

2. The regional distribution of the output of national industries, X_N^r , was obtained by directly allocating the share of national output to a region in proportion to that region's share in the productive capacity of a particular industry.¹⁹ The change in labor earnings by region for national industries was determined by subtracting the regional distribution of outputs before the shift from the distribution of outputs after the shift and multiplying by the labor coefficients.²⁰

The first step in establishing the level of output of each local industry in each region was to distribute the final demand for local industries by regions. Military demand was distributed according to Department of Defense payrolls in each region. Nonhousehold civilian final demand was subdivided into its seven component bills of goods, each one was distributed according to a factor representing the importance of that final demand in a particular region, and the seven resulting matrices were added.²¹

Then, the output in each local industry in each region was obtained by inserting the appropriate matrices and vectors on the righthand side of equation (8). Outputs of local industries before the shift were subtracted from the outputs after the shift and the result was multiplied by the labor coefficients to give the change in labor earnings in local industries.²² The total change in labor earnings by regions, finally, was obtained by adding the change occurring in local industries in a region to that occurring in national industries and to that originating within the military and nonhousehold civilian sectors of the economy.²³

¹⁹ The sources for the P_N matrix, the distribution factors for national industries, are given in table A-11. The actual distribution factors used are shown in table A-5.

²⁰ See table A-6 which includes the change in dollar and in percentage terms. Only one column is needed to represent the percentage changes for national industries since total U.S. demand for the industry's product determines the output within a particular region.

²¹ The sources for the D_0 and D_N matrices, the distribution factors for local industries, are given in table A-12. Table A-4 contains the regionally distributed final demands.

²² See table A-7 for dollar and for percentage changes in local industries.

²³ See table A-9.