking firms have set in motion yet another wave of mechanization and subdivision of labor, resulting in yet higher conveyor belt speeds and speeds at which individual workers must complete their increasingly narrowed tasks. The concomitant rise in injuries, especially of repetitive trauma disorders, has been startling. Relocation of plants to rural areas in the Great Plains and the hiring of workers exposed to low wages and high unemployment rates have enabled a diminishing number of oligopolies to weaken a once powerful union.47
Large poultry firms have faced few obstacles in their transformative project. The broiler industry (and the widespread custom of eating chicken) did not—apart from small-scale sporadic and seasonal efforts in New Jersey and New Hampshire—even exist before the mid-1920s, when Mrs. Wilmer Steele of Ocean View, Delaware, began selling whole broods. Prior to the 1930s, chicken as meat was either an incidental by-product of egg production or derived from small “backyard” flocks. From 1923 to 1934 broiler production in Delaware expanded from 1,000 to 7,000,000. By the beginning of World War II, Delaware alone accounted for more than a quarter of total U.S. production, while the Delmarva peninsula produced 43%. As underscored by the famous Schechter Poultry case, New York City in the early 1930s was the destination of almost three-fourths of all live poultry shipments in the United States; four-fifths of that amount, in turn, was sold to Jewish consumers after having been slaughtered in accordance with Jewish religious dietary prescriptions. New York City, whose “poultry racket [had] become one of the most outrageously . . . corrupt and vile industries known to the criminal world,” was also the overwhelmingly dominant site of consumption of dressed poultry. It was only a decade later that process-


49. Problems in the Poultry Industry, supra note 35, at 3 (testimony of Hermon I. Miller, Director, Poultry Division, Agricultural Marketing Service, U.S. Dep't of Agric.).

50. JOHNSON, supra note 48, at 6.

51. Id. at 12.


ing plants were first established. Since chickens were sold uneviscerated until after World War II, the technology was primitive. Not until 1941 was processing automation introduced in the form of manually operated mechanical poultry pickers to rough off feathers.

The history of Perdue Farms, the third largest poultry producer in the United States, illustrates this development. Perdue Farms was founded on the Delmarva peninsula in 1920 as a "backyard flock of table-egg layers." Three decades later, the company was still merely selling chickens to large meat companies such as Swift and Armour. Not until 1968, when it bought a poultry processing plant in Maryland from Swift, did Perdue complete its initial integration of poultry operations.

The processing industry was initiated at a more advanced technological level than was the case in late-nineteenth-century meat slaughtering. Consequently, poultry firms did not need to struggle for control over production with an entrenched group of skilled butchers. Indeed, by the 1950s, processors, operating in markets increasingly dominated by retail chain stores, began to offer chicken parts cut by low-wage factory workers in order to accommodate retailers' strategy of deskilling their in-store high-wage butcher force. As early as 1951, at a time when workers on conveyor-
belts in modern processing plants still performed most of the work by hand, the Amalgamated Meat Cutters union conceded that "[t]he retail meat cutter is seldom required to draw a chicken anymore." Because many butchers deemed it "beneath their dignity" to cut chicken, the union did not even resist the new division of labor. Finally, because broiler chickens are much smaller and have been much more amenable to physical standardization through genetic engineering than cattle or hogs, the disassembly process, early on, attained much higher speeds than meat packing has ever achieved.

During the early post-World War II years, a dual geographic shift from small urban poultry slaughter plants to large rural plants and from Delmarva and the Midwest to the South occurred. This shift was made possible by the lower wages, lower feed costs, and improvements in transportation and refrigeration available in these areas. By concentrating their plants in rural southern areas beset by depressed farms and high rates of unemployment, and hiring largely impoverished women and minority workers, companies have had to confront much less resistance to progressive deskilling from atomized workers or unions.

The existence of alternative production areas strongly affected the structural development of the broiler subsector by allowing technological and organizational innovations to occur at a faster rate than would have been possible in traditional production areas. Producers in the new areas were not hampered by capital investment based on prior production methods or existing institutions governing the
production, financing, and marketing of broilers.\textsuperscript{69} Even where workers have managed to overcome the obstacles erected by employers\textsuperscript{70} and the law, and elected a union to bargain on their behalf, the largest poultry producers have not been above engaging in blatantly illegal union-busting, such as interfering with elections or having employees arrested for distributing union literature or firing employees for asking co-workers to support the union.\textsuperscript{71}

The initial target of vertical integration was not the working class but formally independent farmers. Production contracts were the pivotal points that enabled the feed grain oligopolies such as Ralston Purina, Cargill, Continental Grain, and Pillsbury to take control of chicken production in the late 1950s and early 1960s.\textsuperscript{72} Broiler production contracts between processors and farmers, as a USDA study notes, "basically are devices used by contractors to lease production facilities and hire labor owned by the contract producers. Contractors retain title to the birds and their ownership of other production inputs is so complete as to make the contractor rather than the farmer the real producer."\textsuperscript{73} Under this contract production system, the integrators are relieved of much of the investment cost whereas the farmers' income often sinks below the equivalent of the minimum wage. From 1950 to 1965, for example, according to USDA calculations, returns to operators and family labor on broiler farms in the key state of Georgia ranged between 54 cents and 1 cent per hour.\textsuperscript{74} Recent figures stating that growers still receive only about 59 cents per hour could be written off as an advocate's massaging of the data since they are calculated on the basis that "[t]he grower is expected to care for the flock 24 hours a day, 7 days a week."\textsuperscript{75} Yet, Perdue Farms proudly boasts

\begin{itemize}
  \item \textsuperscript{69} REIMUND ET AL., \textit{supra} note 36, at 8.
  \item \textsuperscript{70} Local 425 Strikes Tyson's, \textit{Wages Consumer Boycott}, BUTCHER WORKMAN, Nov.-Dec. 1965, at 2, 2-3.
  \item \textsuperscript{72} HARRISON WELLFORD, \textit{Sowing the Wind: A Report from Ralph Nader's Center for Study of Responsive Law on Food Safety and the Chemical Harvest} 104 (1972); FRANCES MOORE LAPPÉ ET AL., \textit{Food First: Beyond the Myth of Scarcity} 304-07 (1981).
  \item \textsuperscript{73} REIMUND ET AL., \textit{supra} note 36, at 15.
  \item \textsuperscript{74} PACKERS AND STOCKYARDS ADMIN., U.S. DEP'T OF AGRIC., \textit{The Broiler Industry: An Economic Study of Structure, Practices and Problems}, 21 tbl. 18 (1967) (hereinafter \textit{The Broiler Industry}).
  \item \textsuperscript{75} Mary Clouse, \textit{Farmer Net Income from Broiler Contracts} (Rural Advancement
that “[f]amilies who commit to raising Perdue chickens wear beep­ers to warn them even in their sleep if the temperature begins to go too high or too low for sensitive birds.”

Such low effective wages explain in part why predictions proved incorrect that it would be impossible to compete with the old system of poultry raising in which the farmer’s wife supplied almost all the labor “free.” Getting the worst of both worlds, the farmers, though they may view themselves as “little more than low-paid employees” and “hired hands,” are treated by the companies as independent contractors and thus “robb[ed]” of their entitlement to workers’ compensation, health insurance, or paid vacations. The National Commission on Food Marketing soberly described the calculus that made “contract farming” a more profitable mode of coordination for processors than formal ownership: “many underemployed farmers with facilities available were willing to sell their labor at very low rates because they had few or no alternatives. Also, contracts were attractive to integrators because they involved no social security, workman’s compensation, and other similar employee costs.” In addition to these cost-cutting measures, outright cheating, in the form of purposely underweighing the broilers raised by the farmers, is also available to integrators.

One of the chief economic advantages that favored the shift of the center of the broiler industry during the 1950s to the South—which increased its share of output from 42% to 70% during that decade—was the “availability of large amounts of low wage labor which has been employed in the highly labor intensive broiler processing industry.” The South had an “abundant

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76. PERDUE & CHICKEN, supra note 62, at 9.
77. SAWYER, supra note 59, at 36.
81. See, e.g., Braswell v. ConAgra, Inc., 936 F.2d 1169 (11th Cir. 1991) (affirming the trial court’s decision in favor of the grower when a buyer had misweighed the broilers over an eight-year period).
82. WESTERLUND, supra note 63, at 37.
83. Herbert J. Milgrim, Productivity and Growth of the Broiler Chicken Industry 129
labor surplus"84 and a lack of "alternative opportunities for labor,"85 and consequently wage rates were less than two-thirds of those prevailing in the North.86 As a result, particularly in the South, "[t]he problem . . . [wa]s the weak bargaining position of the grower."87 The farmers’ vulnerability was exacerbated once they had committed $10,000 to an investment in buildings, equipment, and land that "ha[d] scarcely any value in alternative uses in the absence of a broiler contract. A return on this investment depend[ed] upon having a broiler contract."88 Yet farmers faced a lack of "effective competition" for broiler contracts.89 In the big producing states of Alabama, Georgia, and Arkansas, for example, the four largest firms accounted for one-quarter of all federally inspected slaughter.90 Under these circumstances, a grower was "reluctant to complain about what he consider[ed] to be unfair or offensive trade practices" for fear of being "labeled a 'problem' producer."91 The oppressiveness of the contracting system is illustrated by the fact that a "problem grower" included anyone who even "attempted to obtain a written copy of his contract."92 In many localities the presence of only a single integrator made resistance, in the face of a thin market, financially suicidal.

Emblematic of the lopsided power structure in the industry was the USDA Packers and Stockyards Administration’s issuance of a complaint in 1965 against Tyson Foods, Inc. and Ralston Purina Company for boycotting and blacklisting broiler growers known to be or suspected of being members of an organization seeking to promote the farmers’ interests.93 Even a cooperative farming company, Gold Kist Inc., the second or third largest poultry producer,
has been suspected by the USDA of "locking poultry growers into a 'feudal-serf production system' in which farmers are just piece-rate workers."\textsuperscript{94} Having formed a consciousness appropriate to their new conditions, more than 99\% of the member-growers of the Texas Broiler Association voted in 1958 to affiliate with the Amalgamated Meat Cutters and Butcher Workmen of North America,\textsuperscript{95} thus heralding, in the words of the Association's President, "the emancipation of broiler growers from the bonds forged by cruel exploitation of the Big Rich under a system of peonage far more galling and cruel than anything under the old sharecropper system."\textsuperscript{96}

In the typical vertically integrated broiler production, all steps, with the exception of the primary breeding of parent stock chicks, are combined into one efficient operation. . . . [T]he cycle has only one major input (feed ingredients) and one major output (product sold). In a modern, vertically integrated broiler production complex, these are the only transactions that actually occur and all other steps involve merely an internal transfer of resources. The entire operation thus relies on only one profit center. This process is highly efficient and is analogous to a single, large factory converting raw materials (feed ingredients) into finished product for the consumer (poultry products).\textsuperscript{97}

For example, with the acquisition of Cobb-Vantress, Inc., one of the world's largest producers of breeding stock, Tyson Foods completed the cycle of vertical integration.\textsuperscript{98} It is this all-embracing vertical integration that has enabled firms to develop genetically


\textsuperscript{97} Charles F. Strong, Jr., Vertical Integration in the Poultry Industry 3 (footnote omitted) (unpublished manuscript, on file with author).

\textsuperscript{98} Although Tyson does not juridically own the broiler farms, in the 1950s and 1960s some firms, such as Armour in Delmarva, also owned the farms. \textit{TYSON FOODS, INC.}, 1994 ANNUAL REPORT 3 (1994); Dan McGraw, \textit{The Birdman of Arkansas}, \textit{U.S. NEWS & WORLD REPORT}, July 18, 1994, at 42, 44; Martin, supra note 38, at 26; Milgrim, supra note 83, at 134-38; Ewell P. Roy, Economic Integration in the Broiler Industry 105 (1955) (unpublished Ph.D. dissertation, Louisiana State University).
uniform “products” that can be processed by automated equipment and thus reduce costs in ways that meat producers have thus far been unable to imitate.  

This type of integration was exemplified by such large feed companies as Pillsbury and Ralston-Purina, which were among the four largest broiler producers by the mid-1960s. Pillsbury, which had produced no broilers before 1960, integrated through acquisitions to protect its feed mills in the South whose sales were threatened by a constriction of the market as integrated broiler producers began manufacturing their own feed. By 1970, Pillsbury was the second largest broiler processor in the United States. Ralston-Purina, the largest integrator by the early 1960s and still the largest at the end of the decade, had undergone the same process of integration five years earlier. Both firms divested their poultry divisions in the early 1970s, in part because the industry’s cyclical character was inconsistent with an entrepreneurial strategy of a consistent flow of profits. ConAgra, which ultimately acquired the poultry operations of Swift and Armour, which abandoned poultry production in the wake of their own conglomeratization, also vertically integrated into the broiler industry; after having been a feed manufacturer for two decades, the then Nebraska Consolidated Mills bought a broiler operation in 1961.

100. Poultry and Egg, supra note 34, at 14.
105. Telephone Interview with Bill Burns, former Assistant Research Director, Amalgamated Meat Cutters (Apr. 20, 1995).
In one of the most interesting backward integration processes, Heublein, Inc., used its subsidiary, Spring Valley Foods, the tenth largest broiler processor in 1975, to supply 25% of the poultry for the 900 Kentucky Fried Chicken restaurants that it owned. When broiler prices fell and feed prices rose in the mid-1970s, however, Heublein sold its broiler operations. By the mid-1980s, the capital requirements for a million-bird-per-week broiler complex including processing plant, feed mill, hatchery, rolling stock, and broiler, breed, and pullet houses amounted to $75 million, of which the processing plant alone cost $25 million.

In the course of this transformation of producers from a quasi-home industry into a multibillion dollar business engaged in monopolistic practices and exposed to antitrust liability, the broiler industry experienced explosive growth in total production and per capita consumption. Table 1 and Figure 1 depict this development from the Great Depression to the present:

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ConAgra's entry into the chicken business in 1961 with the purchase of a broiler operation.

107. The 20 Big Ones!, BUTCHER WORKMAN, May 1976, at 27 (listing Kentucky Fried Chicken as the tenth largest broiler processor).
108. Id.
109. MOODY'S INVESTORS SERVICE, MOODY'S INDUSTRIAL MANUAL 1750 (1978); Heublein Quits Poultry, BUS. WK., Nov. 15, 1976, at 54.
**Table 1: UNITED STATES BROILER PRODUCTION AND CONSUMPTION, 1934-93**

<table>
<thead>
<tr>
<th>Year</th>
<th>Production (000,000 lbs.)</th>
<th>Consumption (lbs. per capita)</th>
<th>Year</th>
<th>Production (000,000 lbs.)</th>
<th>Consumption (lbs. per capita)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1934</td>
<td>97</td>
<td>0.5</td>
<td>1964</td>
<td>7,521</td>
<td>27.6</td>
</tr>
<tr>
<td>1935</td>
<td>123</td>
<td>0.7</td>
<td>1965</td>
<td>8,111</td>
<td>29.6</td>
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<td>1993</td>
<td>30,592</td>
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During these six decades, broiler production in live weight increased 315-fold while per capita consumption rose 137-fold. If the chicken that Herbert Hoover had wanted to put in every pot shortly before the great crash of 1929 was still a luxury, and 90% of housewives surveyed in the early 1950s still served chicken only on Sunday, predictions made in the 1960s that per capita consumption was approaching its human limits were manifestly premature. The number of broilers produced during this period rose almost 200-fold—from 34 million to 6.7 billion. In 1992, for the first time, per capita consumption of broilers surpassed that of beef. In more recent years, this growth was spurred in part by

113. See JOHNSON, supra note 48, at 46 (stating that broilers are a luxury for most people).
116. LASLEY, supra note 112, at 4, 8-9; National Broiler Council, Per Capita Consump-
the proliferation of chicken-using fast-food restaurants where, by the end of the 1980s, one-third of chicken production was destined for consumption.\textsuperscript{117}

Despite labor-saving capital investment and productivity, this unusual growth in consumption and output brought about a strong increase in employment. In the broader poultry industry, the number of employees rose from 22,000 in 1947 and 60,000 in 1958 to 226,000 in 1994, while the number of production workers increased from 19,000 and 55,000 to 200,000.\textsuperscript{118} For the years between 1983 and 1993, the last decade for which comparative data are available, poultry slaughtering and processing exhibited the greatest relative increase in employment of all four digit SIC manufacturing industries—66%;\textsuperscript{119} the absolute increase of 86,000 ranked second.\textsuperscript{120} For the twenty years ending in 1993, the absolute increase of 110,000 employees ranked second, and the 103% relative increase fourth.\textsuperscript{121}

The United States has become by far the world’s largest consumer, producer, (aggregate and per capita), as well as the leading exporter, of broilers. By the mid-1980s, U.S. per capita consumption was about two-thirds higher than that in Western Europe.\textsuperscript{122} The United States accounts for 30% of the world’s broilers, which make up three-fourths of world poultry production.\textsuperscript{123}

\textsuperscript{117} Janet Key, Chicken’s Salad Days in Fast Foods, CHI. TRIB., Sept. 3, 1989, at 1; see also Agnes Perez et al., Introducing a Broiler Retail Weight Consumption Series, LIVESTOCK & POULTRY: SITUATION & OUTLOOK REPORT, May 1992, at 28 (indicating a general increase in consumption, in addition to a shift in sales from whole to cut up chickens, with a spike of 22.1% in 1987).


\textsuperscript{119} Bureau of Lab. Statistics, U.S. Dep’t of Lab., Employment performance since 1983, 4-digit level manufacturing industries, seasonally adjusted, sorted by change in level of employment (unpublished data on file with author).

\textsuperscript{120} Id.

\textsuperscript{121} Id.

\textsuperscript{122} See R.T. Parry, Technological Developments in Pre-Slaughter Handling and Processing, in PROCESSING OF POULTRY at 65, 66 (G.C. Mead ed., 1989) (stating that per capita consumption of poultry for the EEC is about 33 pounds per person in the mid 1980s); see also supra note 112 and accompanying Table 1 (stating that per capita consumption of broilers in the United States was 55.1 pounds in 1985).

\textsuperscript{123} OFFICE OF INDUSTRIES, U.S. INT’L TRADE COMM’N, USITC PUBLICATION 2520 (AG-6), INDUSTRY & TRADE SUMMARY: POULTRY, B-8 to B-9 (1992) [hereinafter INDUS-
The first major U.S. broiler export push occurred in the latter half of the 1950s, in large part as a means of overcoming the first serious overproduction crisis, which had surfaced in 1954 as "the broiler industry reached that point all industries do, where production . . . surpassed consumer demand at a profitable price." While "[i]nefficient operators [were] falling by the wayside [t]he promise of profit [was] in volume, so operations [were] becoming larger and more efficient."124 In other words, processors and other links in the integrated production chain faced falling prices that could not be accommodated by means of lowering costs because productivity had reached a temporary plateau. Consequently, processors sought to "maintain a high rate of activity in order to meet the needs of their expanded facilities."125 While the USDA secured an informal agreement with governmental lending agencies and banks to exercise caution in making loans for further expansion of production facilities,126 firms turned to external markets to purchase the surplus. Exports were concentrated in Western Europe, especially West Germany, to which United States shipments rose from four million pounds in 1956 to 152 million pounds six years later.127 The newly formed European Economic Community made efforts to protect its members', especially France's, fledgling broiler industry by imposing levies on U.S. exports, triggering the so-called Chicken War.128 Although U.S. exports during this brief period amounted to only 3% of total production, they were seen at the time as absorbing "an important increment to the market for producers in many areas."129 In order to overcome the increased tariffs, Swift and Wilson opened poultry plants in England and Spain.130

127. POULTRY AND EGG, supra note 34, at 81; Ross Talbot, The Chicken War 9-11 (1978).
128. Talbot, supra note 127, at 12.
Exports, which had averaged little more than 1% of total U.S. production from 1960 to the mid-1970s, rose almost 20-fold by 1993, and were estimated at 2.7 billion pounds or more than 11% of production by 1994.\textsuperscript{131} U.S. producers export almost twice as much in weight as their nearest competitors, French firms,\textsuperscript{132} which are, however, much more export dependent.\textsuperscript{133} Since 1985, U.S. broiler firms have benefited from direct subsidies for exports under the USDA’s Export Enhancement Program, which was designed to subsidize exporters competing with European firms in third-country markets and to pressure the European Community to reduce the level of its agricultural subsidies. The State also protects U.S. producers almost completely from imports, which account for less than one-half of one percent of the U.S. poultry market, by means of prohibitively expensive non-tariff health and sanitary measures. The low broiler production costs of U.S. firms, which in part reflect low wages vis-à-vis those among their Western European competitors, already make invasion of the U.S. market difficult.\textsuperscript{134} Finally, the industry has followed the typical trajectory of exporting manufacturing enterprises by establishing production facilities abroad. For example, in 1994, Tyson gained control over a vertically integrated Mexican poultry firm, enabling it to produce poultry for sale there.\textsuperscript{135}

The poultry industry has become increasingly concentrated and oligopolized as firm and plant sizes have increased. In 1964, 201 firms operated 320 slaughter plants.\textsuperscript{136} By 1984, 134 firms operated 238 such plants;\textsuperscript{137} the average slaughter per plant almost quadrupled during these two decades.\textsuperscript{138} From 1960 to 1987, the four largest firms increased their share of total broilers slaughtered from

\textsuperscript{131} National Broiler Council, Broiler Exports, Jan. 9, 1995 (unpublished material, on file with author).
\textsuperscript{132} Roenigk et al, supra note 123, at 3 (data for 1990-94).
\textsuperscript{134} See BISHOP ET AL., supra note 42, at 10 (noting that, at 29.9 cents per pound, U.S. tied with Thailand for the world’s lowest costs in 1986); ECONOMIC RESEARCH SERVICE, U.S. DEP’T OF AGRIC., MEASURING THE EFFECTIVENESS OF THE EXPORT ENHANCEMENT PROGRAM FOR POULTRY (Staff Report No. AGES-9016, 1990) (discussing the effectiveness of export subsidies designed to meet competition from the European community); INDUSTRY & TRADE SUMMARY, supra note 123, at 8-11; U.S. DEP’T OF COMMERCE, 1993 U.S. INDUSTRIAL OUTLOOK 31-6 (1993).
\textsuperscript{135} TYSON FOODS, INC., 1994 ANNUAL REPORT 14 (1994).
\textsuperscript{136} LASLEY, supra note 112, at 20.
\textsuperscript{137} Id.
\textsuperscript{138} Id.
12% to 38%.\textsuperscript{139} By another reckoning, of the 127 firms that produced and sold chicken in 1982, only 45 remained in 1989, most of which were small, regional, private companies. According to the 1987 Census of Manufacturers, the four largest companies in the poultry slaughtering and processing industry, which encompasses less concentrated branches such as turkey processing and egg processing, accounted for 28% of the value of shipments—three times the ratio for all manufacturing industries.\textsuperscript{140} By the same year, the average young chicken slaughtering and processing plant employed 538 employees.\textsuperscript{141} In 1989, the four largest firms, Tyson, ConAgra Poultry, Gold Kist, and Perdue Farms, controlled almost half (48%) of total production.\textsuperscript{142} Tyson alone accounted for one-quarter of all production in 1994.\textsuperscript{143} The extraordinarily compressed centralization in the industry can be gauged by the fact that just three decades earlier, two Harvard Business School analysts, both keen observers of the concentration dynamic of the period, had asserted that “[i]t seems altogether doubtful that the three largest entities in the business could account for as much as 50% of industry volume in the future.” Even the possibility that twenty-five firms might eventually produce 75% of total output appeared to them “an ultimate limit rather than an early prospect.”\textsuperscript{144}

A somewhat different pattern emerges from Table 2, which is based on data published by a leading trade magazine.

\textsuperscript{139} Id. at 22.
\textsuperscript{143} Broiler Production, Mid-1994, FEEDSTUFFS, July 20, 1994, at 21; Lisa Collins, Chicken’s Hot: Poultry Firms Scramble to Cash In, USA TODAY, Aug. 2, 1989, at 1B; Douglas Frantz, How Tyson Became the Chicken King, N.Y. TIMES, Aug. 28, 1994, at 1.
\textsuperscript{144} TOBIN & ARTHUR, supra note 129, at 108.
Table 2: LARGEST INTEGRATED BROILER FIRMS, 1994

<table>
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<th>Rank</th>
<th>Firm</th>
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<tr>
<td>1.</td>
<td>Tyson Foods</td>
<td>88</td>
</tr>
<tr>
<td>2.</td>
<td>Gold Kist</td>
<td>44</td>
</tr>
<tr>
<td>3.</td>
<td>ConAgra Poultry</td>
<td>38</td>
</tr>
<tr>
<td>4.</td>
<td>Perdue Farms</td>
<td>31</td>
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<tr>
<td>5.</td>
<td>Pilgrims' Pride</td>
<td>25</td>
</tr>
<tr>
<td>6.</td>
<td>Wayne Poultry/Continental Grain</td>
<td>20</td>
</tr>
<tr>
<td>7.</td>
<td>Hudson Foods</td>
<td>18</td>
</tr>
<tr>
<td>8.</td>
<td>Seaboard Farms</td>
<td>14</td>
</tr>
<tr>
<td>9.</td>
<td>Foster Farms</td>
<td>12</td>
</tr>
<tr>
<td>10.</td>
<td>Townsends</td>
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</table>

The scale of recent growth is indicated by the fact that Tyson slaughtered about 35 million broilers weekly in 1995—a volume quadruple that of the largest firm a dozen years earlier. According to this set of figures, the proportion of total industry volume accounted for by the three and five largest firms rose from 1980 to 1989 from 20% to 36% and 30% to 48% respectively. Mergers and acquisitions accounted for 80% of the increase in the four firm concentration ratio between 1977 and 1988. Perdue's 1995 acquisition of the twelfth largest producer, Showell Farms, Inc. further increased concentration as Perdue became the third largest producer. Other large producers include Cargill (twenty-first), which integrated forward from grain and whose chicken operations were sold to Tyson in 1995, and Campbell Soup (twenty-second), which uses all its Herider Farms production internally. As a result of this vertical integration and centralization of capital, a number of firms have become "enormous commodity conglomerates." ConAgra, for example, in addition to being the nation's

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number one flour miller and number two broiler processor and beef packer, is also the number one slaughterer of lambs and turkeys, the number two hog slaughterer.\textsuperscript{150} Industry observers remain convinced that further consolidation will occur regardless of whether the vehicle is internal expansion or acquisitions.\textsuperscript{151}

As the world's largest producer, Tyson's annual output exceeds that of all countries except Brazil and China\textsuperscript{152} and equals that of the eight largest European firms combined; Tyson is also the leading United States exporter, accounting for more than 60\% of total exports of the five largest firms.\textsuperscript{153} That market position in an industry facing uninterrupted growth in demand—the market has grown by 5\% annually over the last two decades—enabled Tyson to be the number-one-ranked \textit{Fortune} 500 firm, in terms of the growth rate in total returns to investors for the period 1976 to 1986, while ConAgra ranked fourth.\textsuperscript{155} For every ten-year period during the last decade, Tyson has ranked between first and seventh among the \textit{Fortune} 500 largest industrial firms in total return to investors, and first or second within the food industry.\textsuperscript{156} For the decade ending 1993, Tyson ranked fourth in total return to investors and seventh in earnings per share growth.\textsuperscript{157} That ConAgra has made achieving at least a 15-20\% after-tax cash earnings return on stockholders' equity its "most important financial objective"\textsuperscript{158} suggests the pressures to which it subjects its employees.

The location of poultry plants in small rural southern towns depressed by high unemployment\textsuperscript{159} and the hiring of large num-

\textsuperscript{150}. Marion & Kim, supra note 147, at 427-28.
\textsuperscript{152}. \textit{TYSON FOODS, INC., TYSON FOODS: CONSERVING TODAY FOR TOMORROW'S WORLD} (n.d.); \textit{TYSON FOODS, INC., TYSON FOODS TODAY} (1994) (declaring that Tyson is the largest producer of chicken in the world).
\textsuperscript{155}. \textit{The Fortune 500}, \textit{FORTUNE}, Apr. 27, 1987, at 355, 384; see also \textit{The Year's 25 Most Fascinating Business People}, \textit{FORTUNE}, Jan. 1, 1990, at 62, 72 (Don Tyson succeeded in building Tyson Foods "into the biggest U.S. chicken producer" and making moves to ensure its "dominance in the . . . industry.").
\textsuperscript{156}. \textit{TYSON FOODS, INC., 1994 ANNUAL REPORT} 17 (1994).
\textsuperscript{157}. \textit{The Fortune 500}, \textit{FORTUNE}, Apr. 18, 1994, at 209, 252.
\textsuperscript{159}. B.C. Rogers, for example, the 24th largest poultry producer, Thornton, supra note 145, at 27, boasts that it is about to open a processing plant in an area of Mississippi with 20\% unemployment. \textit{Broiler Production}, \textit{Mid-1994, Feedstuffs}, July 20, 1994, at
bers of minority women, especially single mothers without other options, have fostered conditions under which "poultry's Pashas" could profit from the gap between productivity and prices on the one hand and wages on the other. Whereas output per worker nearly tripled between 1960 and 1987, wages rose only half as quickly as chicken prices. The industry also has a long tradition of paying wages within the penumbra of the mandatory minimum. In 1964, for example, when the federal minimum wage was $1.25 per hour, hourly wages in southern broiler processing plants averaged $1.29 and ranged as low as 55 cents. Processing firms paying such low wages generated lower labor costs (per unit of output) than firms with average wage rates and twice the productivity (in terms of birds per worker-hour). The wage level was so low that industry consultants (erroneously) warned firms that a failure to raise it would trigger a "severe manpower shortage" and unionization. A decade later, the Amalgamated Meat Cutters complained that "the vast majority of . . . poultry workers . . . receive incomes that are below the poverty level." Even a dissertation writer whose mission was to help processing firms lower labor costs in an industry where "less than ideal" working conditions were associated with turnover rates as high as 245%, conceded that wages were "among the lowest for industrial labor." By the 1990s, with almost half of poultry processing workers concentrated in the low-wage and antiunion states of Alabama, Arkansas, Georgia, and North Carolina, average annual payroll per employee

21, 21; Chris Gilmer, B.C. Rogers to Market 230 Million Pounds of Chicken this Year, MISS. BUS. J., June 7, 1993, at 19, 19; Telephone Interview with Jack Rogers, B.C. Rogers General Counsel (Feb. 6, 1995); see also Jennifer Toth, Meanwhile in the Other South, BUS. WK., Sept. 27, 1993, at 104 (describing how a rural North Carolina town relies on a poultry plant to keep unemployment rate low).


162. See id.


166. Personick, supra note 27, at 1.
in the industry amounted to $14,858—only slightly more than half of the $27,812 paid to the average manufacturing employee.\footnote{167}

III. THE LEGISLATIVE HISTORY OF POULTRY PLANT REGULATION

\textit{[S]lavery time isn't over for many of the people who make it possible for the rest of us to buy cheap chickens. . . . It's not the kind of slavery that ended with the Civil War. No one is dragged in chains to produce those chickens and to process them. But it is a system of virtual economic peonage. . . . Let's acknowledge that some of the food products we expect to be delivered to us at ever-lower prices are being paid for dearly by others in both economic and . . . human terms.\footnote{168} }

Not until 1959 did Congress require the Secretary of Agriculture to inspect the carcass of each bird processed as human food. Congress’s chief objective was, to be sure, the protection of the health and welfare of consumers, not a few of whom had in recent years been made ill or even killed by diseased birds that “chiselers,”\footnote{169} in the absence of independent state inspection, had been able to place in interstate commerce. Nevertheless, consumer well-being was not Congress’s only concern. As several of the chief legislative sponsors of the bills that ultimately became the Poultry Products Inspection Act repeatedly stressed, the federal government’s intervention, sparked in part by deaths among poultry processing workers who had handled diseased birds,\footnote{170} was also designed “[t]o protect the health of persons engaged in the processing and distribution of poultry and poultry products.”\footnote{171} Indeed, one of the chief movers of the legislation, Representative

\footnotesize{\begin{itemize}
\item \footnote{167. See U.S. Bureau of the Census, 1991 Annual Survey of Manufacturers: Statistics for Industry Groups and Industries 1-28 (1992) (calculated from Table 3).}
\item \footnote{168. George Anthan, Shameful Exploitation of Poultry Workers, Gannett News Service, Sept. 6, 1991, available in LEXIS, News Library, GNS file.}
\item \footnote{169. Poultry Inspection: Hearings Before the Subcomm. on Poultry and Eggs of the House Comm. on Agric., 84th Cong., 2d Sess. 145 (1957) [hereinafter Poultry Inspection: Hearings] (statement of Shirley Barker, Amalgamated Meat Cutters and Butcher Workmen) (defining chiselers as “operators who seek a quick and easy profit no matter what dangers or consequences result to the public or industry”).}
\item \footnote{170. 103 Cong. Rec. 2744 (1957) (Rep. Leonor Sullivan).}
\item \footnote{171. Id. at 2745 (quoting from H.R. 12, 85th Cong., 1st Sess. (1957) that Rep. Sullivan had introduced earlier).}
\end{itemize}}
Sullivan, noted that the Amalgamated Meat Cutters and Butcher Workmen of North America had first called her attention to the problem. Similarly, Senator Murray, one of the most vocal advocates of the legislation, and the Committee on Labor and Public Welfare underscored that the union had rendered a great service to the health of the American people by taking the initiative in alerting Congress to the need for the legislation.

Indeed, the Meat Cutters, which had begun an intensive drive to organize poultry workers around 1940, urged federal legislation as early as 1947 to deal with problems of sanitation and disease. The campaign accelerated in 1954 when the union created a poultry department. Under such titles as Congress Should Probe Poultry and Poultry Fraud and Filth Flow On, the organization’s monthly magazine proclaimed poultry cleanup and inspection its highest priority. With circumspection, the union president launched the crusade with the disclaimer that it was not intended to “damage the reputation of the poultry industry, which has literally mushroomed into a mammoth industry overnight and in a sense may still be experiencing ‘growing pains.’” Yet a decade earlier, when the union newspaper in a banner headline had sought to “Page Upton Sinclair!” so that The Jungle could be rewritten to focus attention on the “appalling” conditions in poultry plants, it had not only singled out the large meatpackers, but “urge[d] the poultry workers of the nation to throw off their shackles.”

172. Id. at 11,127.
178. Hilton E. Hanna, Poultry Cleanup and Inspection Voted No. 1 Amalgamated Project, BUTCHER WORKMAN, June 1954, at 8.
Just as the meat packing oligopolies had actually supported mandatory inspection at the turn of the century both to eliminate smaller companies’ advantages and to induce European countries to lift their bans on the importation of United States meats,181 poultry companies had their own reasons for supporting mandatory inspection. In 1926, the Federal Poultry Inspection Service was created to help local government agencies carry out their food safety programs.182 Some localities’ requirement of USDA certification stimulated producers’ interest in a federal system. The significant growth in demand for poultry during and immediately after World War II transformed the industry “from one with primarily local markets to one with nationwide markets that could be effectively served only by uniform national inspection procedures and standards.”183 As early as 1952, the Institute of American Poultry Industries had begun urging a uniform sanitation code in preference to the proliferation of myriad state and local laws and ordinances regulating poultry wholesomeness subject to voluntary inspection by the USDA.184 Had this proliferation continued, processors “wishing to sell poultry across the country would find it practically impossible because of all the differences in poultry codes.”185 When the Institute of American Poultry Industries polled its members representing 1,800 plants in 1956, fewer than 5% opposed the organization’s resolution requesting mandatory federal inspection.186

Representative Johnson, a majority member of the small Subcommittee on Poultry and Eggs of the House Committee on Agriculture, in discussing a compromise bill before the full House of Representatives, observed that all interested parties, including consumers, public health officials, USDA, poultry worker unions, and

183. MEAT AND POULTRY INSPECTION, supra note 45, at 14.
185. SAWYER, supra note 59, at 189.
186. Id.
poultry industry groups, "agreed on the need for adequate inspection to protect consumers and laborers in the processing plants, while at the same time not burdening the processor with extraordinary expense and redtape." Consequently, "[t]he objective of the poultry inspection bill [wa]s to protect the consumer and the worker in the plant from unfit and diseased poultry and to protect the producer and processor from an unworkable inspection program that might [have driven] them out of business." Accordingly to John Harvey, the Deputy Commissioner of the Food and Drug Administration, who testified before the Senate Labor & Public Welfare Committee, one of the principal reasons that the legislation provided for ante mortem (in addition to post mortem) inspection of poultry, was "to guard against infection of plant workers." While rebuking the USDA for "assign[ing] little, if any, importance to the occupational hazard to workers in the industry which may be lessened by ante mortem inspection," the committee itself insisted that there was "a serious problem of hazards to workers in processing plants where no ante mortem inspection is required." Senator Humphrey echoed this view in arguing that inspection was "a major protection for poultry workers against industrial hazards. Any diseased birds which are prevented from coming on the processing line obviously cannot infect the workers."

What is especially instructive about all these legislators' statements is their timing. Representative Sullivan worked closely with the Meat Cutters Union, which strongly supported mandatory poultry inspection. She included in the preamble of two early bills the following phrase: "To protect the general consuming public, to protect the health of persons engaged in the processing and distribution of poultry and poultry products." Less than two months after she had filed the latter of these two bills, she introduced H.R. 5398, which no longer contained the reference to workers'
Yet even as she introduced this bill, she made the speech from which the foregoing quotations concerning the impact of inspection on workers' health were taken. The other legislators' above-cited statements to the same effect were also made after the reference to worker health had disappeared from the bills.

In the late 1950s, four large unionized meatpacking firms (Swift, Armour, Wilson and Cudahy) had largely been organized by the Amalgamated Meat Cutters. Butchers in urban supermarket chains were also largely unionized. Consequently, labor unions had the ability to play a significant legislative role. After all, despite substandard conditions and brutal and racist resistance by some southern processing firms, the Amalgamated Meat Cutters purported to represent 30,000 poultry workers in the 1950s and to have contracts with 280 of 900 poultry plants in the early 1960s. Thus, although the union achieved neither broad-scale organization of the industry nor national collective bargaining as it had with the red meat companies, and poultry workers in plants owned by the large meat producers received much lower wages than those firms' meat packing workers even where the poultry operations were much more profitable, several locals were so successful that by 1959, not only were all seventeen Delmarva poultry processing plants unionized, but even fourteen of nineteen in Arkansas were under union contract. In those areas,
the union was able to negotiate uniform wage contracts.\textsuperscript{205} Labor unions' support of various inspection bills was predicated on the understanding that they would protect both consumers and poultry workers. Representatives of the Amalgamated Meat Cutters and of the AFL-CIO, who stressed that the poultry industry consistently showed the third highest injury frequency rate in United States manufacturing, adopted this position repeatedly in their congressional testimony with regard to bills that lacked any express reference to workers' health and safety.\textsuperscript{206} Leon Schachter, a vice president of the Amalgamated Meat Cutters and Butcher Workmen, explained to the Senate Committee on Labor and Public Welfare that the union had "become especially familiar with the dangers faced by poultry workers when they are forced to work in filthy surroundings and handle diseased fowls. Rashes, infections, and sometimes severe illnesses and deaths, haunt workers in sections of the industry."\textsuperscript{207} Moreover, the union was pressing urgently for mandatory inspection legislation because "the worker has no way to protect himself against this thing. Organizing itself won't do any good against poultry illness."\textsuperscript{208}

Shirley Barker, Director of the Poultry Department of the Amalgamated Meat Cutters and Butcher Workmen, listed the four major purposes of mandatory poultry inspection as protection of (1) "the health and purchases of consumers;" (2) "the health of poultry workers;" (3) "the reputable processors against dangers to his [sic] business provided by the practices of the shady operators;" and (4)


\textsuperscript{207} Mandatory Poultry Inspection, \textit{supra} note 173, at 52.

\textsuperscript{208} Id. at 66.
"the poultry farmers' business." Moreover, Barker characterized the achievement of "the latter two objectives [as] necessarily dependent upon the first and somewhat on the second." Barker also testified that,

[as far as the poultry worker is concerned, ante mortem inspection and plant sanitation are the two most important protections provided in the inspection bills. He depends upon ante mortem inspection to prevent or minimize the amount of diseased poultry coming on the processing line and possibly infecting him there.]

Whereas several bills that the union opposed made ante mortem inspection discretionary, Senate Bill 1128, supported by the union, mandated such inspection. However, it left the manner of carrying out that mandate in the discretion of the Secretary of Agriculture. The mandatory language of Senate Bill 1128 was virtually identical with that of the Poultry Products Inspection Act (PPIA) and its current codified version.

Even after enactment of the PPIA, which was printed in full in the Amalgamated Meat Cutters' monthly magazine, the union continued to stress the risks to which its members were exposed. Under such titles as Don't Be Chicken; Be a Chicken Plucker, it pointed out that the injury rate in the industry was twenty times greater than in explosives manufacturing. Continuity in the understanding of the statute as subsidiarily protecting poultry workers became clear in 1968, when Congress held hearings on amendments to the PPIA. At that time, the legislative representative of the Amalgamated Meat Cutters testified that the union was persisting in its efforts on behalf of consumer-protective regulations in part out of "self-interest[.] Our members working in poultry

209. Inspection Act Hearings, supra note 206, at 125.
210. Id.
211. Id. at 128.
212. Id. (statement of Shirley Barker); S. 1128, 85th Cong., 1st Sess. § 5(a) (Feb. 7, 1957).
213. 103 CONG. REC. at 1646 (text of S. 1128, §5(a)).
216. Poultry Bill Signed by President; Becomes Law, BUTCHER WORKMAN, Sept. 1957, at 10.
217. Don't Be Chicken; Be a Chicken Plucker, BUTCHER WORKMAN, May 1958, at 14.
plants are protected from illness if the plant is clean and the product is wholesome. Federal inspectors can assure this protective cleanliness and absence of disease far better than can the union grievance machinery.”219 As a result, the union expected that the legislation would “drive out of the marketplace any and all poultry which poses any possible danger to the health of consumers and poultry workers.”220

IV. THE USDA AND THROUGHPUT ÜBER ALLES

Modern processing plants are a far cry from grabbing a chicken by the neck and whacking off its head.221

How far the USDA would disappoint Congress’s original intent and labor’s expectation would become very clear, very soon. One of the first consequences of the advent of mandatory inspection was the modernization of production facilities,222 resulting in an exacerbation of the already realized potential for overproduction and an effort by firms to induce Americans to double their consumption.223 The statutory ban on the processing or sale of uneviscerated (New York dressed) poultry products in interstate commerce224 created a powerful incentive for firms to mechanize.225 Since some plants were too outdated to meet new sanitary requirements, the normal process of moral obsolescence was accelerated by the need to meet regulatory deadlines. In the course of building new plants to comply in timely fashion with the USDA regulations, firms increased capacity by introducing the latest high-performance automated processing equipment; within a year to fourteen months, total processing capacity rose by about one-third.226 “If an automated processing plant, with its high capital investment, is to make a return, it has to run chickens. Heavy

219. Id. at 154 (statement of Arnold Mayer, Legislative Representative, Amalgamated Meat Cutters & Butcher Workmen of North America (AFL-CIO)).
220. Id. at 158.
221. Frantz, supra note 143, at 6.
225. FABER, supra note 68, at 16.
226. SAWYER, supra note 59, at 190.
pressure was on the industry to increase production, and the indus-
try had already been having some serious price problems—with a
finger of blame pointed at overproduction."227 Thus, mandatory
inspection almost immediately reinforced the forces inherent in
capital accumulation to increase the rate of throughput and to con-
centrate and centralize production in fewer firms.228 From 1960 to
1964, the proportion of federally inspected slaughter accounted for
by the four largest firms rose from 12% to 18%.229 Looked at
from a slightly different perspective, if in 1960, the nineteen larg-
est processing firms slaughtered 30% of the total poultry inspected
by the USDA, by 1964 the same share was accounted for by only
nine firms.230 Much of this increased concentration occurred
through mergers or acquisitions.231 From 1960 to 1963 alone, the
competitive "attempt to avoid an orgy of overproduction" halved
the number of major firms producing three-fourths of total output
from 100 to 50.232 This concentration of "ownership—or at least
the control over decisions . . . beginning in 1959, and rapidly
accelerating in 1961-62,"233 promoted by the state's own actions,
made a mockery of the contemporaneous "firm opinion" of the
House Select Committee on Small Business that the "broiler indus-
try is an industry where small business can perform any necessary
function as efficiently as a giant concern."234

As the concentration of processing in the largest plants contin-
ued during the latter part of the 1960s,235 the USDA published a
report titled, Efficiency in Poultry Evisceration and Inspection
Operations, which left no doubt that workers' welfare was of no
concern to it: "The purpose of Federal inspection of poultry in
processing plants is to assure a wholesome product. It is to the
advantage of all people concerned—the producer, the processor, the
inspector and the consumer—that Federal poultry inspection be
carried out efficiently and effectively."236 In connection with the

227. Id.
229. POULTRY AND EGG, supra note 34, at 16 tbl. 3-4.
230. THE BROILER INDUSTRY, supra note 74, at 8.
231. Id.
232. Western, supra note 101, at 1.
233. TOBIN & ARTHUR, supra note 129, at 101.
235. ECONOMIC RESEARCH SERV., U.S. DEP'T OF AGRIC., MARKETING RESEARCH RE-
PORT NO. 971, MARKET STRUCTURE OF THE FOOD INDUSTRIES 44 tbl. 28 (1972).
236. AGRICULTURAL RESEARCH SERV., U.S. DEP'T OF AGRIC., MARKETING RESEARCH
REPORT NO. 813, EFFICIENCY IN POULTRY EVISCERATION AND INSPECTION OPERATIONS 1
congressional mandate to perform a post mortem inspection of every bird produced for commerce, including the exterior, the interior, the body cavity, and the viscera, in a process that The New York Times called "a pretty stomach-turning affair," the USDA established various maximum inspection rates dependant upon the configuration of the production line and the number of inspector stations on the line. Conflating its inspectional duties with its myri­ad other activities as facilitator of agribusiness welfare, the USDA immediately began conducting studies designed to help processing companies increase the speed at which they pushed their workers.

Within two years of the onset of federal inspections, the USDA had launched its first Tayloristic time-and-motion studies that showed employers how to reduce labor requirements on the labor-intensive evisceration line. In identifying the most efficient methods used by average workers, this program was driven by the absence of information on labor requirements and of "criteria for crew size and balance in relation to line speed and operating volume." These time-and-motion studies revealed, for example, that reducing the time required to "[r]each for [the] next bird" enabled a worker to remove the oil gland of 36.8 birds per minute rather than a mere 33.0. The USDA also discovered that a slicing cut with a six-inch knife enabled one worker to make an opening cut on 45 birds per minute or 2,700 per hour in contrast with only 28.7 birds per minute or 1,722 per hour with a stabbing cut. Indeed, because the longest work cycle on the eviscerating line was only six seconds and because the workers were so crowd­ed together that it was difficult to observe their hand movements, the investigators were forced to use motion picture cameras rather than stopwatches. Without pausing to relate whether the affected workers expressed their gratitude for these helpful tips on how to fill in the "time-pores" of their leisurely working day more densely, the USDA proceeded to a similar analysis of its

(1968) [hereinafter EFFICIENCY IN POULTRY EVISCERATION].

237. N.R. Kleinfield, America Goes Chicken Crazy, N.Y. TIMES, Dec. 9, 1984, § 3, at 1, 9.

238. AGRICULTURAL MARKETING SERV., U.S. DEP’T OF AGRIC., MARKETING RESEARCH REPORT No. 549, METHODS AND EQUIPMENT FOR EVISCERATING CHICKENS 4 (1962) [hereinafter METHODS AND EQUIPMENT].

239. Id. at 5.

240. Id. at 9-10.

241. Id. at 17, 18 tbl. 7.

242. Id. at 53.

243. KARL MARX, ZUR KRITIK DER POLITISCHEN ÖKONOMIE (MANUSKRIFT 1861-1863),
inspectors' activities. Such throughput über alles guidance fit comfortably within the pattern set by the Agricultural Experiment Stations of the southern states. They, too, were so preoccupied with advising broiler processing plant managers on how to "maximize labor efficiency" at varying line-speeds that the attention they paid to the problem of "an excessive rate of . . . mutilated, unmarketable birds" blinded them to the workers who became unmarketable.

The investigation culminated in two tables displaying the labor requirements for evisceration at production levels ranging from 30 to 90 birds per minute. The USDA stated that "[t]he plan in establishing the most economical line speeds for labor utilization is to arrive at the production level where the most birds possible are processed properly per man-hour of labor expended." Rates per worker varied from a mere 11.7 birds per minute for gizzard removal to 78.8 birds per minute for removal of necks with a knife (achieved by a worker snipping simultaneously on two lines). These rates were not even "the maximum that can be achieved by a worker, but rather the rates that average workers can maintain throughout a day." "Even an average worker can be expected to increase his output by 15 to 20% for short periods of time without decreasing the quality of workmanship." The USDA did not bother to investigate how much longer than a workday workers could sustain this pace and the impact it had on their physical and mental health. Rather, what the USDA deemed crucial was "[m]aximizing labor input through optimum crew balance" and "[g]earing line speed to methods and equipment yielding the highest production rate per worker consistent with good workmanship, rather than striving for the greatest possible total production."

The purpose of the calculations was to determine how close to these rates workers performing the various functions along the line could come at varying line-speeds and at what break points it was profitable to add another worker. The problem that the USDA was
seeking to help broiler oligopolists solve was one that is inherent in all division of labor in which "one worker directly employs . . . the other." This "direct dependence . . . of the workers on one another compels every single one to use only the necessary time for his function," thus forging a unique level of labor intensity, which appears as "a technical law of the process of production itself." Various operations along the production line require varying amounts of time and thus supply varying quantities of product during the same time. Thus, if a rigid division of labor requires the same worker to perform the same operation every day, then "a fixed mathematical relationship" or proportionality between groups of detail workers has to be established for a given scale of production.

In time, firms pressured the USDA to acquiesce in their throughput über alles strategy, which also pushed individual workers’ rates to maximum levels. In an industry where "[e]conomy of scale is everything," the firms’ interest was palpable: by the late 1950s, a southern plant could, by increasing the rate of throughput from 600 birds per hour to 9,600 per hour, reduce its processing costs from $3.69 to $2.62 per 100 live pounds, while the corresponding figures for a plant in the North were $5.13 at 150 birds per hour and $2.64 at 10,000 birds per hour. By 1964, only thirteen plants in the United States operated at more than 10,000 birds per hour.

By 1968, the USDA undertook, by means of linear programming, to determine the time required to conduct federal poultry inspection and the influence of line-speed, bird spacing, and other factors on the inspectors’ productivity in order to help management attain 100% (and even 110%) inspector and worker "utilization" and avoid certain production levels inconsistent with those goals. The USDA took the position that "[e]stablishing a universal rate of inspection is impractical . . . even in plants using

253. Id.
254. Id. at 346.
255. Franklin, supra note 22, at C3.
258. Poultry and Egg, supra note 34, at 20-21 tbl. 3-9.
259. Efficiency in Poultry Evisceration, supra note 236, at 1, 9.
similar equipment, because the . . . [t]ime requirements . . . vary from plant to plant." Nevertheless, it established inspection rates ranging from 18.5 to 22.7 birds per minute for differently configured lines.260

The support that the USDA was providing poultry firms in the 1960s prompted sharp criticism from the Amalgamated Meat Cutters, which objected to the use of federal tax revenues for "setting employee production standards."261 The union charged that the USDA, "[a]pparently not content with the . . . unbelievable production and processing . . . speeds," had been experimenting with poultry automation that eliminated rather than created employment.262 By the end of the decade, the union was expressing concern about the pace and proliferation of labor-saving automation.263 In addition to mechanized killing, cutting, deboning, wrapping, packaging, and weighing, the Amalgamated Meat Cutters appeared most worried about the advent of automated eviscerating machinery, which after thirty years of experiments had met USDA inspection standards and would oust ten workers.264

By the mid-1970s, USDA officials were inspecting on average 23 birds per minute; the 2-inspector configuration thus permitted slaughter line-speeds of 46 birds per minute.265 However, the development of automated evisceration equipment, as well as improvements in genetics, nutrition, health, and flock management, allowed the poultry industry to present uniform lots of birds to inspectors faster than inspectors could properly inspect the birds under the traditional inspection procedure. Therefore, a new inspection procedure was developed in 1978 which allowed better utilization of inspection resources and permitted the poultry industry to take advantage of these new technologies and production improvements.266

260. Id. at 8 tbl. 3.
264. Id.
266. New Line Speed Inspection System for Broilers and Cornish Games Hens, 49 Fed.
Because interpretations of the "informal guidelines" for inspection rates varied, inspection rates differed from one region to another.\(^{267}\) In 1978, the Arkansas Poultry Federation sued the USDA on the ground that it was enforcing inspection rates discriminatorily. The United States District Court for the Eastern District of Arkansas found that the USDA's 1976-77 status quo order, which froze the various maximum regional inspection rates, violated both the Poultry Products Inspection Act and the United States Constitution.\(^{268}\) The court thus enjoined the USDA from enforcing disparate rates and ordered the use of nationally uniform rate standards.\(^{269}\)

In response to the court's order, the USDA issued a final rule on April 13, 1979, entitled, "Young Chicken Slaughter Inspection Rate Maximums; Mandatory Poultry Products Inspection."\(^{270}\) Even before the court ordered it to issue a formal rule, the USDA had been preparing a new system. The previous or so-called traditional inspection procedure had been "satisfactory to [the agency] and the poultry industry for many years."\(^{271}\) Under the old system, one inspector performed all the inspection tasks on each bird including any required trimming:

Line speeds for traditional inspection were based on work-measurement studies and were set at the limit at which an inspector could carry out the organoleptic examination [which requires use of at least three senses] and manipulation of each carcass presented for inspection. Also, industry was not capable of producing birds at a higher speed and therefore, these line speeds were acceptable.\(^{272}\)

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269. Id; see also American Fed'n of Gov't Employees, AFL-CIO v. Block, 655 F.2d 1153 (D.C. Cir. 1981) (upholding the USDA uniform rate standards against procedural challenges).


Presumably, the USDA meant that the speeds were acceptable to the "industry," by which it has always meant firms’ output and profits. The USDA’s admission that it sets the workload of its own employees “at the limit,"273 suggests that the USDA never orients its line-speed decisions towards workers’ needs for longer lives, less plagued by physical pain and disability.

The new regime ushered in by the judicial injunction included two different responses to the throughput/productivity/profit bottleneck imposed on firms by the government’s minimal food safety standards. The USDA first created a national maximum line inspection rate merely by increasing the traditional inspection system rates to match those in effect in the Southwest Region, which the USDA found to “properly ensure adequacy of inspection.”274 By deeming tibia palpation superfluous,275 the USDA was able to increase the rate of inspection by an additional five percent.276 Depending on the production line configuration—the distance between birds ranged from six to twenty-four inches and the number of inspector stations ranged from one to four—the number of birds per inspector per minute varied from 25 to 15.5.277 As a result of this change, forty-four plants with 136 lines (or 25% of all chicken lines nationally) would be required to lower line-speeds if they continued to operate the same configurations under the traditional inspection system.278 A total of 122 plants with 379 lines were then authorized to operate at higher line-speeds.279

Within weeks of the district court’s issuance of the injunction, The New York Times published a long article interpreting the litigation as an expression of an intra-industry struggle between the ascendant producers in Arkansas, Georgia, and Alabama and the older Delmarva producers. As the gap in prices between red meat and broilers widened, “regional scrambling for supremacy in the booming broiler market” prompted the southern producers to com-

273. Id.
275. Although the inspectors’ union, the American Federation of Government Employees (AFGE), opposed this measure as a health risk to the public, the USDA argued that the leukosis-related diseases that might go undetected created no health hazard, but merely made chickens appear “aesthetically unpleasing.” Id. at 10,320-21.
277. Id. at 22,048 n.1.
278. Id. at 22,049.
279. Id.
plain that the USDA had been unfairly favoring the Delmarva firms by permitting them to operate at higher speeds.\textsuperscript{280} The "strong impact on . . . profits" that a 300\% increase in line-speeds from 18 to 70 birds per minute could exert was clear when "even a 1 per cent increase in line speed could net [a firm] $400,000 a year."\textsuperscript{281}

Poultry companies filed comments to the USDA rule, characterizing the newly increased rates as too low, especially since the USDA had itself acknowledged that some plants were already operating at higher rates.\textsuperscript{282} Firms supported this claim by reference to the inevitable development of new technology that would render "the present maximum inspection rates . . . even more obsolete."\textsuperscript{283}

The USDA's response came from Carol Tucker Foreman, the Assistant Secretary for Food and Consumer Services, who had executive responsibility for poultry inspection. Her background pulled her in mutually irreconcilable ways. As a consumer advocate, she was committed to meat safety and low prices. As the wife of a vice president of the United Food and Commercial Workers, which organized poultry plant workers, she might have been thought to have aspired to avoid adopting measures that would have worsened working conditions. Finally, as a native of Arkansas, which had just surpassed Georgia as the leading broiler producer,\textsuperscript{284} the daughter of the head of the Arkansas Democratic Party, and the sister of the future lieutenant-governor and governor of the state, she may have felt pressured not to issue regulations that would reduce the profits of the economically dominant and politically powerful big poultry corporations such as the Arkansas-based Tyson Foods. In the event, she announced that the "USDA recognize[d] the relationship between improved technology and faster line speeds and also recognize[d] the price benefit which consumers would realize from an increased poultry supply. USDA w[ould] make every effort to identify new and improved inspection techniques which [we]re designed to increase industry productivi-

\textsuperscript{280} Franklin, \textit{supra} note 22, at C3.

\textsuperscript{281} Id.

\textsuperscript{282} Young Chicken Slaughter Inspection Rate Maximums; Mandatory Poultry Products Inspection, 45 Fed. Reg. 10,319, 10,320 (1980). The USDA had solicited these comments despite the fact that it had amended the poultry inspection regulations by emergency final rule without waiting for public comment.

\textsuperscript{283} Id.

\textsuperscript{284} LASLEY, \textit{supra} note 112, at 12 tbl. 5.
Foreman denied the claims of her own employees, the USDA inspectors, that new higher rates might adversely affect their health, on the grounds that their workload had in fact diminished. Finally, as to poultry workers themselves, Foreman later reported that when a meatpacking union official asked her to do something about line-speed, she replied, "I'm sorry, honey, but I don't do collective bargaining." Even that claim was disingenuous. Since the USDA inspectors were "largely unionized and, as a third force in the dispute, have tended to resist . . . increases in the speed of the lines," they were in effect engaging in surrogate bargaining on behalf of the largely unorganized production workers.

The real innovation of the late 1970s, however, was the second or modified traditional system, which the USDA unveiled at the same time in response to the injunction, and which held out the promise of alleviating production problems for the forty-four plants that were required to reduce their speeds. The modification involved the introduction of a greater division of labor among inspectors. Under the traditional system, inspectors devoted almost half of their time to positioning the carcass, whereas the alternative system reduced the number of motions required of an inspector by dividing the work between two inspectors. One inspector inspected only the exterior of a prepositioned carcass, using a mirror to see surfaces not directly visible. Company employees then repositioned the carcass and the viscera attached to it for the other inspector, who examined the interior and viscera. By achieving a maximum inspection rate of seventy birds per minute for three inspectors, the modified traditional inspection (MTI) was designed to increase inspection while saving manpower. The USDA justified this innovation by reference to the relentless drive for ever greater output:

286. Id.
287. Telephone Interview with Carol Tucker Foreman, former Assistant Secretary for Food and Consumer Services (Dec. 1994).
288. Franklin, supra note 22, at C3.
290. Id.
291. Id.
292. Id. at 22,050.
Traditional inspection of a young chicken can be accomplished in approximately 3 seconds. Even so, because of the increased production each year, in some cases, the rate of our inspection has become the limiting factor in the speed of a production line. Using the traditional inspection procedure, the only way to obtain greater speed in production lines is to hire more inspectors. Since the Government . . . pays for all inspection except overtime and holiday work, this becomes increasingly expensive for the taxpayer. For this reason, USDA has been investigating alternate inspection methods . . . to obtain at least equal inspection results with greater inspection efficiency in terms of birds inspected per minute.293

Tests revealed that one inspector examining the exterior could work at the rate of seventy birds per minute, while two other inspectors working—at positions along the line after it split294—at thirty-five birds per minute could inspect the interior and viscera.295 The USDA, foreseeing increased consumer demand for poultry as red meat prices remained high, saw MTI as achieving "greater productivity from existing facilities to meet this demand."296 In particular, the "[i]ndustry will gain from the increased productivity of their existing production lines. The 70 birds per minute maximum line speed will be higher than any line speed currently in effect."297 Although the innovation would impose "some costs" on industry in the form of inspection stations and selectors to aid the inspectors, they "should be quickly recovered through productivity gains."298

Foreman was, again, a key figure in making possible the increased line-speeds of the late 1970s:

Processors wouldn't have been able to rev up their lines if the inspection service in 1978 hadn't started allowing companies to wash, instead of tediously trim, contaminated birds. . . . 'I'm responsible for that little travesty,' says Ms. Foreman. . . . 'I never should have approved washing.'

293. Id. at 22,049.
294. Brewer et al., supra note 265.
296. Id.
297. Id.
298. Id.
She says she was misinformed by a government study involving only 180 birds from one plant that purported to show that washing worked.\(^{299}\)

Yet a government researcher concluded that washing was futile since bacteria were found on carcasses even after 40 rinsings.\(^{300}\) In any event, as Foreman admitted to Congress in 1991, "the real result of [her bad decision] was to allow lines to run much faster with no loss of product to the poultry plant."\(^{301}\)

During the Reagan-Bush period, USDA officials also conceded that once that procedure had been implemented and "the industry's current high productivity [was] based on use of this equipment . . . a requirement that contaminated tissue be condemned might cost the firms hundreds of millions of dollars a year in lost output."\(^{302}\) Of crucial significance is the direct worker-consumer linkage. The same throughput über alles approach that injures workers by forcing them to perform the remaining manual motions to keep up with automated operations also endangers consumers: high-speed eviscerating machines often spill feces all over the surface of the body cavity, which inspectors may fail to detect.\(^{303}\) As a former USDA meat safety administrator observed, with the lines "running so fast, they are just unable to produce a clean product."\(^{304}\) As even *Time* recognized, "[p]oor working conditions . . . have an impact on food quality."\(^{305}\)

By the beginning of the 1980s, firms' increased capacity and improved processing equipment prompted them to request the USDA to increase line-speeds again.\(^{306}\) When in 1980 "the industry" submitted comments suggesting that "even higher rates may be

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300. Id.
306. Brewer et al., *supra* note 265.
achievable," the USDA gave recognition to "the price benefit which consumers would realize from an increased poultry supply and [said it would] make every effort to identify new and improved inspection techniques which [we]re designed to permit increased industry productivity."307 To that end, the USDA announced that it would conduct further tests "to determine if a higher maximum rate could be achieved consistent with the public health."308 At the same time, the USDA acknowledged the heightened risk of injury to workers. In order to implement the MTI, the USDA had issued regulations requiring modifications in the production facilities.309 In particular, firms were required to provide four feet of horizontal line space for each inspector and helper.310 In response to firms' comment that less space would be adequate, the USDA observed that "the inspectors' helpers work with sharp knives and scissors. If they work too close together, and too close to the inspector, the possibility of an injury is increased."311

In fact, production workers, too, were "[p]acked tightly and work[ed] quickly with knives and scissors . . . often cut[ting] themselves and others."312 NIOSH ergonomics investigators of poultry plants commonly uncover this constraint. At the Cargill plant in Buena Vista, Georgia, for example, investigators determined that, "[b]ecause the work area [wa]s already cramped, adding workers to the lines without increasing the work area could result in injuries (i.e. lacerations, amputations) from another employee."313 At two Perdue plants in North Carolina, NIOSH recommended as a means of reducing the frequency of highly repetitive movements that the main conveyor belt be slowed down or that diverging conveyors off the main one be provided "so that tasks could be performed at slower rates."314

308. Id.
310. Id. § 381.36(c)(1)(ii).
311. Young Chicken Slaughter Inspector Rate Maximums; Mandatory Poultry Products Inspection, 45 Fed. Reg. 27,919 (1980).
What the USDA failed to make clear was that the "facilities" and "lines" from which the agency was enabling, entitling, and even compelling poultry firms to secure greater productivity were in fact human beings—namely, their employees. Here, a perverse inversion of one of the original purposes of the Poultry Products Inspection Act lies hidden. Whereas Congress intended to protect firms that sought to maintain some hygienic standards against rogue competitors who operated at speeds and under conditions guaranteed to depress the welfare of consumers and workers, two decades later the USDA depressed the entire industry's standard by imposing nationally uniform but higher line-speeds on all firms. Indeed, the USDA stated that although it wished to give firms a choice between the traditional and MTI systems, it arrogated to itself the power, in certain instances, to "require that procedure which will result in increased inspection efficiency."\(^\text{315}\)

The continuity of policy, as between the labor-friendly Carter administration and the avowedly pro-business Reagan administration, was revealed in the early 1980s when an appeals court upheld the new line-speed rules as interim rules, but ordered the USDA to institute rulemaking procedures for the promulgation of permanent rules.\(^\text{316}\) First, the FSIS, which the Food Safety and Quality Service was renamed in 1981,\(^\text{317}\) certified conformity with the cost-benefit mandate of Executive Order 12291, issued by President Reagan at the outset of his administration. The FSIS justified the certification on the ground that the line-speed regulations would not result in (1) an annual effect on the economy of $100 million or more, (2) a major increase in costs or prices for consumers, industries, government agencies, or regions, or (3) significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S. enterprises to compete with foreign enterprises in U.S. or export markets.\(^\text{318}\) Significantly, none of these rubrics subsumed within it the impact on poultry workers' health.

In response to renewed “industry” comments urging the USDA to test methods permitting line-speeds in excess of seventy birds per minute, the USDA assured companies that it was not only “making every effort,” but had already tested such methods. In rejecting firms’ calls for eliminating the requirement that inspectors be furnished adjustable platforms (rather than adjustable chairs or stools), the USDA emphasized that the platforms were “required to minimize inspector’s [sic] physical strain (bending or reaching) as they do their work. Excessive bending or reaching could have adverse health consequences for inspectors and also increase inspector errors due to the added fatigue.” Although poultry production workers’ work is even more strenuous and their ensuing fatigue can trigger the same increase in safety- and health-endangering errors, OSHA has not required that employers provide them with facilities to reduce their strain; moreover, inspectors receive more rest breaks and opportunities for rotation, which may reduce the risk of repetitive trauma syndrome injuries.

When the Republican party gained control of the Senate and the Presidency in 1981, the Agriculture Committee was quick to hold a hearing in Mississippi to provide owners of large southern chicken processing firms with a forum to complain about allegedly onerous regulation by the FSIS. Exasperated with “over-inspecting,” the owner of Sanderson Farms, for example, urged elimination of the position that inspected the outside of the birds under MTI.

Companies’ statutory obligation to reimburse the FSIS for inspectors’ overtime (currently $31.80 per hour) formed another point of contention. That firms chafe under their congressionally created duty to pay even for overtime—which their own work procedures are responsible for causing—while the taxpayers finance the bulk of inspection costs, is ironic in light of the fact that when Congress initially mandated meat inspection in 1906, numerous senators insisted that the packing companies finance inspection

319. Id.
320. Id. at 23,433.
321. Id.
entirely: "I look upon it as a proper expense of advertising that should be charged to that account. These packers do a large amount of advertising, and certainly they do none that will yield such a tremendous return as this one of having the Government stamp on their products."324 Even such a Social Darwinist as Senator Henry Cabot Lodge agreed: "This tax should be paid by those who directly benefit by it, and whose business methods have made severe inspection absolutely necessary."325 Interestingly, when the Johnson administration sought to impose user fees on the poultry firms,326 the Amalgamated Meat Cutters joined the companies in opposing the bill. Whereas the firms' opposition was based on the expense,327 however, the union feared that inspectors on the company payroll would be subject to pressure to approve poultry that should be condemned.328 Since inspectors would, however, remain government employees receiving federal paychecks, the union's fear is most plausibly interpreted as a lack of confidence in the capacity of the USDA to discharge its statutory obligations impartially.

When Senator Cochran of Mississippi informed the FSIS administrator, Dr. Donald Houston, that the owners had complained about overtime charges for inspectors, the official testified that the agency had unsuccessfully contested a recent ruling by the Office of Personnel Management requiring the FSIS to reimburse slaughter line inspectors for overtime associated with changing clothes at the beginning of work and cleaning up at the end of the shift.329 Although Houston assured the Senator that the FSIS had already begun discussing the issue with the National Broiler Council, H.F. McCarty, President of McCarty-State Pride Farms, irately asked Houston: "Are you going to permit the labor union—that's what it amounts to—permit the labor union to dictate that we will have to pay 15 minutes ... at the beginning of work and at the end of work for dressing purposes?"330 The kind of dictating that must have appealed to McCarty was Houston's admission that the

325. Id. at 8767.
327. See 112 Cong. Rec. 3846 (1966) (remarks of Sen. Tydings, Md., in opposition to the initiative on the ground that it would harm producers in his state).
industry's "increased linespeeds. . . . [o]bviously . . . have dictated adaptive change in government inspection activities." And just in case the agency lacked the Mississippi poultry companies' animus toward unionization, McCarty's competitor and colleague, Marshall Durbin, Jr., urged a role for the firms in the USDA's negotiations with its inspectors' union.\textsuperscript{332}

By 1984, the USDA fulfilled its promise to the chicken oligopolists to devise a method for authorizing the broiler line to run even faster. In that year, the Reagan administration promulgated the final rule for what it called its New Line Speed (NELS) inspection system. The USDA justified the innovation by reference to the re-emergence of a throughput-productivity-profit bottleneck caused by its own inefficient inspection methods:

Since the implementation of MTI, the poultry industry has continued to make significant technological advances. Consequently, many establishments can present uniform lots of birds to inspectors faster than 70 birds per minute. This has been made possible by the increased use of further refinement of automated equipment, and through better control of the production process. In such cases, the inspection process has again become a limiting factor in establishment productivity, and restricts the return investment on the development and installation of modern, innovative equipment and facilities. Merely expanding the use of current inspection procedures would not alleviate this restraint given the limits on the line speeds attainable under traditional or MTI inspection procedures.\textsuperscript{333}

The basis for the breakthrough was devolution of the state's inspectional duties to the private profit-making firms themselves. Although some plants had already been engaging in quality control, in other plants that relied on the USDA to provide such controls, inspectors had to assume "a burdensome quasi-supervisory role"\textsuperscript{334} that the agency deemed statutorily inappropriate. By transferring those responsibilities to the firms, the USDA was able to free up some of the post-mortem inspectors' time. Under NELS, each one

\textsuperscript{331} Id. at 57 (testimony of Dr. Donald Houston).
\textsuperscript{332} Id. at 46.
\textsuperscript{334} Id.
of the three inspectors on an eviscerating line returned to the traditional system of inspecting a bird’s exterior (with a mirror), interior, and viscera, but now each inspected only every third bird. The time saving was implemented in the following manner:

After post-mortem inspection is completed . . . ., plant employees independently perform any necessary trim on all passed carcasses after the giblets are harvested. Under traditional and MTI inspection procedures, the inspector is responsible for identifying those carcasses needing to be trimmed, directing the establishment employee to trim the defects, and verifying that the bird has been properly trimmed. However, the NELS inspection system shifts the responsibility of performing specified trim to the establishment employees.335

This devolution is predicated on the implementation of a poultry carcass on-line quality control program, a statistically based sampling system, which is supposed to enable a fourth inspector to monitor and review data, and sample product at critical points on the eviscerating line. The USDA claimed that individual inspection rates were no higher under NELS than under the traditional or MTI systems.336 Carol Tucker Foreman, the former Assistant Secretary of Agriculture, however, has characterized these tests as “bullshit.”337 In any event, under NELS, the maximum line-speed has become ninety-one birds per minute.338 The inspector in charge has the authority to reduce the line-speed when “birds are not presented properly or the health conditions of a particular flock dictate” more extended inspection.339 The inspector thus “can quicken or slow the pace of profits in a plant.”340 Yet, he or she “engages in a perpetual jousting with plant officials looking for new ways to enhance their profits.”341 When a plant manager screams at a line inspector who has just pushed the button to slow down or stop the line that this interference is costing the company

335. Id. For a description of inspectors’ tasks, see FOOD SAFETY INSPECTION SERV., U.S. DEP’T OF AGRIC., MEAT AND POULTRY INSPECTION MANUAL 47 (1990).
337. Telephone Interview with Carol Tucker Foreman, former Assistant Secretary U.S. Dep’t of Agric. (Dec. 1994).
339. Id.; see also 9 C.F.R. § 381.67 (1994).
341. WELLFORD, supra note 72, at 47.
$500 per minute, then, as a former FSIS plant veterinary supervisor conceded, "you have to take that into account."342

The enormous pressure to which inspectors are subject not to hold up the line has run the gamut from management’s deliberately creating a hostile environment that wears down inspectors to arranging forcible assaults.343 Instances in which the FSIS began to override interventionist inspectors and restored de facto control over line-speed to management, or yielded to firms’ demands that strict inspectors be transferred,344 have ultimately hardened into a perceived policy, which has made it that much more difficult for any inspectors to assert their independence.345 Vigilance is especially undermined by the USDA’s practice of stationing inspectors at one plant for many years. The social-psychological barriers to maintaining a vigorous adversarial relationship over such long periods of time are so overwhelming as to have prompted even the inspectors’ union to call on the agency to remove some of its own members from certain plants for flagging vigilance.346 Historically, this problem was accentuated in poultry plants because prior to the introduction of mandatory inspection in 1959, some firms paid the USDA for voluntary inspections, which they could discontinue at will.347 The “close relations” fostered by that regime continued after the transition to compulsory inspection.348

Just how reflexively committed the FSIS has become to throughput über alles was later inadvertently revealed by the Clinton administration:

The driving force behind FSIS’s program changes from the 1970s on was the need to keep up with industry’s expansion and its productivity gains, including the incorporation of automation in the slaughter process that increased the rate at which carcasses could move through the slaughter facility ( . . . “line speed”). Automation has had a particu-

342. Telephone Interview with Dr. Linda Madson, Science and Technology Division, FSIS (Feb. 16, 1995).
343. 37 Fed. Reg. 9706, 9706 (1972); WELLFORD, supra note 72, at 47.
344. George Anthan, USDA to Alter Poultry Plant Inspections, DES MOINES REG., Apr. 23, 1987, at 1A.
345. WELLFORD, supra note 72, at 58-63; George Anthan, Inspectors Cite Drop in Poultry Standards, DES MOINES REG., Sept. 6, 1987, at 11, 21.
346. Telephone Interview with David Carney, President of the North Central Council of Food and Inspection Locals, AFL-CIO (Dec. 1994).
347. WELLFORD, supra note 72, at 57.
348. Id.
larly great impact on poultry operations, where inspectors have had to face faster and faster line speeds, which today can be as high as 91 birds per minute. 349

Here, the FSIS almost seems to be charging that firms imposed these line-speeds on the agency’s inspectors, having forgotten that it itself enforces the speed-ups.

Indirectly, in its responses to comments on the proposed NELS regulations, the USDA once again shed light on the adverse impact that the sharply higher line-speed would exert on workers. Responding to processing firms’ protests against the requirement that they furnish forty-two feet of line space for every three inspection stations, the USDA observed that this length was necessary because the workload of the “helpers,” company employees, assigned to work with inspectors,

varies with the disease conditions of the bird. The birds on the line are continuously moving and when the amount of work increases, helpers must be able to continue their functions. If the horizontal line space is restricted, they may not have sufficient time to carry out these functions properly. 350

Mirror trimmers, company employees who cut off parts of birds as instructed by inspectors, must perform this hectic operation even on automated eviscerating lines. In connection with firms’ resistance to providing sixty-inch high inspection stations, considering them excessive, the USDA noted that “[e]rgonomic measurements made by industrial engineers revealed specific position requirements needed for an inspector to perform with a minimum of strain and fatigue. Since rotation of inspectors is required, the stations must be adjustable.” 351

The impact of increased line-speed on production workers, who do not receive state mandated ergonomic relief or rotation, is easily imaginable. When the inspectors themselves pressed the very same issue on their own behalf, complaining that increased line-speed would exacerbate fatigue and stress, the USDA’s response was cynical. In addition to asserting that the amount of work would not

351. Id.
increase, the USDA claimed that "[j]ob stress is difficult to measure. It is also difficult to differentiate job stress from stress associated with other life events including the implementation of changed methods of inspection. The Department's tests and studies did not indicate that the NELS inspection system caused inspectors undue stress." Nevertheless, pressure by the inspectors' union induced the agency to establish a joint labor management committee to study the biomechanical demands imposed by the job and means of alleviating them by redesigning the workplace.

Still not satisfied with the speed-ups it had effected, the USDA returned to the task two years later. In 1986, it announced an interim emergency rule to be implemented in plants that were operating under the MTI system. The so-called Streamlined Inspection System (SIS) required one or two inspectors and a Finished Product Standards (FPS) program to evaluate the final product. The USDA expected that the industry would realize productivity gains "by maintaining optimal line speeds," and even "maximum speed," as well as savings from reduced costs for inspectors' overtime stemming from a reduced number of inspectors per line. This change, however, was depicted as driven by the agency's own personnel and budgetary shortfalls caused by the Reagan administration's hiring freeze and cutbacks. While the State demanded that the agency make do with less, poultry companies demanded more:

At the same time that the Agency has been confronted with new budgetary limits, the poultry industry has been demanding increased inspection service. The operators of federally inspected poultry processing establishments have requested inspecional coverage for new production lines and expanded operations. Many establishments that have previously operated single-working shifts have expanded to two shifts or are planning to do so in the near future. The growth of the poultry products industry is accelerating. Production in FY 1985 was increased 5.5 percent over

352. Id. at 42,553.
353. Id.
production in FY 1984 and is expected to increase by a similar percentage in FY 1986. . . . In terms of per capita consumption, poultry is now second only to beef among all meat and poultry food products.357

Fortunately for the poultry companies, since the advent of MTI and NELS, “top Agency veterinarians and technical specialists hav[ing] devoted many hours” to the subject, “found that a new sequence of hand-eye movements would provide the most efficient and effective inspection procedures.”358 Consequently, by the mid-1980s, the Agency was able to inform the broiler industry of the “potential availability of one- or two-inspector NELS systems.”359 This possibility permitted “increased productivity in the poultry industry” by enabling plants operating under the older MTI system to convert to NELS.360 Because the USDA had not yet resolved several problems relating to uniformity of application, it did not formally propose the two-inspector NELS system. Instead, the USDA implemented SIS in MTI plants, which would offer an incentive to plants operating under the traditional system to increase their output by converting to MTI/SIS.361 In MTI plants, however, conversion to SIS was not voluntary. According to the USDA, “[t]he chief difference between SIS and MTI is that under the new system there is no mirror inspection station.”362 Instead, one or two inspection stations are placed on the processing line after the evisceration process. The maximum inspection rate is 70 birds per minute for a two-inspector team.363 The FSIS explains the speed-up of inspectors’ work as resulting from the recommittal to private firms of responsibility for detecting quality defects, rather than burdening the government with such tasks.364

As of 1994, 263 chicken plants operating 581 processing lines were subject to USDA inspection.365 The SIS system accounted

357. Id. at 3571.
358. Id. at 3572.
359. Id.
360. Id.
362. Id.
363. Id. at 3572-73.
364. Telephone Interview with Dr. Isabel Arrington, Staff Officer, FSIS, Slaughter Operations (Feb. 15, 1995).
for 53% of all plants and 63% of all lines; NELS accounted for 17% of plants and 20% of lines; and the traditional system accounted for 30% of plants and 17% of lines. The USDA claims that its inspectors achieve greater efficiency without mirrors and inspectors charge that the mirrors are irrelevant since the steam constantly wafting through a poultry plant renders them useless. However, critics suggest that the gains are made with smoke and mirrors. The president of the inspectors' union observes that because SIS failed to introduce any physical changes in facilities, inspectors are merely working faster without being better able to detect disease. As Tom Devine, Legal Director of the Government Accountability Project, argues, "[d]arn the public and full line speeds ahead... SIS means that instead of examining each bird, inspectors just glance. In reality, SIS has been the Streamlined Infection System."

V. THE POOP ON FECAL SOUP

In an industry so tightly management controlled, the paradox that not even the giant integrators can undo is the inexorable course of nature once the hatching eggs are laid. There is no opportunity to vary the rate of flow once the process is started.

The state apparatus that fully accepts and implements capital's position that slowing line-speed is out of the question has, unsurprisingly, by regulation also authorized firms since 1961 to sell chicken that has soaked up as much as 8% of its weight in chilled-tank water, which critics call "fecal soup." The pur-
pose of the immersion is to lower the temperature of the carcass, "not to clean it. The poultry carcasses are already washed and considered ready-to-cook before they enter the chilling system."373 The FSIS is constrained to admit that because "carcasses do, however, carry some bacteria . . . the rinsing action of the water . . . eventually would actually become a contaminating influence."374 By the late 1980s, the FSIS finally released an internal report that found washing of fecal contamination ineffective.375 The source of the contamination is the extraordinary confinement in which chickens are industrially raised. Occupying only one square foot of space in the broiler house, ""[b]roilers are in six inches of feces by the time they're six weeks old. They're going to have salmonella all over.""376

The USDA has approved a process that a government microbiologist has likened to soaking birds in a toilet, merely because the alternative European method of chilling birds with blasts of cold air to avoid cross-contamination would frustrate the throughput speeds on which United States firms insist.377 USDA veterinarians' acknowledge that air chilling is superior to water chilling378 because it ""[i]nvariably . . . is less likely to cause cross-contamination.""379 Nevertheless, in the words of an official of the National Association of Federal Veterinarians, the USDA-adapted process ""enables the sale of hundreds of thousands of gallons of water at poultry meat prices—a profit the industry is un-

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374. Id.
375. George Anthan, USDA Admits Poultry Rules Ineffective, DES MOINES REG., July 1, 1988, at 1A.
376. George Anthan, Contamination Rate Reaches 80% at Some U.S. Poultry Plants, DES MOINES REG., Apr. 12, 1987, at 1A, 9A (quoting Dr. E.M. Foster, Emeritus Director of the Food Research Institute, University of Wisconsin).
377. See W.J. Staedelman et al., EGG AND POULTRY-MEAT PROCESSING 135 fig. 7-5 (1988) (showing air blast method takes four times longer than ice water to chill eviscerated turkeys down to 40 degrees). But see James A. Albert, A History of Attempts by the Department of Agriculture to Reduce Federal Inspection of Poultry Processing—A Return to the Jungle, 51 LA. L. REV. 1183, 1227 (1991) (asserting that air chilling "would not even make processors slow down their lines").
378. Telephone Interview with Dr. Robert L. Brewer (Jan. 18, 1995); Telephone Interview with Dr. William O. James (Jan. 18, 1995); see also C.H. Veerkamp, Chilling, Freezing and Thawing, in PROCESSING OF POULTRY, supra note 37, at 103, 115.
379. G.C. Mead, Hygiene Problems and Control of Process Contamination, in PROCESSING OF POULTRY, supra note 37, at 183, 206.
willing to forgo."\textsuperscript{380} Tyson alone, it is estimated, would lose $40 million if the waterlogging and cross-contamination were eliminated by sealing carcasses in plastic bags while moving through the chiller.\textsuperscript{381} As a gauge of the contempt in which inspectors have come to hold firms, one USDA veterinarian, when confronted with the billions of dollars that they would have to spend to produce uncontaminated chicken, responded, "[b]ut this is only billions of dollars the industry has stolen from the public."\textsuperscript{382}

From the other perspective, in the late 1960s, consumers were estimated to be paying $160 million annually for the extra water.\textsuperscript{383} By the mid-1990s, when this sum had exceeded a billion dollars annually, firms producing red meat, which is deemed adulterated when it absorbs the same quantities of water, sued the USDA for unfairly favoring poultry.\textsuperscript{384} European food safety officials' belief that the United States system is "insane" and rooted in poultry firms' political influence was confirmed by the Clinton administration's accommodation of Tyson's opposition to a program of zero-tolerance for fecal material.\textsuperscript{385} As a cheap make-shift solution, the USDA permits firms to superchlorinate the water in the chillers.\textsuperscript{386} Although chlorine may produce carcinogenic chloramines when combined with chicken skin, it is also ineffective at killing bacteria because the animal protein neutralizes it.\textsuperscript{387} It is, however, effective in causing eye and upper respiratory irritation among production workers.\textsuperscript{388} Ironically, because some European Union countries permit no use of chlorine at all on poultry prod-

\textsuperscript{380} Ingersoll, \textit{supra} note 299, at 300.
\textsuperscript{381} Behar & Kramer, \textit{supra} note 305, at 43-44.
\textsuperscript{382} Anthan, \textit{supra} note 376, at 9A (quoting Dr. Carl Telleen).
\textsuperscript{383} WELLFORD, \textit{supra} note 72, at 137.
\textsuperscript{385} Behar & Kramer, \textit{supra} note 305, at 44.
\textsuperscript{387} Gene Bruce, \textit{Dirty Chicken}, \textit{ATLANTIC}, Nov. 1990, at 32, 38.
\textsuperscript{388} \textit{NIOSH: Tyson, supra} note 386, at 9 (stating that "elevated and variable chlorine levels in these water sprays could partially explain why workers are periodically experiencing eye and upper respiratory irritation").
ucts, the FSIS has proposed exempting products for export from its new requirements for antimicrobial treatment.

A major source of the fecal cross-contamination in the chill tank is precisely the high-speed automated evisceration facilities introduced during the 1970s. As the National Research Council, in a report commissioned by the FSIS, concluded, "[t]he new equipment often malfunctions . . . and the gastrointestinal tracts are frequently broken so that feces . . . contaminate the surface of the birds. . . . Decreased line speeds might eliminate many of these shortcomings, but such speeds would have to be substantially slower than those used in traditional inspection." The obsession of the FSIS with Tayloristic studies of "the effects of accelerated line speed on inspection" in order to decrease the duration of a bird inspection to less than a second augured poorly for a line slow-down merely to reduce contamination.

Fecal soup also plays a role earlier in the process. According to Dr. Edward Menning, head of the National Association of Federal Veterinarians and former Chief Veterinarian of the United States Air Force, the scald tank, which is positioned between killing and eviscerating to facilitate feather removal, is a site of contamination "because many birds enter it still alive and expelling waste." Since firms' ability to increase throughput by the use of such equipment and processes would be jeopardized, they might lose hundreds of millions of dollars annually if the FSIS required such contaminated tissue be condemned.

390. 60 Fed. Reg. 6844-45 (to be codified at 9 C.F.R. §§ 381.69(b)(1) & (c)).
393. George Anthan, USDA to Look at Dubious Poultry Policy, DES MOINES REG., Jan. 11, 1989, at 1A, 7A.
394. Id.