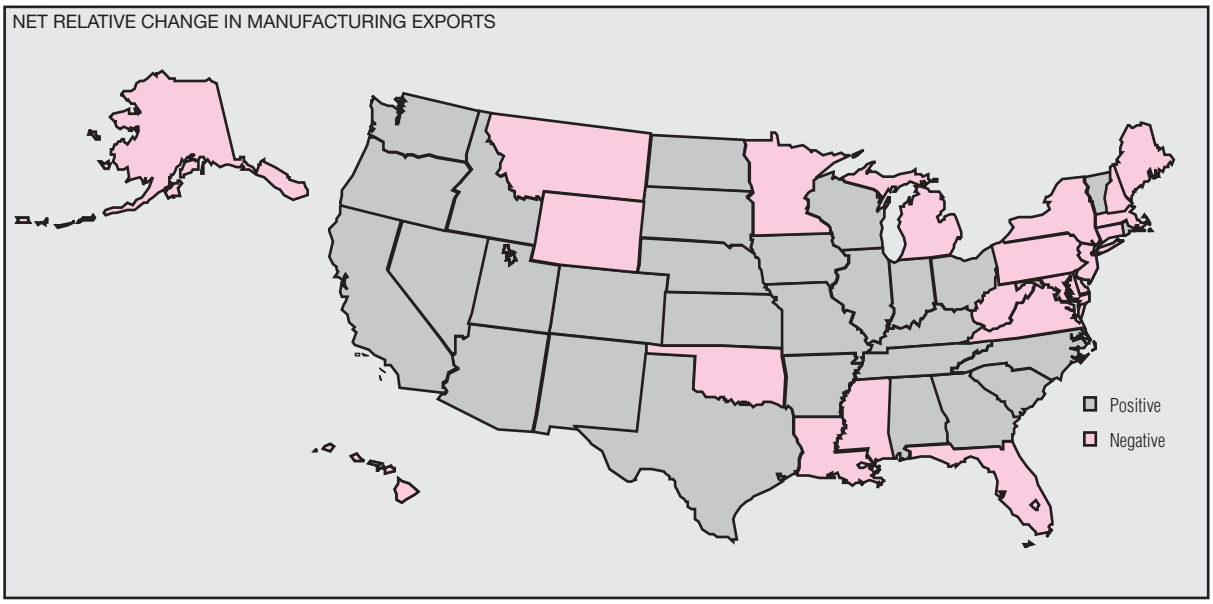
Fourth District Export Growth



Shift-Share Results
(Percent)

	Net relative change	Industry-mix effect	Competitive effect	Destination effect
Ohio	1.7	0.1	2.2	–0.6
Kentucky	44.1	–4.4	51.1	–2.7
Pennsylvania	–0.8	3.5	–4.6	0.4
West Virginia	–33.2	–12.7	–17.8	–2.8
Illinois	19.6	0.8	21.3	–2.6
Indiana	22.7	–0.4	23.7	–0.6
New York	–31.2	3.2	–31.1	–3.3
Michigan	–35.0	1.9	–46.3	9.4

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; and Cletus C. Coughlin and Patricia S. Pollard, "Comparing Manufacturing Export Growth across States: What Accounts for the Difference?" Federal Reserve Bank of St. Louis, *Review,* vol. 83, no. 1 (January/February 2001), pp. 25–40.

Since the mid-1980s, overall U.S. manufacturing exports have increased sharply as a share of gross domestic product, but their state-by-state performance has been uneven. In the Fourth Federal Reserve District, Ohio's and Kentucky's manufacturing exports grew faster than the national average, while Pennsylvania's and West Virginia's lagged behind it.

Cletus Coughlin and Patricia Pollard, economists at the St. Louis Federal Reserve Bank, recently examined relative export growth by splitting the change in each state's net manufacturing exports into three constituent effects. The industry-mix effect indicates that a state contains a higher concentration of industries whose exports expanded faster than the U.S. average. The competitive effect indicates that exports from a state's industries are leading or lagging export growth among similar industries nationwide. The destination effect attributes a state's differential export performance to whether its manufacturers predominantly serve faster- or slower-growing foreign markets.

A consistent pattern does not emerge in the Fourth District. Kentucky, which showed solid relative export growth, benefited from a strong competitive effect. Ohio's relative export growth stemmed from modest competitive and industrial-mix effects. Pennsylvania's exports benefited from a favorable industrial mix and fast-growing foreign customers, but its competitive effect held Pennsylvania back. West Virginia lost ground on all counts.