## How Rural Low-Skill Change in the 1990s Compares with the 1980s

As in the 1990s, most of the drop in low-skill share in the 1980s was due to shifts from low-skill to higher skill occupations within industries. Such shifts accounted for about 85 percent of the drop in low-skill share nationally and nearly 90 percent of the drop in nonmetro areas (table 6). However, in direct contrast with the 1990s, shifts toward higher skill occupations in services contributed much more to low-skill decline than the shift in goods, accounting for over half of the total share decline both nationally and in nonmetro areas.

Also unlike the 1990s, the employment share of the goods sector shrank much more rapidly during the 1980s, especially in agriculture and mining. As a result, the transition from goods to services contributed substantially to increasing skill levels in both metro and nonmetro areas during the 1980s. Growth in high-skill industries in the goods sector outpaced growth in low-skill industries in the 1980s, just as they would in the next decade. In urban areas, the same was true of high-skill industries in the service sector, including such industries as health and finance. Together, industrial shifts within those sectors accounted for about 12 percent of the decline in low-skill share in metro areas in the 1980s. The situation in the 1980s in rural areas, however, was akin to the pattern of the 1990s, as within-sector interindustry shifts raised low-skill employment share only slightly.

In short, rapid occupational upskilling combined with a more rapid transition from goods to services made the 1980s a decade of steep decline in the

Table 6
Employment change due to change in low-skill share by components, 1980-1990

	Metro		Nonn	Nonmetro		Total U.S.	
Item	Jobs <sup>1</sup>	Share <sup>2</sup>	Jobs <sup>1</sup>	Share <sup>2</sup>	Jobs <sup>1</sup>	Share <sup>2</sup>	
	Thousands	Percent	Thousands	Percent	Thousands	Percent	
Occupation mix	-4,597	85.3	-875	89.6	-5,471	85.9	
Within goods	-1,629	30.2	-301	30.8	-1,930	30.3	
Within services	-2,967	55.1	-574	58.8	-3,542	55.6	
Interindustry	-648	12.0	16	-1.6	-633	9.9	
Within goods	-280	5.2	1	-0.1	-280	4.4	
Within services	-368	6.8	15	-1.5	-353	5.5	
Sectoral	-458	8.5	-151	15.4	-609	9.4	
Residual	-312	-5.8	33	-3.4	345	-5.4	
Overall	-5,391	100.0	-977	100.0	-6,368	100.0	

<sup>&</sup>lt;sup>1</sup>These values represent the changes in low-skill employment if total employment had not changed between 1980 and 1990, given the actual changes in employment mix between 1980 and 1990.

Source: Economic Research Service/USDA, using data from the Current Population Survey.

<sup>&</sup>lt;sup>2</sup>Share of overall employment.

low-skill share of jobs. Why did the 1990s look so different, especially given the widespread expectation that the pace of upskilling would quicken? One possibility is that increased immigration may have made less skilled labor cheaper and therefore delayed employer decisions to shift to high-skill-biased production methods. This is consistent with the smaller decline in low-skill share in metro areas, where the immigration of less skilled workers was concentrated.

The differing character of the recessions of the early 1980s and the early 1990s may also be implicated. It was widely noted at the time that while the recession of the early 1980s was accompanied by large layoffs of blue-collar workers, white-collar workers were largely spared. In contrast, the recession of the early 1990s was associated with substantial "downsizing" of white-collar workforces. This finding is consistent with the observation of slower upskilling during the 1990s. However, a full explanation of the slowdown in upskilling would also have to address the reasons for the differing character of the two recessions.

Technological change may have dampened employers' replacement of less skilled labor. In particular, the mix of technology changes may have shifted from more skill-intensive in the 1980s—for example, the introduction of spreadsheet programs for PCs—to less skill-intensive in the 1990s—for example, cash register icons for frequently ordered dishes at a fast food restaurant. This possibility is consistent with the observation that wage inequality stabilized in the 1990s, despite continuing advances in computer technology (Card and DiNardo, 2002).

Much of the skill upgrading in the 1990s also may not have been captured by occupation and industry mix changes but was occurring within occupations. Another way of saying this is that the DOT skill measures may have become less reliable as the skill content of occupations increased. This likelihood is discussed in Wojan (1999). However, we have no specific data to show that this was more significant in the 1990s than in the 1980s.

It is also important to note the differences across major sectors in the two decades. In particular, while within-industry skill upgrading slowed in all sectors, the slowdown was moderate in the goods sector and much sharper in the service sector. This suggests that whatever factors driving the trend were operating more powerfully in the service sector.