COMPENSATION DIFFERENTIALS, RESTRICTIVE LABOR PRACTICES, AND FOOD INDUSTRIES STRUCTURE

BY

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ABSTRACT

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This study examines 397 food system collective bargaining agreements that were in effect during 1981. It represents an initial study of food system labor practices. This is of importance because the labor costs within the food system are the largest single cost item - accounting for nearly two thirds of the total retail food costs.

An extensive description of food system labor practices gleaned from the 397 collective bargaining agreements and estimates of food system collective bargaining agreements on inflation, productivity and equity are presented. The theories of Harvey Leibenstein and Lester Thurow are used extensively to guide an evaluation of the effects of collective bargaining in the food system.

The study finds a positive relationship between product market structure as measured by concentration ratios

and wage rates. It also finds a positive association between restrictive practices contained in labor - management agreements and wage rates.

The author concludes collective bargaining agreements within the food system do not deal effectively with employment stability and makes specific recommendations for the improvement of food system performance within the bounds of present institutional structures.

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TABLE OF CONTENTS

Page

LIST OF TABLES

Table	Page

Table		Page

CHAPTER I

INTRODUCTION

This study examines the food processing and distribution sectors of the United States' economy. It concentrates upon the labor component of these sectors with particular emphasis upon union employment in the food industry. The purposes of the study are to:

1) Describe the collective bargaining agreements within the food system.
2) Estimate the effects of collective bargaining agreements on inflation, productivity within the food system and equity as it relates to wage differentials among workers in various industries within the food system.
3) Estimate the relationship between market structure of the industries comprising the food system and wages.
4) Develop and recommend policy and institutional changes in labor-management agreements that could result in improved industry performance.
5) Identify potential future research in the area of collective bargaining and industry structure within the food system.

This study is a contribution to the North Central Regional Committee 117 (NC-117).

This study contributes to the fulfillment of the following NC-117 objectives in the food processing and manufacturing areas:

A...
4. To describe the structure of food processing and manufacturing industries, the structural changes occurring and the forces causing those changes.

5. To examine the behavior and performance of food manufacturing industries and determine the effects of structural characteristics (market concentration, conglomeration, conditions of entry, product differentiation and vertical integration) on market performance...

...C To describe the legal environment of the food and fiber system, determine the effects of the law on the orginazation and performance of various parts of the food system, and evaluate the effects of alternative legal environments.

...D To identify and evaluate the consequences of alternative public and private actions that could be taken to alter the future organization, control and performance of the food system...

Of more importance, this study examines the effects of collective bargaining agreements on productivity and social justice within the food system. Productivity and social justice are at the heart of the U.S. economic system. Agricultural economists have acknowledged the the effects of unionism. This study investigates the effects.

The methodology of the study is described in detail later in this chapter. At this point the reader should know that nearly 400 food system union contracts are examined in this study in an attempt to determine the relationship between industry structure and wage rates, industry structure and the rate of change in wage rates, and the effects of industry structure on union contract provisions that either inhibit or increase productivity.

Magnitude of the Labor Component

The labor component of marketing margins is the largest single component in the Marketing Cost Index. The Marketing Cost Index measures the magnitude of changes in operating costs of food processors, wholesalers, and retailers. It is published by USDA in Agricultural Outlook, a periodic outlook and situation report of the Economic Research Service (ERS).

Using the ERS 1979 data for relative importance of inputs in food marketing costs, 46.8% of the marketing costs is attributable to labor costs. This is illustrated in Table 1.

This index composition greatly understates the labor component of the food marketing costs. It ignores the labor component of the inputs other than direct labor. This shortcoming is corrected in Table 2. This table uses the input-output coefficients for the United States economy

Table 1

Relative Importance of Inputs and Data Series Used in Food Marketing Cost Index, 1979.

Cost	Relative Importance	Data Series Used
	(Percent)	
Labor:		
Wages and salaries	38.8	Hourly earnings of production workers in food manufacturing and nonsupervisory workers in wholesaling and retailing.
Supplements to wages and salaries	8.0	Employer payments for Social Security and unemployment programs, pensions, health insurance and other non-wage programs
Packaging and containers:		
Paperboard boxes and containers	4.6	Producer Price Index (PPI), paperboard
Metal cans and barrels	3.8	PPI, tin cans
Plastic films, bottles, and trays	2.7	PPI, polyethylene resin
Paper products, primarily grocery bags	2.2	PPI, paper and related products
Glass containers	1.4	PPI, glass containers
Metal foil	.3	PPI, metal foil
Wooden boxes	.1	PPI, wooden boxes
Transportation, intercity and truck	9.9	Bureau of Labor Railroad Statistics (BLS) rail freight index for food
Advertising:		
National	2.3	McCann-Erickson, Inc. index of all media advertising costs
Local	2.6	BLS index of other commercial newspaper advertising
Fuel and power		
Electric	2.5	PPI, electric utilities
Petroleum	3.4	PPI, diesel fuel and fuel oil
Natural gas	1.9	PPI, gas utilities
Coal	.1	PPI, coal

(Table 1 Cont'd)

Other utilities:		Consumer Price Index, Urban (CPI-U)
Communications	.8	CPI-U, telephone
Water and sewage	.2	CPI-U, water and sanitary services
Rent	3.3	Gross National Product (GNP) implicit price deflator new plant and equipment
Maintenance and repair:		
Buildings	1.4	CPI-U, housing maintenance and repair
Equipment	1.3	CPI-U, automotive maintenance and repair
Property taxes and insurance:		
Taxes	.5	CPI-U, property taxes
Insurance	.8	CPI-U, property insurance
Business services:		
Accounting, legal, and other services	2.8	GNP implicit price deflator for services
Printing	.7	CPI-U, newspapers
Laundry	.4	CPI-U, apparel services
Postal	.3	CPI-U, postal charge
Supplies:		
Tires and tubes	.5	PPI, tires and tubes
Motor vehicle parts	.1	PPI, automobile parts
Chemicals	.6	PPI, industrial chemicals
Office supplies	.1	PPI, office supplies and accessories
Soaps and detergents	.3	PPI, soaps and detergents
Towels and sanitary goods	.1	PPI, sanitary paper and health products
Pallets and skids	a	PPI, pallets and skids
Steel wire	.2	PPI, baling wire carbon
Work clothing	.1	CPI-U, boys' and mens' apparel
Interest, short term	.9	Prime commercial paper (4-6 months)
Total	100.0	

a less than 0.05 percent.

Source: Agriculture Outlook, Economics Research Service, USDA, Nov., 1981, p.14

Table 2

Relative Importance of Labor Component of Inputs Used in Food Marketing Cost Index, 1979.

Cost	Relative Importance	Labor Component	Labor Cost as a Percent of Total Costs
	(Percent)	(Coefficient)	(Percent)
Labor:			
Wages and salaries	38.8	1.0	38.8
Supplements to wages and salaries	8.0	1.0	8.0
Packaging and containers:			
Paperboard boxes and containers	4.6	.27807	1.3
Metal cans and barrels	3.8	.22444	.9
Plastic films, bottles, and trays	2.7	.29010	.8
Paper products, primarily grocery bags	2.2	.22897	.5
Glass containers	1.4	.37202	.5
Metal foil	.3	.16564	.05
Wooden boxes	.1	.28184	.03
Transportation, intercity and truck	9.9	.39619	3.9
Advertising:			
National	2.3	.33304	.8
Local	2.6	.33304	.9
Fuel and power			
Electric	2.5	.13141	.3
Petroleum	3.4	.08410	.3
Natural gas	1.9	.08410	.2
Coal	.1	.39108	.04
Other utilities:			
Communications	.8	.33621	.3
Water and sewage	.2	.13141	.03
Rent	3.3	.01660	.05
Maintenance and repair:			
Buildings	1.4	.50228	.7
Equipment	1.3	.50228	.7

(Table 2 Cont'd)

Property taxes and insurance:			
Taxes	.5	.21456	.1
Insurance	.8	.40776	.3
Business services:			
Accounting, legal, and other services	2.8	.28410	.8
Printing	.7	.37181	.3
Laundry	.4	.48931	.2
Postal	.3	.33621	.1
Supplies:			
Tires and tubes	.5	.29010	.2
Motor vehicle parts	.1	.31882	.03
Chemicals	.6	.18067	.1
Office supplies	.1	.37181	.04
Soaps and detergents	.3	.18377	.05
Towels and sanitary goods	.1	.30161	.03
Pallets and skids	a	.28184	
Steel wire	.2	.29923	.06
Work clothing	.1	.30161	.03
Interest, short term	.9		
Total	100.0%		61.44%

a less than 0.05 percent.

Source: Agriculture Outlook, Economics Research Service, USDA, Nov., 1981, p.14
The Detailed Input-Output Structure of the U.S. Economy, 1972, Vol. II, Total Requirements for Commodities and Industries, U.S. Department of Commerce, BEA.

published by the U.S. Department of Commerce to determine the labor component of food marketing costs using the direct labor component of all inputs.

For example, 9.9% of the cost of food marketing is shown in Table 1 to be the cost of transportation. The input-output study of the U.S. shows that the cost of labor represents 39.616% of the cost of transportation. A simple calculation (.39616 times 9.9%) yields the direct labor component of transportation to be 3.9%. Table 2 uses the input-output coefficients for all the components of the Marketing Cost Index and shows the labor component to be 61.44% of the costs of food processors, wholesalers and distributors when the labor component of purchased goods and services is considered for direct inputs.

Table 2 shows the labor component of food processing and marketing costs to be the major component of these costs. While the labor component is shown to be 61.44% an argument can be made that this understates the labor component of food marketing as it ignores the labor content of secondary inputs. Again using transportation, it would include transportation equipment. The labor component of the manufacture of transportation equipment, if included in the labor content of food marketing costs, would further increase the labor component.

For the purposes of this study, it is sufficient to state that labor costs constitute the largest single item in food processing and distribution costs. Further it constitutes the major portion of those costs. Quantitatively, labor costs make up more than 61.44% of the food marketing costs.

This study examines the compensation rates across industry groupings within the food processing and distribution sectors.

Theodore Schultz in 1975 recognized the labor component to be high when he wrote:

> Our national income accounts imply that the overall income attributed to labor services is about three times as large as that of nonhuman capital (Schultz, 1975, p.838).

Other Studies Findings

A study prepared by Data Resources, Inc. for the Grocery Manufacturers of America, Inc. was presented in 1979 in a hearing before the Task Force On Inflation of the Committee on the Budget of the U.S. House of Representatives. This study was designed to measure the impact of labor costs on the total value of selected grocery products. The study used a methodology similar to that used in Table 1 for direct inputs and a methodology similar to Table 2 for direct and indirect inputs.

The results of the study are displayed in Table 3 and a close examination of the data shows great differences in the direct costs of labor for various industries within the food system. For example, the direct cost of labor in meat

Table 3

Labor Impacts of Selected Grocery Products, 1978

Product	Direct	Indirect	Total
Meat packing	9.9%	28.6%	38.5%
Cheese	11.4	38.0	49.4
Ice cream	15.5	39.9	55.4
Fluid milk	15.7	35.9	51.6
Canned fruits and vegetables	19.7	42.5	62.6
Pickles, sauces, salad dressings	17.0	39.4	56.4
Fresh or frozen fish	13.8	26.5	39.1
Frozen fruits and vegetables	13.8	31.3	45.1
Cereal preparations	23.3	29.9	53.2
Bread, cake, related products	34.6	24.0	58.6
Cookies and crackers	25.1	21.3	46.4
Bottle and canned soft drinks	21.6	29.6	51.2
Macaroni and spaghetti	19.6	30.2	49.8

Source: Hearings before the Task Force on Inflation of the Committee on the Budget, U.S. House of Representatives, Ninety-sixth Congress, June 26 and 27, 1979.

packing in 1978 was 9.9% of total costs. The direct cost of labor in bread and cake was 34.6%. Although not included in the Data Resources, Inc. study, testimony at the same hearing by Stephen D'Agostino, Vice Chairman of the Food Marketing Institute and President of D'Agostino Supermarkets, New Rochelle, New York, stressed that 68 per cent of supermarket company's operating costs are made up of wages and benefits for labor. The labor intensity of industries within the food system varies greatly. Earlier work on the wages unions and management negotiate indicated that (in theory) the higher the portion of labor in the cost, the more elastic the demand for that labor, and the lower the wages that could be negotiated. This study does not support that conclusion and stresses that structural composition of the industry may be the most important determination of the wage jointly negotiated.

Table 3 does not include the more labor intensive industries in the food system such as food retailing. As such the data understates the labor component for the food system.

While this study examines 397 contracts with 24 national unions and 414 affiliated local unions, involving 1,595,000 employees and 638 firms in the U.S. food industry - the effects of unionism go far beyond the firms and industries organized and any implications from the absolute number of unions involved are superficial at best.

Adrian W. Throop explains the transmission of union wage gains to nonunion workers as follows:

> Firms employing unorganized labor may be induced to match changes in union wage rates in an attempt to prevent the unionization of their own employees; or they may do so simply because non-union workers may become less productive if wage differentials unfavorable to them were allowed to develop. It has been alleged that such a transmission of union wage gains has become institutionalized in the U.S. economy in the form of the so called 'key group' wage pattern. This wage pattern is known to affect union wages in durable goods industries. But it is supposed to spill over to nonunion labor, as well as to other union labor, and thereby to influence significantly the general level of money wages (Throop, p.79).

A Note on the Labor Theory of Value

The above discussion has serious limitations. If pursued infinitely through input/output data, with the exception of rents from basic raw materials, eventually most of the cost of food could be attributed to the cost of labor, or from another perspective nearly all the value added of food would come from labor. On the surface, the "Labor Theory of Value" would seem to have application to this study (Samuelson, 1976, pp.729-734). It will be seen that structural implications of both labor and product markets, full employment considerations, and utilization of human capital considerations preclude its application even in the extreme.

Review of the Literature

The review of literature concentrates on previous studies:

1) Relating investments in human capital to compensation.
2) Relating wages to industry concentration.
3) Relating unionism and industry concentration.
4) Relating union membership to economic and cultural variables.

Human Capital and Wage Determination

In an article (1970) entitled "The Distribution of Labor Incomes: A Survey with Special Reference to the Human Capital Approach" Jacob Mincer describes a change in direction and focus in studies of income. He states:

> Interest has shifted from the consumption function and its role in short-run fluctuations in income and employment to the production function as a key concept in the study of economic growth. The focus on income as a determanent of consumption is giving way to an interest in income as a dependent variable. Thus the analysis of causes of income variation in the aggregrate and among individuals is returning to the mainstream of theoretical and empirical research. One impressive outgrowth of this shift is the rapidly developing literature on human capital. The human capital approach is intimately related to the study of income distribution: costs and returns to investments in human capital are measured in the first instance by earnings differentials. Consequently, there is a growing recognition of the importance of investment in people as an underlying principle in theoretical and empirical analysis of income distributions (Mincer, pp.1-2).

While Mincer's article is recent, the role of worker capability and worker compensation was shown in a 1953 article in the American Economic Review. Using 1940 census data, D. Gale Johnson concluded that farm people have an ability to perform non-farm work approximately 90 percent of the nonfarm people of the same age and sex. (This was based on the assumption that rural to urban migrants during the period 1935 to 1940 were representative of the farm population.) Using 1940 urban wage distributions by age and sex as weights, he found the 1940 farm labor force had an earning capacity 4 percent below the nonfarm labor force. He concluded that:

> ...this may well be consistent with equal returns for comparable workers (Johnson, p.312).

In a 1971 article using regression techniques, Haworth and Rasmussen using cross-section data for 390 4-digit SIC manufacturing industries found inter-industry wage variations to be significantly related (at the one per cent confidence level) to capital/labor ratio of the industry, the geographic region, the sex composition of the work force, and the racial composition of the work force. These characteristics explained 65% of the inter-industry variation in wages.

When the human capital component was introduced in equations using first an educational attainment independent variable and second a skill index, both variables were significant and the explanatory power of the model increased to 72 and 73 per cent. When worker characteristics were included in the model, unionism had no effect upon wages. The authors note:

> This is not equivalent to saying unions have no effect upon wages. The higher union wages might lead employers to hire workers with desireable characteristics even if the job did not require these characteristics (Haworth and Rasmussen, 1971, pp.378-9).

Difficulty was experienced in estimating the effect of unionism. When unionism was include in the equation, with worker characteristics omitted, unionism was statistically significant at the 99 per cent level and the coefficient indicated that unionized industries have 11 per cent higher wages than non-union industries. (This union/non-union wage differential is the same order of magnitude that other researchers found) (Haworth and Rasmussen).

In a 1975 study individual components of human capital were related to earnings distribution. Paul Taubman (1975) in a study on the personal distribution of earnings (labor earnings, returns to capital, and transfer payments) states:

> Most theoretical and related empirical work on the distribution of earnings fall into the 'human capital' or 'stochastic' theory categories or a blend thereof. The human capital model assumes that people are paid a wage equal to their (real)

marginal product which varies over individuals because of differences in inherited or acquired skill levels. The stochastic theories assume that an individual's earnings over time depend on a cumulative history of random events (Taubman, p.3).

In the conclusions Taubman finds:

In our regressions, we have found a number of significant variables, many of which have never been examined before. Nearly all of these variables have the same sign in the 1955 and 1969 earnings equations ... In the earnings equations we find that educational quantity and quality, mental ability, business assets, certain aspects of family background, preferences toward risk and towards nonmonetary aspects of a job, locational information, hours of work, health, and work experience, and age are significant determinants of earnings ... we find that people earn less for displaying or wanting any of the following traits, certeris paribus: helping others, doing independent work, having job security, avoiding risk, and doing unchallenging work (Taubman, p.193).

Also in 1975 the role of human capital in allowing workers to deal with change entered the literature. Theodore W. Schultz (1975) in an article entitled "The Value of the Ability to Deal with Disequilibria" discusses that component of human capital that allows labor to move from one equilibrium position to another. He points out that the introduction of new technology causes a disequilibrium for the individual and the ability to reallocate services during a period of change is a component of human capital. Shultz states:

This particular ability, ... represents the competence of people to perceive a given disequilibrium and to evaluate its attributes properly

> in determining whether it is worthwhile to act, and if it is worthwhile, people respond by reallocating their resources. The realized gains from such reallocations are their rewards (Schultz, p.384).

Schultz stresses that for people to have gains from their resource allocation does not imply that they need be better off than they were before the disequilibrium. It is only necessary that their economic position has been improved over what it would have been if they had stayed in disequilibrium. Much of the article stresses the ability to deal with disequilibrium through migration. Schultz finds this ability (or supply of human capital) to be related to education.

> We have had and continue to have a vast amount of internal migration by members of the labor force who have been adjusting to changes in job opportunities. Here, too, in terms of economic performance, those with 16 years of education are more successful than those with 12 years, and the latter do better on this score than those with 8 years of schooling. The difference in ability to deal with job disequilibria is apparently related to education (Schultz, p.836).

The demand for the component of human capital that allows people to deal with disequilibria arises during times of changing job opportunities. It would seem a logical extension of Schultz's work to determine what components of human capital allow adjustments to change at the same geographic location, at the same physical plant and even in the same job when this supply of human capital is demanded in order to deal with new manufacturing techniques or technology.

More rapid adaption of technology (presumably at a benefit to the employer) could be achieved while minimizing disruptions to the labor force (presumably to the benefit od employees) if the ability to deal with change was part of the on the job training.

The distinction between two types of on-the-job training brings the workers' costs of investment in human capital and the workers' return from that investment into a sharper focus. Gary S. Becker (1975) in Human Capital distinguishes between general and specific on-the-job training. He finds that the nature of the training determines who pays the cost of the training.

> General training is useful in many firms besides those providing it; for example, a machinist trained in the army finds his skills of value in steel and aircraft firms, and a doctor trained (interned) at one hospital finds his skills useful at other hospitals. Most on-the-job training presumably increases the future marginal productivity of workers in the firm providing it; general training, however, also increases their marginal product in many other firms as well. Since in a competitive labor market the wage rates paid by any firm are determined by marginal productivities in other firms, future wage rates as well as marginal products would increase in firms providing general training. These firms could capture some of the return from (general) training only if their marginal product rose by more than their wages. Perfectly general training would be equally useful in many firms and marginal products would rise by the same extent in all of them. Consequently, wage rates would rise by exactly the same amount as the marginal product and such firms providing such training could not capture any of the return.

> Why, then, would rational firms in competitive labor markets provide general training if it did not bring any return? The answer is that firms would provide general training only if they did not have to pay any of the costs. Persons receiving general training would be willing to pay these costs since training increases their future wages. Hence, it is the trainees, not the firms, who bear the costs of general training and profit from the return (Becker, 1975, pp.11-12).

(Becker ignores the effect of external economics of scale which might offset some of the costs of general training borne by firms.)

> Training that increases productivity more in firms providing it will be called specific training. Completely specific training can be defined as training that has no effect on trainees that would be useful in other firms. Much on-the-job training is neither completely specific nor completely general but increases productivity more in the firms providing it and falls within the definition of specific training (Becker, 1975, p.18).

> If all training were completely specific, the wage that an employee would get elsewhere would be independent of the amount of training he had received. One might plausibly argue, then, that the wage paid by firms would also be independent of the training. If so, firms would have to pay training costs, for no rational employee would pay for training that did not benefit him ... (Becker, 1975, p.20).

> ... Rational firms pay generally trained the same wage (they could get elsewhere) and specifically trained employees more than they could get elsewhere (Becker, 1975, p.24).

(This opens the door for the possibility that some of the interindustry variation in wages is a function of variations in specific training, resulting in differences in productivity.)

Since firms could recapture the costs of training only through increased profits subject to some discount rate, this has major implications for labor turnover. Property rights in a skill are automatically vested in the employee, for a skill can not be used without the permission of the person possessing it.

The willingness of firms to provide either specific or general training closely depends on the likelihood of labor turnover.

Becker's division of training will have importance when the apprenticeship programs are discussed. Generally, since both union and food industry apprenticeship programs involve a reduction in wages, they must have a major component of general training involved in them.

Also in 1975, the concept of human capital was directly connected to the labor market by Lester Thurow. In Generating Inequality he introduces the concept of the "Labor Queue." This is discussed in detail in Chapter IV (Thurow).

Concentration and Wages

Martin Segal in 1964, concentrating on analytical rather than empirical aspects, expanded the proposition that the product market structure of an industry significantly influences union ability to make wage gains. Traditionally the number and size distribution of sellers (concentration ratios) are singled out as a wage influencing variable. Segal expanded the analysis to include (1) the number and size distribution of sellers; (2) the geographic boundaries of the markets in which the industry's firms compete; and (3) the conditions of exit and entry for the sellers; the conditions of entry being easier in a competitive industry (Segal).

On the basis of these characteristics he formulates a four-way classification of industries. The industries are first divided into national and local market categories. Each of these categories is divided into competitive and non-competitive groups.

This methodology is illustrated below with industries Segal postulates fall into the categories.

	COMPETITIVE	NON-COMPETITIVE
LOCAL MARKETS	business services	brewing
	residential const.	newspapers
	local bakeries	public utilities
NATIONAL MARKETS	textiles	automobiles
	furniture	steel
	apparel	aluminum

Segal concludes:

> One should expect that, ceteris paribus, a union in a local competitive industry would have greater wage-gaining ability than a union in a competitive-national market industry. The main reason is that local market union leaders are in a better position to evolve wage policy that is relatively uninfluenced by intra-industry competitive pressures. Another reason is that local market union has greater ability to organize the competing firms.
>
> A union in a local-competitive industry can be expected to have less wage-gaining ability than a union in a non-competitive industry-whether national or local. The main reason is that freedom of entry and price pressures in a local-competitive industry create a danger of expansion of a nonunion sector.
>
> One can expect that a union would have the least ability to influence wages in a competitive industry whose firms sell in a national market. In this type of market structure the intra-industry price competition exerts a major impact on union policies in particular firms or production areas. Another factor limiting union wage-gaining ability is the inevitable competition of the unorganized sector (Segal, p.111).

A 1966 article by Leonard Weiss will be referred to several times. Using regression techniques with private wage and salary income as the dependent variable, he tested two hypotheses: (1) that concentrated industries pay high annual rates for labor of particular occupations; and (2) that these high earnings are more than can be accounted for by the personal characteristics of the labor employed. He also tested the effect of unionism on private wage and salary income.

He concluded that concentrated industries do pay high incomes for given occupations.

> The relationship is strongest for male production workers where the threat of unionization is undoubtly greatest ... Once personal characteristics are introduced, the relationship between concentration and earnings is no longer significant and is negative about as often as it is positive ... The laborers in concentrated industries seem to receive no more for their services than they might in alternative employments for persons with similar personal characteristics.
>
> This does not necessarily imply that no misallocation results from high-wage payments in concentrated industries. Labor quality in this study includes such personal characteristics as race, which may be quite irrelevant to the objectively evaluated productivity of the worker involved. It has been suggested that firms with monopoly power use part of their profits to hire congenial or socially acceptable employees, an option not available to employers subject to more stringent competitive pressures (Weiss, pp.114-5).

In 1970, Micheal L. Wachter investigated cyclical variation in interindustry wage structure and found that wage differentials were a function of ability to pay considerations emanating from the structure of the product market and the strength and degree of unionization. He recognized the high intercorrelations between these variables and made no attempt to determine the separate effects of the two variables.

He found a theoretical basis for cyclical variations.

> It is probable that almost all industries pay a premium in order to reduce the uncertainties attached to unexpected fluctuations in their demand or supply of labor ... Cyclical variation in relative wages can be analyzed in terms of shifts in the industry supply curve due to changes in aggregate unemployment. As labor markets tighten, for example, low-wage industries find a decline in the size of the labor force available to them. This involves not only an increasing difficulty in attracting new workers, but also a greater problem in retaining workers already hired. The result is that low-wage industries attempt to increase their competitive standing by narrowing the wage structure ... Similarly, as unemployment rises, low-wage industries find it increasingly easy to maintain a given labor supply, so that they attempt to reduce their relative wage (Wachter, p.77).

This makes low-wage industries more cyclical than high wage industries.

In addition, unionism is more prevalent in high wage industries and contract bargaining induces a lag in high wage industries that smooths cyclical variation. His empirical work was consistant with these theories; however, he did find that high-wage industries respond more quickly to changes in the cost of living than do low wage industries. This may be a function (at least partially) of the cost of living provisions in many union contracts, assuming the prevalance of unions in high-wage industries.

In a 1971 study of the European Common Market, Louis Phlips concludes that there is a positive relationship between higher concentration and wage rates in all countries studied:

> Whether they extract higher profits or not, concentrated industries do pay higher wages in all countries under study (Phlips, p.174).

In a 1980 article "Profitability, Concentration and the Interindustry Variation in Wages", Thomas A. Pugel studied the contention that wage differentials are related to the ability to pay. Focusing on labor force characteristics and product market influences, he determined that other things being equal, the prime age, large-plant, and unionized factors are positively correlated with average hourly earnings. The female fraction, and the portion of the labor force in the South were negatively correlated with average hourly earnings. Racial differences had an insignificant correlation with average hourly earnings.

Pugel concludes:

> Excess profitability is demonstrated to be superior to concentration as a determinant of the interindustry variation in wages. The labor force receives up to 14% of the total excess return available due to product market imperfections (Pugel, p.253).

Unions, Wages and Industry Concentration

This section specifically introduces unions and their effects. A review of the literature offers little concrete in predicting the wage gains of unions. If there are to be policy recommendations concerning unions, the acceptance of these policy recommendations would be enhanced if they were in the best interests of trade unions, industry, and society. Central to this concern is a comprehensive theory of trade unions so that it could be determined what trade unions maximize given their constraints.

Donald L. Martin (1980) in An Ownership Theory of Trade Unions in noting that there is not a broadly accepted theory of the trade union states:

> The absence of an economic theory of unions is not for want of trying. Scholars since Adam Smith have searched for a explaination of union behavior within the confines of economic theory. Others, not so constrained, have sought explainations in terms of political sociology. The biggest stumbling block for economists, however, has been the answer to the deceptively simple question asked by John Dunlop over 30 years ago: 'What do unions maximize?' Given an objective function, it is possible to derive logical implications that will serve to identify, from an otherwise bewildering collection of facts, variables relevant to the empirical examination of the economic impact of the trade union.

> The response to Dunlop's question by economists and students of industrial relations has been, to say the least, disappointing. The profession has generated an embarassing number of maximands. It has been suggested, from time to time, that unions maximize the wage bill, the wage rate per member, the utility of the membership, rents generated from union monopoly power, membership size, the probability of the union's survival, 'the economic welfare of the membership, and the difference between receipts and expenditures. Some have suggested that unions are not, after all, maximizing institutions, they are satisficing institutions. This cornucopia of maximands is itself evidence of the profession's failure to

> develop an operational model of the trade union comparable to its model of the profit maximizing firm (Martin, 1930, pp.1-2).

The interaction of organized labor and full employment conditions was discussed by Albert Rees in a 1953 article "Long-Run Effects of Full Employment" that states:

> The most widely used definition of full employment is that of Sir William Beveridge, who means by full employment 'having always more vacant jobs than unemployed men (Rees, 1953, p.451).

He also cites a United Nations definition for full employment as:

> ... a situation in which employment cannot be increased by an increase in effective demand (Rees, 1953, p.451).

Rees states that clearly both definitions would cause inflation. This inflation could be contained in the short run, but not indefinitely.

Rees explains the inflationarly effect of full employment is:

> ... generally believed to be true solely or primarily because of the bargaining power of labor and other orgainzed economic groups. ... In this context, it has seldom been remembered that the demand for labor is derived demand, and that the excess demand for labor required by the Beveridge definition can be created only by creating simultaneously an excess demand for commodities. Such wage and price increases would take place most rapidly in perfectly competitive product markets.

> They would tend to be delayed or suppressed by the rigidities of collective bargaining and administered prices (Rees, 1953, pp.451-2).

Rees offers little hope for wage restraint from organized labor. He states:

> Writers ... have expressed the hope that unions would moderate their wage demands. They (the writers) have usually advocated the centralization of wage bargaining to further this moderation by eliminating competition between unions for wage increases. These suggestions have sometimes been criticized as unrealistic. ... In my opinion, the criticism is valid for the United States and Canada, for there is little reason to expect that in the foreseeable future that American Unions will submerge long-standing rivalries and pursue self-sacrificing wage policies (Rees, 1953, p.453).

In 1969 Stanley H. Masters extended the findings of Segal and Weiss. He argued that plants of different size will normally set different standards for their workers. Because of the capital intensity of large plants, they will want workers who are more dependable and more willing to be regimented, but less broadly skilled. If all firms could set wages unilaterally, then the average wage rate might be relatively high or low in the industries with the larger plants. This would depend upon the relative strength of these considerations (Masters).

He also noted that union organizing has some economies of scale such that on a cost per member basis, it is less costly to organize large plants than small plants, all other things equal. Thus when unions are taken into account, there is a chance that industries with the larger plants have higher wages. His analytical conclusion is that large plants, not large firms in a concentrated industry account for the interindustry differentials in wages.

Masters tests this hypothesis in a simple regression where the dependent variable is the average hourly earnings for production workers and the sole independent variable is a plant size variable. (Percent of industry employment in plants with employment over 1000). This is done using data from the 1963 Census of Manufacturers for the 417 SIC four-digit manufacturing industries. He finds a significant correlation. He then adds concentration and unionization independent variables and finds plant size significant at the 99 percent level as is the unionization variable, but the concentration ratio is unimportant.

There is substantial intercorrelation between concentration, unionization and plant size. Masters does not address this. His conclusions that the average wage rate in a manufacturing industry is positively related to the proportion of large plants in that industry and that economists should give plant size greater attention when seeking to explain interindustry wage variation-seem not to warrant extrapolation beyond these points (Masters, p.345).

Gary S. Becker (1971) in The Economics of Discrimination finds a trade union may raise wages but have no control over the distribution of jobs. In a union shop contract this power is nominally controlled by the employers. (It is the author's experience that this is not necessarily the case if the employer desires good industrial relations.) Since a new union member may have no reasonable expectation of finding employment, easy entry would not necessarily indicate that wages have not been raised. The trade union's power would have to be measured by the number of applicants for employment per employed person. The employer, rather than the trade union, would ration entry and could discriminate and show favoritism at no cost to himself. He concludes that craft unions have more power than industrial unions because they reject more applicants and discriminate more. He feels the possibility remains, however, that industrial unions have the power to raise wages, but lack the power to ration jobs (Becker, 1971, pp.69-74).

Lawrence M. Kahn in 1977 examined the effects of unionism on increased skill levels of unionized workers. Simply stated he feels that in the long run unions can, by raising labor costs, induce employers to substitute capital for labor. Such changes would lead employers to raise the skill levels of their workers through increased on the job training. In addition employers would raise hiring standards in view of the increased capital intensity of the work performed. This opens the door for a trade off between union wage gains and increased worker skill levels (Kahn).

Using econometric techniques (OLS and 2SLS), he estimated a 40 percent increase in unionization is associated with a 3.4 percent increase in the long run (equilibrium) skill level. He recognized that standard errors larger than the coefficients cast doubt upon his conclusions using Census data, however this represents a potential area of policy which shall be explored in the recommendations.

Unfortunately, no clear guidance is given in the area of the effect of unionism on wage rates and inflation. It is not generally recognized in the literature that the very nature of the production function in most industries gives employers an incentive to agree to wages above the prevailing wage.

A description of the work of Kutish with an expansion by this author illustrates that not all pressures for wage increases flow from union concerns.

L. John Kutish presented a theory of production in the short run that recognized the nature of industrial production. This theory has an application when attempting to understand why there is an economic incentive for an employer to enter into a contract that pays a premium to workers. This section uses Kutish's theory to demonstrate that constant marginal costs can be obtained by a manufacturer over a wide range of output levels when trained labor is available to the normal industrial production process (Kutish).

Further, his theory demonstrates that coupled with a trained labor supply, the law of diminishing returns over a large range of production may be circumvented by the firm.

Kutish describes a plant with two identical production lines, one of them idle and the other operating an eight-hour shift five days per week. If management attempts to increase production by speeding up the active line by increasing only the raw material (which Kutish calls the passive agent in production) the law of diminishing returns will soon rear its ugly head. In the same manner, if management attempts the increased production by adding more labor, machines, etc. (which Kutish calls active agents in production) while some agents remain fixed, again the expected effect of the law of diminishing returns will be felt.

> Still seeking to increase output and avoid the increase in marginal costs, management now used the ... method of expanding output: activating the idle production line. Of course, additional laborers must be hired to operate the machines, but this is permissable in the short run. If machines and workers in the second line are of the same quality as those in the first line, and if the additional labor and raw material are available at the same cost rates, then the output of the second production line can be secured without an increase in incremental costs (Kutish, pp.39-40).

Assume management wishes to still further expand production. An attempt to increase the instantaneous rate on the second line will be subject to the same problems that were experienced with the first line. Namely, the law of diminishing returns will cause incremental costs to rise. The present instantaneous rates could be maintained (as well as the present incremental costs) by adding a second or third shift or in extreme cases rescheduling the plant so that four shifts are operated on two lines. AT THIS POINT IT SHOULD BE STRESSED THAT THE PRECEEDING EXAMPLE HAS RESULTED IN UP TO AN EIGHT FOLD INCREASE IN PRODUCTION WITH ESSENTIALLY NO INCREASE IN MARGINAL COSTS FOR THE FIRM. (Expansion of a single line plant from one shift to four shifts would result in a fourfold increase.)

Data will follow showing shift premiums in the food industry to be small and so long as Saturday and Sunday work can be avoided under existing union contracts, a four fold increase in production starting from a single shift could be expected under conditions of constant marginal costs.

Kutish's theory is for the short run. As such, as production increases, those costs that are fixed in nature are spread over more and more units resulting in a decline in total unit costs from a production standpoint. Quite an advantageous position for a manager charged with the cost responsibility. This would seem to explain production men's devotion to volume.

Before describing the applicability of this theory to incentives for employers to enter into union contracts, let me discuss the short run nature of Kutish's theory.

Remembering that an economist's definition of the long run is the period of time in which all factors are variable, very few industrial decisions are long run. In fact most people charged with management functions in industrial situations spend their entire career without ever making, or even being called on to make, a truly long run decision. This is not only at the lower levels of management. Most chief executives never make a long run decision under the definition of the economist. Far from being a disadvantage, the short run nature of Kutish's concept is actually used in the planning of production organization in business.

Conditions such as idle capacity create an economic incentive for firms to enter into labor contracts above the prevailing wage. At the very least, this will result in a labor queue that contains quickly and cheaply trained workers. In the extreme it will result in laid off workers awaiting recall to man the idle capacity. In this case (as Weiss points out), the costs and risk of fluctuations in demand are passed on to the workers. To the extent unemployment compensation is paid from general tax revenues, part of the risk of the firm is also passed on to the general public.

The increased wages represented by the differential between the prevailing wage rate and the contract rate must be offset by the gains from constant marginal costs where firms actively compete for labor. This is of less importance where industry wide bargaining takes place. This pattern of bargaining may increase the shifting of risk to the employee and to the general public and result in an incentive for firms to build plants with idle capacity. Thurow notes that the existing tax structure for corporations increases the misallocation of capital and this is addressed in the recommendations section (Thurow, p.201).

Chapter II is devoted to describing provisions in food industry labor-management agreements that affect efficiency. It relys heavily upon the theories of Harvey Liebenstein. These theories are presented in that chapter (Liebenstein, 1966, 1976).

Methodology

This study examines 397 collective bargaining agreements covering 1,595,000 workers in the food system. These agreements were all in effect during the period 1979-1981 and are maintained in a public file by the United States Department of Labor, Bureau of Labor Statistics, Washington, D.C. The file was examined in a preliminary manner and 63 contracts analyzed to determine the limitations of the data and the areas of research in which a contribution to knowledge could be made. Examples from many of the contracts analyzed were used in a research proposal to illustrate the nature of the data, the application of economic theory to the data, and the potential of this study to make a contribution to the literature of agricultural economics.

Source and Nature of the Data

The legislative authority for the file of contracts used in this study is Section 211 (a) of the Labor Management Relations Act, 1947, which reads as follows:

> For the guidance and information of interested representatives of employers, and the general public, the Bureau of Labor Statistics of the Department of Labor shall maintain a file of copies of all available collective bargaining agreements and other available agreements and actions thereunder settling or adjusting labor disputes. Such a file shall be open to inspection under appropriate conditions prescribed by the Secretary of Labor, except that no specific information submitted in confidence shall be disclosed.

Of the 397 agreements on file under four digit SIC codes covering industries comprising the food system, only 3 agreements were submitted in confidence. These confidential documents were reviewed, but not included in the study. They did not deviate from normal collective bargaining agreements and their exclusion from the study respects the wishes of the firms and unions involved, but does not affect the methodology, analysis, conclusions or recommendations of the study.

The Bureau of Labor Statistics keeps current a file of approximately 8,000 agreements, all submitted voluntarily.

A form is used by the Bureau of Labor Statistics to obtain the contracts from both parties to the agreements, namely the union and the firm or firms involved. The form makes no mention of the ability to submit the collective bargaining agreement in confidence and the voluntary nature of submission is in rather fine print, and certainly not stressed.

Included in this file are virtually all agreements in the United States covering 1,000 workers or more (Approximately 2,000 agreements). Only a small portion of smaller agreements is on file. With the exception of those documents submitted in confidence, the file is open to public inspection in the General Accounting Office, Fifth and G Streets, N.W., Washington, D.C.

Copies of all agreements analyzed in this study were obtained in 1980 and kept current during the research by four visits to the file during 1981 to obtain contracts for firms that were not previously on file, or contracts that expired and were renewed during the period of time this research consumed. Table 4 shows the industries and number of employees covered by the contracts.

All collective bargaining agreements used in this study are listed in the APPENDIX by four digit SIC code showing both the employer(s) and union that are parties to the contract.

Since the study inquires into the relationship between the market structure of industries comprising the food

Table 4

Food System Industries, Number of Collective Bargaining Agreements and Employees per Industry Covered by Collective Bargaining Agreements Used in Study.

INDUSTRY	CONTRACTS	EMPLOYEES
Milk production	1	2,700
Meat packing	30	68,350
Dairy processing	16	29,500
Canning, packing	45	131,250
Grain milling, cereals	8	18,800
Baking	21	42,500
Sugar refining	11	25,750
Candy, confections	13	14,900
Brewing, soft drinks	13	23,500
Coffee processing	3	3,950
Tobacco products	13	26,150
Farm machinery	12	117,500
Wholesale food distribution	15	22,500
Beer distribution	8	11,100
Food retailing	123	395,850
Special food retailing	7	10,300
Restaurants	22	68,500
Catering	23	140,550
Stevadoring	13	44,500
Total Contracts	397	
Total Employees Covered		1,595,600

Source: BLS Contract File

system and inflation, productivity and equity, the latest data available relating to the concentration ratios in food manufacturing and distribution was obtained from the North Central Regional Committee in Madison, Wisconsin. It consisted of the (at that time) unreleased Concentration Ratios in Manufacturing of the 1977 Census of Manufacturers (printed in May, 1981) and internal data on the concentration of grocery retailers in selected relevant markets (U.S. Bureau of Census).

In the design of the study, it was recognized that regional differences in wage patterns could affect the nominal and real wage patterns under study. A method to correct for this is explained later in this section. That method required the use of 39 separate Area Wage Surveys for 1980 compiled by the Bureau of Labor Statistics and released during 1980 and 1981 (BLS).

This study consists of the following analytical chapters and the use of the above data in the specific Chapter is discussed below.

Chapter II The Effects of Food System Collective Bargaining Provisions on Productivity and "X-Efficiency"

Chapter III Inflationary Impacts

Chapter IV Contract Provisions and Wage Differentials

Areas of Analysis in Chapter II

Entry

Thurow's "Labor Queue" is the theoretical basis for this analysis. Essentially workers line up and the employer hires the one(s) with the lowest cost of training. Contract provisions in collective bargaining agreements that affect which workers can be hired and/or remain hired are described by industry and by region within the food system. Most collective bargaining agreements that are described recognize the union as the sole bargaining agent for employees but vary beyond that (Thurow).

Selected provisions from the contracts analyzed are included to show the effects of union shop, vestiges of the closed shop that is illegal under the provisions of the Taft-Hartley Act, maintainence of membership, seniority and apprenticeship programs.

This chapter describes the type of union security provision (i.e. union shop, closed shop, etc.) by company with totals by industry within the food system. It describe apprenticeship programs similarly. It results in an overview of the role collective bargaining agreements play in the hiring process in the food industry.

Efficiency

Leibenstein's concept of "X Inefficiency" is used in this chapter to evaluate provisions in collective bargaining agreements that reduce or increase employee effort with a corresponding effect on productivity. This is done by industry and the resulting description will give an extensive overview of differences between industries within the food system (Leibenstein, 1976).

For example, provisions such as those limiting a waiter to serving 18 people in a restaurant or requiring a head meat cutter on duty at all times in a super market are described and aggregated by industry. Provisions limiting tasks that can be done by employees (job descriptions) are described and tabulated in the same manner. These provisions are generally felt to be union practices that reduce productivity.

There are provisions generally favored by both union and management that affect employee effort. Duration of the collective bargaining agreement, grievance procedures, cooperation in new technology provisions, etc. are all present in the agreements. These provisions are described. These are provisions that generally contribute to stability and productivity. These provisions are described and aggregated by industry.

Unique Provisions

Many of the contracts analyzed include provisions unique to problems in the industry covered by the contract. This is an evolving area of collective bargaining and is varied among industries. An analysis of these provisions is included in this chapter.

An example will clarify the role of these types of provisions.

The collective bargaining agreement between Rath Packing and the Amalgamated Meat Cutters contains provisions calling for the union contract to remain in effect if a plant is closed, sold to another packer or leased. It further restricts packer to packer trading by Rath. This is designed to prevent recurrence of what happend at the Mason City, Iowa plant of Iowa Beef Processors. Essentially Iowa Beef sold the plant, contracted for its entire production and the new owners (who were extremely friendly with Iowa Beef management) refused to hire any former employees who had been union members.

The same Rath agreement calls for a reduction in wages for employees and that reduction to be used for purchase of Rath stock in the name of the employee. On the surface this would appear to be an effort by both management and the union to add incentives for workers. In fact, the financial condition of Rath Packing made it necessary for employees to take a reduction in wages from those originally negotiated.

Many contracts in the retail food industry contain provisions to facilitate the adaption of new technology (i.e. electronic check outs, boxed beef, etc.) while easing the adjustment on existing workers.

These examples illustrate some current contract provisions unique to industry problems. These provisions are described by industry. While direction in this is difficult to establish, these provisions are important. Inclusion of developing areas is intended to allow this study to be on the leading edge of collective bargaining agreements in the food system.

Areas of Analysis in Chapter III

Inflationary Impact

The contracts analyzed are generally of a three year duration with annual increases in wages. These, of course, vary among firms within an industry but a pattern does emerge among industries within the food system. In the same manner many of the contracts have "cost of living" provisions that escalate wage rates based on increases in the Consumer Price Index as published by the U.S. Department of Labor. The variation of these provisions is extensive.

The escalation can be quarterly, semi-annually or annually. In most cases the escalation is to be added to previously negotated annual wage increases. These provisions are normally called "roll in" provisions. Thus many contracts escalate wages with two provisions.

Areas of Analysis in Chapter IV

Wage Differentials

Nominal Wages

This portion of the study adjusts the nominal wage rates by the appropriate contract escalators to the rates in effect on April 1, 1981. These rates are then adjusted to account for paid holidays and vacations specified by each contract. The rates are then expressed as hourly wages and are displayed by industry within the food system.

These nominal rates are compared among industries using the two methods. Common skill levels in different industries are compared and the hypothesis tested that differentials are related to concentration in the industry. Parallel to this, nominal wage rates are compared among similar skills between industries and the differences between those rates and rates in the same geographic area for all industries (as reported in Area Wage Surveys of the

U.S. Department of Labor) are compared to concentration to again test the hypothesis that these differentials are related to concentration.

Compensation

This portion of the study adjusts the contract wage rates for fringe benefits such as vacations, retirement contributions, paid holidays, etc. by firm and by industry within the food system. This data is reduced to the hourly benefit in effect on April 1, 1981.

This data is added to the data developed in the preceding section which developed the nominal wage differences. By adding the fringe benefits to the nominal wage rates, the compensation rates are obtained and these are analyzed with the same parallel methodology used in the preceding chapter's methodology to test the hypothesis that differences in compensation rates are related to concentration.

This chapter reports the negotiated wage and fringe benefit increases over the term of the contracts, adds to the negotiated wage increases further increases due to "cost of living" provisions and compares them among industries within the food system using the total compensation in effect of April 1, 1981. Again this is compared to concentration ratios.

Hypothesis

Demand

The demand for labor is a derived demand - derived from the demand for goods and services. The demand for goods and services in turn is determined on industry-by-industry basis in imperfect competition. It has become widely believed that market imperfections in the product market are widespread resulting in reduced competition, technical inefficiency and an ability of manufacturers to (at the very least) pass on costs through the channels of distribution. The channels of distribution are infinitely complex, such that a given product may be part of a complex mixture of products of a firm. An evaluation of the fixed and variable costs may not explain production decisions because of potential cross subsidization.

Capital is an input into the production process and may earn less than its opportunity costs in the general economy for several reasons. Chief among these are:

1. Asset fixity
2. Corporations retain earnings and these are isolated from the general capital markets. They can be invested at less than the current return.
3. A professional managerial class has emerged so that management and ownership are separate, resulting in a less concern with capital erosion.

The demand for labor side emerges as being less sensitive to adjustments at the margin, able to pass on increased costs and somewhat insulated from cpital market.

<u>Supply</u>

The supply side of labor in this complex system (in this study) is represented by large national unions. These unions appear to be of adequate strength to effectively represent workers in bargaining. They recognize the employers strengths in the product market and want their members to share in the "monopoly profits". These unions face fully the trade offs from higher wages (the trade off being reduced employment) only at the time of plant closings. The unions assist their members in two ways:

1. Raising the wage scale, and
2. Maintaining or increasing member employment.

When the supply and demand for labor interact, what results of that interaction fit the hypothetical description above? Throughout this study evidence will be cited (which may or may not be conclusive) that supports this general hypothesis.

CHAPTER II

THE EFFECTS OF FOOD SYSTEM COLLECTIVE BARGAINING PROVISIONS ON PRODUCTIVITY AND "X-EFFICIENCY"

The Theories of Liebenstein

Harvey Leibenstein (1966) in an article "Allocative Efficiency Vs. 'X-Efficiency'" states:

> ... that firms and economics do not operate on an outer-bound production possibility surface consistent with their resources. Rather they actually work on a production surface that is well within the outer bound. This means that for a number of reasons people and organizations normally work neither as hard nor as effectively as they could ... The data suggest that in a great many instances the amount to be gained by increasing allocative efficiency is trivial while the amount to be gained by increasing X-efficiency is frequently significant (Leibenstein, 1966, p.413).

Leibenstein defines X-efficiency as non-allocative efficiency of which motivation and the resultant effect are major parts. He argues that allocative efficiency gains or losses are usually less than one percent while gains or losses due to X-efficiency are much larger and he cites examples in excess of 80 percent.

While he does not specifically deal with organized labor and collective bargaining agreements, he does state:

> The conventional theoretical assumption, although it is rarely stated, is that inputs have a fixed specification and yield a fixed performance. This ignores other likely possibilities ... The most common case is that of labor services of various kinds that have variable specifications and variable performance-although markets sometimes operate as if much of the labor of a given class has a fixed specification. Moreover, it is exceedingly rare for all elements of performance in a labor contract to be spelled out. A good deal is left to custom, authority, and whatever motivational techniques are available to management as well as to individual discretion and judgement (Leibenstein, 1966, p.407).

Work effort as it is dealt with in a work setting goes far beyond the provisions of collective bargaining agreements. This study will deal with those provisions of collective bargaining agreements that effect X-efficiency-knowing that the more important considerations of work humanization and motivation are beyond the bounds of most contracts.

An important area for future research is why X-efficiency even exists in the first place. Leibenstein touches on this when he recognizes that an important component of human capital-knowledge-may not be used to capacity; just as traditional capital or labor may be underutilized. He states:

> People normally operate within the bounds of a great deal of intellectual slack. Unlike underutilized capital, this is difficult to observe. (Leibenstein, 1976, p.41).

It will be seen from the theories of Thurow (Thurow, 1975) that the hiring process tends to array workers based on their ability to fulfill a firm's objectives. To the extent this results in jobs going to overqualified workers, the worker may experience "intellectual slack" from his first moments on the job. This may be exacerbated during his career. A study of the interaction of the theories of Leibenstein (X-efficiency) and Thurow (Labor queue) would provide insight into why X-efficiency exists.

Productivity is increased when worker effort improved. This Chapter details contract provisions that affect productivity. On balance, it will be seen that many contract provisions directly reduce productivity. For one to reach the conclusion that the total effect of provisions contained in food system collective bargaining agreements do not harm productivity, one must believe that improvements in industrial democracy, employment stability and work preservation contribute to productivity through the mechanisms described by Liebenstein. These mechanisms affect productivity indirectly.

Keep in mind that some provisions of contracts directly influence effort. Provisions of this type limit the productivity of the worker often in an effort to preserve employment. Other provisions indirectly influence effort in the manner described by Liebenstein. Provisions of this type often deal with fairness or industrial democracy, such as a grievance procedure.

The effect of the provisions in collective bargaining agreements on effort and productivity comes from the interaction of the various provisions within the contract plus work rules and motivational components on the job, but not specifically covered in the contracts. This study is confined to the bounds of collective bargaining agreements. It will further be confined to describing the provisions affecting productivity both by individual provision and by the collective provisions.

A fertile area for future research is the interaction of the collective bargaining provisions and their effect on productivity. The area involves a great deal more than the summing of various types of provisions and describing the differences between industries within the food system as described in this chapter.

Methodology

This chapter uses the Master Agreement between Armour and Company and the United Food and Commercial Workers International Union, A.F.L.-C.I.O. & C.L.C. as a modified case study of the effects of a total contract on productivity. When a specific type of provision in the Armour Agreement is described, a narrative will immediately follow describing variations on that provision that can be found in the other food industry contracts analyzed and a table will show the incidence of this type of provision and its variations in each industry comprising the food system.

An appreciation for the interaction of the provisions affecting motivation/productivity and their resultant effect on industry performance will emerge from this expanded case study approach. The Armour Agreement should serve as a guide (hopefully even a road map) for the reader.

Provisions Affecting X-Efficiency

Duration and Unit(s) Covered

The Armour Agreement is a master agreement covering 21 domestic plants and 4,300 workers. It was in effect from September 1, 1979 to August 31, 1982 (three years). The agreement does not include wages at individual plants, these are negotiated on a local plant basis. The productivity implications are the term of the agreement lends stability to the production process, but the inclusion of local wage negotiation offers the possibility of decentralization of compensation issues and a system of rewards reflecting the local situation.

Contract Coverage in the Food System

While the Armour Agreement covers one firm, only 54.9% of the contracts analyzed cover one employer. The remaining

45.1% of the contracts cover more than one employer. In many cases the contract is with a group of employers covering the industry in a specific geographic area.

Table 5 shows the incidence of single employer contracts and multiple employer contracts by four digit SIC code. The incidence of multiple employer contracts is highest in food retailing (SIC 5411), stevadoring (SIC 4463), and the food service industries (SIC 5812 and 7011).

Duration of Food System Contracts

The Armour Agreement is of three years duration. Most food system contracts are of this length. Table 6 shows 80.9% of the contracts analyzed to have a duration of 34 to 38 months. Contracts of shorter duration are predominant in the baking industries (SIC 2051 and 2052). Contracts of longer duration are predominant in the food service industries [restaurants (SIC 5812) and hotels (SIC 7011)]. Those contracts of longer duration generally involve employees who receive gratuities and meals as a portion of their compensation. These forms of compensation are indexed indirectly to inflation and reduce the need for frequent wage negotiations. Table 6 shows the duration of food system contracts.

Table 5

Number of Employers that are Party to Specific Collective Bargaining Agreements in the Food System in effect on April 1, 1981.

SIC Code	Total Contracts	Single Employer	Multi-Employer
0132	1		1
0192	1	1	
2000	1		1
2011	30	23	7
2015	1	1	
2020	4	1	3
2023	1		1
2024	3		3
2026	12	1	11
2031	2	2	
2032	5	5	
2033	20	19	1
2034	6	5	1
2036	2	2	
2037	5	3	2
2041	3	3	
2043	3	3	
2046	2	2	
2051	15	2	13
2052	6	6	
2061	1		1
2062	6	6	
2063	5	5	
2071	10	9	1
2072	3	3	
2073	1	1	
2082	10	6	4
2085	4	4	
2086	3		3
2095	1	1	
2099	2	2	
2111	7	7	
2121	4	4	
2131	2	2	
2141	1	1	
3522	12	12	
4463	13		13
5040	1		1
5042	7	2	5
5047	2		2
5048	3		3
5049	1		1
5411	123	71	52
5421	5		5
5810	2		2
5812	22	1	21
7011	23	2	21
Total	397	218	179
Percent of Totals		54.9%	45.4%

Source: Contract File, BLS.
Note: Refer to SIC Identification in Appendix

Table 6

Duration of Food Industry Collective Bargaining Agreements in Effect April 1, 1981.

		Duration of Collective Bargaining Agreement					
SIC Code	Total Contracts	24-26 months	27-33 months	34-38 months	39-42 months	48-51 months	60 months
0132	1			1			
0192	1			1			
2000	1			1			
2011	30			28	1	1	
2015	1			1			
2020	4			4			
2023	1			1			
2024	3			3			
2026	12	3		9			
2031	2	1		1			
2032	5	2		3			
2033	20	2		18			
2034	6		1	5			
2036	2			2			
2037	5	1		4			
2041	3			3			
2043	3			3			
2046	2			2			
2051	15	7		8			
2052	6	6					
2061	1	1					
2062	6	1		5			
2063	5	1		4			
2071	10	1		9			
2072	3	1	1	1			
2073	1			1			
2082	10	1		8	1		
2085	4	1		3			
2086	3	1		2			
2095	1			1			
2099	2			2			
2111	7			7			
2121	4			4			
2131	2			2			
2141	1			1			
3522	12		4	8			
4463	13			13			
5040	1			1			
5042	7			7			
5047	2			2			
5048	3			3			
5049	1			1			
5411	123	6	4	112	1		
5421	5			5			
5810	2			1		1	
5812	22	1		10		7	4
7011	23	1	1	10	1	7	3
Total	397	38	11	321	4	16	7
Percent of Totals		9.6%	2.8%	80.9%	1.0%	4.0%	1.8%

Source: Contract File, BLS.
Note: Refer to SIC Identification in Appendix

Locations Covered in Food System Contracts

The Armour Agreement covers twenty-one plants in the United States. Most food system agreements cover more than one location. There is a possible bias in the analysis of number of locations. It has been previously shown that 45.1% of the contracts analyzed are for more than one employer. In addition the large number of employees (1000 or more per contract) may be associated with more than one location. This is especially true in industries such as food service and food retailing. Table 7 shows only 23.9% of the contracts analyzed are for one location. Most contracts are for more than one location. Table 7 shows 53.4% of the contracts to be for more than ten locations. It can be seen from Table 7 that food retailing (SIC 5411) and food service (SIC 5812 and 7011) greatly affect the number of contracts covering ten or more locations.

Cooperation

Article II of the Armour Agreement pledges cooperation between the Union and Company it states:

> 2.1 Intent
> It is the intent and purpose of the parties that this Agreement shall promote and improve the industrial and economic relationship between the Company and the Union ...
> 2.2
> Mutual Interest
> It is recognized by both parties that they have a

Table 7

Number of Locations Covered by Individual Contracts in Effect on April 1, 1981.

SIC Code	Total Contracts	1 locations	2-5 locations	6-9 locations	10 or more locations
0132	1				1
0192	1		1		
2000	1	1			
2011	30	18	3	3	6
2015	1		1		
2020	4		1	1	2
2023	1			1	
2024	3				3
2026	12		3	3	6
2031	2	1	1		
2032	5	5			
2033	20	8	5	6	1
2034	6	3	2	1	
2036	2	2			
2037	5	2		2	1
2041	3		1	1	1
2043	3	1		1	1
2046	2	2			
2051	15	6	3	5	1
2052	6	6			
2061	1				1
2062	6	5	1		
2063	5	1	2	1	1
2071	10	9			1
2072	3	3			
2073	1		1		
2082	10	6	3	1	
2085	4		4		
2086	3				3
2095	1	1			
2099	2	2			
2111	7	2	5		
2121	4	2	2		
2131	2		2		
2141	1	1			
3522	12	7	3	1	1
4463	13				13
5040	1				1
5042	7				7
5047	2				2
5048	3				3
5049	1				1
5411	123		12	6	105
5421	5				5
5810	2				2
5812	22				22
7011	23	1		1	21
Total	397	95	56	34	212
Percent of Totals		23.9%	14.1%	8.6%	53.4%

Source: Contract File, BLS.
Note: Refer to SIC Identification in Appendix

> mutual interest in maintaining friendly cooperation between the Company and the Union, which will permit safe, economical and efficient operation of the plants.

The language of these provisions could promote harmony and have a positive effect on motivation, productivity and resultant performance.

Every contract analyzed in this study contained language similar to the language quoted from the Armour Agreement. This is a standard industry practice and is usually coupled with language to assure that there will be no lockout of employees by the employer and no strike by members of the bargaining unit during the duration of the collective bargaining agreement.

Work Limitations

Armour Contract Work Limitations

Article I of the Armour contract recognizes the UFCW as the collective bargaining agent and the Appendices of the contract specify the workers that are covered in the contract by plant location. It contains the following provision that has a direct effect on the cost of Armour.

> 1.3 Bargaining Unit Jobs
> The company shall not remove any job from a bargaining unit, except by agreement with the Union. All trucks of regular haulers will be

> loaded and unloaded by bargaining unit employees of the Company (Armour) except for those customer pick-up trucks which in past practice have been loaded by the customer.

The wording of this provision is not clear. Does it mean that those customers who in the past loaded their trucks may continue the practice, but new customers may not? If this is the case, at the very least a cost difference to Armour among customers is created. A reduction in productivity of their new customers' truck drivers is imposed through this provision-as they would be idle during loading. This provision restricts work by non-bargaining unit employees.

If the provision means that past custom shall prevail during the term of the Agreement and customers of the same type (new or existing) shall be allowed to continue past practices of loading their own trucks, the productivity implications of the provision are indeed different.

At this early point the interaction of the provisions becomes important. All provisions of this contract are subject to a procedure to resolve differences in interpretation so the dire need for precision in wording is eliminated. This will be shown in detail later when grievance procedures are discussed. The provision also shows that ambiguous contract language can lead to disputes and a corresponding negative effect on motivation, productivity and performance.

Provisions Directly Affecting Productivity

Supervisors Working

Article III of the Armour Agreement gives management the right to manage the plants, hire, fire and transfer employees subject to the provisions of the agreement in a "Rights of Management" provision. Such provisions are standard in all food system collective bargaining agreements, subject to other provisions contained in the contracts. The Armour Agreement does include the following provision that directly affects productivity.

> 3.2 Supervisors.
> Supervisors shall not perform production work except to instruct and except in cases of emergency. In the event it is determined through the proceedures set forth in Article XXI of this Agreement (Article XXI calls for the 'Adjustment of Grievances') that the provisions of this Section have been violated, an amount equal to four (4) times the common labor hourly rate shall be paid by the Company for distribution as determined jointly by the company and the Local Union.

This provision has the effect of stopping working foremen or other working supervisory employees. From a management standpoint it reduces the output of the supervisory employee, but has the trade off of making the employee devote his full time to being a supervisor-presumbly improving the supervisory function. Management is preempted from making the trade off between manual work and supervision by this provision and the elimination of the right to allocate factors of production between supervision and direct involvement in the productive process has the potential for reduced productivity. This Agreement also contains a substantial penalty for violation of the provision. Once again the wording of the provision could lead to the use of other provisions.

For example, what is an emergency? Does it mean that some one will be injured if the supervisor does not turn off a machine or does it mean that the output of the department in question will fall below acceptable quality standards if the supervisor does not do "hands on" work? No matter what the interpretation, the above provision has the effect of preserving Bargaining Unit employment with a reduction in management options.

Food System Limitations on Work

The work limitations in the Armour Agreement have been shown. These are specific to the meat packing industry. Provisions in food system contracts have been divided by industry (four digit SIC Codes) into those provisions affecting work by members of the bargaining unit and those provisions affecting work by persons not members of the bargaining unit. Limitations on bargaining unit work are then classified by those provisions requiring a full crewing, those provisions directly limiting output and those provisions specifying ratios of employees with given job descriptions. In a similar manner, provisions restricting work done by persons not members of the bargaining unit are divided into contracts containing restrictions on work by suppliers, supervisors and outside contractors. In general, these provisions reduce productivity.

Full Crew Requirements

Provisions in food system collective bargaining agreements that specify the number of bargaining unit employees required are classified as full crew provisions in this study. The variation in the provisions is illustrated by the following three provisions.

The first provision is taken from the collective bargaining agreement between National Tea's Standard Grocery Division of Indianapolis, Indiana and three local unions of the International Brotherhood of Teamsters, Chauffers, Warehousemen and Helpers of America. The contract covers 1100 employees. The contract states:

> Department Heads shall be appointed by the Company on the following weekly sales volume basis: (Revised March 1 of each year.) Department Head classifications as contained in this Agreement are defined as: An employee(s) who directs and is responsible for the operations of a given department under the direction of store management.

Under $7,500-one department head (Assistant Manager)

7,501-15,000-two department heads (Assistant Manager or Head Produce Clerk and Head Cashier)

15,001-35,000-three department heads (Assistant Manager, Head Produce Clerk, Head Cashier)

35,000 and over-a fourth department head (Head Dairy)

125,000 and over-a fifth department head (Frozen Food Department Head)

The collective bargaining agreement between Star Markets of Honolulu, Hawaii and Local 594 of The United Food and Commercial Workers is in effect from July 1, 1979 through June 30, 1982. It contains the following provision requiring a journeyman meat cutter on duty:

> There shall be at least one journeyman meat cutter in attendance at all times when any of the meats, fresh or frozen, coming under the jurisdiction of the agreement of the Union are sold or offered for sale, provided, however, that this requirement shall not be applicable after 7 p.m. If the Company fails to schedule a journeyman as aforesaid, the Company will pay to the United Food and Commercial Workers International Union-Industry Pension Fund, an amount equal to the wages of one journeyman meat cutter for the period of the violation, but no less than 8 hour's pay.

The Agreement, 1978-1980 Between the Marine Association of Chicago and Independent Employers and Local 19, International Longshoremen's Association, A.F.of L.-C.I.O. covers 600 employees and 17 employers operating in the Port of Chicago. It contains the following provision (among many such provisions):

> 3.A U.S.D.A. Cargos from Freight Cars (Manual Work)
>
> (a) The cargo shall be stacked to a height as prescribed by this Article except in cases where a shortage of pallets may occur.
>
> (b) The house gang size and production shall be as follows: 1-Driver and 4-Men, 3 R.R.Cars, 8 Hours Pay. Provided the base count does not exceed the maximum number under the 1975-77 Agreement.

This provision specifies the size of crew and their maximum output in eight hours. It further restricts output to earlier levels.

Food system collective bargaining agreements containing full crew provisions similar to those three shown above are listed by industry in Table 8.

Output Limiting

Provisions in food system collective bargaining agreements that limit the output of bargaining unit employees are classified in this study as output limiting provisions. The variation in the provisions is illustrated by the following three provisions. All three of which either directly or indirectly limit productivity of workers either in the rate at which tasks are performed or by limiting the performance of these tasks to previous methods.

Table 8

Limitations on Bargaining Unit Members' Work and Restrictions on Work Done Outside the Bargaining Unit Contained in Food System Collective Bargaining Agreements in Effect on April 1, 1981 by SIC Code

		Limitations On					
		Bargaining Unit Work			Non-Bargaining Unit Work by		
SIC Code	Total Contracts	full crew	output limiting	ratios	suppliers	super-visors	contrac-tors
0132	1						
0192	1						
2000	1						
2011	30		4			11	
2015	1						
2020	4		4				
2023	1						
2024	3						3
2026	12		9			5	
2031	2						
2032	5						
2033	20					14	7
2034	6						6
2036	2					1	
2037	5					3	
2041	3						
2043	3						
2046	2						
2051	15	3				5	3
2052	6						
2061	1						
2062	6					4	
2063	5						2
2071	10						
2072	3					1	
2073	1						
2082	10					5	2
2085	4	4	4				4
2086	3	3					
2095	1						
2099	2						
2111	7	3					4
2121	4						
2131	2		2				
2141	1						
3522	12					11	8
4463	13	10	10			7	7
5040	1						
5042	7	1				1	5
5047	2						
5048	3						
5049	1						
5411	123	63	14	59	64	30	6
5421	5	5	5				
5810	2		2				
5812	22		8				
7011	23		8			4	
Total	397	92	70	59	64	102	57
Percent of Totals		23.3%	17.6%	14.9%	16.1%	25.7%	14.3%

Source: Contract File, BLS.
Note: Refer to SIC Identification in Appendix

The collective bargaining agreement between Joseph E. Seagram and Sons, Inc. and the Distillery, Rectifying, Wine and Allied Workers' International Union of America, A.F. of L.-C.I.O. covers 1,300 employees in Southern Indiana and Northern Kentucky. The agreement contains the following provisions on line speeds and manning.

1. (a) Effective August 1, 1978, bottling lines in each plant may be operated at maximum speeds not to exceed 300 bottles per minute for half-gallons (1.750 liter), quarts (1.000 liter) and fifths (.750 liter) sizes and at maximum speeds not to exceed 320 bottles per minute for pints (.500 liter) ...
   (b) It is understood that any sizes not listed in 1 (a) above, shall be treated for maximum speed purposes as follows:

   Anything bottled over 16 ounces (.500 liter) shall have the maximum speed of 300 bottles per minute apply.

   Anything bottled 16 ounces (.500 liter) or less shall have the maximum speed of 320 bottles per minute apply.

2. In the event the existing (July 31, 1978) line speeds are increased to the maximum levels provided for hereinabove, there shall be a trial run not to exceed five working days to be observed by a joint committee of the Employer and the Union for the purpose of determining whether or not additional people are required for proper manning.

3. If no agreement is reached at the conclusion of the trial period, with respect to mannings, the parties agree to immediately submit such dispute to arbitration without the necessity of involving the preliminary steps as set forth in the agreement covering arbitration.

4. Mannings for all locations will be defined in the respective Local Supplimentary Agreements ...

These provisions in the Seagram's contract both limit output and require a "full crew." These have the potential to reduce productivity directly. These provisions also have the potential to improve the quality of the job and motivation-thereby indirectly improving productivity.

The collective bargaining agreement between Star Markets of Honolulu, Hawaii and Local 594 of The United Food and Commercial Workers contains the following provision limiting meat operations off the store premises:

> All meat and meat products covered here under shall be cut, prepared, and fabricated by a head meat cutter, journeyman meat cutter, apprentice meat cutter, journeyman fish cutter, or meat wrapper on the Company's premises or immediately adjacent there to so as to enable the Company to maintain effective supervision of such operation and conduct the same under sanitary conditions; provide, however, that beef, veal, lamb, and pork in carcass form may be broken down off the premises into primal cuts such as rounds, ribs, chucks, plates, and loins, and sub-primal cuts, but said primal cuts and sub-primal cuts shall be fabricated and reduced to retail cuts on the premises only by members of the bargaining unit as established in Exhibit "A" and made a part of this Agreement.

The collective bargaining agreement between The Chicago Area Ice Cream Council (an industry bargaining association comprised of thirteen employers in a fourteen county area in Northeast Illinois and Northwest Indiana) and the Ice Cream, Frozen Custard Industry Employees, Drivers, Vendors and Allied Workers Union, Local 717 affiliated with the International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America covers 600 workers and contains the following provision restricting production to be within the geographic area covered by the contract.

> Section 4.5. The Employer agrees for the term of this Agreement not to remove its or any part of its manufacturing operations from the jurisdiction of Local 717 and to continue to manufacture within the jurisdiction of Local 717 and the Employer, including any affiliates or subsidiaries, agrees that it shall not establish or operate a plant for production of ice cream or frozen dessert products outside Local 717 for sale or distribution of products in the jurisdiction of Local 717.

This provision effectively limits production of product to the market area. While the market area in question is a large market, the provision has the potential of preventing the economies of scale that are present in ice cream plants or in the alternative-forcing large scale plants to be built in an area not necessarily the optimium location (McEowen).

Food system collective bargaining agreements containing output limiting provisions similar to the three shown above are listed by industry in Table 8.

Ratios

Provisions in food system collective bargaining agreements that specify a ratio of apprentices to journeymen are found only in food retailing (SIC 5411) contracts. These provisions also limit entry, but in this section are classified as output limiting in the sense that the number of apprentices with lower levels of skills and compensation than journeymen are limited. The following provision has the potential to cause higher levels of skill and cost to be used to perform a task than is necessary, thereby reducing output of the more skilled worker.

The collective bargaining agreement between Star Markets of Honolulu, Hawaii and Local 594 of The United Food and Commercial Workers contains the following provision stipulating the ratio of apprentices to journeymen. The provision states:

> APPRENTICE RATIO. Not more than one (1) apprentice shall be allowed to every four (4) journeymen or fraction over four (4). Markets employing less than four journeymen shall be entitled to one (1) apprentice.
>
> WRAPPERS. Wrappers shall not handle the tools of the trade, except the slicer machine. (An earlier provision in this agreement requires a journeyman on duty at all times meat is offered for sale, except after 7 p.m.)

Food system collective bargaining agreements containing output limiting provisions similar to the one shown above are listed by industry in Table 8.

Limitations on Work by Non-Bargaining Unit Personnel

Outside Suppliers

Provisions in food system collective bargaining agreements that limit the work performed by the suppliers' employees are found only in food retailing (SIC 5411) contracts. Such provisions are listed in this study as limitations on non-bargaining unit work performed by suppliers. The following provisions are typical of these types of provisions found in food system contracts.

The "Area Grocery Contract, Minnesota and Wisconsin" between an employers association and Local 1015 of the Retail Clerks affiliated with the United Food and Commercial Workers covers 1100 employees and contains the following provision:

> Except as hereinafter provided, outside salesmen shall not mark merchandise, nor place merchandise on shelves, nor build displays. The stocking of shelves, building of displays and marking of merchandise shall be reserved exclusively for bargaining unit employees of the store. The salesmen may examine merchandise to determine whether or not it is properly marked or is being properly rotated.
>
> A letter of agreement from each party shall be attached stating: 'A penalty of $50.00 per violation shall be paid to the local Salvation Army serving the town in which the violation occurs, when an Employer is found to have violated the shelf stocking provisions of the Agreement.

The Master Food and Liquor Agreement between the Food and Liquor Employers Association (covering nine counties in Northeast California) and the Retail Clerks Union, Local 17 of the United Food and Commercial workers International Union, A.F. of L.-C.I.O. covers 1,250 employees. The agreement contains the following provisions limiting work by suppliers or their representatives.

> It is recognized that utilization of the services offered by rack-jobbing concerns will be required for a period of time not to exceed 120 days after the establishment of non-food general merchandise work. Work may be performed by rack-jobbers or outside suppliers after the aforesaid 120-day period is determined by the practice in the industry of allowing five (5) of the following (8) exemptions for any individual Employer: pet supplies, greeting cards, sewing notions, brooms and mops, toys and novelties, phonograph records, paperback books and specialized nail care centers ...

Another separate provision deals with salesmen. It states:

> I. SALESMEN: The Employer assumes a particular responsibility to require observance of this Agreement on the part of book-salesmen. The Employer shall give to one (1) clerk on each shift written authorization to request any book-salesman in violation of this Agreement to cease work. If the book-salesman does not comply with such a request, then the authorized clerk shall report the matter to the Employer or store manager, who shall then cause the book-salesman to cease such work. (The term book-salesman does not mean one who sells books. It refers to a salesman selling any merchandise and the term book refers to either his book listing and describing the merchandise for sale or his order book.)

Food system collective bargaining agreements containing limitations on work performed by suppliers such as the provisions shown above are listed by industry in Table 8.

Supervisors Working

Provisions in food system collective bargaining agreements that limit or prohibit work by supervisory employees are contained in 25.7% of the contracts analyzed. These provisions are classified in this study as limitations on non-bargaining unit work by supervisors by industry. These provisions are illustrated by the following:

The collective bargaining agreement between the Retail Clerks Union, Local 1657, A.F. of L.-C.I.O. and C.L.C. and Liberty supermarkets of Birmingham, Alabama covering 300 employees contains a provision limiting work by employees of suppliers to the grocery chain. The provision states:

> All work services connected with, or incidental to the operation of the Employer's Retail Establishment, including handling or selling of all merchandise shall be performed only by employees within the appropriate unit (job classification) as defined by this agreement.
>
> The following are excluded from the preceding paragraph: Health and Beauty Aids, Gum, Party Snacks, Beverages, Cakes, Cookies, Crackers, Bread, Potato Chips, Baby Food, Tobacco Products, Milk and dairy Products delivered by route men, Ice Cream serviced by truck, hardware, spices, pet supplies, toys, magazines and books, records and hosery racks. This shall not exclude cleaning, rotating and picking up of merchandise.

> No supervisory employee shall perform clerks work except in case of emergency.
>
> In the event of a violation of this Article, the Employer will pay to the senior employee not working forty (40) hours that week the amount of time spent in such violation at the employees regular rate of pay. If this should result in the employee receiving more than forty (40) hours pay, the hours in excess of forty (40) will go to the next senior employee not working forty (40) hours that week.

Food system collective bargaining agreements containing limitations on non-bargaining unit work performed by supervisors similar to the one shown above are listed by industry in Table 8.

Contracting Out Work

Provisions in food system collective bargaining agreements that limit the work that can be done by contractors or sub-contractors are classified in this study as limitations on non-bargaining unit work by contractors. The variation in the provisions is illustrated by the following four provisions. All four of which either directly or indirectly limit activities that can be performed by contractors.

The Grocery and Delicatessen Agreement between the Retail Clerks Union Local 648 of The United Food And Commercial Workers and the San Francisco, California Food

Employers Council and Food Industry Operators covers 3,000 workers. It states:

> It is agreed that the Employer and the Union have a common interest in protecting work opportunities for all employees covered by this Agreement ... shall be performed under any sublease or subcontract unless the terms of said lease or contract specifically provide (1) that all such work shall be performed by members of the appropriate bargaining unit ... and (2) that the Employer, party hereto, shall at all times hold and exercise full control of the terms and conditions of employment of all such employees pursuant to the terms of this Agreement.

This provision allows subcontracting so long as the subcontractor uses members of Local 648 for the jobs covered by the contract. In other words, the subcontractor is bound by the provisions of the original agreement between the Employer and the Union.

The Pittsburg Factory Labor Contract between the Food Processors Union Local 325 of the United Food and Commercial Workers International Union A.F. of L.-C.I.O. & C.L.C. and Heinz U.S.A., a division of H.J. Heinz Company covers 1,800 workers. The agreement contains mild provisions regarding outside contractors. The agreement states:

> .... SECTION C
> OUTSIDE CONTRACTORS
>
> The Company agrees that outside contractors shall not be employed to perform work on Company premises which is normally performed by employees included in the bargaining unit if employees who normally perform such work are laid off from their Home Department for lack of work, and are available and capable to perform the entire job.

> The Company will endeavor to notify the Union in writing when it intends to use outside contractors, and the Union may object only to the total job to be performed by the outside contractor and not to parts thereof.

The following provision forces the conditions of employment contained in the collective bargaining agreement upon customers of the employer. It is taken from the Conventional Dairy Agreement between an employer bargaining group-Dairy Industry Industrial Relations Association-and ten Local Unions of the International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America. The agreement covers 5,000 Southern California workers. The provision is designed to protect the route drivers and it states:

> 32.1 For the purpose of preserving work and job opportunities for the employees covered by this agreement, the Employer agrees that no work or services presently performed or hereafter assigned to the collective bargaining unit will be subcontracted, transferred, leased, assigned or conveyed in whole or in part to any other plant, person or non-unit employees, unless such other plant, person or non-unit employee observes and causes its employees to observe substantially the same economic conditions of employment, or conditions of employment which are more beneficial to its employees than those observed by the Employer. The word employee referred to above shall include so-called. 'independent owner-operators.'
>
> 32.2 Employer agrees that, unless required so to do by law or lawful public authority, it will not sell dairy products at its platform to any person, firm or corporation who buys said products for distribution to retail outlets in competition with route salesmen covered by this Agreement and similar agreements corporation observes

> and causes its employees to observe substantially the same conditions of employment as those observed by the Employer.

In a somewhat different manner, unionism could potentially be forced upon an employer by a provision of the type contained in the Plant Agreement between Anheuser-Busch, Incorporated-St. Louis, Missouri and The Brewery and Soft Drink Workers Conference, U.S.A. and Canada-Local Union 6 affilated with the International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America. The contract covers 800 workers.[1] The contract states:

> ....ARTICLE XIV
> UNION MADE MATERIALS AND SUPPLIES
>
> The Employer agrees to give preference to union made materials and supplies, in every instance, provided that price, quality, and general conditions are equal.

When the nation's largest brewer is involved, this clause has the potential to bring about and/or cement unionization in related industries such as malting, containers, closures, and other packaging materials.

Food system collective bargaining agreements containing limitations on work performed by outside contractors or sub-contractors similar to those four shown above are listed by industry in Table 8.

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[1] The contract is of three year duration from February, 1979 through February, 1982.

Job Descriptions

Jobs are described in the Armour Agreement. Compensation is then related to these job titles. The contract does not specifically limit an employee to doing only the work connected with the job title, presumably leaving this to custom and other provisions. Other provisions are cited that indicate little deviation from the duties associated with the position title are allowed in actual practice.

Food System Job Descriptions and Limitations

Collective bargaining agreements in the food system all list the job title, 50.1% of the contracts analyzed contain no description or limitations on the work performed under the job title, 14.6% of the contracts analyzed both list and describe the work performed by workers with a given job title, 35.3% of the contracts contain provisions that list the job, describe the job and limit the worker to performing the tasks described.

The following provisions are from collective bargaining agreements that limit the employee to performing only described tasks. The productivity implications of these types of provisions are mixed. Productivity is decreased if workers are prevented from being fully employed by the limitations. Productivity could be increased if the provisions result in greater specialization rather than work preservation. Morale and productivity would be improved if workers knew that they could complete a given task without being removed to another. However, the opposite could happen if the jobs were too limited and boredom resulted. The productivity implications of job descriptions and limitations are an area for future research.

Job Descriptions

The "Grocery Agreement-Quad Cities-Illinois and Iowa" between an employer bargaining group and Local Union 1470 of the Retail Clerks affiliated with the United Food and Commercial Workers covers 2000 employees. It contains provisions describing a position:

> (a) Regular clerks are all employees other than general merchandise clerks and utility clerks.
>
> (b) General Merchandise clerks are employed for the purpose of performing those functions necessary for the stocking, displaying, and selling general merchandise. General Merchandise clerks may be employed when a minimum of one-hundred (100) hours or more per week or four (4) full aisles are devoted to general merchandise. General merchandise is defined as non-food items, such as housewares soft goods, pet supplies, light bulbs and supplies, greeting cards, automotive and electrical supplies, drugs and health and beauty aids, and so forth.
>
> (c) Utility clerks are all employees whose duties are: limited to sorting, bagging and packaging sold merchandise, carrying and loading sold merchandise; sweeping floors anywhere in the store, cleaning the parking lot and other adjacent areas outside the store; filling bag

racks; cleaning areas around and in front of the checker lanes; cleaning rest rooms; collecting and sorting beverage containers; disposing of trash and rubbish; washing and cleaning of shelves and fronts and insides of cases, without handling merchandise; washing windows; posting of window signs, and over the wire signs; checking prices of merchandise as needed for cashiers; when cleaning shelves, utility clerks may remove shelf stock, clean the shelf, and return the shelf stock to the same location; and returning of merchandise left by customers from check stands to shelves or displays.

Jobs Limited

The above Quad Cities Agreement contains provisions limiting work performed by a given job description, this is illustrated by the following:

It shall be a violation of this Agreement for Utility Clerks to perform any duties other than those set forth in 8.4 (c). In order to insure compliance with the provision, the parties agree as follows:

(a) The Employer shall post in each of its stores a notice to employees signed by an authorized Employer representative instructing all employees of the duties of Utility Clerks and instructing all employees that the performance of any other duties constitutes a violation of the contract.

(b) Upon the first violation of this section, the Utility Clerks, in the store involved shall be paid the regular clerks starting rate for all hours worked in the week or weeks in which the violation occurred including hours worked in performance of Utility Clerks' duties.

(c) Upon a second violation in the same store, all Utility Clerks in the store involved shall be paid the regular clerks starting wage for all hours worked in the week or weeks in which the violation occurred including hours worked in performance of Utility Clerks' duties.

> (d) Upon a third violation in the same store, all Utility Clerks in the store shall be paid double the Utility Clerks' rate for all hours worked in the week or weeks in which the violation occurred, including hours worked in the performance of Utility Clerks' duties.

Three other provisions are included to illustrate the range of provisions limiting jobs. The frequencies of such provisions are then shown in Table 9.

The Grocery and Delicatessen Agreement between the Retail Clerks Union Local 648 of The United Food And Commercial Workers and the San Francisco, California Food Employers Councils and Food Industry Operators indicates the limitations present in many food retailing contracts. The agreement covers 3,000 employees. The agreement states:

> Courtesy Clerks shall wear badges on their person designating them as a courtesy clerk at all times during working hours, and their failure to wear such badges while working shall be considered a violation of these provisions. The Union will submit to the Employer and the employee involved a written warning and in the event of a second violation with the same Employer by the same employee, the Employer agrees to suspend said employee for six (6) calendar months following written notice from the Union to the Employer involved. If the Employer does not furnish the badges, the Union may furnish them.
>
> Violations: The Employer agrees that Courtesy Clerks shall not perform duties other than those listed in the collective bargaining agreement. In the event of a violation of this section, the person or persons who directed that the work be performed and the person who performed the work which caused the contract violation shall receive written warnings.

Table 9

Number of Job Provisions in Food Industry Collective Bargaining Agreements in Effect on April 1, 1981.

SIC Code	Total Contracts	Nature of Contract Job Provision: Listed Only	Listed and Described	Listed, Described and Limited
0132	1	1		
0192	1	1		
2000	1	1		
2011	30	23	6	1
2015	1	1		
2020	4	4		
2023	1	1		
2024	3		1	2
2026	12	7	5	
2031	2	2		
2032	5	3	2	
2033	20	15	5	
2034	6	3	3	
2036	2	2		
2037	5	2	3	
2041	3	3		
2043	3	3		
2046	2	2		
2051	15	6	8	1
2052	6	6		
2061	1	1		
2062	6	6		
2063	5	3	2	
2071	10	10		
2072	3	2	1	
2073	1	1		
2082	10	3		7
2085	4	4		
2086	3			3
2095	1	1		
2099	2	2		
2111	7	5		2
2121	4	4		
2131	2	2		
2141	1	1		
3522	12	6	3	3
4463	13	2	5	6
5040	1	1		
5042	7	4		3
5047	2	1	1	
5048	3	2		
5049	1		1	
5411	123	35	7	81
5421	5			5
5810	2			2
5812	22	5		17
7011	23	12	4	7
Total	397	199	58	140
Percent of Totals		50.1%	14.6%	35.3%

Source: Contract File, BLS.
Note: Refer to SIC Identification in Appendix

> In the event any of the same persons are involved in a second violation within one year from the first infraction, the person performing the work shall be suspended for one week and the person who directed that the work shall be performed shall also be suspended for one week. If the person directing that the work be performed is not a member of the bargaining unit, the sum of $500 will be paid to the Retail Clerks and Food Employers Pension Fund.
>
> In the event of a third violation within one year from the first infraction by any of the same persons, the person performing the work and the person directing the work will be suspended for one month. If the person directing that the work be performed is not a member of the bargaining unit, the sum of $1,500 will be paid into the Retail Clerks and Food Employers Pension Fund.
>
> Ratio: Courtesy Clerks may be hired from any source and employed on a ratio of one to every two checkstands, and in addition one for over forty parking stalls, two for over eighty-five parking stalls, three for over one hundred twenty-five parking stalls may be on duty at any given time.

Provisions in collective bargaining agreements can limit work to a specific classification. This is shown by the Agreement on Wage Scales and Working Conditions between the Hotel, Motel and Restaurant Employees and Bartenders Local Union 50, A.F. of L.-C.I.O. of Alameda County (California) and the East Bay Restaurant Association, Incorporated. The agreement covers 3,300 employees and states:

> SECTION 21. COMBINATION: (a) No employee shall be allowed to work as a combination employee or perform work in more than one classification in more than one day unless a mutual agreement has been agreed between the Union and the Employer ...

The collective bargaining between an employers' association covering four Northwest Washington counties and Local 451 of the Hotel and Restaurant Employees and Bartenders International Union, A.F. of L.-C.I.O. covers 550 employees. It contains the following provisions limiting work.

> .... ARTICLE XVI WORK LIMITATION
>
> Section 16.01 Waiters and Waitresses shall not wash dishes, silverware, glasses or pots and pans.
>
> Section 16.02 Cooks shall not do sink work with the exception of any establishment where there is only on worker per shift and said worker is a Cook, he or she may be permitted to do sink work during that time only, provided said sink work is not left by another worker.

New Jobs, Technology and Methods

The Armour Agreement in Article III section 8.6 provides:

> New Jobs Defined. The rate schedules expressed in numbers of brackets above common labor, set forth in the agreed upon Standard Job Rate List for each of the plants listed in the Appendix A, and the job classification lists heretofore agreed upon for each of the plants listed in Appendix A-1, as adjusted pursuant to this Agreement shall be considered a complete and proper listing of all jobs (other than common labor) performed in said plant, and shall continue in effect for the duration of this Agreement. Any job not appearing on the agreed upon Standard Job List for the particular plant shall be deemed a new job.

This section effectively defines a new job. Section 8.8 of the Article compels the Company to notify the Union of any new job at least three days before it is created; provides that the Plant Superintendent and the Local Union negotiate to establish the pay rate for the new job; specifies that any agreement at the local level is subject to ratification by the National Office of the Union and that should agreement on the hourly rate of pay not be reached the:

> ... hourly rate in question shall be introduced into the Second Step of the grievance procedure and shall be processed thereafter in accordance with the grievance procedures of this Agreement, including arbitration ... An hourly rate when established pursuant to this Section shall be effective as of the date when work was first performed on the new job or changed job.

The scope of new jobs is limited by provisions as set forth in Article III Section 8.9.

> Work Standards ... (f) Job assignments on Killing and Cutting gang line-ups will not be combined or altered, other than minor changes, under established gang line-ups or new gang line-ups properly established for new speeds under the procedures herein except as they may be changed by the addition or deletion of operations, or a change in the method or equipment.

This provision would preclude any productivity increases through increased employee effort. Increased productivity could come from new equipment or methods and

Article III does provide a mechanism for the introduction of new jobs and the resolution of disputes surrounding the introduction. It further makes the hourly pay agreement on a new position retroactive to the beginning of the job, thereby facilitating changes in manufacturing methods while the compensation is being resolved.

Sections 8.6 and 8.8 of the Armour contract facilitate the introduction of new methods and generally increase productivity by these methods. Section 8.9 contains the above provision and the following provisions that present productivity standards cannot be changed and limit job assignments to job descriptions. These provisions generally reduce productivity.

> (g) job assignment on jobs where established work standards are applicable may not be combined or altered, other than for minor changes, to require more than 100% performance or to result in a reduction in hourly rate.
>
> ... (j) When issuing new or changed gang line-ups, the Company will list job titles with sufficient description to indicate the content of the jobs.

Other provisions in Article III of the Armour contract eliminate job stress and increase productivity. An example is section (h):

> Job assignments on all other production jobs where no standards exist shall not be combined or altered, other than minor changes, in such a manner as to create a job overload or to result in a reduction in hourly rate.

It should be clear to the reader that the effect of each section in Article III on productivity may be either positive or negative and it is difficult to give a balanced opinion from the contract provisions. It is even more difficult to declare if the provisions of Article III impede or enhance productivity without knowing the mechanism of interaction between the Sections or the mechanism of interaction between Article III and preceding and subsequent Articles.

Impact of New Technology

APPENDIX I of the Armour Agreement establishes a bipartisian committee to administer a fund easing the burden of unemployment from automation. It states:

> The Committee is also authorized to utilize the Fund for the purpose of studying the problems resulting from the modernization program and making recommendations for their solution, promoting employment opportunities within the Company for those employees affected, training qualified employees in the knowledge and skill required to perform new and changed jobs so that the present employees may be utilized for this purpose to the greatest extent possible ...

This clearly has the potential to ease the disruptions of new technology thereby facilitating its introduction. It is discussed in detail in Job Mobility.

Food System Provisions on New Jobs and Technology

Contract provisions from agreements analyzed in this study are divided into those contracts containing provisions concerning the establishment of new jobs during the contract period and those contracts containing provisions more broadly concerned with new technology. These types of provisions are illustrated by excerpts from contracts and tabulated by industry in Table 10.

New Jobs

Over ten percent of the contracts contain new job provisions such as the one below. It will be seen that all food industry contracts contain a grievance procedure that could be used for the establishment of new jobs during the term of the contract. The lack of provisions for new job introduction is explained by the presence of alternative provisions such as those dealing with new technology shown later in this chapter.

The collective bargaining agreement between Joseph E. Seagram and Sons, Inc. and the Distillery, Rectifying, Wine and Allied Workers' International Union of America, A.F. of L.-C.I.O. covers 1,300 employees in Southern Indiana and Northern Kentucky. The agreement contains the following provision on new jobs that calls for negotiation in the event

Table 10

Provisions Concerning the Introduction of New Jobs and New Technology Contained in Food System Collective Bargaining Agreements in Effect on April 1, 1981.

SIC Code	Total Contracts	Contracts containing provisions concerning New Jobs Only	Contracts containing provisions concerning New Technology
0132	1		
0192	1		
2000	1		
2011	30	11	5
2015	1		
2020	4		
2023	1		
2024	3		2
2026	12	2	1
2031	2		1
2032	5	2	1
2033	20		3
2034	6		
2036	2		
2037	5		
2041	3		
2043	3		
2046	2		
2051	15		2
2052	6		1
2061	1		
2062	6		
2063	5	1	2
2071	10		
2072	3		2
2073	1		
2082	10		3
2085	4	2	1
2086	3		
2095	1		
2099	2		
2111	7		
2121	4		4
2131	2		
2141	1		
3522	12		2
4463	13		7
5040	1		
5042	7		2
5047	2		
5048	3		
5049	1		
5411	123	25	58
5421	5		3
5810	2		
5812	22		4
7011	23		
Total	397	43	104
Percent of Totals		10.8%	26.2%

Source: Contract File, BLS.
Note: Refer to SIC Identification in Appendix

of work assignments not previously in the manufacturing operations.

> In the event that it becomes necessary to create a new job or jobs, the rate for such job or jobs shall be established by prior consultation and agreement between the Employer and the Distillery, Rectifying, Wine and allied Workers' International Union of America, A.F. of L.-C.I.O.

New Technology

Of the food system contracts analyzed, 26.2% contain provisions concerning the introduction of new technoloty. The variation in these provisions ranges from facilitating new technology to work preservation. This is shown in the four contract provisions that follow. These are tabulated by industry in Table 10.

The collective bargaining agreement between the Allied Employers (a supermarket employer bargaining group) of Seattle, Washington and Retail Clerks Union, Local 1105 of The United Food and Commercial Worker's International Union covers 5,000 employees. The agreement contains the following provisions regarding technological change:

> ... It is agreed that should the Employer intend to institute electronic check-out systems which result in the removal of price marking from the stores which would have direct, material impact on employment covered by this Agreement, the Employer will give to the affected Union or Unions at least sixty (60) days written advance notice by certified or registered mail setting forth the nature of such intended changes and/or methods of operation.

Upon written request by the Union, negotiations shall commence with respect to the following subjects: rates of pay for new jobs that might be created; transfer to comparable work, within or outside the bargaining unit, or the disposition of displaced employees resulting from the institution of such new methods.

In the event parties do not reach agreement within such period, then all unresolved issues as set forth above shall be submitted to final and binding arbitration. It is not the intent of the parties that such negotations or arbitrations will in any way jeopardize the efficiencies and increased productivity to be gained by the installation of such systems.

The parties further agree that the Arbitrator's decision shall be final and binding, and that there will be no strikes,work stoppages, lockouts, or economic action of any sort or form employed by either party in connection with, or arising out of, any dispute concerning or related in any way to the operation of this Section.

It is agreed and expected that the parties will exert every effort to accomplish the foregoing within the sixty (60) day allotted period, but failing to do so, shall not prohibit or in any way impede the Employer from installing or effectuating any such new methods, systems, or equipment upon the expiration of the allotted sixty (60) day time period, unless such period is extended by mutual written agreement. The decision of the Arbitrator or the parties shall be effective on or retroactive to the date such new methods are installed. The cost of the impartial Arbitrator shall be borne equally by the parties.

The "Grocery Agreement-Quad Cities-Illinois and Iowa" between an employer bargaining group and Local Union 1470 of the Retail Clerks affiliated with the United Food and Commercial Workers covers 2000 employees. It contains the following provisions concerning the introduction of new technology:

21.1 The parties recognize that automated equipment and technology is now available for the retail food industry. The Employer recognizes that there is a desire to protect and preserve work opportunities. At the same time the Union recognizes that the Employer has the right to avail itself of modern technology. With this common objective the parties agree as follows:

In the event that the Employer introduces major technological changes which for the purpose of this article are defined as price marking and electronic scanners which would have a direct material impact affecting bargaining unit work, sixty (60) day advance notice of such change will be given to the Union.

In addition the Employer agrees:

(a) Any retraining necessary will be furnished by the Employer at no expense to the employees.

(b) Where retraining is not applicable, the Employer will make every effort to effect a transfer to another store.

(c) In the event an employee is not retrained or transferred and is permanently displaced as a direct result of major technological changes, as defined above, the employee will be eligible for severance pay in accordance with the following provisions:

1. All employees with two (2) or more years of continuous service will be eligible for one (1) week severance for each year of continuous service. Maximum severance pay of eight (8) weeks pay to be paid on a weekly basis.

2. An employee shall be disqualified for severance pay in the event the employee:
   (a) Refuses retraining
   (b) Refuses a transfer within a geographical grouping
   (c) Voluntarily terminates employment

Extreme work preservation rules to deal with new technology are illustrated by the 1977-1980 Deep-Sea Agreement between the Dock Loaders and Unloaders of Freight Cars and Barges of the Internationsl Longshoremen's Association (ILA) Local Union No. 854 and the New Orleans Steamship Association. The New Orleans Steamship Association is a bargaining association of thirty-five employers primarily at the Port of New Orleans. The Agreement does cover all Mississippi River ports from the Gulf of Mexico to Baton Rouge, Louisiana. The following provisions are illustrative of work preservation rules contained in the agreement and are not a listing of these types of provisions in the agreement.

> .... ARTICLE XXII
> ROYALTY PAYMENTS
>
> On containers which have not been stuffed or stripped by ILA labor· the royalty amounts set forth below, in subparagraphs 1,2,3 and 4, shall be paid by the employer to the Adiministrator of the NOSSA-ILA Pension, Welfare, Vacation and Holiday Funds, ...
>
> (1) On conventional ships, seventy cents per gross ton (as provided in the appended Containerization Agreement).
>
> (2) On partially-automated ships (conventional ships converted for handling vans and containers) where not more than two hatches have been converted for the handling of containers, $1.40 per gross ton (as provided in the appended Containerization Agreement).
>
> (3) On partially-automated ships (conventional ships converted for handling vans and containers) where not more than 40% of the ships bale cube has been fitted for containers, $1.40 per gross ton (as provided in the appended Containerization Agreement).

(4) On ships where more than two hatches have been converted or fitted for the handling of containers, or where more than 40% of the ships bale cube has been fitted for containers, $2.00 per gross ton (as provided in the appended Containerization Agreement).

(NOTE: Stripping and stuffing is the actual physical emptying and filling of containers.)

Rule 1-Containers To Be Loaded or Discharged by Deep-sea ILA Labor

(1) Cargo in containers referred to below shall be loaded or discharged out of containers only at the waterfront facility by deep-sea ILA labor.

(1) Containers owned, leased or used by employers (including containers on wheels and trailers), hereinafter, 'containers,' which contain consolidated container loads which come from or go to any point within a geographic area of the Port of New Orleans described by a 50-mile circle with its radius extending out of the foot of Canal Street-see map-(hereinafter called 'geographic area') or

(2) Containers which come from a single shipper which is not the manufacturer ('manufacturers label') into which the cargo has been loaded (consolidated) by other than its own employees and such containers come from within the 'geographic area,' or

(3) Containers designated for a single consignee from which the cargo is discharged (deconsolidated) by other than its own employees within the 'geographic area' and which is not warehoused in accordance with Rule 2B.

In its simplest form, (1) above would prevent an employer owned trailer from being loaded within the "geographic area" by a manufacturer at his plant using other than union labor. If the contract is violated the rule states:

Liquidated Damages-Failure to load or discharge a container as required under these rules will be

> considered a violation of this Agreement. Use of improper, fictitious or incorrect documentation to evade the provisions of Rule 1 or Rule 2 shall also be considered a violation of this Agreement. If for any reason a container is no longer at the waterfront facility at which it should have been loaded or discharged under the rules, then the employer shall pay to the Royalty Fund liquidated damages of $1,000 per container which should have been loaded or discharged ...

The extreme nature of the above provisions establishing a 50 mile radius with which ILA members must do the packing and unpacking of containers has been challenged in the Federal Courts. The rules are in effect from Maine to Texas. On October 4, 1981, the Supreme Court let stand a lower court injunction against the container rules. This injunction was issued while the rules were being appealed to the National Labor Relations Board (NLRB). The injunction will stand until the NLRB decides whether the rules are legal.

Armour Employment Guarantee

The Armour agreement in Article VIII specifies a daily number of hours of guaranteed work and a weekly guarantee. The Article specifies:

> 13.1 Daily Call-In Guarantee. Employees called to work must be provided with a minimum of four (4) hours work, or pay in lieu of work.
>
> 13.2 Weekly Guarantee.
> The Company will guarantee a minimum of thirty-six (36) hours per week, Monday to Friday, inclusive, for all regular full-time hourly paid

> employees ... who are not laid off by or before the last scheduled workday of the preceding week ...

The productivity effect of these provisions is not readily apparent. Employee motivation would be enhanced knowing that if called in they are at least going to work a half day and if they finished last week they will at least work four and a half days this week. Management loses some ability at the margin to schedule operations with a resulting negative effect on productivity. The net effect is unclear.

The discussion that follows shows these employment guarantees to be somewhat standard for the food system. In general, it is doubtful that they are of significance in either employment stability, long run motivational aspects or the ability of management to effectively schedule production. This is not the case for all industries within the food system.

Food System Employment Guarantees

Employment guarantees in the food system range from no guarantee to a one year guarantee. It is stressed in the concluding chapter that food system collective bargaining agreements deal with adjustments to unstable employment rather than employment stability. This can be seen from

Table 11 which shows the length of employment guarantees. Call in pay is eight hours or less guaranteed compensation. 24.4% of the contracts analyzed contain this guarantee, similar to the provision cited in the Armour Agreement.

Only 1.8% of the contracts contain employment guarantees of three months or more. The following provisions illustrate contract language associated with longer employment guarantees.

> Section 1. Each Single Employer shall guarantee the senior eighty percent (80%) of its regular full-time employees who were on the active payroll on September 1, 1978, and who are fully registered members of the Union on that date, the opportunity for regular full-time employment (in a comparable classification or with a comparable rate) for the duration of this Agreement. Effective September 7, 1981, each Single Employer shall guarantee the senior eighty percent (80%) of its regular full-time employees who were on the active payroll on January 1, 1979, and who were fully registered members of the Union as of that date, the opportunity for full-time employment (in a comparable job classification or with a comparable rate) for the duration of this agreement. Effective September 6, 1982, each Single Employer shall guarantee the senior eighty percent (80%) of its regular full-time employees who were on the active payroll on January 1, 1980, and who were fully registered members of the Union as of that date, the opportunity for regular full-time employment (in a comparable job classification or with a comparable rate) for the duration of this Agreement ...
>
> ... The job protection set forth in this Agreement shall not apply in the following situations:
>
> (a) In the event a Single Employer terminates entirely its retail food operations in the geographical area covered by this Agreement.
>
> (b) In the event of a strike, lockout, or Acts of God (such as fire, flood, etc.) beyond the control of the Single Employer.

Table 11

Food System Employment Guarantees by Individual Contracts in Effect on April 1, 1981.

SIC Code	Total Contracts	Duration of Employment Guarantee: Call In	2-7 Days	7-30 Days	90-365 Days
0132	1				
0192	1				
2000	1				
2011	30	5	14		
2015	1				
2020	4				
2023	1				
2024	3				
2026	12	3	5		
2031	2				
2032	5				
2033	20	14	2		
2034	6				
2036	2	1			
2037	5				
2041	3				
2043	3	2			
2046	2				
2051	15	3			
2052	6	6			
2061	1				
2062	6				3
2063	5				
2071	10				
2072	3				
2073	1				
2082	10	4			
2085	4	2			
2086	3				
2095	1				
2099	2	2			
2111	7	6			
2121	4	2			
2131	2	2			
2141	1	1			
3522	12	6		2	
4463	13				2
5040	1				
5042	7				
5047	2				
5048	3				
5049	1				
5411	123	38	16	10	2
5421	5				
5810	2				
5812	22				
7011	23		8		
Total	397	97	45	12	7
Percent of Totals		24.4%	11.3%	3.0%	1.8%

Source: Contract File, BLS.
Note: Refer to SIC Identification in Appendix

(c) In the event a protected employee retires, quits, or is terminated for cause.

ARTICLE III
SEVERANCE ALLOWANCE

Section 1. Each Single Employer shall grant a severance allowance in the amount of one (1) week's pay (i.e. forty (40) hours' pay at his then existing regular hourly rate) for each two (2) years of service in the Cleveland food industry, but not to exceed ten (10) weeks' pay to the following employees:

A. Any employee entitled to job protection under this Agreement who is displaced as a result of a Single Employer

B. Any employee entitled to job protection under this Agreement who is displaced because a Single Employer closes a store and the employee agrees to take severance pay ... where mutually agreed to in writing between the Single Employer and the Union. ...

.... ARTICLE IV
EXCLUDED EMPLOYERS

This Agreement shall not apply to any Single Employer with less than three (3) stores (or retail outlets) and an annual gross volume (from all stores and/or retail outlets, regardless of location) of less than Two Million Dollars ($2,000,000)...

These provisions are from the collective bargaining agreement between The Cleveland Food Industry Committee, a multi-employer bargaining group covering thirteen counties in Northeast Ohio and Northwest Pennsylvania, and District Union 427 of The United Food and Commercial Workers International Union. The agreement covers 11,900 food retailing employees of major chains and independents.

In the extreme, these provisions guarantee employment for nearly three years provided the employer remains in business in the geographic area. At a very minimum, it provides severance for all employees of senior standing. Of special interest is the exemption of small firms. This is possibly related to the nature of the employer bargaining group. The group includes four national chains, two voluntary chains and an association of independent food dealers.

The collective bargaining agreement between the J.I. Case Company and the United Automobile, Aerospace and Agricultural Implement Workers of America covers 6,500 employees in plants in Illinois, Indiana, Iowa and Minnesota. A provision in the agreement provides for a layoff at the employees' option instead of a transfer to another department on the basis of seniority. This contract calls for supplemental unemployment benefits that result in the laidoff employees having essentially the same income and benefits during the early portion of a layoff.[2]

> An employee (with five or more years seniority) may elect to be laid off from the plant rather than be transferred in lieu of layoff to another classification in accordance with Section 5; however, he must return to work if recalled to his classification. An employee who elects to be laid off will not be entitled to a recall until his seniority entitles him to a job in his classification, or to his seniority unit if his classification no longer exists.

---

[2] The following provision is from the contract that expired June 30, 1980.

On the surface, this provision allows a senior employee to choose not to work in the event of a layoff with the main risk to the employee being never recalled. This risk is inversely related to length of service. A deeper examination of the provision shows that from the company standpoint, the process of bumping is reduced and this may lead to a gain in productivity. The overall implications of these types of provisions are unclear. This much is clear however, this provision deals with the effects of reduced work and not with the causes.

Armour Vacation Policy

The Armour Agreement in Article XIV provides that increasing length of vacations shall accompany increasing continuous service to the Company. An employee is entitled to from one to six weeks vacation, depending on the length of service.

This has the effect of increasing compensation to more senior employees and may well have a positive motivational effect and contribute to less employee turnover. On the other hand, it does increase the labor cost of more senior workers, thereby reducing productivity as measured by minimum cost of output.

Section 14.13 does have the potential for reducing the effectiveness of vacation provisions. It provides:

> ... Employees shall not be allowed to take money in lieu of vacation.

Economic theory indicates that an employee could achieve a higher level of satisfaction (or if it is preferred a more efficient use of his total compensation) if he were allowed to choose between some combination of vacation pay and actual vacation. This would cause work force scheduling problems for management, but the negative effect of the scheduling is inversely related to the period of time between management's notification of his choice and the vacation time. For example, a twenty-five year employee is entitled to six weeks paid vacation. Suppose he chose to take three weeks with pay and work the other three weeks at double time. Assume further that he was required to make this decision far enough in advance (say six months) so that management could schedule the plant labor force efficiently-the net effect would be greater real income for the employee at no additional cost to the employer, assuming no reduction in productivity.

In the above example six weeks vacation represents twelve per cent of the employees annual compensation. He might very well benefit from being able to maximize this portion of his income.

Armour Seniority Provisions

The Armour Agreement in Article XV sets forth the seniority provisions of the contract. It states:

> Seniority-General.
>
> Seniority will operate on a departmental basis except as otherwise specified in this Article. Promotions, layoffs and reemployment will be based on departmental seniority, except as otherwise specified in this Article ...

The section then modifies the departmental seniority to allow employees laid off in one department to replace less senior employees in other departments, provided they are capable of doing the work. This process of using seniority to replace less senior employees across departmental lines is known as "bumping".

Armour Bumping Procedure

APPENDIX I of the contract between Armour and the UCFW deals with administering the bumping procedure. The reader will notice that for the purposes of these provisions, seniority is not departmental-but plant wide. This is an important distinction. While plant wide seniority gives greater job security, it also causes greater disruptions in the production process. A careful reading of the following will indicate that the interaction of seniority provisions with job displacement provisions is an important area to consider when evaluating the effects of seniority on productivity.

In administering the procedures for handling displacement rights for employees under Section 15.7, the parties seek to achieve the following basic objectives:

(A) Displacements under the bumping procedure shall be limited to one day per week.

(B) Employees who exercise displacement rights shall be assigned by management to jobs which can be performed with a minimum training period in order to reduce potential disqualifications.

(C) Employees who are displaced under the changed procedure shall be those employees on the active payroll having the least amount of continuous service.

The procedure for accomplishing these objectives shall be as follows:

(1) Local plant management must decide no later than Thursday noon of each week the levels of production they wish to maintain the following week. The production departments and the employment office are to be given this information no later than Thursday noon in order that they can properly plan adjustments in their gangs in the plant departments and determine the employees who are to be laid off as a result of gang reductions as well as those employees to be recalled from layoff for any gang increases. THE ADVANCE PLANNING REQUIRED UNDER THIS PROCEDURE IS THE KEY TO SUCCESSFUL HANDLING OF THE BUMPING PROCEDURE.

(2) As soon as the employment office determines employees who are to be laid off, such employees are to be notified by written notice by Thursday afternoon of their layoff and of the date on which it becomes effective. The department release form for layoffs contains instructions to employees with more than one (1) year continuous service who may be entitled to bumping rights in other departments. Such employees who desire to excercise displacement rights will be required to register at the employment office Thursday after completing their day's work and no later than the time to be designated by the local plant for closing of the bumping register. ...

(3) Immediately after the closing of the bumping register and prior to the end of the work day on Friday the employment department will make

assignments to the registered employees in order of continuous service, giving preference to the choices indicated by the employee. When two or more employees indicate the same preference of departments, the employee with the longest service is to be given his first choice ...

(6) In some plants it may be desirable due to peculiar circumstances to set a limitation on the number of employees who may be bumped into another department in any one week. Limitations in this area are permissible provided they can be arrived at by agreement in writing with the local bargaining committee. If serious disruptions are feared in this connection, the local plant must notify the home office since the International Office of the Union has agreed to cooperate in working out such problems.

(7) The policy of assigning the person exercising bumping rights to the job of the employee being bumped is no longer required. In changing this policy it shall be the practice to assign displacing employees to the least skilled jobs in the department.

These provisions have the effect of increasing job security for more senior employees with a corresponding decrease in job security for less senior employees. Sub-Section 7 above replaces a less senior employee with a more senior employee in a given department. It places the more senior employee in the least skilled position in the department to protect seniority. It has the potential to reduce the skill levels in the department and the entire plant, thereby reducing productivity.

The effect of the above provisions is to make seniority plant wide where the employee can perform other jobs. The effect of the provision is more employment security for senior employees, less employment security for less senior employees and the transmission of labor force changes in one department to other departments that would not have otherwise been affected. The net motivational, productivity and performance effects of this provision are mixed.

This is further compounded by provisions that are described under Job Mobility that make seniority company wide in the Armour Agreement.

Seniority and Productivity in General

Before listing the seniority provisions in other contracts, a discussion of seniority systems in general is in order. Albert Rees states:

> The principle of seniority seems to conflict strongly with efficiency, with the selection or retention of the most able or productive man for each job. There is undoubtly some conflict, though less than one might think for several reasons. First, there is the natural positive correlation between productivity and experience. Second the seniority system did not replace selection by measured ability; as we have seen, it replaced a system of subjective selection that had important elements of favoritism and quessing. In many areas it is doubtful whether employers have reliable measures of ability ...
>
> ... It is widely and no doubt correctly assumed that the use of seniority to govern layoffs and promotions has contributed to the secular decrease in the voluntary mobility of American manual labor (Rees, 1977, pp.144-6).

Seniority in the Food System

Seniority in the food system is a complex matter. The simple definition of "last hired-first fired" does not explain seniority practices in the food system. In general, food system seniority practices establish two distinct categories of seniority. Full time employees and part time employees are kept on separate seniority lists. Any full time employee has seniority over a part time employee, so that, in the event of a layoff all part time employees must be laid off before any full time employee is dismissed.

Seniority is also divided into departmental, plant or company wide seniority. In general, seniority lists are kept by department, plant or store, and company. In actual practice, for promotions, seniority is plant or store wide in the food system. When a bargaining unit job opens, employees sign up or "bid" for the job. If two employees are equally able to perform the task, then the job is awarded to the most senior employee at the plant or store who "bid" for the job. This simple explaination of seniority in the food system applies only in the case of promotions.

Table 12 shows the practice for seniority provisions in the food system at time of layoff. In 28.2% of the contracts, the principle of "last hired-first fired" applies within a department. A more senior employee may displace

Table 12

Type of Seniority at Time of Layoff Resulting from Provisions in Food System Collective Bargaining Agreements in Effect on April 1, 1981.

SIC Code	Total Contracts	Departmental	Plant or Store	Company	Geographically by Company	Geographically by Industry
0132	1		1			
0192	1		1			
2000	1		1			
2011	30		27	3		
2015	1			1		
2020	4			4		
2023	1		1			
2024	3	3				
2026	12	7	3	2		
2031	2		2			
2032	5	3	2			
2033	20	2	18			
2034	6		6			
2036	2		2			
2037	5		5			
2041	3		3			
2043	3		3			
2046	2		2			
2051	15	2	12			
2052	6	1	5			
2061	1		1			
2062	6	2	4			
2063	5		5			
2071	10		10			
2072	3		3			
2073	1		1			
2082	10	5	5			
2085	4	3	1			
2086	3	3				
2095	1		1			
2099	2		2			
2111	7	4	3			
2121	4	2	2			
2131	2		2			
2141	1		1			
3522	12	3	6	3		
4463	13		1			12
5040	1		1			
5042	7	1	6			
5047	2		2			
5048	3		3			
5049	1		1			
5411	123	48	11	10	54	
5421	5	5				
5810	2	2				
5812	22	8	12	2		
7011	23	8	15			
Total	397	112	194	25	54	12
Percent of Totals		28.2%	48.9%	6.3%	13.6%	3.0%

Source: Contract File, BLS.
Note: Refer to SIC Identification in Appendix

(bump) a less senior employee within a department provided he can perform the work with a minimum of training.

In 48.9% of the contracts analyzed, a more senior employee can "bump" a less senior employee at the time of a layoff outside his department, but within the same plant or store, providing the more senior employee can perform the task. This type of seniority causes disruptions beyond the department at the time of a layoff.

In 6.3% of the contracts analyzed seniority is company wide at the time of a layoff. Where the company operates only one plant, this has the same effect as plant wide seniority at the time of a layoff. In multi-plant operations or multi-store operations the disruptions of a layoff in one department can spread company wide.

In food retailing (SIC 5411) 54 of the 123 contracts analyzed have company wide seniority provisions in the event of layoffs, but the senior employee is limited to "bumping rights" within a limited geographic area such as a county.

In stevadoring (SIC 3522) seniority is industry wide in a given port. Employees are hired daily in a "shape up" on the basis of seniority. When work is limited, less senior employees are not hired.

The placing of seniority provisions at time of layoff is the result of reading and evaluating all the seniority language in the collective bargaining agreements. No provisions are quoted in this section as they would be extremely lengthy and complex.

Table 12 shows the effect of seniority provisions at time of layoff. Only 28.2% of the contracts confine the adjustments of diminished work in one department to that department. This has a negative effect on productivity. However, expanding the principle of seniority beyond a department has potential morale improving implications and can indirectly improve performance.

The following provision is included to show the effect of softening seniority by provisions to spread work among bargaining unit employees at time of layoffs.

These provisions are rare and have been found only in the tobacco processing industries. This provision is taken from the Contract Between Jno. Swisher and Son, Incorporated and the Retail, Wholesale and Department Store Union, A.F. of L.-C.I.O.-C.L.C. Cigar Makers Local 531 of Jacksonville, Florida. The contract covers 750 employees and states:

> ARTICLE #8
> SECURITY OF EMPLOYMENT
>
> If it should appear necessary to curtail employment for seasonal or other temporary reasons, in the interest of equitable distribution of work and to guarantee greater economic security for the Employees covered by this Contract, the Company agrees to first reduce the number of working days of each week to four (4) days of eight (8) hours per day. Economic factors seriously affecting the Company shall not be governed by these provisions: however, the Union will be advised concerning the change or changes contemplated.

Armour Disabled Employee and Compulsory Retirement Provisions

Section 15.21 of Article XV in the Armour contract states:

> A disabled employee who has at least ten (10) years of credited service under the Pension Plan and who, at the end of the period for which he is entitled to receive sick leave benefits or at the end of twenty-six (26) weeks, whichever period is greater, continues to be disabled as defined in the Pension Plan, Supplements 1, 2 and 3, but who is able to perform the duties of one or more jobs in another department or departments which are being performed by employees with less plant seniority than the disabled employee, shall have the option, in lieu of disability pension, to transfer to one of such jobs ... The employee replaced by such a transfer may exercise his seniority in accordance with the provisions of Section 15.7.

Allowing the disabled worker to work at a job he can perform increases his individual productivity and the performance of the industry. Bumping of a qualified employee in another department has a detrimental effect on motivation, productivity and performance. An interesting question arises. If allowing a disabled worker to work where he can perform the task increases productivity, would requiring the disabled worker to perform work which is within his limitations improve performance?

Article XVIII, Section 18.9 of the Armour Agreement indicates an area of Union and Company disagreement where the Union agrees to take no action in opposition to the policy of Armour and Company. Pragmatically this is the same as agreeing. The provision states:

> The Company's policy of compulsory retirement shall continue in accordance with the following:
>
> Employees shall retire on their attainment of age 70.
>
> The Union does not subscribe to any policy of compulsory retirement and no mutual agreement on the adoption of such a policy has been reached. The Union has agreed, however, to waive any such right to oppose the application by the Company of such a policy in accordance with the above schedule.

This has the effect of lumping all workers of age 70 or over into a group regardless of the productivity associated with the worker. It has the potential for either increasing or decreasing productivity in the plant, increasing or decreasing employee motivation by increasing job openings; but from a performance standpoint it has the potential to remove productive workers from the workplace regardless of their ability to perform a task and at times of full employment reduce performance.

Food System Retirement and Disabled Worker Provisions

Table 13 shows the incidence of compulsory retirement provisions in the food system to be very small. It shows provisions for adjusting the work environment for disabled

Table 13

Compulsory Retirement and Disability Provisions Contained in Food System Collective Bargaining Agreements in Effect on April 1, 1981.

SIC Code	Total Contracts	Contracts Containing Provisions For Compulsory: Retirement at Age 65 years	Retirement at Age 70 years	Disabled Employees
0132	1			
0192	1			
2000	1			
2011	30	1	2	8
2015	1			
2020	4			
2023	1			
2024	3			
2026	12			
2031	2			
2032	5			
2033	20			9
2034	6			
2036	2		1	2
2037	5			
2041	3			
2043	3			
2046	2			
2051	15			
2052	6			
2061	1			
2062	6			
2063	5			
2071	10			
2072	3			
2073	1			
2082	10			
2085	4			
2086	3			
2095	1			
2099	2	1		
2111	7			2
2121	4			1
2131	2			
2141	1			
3522	12			4
4463	13			3
5040	1			
5042	7			
5047	2			
5048	3			
5049	1			
5411	123		3	11
5421	5			
5810	2			
5812	22			
7011	23			
Total	397	2	6	40
Percent of Totals		0.5%	1.5%	10.1%

Source: Contract File, BLS.
Note: 389 contracts have no specific retirement age; 357 contracts have no specific provision for handling disabled employees. Refer to SIC Identification in Appendix

workers to appear in 10.1% of the contracts and these are found in only eight industries.

Armour Contract Safety Provisions

Article XX of the Armour Contract deals with the safety of the workers while on the job. Section 20.1 places responsibility with the Company but subsequent sections provide a method for Union and Company cooperation at the plant level. The provisions of the Article states:

> 20.1 Responsibility.
>
> The Company has the responsibility to provide a safe work place and to correct safety hazards. Nothing in this Agreement shall imply that either the local or the International Union has undertaken or assumed any portion of that responsibility.
>
> 20.1 Safety Committee.
>
> For the purpose of advising and assisting the Company in the performance of its safety responsibilities and obligations and to facilitate the discovery and remedying of safety hazards, a joint Employee-Management Safety Committee shall be established at each plant under this Agreement. The number of members at any local plant shall be determined as follows:
>
> In smaller plants up to 50 bargaining unit employees, the Safety Committee shall consist of one employee designated by the union and one management representative. In plants where the number of employees exceeds 50, membership of the Safety Committee shall consist of three employee representatives designated by the union and ... three representatives designated by local plant management provided, however, that both parties will discourage unnecessary change in order that an informed committee can operate. By local agreement, the number at any plant can be reduced to

> two persons for each party. In any plant in excess of 100 employees, one of managments' representatives will be the person responsible for plant maintenance.
>
> 20.3
>
> The Safety Committee shall convene once each month ... The duties of the Committee shall include the review and investigation of safety practices and rules and health and safety conditions in the plant and the handling of safety complaints. One Employee member ... will be permitted to accompany OSHA inspectors or other government safety inspectors on a plant inspection tour. ... Working hours lost by Employee Members of the Committee ... shall be compensated at the employees regular hourly rate ...

Additional provisions provide for the correction of safety hazards and for access of local Employee Committee members to the Corporate Director of Safety.

The provision has the potential to increase employee effort and productivity. It has the potential to reduce on-the-floor disputes thereby increasing productivity. It has the potential to increase performance by reducing lost time accidents. The proposal has definite costs to the Company that involve the direct cost of paying the Employee Member and the costs associated with the correction of hazards.

Food System Safety Provisions

Table 14 shows 18.4% of the contracts analyzed to contain provisions for safety committees. These committees are (with the exception of four committees) joint committees

Table 14

Food System Collective Bargaining Agreements Containing Provisions for a Safety Committee and Type of Committee Control for Contracts in Effect on April 1, 1981.

SIC Code	Total Contracts	Contracts with Safety Committees and Majority Representation by: Union	Joint	Management
0132	1			
0192	1			
2000	1			
2011	30	1	14	
2015	1			
2020	4			
2023	1			
2024	3			
2026	12		2	
2031	2			
2032	5		5	
2033	20		2	
2034	6		4	
2036	2			1
2037	5			1
2041	3			
2043	3			
2046	2			
2051	15		5	
2052	6		5	
2061	1			
2062	6		3	
2063	5		3	
2071	10			
2072	3		1	
2073	1			
2082	10			
2085	4			
2086	3			
2095	1			
2099	2			
2111	7		1	
2121	4		2	
2131	2			
2141	1			
3522	12	1	5	
4463	13		4	
5040	1			
5042	7			
5047	2			
5048	3			
5049	1			
5411	123		13	
5421	5			
5810	2			
5812	22			
7011	23			
Total	397	2	69	2
Percent of Totals		0.5%	17.4%	0.5%

Source: Contract File, BLS.
Note: Refer to SIC Identification in Appendix

with management and the bargaining unit having equal representation.

Armour Grievance Procedure

Article XXI of The Armour Agreement sets forth the grievance procedure. Albert Rees describes a grievance as:

> A complaint by a worker that he has not been treated fairly in some aspect of his work or pay, usually in some aspect covered in a collective agreement. There is great variation in the nature of the complaints, though certain complaints recur frequently. Among these are grievances about rates of pay (for example, a worker may feel that the work he has been doing should be classified as carrying a higher rate than he is receiving). Seniority grievances are also common; a worker alleges that if his seniority had been reckoned properly, he would have been promoted or transferred to a more desirable position instead of someone else. The grievance machinery is also frequently used to protest discipline that is considered unwarranted or unduly severe.
>
> Where unions bargain with small employers the grievance system is often very simple. The worker makes his complaint orally to his immediate supervisor; if he does not get satisfaction, he goes to the union president or business agent, who talks to the owner or manager of the firm. Such an informal procedure is clearly unworkable in large companies, where elaborate formal systems of handling grievances have evolved. In such systems the worker goes in the first instance to his shop steward, an elected part-time union official sometimes called a grievance committeeman or a 'griever'. If the steward feels that the grievance is a legitimate one, he will help the worker put it in writing and will try to settle it with the foreman. The requirement that a grievance be put in writing causes a surprising number of complaints to evaporate at this point. If the grievance cannot be settled between the steward and the foreman, it will proceed upward through a well defined number of steps involving

> increasingly higher levels of authority within the union and the management ... As a final step, the great majority of grievance procedures provide for neutral arbitration (Rees, 1977 pp.151-2).

In the Armour/UFCW Agreement, the grievance procedure is a formal system of industrial jurisprudence. The provisions are extensively excerpted from the contract and follow below.

> 21.1 Grievance Committee.
>
> A Grievance Committee of employee representatives, the number to be determined locally, shall designated by the Union. The Company shall designated a permanent Management representative for each department to handle all grievances and complaints with the Union stewards. In the event that the permanent representative is not present at any particular time a substitute representative shall be designated by the Management. Members of the Grievance Committee shall be afforded the necessary time off without pay as may be required to attend regularly scheduled and emergency grievance meetings.
>
> 21.2 Grievance Steps.
>
> Should differences arise between the Company and the Union, or between the Company and employees, or between employees of the Company because of Union or non-Union affiliation, or should trouble of any type arise in the plant, there shall be no strike, stoppage, slowdown, suspension of work or boycott on the part of the Union or its members or employees, or lockout on the part of the Company, on account of such dispute, until all matters have been processed through the grievance procedure provided below:
>
> (a) 1st Step-The aggrieved employees may present the grievance or complaint to the departmental Management representative, or to their Union Representative who may present the grievance or complaint to the departmental Management representative. All such presentations are to be made

on the employee's and the Union representative's own time. The grievances are to be presented at times causing the least inconvenience to the operations and involving the least amount of lost time. Management's answer is due within forty-eight (48) hours.

(b) 2nd Step-If the parties fail to reach a settlement in the first step, the Grievance Committee may appeal from the decision of the departmental representative, in which event the grievance shall be submitted in writing (on forms supplied for the purpose) to the General Superintendent or his representative by a member or members of the Grievance Committee. Managements' answer is due within one (1) week after the written grievance has been so submitted.

(c) 3rd Step-In the case of grievance other than those involving discharge or other discipline, if the parties fail to reach a settlement in the second step, the Grievance Committee may appeal to the third step of the grievance procedure by preparing a written 'Notice of Appeal to Third Step' in triplicate and forwarding one (1) copy to the plant General Supperintendent and one (1) copy to the International Office of the Union, and retaining the third copy. The plant General Superintendent shall forward his copy to the National Office of the Company.

The International Office of the Union and the National Office of the Company shall thereafter arrange a mutually convenient date for their representatives to meet in the plant city with local represenaives for the purpose of attempting to settle the grievance. The parties agree to have their representatives available for such a meeting within thirty (30) days following receipt of 'Notice of Appeal to Third Step'.

(d) In the case of grievances involving discharge or other discipline, if the parties fail to reach settlement in the second step, the Grievance Committee may appeal said grievance to arbitration as provided in paragraph 21.4, provided that the International Union may participate in any such arbitration, and the Company Director of Labor Relations and the Director of Labor Relations of the International Union may request a pre-arbitration meeting to discuss the case. Such meeting shall not delay or interfere with the selection of the arbitrator and scheduling of the hearing. In the case of grievances other than those involving discharge or other discipline, if the parties fail to reach a settlement in the third step, the Union may appeal the grievance to arbitration as provided in paragraph 21.4 ...

21.4 Arbitration.

(a) Arbitration shall be the final step with respect to classes of grievances referred to in this Section and shall be provided through an arbitrator chosen by both parties.

(b) It shall be the function of the Arbitrator, after due investigation and any other procedure he may shall deem necessary, to make a decision in all cases of alleged violation of the terms of this Agreement or of existing Company local rate schedules. The Arbitrator shall have no power to add or to subtract from or modify any of the terms of this Agreement or any agreements made supplimentary hereto, nor to change any job rate on a national basis or under existing Company local rate schedules.

(c) Any case referred to the Arbitrator on which he has no power to rule shall be referred back to the parties without decision. ...

(e) The Arbitrator shall have jurisdiction to determine whether or not a work standard has been met and to detemine the propriety of discipline, if any, out of failure to meet work standards.

(f) There shall be no appeal from the Arbitrator's decision, which shall be final and binding on the Union and its members, the employees or employee involved, and the Company ...

(g) All of the Arbitrator's expenses shall be borne equally by the parties.

Other provisions in the food system provide for the losing party to pay the expenses of arbitration. This in fact is difficult to administer as there is not always a clear cut winner or loser. Many collective bargaining agreements provide that the arbitrator shall decide how the expenses of arbitration shall be paid on a case by case basis.

> (i) The parties have, by separate letter, agreed to a panel of arbitrators to hear disputes appealed to arbitration under Section 21.4. Unless the parties designate a panel arbitrator by mutual agreement (preferably on a regional basis), the selection of the arbitrator shall be made from the agreed-upon panel by the appealing party striking first and the parties thereafter alternatively striking until one arbitrator remains to hear and decide the case or cases submitted, provided, however, if that arbitrator is not avbailable to promptly hear the matter(s) within the limits hereto provided, then the parties will work backwards on the struck panel until a panel arbitrator is selected or mutually agreed upon.

The language of (i) above is intended to have each party alternatively strike a name from a list of previously agreed upon arbitrators until one name remains. Other methods in the food system of selecting arbitrators are:

Each party select an arbitrator, and those arbitrators agree upon a third arbitrator. The grievance is then decided by a panel of three.

The grievance is referred to the American Arbitration Association or a similar group. The neutral group appoints a single arbitrator to decide the grievance.

A single Arbitrator is included in the contract by name and that person decides all disputes that arise during the term of the Agreement.

The above Armour/UFCW procedure is a four step grievance procedure, the final step being binding arbitration. All grievance procedures in the food system have binding arbitration as the final step. The procedures are carefully outlined to indicate the steps and the limits of the parties.

This system on the surface provides a method of settling disputes without resorting to strikes, slowdowns or lockouts. It therefore contributes to productivity and therefore contributes to performance from an output and equity standpoint. It must be remembered that the procedure in handling grievances described above and in use in the food system is an adversary proceeding. It has the potential to bring about protracted meetings and hearings until a decision is reached. To that extent it can damage morale and contribute to reduced productivity and performance. A fertile area for future research is the actual effect on productivity and performance of the present grievance system.

Food System Grievance Procedures

Every food system collective bargaining agreement contains a grievance procedure of some type. These are all similar to the Armour provisions cited. All procedures involve steps beginning with the grievant and his immediate supervisor and ending in binding arbitration. Table 15 indicates that a four step grievance procedure is found in

Table 15

Food System Collective Bargaining Agreements Containing Grievance Procedure Provisions and the Number of Steps Specified by the Provisions for Contracts in Effect on April 1, 1981.

SIC Code	Total Contracts	Number of Steps: three	four	five	six
0132	1	1			
0192	1			1	
2000	1		1		
2011	30	7	18	5	
2015	1		1		
2020	4			4	
2023	1	1			
2024	3	1	2		
2026	12	8	4		
2031	2		1	1	
2032	5			5	
2033	20		5	15	
2034	6		6		
2036	2		2		
2037	5		2	3	
2041	3		3		
2043	3		3		
2046	2		2		
2051	15		5	10	
2052	6		6		
2061	1		1		
2062	6		6		
2063	5		5		
2071	10		7	3	
2072	3		3		
2073	1		1		
2082	10		10		
2085	4	1	3		
2086	3		3		
2095	1			1	
2099	2		2		
2111	7	1	1	3	2
2121	4		3	1	
2131	2	1	1		
2141	1		1		
3522	12	4	8		
4463	13	6	7		
5040	1		1		
5042	7	2	5		
5047	2		2		
5048	3		2	1	
5049	1		1		
5411	123	42	77	4	
5421	5	4	1		
5810	2	1	1		
5812	22	15	7		
7011	23	3	16	4	
Total	397	98	236	61	2
Percent of Totals		24.7%	59.4%	15.4%	0.5%

Source: Contract File, BLS.
Note: Refer to SIC Identification in Appendix

54.4% of the contracts analyzed. In general, shorter procedures are to be found where there are fewer employees at a location such as in food retailing (SIC 5411).

Table 16 indicates that the final step of the grievance procedure varies in the number and type of arbitrator(s) used in the binding arbitration. In all cases where a jointly selected arbitration panel is used, an odd number of arbitrator(s) is used to avoid split decisions. Where a mediation agency is used, that agency appoints an arbitrator or arbitrators to hear and decide the grievance.

The grievance procedure in the case of discharges can provide a barrier to entry by new employees. This is discussed in more detail in Chapter V.

The collective bargaining agreement between the J.I. Case Company and the United Automobile, Aerospace and Agricultural Implement Workers of America covers 6,500 employees in plants in Illinois, Indiana, Iowa and Minnesota. A provision in the agreement provides for an expedited grievance procedure in the event of a discharge.[3]

> Any discharge grievance referred to the special arbitration procedure ... will be scheduled for a hearing as soon as possible during the next 45 days immediately following such meeting. Post hearing briefs will be filed within ten (10) days following conclusion or the hearing. The arbitrator will render a written award with ten (10) days following submission of briefs.

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[3] The following provision is from the contract that expired June 30, 1980.

Table 16

Food System Collective Bargaining Agreements Containing Grievance Procedure Provisions and the Number of Arbitrators Specified by the Provisions for Contracts in Effect on April 1, 1981.

SIC Code	Total Contracts	Number or Type of Arbitrator(s) one	three	five	Mediation Agency
0132	1			1	
0192	1	1			
2000	1				1
2011	30	17	9		4
2015	1		1		
2020	4		3		1
2023	1		1		
2024	3	1	2		
2026	12	5	5		2
2031	2	1	1		
2032	5		4		1
2033	20	18	2		
2034	6	4	1		1
2036	2		2		
2037	5	1	2		2
2041	3	1	2		
2043	3		1	1	1
2046	2		2		
2051	15	3	4	4	4
2052	6		3	2	1
2061	1				1
2062	6		1	2	3
2063	5		2	2	1
2071	10			6	4
2072	3		1		2
2073	1				1
2082	10	2	5	2	1
2085	4	1			3
2086	3	2	1		
2095	1		1		
2099	2		1	1	
2111	7	3		1	3
2121	4	1	1		2
2131	2		2		
2141	1		1		
3522	12	8	4		
4463	13	12			1
5040	1	1			
5042	7	5	2		
5047	2	1	1		
5048	3	3			
5049	1		1		
5411	123	61	31	3	28
5421	5	4	1		
5810	2	1	1		
5812	22	9	4	6	3
7011	23	12	7		4
Total	397	178	113	31	75
Percent of Totals		45.0%	28.0%	9.0%	19.0%

Source: Contract File, BLS.
Note: Refer to SIC Identification in Appendix

It can be seen from the above provision that the final step of the grievance procedure can take as long as 65 days. Prior steps can take as long as 30 days. The employer runs the risk of having to reinstate the employee with full back pay and this could involve nearly three months compensation without any benefit to the output of the company. This creates a potential loss to the employer and has the effect of causing only employees who (in the eyes of the company) are unproductive to be discharged.

From the employee's standpoint, being discharged means the loss of accrued benefits and in this particular industry-the loss of a job paying more than the prevailing area wage for comparable skills. The economic loss over a lifetime could amount to many thousands of dollars. Civil matters of this magnitude are resolved in the civil courts and often take years to be resolved. Due process in industrial jurisprudence takes less time than normally expected in instances that are resolved in the civil courts.

The trade offs illustrated by the above paragraph are obvious. The employer faces less of a threshold in discharging unproductive employees the shorter the time that is involved in the resolution of any dispute arising from that discharge. Conversely, the discharged employee is given a presumably reasonable time in the viewpoint of his union to defend his position. The employee faces a threshold also-for he is without pay during the grievance procedure. This much can be said, an expedited grievance procedure is desirable so long as that procedure functions equitably.

Armour Separation Allowances

The Armour/UFCW Agreement's separation provisions are discussed in detail under Job Mobility. Article XIX provides that employees having one year or more of continuous service shall receive a separation allowance if they are:

> Permanently dropped from service because of a reduction in forces arising out of the closing of a department or unit of the business, or as the result of technological changes and when it is not expected they will be rehired ...
>
> 19.3 Amount of Payment
>
> In order to reflect the fact that Separation Pay is earned during periods of employment with the Company, and is payable with respect to said past service, the amount of Separation Pay shall be computed as multiple equivalents of weeks of wages times years of continuous service, in accordance with the following schedule. Payments are to be computed on the basis of forty (40) hours per week at the employees regular rate as follows:
>
> One (1) through ten (10) years of continuous service:
> One week's pay for each year of continuous service.
>
> Eleven (11) through twenty (20), add to the computation for ten (10) years:
> One and three-fourths weeks' pay for every year of continuous service above ten (10) years.
>
> Twenty-one (21) and over, add to the computation for twenty (20) years:
> Two weeks' pay for each year of continuous service for each year of continuous service above twenty years.

This provision has the potential for easing the adjustment of permanently displaced workers, thereby increasing the positive aspects of performance. It also has the direct effect of adding to the cost of closing a department, closing a unit and of introducing less labor intensive technology. This has potential negative effects on productivity.

Food System Separation Allowances

Provisions in the food system contracts analyzed concerning severance allowances are divided into categories and shown by industry in Table 17.

Fixed Amount Per Year with a Maximum

Fifteen and four tenths percent of the contracts contain a provision that grants one week of severance pay per year of continuous service with a maximum payment. The following from the collective bargaining agreement covering the stores in North West Pennsylvania and Western New York between the Loblaw Division of the Peter J. Schmitt Company, Inc. and Local 34 of the Amalgamated Meat Cutters and Food Store Employees Union affiliated with the United Food and Commercial Workers International Union covers 900 employees. The agreement contains the following provision

Table 17

Food System Collective Bargaining Agreements Containing Severance Provisions and Type of Severance Provision by Contract in Effect on April 1, 1981.

SIC Code	Total Contracts	Provisions containing: Maximum Payment wk./yr. type	Provisions containing: No Maximum Payment wk./yr. type	Provisions containing: No Maximum Payment acclerated
0132	1			
0192	1			
2000	1			
2011	30		2	6
2015	1			
2020	4		2	
2023	1			
2024	3	2		
2026	12	2		
2031	2			
2032	5	4		
2033	20	2		
2034	6			
2036	2		1	
2037	5			
2041	3			
2043	3			
2046	2			
2051	15	7		
2052	6		3	
2061	1		1	
2062	6			
2063	5	2		
2071	10			
2072	3			
2073	1			
2082	10	2	2	
2085	4	2		
2086	3		2	
2095	1			
2099	2			
2111	7	2		
2121	4	2		
2131	2			
2141	1			
3522	12			
4463	13			
5040	1			
5042	7	1		
5047	2			
5048	3			
5049	1			
5411	123	33		8
5421	5			
5810	2			
5812	22		1	
7011	23			
Total	397	61	14	14
Percent of Totals		15.4%	3.5%	3.5%

Source: Contract File, BLS.
Note: 308 contracts contain no severance provisions of any type.
Refer to SIC Identification in Appendix

that grants severance pay in a limited manner:

> In the event of a store closing, employees unable to exercise their seniority bumping rights to continue employment with the Company, shall be entitled to severance pay based on the following formula:
>
> a. The Company shall make up the difference between the employees normal gross pay; forty (40) hours for full time and twenty (20) hours for part time, and their total dollar benefit which would otherwise be available through State Unemployment Insurance.
>
> b.

LENGTH OF SERVICE	MAXIMUM NUMBER OF WEEKS
25 years plus	Eight (8) weeks
20 but less than 25	Six (6) weeks
15 but less than 20	Five (5) weeks
10 but less than 15	Three (3) weeks
5 but less than 10	Two (2) weeks
Less than 5	None

> The above shall not apply in the event of an employee accepting a position within the corporation's franchise system.

Provisions with No Maximum Payment

Three and one half percent of the contracts analyzed grant a given amount of severance pay for each year of continuous service with no maximum on the amount of payment. An additional 3.5% of the contracts analyzed accelerate the amount of payment and place no maximum on the amount of payment. This is illustrated by the the collective bargaining agreement between Star Markets of Honolulu, Hawaii and Local 594 of The United Food and Commercial Workers. It contains the following provision granting severance allowances subject to permanent layoff:

> A regular full-time employee who has completed one (1) or more years continuous service and who is permanently terminated from service by the Company by reason of layoff shall receive a separation allowance computed on the basis of one (1) week's pay (40 hours) for each year of service up to and including fifteen (15) years, and one and one-half weeks' pay (60 hours) for each year of service over fifteen (15) years.
>
> The amount of such separation allowance shall be computed on the basis of an eight (8) hour day and at the rate of pay applicable to the employee at the time of separation.

The performance implications of severance allowances are mixed. They provide for an adjustment for the employee and this has the potential to improve overall performance. These provisions deal with the effects of severance rather than the causes. This is discussed in detail in the recommendations.

Armour Provisions Unique to Industry Problems

Article XXV Section 25.6 of The Armour Agreement deals with a problem unique to the meat packing industry. In the past, firms have sold plants to close associates who refused to recognize the previous Union and would not hire employees believed to have been sympathetic to union goals. The selling firm then contracted for the production of the plant that it sold, thereby eliminating the influence of the Union.

This provision is designed to stop such practices.

25.6 Closed Plants.

(a) Within five (5) years after the Company closes down or substantially terminates production operations at any plant or division or department of a plant covered by this Agreement, the Company will not by sale, contract, lease or other similar arrangement, secure the production of the same or substantially the same products within the same plant by another producer. This provision shall not apply to packer-to-packer sales or purchases of product in the normal course of business.

(b) Within five (5) years after the Company closes down or substantially terminates production operations at any plant or division or department of a plant covered by this Agreement, the Company will not enter into a contract or other similar agreement whereby the Company agrees to purchase from a third party producer's plant located within 100 miles of the closed plant, division or department, the production output of such third party producer's plant or a volume of such output substantially equivalent to or exceeding the output of the closed Company plant, division or department, of the same product or substantially the same product which the Company produced at its closed plant or division or department thereof.

(c) If the Union believes the Company has entered into a contract or is about to enter into a contract in violation of Sections (a) or (b) above, the Director of the Packinghouse Department may within a reasonable time period, request an immediate meeting with the Company's Director of Labor Relations, together with the management representatives familiar with the transaction in question. The Company will provide the Union promptly upon request all information and relevant documents necessary to determine whether a violation has occurred or may occur ...

The Section then provides for arbitration giving the arbitrator power to "direct such remedy as may be appropriate to prevent the violation or to provide damages."

This provision is standard in many meat packing contracts. Other provisions unique to special industry problems are shown in this section. The plant closing provisions ensure the provisions of the contract will not be circumvented. The productivity and performance features of the contract are then cemented.

Food System Unique Problems

Many contracts analyzed contain provisions unique to their industry. Seven provisions are included to give the reader a view of the variation in these provisions on the role of collective bargaining agreements in preventing disputes in industry practices.

Gratuities

Many food system workers receive gratuities. This appears to present a special problem and is illustrated by the following provision from the Uniform Agreement between Restaurant-Hotel Employers' Council of Southern California, Incorporated Local 11 of the Hotel and Restaurant Employees and Bartenders' Union, A.F. of L.-C.I.O. The Agreement covers 10,000 employees. The provision states:

> SECTION 15. Ownership of Gratuities
>
> All gratuities shall be the property of the individual employee and shall not be deemed part

> of the basic wage. No employee shall be required or permitted to contribute any part of his wages, tips or gratuities to the Captain, Headwaiter, Headwaitress, Head Bartender, Manager, Assistant Manager or anyone in charge. The Employer shall have no right to order the manner in which tips should be distributed among employees.

Cash Handling

The collective bargaining agreement between the United Food and Commercial Workers International Union, Local 1689 and the Fairbanks, Alaska Retail Grocers Association (an industry bargaining group covering the area's major an independent food stores) covers 300 employees. The agreement contains the following provision covering cash handling.

> CASH HANDLING POLICIES. Written instructions concerning the cashing or acceptance of checks shall be posted on or near the cash registers or distributed to the employee in writing at the time of hire or when policy changes are made and available for review at an in-store location. Failure on the part of an employee to comply with such instructions shall be treated as cause for discipline or discharge. Cash policy shall be reduced to writing and a copy sent to the Union.

Trade Secrets

The Articles of Agreement between Hershey Chocolate Company at Hershey, Pennsylvania and the Chocolate Workers' Local Union 464 of the Bakery, Confectionery and Tobacco Workers' International Union of America, A.F.of L.-C.I.O.

covers 3,000 workers. It contains the following provision:

> 33. TRADE SECRETS
> It is recognized that all employees, in the day-to-day performance of their duties, have had, will have, or are likely to have, access to the Company's trade secrets and proprietary information and to confidential Company records and sources of information. While the employees have always received such information in confidence and have treated such information as secret and proprietary information belonging solely to the Company, both the Company and the employees believe it is preferable to reduce to writing their understanding in this regard. Therefore, the employees acknowledge that since having assumed employment they have kept confidential and secret and agree to keep confidential and secret during and subsequent to the period of said employment, all information relating to the Company's or any of its subsidiaries' business, pricing, and cost information, product formulas, recipes and all other trade secrets, sources of supply or lists of customers and plans or contemplated actions, except as they relate to the processing of labor relations matters with the Company.

This leads to the conclusion that Hershey has a production function, from source of supply to the customer, that it feels a need to protect (and the union has agreed to protect). It leads to rejection of any methodology that rigidly assumes equal production functions among firms in the same industry. When marketing services are considered as a portion of the production function of a firm, it matters little whether differences between industry products are real or imagined when considering production functions among firms in an industry.

New Hires

A special problem appears to exist in the brewing industry regarding customers using their influence to have a person hired. This is illustrated by the Plant Agreement between Anheuser-Busch, Incorporated-St. Louis, Missouri and The Brewery and Soft Drink Workers Conference, U.S.A. and Canada-Local Union 6 affilated with the International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America. The contract covers 800 workers and states:

> Recommendations by the customers of the Employer shall not be considered in the employment of employees.

The provision appears to make the qualifications of a new employee stand on their own merits and directly improve productivity with the potential of improving morale among employees resulting in an indirect gain in productivity. The provision also reduces employer information on new hires-especially those who had previous employment with a customer.

Safety Hazards

The Master Agreement between the John Morrell and Company and the United food and Commercial Workers

International Union, A.F. of L.-C.I.O.-C.L.C. covers 6,100 workers in ten U.S. plants. The contract contains the following provision:

> The Company shall provide to the Packinghouse Department of the International Union and the Local Union a list of all known hazardous substances and processes in use in the plant, giving the chemical name and trade name of each, and stating the known dangers and harmful effects of each and the known threshold levels or measurements or other factors which may give rise to such dangers or effects.

House Cards

The collective bargaining agreement between an employers' association covering four Northwest Washington counties and Local 451 of the Hotel and Restaurant Employees and Bartenders International Union, A.F. of L.-C.I.O. covers 550 employees. It contains provisions for the use of a sign or decal allowing the employer to identify the establishment as a "Union House". This particular provision makes the use of the card optional. Other contracts contain provisions requiring the display of the decal or sign indentifying the establishment as being a party to a collective bargaining agreement with a specific union. These provisions are generally restricted to establishments where the public enters such as food retailing, restaurants, etc.

The provision reads as follows:

> HOUSE CARD:
>
> Section 1.03
>
> In consideration of the signing of this agreement, and for the period of good and faithful performance of its provisions and convenants by the Employers, the Union shall furnish to the Employer a House, Bar or Motel Card, which shall be the property of and issued by the Union. The failure of the Employer to comply with any of the provisions of this agreement shall confer upon the Union the right to terminate the Employer's right to the use of the House, Bar or Motel Card and the card shall be returned to the Union upon demand.

STORE CLOSINGS

The collective bargaining agreement between The Great Atlantic and Pacific Tea Company, Inc. and District Local #10A, United Food and Commercial Workers International Union-Springfield, Massachusetts contains the following store closing provision to protect workers from lost time due to store closings:

> ...... ARTICLE XXII
> STORE CLOSINGS
>
> For the protection of employees in stores that may be closed for any reason, the following clause is added:
>
> Employees shall be protected as to employment and seniority and shall not lose any time due to such closings. These employees shall be temporarily transferred to other departments, rather than be discharged, if they so desire, and shall be paid the going wage for the new job, with full consideratin being given to their length of service.

When new jobs are available or when vacancies occur, those employees shall be advanced to better paying operations or better jobs in their respective departments on the basis of seniority, providing they are able to do the work. Any employee who may be discharged shall be entitled to a hearing before representatives of the Company and the Union.

Armour Closing Provisions

Article XXV of The Armour Contract provides for notice of plant closing notice with a payment to the employee in lieu of notice.

25.1 Notice of Plant Closing.

(a) The Company shall give notice in writing to both the International and Local Union of the closing of a plant or division of a plant, or of a major department of a plant, at least six (6) full calendar months prior to such closing. An employee who was on active payroll of the affcted plant on the date of such a notice or at any time thereafter, excluding temporary replacements, or newly hired employees and who is permanently separated from service as a result of such closing (regardless of whether the employee is employed in the particular division or major department closed) prior to the expiration of the aforesaid six (6) calendar months, shall be paid eight hours pay at his regular basic hourly rate for each day (based on a five (5) day work week) after his separation which is within the six (6) full calendar month period and which is not within a week for which a weekly guarantee is paid.

The wording of this provision includes workers who may be displaced by more senior employees through provisions expanding departmental seniority to plant wide seniority and company wide seniority. In its extreme, it forces a six month notification upon the Company to avoid penalities in excess of separation payments. Obviously this provision increases employment stability in the short run at the expense of management flexibility. An important area of future research is the cost/benefit effects of closing provisions.

Food System Closing Notices

Table 18 shows 12.5% of the food system contracts analyzed contain provisions for formal notification of the Union of closings. Only 3.0% of the contracts analyzed call for notification periods of more than one month. These are primarily in the meat packing (SIC 2011) industry. It is doubtful that plant closing notices in the food system have a positive or negative effect on performance in the system.

Direct Incentive Provisions in the Food System

Commission

Direct incentive provisions are contained in 12.3% of the food system contracts analyzed. The provisions are of three types. A commission type incentive is paid to delivery men in the meat, beverage and dairy industries.

Table 18

Food System Collective Bargaining Agreements Containing Closing Notice Provisions and Type of Closing Notice Provision by Contract in Effect on April 1, 1981.

SIC Code	Total Contracts	Length of Notice Required Before Closing: 7 days	8-30 days	31-180 days	180-365 days
0132	1				
0192	1				
2000	1				
2011	30			7	
2015	1				
2020	4			2	
2023	1				
2024	3				
2026	12				
2031	2				
2032	5				
2033	20				
2034	6				
2036	2				
2037	5				
2041	3				
2043	3				
2046	2				
2051	15				
2052	6				
2061	1				
2062	6				
2063	5				
2071	10				
2072	3				
2073	1				
2082	10				
2085	4				
2086	3				
2095	1				
2099	2				
2111	7		1	1	2
2121	4				
2131	2				
2141	1				
3522	12	2			
4463	13				
5040	1				
5042	7				
5047	2				
5048	3				
5049	1				
5411	123	12	23		
5421	5				
5810	2				
5812	22				
7011	23				
Total	397	14	24	10	2
Percent of Totals		3.5%	6.0%	2.5%	0.5%

Source: Contract File, BLS.
Note: 347 contracts contain no closing notice provisions of any type. Refer to SIC Identification in Appendix

This is usually a set amount per unit. 5.% of the contracts analyzed contain a provision for payment of commissions.

Piece Work

Five and four fifths percent of the collective bargaining agreements contain provisions for incentive pay based on output or piece work. These are generally in industries that are not machine paced and the specifics of the incentive pay are omitted from the contract, but provisions regarding the implementation of the incentives are included.

The collective bargaining agreement between The California Processors Association, Incorporated-an employer bargaining association of twenty-five firms and seventy-one plants and eleven Local Unions comprising the Teamsters California State Council of Cannery and Food Processing Unions, International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers. The agreement covers 55,000 employees and states:

> .... SECTION XII
> PLANT OPERATIONS
>
> A. On all incentive operations where there is an advantage to the worker because of position in the work line, the workers shall be rotated daily in position insofar as such rotation is practicable from the standpoint of efficient operation. Such rotation shall take place at the start of each shift. This paragraph shall not be construed to require the rotation of employees performing work of different kinds or qualities ...

Attendance

An incentive for attendance is illustrated by the contract between OreIda Foods, Incorporated's Burley, Idaho plant and Local Union 368 of the Amalgamated Meat Cutters and Butcherworkers. It provides for a bonus on an increasing scale-that is the more senior the worker the higher the bonus. The contract covers 1,000 employees and states:

> Section 1.
>
> A. A regular employee who has worked at least 1,040 hours during the preceding calendar year, and who is in the employ of the Company on December 31 of any calendar year will be entitled to an attendance bonus of 1/52 of the gross wages earned during the preceding calendar year ...
>
> B. A regular employee who has three or more years seniority ... will be entitled to an attendance bonus of 2/52 of the gross wages ...
>
> C. ... eight or more years ... 3/52 of the gross wages ...
>
> D. fifteen or more years ... 4/52 of the gross wages ...
>
> Attendance bonus checks will be available two weeks after the completion of the regular processing campaign.

One and one half percent of the contracts analyzed contain provisions for an incentive based upon attendance.

All three types of direct incentives used in the food system are directly tied to the output of the worker or a small group of workers. This contributes to productivity.

An area of future research is the level of total compensation that is related to incentives and the effect of incentives on real output.

Table 19 shows the incidence of direct incentives by type and by industry within the food system.

Armour and Swift on Job Mobility

The matter of factor mobility between geographic areas as it relates to labor within a firm generally is not a concern of labor agreements in relatively small geographic areas. It does become a concern when nationwide master agreements are negotiated between nation wide unions and large, multi-plant firms.

Essentially three perspectives on labor mobility become important. First, from the standpoint of society in general, factor mobility is important. As patterns of population, technology, production and transportation change, it follows that the optimum location of physical production and distribution facilities also change. At the same time the requirements for human capital associated with that processing and distribution also change. The investment in on-the-job training in workers is partially lost when workers with relevant industrial skills have less mobility than capital other than human capital. There is a double effect if worker mobility is restricted. Not only is the investment in human capital lost if workers remain in an area

Table 19

Food System Collective Bargaining Agreements Containing Direct Employee Incentive Provisions and Type of Incentive Provision by Contract in Effect on April 1, 1981.

SIC Code	Total Contracts	Incentive Compensation Based On: Commissions	Output	Attendance
0132	1			
0192	1			
2000	1			
2011	30		9	
2015	1			
2020	4			
2023	1			
2024	3			
2026	12	10		
2031	2		1	
2032	5			
2033	20		5	2
2034	6			
2036	2			
2037	5		1	
2041	3			
2043	3			
2046	2			
2051	15			
2052	6			
2061	1			
2062	6			
2063	5			
2071	10			
2072	3			
2073	1			
2082	10			
2085	4			
2086	3	3		
2095	1			
2099	2			
2111	7			
2121	4			
2131	2			
2141	1			
3522	12		7	4
4463	13			
5040	1			
5042	7	7		
5047	2			
5048	3			
5049	1			
5411	123			
5421	5			
5810	2			
5812	22			
7011	23			
Total	397	20	23	6
Percent of Totals		5.0%	5.8%	1.5%

Source: Contract File, BLS.
Note: No contracts contain profit sharing provisions other than stock purchase. Refer to SIC Identification in Appendix

where the skills are not needed, but that investment must be duplicated in an area where those skills are not present in the required quantities.

This is true even under conditions of full employment. The concept of full employment is a numerical concept that does not take into account the optimum employment of individuals that utilizes their stock of job related human capital, the bulk of which has been learned on the job.

From the standpoint of the firm, job mobility allows it to retain its investment in human capital, which again is mostly on-the-job training and to prevent having to duplicate those expenditures. Obviously the costs of moving those skills must be weighed against the benefits of retaining them.

From the standpoint of the bargaining unit and the individual worker, their personal stocks of human capital will yield a greater return (no matter how measured), the more alternatives that are available. Just as in international trade, the more options available, the less likely that the terms of trade will turn against the owner of the capital.

At this point the benefits of factor mobility which are almost self-evident have been described in general terms. Now how these are dealt with in Union-Management agreements is illustrated.

Two Master Agreements in effect over the same period of time in the meat packing industry are compared on the issue of labor mobility. The first agreement is the Swift and Company Master Agreement with the United Food and Commercial Workers International Union. This agreement covers 3,150 workers in 19 plants nationwide. The second agreement is the Master Agreement between Armour and Company and the United Food and Commercial Workers International Union. It covers 4,300 workers in 21 plants nationwide.

Within the bounds of the contracts, three items can bring about the need for mobility between geographic areas.

1) A plant closing.

2) A permanent reduction in work force at a location.

3) An opening of a new plant.

Both agreements use nearly identical language in dealing with plant closings or permanent reductions in labor force. The contracts call for a 26 week notice prior to closing of a plant or department and specify that there shall be no lay offs in anticipation of such a closing.

Both contracts provide for identical severance payments to employees whose jobs are permanently lost. Any employee with one year's seniority is eligible for severance pay at the rate of one week's (40 hours) pay for each of the first ten years of employment with the company, one and three fourths week for each year of service in excess of ten years but less than twenty years, and two weeks pay for all years of service in excess of twenty years. At the employees option, the pay can be in one lump sum. The

Armour agreement also provides for any vacation pay the worker would accumulate during the pay periods covered by the severance provisions while the Swift agreement is silent on this matter.

Both contracts give an employee the right to be transferred from the plant at which he is employed to another plant covered by the agreement where such an employee is subject to being permanently separated because of a reduction in work force arising out of the closing of a plant or a division or department of a plant, and where at the other plant there is at least one junior employee in terms of Master Agreement seniority.

Both Agreements provide for joint counseling of an employee who is displaced due to a permanent reduction in labor force by a meeting in which he is interviewed by representatives of both the Local Union and the Company and is given a full explanation of the options available to him, including a statement of the transfer opportunities and the amount of severance pay, pension or other benefits available to him. At this meeting the employee is required to indicate his choice from the options available. Both Agreements offer identical assistance in moving which would not cover employee costs. For example, a married employee moving 1000 miles or more would receive $500.00.

Limitations other than seniority are placed on the number of employees that can transfer to an existing plant.

The Swift Agreement limits the transfers to 10% of any department at any plant not affected by the reduction, but in all cases at least one employee per department can be replaced. The Armour Agreement limits the number of transfers to a number decided by an Automation Fund jointly administered by the Company and Union, but in no case greater than 15% of any department at any plant receiving the employees transferring.

In the event that openings do not exist at other plants, the Swift Agreement provides for a waiting list based upon seniority. Future opening in another plant will be filled from that list. An employee must defer severance pay to be placed upon that list and his name will be removed from the list if he applies for severance pay.

In the matter of new plants the Armour Agreement provides that any employee may transfer to a new plant (again seniority determines who transfers in the event that there are more applicants than openings). This is subject to the provision that the union in the Master Agreement is certified by the National Labor Relations Board or that the union presents satisfactory proof that it has been designated by a majority of employees in an appropriate unit as their bargaining unit in the new plant. Armour is not required to fill more than 80% of the jobs in the new plant from transferred employees.

The Armour contract also provides that the jointly administered Automation Fund can provide moving expenses for these moving employees.

With an apparent migration of population from the Northeastern United States to the "Sun Belt" the area of job mobility could become a major bargaining item for multi-plant firms in the future. It is presently of little consequence in food industry contracts.

An area of future research in the effect on productivity (from both the macro and micro view) of factor mobility under conditions of varying levels of employment and scale of operation. Clearly if contractual job mobility increases the productivity of the firm, it would facilitate the movement of plants. If contractual job mobility inhibits productivity of the firm, it would deter the movement of plants. From a macro standpoint, the research would involve more than just the summing of gains and losses of the firm. Costs and benefits external to the firm would need to be considered.

Conclusions

What can be said about the net effect of collective bargaining provisions on productivity and food system performance? If a ledger were to be established with those provisions on one side that improved productivity and on the opposite side those that inhibited productivity, the balance would be decidedly against increasing productivity.

When a weighting of the provisions was applied, the results are not so clear. Leibenstein argues persuasively that the effects of X-efficiency greatly out-weigh the effects of allocative efficiency in a developed society (Leibenstein, 1966, 1976). If this is the case, the provisions that improve morale and motivation may improve productivity. When the interaction of all contract provisions is considered, this improvement for many industries is only a possibility.

What can be said about the effect of collective bargaining agreements in the food system on performance? The conclusions that one would reach on the economic effect of collective bargaining on productivity do not transfer directly to the consideration of the effects of collective bargaining agreements on performance in its broadest sense. It has previously been shown that seniority is given precedence over productivity, job preservation, over new technology; effects are addressed rather than causes; short-run considerations prevail over long run considerations. Yet the rights of workers are important in a free enterprise system. So too is the hope of workers that past gains will not be lost and the hope of continued future improvement.

This must be stressed. The effect of productivity of provisions in food system collective bargaining agreements is determined by the interaction of provisions within individual contracts. This determination of the exact effect of this complex interaction is further clouded by the nature of Leibenstein's theory of X-efficiency. Leibenstein states:

> There is no reason that the work experience within a firm cannot also be viewed as a form of consumption. Many individuals quite readily attribute satisfaction (utility) to the work experience. A good, after all, is anything that yields satisfaction to the consumer, and is scarce in some sense. There is no reason why individuals should not behave in such a way that attempts to increase their utility (as consumers of their work experience) conflicts with the presumed profit maximization ideals of the firm to which they belong (Liebenstein, 1976, pp.6-7).

Leibenstein recognizes the problem of aggregation of individual utility functions when he states:

> .... utility maximization for some individuals may conflict with attempts of utility maxmization by others. The compromises achieved may not maximize the utility of either individual or even of both as a group (Leibenstein, 1976, p.6).

This leads to a most difficult interaction. The balancing of contract provisions numerically may be overwhelmingly against increasing productivity. The effect on X-efficiency of the interaction of provisions will vary among workers and as a result will have varying effects on workers' efforts.

An important area for future research is the total effect on productivity of both allocative efficiency and X-efficiency resulting from collective bargaining agreements in the food system.

With productivity and social justice at the heart of the U.S. economic system, the grievance and seniority provisions of collective bargaining agreements must, on balance, contribute to improved industry performance. This is not sufficient to conclude that the net effect of collective bargaining agreements is positive.

One reading this Chapter in isolation might well come to the conclusion that union gains are at the expense of capital and this contributes to equity. Such a generalization is not supported by other chapters when the structure of the industry within the food system is considered. Nor are generalizations of any type appropriate across the food system. Clearly union/management agreements in the Maritime industry have a more negative effect on productivity than those in many other industries. This effect is easily seen when one views the extremes of provisions across industries.

The conclusion that collective bargaining agreements offer the possibility of imporoved performance is based on the fact that collective bargaining agreements represent a continuing dialog between labor and management. However, the nature of the process indicates past union gains are not likely to be negotiated away in future years. Management has previously had the option to close operations when contract provisions became oppressive. Those unions which are already insulated from trade offs of contract gains versus employment are further insulated from facing the ultimate trade off-facility closing if restrictions on plant closings are contained in collective bargaining agreements.

An hypothesis on the supply and demand for labor under imperfect competition was detailed at the end of Chapter I. That hypothesis is supported by the findings in this chapter of provisions that reduce the ability of management to make adjustments at the margin while preserving employment. The frequency of these provisions was found to be:

Provisions	Percent of Contracts Containing
Multi employer bargaining	45.1%
Multi location bargaining	76.1
Work limitation	38.0
Output restrictions	17.6
Job descriptions and limitations	49.9
New job and/or technology restrictions	28.5
Employment guarantees	40.6
Greater than departmental seniority	71.8
Long grievance procedures	75.3
Plant closing limitations	22.4

CHAPTER III

INFLATIONARY IMPACTS

Introduction

This chapter examines the relationship between industry concentration and the increases in total compensation in food system collective bargaining contracts. It quantifies the per hour increase in compensation in each contract during the 1981 contract year and compares that rate to the compensation in effect at the end of the 1980 contract year.

The rates of compensation for food system fork lift truck drivers are used in this and following analyses. The reasoning for choosing this occupation is that it is felt this skill (or human capital requirement) is the most equal among firms in a particular food system industry and between industries within the system.

The compensation rates are determined by compiling the hourly wage effect of contract wage rate plus any escalations such as cost-of-living adjustments, the hourly effects of increases in fringe benefits where specified in the contract, and the hourly effects of changes in vacation and holidays for a fork lift truck driver with five years seniority.

It must be stressed that every provision in a collective bargaining agreement affects the price of labor. The reader must be aware that only those provisions in union contracts that can be directly quantified are used in the calculations in this chapter. This will become clearer as excerpts from contracts are used to illustrate the type of increase during the contract year.

> The issue of whether unions raise wages is further confused by the growing complexity of typical union contracts. Besides basic wage rates, such contracts usually specify a range of fringe benefits (some of which are difficult to cost or evaluate), work rules, grievance procedures, safety standards, seniority systems for promotions and layoffs, and so forth (Mitchell, p.8).

One additional note of caution must be injected before the detailed analysis. This chapter does not address the question of whether unions cause inflation. It is only concerned with the increases in compensation and the relationship to industry concentration. There is little doubt that union contracts perpetuate inflation if today's contracts reflect current and past inflation. This is not the same as causing inflation.

There is every indication that for the contract year 1981, there were real gains in compensation for very few workers in the food system if the compensation is adjusted for the "money illusion". This will be demonstrated later in this chapter.

There is much current work on the concept of wage imitation. Basically it says that unions follow settlements in other contracts.

> Specialists in industrial relations have pointed out a special feature of union wage determination, the phenomenon of wage imitation. This concept has been applied in a firm's internal wage structure. For example, it is often said that wage differentials in a firm or bargaining unit tend to be rigid across occupations and job classifications. It is also said that jobs across firms or bargaining units are themselves linked in "wage contours". And there is a more general sense of wage imitation, often called "pattern bargaining", that suggests linkages between fairly diverse groups of union contract negotiations (Mitchell, p.10).
>
> Although the literature on wage imitation is largely descriptive, important theoretical insights concerning wage determination and other phenomena may be gained from further study. Empirical analysis of wage-settlement data suggests that spheres of influence surround some major-union contracts such as automobile, trucking, and metals settlements. On the other hand, it appears that the further a unit is away from the center of such a sphere, the greater the scope for deviation from the pattern. As for econometric efforts to capture union-nonunion spillovers, the results so far have been mixed and contradictory. Imitation seems to be important in some periods and situations but not in others. Why these variations occur may lead to interesting speculations, but no clear answers emerge (Mitchell, p. 207).

An important issue for public policy is whether wage setters watch each other in a complex system of mutual interaction. A mutual interaction system could be inflationary.

Areas of Increases in Compensation

Annual increases in compensation analyzed in this chapter come from four sources. These sources are:

(1) Negotiated increases in the base wage rate during the term of the contract.

(2) Negotiated increases due to cost-of living provisions during the term of the contract.

(3) Negotiated increases in the fringe benefits such as hospitalization, dental, pension, etc. during the term of the contract. This analysis is limited to the dollar amounts of increases specified in the contracts reviewed.

(4) Changes in holidays or vacations during the term of the contract.

Base Wage Rates

Every contract (with the exception of eight contracts calling for them to be reopened annually for the purpose of negotiating wages and three which call for a wage survey of competing firms in the same labor market to determine annual increases in wages) reviewed has provisions for periodic increases in nominal wage rates. These are generally annual or semi-annual increases in either cents per hour for specific occupations or an overall percentage increase uniformally applied to all members of the bargaining unit.

These have been called productivity increases, however that traditional name is rarely used. The rationale for productivity increases is simply that workers become more productive over time and their compensation (nominal wage rate) should reflect their increased productivity. This should not be confused with incentives such as piece work that are described elsewhere in this study. These increases are in no way tied directly to increased productivity. The following contract excerpt illustrates such a provision. It will be obvious to the reader that the responsibility for the increased productivity lies with management rather than labor.

This illustration is from the collective bargaining agreement between International Harvester Company and The International Union, United Automobile, Aerospace and Agricultural Implement Workers of America and eighteen affiliated local unions. The contract (SIC 3511-Contract 3226) began May 2, 1980 and is of three year duration. It covers 36,500 workers in 18 U.S. locations.

Section 3 ....

(b) Wage Improvement Factor

(1) An annual improvement factor in wages of employees covered by this Contract is provided in recognition that a continuing improvement in the standard of living of employees depends on technological progress, better tools, methods, processes and equipment and a cooperative attitude on the part of employees, the Union, and the Company in such progress. The annual improvement factor further recognizes the principle that to produce more with the same amount of human effort is a sound economic and social objective.

(2) Effective October 6, 1980 and October 5, 1981, three percent (3%) annual improvement factor increase in the wage rates will become effective as follows:

Rate Prior to Increase (Excluding Cost of Living Allowance)	Annual Improvement Factor Increase
Less than $8.50	25 cents per hour
$8.50 - 8.83	26 cents per hour
8.84 - 9.16	27 cents per hour
9.17 - 9.49	28 cents per hour
9.50 - 9.83	29 cents per hour
9.84 - 10.16	30 cents per hour
9.84 - 10.16	30 cents per hour
10.17 - 10.49	31 cents per hour
10.50 - 10.83	32 cents per hour
10.84 - 11.16	33 cents per hour
11.17 - 11.49	34 cents per hour
11.50 - 11.83	35 cents per hour
11.84 - 12.16	36 cents per hour
12.17 - 12.49	37 cents per hour
12.50 - 12.83	38 cents per hour
12.84 and over	39 cents per hour

Without unduly clouding the illustration, it should be noted that these annual increases are to be calculated in succeeding years from a base that includes cost-of-living increases.

It is also important to note that the "productivity" increases apply to all workers, since the base wage is raised. This results in entering workers gaining, when they could not have contributed to any real gains in productivity in prior periods.

Cost of Living Increases

The contracts analyzed are generally of a three year duration with annual increases in wages as illustrated above. Fifty-four percent (54%) of the contracts have cost-of-living provisions that escalate wage rates based on increases in a Consumer Price Index (CPI) as published by the U.S. Department of Labor. The variation in these provisions is extensive.

The CPI is published in various forms and the following discussion shows the consumers Price Index for Urban Wage Earners and Clerical Workers (CPI-U) used in food system collective bargaining agreements to be either a local or national index.

Table 20 shows the differences among the various indices and the Consumer Price Index for Urban Wage Earners and Clerical Workers - All Cities. During the fourteen years (1967-1981), there appears to be little difference between either a local or national index. In the extreme, for example, the Houston index of 283.1 is 6 percent higher than the All City CPI-U of 266.8 over a fourteen year period. Honolulu is 6.2 percent lower than the All City CPI-U.

Table 20

Consumers Price Index for Urban Wage Earners and Clerical Workers: Selected Areas, All items Index.

Area	CPI-U April 1981 (1967:100)
Atlanta, Ga.	268.8
Buffalo, N.Y.	252.7
Chicago area	263.0
Cleveland, O.	272.1
Dallas area	276.9
Detroit, Mi.	268.0
Honolulu, Hawaii	250.2
Houston, Tx.	283.1
Kansas City area	264.3
Los Angeles area	269.1
Minneapolis area	267.3
New York City area	254.8
Philadelphia area	261.5
Pittsburg, Pa.	267.3
San Francisco area	270.9
All city CPI-U	266.8

Source: BLS <u>CPI Detailed Report April 1981</u>

The escalation can be quarterly, semi-annually or annually. In most cases the cost-of-living provision contains a "roll in" provision that adds the escalation to previously negotiated increases in nominal wage rates. Thus many contracts escalate wages with two provisions. The reader will have a greater appreciation for the importance of 'COLA' (cost of living adjustments) later in the chapter when it is shown that during 1981 workers in the food system with a COLA provision in their contract experience wage increases double that of unionized employees with only the "productivity provision".

Nearly every contract in the food system used in this study is of three year duration. This is important to realize in evaluating the cost-of living provisions (COLA). There is a positive association between contract escalators and length of the contract. The Bureau of Labor Statistics reports in Characteristics of Major Collective Bargaining Agreements, that only one percent of the forty five contracts (in its file) with durations of one year or less had escalators while fifty-three percent of the contracts of three year duration had such clauses.

COLA Increases and the Ratchet Effect

Ratcheting refers to increases in the general price level resulting from cost increases in a specific sector or sectors. This is commonly measured by increases in the CPI. Food system collective bargaining agreements containing COLA provisions escalate wages in direct response to increases in the CPI. Many contracts decrease wages in response to a CPI reduction. During the period of time of this study, the ratchet effect was universally up.

The potential for direct downward transmission of deflationary items is limited to those contracts containing COLA provisions allowing reduction in wages. This potential is further restricted by the nature of the collective bargaining process in which labor uses past contractual gains as the point from which they bargain for future gains.

A simple example of ratcheting is if housing costs rise. This results in a rise in the CPI. Food system workers with contracts containing COLA provisions would receive a wage increase. When this wage increase worked through the pricing mechanism it would result in a rise in the CPI. Where COLA provisions exist, the wages of both construction workers and food system workers would rise-which in turn eventually increases housing and food costs triggering another upward revision in wages.

While COLA provisions directly change wages, these provisions are not necessary for the ratchet effect. Wages are indirectly increased by pattern bargaining in which one group of workers attempts to duplicate wage gains of another group and by spill over effects where increases in prices exacerbate the bargaining for higher worker compensation.

The ratchet effect is then not entirely due to COLA provisions. Some of the effect is automatic (if somewhat delayed) in contracts with COLA provisions. Even then the extent of the ratchet effect is dependent upon the relationship of the COLA provision and the proportion of the CPI affected by the increase in wages. This is not a simple matter and represents an area for future research. For example, if a rise in the appropriate CPI causes an increase in wages of a food system worker, the ratchet effect will be dependent (1) upon the ability of the firm employing the worker to increase its prices to cover that increased cost, (2) the relationship of the employer's product to the market basket used in the calculation of the CPI and (3) the extent to which other manufactureres of the same product increase their prices. This is further conditioned by the extent to which a price increase at the manufacturing level affects retail pricing.

Types of COLA provisions

Four types of cost-of-living escalation provisions are in food system collective bargaining agreements. The nomenclature is essentially that of the author and the types are illustrated with excerpts from actual contracts. The types of COLA provisions are:

(1) Partial-where nominal wages are escalated (and in some cases reduced) one cent per hour for a given change in the Consumer Price Index as published by the Bureau of Labor Statistics.

(2) Cap-where the nominal wages are adjusted by the provisions in (1) directly above, but can not exceed a given amount during a given contract year or during the term of the collective bargaining agreement. In every contract studied the "cap" caused nominal wages to be lower than they would have been under the partial provision.

(3) Corridor-where the rise in the Consumer Price Index must exceed a given absolute or percentage amount before the nominal wage is adjusted under the provisions in (1) directly above.

(4) Full-where the nominal wages are adjusted by the percentage change in the Consumer Price Index during a given period.

Partial

Contract provisions within the food system under the catagory of partial COLA adjust nominal wages based on full year changes in the appropriate Index. The adjustments can be quarterly, semi-annually, or annually. The basis for the adjustment can be one cent per hour for each .25, .3, .35, .4, .45, .5, or .6 rise in a specific Index depending on the collective bargaining agreement involved.

Those provisions are illustrated by the collective bargaining agreement covering the Omaha, Nebraska area stores of Hinky Dinky Supermarkets and the Retail and Professional Employees Union, Local 1015 charted by the Retail Clerks International Union of the A.F. of L.-C.I.O. The agreement and covers 2,000 area employees.

While the language of the Hinky Dinky/Local 1015 contract demonstrates the imprecision characteristic of many food industry collective bargaining agreements, it calls for a cost of living adjustment each October based on an increase in an appropriate Consumer Price Index for the six month period immediately prior. The increase is paid on all hours worked and included in the base rate. This inclusion is a "roll in" provision. The basis for the increase is a one cent per hour increase in wages for each .3 rise in the appropriate Consumer Price Index, during a 6 month period each year. (This approximates 1 cent per hour for each .6 rise.).

The following language from the Hinky Dinky/Local 1015 contract is illustrative of partial COLA provisions.

.... ARTICLE 8

COST OF LIVING ALLOWANCE

A cost of living allowance shall be paid on all hours on October 30, 1978, November 5, 1979 and November 3, 1980, based on the rise in the Consumers Price Index (C.P.I.) for Urban Wage Earners and Clerical Workers, all cities, (1967 base equals 100) as published by the Bureau of Labor Statistics. Each three tenths (.3) rise in the C.P.I. equals one cent.

The first C.O.L.A. shall be payable October 30, 1978, based on the changes in the C.P.I. from February, 1978 through August, 1978.

The second C.O.L.A. shall be payable November 5, 1979, based on the changes in the C.P.I. between February, 1979 and August, 1979.

The third C.O.L.A. shall be payable November 3, 1980, based on the changes in the C.P.I. from February 1980 through August, 1980 ...

C.O.L.A. payments shall become part of the regular base rates per this agreement.

Cap

Cap COLA provisions are illustrated by the provisions contained in the collective bargaining agreement between the employers comprising the St. Louis Food Industry Association and the Retail Store Employees Local 655 of the United Food and Commercial Workers International Union, A.F. of L.-C.I.O. and C.L.C. The agreement covers 8,500 employees.

22.2a

All employees ... on the rate schedules in the agreement shall receive a cost-of living adjustment effective November 2, 1980 and again on

November 8, 1981 based on the C.P.I. Urban Wage Earners and Clerical Workers (Revised) 1967-100. The first adjustment will be determined on the basis of the difference in C.P.I. for the twelve (12) month period of the C.P.I. for August 1979 to the C.P.I. reading for August 1980 with one cent increase for each .4 change in the index.

22.2b

The second cost-of-living adjustment will be determined on the basis of the difference in the C.P.I. for the twelve (12) month period of the C.P.I. reading for August 1980 to the C.P.I. reading for August 1981 with a one cent increase for each .4 change in the index.

22.2c

The maximum Cost of Living increase per year will be twenty cents per hour.

....

22.2e

Cost of Living adjustments shall become and remain part of the base rate of pay.

While the language of the above provision is imprecise, one can only assume that the increase in nominal wage rate is triggered by a rise in the CPI and not a "change" as the language in the contact indicates, the effect of this provision is an annual adjustment in the upward direction based on a given point change in the appropriate index not to exceed twenty cents per hour in any contract year.

Corridor

Corridor COLA provisions and the many variations within this classification are illustrated by the language in the collective bargaining agreement between the San Francisco Retail Meat Market and Frozen Food Locker Plants Association (an employer bargaining group) and Butchers' Union Local 506 of the United Food and Commercial Workers International Union of the A.F. of L.-C.I.O. and C.L.C. covering 27 employers and 1,800 employees.

.... COST-OF-LIVING

Section (c)

A cost-of-living provision will provide additional increases in wages, if applicable, for Head Meat Cutters, Journeymen, and experienced Meat Clerks employed on or before November 1, 1979, with appropriate and traditional percentages for inexperienced Meat Clerks, experienced Meat Clerks hired after November 1, 1979, Apprentices and Clean-up employes to apply as follows:

(1) Using the August, 1979, San Francisco Consumer Price Index (1967=100) as a base, adjust hourly rates of pay, effctive May 4, 1980, by one cent for each full .45 point that the February 1980 Index exceeds 3.0 points over the base index of August, 1979.

(2) Adjust hourly rates of pay, effective November 2, 1980 by one cent for each full .45 point that the August, 1980 Index exceeds the last full .45 point increase in the May, 1980 adjustment.

(3) ....

These provisions repeat during the term of the contract with the last adjustment being on May 2, 1982. The effect of the contract language being a semi-annual cost-of--living increase of one cent per hour in nominal wages for each .45 point rise in the San Francisco CPI in excess of 3 points in a given contract year. In other words, there is a 3 point corridor annually before the COLA provision escalates nominal wages.

Full

Full COLA provisions are illustrated by the collective bargaining agreement between the Del Monte Corporation and the Teamster Food Processors, Drivers, Warehousemen and Helpers, Local Union 670 covering 1,800 employees in plants at Salem, Oregon and Vancouver, Washington. The language of the provision is as follows:

COST OF LIVING

(a) All employees covered by this Agreement shall be covered by provisions for a cost-of-living allowance as set forth in this section.

(b) Effective December 1, 1979, all employees shall receive a percentage wage increase based on the wage scale effective June 1, 1979 equivalent to the greater of the following:

(1) Two and one-half percent increase, or

(2) The actual percentage increase in the Consumer price Index as measured by the difference between the index figure of May, 1979 and November, 1979.

(c) Effective June 1, 1980, all employees shall receive a percentage wage increase based on the wage scale effective December 1, 1979 equivalent to the greater of the following:

(1) Two and one-half percent increase, or

(2) The actual percentage increase in the Consumer Price Index as measured by the difference between the Index figure of November, 1979 and May, 1980.

These provisions repeat themselves. The effect of the provision is to guarantee a semi-annual increase in nominal wage of two and one-half percent and index wages above that increase to changes in the C.P.I. The increases in nominal wages follow closely the change in the Index.

Other provisions from the COLA section of the Teamster-Del Monte agreement are included at this point to illustrate the variations typical of COLA provisions.

... (g) The Cost-of-Living calculations shall be determined and redetermined as provided herein on the basis of the 'Consumer Price Index for Urban Wage Earners and Clerical Workers (Revised 1978), Portland Area (1967=100), published by the Bureau of Labor Statistics, U.S. Department of Labor' and referred herein as the 'Index.

(h) The Cost-of-Living allowance shall become a fixed part of the base rates for any classification.

(i) A decline in the Index shall not result in a reduction in the classification rate.

(j) A portion or all of the cost-of-living increases may be used as a severance fund instead of wages if requested by the Union ...

These added provisions "roll in" the COLA adjustment into the nominal wage, make all adjustments only upward, and provide an alternative use for the increase.

Roll in Provisions

The reader has already been introduced to provisions in collective bargaining agreements that incorporate contractual changes in compensation from COLA provisions into the nominal wage stated in the contract. It is of rhetorical interest only to know that some contracts do not have roll in provisions and other specifically exclude COLA adjustments from incorporation in the base rate. The following excerpt from the contract between the Houston Food Council and the United Food and Commercial Workers International Union Local 408 illustrates both the language and its rhetorical nature.

> ... (g) In no event shall either an increase or decrease in the allowance have any effect upon the negotiated wage rates or fringe benefit rates referred to above ...
>
> 4. The Cost Of Living adjustments that were implemented pursuant to the Cost Of Living provisions of the 1977-1980 Food Council Retail Meat Agreement with the UFCW Local 408 shall be incorporated in the basic straight-time hourly rates of pay under the parties' 1980-1983 Agreement.

Now what do these provisions do? The first part (g above) specifically excludes the COLA adjustments from the nominal wage. The second part (4) incorporates COLA compensation changes from the contract immediately prior into the present Agreement. In effect, past gains are "rolled in" even though the language excludes them.

In every contract analyzed that did not have a roll in provision that accompanied the COLA provision, COLA adjustments from the previous contract were accumulated and incorporated into the succeeding Agreement. Labor lawyers may conclude that not all COLA adjustments are automatically incorporated. Certainly the contract language would support such a conclusion. An economist must, in view of the operation of COLA provisions, conclude that they are all incorporated in fact if not in the letter. It must be stressed that the COLA provisions studied coupled with the rise in the appropriate Index, involve an upward adjustment in nominal wages. Not incorporating the COLA additions would have amounted to a reduction in wages during the period of time covered by this study. It will be seen in Table 21 that the inclusion of COLA provisions (with the exception of those of the "cap" type) allows most workers covered by COLA to experience compensation gains equivalent to inflation rates and in more concentrated industries to experience real increases. Please note that this is not solely a function of COLA provisions. It is a function of the combination of "productivity" increases and COLA provisions.

Increases in Fringe Benefits

In many of the contracts analyzed, it is possible to quantify the increases in fringe benefits between the end of the 1980 contract year and the end of the 1981 contract year. Wherever possible, this has been done and the calculations used in the analysis. The areas of health and welfare benefits and pensions in food industry contracts often give specific hourly, weekly or monthly amounts to be paid by the specific employer. This is illustrated by the following provisions from the collective bargaining agreement between the Houston, Texas Food Stores, and J. Weingarten, Inc.) and the United Food and Commercial Workers Union Local 408.

> ... Effective January 1, 1981, the Employer agrees to increase the monthly contribution (to the health and welfare fund of the union) from $132.88 (per employee) to $139.06 ...
>
> ... Effective January 1, 1982, the Employer agrees to increase the monthly contribution from $139.06 to $161.82 ...
>
> ... Effective January 1, 1983, the Employer agrees to increase the monthly contribution rate from $161.82 to $191.11 ...
>
> ... Effective July 1, 1981, (the Employer agrees to) increase the monthly Pension contribution from $108.40 to $112.70 per calender month per employee ...
>
> ... Effective July 1, 1982, increase the monthly Pension contribution from $112.70 to $117.00 ...
>
> ... Effective July 1, 1983, increase the monthly Pension contribution from $117.00 to $121.30 ...

Many contracts specify only a level of benefits that the employer must maintain. No attempt to quantify these provisions is made. Contractual provisions calling for the level of benefits to be maintained do increase labor costs to employers during a period when those costs are increasing. At the same time it has the potential to increase workers real compensation only if the quality of those benefits increases.

Increases in Holidays and Vacations

When the 1981 contract year contained negotiated holidays or vacations different from those in the 1980 contract year, the straight time hourly effect of these provisions on the employers' cost of labor was calculated and included in the analysis.

ANALYSIS

Table 21 displays the increase in compensation during the 1981 contract year for industries within the food system that were felt to have a national market. The data is arrayed in descending order of industry concentration as measured by the market share of the four largest firms.

A brief examination of the increases in wages for those contracts in the summary Table 21 shows little correlation between industry concentration and increases in

Table 21

Food System Industries by 1977 Concentration Ratios, Compensation and Fringe Benefit Rates in Effect on April 1, 1981, and Increases in Compensation During The 1980 Contract Year for Fork Lift Truck Drivers.

Industry SIC	Concen-ion Ratio CR4	Nominal Wage	Wage w/out fringe	Wage with fringes	Increase during 1980 w/cola	Increase during 1980 w'out/cola
2043	89	$7.62	$10.85		24.0%	-
2111	85	8.48	10.49		13.9	-
2131	81	8.40	10.29		13.8	6.1%
2063	67	5.58	6.00			4.8
2082	64	10.76	12.29	$14.09		8.9
2062	63	5.62	6.09			7.7
2032	63	7.73	8.41			7.2
2095	61	8.69	9.78			7.2
2052	59	8.47	9.67	11.54		10.1
2121	56	5.68	7.30		15.4	7.1
2085	52	7.65	8.57	9.67	7.5w/cap	-
3522	46	8.36	11.02		15.7	-
2034	37	wage reopeners				
2051	33	8.17	9.00			7.6
2099	28	7.72	8.61			8.5
2024	28	7.25	8.23	10.62		5.2
2033	22	6.80	8.23		12.4	8.5
2037	22	7.12	8.02			10.0
2011	19	8.61	10.35	11.30	12.9	7.2
2026	18	6.21	7.15			5.2

Source: Contract File, BLS.

compensation. This is borne out by a statistical examination of the data by firm.

Using ordinary least squares regression techniques the data for contracts without COLA provisions was fit to the following equations:

$$Y_1 = a + bX \qquad (3.1)$$

and

$$Y_2 = a + b\log X \qquad (3.2)$$

where Y is the percentage increase in compensation during the 1981 contract year for fork lift truck drivers covered each contract not having a COLA provision.

and X is the concentration ratio of the industry in which the employer is engaged.

The results were:

$$Y_1 = 7.57 - .01\ X \qquad R^2 = .17 \qquad (3.1)$$

(.010069) standard error

t = 6.42

F = 11.06

n = 56

[The t value indicates the coefficient of the independent variable (CR_4) is different from zero at the alpha = 1 percent level. The overall F value for the regression indicates either the intercept or the coefficient is different from zero at alpha = 1 percent level.]

and

$$Y_2 = 7.97 - .15 \log X \quad R^2 = .34 \tag{3.2}$$

$$(.0104) \text{ standard error}$$

$$t = 14.16$$

$F = 21.87$

$n = 56$

[The t value indicates the coefficient of the independent variable (CR_4) is different from zero at the alpha = 1 percent level. The overall F value for the regression indicates either the intercept or the coefficient is different from zero at alpha = 1 percent level.]

In both cases the negative signs associated with the independent variable indicate workers in less concentrated industries experienced percentage wage gains greater than workers in more concentrated industries.

This would indicate a narrowing of any wage differential associated with concentration, as Chapter IV will show firms in more highly concentrated industries pay higher wages. This would have great importance in the matter of equitable compensation. Unfortunately this conclusion is applicable only when data for firms and workers in the food system who are not covered with COLA provisions is considered.

A brief examination of the summary data in Table 21 for workers covered by COLA provisions shows immediately that these workers received nearly double the increase in compensation during the 1981 contract year that their counterparts that were not covered received. The data for workers covered by COLA provisions is correlated with industry concentration. This was determined by using ordinary least squares to fit the data for contracts with COLA provisions to the following equation:

$$Y_3 = a + bX \qquad (3.3)$$

where Y is the increase in compensation for fork lift truck drivers covered by contracts with a COLA provision.

and X is the market share of the four largest firms in the industry covered by the contract.

$$Y_3 = 11.08 + .08\ X \qquad R^2 = .31 \qquad (3.3)$$

(.022) standard error

$t = 3.69$

$F = 7.52$

$n = 41$

[The t value indicates the coefficient of the independent variable (CR_4) is different from zero at the alpha = 1 percent level. The overall F value for the regression indicates either the intercept or the coefficient is different from zero at alpha = 1 percent level.]

These results indicate that for workers in the food system covered by COLA agreements, an increase of industry concentration of 10 (i.e. from a concentration ratio of 30 to 40) is associated with an .8 percentage point increase in compensation during 1981 beyond that otherwise obtained. The implications of this are the opposite of the previous regressions. Clearly, between workers in less concentrated and more concentrated industries, the gap in income is increasing.

When all the data is accumulated for contracts with and without COLA provisions, and fitted using ordinary least squares-a view of the relationship between concentration and increases in compensation for the entire food system is available.

The increases in compensation for all contracts for the 1981 contract were fitted to the following equation:

$$Y_4 = a + b\log X \qquad (3.4)$$

where Y is the percentage increase in compensation for unionized fork lift truck operators in the food system.

and X is the concentration ratio of the industry in which the worker is employed.

The results are as follows:

$$Y_4 = 7.78 + .55 \log X \quad R^2 = .21 \qquad (3.4)$$

(.045) standard error

t = 12.16

F = 25.24

n = 97

[The t value indicates the coefficient of the independent variable (CR_4) is different from zero at the alpha = 1 percent level. The overall F value for the regression indicates either the intercept or the coefficient is different from zero at alpha = 1 percent level.]

CONCLUSION

The conclusion reached in this chapter is that higher rates of increase in compensation are associated with more concentrated industries within the food system. Obviously this conclusion can only be applied directly to the unionized sector of the food industry.

The above conclusion is also based on the analysis of the wages of fork lift drivers. The relationship of these wages to other wages in the food system is discussed in Chapter V.

This conclusion is subject to serious qualifications. The contracts analyzed were in effect during a period of double digit inflation. The data, while showing a relationship between increasing compensation and increasing concentration, indicates the increases were only illusionary. Once the money illusion is recognized, the fact remains that only a very few workers-in industries characterized by high degrees of product differention and high concentration-experienced any real gains in compensation. Most workers' real compensation fell. The inflationary implications are that for the period studied, food system wage gains were largely illusionary.

Another area is brought partly into focus at this point. While most workers experienced losses in real compensation, those workers in less concentrated industries experienced greater losses than those in more concentrated industries. It will later be shown that these greater losers were also the lower paid workers. This raises substantial equity issues of:

(1) The equity of lower real compensation for nearly all workers in the food system.

(2) The equity of the distribution of wages among workers themselves.

Both these substantive issues will be addressed in the concluding chapter, but some discussion of the relationship between equity and collective bargaining agreements is in order at this point.

Daniel Mitchell (1980) stated:

> The emphasis on wages goes beyond the simple observation that wages are an important component of costs. Most models of pricing behavior are based on either profit maximization or a markup approach. In either case, prices will reflect costs passively, even if the firm can exercise monopolistic power. But economists suspect that a more exogenous element is behind wage determination. Notions of equity permeate discussion of wages. Equity is difficult to define; sometimes it carries an absolute connotation (a decent minimum wage) and sometimes a relative connotation (traditional wage differentials). In its relative form, the concept of a "just" wage increase is as important as the just wage itself. If in fact wages and wage increases are influenced by notions of equity, wage determination takes on an exogenous aura-that is, it appears to be affected by factors beyond simple supply and demand considerations (Mitchell, p.2).

One important point arises from this research. Union compensation gains are over stated. The failure to recognize the bargaining nature of collective bargaining results in the belief that unions are responsible for gains and this is an over statement at the very least. Because of the bargaining nature, employers offer less than they expect to pay and unions ask for more than they expect to receive. The result is not a simple splitting of the difference, but the result is that the employer finally settles at some point above the original offer. The difference between the original offer and the final settlement is usually felt to be the union wage gain. To determine the union wage gain accurately, one would need to know the offer the employer would have made in the absence of bargaining. If the offer (in the absence of collective bargaining) would have been above the original offer (with collective bargaining), union wage gains are overstated. Granted the period of this study was during a time of rapid inflation, there is evidence that union wage gains may have been illusionary in most instances.

This raises an area of future research. The relationship of real wages to real per capita Gross National Product (GNP) could measure redistributional effects. For example, if real wages are constant and real per capita GNP is falling, wage earners would be the beneficiaries of redistribution effects irrespective of the general price level. The opposite would result in times of constant real wages and a rising real per capita GNP. Similarly the relative movement of these two variables could indicate the direction of redistributional effects.

From a policy standpoint, unions are insulated from the main economic trade offs in contract negotiations. First, they have incentives to ask for more constantly. The only trade off to gains is reduced employment. For example, if higher wages are a good and higher fringes are a good, what is the trade off for a union between two desirable items. Only when reduced employment (or in the extreme a strike or plant closing) takes place is the union faced with a true trade off between a bad and a good. Extensive unemployment pay directly insulates a union from facing the "bads" in trade offs no matter what the original intention of unemployment benefits. While not immediately so clear, structural characteristics of an industry such as barriers to entry, product differentiation, etc. may be even more effective in insulating union workers from facing the negatives in trade offs flowing from collective bargaining.

This exchange between Samuel Gompers and Morris Hillquit, a well known socialist leader in testimony before the sixty-ninth Congress in 1916 illustrates the first portion of the above paragraph.

Hillquit: Now, my question is, will this effort on the part of organized labor ever stop until it has the full reward for its labor?

Gompers: It won't stop at all ...

Hillquit: Then the object of the labor union is to obtain complete social justice for themselves and for their wives and their children?

Gompers: It is the effort to obtain a better life every day.

Hillquit: Every day and always?

Gompers: Every day. That does not limit it.

Hillquit: Until such time.

Gompers: Not until any time ... In other words you have an end; we do not (Mitchell, p.69).

Unions and Wages

There is an argument that says unions can not have any long run effect on wages. Under the assumption of relatively equal production functions among firms in an industry, unionized firms with presumably higher costs of production would become victims of competitive pressures from non-unionized firms. An extension of the argument, however, recognizes unions can avoid direct non-union competition by unionizing an entire industry or at the very least those firms in a relevant market. When market structure considerations are applied to this extension an entirely different outcome is postulated.

For example, when barriers to entry within the industry are considered, it is possible that wage gains could be insulated from non-union competition by organizing the entire industry and in addition these gains could experience some insulation from wage rates in the economy as a whole. The following example shows this.

The brewing industry which is a concentrated industry, highly organized with multi-employer contracts, and has high barriers to entry from product differentiation and capital costs exhibits such characteristics of having wage rates somewhat removed from normal rates. The closing of the Schlitz plant in Milwaukee, Wisconsin following a long strike may very well illustrate the long run effect of structural imperfections in an industry coupled with industry wide bargaining.

> From the economists viewpoint, labor market inefficiency arises from a combination of labor-demand elasticity and a union wage differential. When the demand for labor is highly inelastic (big wage increases produce little reduction in labor demand), little economic inefficiency is generated by a large union wage differential. Wage costs are simply passed through to consumers, which is largely an income transfer from consumer to worker. When there is significant elasticity for labor demand in the face of a union wage differential, inefficiency is generated because labor is underutilized in the unionized firm and possibly other factors of production are overutilized. There is also an 'artificially' induced underconsumption of the firm's product and an overconsumption of competitors' products and even substitute products from other industries (Mitchell, p.14).

This viewpoint is logically consistent, but an entirely different view of economic efficiency could flow from the above argument once structural considerations enter the discussion. If a union wage differential is felt to have relatively little effect on economic efficiency because of an inelastic demand for labor, one is tempted to look only at the redistributional effects. Suppose the demand for labor in the industry (which is related to the marginal value product of labor) is affected by extreme product differentiation for the final product resulting in the demand for labor being less elastic. The effects of product differention (or other factors contributing to industry concentration) coupled with an industry wage differential-not only result in economic inefficiency, but exacerbate it.

SUMMARY

The analysis portion of this chapter shows higher rates of increases in compensation to be associated with more concentrated industries. It further shows the rates of increase in compensation for the food system to be widening the differences in returns to human capital because similar human capital requirements receive greater increases in wages in more concentrated industries. (This was found in a year of rapid inflation.)

The discussion of the conclusions indicates the equity considerations of this widening of the returns to human capital to be complex and at the very least to raise questions of inequitable returns to workers within the food system. All this is of importance, but it does not answer the question of the effect of collective bargaining agreements on inflation.

A very basic look at inflation will give a simple answer. Considering only core inflation which is defined as the rate of change in wages minus the rate of change in labor productivity then it is clear that in food system collective bargaining agreements, wages are increased without any corresponding requirement that productivity increase. To the extent that productivity lags the increase in wages, collective bargaining agreements are inflationary.

This still leaves unanswered the question of whether unions cause inflation. All that this analysis can state is that when unions enter into agreements with firms in more concentrated industries, the results are contracts with higher rates of increase in compensation. To the extent that the concentration is associated with market structural characteristics that result in a misallocation of resources then productivity suffers and inflation is exacerbated. The nature of this study does not directly account for the productivity of firms, but the preceding chapter indicated numerous collective bargaining provisions that reduce productivity. This chapter details many provisions that increase wages. The combination of reduced productivity and increased compensation must increase the core rate of inflation.

An important area of future research is the effect of concentration on inflation. As previously discussed, the role of unions in this can be through their direct involvement or through the transmission of union gains to non-union firms. The effect of concentration on unionization only adds to the complexity.

Unions are generally isolated from trade-offs between higher wages and unemployment because they fully face these trade-offs only in the extreme case of plant closing. If market structural characteristics remove firms in concentrated industries from competitive pressures then in some cases the collective bargaining agreement is insulated (if not isolated) from competition and results in decreased efficiency. When this decreased efficiency is coupled with rising compensation the results are inflationary.

Hypothesis

At the end of Chapter I an hypothesis is presented concerning labor-management agreements under conditions of reduced product market competition. Chapter II lists contract provisions tending to support this hypothesis.

This chapter shows contract provisions that increase wages with no corresponding requirement that productivity increase. The chapter further shows a positive association between industry concentration and the rate of increase in wage rates. Under the assumption that more highly concentrated industries are less competitive, the findings of this chapter support the hypothesis that union employees and their employers share monopoly profits.

CHAPTER IV

CONTRACT PROVISIONS AND WAGE DIFFERENTIALS

Introduction

This chapter shows the positive association between industry concentration and wage rates. Nominal wage rates are the straight time hourly rate received by food system fork lift truck drivers in effect on April 1, 1981 using contract escalators such as COLA that have been described in previous chapters. Total compensation rates are the straight time costs of a fork lift truck driver for an employer after applying all contract escalators and adjusting the wage rate to reflect vacations, holidays, fringe benefit costs where available from contracts and any bonuses such as vacation bonuses. In both cases an employee with five years of seniority with the firm is used.

Total Compensation and Nominal Wages

The nominal wage rate (excluding fringe benefits) was used as the dependent variable (Y_1) and the industry concentration ratio of the national market share of each industry's four largest firms (CR_4) was used as the dependent variable (X) in the equation:

$$Y_1 = a + bX \qquad (4.1)$$

Concentration data was available covering 108 contracts covering 286 firms and 789,00 employees. This data was fit to the equation using ordinary least squares.

In addition the total compensation rate including fringe benefits where specified in the contracts was used as the dependent variable (Y_2) and the industry concentration ratio (CR_4) was used as the dependent variable (X) in the following equation:

$$Y_2 = a + bX \qquad (4.2)$$

Thirty-eight of the contracts contained fringe benefit costs. These were used for the dependent variable Y_2. The data in these contracts were used to determine the association between wages, fringe benefits and industry concentration. Once again ordinary least squares were used.

The results were:

$$Y_1 = 7.3893 + .03605\ X \quad R^2 = .135176 \qquad (4.1)$$

(.010069) standard error

$t = 3.58$

$F = 12.82$

$n = 108$

[The t value indicates the coefficient of the independent variable (CR_4) is different from zero at the alpha = 1 percent level. The overall F value for the regression indicates either the intercept or the coefficient is different from zero at alpha = 1 percent level.]

$$Y_2 = 9.98937 + .04412\ X \quad R^2 = .166135 \qquad (4.2)$$

(.021072) standard error

t = 2.009

F = 4.38

n = 38

[The t value indicates the coefficient of the independent variable (CR_4) is different from zero at the alpha = 5 percent level. The overall F value for the regression indicates either the intercept or the coefficient is different from zero at alpha = 5 percent level.]

In both cases a positive association is found between concentration (X) and the wage or compensation rate.

After rounding to the nearest cent, equations (4.1) and (4.2) show a one percent increase in the concentration ratio of the four largest firms in the food system industry is associated with an increase in worker compensation of four cents per hour in both nominal and total compensation wages. Over the range of the data, a positive wage differential of $2.84 is associated with industry concentration ratios increasing from 18 to 89.

<u>Nominal Wage Adjusted for Geographic Differences</u>

The methodology used in equations (4.1) and (4.2) used cross-sectional data and made no adjustment for regional differences in compensation. To adjust for regional differences in compensation patterns, 63 contracts covering 435,000 workers in the food system were used. These contracts were selected because the geographic area for the jurisdiction of the collective bargaining agreement was contained within the boundaries of the 1980 Area Wage Surveys of the Bureau of Labor Statistics. The Area Wage Surveys list the mean hourly straight time wage for fork lift truck drivers within the Survey area.

This mean value was subtracted from the hourly rate of compensation for the same skill contained in the collective bargaining agreement that was in the same area. These deviations were recorded and used as the dependent variable (Y_3) in the following equation where the independent variable (X) is the concentration ratio (CR_4) of the industry.

$$Y_3 = a + bX \qquad (4.3)$$

Once again ordinary least squares were used to fit the data to the function. The results were:

$$Y_3 = -.32107 + .003186\ X \quad R^2 = .053 \qquad (4.3)$$

(.001813) standard error

t = 1.76

F = 3.09

n = 63

[The t value indicates the coefficient of the independent variable (CR_4) is different from zero at the alpha = 10 percent level. The overall F value for the regression indicates either the intercept or the coefficient is different from zero at alpha = 10 percent level.]

Again an increase in wages as measured in deviations from the prevalent area wage is associated with increasing concentration. Most workers in food system manufacturing industries earn wages less than the mean wage for workers of similar skills in their area. Adjusted for regional differences, equation (4.3) shows a ten percent increase in the concentration ratio (CR_4) is associated with a three cents per hour increase in nominal wages.

Over the range of the data an increase in industry concentration ratio from 18 to 89 is associated with a wage differential of 23 cents per hour after adjustment for regional differences in compensation for the same job related human capital. This compares to $2.84 per hour without adjustments for regional differences from equations (4.1) and (4.2).

Association of Contract Restrictions with Wages

To determine the effect of non-wage provisions in collective bargaining agreements on the nominal wage, contracts were divided into two groups. Group 1 contained all contracts studied containing nominal wage information and restrictions on the work performed of the type associated with:

1) full crew provisions
2) output restricting provisions
3) ratio provisions
4) restrictions on sub-contracting
5) job descriptions
6) job limitations

for which concentration data was available. These restrictions and descriptions/limitations are described in Chapter II.

Group 2 consisted of all contracts containing none of the above six restrictions, limitations or descriptions, for which both nominal wage information and concentration data was available.

Data from Group 1 was fit to the following equation:

$$Y_4 = a + bX \qquad (4.4)$$ where:

Y_4 is the nominal wage for contracts containing one or more of the above six provisions and X is the concentration ratio of the four largest firms in the collective bargaining agreements' industry.

Data from Group 2 was fit to the following equation:

$$Y_5 = a + bX \qquad (4.5)$$ where:

Y_5 is the nominal wage for contracts containing none of above six restrictions, limitations or descriptions and X is the concentration ratio of the four largest firms in the collective bargaining agreements' industry.

The results using OLS are:

$$Y_4 = 9.1361 + .0195\ X \quad R^2 = .0646 \qquad (4.4)$$

(.01264) standard error

t = 1.54

F = 2.38

n = 38

[The t value indicates the coefficient of the independent variable (CR_4) is different from zero at the alpha = 15 percent level. The overall F value for the regression indicates either the intercept or the coefficient is different from zero at alpha = 15 percent level.]

and

$$Y_5 = 6.9550 + .0383\ X \quad R^2 = .1575 \qquad (4.5)$$

(.01107) standard error

t = 3.46

F = 11.97

n = 65

[The t value indicates the coefficient of the independent variable (CR_4) is different from zero at the alpha = 1 percent level. The overall F value for the regression indicates either the intercept or the coefficient is different from zero at alpha = 1 percent level.]

Again there is a positive relationship between industry concentration and wage rates. There is also a positive relationship between so called "tougher" union contracts (defined as those contracts containing job descriptions, limitations, and/or restrictions) and wage rates.

Over the range of the data, wage rates in contracts with restrictions, as shown by equation (4.4), show a one percentage point increase in the industry concentration ratio is associated with a two cent per hour increase in nominal wage rates. Equation (4.5) shows a one percent increase in industry concentration is associated with a four cent per hour increase in nominal wage rates. This indicates that "tougher" union contracts are associated with a reduction in the effect of industry concentration on nominal wage rates over the range of the data.

When the results of equations (4.1) and (4.5) are compared, it can be seen that over the entire range of the data food system workers covered by contracts without restrictions earn a nominal wage 43 cents per hour less than the nominal wage associated with all workers in the food system.

Those workers with contract restrictions earn a nominal wage higher than all food system workers. (Table 4.1 shows that this higher wage rate is as high as $1.89 per hour for workers in less concentrated industries.)

When the results of equations (4.1), (4.4) are compared, it can be seen that food system workers covered by contracts with restrictions earn higher wages than all unionized workers in the food system, but that difference decreases over the range of the data. "Tougher" contracts reduce the magnitude of the effect of industry concentration. This is shown in the following Table.

Table 22

Wage Differentials Relative to All Food System Wages Associated with Industry Concentration Ratios for Food System Contracts with Restrictions and Without Restrictions.

Type of Collective Bargaining Agreement	Wage Differential Associated with: Industry Concentration Ratio 18	53.5	89
Contracts			
With Restrictions	+$1.89/hr.	+$1.32/hr.	+$ .89/hr.
Without Restrictions	- .43	- .43	- .43

note: Independent variable coefficient from equations (4.1), (4.4), and (4.5) rounded to three decimal points for these calculations.

Equation (4.3) indicates that the above differentials, when adjusted for regional differences would be greatly reduced.

The analysis of Chapter III indicates unions are insulated from the employment/unemployment trade off. This Chapter indicates some unionized employees are insulated from the general labor market. This is discussed in the Conclusions and Recommendations.

Wage Contours

John Dunlop developed the concept of wage contours (Dunlop, 1964, pp.16-22). Essentially it is the measure of the wage differential of different jobs within an industry. This is of importance in this study if the conclusions drawn from an analysis of the wages of one job are applied to other jobs. If wage differentials remain somewhat constant, the conclusions drawn from an analysis of one job can apply industry wide.

Two specific methodological problems are presented when wage contours are measured over concentration ratios within an industry. First, the industry must be characterized by regional relevant markets rather than a national market. Second, the jobs analyzed must be the result of generalized training rather than specific training so that the workers are mobile between firms. This was discussed in detail in the Chapter I.

For these reasons, the food retailing industry (SIC 5411) was chosen and the nominal wages of clerk and journeyman meat cutter were compared in nineteen relevant markets. In all cases an employee of five years seniority was chosen.

The following data in Table 23 indicates the wage differential between jobs narrows as concentration in relevant markets increases. The data from the Table 23 was fit using

Table 23

Wage Contours in Food Retailing (SIC 5411) for Senior Clerks and Journeymen Meat Cutters by Market Share of the Four Largest Firms, Nineteen Relevant Markets, 1980.

Market	CR4	Clerks Wage/Hr.	Meat Cutters Wage/Hr.	Cutters/Clerks Wage Ratio
New York City	34	$ 7.63	$ 9.83	1.29
Boston	39	7.68	10.12	1.32
Baltimore	46	9.48	10.38	1.09
Philadelphia	52	8.87	10.12	1.14
Detroit	53	9.16	11.26	1.23
Huston	54	8.97	11.19	1.25
Minneapolis	57	9.70	10.50	1.08
San Francisco	58	10.68	11.13	1.04
Seattle	59	8.79	10.43	1.19
Cleveland	61	8.96	10.55	1.18
Indianapolis	61	8.05	10.08	1.25
Dallas	63	8.40	11.19	1.33
Chicago	66	9.70	12.01	1.24
Milwaukee	70	9.20	11.23	1.22
St. Louis	74	9.10	10.19	1.12
Atlanta	75	8.92	9.73	1.09
Phoenix	77	8.30	9.52	1.15
Washington, DC	77	9.48	10.38	1.09
Kansas City	80	9.30	11.19	1.20

Source: Internal documents United Food and Commercial Workers, 1980 Grocery Distribution Guide, Metro Market Studies, Grocery Distribution Guide, Wellesley Hills, Mass.

ordinary least squares to the linear equation:

$$Y_6 = a + bX \qquad (4.6)$$ where:

X is the concentration ratio and Y_6 is the ratio of meat cutters wages divided by clerks wages. The results were:

$$\text{m/c wage ratio} = 1.3265 - 0.234\ CR_4 \qquad R^2 = .1248 \qquad (4.6)$$

(.001502) standard error

t = 1.56

F = 2.42

n = 19

[The t value indicates the coefficient of the independent variable (CR_4) is different from zero at the alpha = 15 percent level. The overall F value for the regression indicates either the intercept or the coefficient is different from zero at alpha = 15 percent level.]

Over the range of the data the differential narrows as follows:

CR_4	Clerk/Meat Cutter Wage Ratio
36	1.25
80	1.15

This indicates that a wage differential between skills remains across the industry, that the differential is consistently of the same sign, but that the differential narrows within the industry. The wage differential lessens as concentration increases. As such, concentration reduces the wage differential between jobs. If this is true, then the effect of industry concentration on the compensation for a specific skill will not be the same for all skills. The meat cutter-clerk analysis indicates higher skilled jobs may be affected less than lower skilled occupations by industry concentration.

More Complex Analysis

A more complex analysis was performed in an effort to explain more of the variation in food system wages. As with equation (4.3), to adjust for regional differences in compensation patterns, 19 contracts covering 398 locations and 177,000 food system workers were used. These contracts were selected because the geographic area for the jurisdiction of the collective bargaining agreement was contained within the boundaries of the 1980 Area Wage Surveys of the Bureau of Labor Statistics; the contracts each covered more than one location and information for the independent variables was available from secondary sources. The Area Wage Surveys list the mean hourly straight time wage for fork lift truck drivers within the Survey Area.

This mean value was subtracted from the hourly rate of compensation for the same skill contained in the collective bargaining agreement that was in the same area. These differences (both positive and negative) were recorded and used as the dependent variable (Y_7) where the dependent variables were as follows:

X_1 is the concentration ratio (CR_4) of the industry

X_2 is the number of locations covered by the contract

X_3 is the number of employees covered by the contract

X_4 is the number of types of job restrictions present in the contract (i.e. fullcrew, output limiting - see Chapter II, Table 3).

Once again ordinary least squares were used to fit this cross sectional data to the function:

$$Y_7 = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + u \qquad (4.7)$$

The results were:

$$Y_7 = -3.2745 + \underset{(.0131)}{.0263}\ CR_4 + \underset{(.0164)}{.0267}\ \text{Number of Locations}$$

$$- \underset{(.000022)}{.00005}\ \text{Number of Employees Covered}$$

$$+ \underset{(.40207)}{1.4356}\ \text{Types of Restrictions}$$

(standard errors in parentheses)

$R^2 = .5935$

$F = 5.11$

$n = 19$

[The calculated t value indicates the coefficient for the independent variable, Types of Restrictions, is significantly different from zero at the alpha = 1 percent level; Number of Employees, significant at the 5 percent level; CR_4, significant at the 10 percent level; and Number of Locations, significant at the 15 percent level. The overall F value for the regression indicates that one or more of the coefficients is different from zero at the 1 percent level of significance.]

An increase in wages as measured in differences from the prevalent area wage is associated with increasing concentration. An increase in wages as measured above is associated with additional locations covered by the collective bargaining agreement. Lower wages as measured above are associated with the greater number of employees covered. Higher wages are associated with more contractual restrictions.

The sign of the concentration coefficient is what would be expected from industrial organization theory and is consistent with earlier results from single variable regressions. Ceteris paribus, the positive relationship between number of locations and wages indicates when plants employ fewer workers, the workers experience higher wages. (In the equation, when employees covered by a multi-location contract are held constant and the number of locations increased; the average workers per plant decreases.) This is consistent with the negative sign for the number of workers covered per contract. (In the equation, ceteris paribus, when the number of locations is held constant an increase in employees covered by the agreement increases the average workers per location.) These results are not necessarily inconsistent with a reference cited in the review of literature that found wage rates to be positively related to plant size. The regression used in this study used multi-plant collective bargaining agreements and a direct comparison between the two studies is not appropriate.

A possible explanation of the negative relationship between employees covered per location and wage rates is the seasonal nature of the food industry where labor is not utilized year round and consequently does not have productivity improving capital associated with it. This is a subject for future research.

The positive association between wages and number of types of restrictions is to be expected from earlier results. The size of the coefficient (1.4356) is important. This associates an increase in wages of $1.44 per hour with the presence of each type of restriction. None of the contracts used in this analysis had more than three types of restrictions present.

Conclusions

This chapter has used several equations in the analysis of wages and total compensation in food system collective bargaining agreements. Specific equations will be cited in these conclusions to allow the reader to connect the analysis and conclusions.

This chapter found a positive association between wage rates and industry concentration (equation 4.1). This chapter also found a positive association of the same magnitude between industry concentration and wages plus fringe benefits (equation 4.2). When regional differences in compensation were considered, the positive association between industry concentration and wage rates was reduced (equation 4.3).

When qualitative variations in food system collective bargaining agreements were considered (equation 4.4), it was found that work restrictions and limitations are associated with wage rates higher than wage rates in contracts where these limitations were not present (equation 4.5). It was also found that food system workers without collective bargaining agreements containing restrictions and/or limitations earned forty-three cents per hour less than all food system workers.

The analysis of equations (4.1), (4.4), (4.5) and (4.7) resulted in the following conclusions:

1. "Tougher" union contracts, as defined as those containing work limitations and/or restrictions, are associated with reduced effects of industry concentration on wage rates. This is because the coefficient of the independent variable (CR_4) in "tougher" contracts (equation 4.4) is half that of contracts containing no restrictions (equation 4.5).
2. "Tougher"union contracts are associated with higher wage rates than all contracts in the food system across the entire range of data analyzed.
3. Some unionized employees are insulated from the general labor market as a result of contract restrictions.

The use of fork lift truck driver wages as a proxy for all food industry wages is based upon wage contours. This is the belief that a worker looks around him and the wages of his associates affects his wants as transmitted to his employer by union bargaining. This chapter finds such a relationship exists (equation 4.6), but the wage differential between skills within the industry narrows as concentration in a relevant market increases. This leads to the conclusion that the relationship between the wages of fork lift truck drivers and industry concentration if applied directly to the relationship between higher skilled jobs and industry concentration may result in an overstatement of that relationship.

An analysis of the effect of other variables in addition to industry concentration on wage rates (equation 4.7) shows industry concentration is associated with increased wages, but the relationship of capital associated with increasing labor productivity may be of special importance in the food system. Specifically, plants with higher employment are associated with lower wages. However, the more locations covered by a collective bargaining agreement - the higher the wage associated with that contract.

Hypothesis

The findings of this chapter that wages are positively associated with industry concentration supports the hypothesis that firms and their unionized employees share the monopoly profits from reduced competition. The finding of a strong association between wages and the presence of work restrictions in contracts tends to support the hypothesis since a positive association between wages and industry concentration remains when restrictions are introduced into the regression.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

This study of food system collective bargaining is a study of imperfect markets that have become institutionalized. The study's purposes are to:

1) Describe the collective bargaining agreements within the food system.
2) Estimate the effects of collective bargaining agreements on inflation, productivity within the food system and equity as it relates to wage differentials among workers in various industries within the food system.
3) Estimate the relationship between market structures of the industries comprising the food system and wages.
4) Develop and recommend policy and institutional changes in labor-management agreements that could result in improved food system performance.
5) Identify potential future research in the area of collective bargaining and industry structure within the food system.

Description

Chapter II, entitled "The Effects of Food System Collective Bargaining Provisions on Productivity and 'X-Efficiency'", describes the provisions of collective bargaining agreements in 47 food system industries. The Chapter is presented in a manner to allow the reader to see the complex interactions of the provisions in a collective bargaining agreement.

Chapter III, entitled "Inflationary Impacts", describes in detail those provisions in food system collective bargaining that affect increases in wages and fringe benefits. Combined with the Appendix, Chpaters II and III give a description of collective bargaining practices in the U.S. food system and demonstrate differences in collective bargaining practices among industries within the food system.

Effects of Collective Bargaining Agreements

This study estimates the effects of collective bargaining agreements on productivity, inflation and equity within the food system.

Productivity

The theories of Harvey Leibenstein form the basis for the analysis of the effect on productivity (Leibenstein, 1966, 1976). Chapter II details provisions that directly influence productivity. Productivity is adversely affected by contractual provisions that restrict output, often in an effort to preserve employment.

Other provisions are shown that indirectly affect productivity through improved working conditions. Provisions of this type deal with working conditions and fairness or industrial democracy, such as a grievance procedure.

The study stresses that the effect of collective bargaining agreements on worker effort and industrial productivity comes from the interaction of the various contract provisions and this is the major conclusion of the chapter.

The study finds contracts laden with provisions to ease the burden of unemployment. Procedures for more senior employees to replace less senior employees, severance pay, plant closing provisions, etc., all deal with the effects of unemployment. Only superficial causes of unemployment are subjects of collective bargaining agreements. The causes are dealt with by work preservation rules such as job limitations and prohibition of work by supervisory employees.

A major conclusion of this study is that collective bargaining agreements in the food system do not effectively deal with employment stability. They deal almost exclusively with easing the burden of unemployment and the preservation of work through continuing past practices. As such, they deal with the effects of reduced employment and not the causes.

The study finds that 72.8% of the collective bargaining agreements analyzed allow the effects of reduced employment to be spread beyond the department involved through seniority provisions. These provisions allow "bumping" in other departments, thereby spreading the effects of reduced work with a negative effect on productivity.

The study finds a well defined set of provisions on seniority and processing of grievances that ensure and promote industrial jurisprudence. These are judged to contribute to increased productivity.

The analysis of grievance procedures shows they can provide a barrier to entry by new employees. Since the procedure can involve nearly three months in the case of a discharged employee, the employer faces a threshold in the discharge of an employee. The employer faces the risk of having to reinstate the employee with back pay and no corresponding production. Recognizing the potential loss to an employee of an unjust discharge, the author concludes that an expedited grievance procedure in the case of discharged employees is desirable so long as that procedure functions equitably.

The study finds labor mobility to be an area of increasing importance in collective bargaining and productivity. The study stresses that this is important as patterns of population change the requirements for human capital associated with changing patterns of production and distribution also change. If labor mobility is restricted the investment in human capital must be duplicated in an area of new production, while that component of human capital goes unused in the area where workers are left behind. This conclusion is unchanged in times of full employment, if optimal employment of individuals is considered.

Fringe benefits are found to be important areas of compensation. Vacations alone may comprise 12% of an employee's annual compensation. Contract provisions prohibiting employees from taking money in lieu of vacations are indicative of provisions that prevent choice by employees and prevent the efficient use of compensation.

Provisions granting preference to union made goods are found in some contracts. These provisions have the potential to bring about and/or cement unionization in related industries. This reduces the choice of inputs in the production process.

The study found the use of specific training in the food system to be minimal. Most apprenticehip programs were found to be extensions of the seniority system and that on-the-job training was of a general nature. This implies that most food system workers pay for their own training through reduced wages.

The analysis of provisions shows unions have little control over who is hired, but do have a substantial voice in the nature of the job they fill through job descriptions, limitations, etc. Theory indicates that employers have an incentive to enter into agreements for wages above the prevailing wage and that this results from excess productive capacity. The author concludes that the present system provides an incentive for building facilities with excess capacity and having a queue of workers ready to supply labor for the excess capacity. The study further finds some portion of this cost is absorbed by the general public through unemployment compensation.

With the exception of those workers covered by piecework incentives and commissions, most workers in the food system find their compensation determined by the job they hold and not their marginal products. Therefore, getting hired is the problem faced by most workers. This results in the background characteristics of a worker determining his/her getting a job. These same background characteristics indirectly determine the compensation during the employee's career with a firm in the food system.

The combination of (1) an employer's incentive to pay wages above the prevailing rate for a given skill and (2) the fact that background characteristics determine who will be hired-raises the probability that overqualified workers are hired for given tasks. This could continue through a career. Leibenstein calls this "intellectual slack".

Present labor laws deal with provisions in collective bargaining agreements rather than outcomes. This interpretation harms productivity because it does not allow for the complex interaction of provisions shown in Chapter III.

(Chapter III does not deal with structural considerations within the food system. As such, any conclusion from the Chapter relating to union gains at the expense of capital and possible contributions to equity are inappropriate from the Chapter in isolation.)

The Chapter concludes "The economic performance of collective bargaining agreements on productivity in food system industries can only deteriorate under present policies and with the present level of knowledge of how the interaction of provisions affects productivity."

Inflation

Chapter III examines food system collective bargaining agreements to determine the rate of change in compensation during 1981. The Chapter is not concerned with the issue of whether unions cause inflation. Its sole focus is the increase in compensation associated with industry concentration.

The study finds increases in compensation to result in the following four areas:

1) Negotiated increases in the base wage rate during the term of the contract.
2) Negotiated increases due to cost-of living provisions during the term of the contract.
3) Negotiated increases in fringe benefits such as hospitalization, dental, pension, etc. during the term of the contract.
4) Changes in holidays or vacations during the term of the contract.

While every provision in a collective bargaining agreement affects the price of labor, only those provisions that are directly quantifiable are used.

The study using ordinary least squares regression techniques, found a negative relationship between industry concentration (CR_4) and increases in compensation for food system workers covered by collective bargaining contracts without COLA adjustments. Within this class of contracts, workers in less concentrated industries experienced greater percentage wage gains than workers in more concentrated industries.

The study found a positive relationship between industry concentration and increases in compensation for food system workers with contracts containing COLA provisions. Within this class of contracts, workers in less concentrated industries experienced smaller percentage wage gains than workers in more concentrated industries.

When all contracts (both with and without COLA clauses) were used, the study found a positive relationship between indutry concentration and increases in compensation. The resulting equation:

$$Y = 7.78 + \underset{(.045)}{0.55} \log X \qquad (3.4)$$

$$R^2 = .21$$

where Y is the percentage increase in compensation for unionized fork lift truck operators in the food system; and X is the concentration ratio (CR_4) of the industry in which the worker is employed. This equation shows increases in compensation to be associated with increases in concentration--but the effect on compensation is less in more highly concentrated industries.

The study found that for food system workers considered, the inflationary impact of collective bargaining agreements widens the wage differential for a common skill level between workers in less concentrated industries and workers in more concentrated industries.

The study finds unionized workers in the food system, covered by contracts with COLA provisions, received increases in compensation double those union workers without COLA provisions. During the period studied, a time of double digit inflation, most unionized workers in the food system experienced losses in real income. Workers in more concentrated industries with cost of living escalators in their collective bargaining agreements made small gains in real income. The inflationary impact of food system collective bargaining agreements can be expected to increase. During a period of high inflation, contracts containing cost of living provisions had nominal compensation gains double other contracts. Economic pressures from pattern bargaining can be expected to result having these provisions in a greater number of future contracts.

The study concludes that the inflationary impacts of collective bargaining agreements in the food system are compounded by the nature of the collective bargaining process. Unions are insulated from the trade off between higher wages and unemployment, and in many contracts restricting the performance of work, unions are insulated from the general labor market. The demand for labor is a derived demand and structural characteristics in the product market may affect this derived demand. The resulting negotiations in more concentrated industries (especially where pattern bargaining exists) have an inflationary bias.

The study looks at core inflation which is the rate of change in wages minus the rate of change in labor productivity. It concludes that food system collective bargaining agreements increase wages without any corresponding requirement that output increase. The author concludes that to the extent output lags the increase in wages, collective bargaining agreements are inflationary.

Equity and Wage Differentials

The inflation discussion found that during the period studied most workers experienced losses in real compensation. Those workers in less concentrated industries experienced greater losses. This leads to the conclusion that the collective bargaining process compounds the problem of equitable distribution of wages among workers in the food system during a period of inflation.

This study uses wage differentials for similar human capital requirements among food system industries to estimate the effects of collective bargaining on equity. The study finds that workers in more highly concentrated industries, ceteris paribus, earn more than workers in less concentrated industries. Specifically, a one percent increase in the concentration ratio of the largest four firms in an industry is associated with an increase in worker compensation of four cents per hour.

When this wage differential is adjusted for geographic differences in wages, it is found that, ceteris paribus, a one percent increase in concentration ratio (CR_4) is associated with a two cent per hour increase in compensation. Over the range of the data, an increase in industry concentration ratio from 18 to 89 is associated with a wage differential of \$1.42 per hour after adjustment for regional differences in compensation for the same job related human capital.

Food system workers in industries with concentration ratios less than 25, earn less than the mean hourly wage for workers of similar skills in their area. Those workers in industries with concentration ratios above 25, earn more than workers of similar skills in their area.

Chapter II shows many of the contracts analyzed to have provisions restricting output of workers or limiting tasks that can be performed. This study in Chapter IV finds that, ceteris paribus, food system workers covered by agreements without work restrictions and/or limitations earn 43 cents per hour less that all food system workers. Work restrictions are associated with higher labor costs in the form of wage rates and labor practices reducing output.

The study found that, ceteris paribus, food system workers covered by contracts containing restrictions earn more than all food system workers and the differential becomes smaller as the concentration ratio increases. Over the range of the data, at a concentration ratio of 18, a worker with a contract containing work restrictions and/or limitations earns $1.89 per hour more than a worker in the same industry without restricitons and/or limitations in his contract. This differential narrows to 89 cents per hour at a concentration ratio of 89.

Using retail clerks' compensation and meat cutters' compensation, the study found that a wage differential remains between skills within an industry, but that differential narrows within an industry as concentration in relevant markets increase. The analysis indicates the effect of industry concentration may be less on more highly skilled jobs.

The study concludes that the relationship of capital associated with increasing labor productivity may be of special importance in the food system. Specifically, the study found plants with higher employment to be associated with lower wages. It is postulated that because of the seasonal nature of the food industry, where labor is not utilized year round, labor may not have productivity improving capital associated with it.

The differences in compensation for similar human capital requirements found in Chapter IV have implications of reduced productivity through the under utilization of human capital, inequitable returns to workers and creates conditions favoring employee turnover as similar workers are attracted to higher paying jobs.

Recommendations

The chapter lists the conclusions from the research and recommends policy changes. Union/Management agreements in the food system have become fully developed. Unions, employer associations, governmental agencies, product market structures and employment practices have become institutionalized. Recognizing the difficulty of extreme institutional change, all recommendations of this work are within existing institutional frameworks in the hope that they may be more readily acceptable, and as a result, more beneficial.

The author recommends the following:

1) Since concentration and wages are related, the equity of the food system wage and the productivity of food system workers as measured by the utilization of job related human capital would be improved by maintenance of the highest levels of competition within each industry of the food system. This study recommends the use of all governmental agencies charged with the maintenance of competition under existing laws be continued.

2) Since collective bargaining agreements deal with the effects of unemployment rather than causes, this study recommends a change in that emphasis.

Collective bargaining agreements in the food system are laden with provisions to ease the burden of reduced employment. Provisions jointly negotiated deal with:

Store closings

Plant closings

Related severance provisions

All these have the short run effect of making the cost of closing a facility higher (in effect making some marginal costs fixed costs) and increasing short run employment stability with no concern for the productivity and long run considerations from either a firm, a worker, or society in general. If the long run costs of a facility are such that it is not an economic unit, adding to the short run costs does nothing but delay the adjustments. Food system collective bargaining agreements only delay and possibly soften the impact on the worker in the short run. Worker, employer and social concerns would be better served by long run adjustments.

Many contracts contain provisions for supplemental unemployment compensation. Again this is only a device for easing short run problems. It is geared to short run effects and not long run causes.

Beyond the bounds of collective bargaining agreements, employers have costs of compulsory unemployment insurance (the prime cost of which is unemployment benefits) and once again the target is short run effects not causes.

There is a fertile area of bargaining that is ignored by union, management and government. Presently, workers receive indirectly compensation in the form of severance pay, unemployment compensation, compensation for job related injuries, supplemental unemployment benefits and closing allowances. Employers have little choice but to view these as additional costs that must at the very least exceed revenues associated with them.

These same costs could be applied in a manner that addresses employment stability from the standpoint of increasing output through demand expansion (increased marginal revenue and therefore increased marginal value product) or reduction in marginal costs. From both a firm's and a worker's standpoint this would be Pareto better. (I do not mention society's viewpoint because I am seeking a common ground within the collective bargaining framework that would result in some benefits to society.)

Organized labor comes to the bargaining table with benefits already obtained in bargaining such as supplemental unemployment benefits, severance pay, plant closing pay, early retirement, etc. Employers come to the table knowing full well there will be pressure to increase all the previously obtained benefits and the best they can do is slow the advance. What bargaining chips does management have? Obviously wages are one. But bargaining for the employer still centers upon costs.

Assume a mechanism can be found to increase long run efficiency per worker using the costs associated with previous union gains and gains envisioned in this round of bargaining; and these gains allow employers to increase employment stability based on output rather than additional costs. Rational employers would be willing to trade longer employment guarantees and some portion of the increased profits to the union in exchange for lower costs of items designed to ease the effect of unemployment.

This study recommends that government lead the way by allowing the unemployment compensation rate to reflect the contract guarantees rather than the actual experience of the employer. Reducing this lag would spur such adjustments.

For example, if an employer were to enter a collective bargaining agreement whereby the employer contractually agreed to retain employees with over five years seniority for the duration of the contract, both the state and federal unemployment insurance rates would be actuarially computed as if the contract guarantees were fulfilled. The risk assumed by government in this plan would be that the employer was not able to meet these guarantees because of financial weakness. Government would supply a safety net in the event that the assets of the employer could not meet the employment guarantees which would be a contractual obligation and legally enforceable.

3) Food system training is primarily general training. As such, the employee bears the cost of the training resulting in a lower wage and the employer is faced with increased turnover and associated costs as the employer has trained the worker in a skill that makes him a desirable employee for another firm. This study recommends that consideration be given to allowing the same accounting treatment, both tax and book accounting, for investments in human capital that are presently given investments in physical plant and equipment.

Recognizing that human capital investments can only be used by the person possessing the results of that investment, it may be necessary for selected employees to enter into an employment contract of reasonable duration (i.e. three years) with the employer to assure the employer can recapture his investment in specific training. Accounting principles dictate that the investment be amortized over the duration of the employment contract.

4) This study recommends changes in the system of industrial jurisprudence so that it does not function as a barrier to entry for new workers by unduly restricting exits of unproductive workers. Specifically recommended is that the grievance procedure in the case of dismissal be expedited by the use of binding arbitration immediately following the first step in any grievance procedure.

5) Recognizing that pressures are present for the increased use of cost of living provisions in food system collective bargaining agreements, this study recommends that the Consumer Price Index as published by the United States Department of Labor, Bureau of Labor Statistics, be continually revised to reflect the true composition of consumer expenditures, and that it be adjusted to reflect the ability of consumers to substitute in their purchases.

6) This study has found unions insulated from the trade off between higher wages and unemployment. Only in the extreme case of plant closings do they face this trade off. This study recommends that no public policy of restricting the closing or moving of facilities be enacted at any level

of government. The enactment of such legislation would do more than the present system that insulates unions from unemployment. It would separate unions from the trade off and contribute to reduced productivity and higher inflation.

Areas of Future Research

Several areas of future research are detailed in Chapters I through IV. These areas are summarized in this section. In addition, the Recommendations of this study will require research before implemention and even a firm policy recommendation must be qualified by the need for future research. This study takes an initial look at collective bargaining in the food system. As such, it raises as many questions as it answers.

Future research is needed in the interaction of the structural composition of food system industries and wages that can be negotiated. Theory indicates that the higher the proportion of labor in the cost, the more elastic the demand for labor, and the higher the wages that can be negotiated. This study does not support that theory and stresses the structural composition of the industry is important in wages jointly negotiated. Research into the product market characteristics, and the role of these characteristics on the derived demand for labor is needed in this area.

An extension of Schultz's work on the ability to deal with disequilibria is an area of future research in the food system. Specifically discovering the components of human capital that allow adjustments to industrial change by workers in the same geographic locations, at the same plant or in the same job would facilitate the introduction of new techniques and technology.

Becker notes that generally trained workers are paid less than specifically trained workers (Becker, 1975, p.24). Research is necessary to determine if variations in wages within the food system are a function of variations in specific training--resulting in real productivity differences among workers.

Research on the effect of turnover on equitable distribution of wages among workers is needed. This study shows employers have an incentive to pay wages above the prevailing wage. Does this cause a supply response among workers resulting in workers moving from lower wages to higher wages for the same skill? If this is the case, there may be a trade off between reduced productivity from the forming of a labor queue and equitable income.

Much of the analysis of productivity in Chapter II is based on the role of employee effort, or in the reverse, lack of effort--"X-efficiency". The heart of the matter is not measuring "X-efficiency" or compensating for it in the production process. The true problem is why does it exist. Leibenstein touches on this when he recognizes that human capital may not be used to capacity, just as capital measured by traditional methods is underutilized (Leibenstein, 1976, p.41). Thurow finds employers array workers based on their abilities to fulfill a firm's objectives (Thurow). A study to determine if the labor queue results in hiring of overqualified workers could determine if X-inefficiency starts at hiring and if the present system is biased towards X-inefficiency.

Chapter II details provisions of collective bargaining agreements that describe jobs and limit output and/or work. Chapter IV associates these restrictions with higher wages. Research is needed to determine what the real effects of these restrictions are upon output and the demand for labor. These restrictions are either good or bad for labor and management. This research could find a common approach to work preservation and productivity.

The study has shown seniority provisions in the food system seldom result in departmental seniority. At a time of layoffs, a system of industrial musical chairs takes place across departments and among plants. Research to determine the productivity implications of this "bumping" practice is needed. It is possible that by minimizing disruptions at the time of layoffs, productivity would increase. These gains (or reduced losses) could be used to compensate more senior employees.

Chapter III also details provisions allowing a disabled worker to work where he can perform the task. If this improves productivity, would requiring a disabled worker to perform work which is within his limitations (in lieu of compensation for disability fully or partially) improve performance? Research into all dimensions of this problem could determine the trade offs in this area.

The grievance system of industrial jurisprudence has the potential for long and protracted adversary proceedings. Research needs to be done on the actual effect on productivity and performance of alternative grievance systems.

Closely related to the above need for future research is the need for study on the role of grievance procedures in providing a barrier to entry for new employees by limiting exits. Does the present system function as a barrier while insuring industrial democracy? What has been the effect on industrial democracy of expedited grievance procedures?

This study concludes plant closing notices and required severance payments have little effect in the food system. The study recommends no plant closing legislation be enacted. Research is needed to determine both the costs and benefits of plant closing. The study would need to take into account external costs and benefits stemming from plant closing legislation.

Future research is needed on the effects (both macro and micro) of labor mobility under conditions of varying levels of employment and scale of operation. The question, "Under what set of circumstance does contractual job mobility help or hinder productivity?" could be answered.

The conclusion in Chapter II states that "numerically contract provisions are overwhelming against increasing productivity." The effect of collective bargaining agreements on worker effort is positive in the area of social justice. Research needs to be done on the total effect of both allocative efficiency and X-efficiency resulting from collective bargaining using specific cases.

Future research on the ratchet effect and COLA provisions interaction is needed. Chapter II points out that four factors can influence the ratchet effect. Once again the product market characteristics are important. This study could find a relationship between market structural characteristics of an industry and the ratchet effect that would lead to policy conclusions.

The inflation discussion raises the possibility that rising real wages and constant or falling real per capita GNP could cause redistributional effects irrespective of the general price level. Research needs to be done on the magnitude and distribution of these effects and the subsequent effects. This knowledge would guide policy on wage restraint.

Research to determine the inflationary impact of industrial concentration and unionism could discover the mechanism involved. Obviously there is a connection between the product market and the ability to increase prices. Do unions force this increase or would it take place in the absence of unions? Knowing this would allow policies to be developed that would aid in the control of food inflation.

Chapter IV notes a negative relationship between employees per location and wage rates in the food system. The role of productivity improving capital in seasonal industries is an area of future research that might aid in raising productivity in the food system.

Finally, the study found restrictive practices such as job limitations, output restrictions, and full crew provisions are associated with higher wages. Research relating the inclusion of these restrictions to product market characteristics and actual industrial output would aid in developing recommendations concerning future food system conduct and market structure.

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APPENDIX

STANDARD INDUSTRIAL CODE	CONTRACT	NUMBER OF EMPLOYEES	CONTRACT WAGE RATE PLUS COLA (c) FOR FORKLIFT DRIVERS	TOTAL COMPENSATION PLUS CONTRACTUAL FRINGES (f) FOR FORKLIFT DRIVERS	CONTRACT WAGE RATE PLUS COLA (c) FOR QUALITY CONTROL SKILL
0132	I-A Southern Calif. Dairy Employers and Ranch Hands Local 17	700	10.93(c)	13.08	
0192	Butler County, Pa. Mush-room Farms, Inc. and Local Union 8025	900	6.16	6.63	
2000	Great A&P Tea Co., Ann Page Division and Local Union 62	1800	6.45	7.57(f)	6.55
2011	Armour and Company Master Agreement-International	4300	wages not in contract		
	Armour and Company, Louis-ville, Ky. and Local Union 227	700	10.18(c)	12.38(f)	
	Bryan Packing Company and Local Union 515	1200	6.28	6.92	6.15
	Campbell Soup Co., Napol-eon, Ohio and Local Union 146	2000	skill not in contract		
	Central Calif. Meat Proces-sors Association and Local Union 506	800	skill not in contract		
	Chicago Midwest Meat Asso-ciation and Local Union 100	4300	8.59(c)	9.76(f)	8.59(c)
	Dubuque (Iowa) Packing Co. and Local Union 150	2300	10.07(c)	11.07	
	Emge Packing Co. (Ft. Branch, Ind.) and Local Union 172	550	skill not in contract		
	Fischer Packing Co. (L'ville, Ky.) and Local Union 227	700	skill not in contract		

2011	Food Employers Council, Meat Packing Companies; L.A., Calif. and Local Union 563	950	9.40(c)	11.82(f)	
	General Host-Cudahy and Ga. N.E. Counties Local	550	skill not in contract		
	Geo. Hormel and Co., Austin, Minn. Plant and Local Union P-9	2150	wages not in contract		
	Geo. Hormel and Co., Ft. Dodge, Iowa Plant and Local Union P-31	650	wages not in contract		
	Greater Philadelphia Meat Packers Ass'n. and Others and Local Union 195	500	skill not in contract		
	Hygrade Food Products, Inc. (Iowa, Mich., Wash., Fla.) and 7 Local Unions	1500	wages not in contract		
	Association of Independent Meat Drivers (Chicago) and Local Union 710	1200	skill not in contract		
	Association of Independent Meat Industry Shops (Chicago, Northern Ind.) and Local Union 100	2950	8.59(c)	11.22(f)	8.59(c)
	Iowa Beef Processors, Inc. (Dakota City, S.D.) and Local Union 222	2300	7.94(c)	8.54	8.09(c)
	ITT, Gwaltney Division, (Smithfield, Va.) and Local Union 822	1000	5.77	6.15	5.51
	John Morrell and Co. International Agreement and 10 Local Unions	6100	wages not in contract		
	Meat Packers Association, Los Angeles County, Calif. and Local Union 563	1200	skill not in contract		
	Oscar Mayer and Co., Chicago and Local Union 100	1000	wages not in contract		

2011	Oscar Mayer and Co., Davenport, Iowa and Local Union 431	1800	wages not in contract		
	Oscar Mayer and Co., Madison, Wis. and Local Union 538	3200	wages not in contract		
	Patrick Cudahy, Inc. Cudahy, Wis. and Local Union Plant 40	800	expired 8/80		
	Rath Packing Company Master Agreement (Tex., N.C., Ga., Iowa) and 6 Local Unions	2000	wages not in contract		
	Schluderberg-Kurdle Co. Baltimore, Md. and Local Union 117	700	8.24	8.91	
	Stark and Wetzel Foods, Inc. Indianapolis, Ind. and Local Union 167	550	expired 10/79		
	Swift and Co.-Estech, Inc. Master Agreement	3500	wages not in contract		
	Wilson Foods Master Agreement and 14 Local Unions	6000	wages not in contract		
2015	Rockingham Poultry Marketing Cooperative (Va., W.Va.) and Local Union 593	900	4.40	4.71	
2020	Carnation Co. Master Agreement Central States Area and 7 Local Unions	950	skill not in contract		
	Dairy Employers Labor Council Master Agreement and 8 Local Unions BLS 349	1600	12.45(c)	16.68(f)	12.35(c)
	Greater Cincinnati Milk and Ice Cream Dealers Association and Local Union 101	650	expired 9/80		
	Independent Associated Master Dairy and Central States Addendum Agreement and Local Union 603	700	expired 7/79		

2023	Milk Producers Manufacturers Association of Calif. and 6 Local Unions	850	expired 12/80		
2024	Independent Associated Ice Cream Industry Agreement and Local Union 757	1100	expired 4/80		
	Independent Associated Ice Cream Industry-Multi Depts., Pa., and 3 Local Unions	600	expired 9/80		
	Ice Cream Council-13 Counties, Ill. and Ind. and Local Union 717	1000	7.25	9.64(f)	
2026	Associated Milk Dealers of Denver, Inc. and Local Union 537 (truck drivers)	700	5.13 plus commission	5.51	
	Associated Milk Dealers of Chicago and Local Union 754	600	expired 4/80		
	Dairy Industrial Relations Association Southern Calif. Master Agreement	5000	expired 3/80		
	Dairy Industry Industrial Relations Association of Calif. Office Agreement	4000	expired 3/80		
	Greater N.Y. Milk Dealers Labor Council and Local Union 584	1900	expired 11/80		
	Greater Pittsburgh Milk Dealers Association and Local Union 205	750	expired 4/80		
	Independent Association of Fluid Milk and Ice Cream Processors of Calif. and 7 Local Unions	1350	expired 8/80		
	Independent Association of Philadelphia and vicinity Milk Dealers and 4 Local Unions	2500	expired 9/80		

2026	Independent Association of Milk Manufacturing and Receiving Plants in N.Y. and Pa. and Local Union 680	900	7.29	8.78	
	Land O'Lakes, Inc. and Ft. Dodge, Iowa Local Union 6	503	7.99	8.69	
	Northern Calif. Dairy Association and 5 Local Unions	1600	expired 3/80		
	Pet, Inc. Dairy Group (Tenn., Ga., Va., Ky., S.C., N.C.) and 8 Local Unions	1200	4.18	4.57	3.61
2031	Castle and Cooke, Inc. Bumble Bee Seafoods Div. Oregon Plant Local 554	600	5.65	6.79(f)	
	Star Kist Foods, Inc. Los Angeles and vicinity Agreement	2400	skill not in contract		
2032	Baker/Beechnut Corp. and Canaajoharie, N.Y. Local Union 697	600	5.61	6.10	
	Campbell Soup Company and Camden, M.J. Plant 80 Local Union	1700	6.50	7.07	
	Campbell Soup Company, Modesto, Calif. and Local Union 127	500	expired 4/80		
	Campbell Soup Company, Sacrament, Calif. and Local Union 228	1400	8.95	9.74	
	Campbell Soup Company, Paris, Tex. and Local Union 1229	1300	5.93	6.45	5.60
2033	Agripac, Inc-4 Oregon Plants and Local Union 670	3000	7.73(c)	8.42	6.80

2033	American Home Foods, Chef Boy-ar-dee Division, and Milton, Pa. Local Union 38	1300	7.63	8.28	7.28
	Calif. Processors, Inc. and 12 Local Unions	55000	8.25(c)	8.97	
	Del Monte Corp., Plant 125 and Yakima, Wash. Warehouses and Local Union 760	500	8.13(c)	8.81	7.32
	Del Monte Corp., Plants 126, 127 and Oreg. Local Unions 670 and 305	1700	7.79(c)	8.37	6.82
	Del Monte Corp. Chehalis, Wash. Plant and Local Union	700	9.79(c)	10.65	
	Del Monte Corp., Warehouse and Plant 122 and Toppenish, Wash., Local Union 760	850	7.80(c)	8.45	
	Del Monte Corp. 4 Ill. Plants and Local Union 17	1550	expired 1/81		
	Diamond Fruit Growers, Inc. (Oreg.) and Local Union 670	1200	7.32(c)	7.93	6.83
	General Foods Corp., Food Products Div., Woodburn, Oreg.	1400	7.40 from area wage survey	8.02	
	Heinz, H.J.-Heinz U.S.A. Division and Muscatine, Iowa Local Union 431	700	expired 2/80		
	Heinz, H.J.-Heinz U.S.A. Division and Pittsburgh Local Union 325	1800	8.35(c)	9.08	
	Independent Associated Pineapple Companies and Plantations and Hawaii Local Union 142	4200	7.61	8.18	7.61

2033	Morgan Packing Company and Austin, Ind. Local Union 89	500	expired 8/80		
	National Fruit Canners and Chehalis, Wash. Local Union 252	700	7.92(c)	10.06(f)	6.95
	Ore-Ida, Inc. and Burley, Idaho Local Union 368	1000	6.41	7.21	6.02
	Stayton Canning Cooperative, Wash. Plant 1	1800	8.24(c)	8.93	7.74
	Stayton Canning Cooperative, Wash. Plant 2	2300	8.24	8.93	7.74
	Stokely-Van Camp, Inc. and Minn. Local Union 487	850	expired 2/81		
	Stokely-Van Camp, Inc. and 4 Wis. Local Unions	850	skill not in contract		
	Stokely-Van Camp, Inc. and Ind. Local Union 1473	500	expired 6/80		
	Sunkist Growers, Inc.-Orange Products Division and Ontario, Calif. Local Union 871	550	expired 10/80		
	Tropicana Products, Inc. and Fla. Local Union 173	1800	6.96(c)	8.98	6.70
2034	Del Monte Corp., Del Monte Foods Div., Tex. Plant 250	600	expired 1/80		
	Diamond-Sunsweet, Inc. and Stockton, Calif. Local Union 601	650	9.62	10.55	9.62
	Independent Associated Dried Fruit Industry and 6 Calif. Local Unions	1000	7.78	8.50	7.78
2072	Hershey Foods Corporation Hershey Chocolate and Confection Div. Pa. Agreement	2300	8.56	9.31	

2072	Nestle Company and Fulton, N.Y. Local Union 1974	1100	6.27	6.82	
2073	Topps Chewing Gum, Inc. and Duryea, Pa. Local Union 229	600	5.83	6.34	6.00
2082	Anheuser-Busch, Inc. and Neward, N.J. Local Unions 153 and 843	700	expired 2/79		
	Anheuser-Busch, Inc. and St. Louis, Mo. Local Union 1187	1800	10.83	13.31(f)	10.83
	Brewery Proprieters of Milwaukee (Miller, Pabst, Schlitz) and Local Union 9	3500	10.90	14.22(f)	10.90
	Calif. Brewers Association and Local Unions 896 and 1007	1200	12.13	15.76	12.13
	Carling National Breweries and Baltimore, Md. Local Union 1010	500	skill not in contract		
	Independent Association of Beer Breweries and Distributors and St. Louis, Mo. Local Union 113	500	skill not in contract		
	Northwest Brewers Association and State of Wash. Local Unions 28 and 37	900	10.62	13.95(f)	
	Schlitz Brewing Company, Container Division Agreement BLS Contract 002988	1000	expired 5/80		
	Stroh Brewery Company and Detroit, Mich. Local Unions 181 and 1038	850	expired 3/81		
2085	Hiram Walker and Sons, Inc. Peoria, Ill. Local Union 55	650	8.18(c)	9.19	
	Joseph E. Seagram and Sons, Inc. International Agreement and 6 Local Unions	1300	7.25(c)	9.72(f)	

2085	National Distillers and Chemical Corporation International Agreement	1000	8.14(c)	9.62(f)	8.03(c)
	Schenley Distillery, Inc. Ind. and Ky. Agreement and 3 Local Unions	1000	7.63	8.34	7.63
2086	Bay Area Soft Drink Bottlers Association (Calif.) and Local Union 70	1200	skill not in contract		
	Independent Association of Soft Drink Companies and Local Union 1164	500	expired 5/80		
	Independent Association of Chicago Area Soft Drink Employers and Drivers and Helpers Local Union 744	1300	skill not in contract		
2095	General Foods Corporation Maxwell House Division and Hoboken, N.J. Local Union 56	900	8.69	9.78	8.52
2099	General Foods Corporation, Food Products Division and Dover, Del. Local Union 56	950	8.69	9.78	8.52
	Simplot, J.R. Company Food Processing Plant and Heyburn, Ohio Local Union	1100	expired 6/80		
2111	American Tobacco Company and N.C. and Va. Local Unions 182, 183, 192	4200	9.60(c)	10.71	
	Brown and Williamson Tobacco Company, Louisville, Ky.	2400	9.20(c)	10.66	8.89(c)
2034	J.R. Simplot Company Food Processing Div. and Idaho Local Union 670	1350	6.16	6.69	5.52
			estimate--wage reopener		
	J.R. Simplot Caldwell, Idaho Food Processing Plant	1800	6.16	6.69	5.52
2036	Gorton Group and Glouster, Mass., Local Union 15	600	6.58	7.16	

2036	Ralston Purina Company Van Camp Sea Food Division	1850	4.16	4.90(f)	3.93
2037	Associated Wash. Packers and Producers, Inc. and 4 Local Unions	1300	6.36	8.55(f)	6.10
	Campbell Soup Company and Camen, N.J. and Local Union 80	1700	6.34	6.89	
	Campbell Soup Company and Fayetteville, Ark. Local Union 425	1400	5.23	5.68	4.98
	ITT Cont. Baking Co., Morton Frozen Food Division and Crozet, Va. Local Union	850	5.27	5.71	
	J.R. Simplot Company and AFGM Local 296	1200	expired 6/80		
	Lykes Pasco Packing Company and Dade City, Fla. Local Union 43	1100	expired 12/80		
	Watsonville, Calif. Frozen Food Employers Association and Local Union 912	3500	8.97	10.32(f)	8.23
2041	General Mills, Inc. Master Agreement and 17 Local Unions	4000	expired 3/81		
	International Multifoods Master Agreement and 8 Local Unions	500	expired 3/81		
	Peavey Company Flour Mills and 4 Local Unions	600	expired 3/81		
2043	General Foods Corporation Post Carton and Container and Mich. Local Union 374	1550	expired 10/80		
	Kellogg Company Master Agreement and 4 Local Unions	5350	9.85(c)	10.85	9.65(c)

2043	Quaker Oats Company and Cedar Rapids, Iowa Local Union 110	2000	9.01(c)	9.90	9.13
2046	CPC International, Inc. Corn Division and 4 Local Unions	2300	expired 6/80		
	Staley Manufacturing Co. and Decatur, Ill. Local Union 837	1650	expired 9/80		
	Standard Brands, Inc. and Clinton, Iowa Local Union 6	850	expired 7/79		
2051	Arnold Bakers, Inc. Greenwich, Conn.	700	8.17	9.00	
	Bordo Producers Cooperative and Winter Haven, Fla. Local Union 60	550	expired 10/78		
	Calif. Bakery Employers Association Machine Shop Agreement and Local Union 119	800	9.01	11.46(f)	
	Chicago Bakery Employers Labor Council and Local Union 734	700	delivery driver wages only		
	Cincinnati and vicinity Bakers Club and Local Union 213	800	7.71	10.47(f)	7.71
	Detroit Bakery Employers Labor Coundil and Local Union 51	500	expired 10/79		
	Gulf Coast Bakers Council of Houston, Tex. Agreement	1100	7.50	9.61(f)	7.50
	Independent Associated Bakeries of Greater New York City and 3 Local Unions	3200	8.60	9.78	
	Independent Associated Greater Philadelphia Bakery Employers and 2 Local Unions	600	8.12	10.13(f)	8.12

2051	Independent Associated Calif. Retail Bakeries Machine Shop Agreement and Local Union 37	750	expired 5/80		
	Kansas City Bakery Employers Labor Council and Local Union 218	500	skill not in contract		
	Kroger Company Columbus, Ohio Bakery Division and Local Union 57	550	8.79	9.55	8.74
	Northern Calif. Association of Bakery Employers and 13 Local Unions	3700	9.33	12.72(f)	9.33
	Wholesale Bakers of Calif. and 2 Local Unions	1550	skill not in contract		
	Wholesale Baking Industry of San Diego, Calif. and Local Union 683	500	skill not in contract		
2052	Keebler Company Bakery and Macon, Ga. Local Union 434	550	expired 10/80		
	Keebler Company Bakery and Philadelphia, Pa. Local Union 492	700	expired 10/80		
	Keebler Company Bakery and Denver, Colo. Local Union 72	650	expired 10/80		
	Keebler Company Grand Rapids, Mich. Bakery Agreement	600	expired 10/80		
	Nabisco, Inc. Interstate Master Agreement	2700	8.47	11.54(f)	8.06
	Sunshine Biscuits, Inc. and Sayreville, N.J. Local Union 50	800	expired 6/80		
2061	Sugar Companies of Hawaii Negotiating Committee and Local Union 142	9000	6.66	7.19	

2062	Amstar Corporation, American Sugar Division, Baltimore Refinery and Local Union 392	500	8.47	10.50(f)	
	Amstar Corporation Chalmette Refinery and Arabi, La. Local Union 1101	550	7.78	9.57(f)	
	Calif. and Hawaiian Sugar Company and Crockett, Calif. Local Union 1	1000	skill not in contract		
	Godchaux-Henderson Sugar Co. and Reserve, La. Local Union 1124	500	expired 7/80		
	National Sugar Refining Company and Philadelphia Local Union 1648	600	expired 10/80		
	United States Sugar Corp. Western and Eastern Fla. Divisions and Local Union 57	900	7.06	7.71	6.90
2063	American Crystal Sugar Co. Sugar Division-BLS 000291	900	7.74	8.46	8.42
	Amalgamated Sugar Company and 4 Idaho and Oreg. Local Unions	1800	5.80 estimate--wage reopener	6.24	5.51
	Great Western Sugar Company and 15 Kans., Nebr., Mont. and Wyo. Local Unions	3500	5.58	6.00	5.58
	Independent Associated Sugar Companies (4) International Agreement and 15 Local Unions BLS contract 000297	3500	expired 2/80		
	U and I, Incorporated, Sugar Division and 4 Idaho, Utah and Wash. Local Unions	3000	expired 8/80		

2071	Brach and Sons and Local Union 738	3000	6.45	7.17	
	Confectioners Industrial Relations Board of Greater New York City and vicinity and Local Union 452	1100	5.45	5.96	5.37
	Fred Sanders Corporation Factory Agreement and Highland Park, Mich. Local Union 30	700	expired 8/79		
	Gulf and Western Corporation Schrafft Candy Div. and Mass. Local Union 348	700	expired 7/80		
	Haig Berberian, Inc. and Modesto, Calif. Local Union 748	600	expired 8/79		
	Life Savers, Inc. and Canajoharie, N.Y. Local Union 697	800	5.87	6.39	5.66
	Pet, Inc. Whitman Chocolates Division and Philadelphia Local Union 6	700	expired 3/80		
	Standard Brands, Inc. Curtiss Candy Div. and Franklin Park, Ill. Local Union 552	1550	expired 12/80		
	Standard Brands, Inc. Planters Peanut Division and Local Union 26	1500	expired 4/80		
	Tootsie Roll Industries Inc. and Chicago Local Union 1	750	expired 9/80		
2111	Liggett and Myers, Inc. and Durham, N.C. Local Union 176	1650	wages not in contract		
	Loews Corporation, Lorillard Division and Greensboro, N.C. Local Union 317	2400	10.78(c)	12.09	10.51(c)

2111	Loews Corporation, Lorillard Division and Louisville, Ky. Local Union 201	1500	10.78(c)	12.09	10.51(c)
	Phillip Morris, U.S.A. and Richmond, Va. Local Union 203	5800	8.93(c)	9.83	8.93(c)
	Phillip Morris, U.S.A. and Louisville, Ky. Local Union 16	2400	8.93(c) estimate--wage reopened	9.83	8.93(c)
2121	American Brands, Inc. American Cigar Division and Mountaintop, Pa. Local Union 401	750	4.53	4.91	
	Jno H. Swisher and Son, Inc. Fla. and Ga. Agreement, BLS Contract 000511	750	5.33(c)	6.22(f)	
	Loews Corporation, Lorrilard Diviaion and Danville, Va. Local Union 233	500	8.64(c)	9.68	
2131	Brown and Williamson International Agreement and 2 Local Unions	2300	9.22(c)	10.29	9.10(c)
	Brown and Williamson Tobacco Company (Ky., Va., N.C.) and 3 Local Unions	900	9.22(c)	10.29	9.10(c)
2141	Imperial Group Limited, American Leaf Organization and Winston N.C. Local Union 271	600	4.07(c)	4.38	
3500	International Harvestor Clerical and Technical Employees International Agreement and 7 Local Unions	2500	skill not in contract		
3522	Allis-Chalmers Corporation and Independence, Mo. Local Union 1958	1300	expired 2/80		

3522	Allis-Chalmers Corporation and LaPorte, Ind. Local Union 1319	1000	9.07	10.27	9.67
	Allis-Chalmers Corporation and West Allis, Wis. Local Union 248	3700	10.15(c)	11.93	10.75(c)
	Caterpiller Tractor Company Central Agreement BLS Contract 003348	30550	11.36(c)	13.37	10.79(c)
	Deere and Company and 9 Ill. and Iowa Local Unions	25400	expired 9/79		
	Deere and Company and Horicon, Wis. Local Union 873	950	10.98(c)	12.30	9.96(c)
	Deere and Company Interstate Skilled Trades Agreement and 5 Local Unions	500	expired 7/79		
	Hesston Corporation and Hesston, Kans. Local Union	950	7.13(c)	7.98	7.13(c)
	International Harvestor Company, Main Production/ Maintenance Labor Agreement and 18 Local Unions	36500	9.43(c)	11.09	
	J.I. Case Company (Div. of Tenneco) and 5 Ill., Ind., Iowa, Wis. Local Unions	6500	8.85(c)	9.75	9.05
	Massey Ferguson, Inc. Master Agreement and 4 Ill., Mich., ohio, Iowa Local Unions	1600	expired 10/79		
	New Idea Farm Equipment Corporation and Coldwater, Ohio Local Union 4839	900	skill not in contract		
	White Motor Corporation, White Farm Equipment Company and Charles City, Iowa Local Union	1700	expired--firm liquidated		

3522	White Motor Corporation, White Farm Equipment Company and South Bend, Ind. Local Union 1095	650	expired--firm liquidated		
3531	Caterpiller Tractor Company and San Leandro, Calif. Local Union 284	850	11.21(c)	12.46	13.22
3711	Ford Motor Company, Master Interstate Agreement BLS Contract 004019	150000	expired 12/80		
4463	Hampton Roads Shipping Association Agreement	2500	11.60	17.29(f)	11.60
	Marine Association of Chicago and Ind. Employers and Local Union 19	600	expired 12/80		
	Mobile, Ala. Steamship Association Longshoremen's Agreement and Local Union 1410	700	11.60	17.29(f)	11.60
	N.Y. Shipping Association Port Watchmen's Agreement and Local Union 1456	700	skill not in contract		
	New Orleans Steamship Association Checkers and Clerks Agreement and Local Union 1418	1000	11.60	17.29(f)	11.60
	New Orleans Steamship Association Longshoremen's Agreement and Local Union 1419	6000	11.60	17.29(f)	11.60
	Philadelphia and vicinity Marine Trade Association and 8 Local Unions	4050	11.60	17.29(f)	11.60
	Savanah, Ga. Maritime Association and Local Unions 1414 and 1475	1100	11.60	17.29(f)	11.60
	Steamship Trade Association of Baltimore and 6 Local Unions	5000	11.60	17.29(f)	11.60

4463	West Gulf Maritime Association and 28 Local Unions	15600	11.60	17.29(f)	11.60
5040	Calif. Food Employers Food Industry Office Agreement and 5 Local Unions	1400	expired 9/79		
5041	Allied Supermarkets and Livonia, Mich. Local Union 337	850	expired 10/79		
5042	Calif. Food Employers Food Industry Warehouse Agreement and 6 Local Unions	3500	expired 7/79		
	Calif. Food Employers Frozen Food Agreement and 5 Local Unions	500	11.04(c)	13.69(f)	10.93(c)
	Calif. Food Employers Produce Drivers and Warehouse Agreement and 6 Local Unions	900	11.96(c)	13.18	
	Independent Associated Food Distributors of Greater St. Louis, Mo. and Local Union 688	800	expired 6/79		
	Safeway Stores, Inc. and Denver, Colo. Local Union 435	650	expired 9/80		
5043	Independent Associated Wholesale-Retail Milk Dealers and Chicago Local Union 753	900	skill not in contract		
5047	Greater N.Y. Association of Meat and Poultry Dealers, Inc. BLS Contract 006305	2600	skill not in contract		
	Independent Associated Meats and Provisions Employers and Delivery, Sales and Wholesale Workers of N.Y., N.J.	800	8.55	11.40(f)	

5048	Grower-Shipper Vegetable Association of Central Calif. and Local Union 78	500	6.05	6.67	
	Grower-Shipper Vegetable Association of Central Calif. and 4 Local Unions	500	9.81(c)	10.58	

STANDARD INDUSTR-IAL CODE	CONTRACT	NUMBER OF EM-PLOYEES	NOMINAL WAGE CLERK + COLA (c)	TOTAL COMPENSATI(CLERK	NOMINAL WAGE MEAT CUTTER + COLA (c)	TOTAL COMPENSATI(MEAT CUTTE]
5411	Acme Markets and Little Falls, N.J. Local Union 1245	1700	7.08	7.64	8.88	9.58
	Allied Employers and Meat Dealers and Seattle, Wash. Local Union 1105	1700	9.78(c)	10.74	11.58(c)	12.72
	Allied Employers of King-Snohomish Counties, Wash. and Local Union 1105	400	9.88(c)	10.74	11.58(c)	12.72
	Allied Employers Whole-sale Grocery Agreement and 6 Seattle, Wash. Local Unions	2000	NA(c)	NA		
	Almacs, Inc. and Providence, R.I. Local Union 328A	2000	7.53	8.23	9.33	10.20
	Benny La Russa, Inc. and Birmingham, Ala. Local Union 1657	20	4.15	4.42	5.05	5.38
	Bernalillo County N.M. Independent and Chain Stores Safeway Furr's Smith Food King and Local Union 1564	1450	8.43	9.09		
	Big Apple Supermarkets and Birmingham, Ala. Local Union 1657	100	7.86(c)	8.38		
	Calumet, Ind. Area Super-markets and Gary, Ind. Local Union 1460	1900	8.45	9.04		
	Central and Northern N.M. Chain and Independent Stores and Local Union 1564	2300	8.33	8.99		
	Chicago Area Major Food Chains and 5 Local Unions	6500	9.90(c)	10.95		

5411	Cleveland, Ohio Food Industry Committee and Local Union 427	4000	9.06	9.90	11.10	12.13
	Cleveland, Ohio Food Industry Committee and Local Union 880	8400	8.96	9.79		
	Colonial Stores and Atlanta, Ga. Local Union 1603	2200	9.08(c)	9.68		
	Colonial Stores and Columbia, S.C. Local Union 204	550	6.00	6.45	8.44	9.07
	Colonial Stores Raleigh Division and Local Union 204	1400	7.95	8.61		
	Consumer Warehouse Foods and Birmingham, Ala. Local Union 1657	600	6.21	6.62		
	Culotta's Inc. and Birmingham, Ala. Local Union 1657	24	5.65	6.02	6.95	7.41
	Denver, Colo. Grocers Assn. and Local Union 634	NA	8.18	8.79		
	Fairbanks, Alas. Retail Grocers and Local Union 1689	300	14.45(c)	15.99	17.63(c)	19.51
	First National Supermarkets and Westport, Conn. Local Union 371	2700	8.10	8.85	10.13	11.07
	First National Stores (R.I., Conn., Mass) and Local Union 328	700	9.25	10.11	9.93	10.93
	First National Supermarkets and Edwards Stores (New England) and Local Union 2	1550	8.03	8.74	10.11	10.99
	First National Supermarkets and Edwards Stores (New England) and Local Union 592	1800	8.03	8.74	10.11	10.99

5411	Food Employers Council (Los Angeles) and 9 Local Unions	60150	10.52(c)	11.59		
	Food Fair, Inc. and Philadelphia Local Unions 56, 195, 196 and 198	5000	interim agreement fringes only			
	same for					
	A&P and Local Unions 56 and 195					
	Acme Markets and Local Unions 56, 195, 196 and 198					
	Shop 'N Bag and Local Unions 56, 195, 196 and 198					
	Foodland Supermarkets and Honolulu, Hawaii Local Union 594	NA	8.85	9.59	10.53	11.41
	Foodtown Supermarkets and N.J. Local Union 1262	3000	8.57(c)	9.37		
	Fresno, Calif. Master Food and Liquor Agreement and Local Union 1288	1200	9.92(c)	10.93		
	Fry's Food Stores and Ariz. Local Union 99	990	9.18(c)	10.11		
	Grand Union Company and Ft. Myers, Fla. Local Union 282	90	5.85	6.31	7.80	8.50
	Grand Union Company and Westport, Conn. Local Union 371	750			9.50	10.60
	Great A&P Tea Co. (Atlanta Division) Local Union 1063	800	9.29(c)	9.90		
	Great A&P Tea Co. and Birmingham, Ala. Local Union 1657	65	9.53(c)	10.15	10.90(c)	11.62
	Great A&P Tea Co. and Jacksonville, Fla. Local Union 1636	67	6.43(c)	6.91		
	Great A&P Tea Co. (New England Division) and Local Union 10	2000	7.60	8.31	9.51	10.39

5411	Great A&P Tea Co. and N.C., S.C., Tenn. Local Union 525	700	7.75	8.40	8.85	9.59
	Great A&P Tea Co. (Scranton, Pa. Division) Local Unions 1687 and 1393	700	6.55	7.04	8.08	8.68
	Greater Kansas City Employers and Local Union 576	1200			12.54	13.59
	Hillman's Food Stores and Chicago Local Union 372	500	6.12	6.60		
	Hinky Dinky Supermarkets and Omaha, Nebr. Local Union 1015	2000	9.98(c)	10.81		
	Hudd's Markets and Birmingham Local Union 1657	37	wages not in contract			
	Houston, Tex. Food Council Kroger Lucky Safeway J. Weingarten and Local Union 408	2400			12.23(c)	13.25
	Independent Grocers Agreement--Quad-Cities Iowa and Ill. Local Union 1470	2000	8.80	9.53		
	Independent Grocers Agreement and 7 Sacramento, Calif. Local Unions	1300	9.99(c)	NA		
	Jewel Food Warehouse Agreement and Chicago Drivers, Helpers Independent Union	700	NA(c)	NA		
	Jewel T Discount Co. and Tampa, Fla. Local Union (warehouse)	9	5.10	5.46		
	Kroger Co. and Atlanta, Ga. Local Union 1063	2800	9.60(c)	10.23		
	Kroger Co. and Charleston, W.Va. Local Union 347	2800	9.15(c)	9.91	10.14(c)	10.99

5411	Kroger Co. and Cincinnati Local Union 1099	3450	9.88(c)	10.66		
	Kroger Corporation and Tuscaloosa, Ala. Local Union 1657	730	9.18(c)	9.86		
	Liberty Supermarkets and Birmingham, Ala. Local Union 1657	300	10.13(c)	11.16		
	Master Food and Liquor Agreement (105 Sacramento, Calif. area firms) and Local Union 588	4200	10.04(c)	11.06		
	Meijer, Inc. and Michigan Local Union 951 Distribution Center Agreement, Properties Maintenance Agreement, Food and Service Dept. Agreement	8500	9.87(c)	10.79		
	National Supermarkets Warehouse Agreement and Hopkins, Minn. Local Union 544	400	NA(c)	NA		
	National Tea (Ind. and Ill.) Standard, Del Farm and National Divisions and Local Unions 725, 50 and 550	1200	8.00	8.74		
	National Tea Warehouse and Drivers Agreements and Hopkins, Minn. Local Union 544	800	NA(c)	NA		
	Indianapolis, Ind. Local Union 135 Warehouse Agreement		NA(c)	NA		
	Drivers Agreement New Orleans Local Union 270		NA(c)	NA		
	Northern Minn. Area Grocers Association National Foods Piggly Wiggly Super Valu IGA Red Owl Big Dollar and Hibbing, Minn Local Union 1116	1500	9.50	10.21		

5411	Oregon Food Employers and Portland Local Union 1092	4150	9.77(c)	10.50		
	Peoria, Ill. Meat Agreement and UFCW Local Union	NA			11.00(c)	11.82
	Peter J. Schmitt Co. (Loblaw) and Meadeville, Pa. Local Union 1	200	7.59(c)	8.15	8.45(c)	9.08
	Peter J. Schmitt Co. (Loblaw Division N.Y. and Pa.) and Local Union 34	900	6.77	7.80	8.34	9.11
	Philadelphia Food Store Employers Labor Council and Local Union 169	1000	11.57(c)	12.80		
	Safeway Stores and Denver, Colo. Local Union 634	2000	8.18	9.01		
	Safeway Stores and Honolulu, Hawaii Local Union 480	425	10.32(c)	11.19		
	St. Louis Area Food Industry Employers and Local Union 655	8500	10.23(c)	11.03		
	St. Paul, Minn. Food Retailers Association and Local Union 789	3100	10.77	11.62		
	Sanders Retail Stores and Detroit, Mich. Local Union 30	700	NA	NA		
	San Francisco Food Employers Council and Food Industry Operators and Local Union 648	3000	10.85(c)	12.00	11.63(c)	12.87
	San Jose, Calif. Food Employers and Local Union 428	6800	10.55(c)	11.67		
	Stop and Shop Co. (Bradlees) and Boston, Mass. 4 Local Unions	7000	increases only			

5411	Southern Calif. Food Employers Custodial Agreement and Los Angeles Local Union	1200	NA(c)	NA		
	Southern Calif. Retail Markets and Food Locker Agreement and 3 Local Unions	1400	11.51(c)	12.68	12.71(c)	14.08
	Star Supermarkets and Honolulu, Hawaii Local Union 480	75	8.51	9.22		
	Star Supermarkets and Honolulu, Hawaii Local Union 594	200	8.85	9.59	10.53	11.41
	Super Valu Stores and Hopkins, Minn. Local Union 544 (receiving clerk)	1200	12.71(c)	13.77		
	Times Supermarkets and Honolulu, Hawaii Local Union 594	NA	8.85	9.59	10.53	11.41
	Vornado, Inc. and 13 Mass., Conn., N.Y. and N.J. Local Unions	7000	increases only			
	Waldbaum, Inc. Food Mart, Division and Westport, Conn. Local Union 371	1500	8.85	9.57	10.75	11.99
	Wholesale Meat Employers and Buffalo, N.Y. Local Union 174	800			7.87	8.60