Manufacturing on the Move

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BOOK REVIEW

Manufacturing on the Move.
By Robert W. Crandall, Washington, DC: The Brookings Institute, 1993, pp. xii, III, $26.95

In this study, Robert Crandall empirically examines the shift in manufacturing employment and output from the so-called “Rust Belt” states – the states from Wisconsin to New York – to the South and West [the “Sun Belt”]. Crandall finds that differences in labor market conditions – in the degree of unionization and wage rates – provide the principal explanation of this growth of manufacturing employment and output in the West and South. He also provided evidence that the movement of manufacturing from the Rust Belt to the Sun Belt is not likely to stop because the interstate differentials between the Rust Belt and the Sun Belt in terms of wages and the degree of unionization have not significantly narrowed.

Crandall notes that the popular explanations for the decline in manufacturing in the Rust Belt states were slow economic growth after the oil price shocks of the 1970s and the sharp rise in the value of the dollar that occurred in the early 1980s. Crandall rejects both of these explanations. He observes that the United States experienced eight years of sustained economic growth after the 1981-1982 recessions and that by 1992 the dollar had receded to its lowest real level since the early 1970s. He reasons that if the lack of growth and an overvalued dollar were causes of the Rust Belt problems in the 1980-1985 period, then surely this area should have rebounded since 1985. But, “…seven years after the peak of the exchange rate and eleven years after the peak in energy prices, there has been no recovery in Rust Belt manufacturing employment” [p.13]. Indeed, manufacturing employment in the Rust Belt states continues to fall, and manufacturing jobs continue to shift to the South and West. He also observes that “…any attempt to link the long-run decline of Rust Belt manufacturing employment to the value of the dollar is difficult...because this decline has persisted through periods of dollar appreciation and depreciation” [p.22].

In chapter 2, which is the pivotal chapter in this study, Crandall empirically investigates why manufacturing continues to move away from the Rust Belt. The author integrates several factors into his estimates, including: WAGE, the average wage rate in each region; UNION, a measure of the pervasiveness of unions in each region; P, a vector of other input costs such as energy; GOVT, a measure of the region’s public infrastructure; DEMAND, a measure of the strength of demand within the region; TEMP, a measure of the attractiveness of the region’s climate; and TAX, a measure of taxes specific to the region.

His estimates for states, which use standard econometric tools, indicate that two labor market variables. The degree of unionization and wage rates, exercise a negative and significant impact on employment and output growth in manufacturing. His estimates for metropolitan areas also point to the importance of labor market variables – unionization and wage rates – in explaining the growth or decline in manufacturing output and employment. Interestingly, Crandall obtains corroborative evidence of these results from individual manufacturing industries. Hence, he strongly concludes that labor market variables [the degree of unionization and wages] consistently and negatively impacted on manufacturing growth over the 1967-1991 period.
His empirical estimates in chapter 3 indicate, among other things, that manufacturing industries have been moving to areas with falling excess earnings levels, not that earnings are depressed by the growth of manufacturing. He also finds that the decline in manufacturing in the Rust Belt has had a particularly hard economic impact on young black males.

As a result of his empirical analysis in chapter 4, Crandall concludes that whatever may have caused the movement of manufacturing from the Rust Belt – wage rates, the degree of unionization, state and local taxes, or government spending – there is little reason to expect that this movement of manufacturing will abate during the next few years or even decades. He finds that the differences in unionization, wage rates, state and local taxes, and government expenditures between the Rust Belt and the remainder of the nation have exhibited no significant signs of narrowing over the past quarter century. Furthermore, he concludes that, even if these various differences were to narrow somewhat, the natural advantages of the West and South would continue to attract manufacturing away from the colder and apparently less desirable Rust Belt.

To lend a real world flavor to his empirical analysis, Crandall in chapter 5 discusses three specific industries: steel, tires, and motor vehicles. He observes that in the steel industry, high labor costs and productivity made large firms increasingly noncompetitive with the smaller and more efficient “mini-mills”, some to the largest of which emerged in the West and South. Among the factors behind this shift were low unionization and wages in the South, as well as lower transit and electricity costs in the West and South, the concurrent shifting to the South of industries that consume steel and changing iron ore and coal requirements that essentially eliminated a major Rust Belt geographic advantage.

In chapter 6, Crandall argues that there is little that governments can do to alleviate the poor climate resulting from decades of labor-management antagonism. He believes that wage subsidies, reductions in employer contributions to government benefit programs, reduced regulation, and even enterprise zones might be helpful in offsetting the high cost of labor in Rust Belt states. However, while such policies may slow the movement of manufacturing, they will not be able to stop it.

Overall, this study is well written and reasonably convincing. Ideally, it might have been useful to examine the impacts of wages on manufacturing employment and output growth after allowing for geographic living cost differentials. It might also have been useful to determine to what extent real wage differentials among areas have diverged or converged. In any case, this study may prove quite useful.

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