

Establishment Attributes

Three-fourths of nonmetro and metro establishments reported they had added products or substantially improved product quality. Nonmetro establishments were more likely than metro manufacturers to report having added employees from 1992 to 1995. They also paid lower average hourly wages and had a lower percentage of workers in professional, technical, and management positions.

Production Methods

Nonmetro establishments are somewhat more likely than metro establishments to employ large batch assembly line methods of producing "large numbers of the same product," while metro plants are more likely to custom-produce individual units or to produce small batches of a distinct product (table 1). About 20 percent used "other" methods, which respondents usually identified in written comments as a combination of the other three methods.

Most respondents seem to have been actively seeking improvements in their operations to respond to markets and lower costs. Three-fourths of establishments said that they had added new products or substantially improved product quality. Nearly half said that they had substantially lowered their costs of production. Responses of metro and nonmetro establishments were similar, but nonmetro plants were slightly less likely to report having added new products and improved product design.

Work Force Characteristics

Nonmetro establishments reported an average of 190 employees in 1995, slightly less than the metro average of 202 (table 2). However, the tendency has been for nonmetro plants to expand employment, while metro plants appear to be shrinking employment. The average number of jobs reported in 1992 was 182 (8 less than the 1995 average) for nonmetro plants and 231 (29 more than the 1995 average) for metro plants. These results are consistent with regional employment data, which show a modest shift of manufacturing jobs from urban to rural areas. The work force in nonmetro plants is more heavily composed of production labor than in metro plants. Metro plants have more professional, technical, and clerical and other workers. About 10-11 percent of workers are in managerial positions in both metro and nonmetro plants. More than 9 in 10 production workers are permanent full-time employees in both metro and nonmetro establishments.

Table 1—Production methods and product changes by manufacturing establishments

Characteristic	Nonmetro	Metro
	<i>Percent</i>	
How products are generally made:		
Custom produce or make single units for each customer	29*	33*
Produce small batches or limited numbers of a distinct product	17*	23*
Produce large numbers of the same product	34*	24*
Other methods ¹	20	20
Changes to product line in previous 3 years:		
Dropped products	44	47
Added new products	77*	83*
Substantially improved product design	62*	67*
Substantially improved product quality	75	77
Substantially lowered cost of production	47	47

* = Nonmetro-metro difference is statistically significant at 0.05 level.

¹Most respondents described "other methods" as a combination of custom, small batch, and large batch production.

Source: ERS Rural Manufacturing Survey, 1996. N=2,764 nonmetro, 1,059 metro.

Nonmetro plants tend to pay lower wages than metro plants, and 1992-95 wage growth was slower in non-metro plants. Nonmetro plants paid an average of \$8.88 per hour to production workers in 1995, up from \$7.86 in 1992. Metro plants paid an average of \$10.43 in 1995 and \$9.18 in 1992. The most common benefits provided to production workers were paid sick or vacation leave and contributions toward health insurance. Most establishments also provided a pension or retirement plan. The percentage of plants covered by a collective bargaining agreement was 14-15 percent for both metro and nonmetro plants. The availability of benefits was similar in metro and nonmetro plants, but nonmetro plants were slightly less likely to offer health insurance contributions and paid leave.

Workers with a minority racial or ethnic background made up an average of 41 percent of the production labor in metro plants, compared with only 20 percent in nonmetro plants. Nonmetro plants had a slightly higher percentage of women in their work force. Nonmetro establishments reported an average of 18 percent of production workers with less than a high school degree. An average of 71 percent had completed high school, but did not attend college, and 11 percent had completed at least 1 year of college. On average, nonmetro establishments reported a larger share of workers with a high school degree than did metro establishments, but metro establishments had a slightly higher proportion of workers with college training.

Table 2—Work force characteristics of manufacturing establishments

Characteristic	Unit	Nonmetro	Metro
Average employees, 1995	Number	190*	202*
Average employees, 1992	Number	182*	231*
Management (including financial and legal officers)	Percent	10	11
Professional and technical (engineers, scientists, computer specialists, draftsmen, lawyers)	Percent	6*	11*
Production workers, including foremen	Percent	75*	66*
Other workers (sales, clerical, administrative support)	Percent	9*	12*
Production workers:			
Permanent full-time	Percent	93	92
Permanent part-time	Percent	4	3
Temporary	Percent	3	5
Number of production workers varies seasonally by at least 20 percent	Percent	17	15
Average hourly wage, production workers, 1995	Dollars	8.88*	10.43*
Average hourly wage, production workers, 1992	Dollars	7.86*	9.18*
Benefits provided to production workers:			
Pension or retirement plan	Percent	63	61
Contribution toward employee group health insurance	Percent	87*	92*
Profit-sharing/stock purchase plan	Percent	39	39
Paid sick leave or vacation leave	Percent	91*	93*
Covered by a collective bargaining agreement	Percent	14	15
Production workers with minority ethnic/racial background	Percent	20*	41*
Production workers who are women	Percent	31	27
Highest level of education achieved by production workers:			
Less than high school degree	Percent	18*	23*
High school degree and less than 1 year college	Percent	71*	65*
One or more years of college	Percent	11*	13*

* = Nonmetro-metro difference is statistically significant at 0.05 level.

Source: ERS Rural Manufacturing Survey, 1996. N=2,764 nonmetro, 1,059 metro.