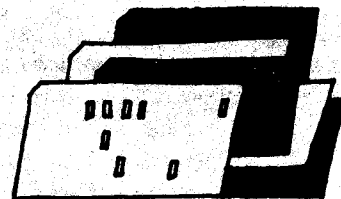


Research Summaries



Expenditures of urban and rural consumers, 1972-73 to 1985

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Social and economic comparisons of urban and rural populations have long been of interest to public policymakers. The migration of families between urban and rural areas, the financial problems of the American farmer, and the incidence of poverty by type of area are but a few of the urban versus rural topics that have received much attention.¹ This report focuses on another socioeconomic aspect of the urban and rural populations, namely, how the expenditure patterns of the two populations compare.² Expenditures, income, and family characteristics are compared for 1985, and changes in expenditure levels and expenditure shares between 1972-73 and 1985 are discussed using data from the Bureau of Labor Statistics Consumer Expenditure (CE) Survey.

Method of the expenditure survey. Both urban and rural consumer units were sampled when the current, ongoing CE Survey began in 1980.³ However, because of Federal budget reductions, the rural portion of the sample was dropped in 1981-83. In January 1984, the Bureau reintroduced the rural portion of the population in the survey sample. Now that data for both the urban and rural populations are again available, it is possible to compare the expenditures, income, and family characteristics of the two population groups. It also affords the opportunity of comparing recent urban versus rural data with earlier data.

The CE Survey consists of two separate components, each with its own questionnaire and sample: 1) a quarterly Interview survey in which expenditures and income of consumer units are obtained in five interviews conducted every 3 months and, 2) a Diary or recordkeeping survey completed by consumer units for two consecutive 1-week periods. The Interview survey is designed to obtain data on the types of expenditures which respondents can recall for a period of 3 months or longer. In general, these include relatively large expenditures, such as automobile purchases, and those that occur on a regular basis, such as rent or utility payments. Including "global estimates" of spending for food, about 95

percent of expenditures are covered in the Interview survey. The Diary survey obtains data on small, frequently purchased items which normally are difficult for respondents to recall, such as detailed food expenses. Data cited in this report are from the Interview survey. Differences in expenditures and expenditure shares discussed here are based on population estimates rather than sample estimates.

Urban versus rural, 1985. Income and demographic data collected in the expenditure survey show differences between the urban and rural populations that help explain some of the differences in expenditures of the two groups. Table 1 shows estimates for 1985, the most recent period for which data are available from the current survey, and for 1972-73, the reference period of the last expenditure survey prior to the start of the current, continuing survey. Percent changes in expenditures between the two periods are presented, and a column showing changes in the BLS Consumer Price Index for All Urban Consumers (CPI-U) also is included so that changes in expenditures and prices can be compared. Comparisons for 1985 are discussed below while changes from 1972-73 to 1985 are examined in the following sections.

Rural consumer units accounted for about 16 percent of the total in 1985. However, the portion of the consumer units classified as rural varied substantially by region of the country. Almost 22 percent of the units in the South were rural, compared with only 9 percent of the units in the West. About 19 percent of units in the Midwest region and 12 percent in the Northeast were in rural areas. The data also show that urban consumer units averaged higher incomes in 1985 than did their rural counterparts. Urban consumer units had slightly fewer members and were headed by persons about 2 years younger than heads of rural units. The numbers of earners, children under age 18, and persons over 65 were about the same for the two groups. Rural consumer units owned more vehicles per unit and were more likely to own their own homes. Total expenditures accounted for a larger proportion of total income of rural units than of urban units.

Expenditure levels of the two population groups showed substantial differences across expenditure components. As might be expected from their higher average incomes, urban consumer units had higher levels of total expenditures—they spent about \$3,600 more on average than did rural units in 1985. Higher food, housing, and apparel expenditures accounted for much of the difference. However, despite

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lower average incomes, rural consumer units spent more for transportation, health care, tobacco, and life and other personal insurance than did urban units.

Results show that, in 1985, urban consumer units spent more for housing than did their rural counterparts, and the amount spent accounted for a larger share of total expenditures than that of rural units. Expenditure shares, the percent of total expenditures spent on each component, are shown in table 2. Urban consumer units spent an average of \$7,005, or 31 percent of their total expenditures, on housing compared to an average of \$5,064, or 26 percent of the total, spent by rural units. A higher percentage of rural consumer units were homeowners and rural homeowners were more likely to have paid off their mortgages—38 percent having done so versus 21 percent of urban units. Despite lower total housing expenditures, rural units spent almost as much on fuels and utilities as urban units, \$1,579 compared to \$1,661. These costs accounted for a larger share of rural consumers' housing costs than of urban consumers'—31 percent versus 24 percent. The higher share spent by rural consumer units may be partially explained by the fact that

renter families frequently do not pay directly for fuels and utilities—payments are included in the rent—and a higher proportion of urban families are renter families.

Rural consumers spent a larger share of their total unit expenditures on transportation, 25 percent versus 20 percent spent by urban consumers, due largely to higher expenditures for vehicles and gasoline. This is as expected, because rural consumers own more vehicles than do urban consumers—2.4 per consumer unit compared to 1.8 owned by urban consumers. Also, rural consumers probably drive longer distances than do urban consumers.

Rural consumers also spent more per unit on health care than did urban consumers—\$1,168 versus \$1,011. This accounted for about 6 percent of rural consumers' total unit expenditures versus 4 percent of urban consumers' total. Higher health care expenditures by rural consumers can be attributed to their being older, on average, than urban consumers. Also, data from the survey show that rural consumer units more frequently paid the full cost of their health insurance policies while employers more frequently paid the costs of policies for urban consumers.

Table 1. Trends in selected characteristics and average annual expenditures of urban and rural consumer units and in the CPI-U, 1972-73 to 1985

Item	Urban			Rural			CPI-U percent change ²
	1972-73	1985	Percent change	1972-73	1985	Percent change	
Number of consumer units (thousands)	58,948	76,524	29.8	12,272	15,040	22.6	—
Consumer unit characteristics:							
Income before taxes ¹	\$12,349	\$26,241	112.5	\$10,039	\$19,708	96.3	—
Persons in consumer unit	2.8	2.5	—	3.1	2.8	—	—
Age of reference person	47.1	46.4	—	50.3	48.5	—	—
Housing tenure (percent):							
Homeowner	56	59	—	73	76	—	—
Renter	44	41	—	27	24	—	—
Average annual expenditures							
Food	\$ 9,420	\$22,810	142.1	\$ 7,760	\$19,197	147.4	—
Alcoholic beverages	1,675	3,473	107.3	1,513	2,996	98.0	133.8
Housing	89	297	233.7	49	215	338.8	89.5
Shelter	2,838	7,005	165.5	1,902	5,064	166.2	—
Owned dwellings	1,507	4,083	170.9	890	2,602	192.4	—
Rented dwellings	746	2,352	215.3	555	1,850	229.7	—
Other lodging	651	1,308	100.9	251	540	115.1	117.2
Fuels and utilities	117	423	261.5	86	232	169.8	211.9
Household operations	581	1,661	185.9	586	1,579	169.5	218.7
Housefurnishings and equipment	138	366	165.2	85	242	184.7	143.8
	411	895	117.8	341	641	88.0	74.5
Apparel and services							
Transportation	732	1,224	67.2	529	839	58.6	65.3
Vehicles	1,762	4,508	155.8	1,706	4,794	181.0	163.3
Gasoline and motor oil	709	1,969	177.7	746	2,418	224.1	167.3
Other vehicle expenses	404	1,010	150.0	446	1,157	159.4	224.7
Public transportation	540	1,227	127.2	482	1,127	133.8	132.0
	110	302	174.5	31	92	196.8	179.5
Health care							
Entertainment	432	1,011	134.0	448	1,168	160.7	198.4
Personal care	389	1,122	188.4	299	895	199.3	96.4
Reading	106	209	97.2	80	142	77.5	125.6
Education	50	145	190.0	40	120	200.0	—
Tobacco	126	323	156.3	76	208	173.7	183.4
Miscellaneous	131	210	60.3	118	241	104.2	143.0
Cash contributions	100	380	280.0	74	217	193.2	—
Personal insurance and pensions	372	857	130.4	293	542	85.0	—
Life and other personal insurance	818	2,067	152.7	633	1,755	177.3	—
Retirement, pensions, and Social Security	367	270	-26.4	283	320	13.1	—
	451	1,797	298.4	350	1,435	310.0	—

¹ Income values are derived from "complete income reporters" only. The distinction between complete and incomplete income reporters is based in general on whether the respondent provided values of major sources of income, such as wages and salaries, self-employment income, and Social Security income.

² CPIs for some components are not conceptually comparable to the CE data and are not shown. For some components, there may not be a direct correspondence between the CE and CPI, and for those components the change for the most comparable component, or a weighted average change of more than one component, is shown.

Table 2. Expenditure shares of urban and rural consumer units, Interview Survey, 1972-73, 1980, and 1985¹
 [In percent]

Item	Urban			Rural			Significance test ²
	1972-73	1980	1985	1972-73	1980	1985	
Total expenditures:							
Average (in dollars)	\$9,420	\$16,723	\$22,810	\$ 7,760	\$13,663	\$19,197	—
Percent of total	100.0	100.0	100.0	100.0	100.0	100.0	—
Food	17.8	19.0	15.2	19.5	20.4	15.6	—
Food at home	(9)	14.3	10.3	(9)	16.6	11.5	*
Food away	(9)	4.7	5.0	(9)	3.8	4.2	*
Alcoholic beverages9	1.7	1.3	.6	1.4	1.1	—
Housing	28.0	29.3	30.7	24.5	25.2	26.4	*
Shelter	16.0	16.3	17.9	11.5	11.8	13.6	*
Owned dwellings	7.9	9.5	10.3	7.2	8.4	9.5	*
Rented dwellings	6.9	5.3	5.7	3.2	2.1	2.8	*
Other lodging	1.2	1.5	1.9	1.1	1.2	1.2	*
Fuels and utilities	6.2	7.1	7.3	7.6	8.4	8.2	*
Household operations	1.5	1.6	1.6	1.1	1.2	1.3	*
Housefurnishings and equipment	4.4	4.3	3.9	4.4	3.2	3.3	*
Apparel and services	7.8	5.4	5.4	6.8	4.5	4.4	*
Transportation	18.7	20.4	19.8	22.0	24.7	25.0	*
Vehicles	7.5	7.0	8.6	9.6	9.4	12.6	*
Gasoline and motor oil	4.3	7.1	4.4	5.7	9.4	6.0	*
Other vehicle expenses	5.7	5.1	5.4	6.2	5.7	5.9	*
Public transportation	1.2	1.3	1.3	.4	.5	.5	*
Health care	4.6	4.4	4.4	5.8	5.2	6.1	*
Entertainment	4.1	4.3	4.9	3.9	4.1	4.7	—
Personal care	1.1	.9	.9	1.0	.8	.7	*
Reading5	.7	.6	.5	.6	.6	—
Education	1.3	1.2	1.4	1.0	.7	1.1	*
Tobacco	1.4	1.0	.9	1.5	1.3	1.3	*
Miscellaneous	1.1	1.5	1.6	1.0	1.5	1.1	*
Cash contributions	3.9	2.9	3.8	3.8	2.5	2.8	*
Personal insurance and pensions	8.7	7.2	9.1	8.2	7.0	9.1	—
Life and other personal insurance	3.9	1.5	1.2	3.6	1.8	1.7	*
Retirement, pensions, and Social Security	4.8	5.7	7.9	4.5	5.2	7.5	—

¹ Expenditure shares are the percent of total expenditures spent on each component.

² A chi-square test of the significance of the difference between proportions was used to test whether the difference between urban and rural shares in 1985 was significant at the 5-percent

level. Those components for which the difference was significant are marked by an asterisk.

³ Data not available.

Changes from 1972-73 to 1985. There was little change between 1972-73 and 1985 in the proportion of the total population that was rural. The average size of the consumer unit and the average age of the consumer unit head decreased slightly for both urban and rural consumers over the period.

Increased expenditures for housing and transportation were primarily responsible for the overall increase in spending between 1972-73 and 1985 for both urban and rural consumer units. (See table 1.) Expenditures for some other components increased at a faster rate, but housing and transportation accounted for much of the increase because they were a larger share of consumers' total spending and they rose faster than the average. Among the housing subcomponents, expenditures on owned dwellings rose faster than average total expenditures for both urban and rural consumer units, while expenditures on rented dwellings rose at a slower rate than the total. Among the transportation subcomponents, expenditures on vehicles increased at a faster rate than total expenditures and somewhat more for rural than for urban units. Gasoline and motor oil expenditures increased at a slightly faster rate than total expenditures for both urban and rural consumers. Gasoline price increases that contributed to sharp increases in expenditures in the

1970's were offset by subsequent price decreases and by conservation measures. Prices for motor fuel, motor oil, coolant, and other products rose 241 percent between 1973 and 1981 as measured by the CPI, then dropped about 9 percent between 1981 and 1985; the net change from 1973 to 1985 was 211 percent. Also, average fuel consumption per automobile dropped by 24 percent from 1973 to 1984 while the average mileage per gallon for automobiles improved 28 percent over that period.⁴

Expenditures on some components, such as vehicles mentioned previously, rose at different rates for urban consumers than they did for rural consumers. Expenditures for alcoholic beverages rose at a faster rate for rural consumer units than for urban units between 1972-73 and 1985. However, this component is historically underreported so that changes may reflect better reporting rather than actual increases alone. Expenditures for other lodging (which include expenses for vacation homes and lodging while out of town) rose faster for urban than for rural units, as did expenditures for miscellaneous goods and services (which include bank fees, legal and accounting fees, funerals, cemetery lots, union dues, occupational expenses, and finance charges other than for mortgages and vehicles).

Changes in expenditure shares. Changes in the shares of total expenditures spent on different components are used to show how consumers' expenditure patterns change over time. Increases or decreases in shares show changes in the way consumer units allocate their expenditures on individual components relative to the change in total expenditures. Changes in shares can take place gradually over a period of years as consumers alter their expenditures in response to changes in tastes, preferences, or lifestyle, or in response to sudden economic changes. For example, the share of the food dollar spent on food at home has been declining over time and can be attributed in part to the increase in the number of two-earner households. Families have had to adjust their schedules to meet job requirements, which has resulted in multiple-earner families taking more meals outside the home. An example of a more sudden change was the sharp increase in expenditures on gasoline in the 1970's as a result of the 1973-74 oil embargo that depleted supplies and forced up prices.

Data in table 2 show how expenditure shares for urban and rural consumer units changed between 1972-73 and 1985. Shares are also shown for 1980 because, for some components such as food and gasoline, the shares over the entire period from 1972-73 to 1985 were not steadily increasing or decreasing. Food expenditure shares for urban and rural consumer units each increased about 1 percentage point between 1972-73 and 1980. Subsequently, food expenditure increases slowed relative to increases in expenditures for other goods and services, and this is reflected in the drop in food expenditure shares between 1980 and 1985:

*Food expenditure shares
(percent of total expenditures)*

	Urban			Rural		
	1972-73	1980	1985	1972-73	1980	1985
Food, total.	17.8	19.0	15.2	19.5	20.4	15.6
Food at home . . .	*	14.3	10.3	*	16.6	11.5
Food away.	*	4.7	5.0	*	3.8	4.2

*Data not available.

Food expenditure shares dropped for both urban and rural consumer units, but more for rural units than urban. In 1972-73, food accounted for a larger share of rural consumers' total unit expenditures than of urban consumers'—20 percent versus 18 percent—but, by 1985, this difference had almost disappeared. The decline in food expenditure shares from 1980 to 1985 was accounted for entirely by the drop in the food at home component, as expenditure shares for food away from home actually increased slightly over the period. As a result, food away from home accounted for an increasing portion of overall food expenditures. The drop in expenditure shares for food at home corresponds to the slower price rise of food at home items relative to the price increases of all goods and services. From 1980 to 1985, food at home prices as measured by the CPI-U rose only 18 percent compared to a 31-percent increase in the All-Items CPI-U.

Housing expenditure shares increased steadily from 1972-73 to 1985 for both urban and rural consumer units; the share that urban units spent on housing rose about 3 percentage points, from 28 percent in 1972-73 to 31 percent in 1985, while rural units' share rose about 2 percentage points, from 25 percent to 27 percent over the period. The percentage of units that were homeowners rose about 3 percentage points for both urban and rural consumers.

Transportation expenditure shares rose over the period 1972-73 to 1985, but more for rural than for urban consumer units. Shares rose from 22 to 25 percent for rural units compared to an increase from 19 to 20 percent for their urban counterparts. The sharp increase in gasoline prices contributed to a rise in gasoline expenditure shares from 1972-73 to 1980. However, the subsequent decline in prices, coupled with conservation measures, resulted in gasoline shares dropping to about the same level as in 1972-73 by 1985. Increases in expenditures on vehicles were responsible for the larger increases in the overall transportation component for rural consumers than for urban consumers. Vehicle shares dropped slightly from 1972-73 to 1980 for both urban and rural consumer units. However, they then rose sharply from 1980 to 1985 and more rapidly for rural than for urban units. Other transportation components accounted for about the same share of total expenditures in 1985 as in 1972-73.

Expenditure shares for retirement, pensions, and Social Security also increased from 1972-73 to 1985. Shares rose about 3 percentage points for both urban and rural consumer units, with much of the increase occurring between 1980 and 1985. Over that period, the annual maximum taxable earnings for Social Security rose from \$25,900 to \$39,600 and the employee contribution rate rose from 6.13 percent to 7.05 percent.⁵

THIS REPORT SHOWS that there are differences in the way that urban and rural consumers allocate their expenditure budgets. Also, the differences in expenditure shares between the two groups are not static, but rather fluctuate in response to socioeconomic changes. As more data become available, analysts will have the opportunity to compare and follow changes in expenditure patterns of the two groups. The data provided by the Consumer Expenditure Survey can be of help in developing economic programs specific to each of the two different population groups.

—FOOTNOTES—

¹ See Kathleen K. Scholl, "Income and Poverty Rates: Farm and Non-farm Residence," *Family Economics Review*, no. 1, 1983, pp. 16-19; and Kathleen K. Scholl, "Economic Outlook for Farm Families: 1986," in U.S. Department of Agriculture, *Outlook '86: Proceedings*, Agricultural Outlook Conference, Dec. 4, 1985, pp. 279-88.

² Urban, as defined in this survey, includes the rural population within metropolitan areas.

³ A consumer unit comprises: 1) all members of a particular household related by blood, marriage, adoption, or other legal arrangements; 2) a

person living alone or sharing a household with others or living as a roomer in a private home or lodging house or in permanent living quarters in a hotel or motel but who is financially independent; or 3) two or more persons living together who pool their income to make joint expenditure decisions. For the purposes of this report, consumers and consumer units may be used interchangeably.

⁴ Data on fuel consumption are from *Statistical Abstract of the United States, 1987* (Bureau of the Census, 1987), p. 590, table 1032, "Domestic Motor Fuel Consumption, By Type of Vehicle: 1970 to 1984."

⁵ Data are from *Statistical Abstract of the United States, 1987*, p. 348, table 586, "Social Security (OASDI)—Contribution Rates: 1970 to 1990."

Glass container wage gains trail those in other glassware plants

A Bureau of Labor Statistics study of the pressed or blown glass and glassware industry in June 1986 found that wages in glass container manufacturing averaged \$9.89 an hour—a 29-percent increase over the \$7.66 average reported in May 1980.¹ Average straight-time earnings of workers in other types of glassware plants (for example, those making tableware) rose 48 percent—from \$6.40 an hour to \$9.47.² Because of smaller pay gains over the 6-year period, glass container workers saw their pay advantage over workers in the other glassware plants narrow from 20 percent in 1980 to 4 percent in 1986.³

Between 1980 and 1986, glass containers have met with strong competition from metal cans and plastic bottles, contributing to 6 straight years of declining shipments of glass containers.⁴ The industry has reacted, in part, through smaller wage settlements, closing marginal plants, and downsizing staff at the remaining locations. The Bureau's 1986 survey estimates that there were 91 glass container plants employing about 39,000 production workers—an average plant size of 425 workers; the 1980 survey reported 104 plants with 54,500 production workers—an average plant size of about 525 workers.⁵ The sharp employment declines have more than offset lowered container output, substantially raising the industry's productivity (output per hour) to an average annual rate of 4.8 percent between 1980 and 1985 (the latest year available).⁶

The narrowing pay gap affected a large majority of the production occupations covered in the 1980 and 1986 surveys. Table 1 presents average hourly earnings of surveyed jobs common to both industries. It shows that by 1986, little or no pay advantage was reported in glass container firms for batch mixers, mold polishers, final inspectors, selectors, pipefitters, assemblers, janitors, and material handling laborers. In fact, furnace operators had an 8-percent disadvantage relative to the same occupation in other glassware factories, whereas they had an 11-percent advantage in 1980. In contrast, forming-machine upkeepers and watchmen, respectively, the highest and lowest paying jobs studied for glass container workers, maintained a substantial pay ad-

Table 1. Average hourly earnings¹ in glass container and other pressed or blown glassware manufacturing, selected occupations, June 1986 and May 1980

Department and occupation	June 1986			May 1980		
	Glass containers	Other glassware industry	Containers as percent of other glassware average	Glass containers	Other glassware industry	Containers as percent of other glassware average
All production workers ²	\$ 9.89	\$ 9.47	104	\$ 7.66	\$ 6.40	120
Batch house and furnaces:						
Batch mixers	9.21	9.11	101	7.25	6.34	114
Batch-and-furnace operators	10.12	8.68	117	7.46	6.19	121
Cullet handlers	9.16	8.60	107	7.09	6.05	117
Furnace operators	9.70	10.53	92	7.54	6.79	111
Machine forming:						
Forming-machine operators	12.35	10.79	114	10.02	8.04	125
Forming-machine upkeepers	13.43	9.85	136	10.85	7.85	138
Mold polishers	9.90	9.86	100	7.19	5.83	123
Annealing:						
Lehr tenders	9.79	8.71	112	7.33	6.24	117
Decorating:						
Decorating-machine operators	9.64	8.43	114	7.25	5.83	124
Mold shop:						
Mold makers, metal	12.64	12.08	105	9.93	8.95	111
Selecting and inspecting:						
Inspectors, final	9.19	9.08	101	7.10	6.15	115
Selectors	8.75	8.80	99	6.74	5.78	117
Maintenance:						
Electricians	12.50	11.72	107	9.93	8.18	121
Machinists	12.69	12.09	105	10.06	8.62	117
Mechanics	12.40	11.55	107	9.90	8.12	122
Pipefitters	11.90	11.79	101	9.52	8.17	117
Miscellaneous:						
Assemblers, carton	8.94	8.90	100	6.87	5.86	117
Janitors	8.74	8.63	101	6.58	5.90	112
Laborers, material handling	9.14	9.07	101	6.99	5.62	124
Power truckers	9.49	9.03	105	7.22	6.23	116
Watchmen	8.50	6.25	136	6.76	5.25	129

¹ Earnings data exclude premium pay for overtime and for work on weekends, holidays, and late shifts. Incentive payments, such as those resulting from piecework or production bonus systems, and cost-of-living pay increases (but not bonuses) were included as part of the workers' regular pay. Excluded are performance bonuses and lump-sum payments, as well as profit-sharing payments, attendance bonuses, Christmas or yearend bonuses, and other non-production bonuses.

² Includes data for workers in occupations in addition to those shown separately.

vantage (36 percent) over the 6-year period.

In addition to similar pay levels, the glassware industries also shared a broad mix of skill requirements which provided for substantial differences in pay between the highest and lowest paid occupational groups studied. For example, the top earners in glass container firms (forming-machine upkeepers at \$13.43 an hour) averaged 58 percent more than the lowest paid (watchmen at \$8.50 an hour). In other glassware plants, the corresponding differential was even

greater—a 93-percent spread between hourly pay levels for maintenance machinists (\$12.09) and watchmen (\$6.25).

About nine-tenths of the workers in the two industries were paid time rates, usually under formal systems providing single rates for specified occupations. Forming-machine operators and upkeepers, two exceptions, were commonly paid on an incentive basis; in glass containers, they typically averaged 15 to 20 percent more in hourly earnings than their time-rated counterparts.

Nearly all establishments in the survey operated under labor-management contracts covering all or a majority of their production workers. The American Flint Glass Workers Union of North America (AFL-CIO) usually represented workers in the mold-making departments in both industries and other production workers in the pressed or blown glassware (except containers) industry. The Glass, Pottery, Plastics, and Allied Workers International Union typically had contracts covering production workers outside the mold-making departments of glass container plants. Bargaining is generally conducted on a company-by-company basis.

Virtually all establishments in the 1986 survey provided paid holidays, usually 12 per year, and paid vacations, typically 1 to 6 weeks per year depending on years of service. Other widespread provisions for paid time off included sickness and accident insurance or sick leave, or both; funeral leave; and jury-duty leave. Retirement pension plans and various insurance plans—including life, accidental death and dismemberment, hospitalization, surgical, basic and major medical, and dental coverage—also were available to a large majority of the workers. Employers typically paid the entire cost of these benefits.

For each of the two industries, separate reports for regions of industry concentration are available from the Bureau of Labor Statistics or any of its regional offices. A comprehen-

sive report, *Industry Wage Survey: Pressed or Blown Glass and Glassware, June 1986*, Bulletin 2286, may be purchased from the Bureau of Labor Statistics, Publication Sales Center, P.O. Box 2145, Chicago, IL 60690, or the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. The bulletin provides additional information on occupational pay, by region and by size of establishment, and on the incidence of employee benefits, nationwide and by region. □

—FOOTNOTES—

¹ For an account of the 1980 study, see "Container plant workers win largest gains in glassware manufacturing," *Monthly Labor Review*, December 1981, pp. 54-55.

Earnings data exclude premium pay for overtime and for work on weekends, holidays, and late shifts. Incentive payments, such as those resulting from piecework or production bonus systems, and cost-of-living pay increases (but not bonuses) were included as part of the workers' regular pay. Excluded are performance bonuses and lump-sum payments of the type negotiated in the auto and aerospace industries, as well as profit-sharing payments, attendance bonuses, Christmas or yearend bonuses, and other nonproduction bonuses.

² The wage and salary component of the Bureau's Employment Cost Index for durable goods manufacturing rose 40 percent between the second quarter of 1980 and June 1986.

³ The gap narrowed in part because container employees gave up a 31-cent-per-hour scheduled increase in 1985 when their employers were experiencing financial problems. Still, even if one counts the 31 cents which was later restored by several companies in August 1986, the gap was less than half that reported in 1980.

⁴ For a discussion of the rigid containers industries, see *1987 U.S. Industrial Outlook* (International Trade Administration, 1987), ch. 6-1 through 6-6.

⁵ A minimum size for survey establishments was 100 workers in both the 1980 and 1986 studies.

⁶ See *Productivity Measures for Selected Industries, 1958-85*, Bulletin 2277 (Bureau of Labor Statistics, 1987), p. 139.