## WORKING PAPER

Executive Summary

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## LOCAL LABOR MARKET CONDITIONS AND RETIREMENT BEHAVIOR

BY DAN A. BLACK AND XIAOLI LIANG

In this paper, we explore the effect of local labor market conditions on the labor supply decisions of older workers. We use three different sources of variation: shocks to the US steel industry, shocks to Appalachian coal mining, and shocks to US manufacturing. While each experiment uses a different methodology, the three tell a remarkably consistent story: the retirement decisions of Americans over the last thirty-five years have been affected by the performance of local labor markets.

First, we exploit the decline of the US primary metals industry – primarily the steel industry – and ask if counties that had a concentration of factories in the primary metals industry had higher takeup rates and higher expenditures in the Old Age components of OASDI expenditures when the industry declined sharply starting in 1981. Because steel production benefits from good access to water transportation, proximity to ore fields, and proximity to coal mines, the distribution of employment in the US steel industry is quite concentrated. Using this variation in concentration of the primary metals industry, we find that a 10 percent reduction in earnings resulting from the decline of the primary metals industry resulted in a 1.5 percent increase in the participation and expenditures of the Old Age program.

Our second experiment uses the boom in the coal industry associated with the 1973 OPEC Oil Embargo and the subsequent collapse in the industry with the sharp decline in oil prices in the 1980s to assess how the boom and bust in the coal industry affected participation and expenditures in the Old Age program. Because coal can only be mined in locations that have endowments of coal, the distribution of coal mining employment is again quite concentrated. We find that a 10 percent increase in earnings from the coal industry reduced participation about 0.9 percent and decreases expenditures about 1.2 percent.

Finally, we examine the impact of the decline in US manufacturing on the labor force participation of older men. Surprisingly, we find a great deal of heterogeneity in the concentration of employment in manufacturing. Exploiting this variation, we find that the labor force participation of older workers in cities with a high concentration of manufacturing employment, as well as those with a low concentration of manufacturing, declined about the same between 1970 and 1980.

Between 1980 and 1990 – a period of rapid decline of US manufacturing – the labor force participation of older workers in the industrial cities fell at a much faster rate than the corresponding labor force participation rate in nonindustrial cities. Indeed, the labor force participation rate of older workers fell four times as fast in the industrial cities as in the nonindustrial cities. Between 1990 and 2000, the decline in labor force participation was still larger in the industrial cities than in the nonindustrial cities.

Surprisingly, when we use the micro data and examine the education levels of workers, we find that the earlier retirement induced by deindustrialization was not concentrated among low-skilled workers. Indeed, the increase in the retirement rate induced by deindustrialization seems to be at least as high among workers with some college and at least a four-year college degree as the increase for less skilled workers.

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## **CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE**

Fulton Hall 550, 140 Commonwealth Avenue, Chestnut Hill, MA 02467-3808 phone 617.552.1762 fax 617.552.0191 crr@bc.edu www.bc.edu/crr