The Geography of American Labor Market Attachment

Extended Abstract:

This paper takes up the longstanding puzzle of prime-age labor force participation in the United States, which has continued to trend downward since the turn of the century. It forms the central chapter of a dissertation currently in progress, which attempts to bring together three as of now distinct literatures. The first is the extensive research program inaugurated by economist David Autor on routine-biased technical change, in which deindustrialization in the economies of the advanced world has been accompanied by a distinctive "U-shape" in employment growth (often shorthanded as "job polarization"). The second is the comparatively thinner oeuvre on labor market detachment in the United States, the persistence of which has continued to confound social scientists' basic sociological and economic axioms. The third is the growing literature on the decline of economic mobility, the increase in worker sorting, and the bolstering of agglomeration effects in the urban landscape of twenty-first century America. The contention of the dissertation is that the hollowing out of so-called "middle-skilled" jobs in the winner-takeall nature of labor and product markets of the post-industrial economy has eliminated a key set of opportunities formerly available to the non-college-educated in America to achieve financial stability. Coupled with scant public expenditure on retraining and/or reskilling, as well as the skyrocketing costs of housing in the United States' booming cities, this bleak economic landscape has made non-participation a reasonable, if painful, measure of last resort for broad swaths of those who in previous generations would have occupied middle-skilled positions.

The paper examines the relationship between job polarization and labor force nonparticipation through the use of two public datasets: the BLS Occupational Employment and Wage Statistics (OEWS) and the American Community Survey (ACS), harmonized at the geographic unit of the metropolitan statistical area (MSA). From the OEWS, the relative composition of extant employment – high-, middle-, and low-skilled¹ – in each MSA is tracked from the turn of the century to the start of the COVID-19 pandemic. From the ACS' five-year estimates, the employment rates of the college- and non-college-educated in the same MSAs are followed from their peak prior to the Great Recession, their trough in the aftermath of the Recession, and their peak prior to the COVID-19 downturn. Additional variables of theoretical interest, including but not limited to the proportion of college-educated, number of Social Security Disability Insurance recipients, and homeownership and rent-burdened rates in the MSAs, are also drawn from the ACS. Three procedures are then performed on the linked dataset to exploit the tremendous geographic variation that exists across the United States. The first sorts the MSAs across two dimensions, namely, extent and type of polarization. MSAs are initially grouped by cut-offs in the decline of middle-skilled employment, endogenous to the distributions in the data, as experiencing either *medium* or *high* job polarization in the first two decades of the twenty-first century. They are then categorized by the composition of the jobs that have replaced the middle-skilled ones: "high-skill polarizing" MSAs are those for which over 60% of the relative decline in middle-skilled jobs is compensated by high-skill ones, "low-skill polarizing" MSAs are the same but for low-skill jobs, and "balanced" are those for which the proportion lies in between both ends.

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¹ Two separate definitions for each category commonplace in the literature are used to this end, the first being based on occupational task content and the second on occupational median wage percentile.

In the second procedure, the trajectory of labor force participation for the college- and the non-college educated are then mapped within all six MSA categories, with each MSA weighted by its respective population size. Relevant differences across and within the categories are explored. Finally, in the last procedure, multi-level regressions attempt to quantify the exact relationship between job polarization and labor force participation. The key independent variables are (1) the peak-to-trough and (2) the trough-to-peak employment rates of the college and non-college-educated over the course of the business cycle initiated by the Great Recession; specifically, these are composite variables derived from the relevant variables in the 2005-2009, 2010-2014 and 2015-2019 ACS five-year estimates. The principal dependent variables are the proportionate decline in middle-skill jobs (as drawn from the OEWS), category dummy variables, their interactions, and regional dummies. Other dependent variables include the educational and housing indicators previously referred to. In broad strokes, the paper concludes that polarization, while a necessary condition, is insufficient on its own to explain the depth of the decline in prime-age labor force participation. Certain additional key socio-economic variables, such as the cost of housing, relocation expenses, and the presence of agglomeration effects to high-skill employment (or lack thereof) – as visible in the large and significant interaction coefficients –, come together to induce labor market detachment by the non-college educated, as well as a somewhat surprising *strengthening* of labor market attachment by the college-educated.

Consequently, the paper argues that policy proposals that focus principally on human capital formation fail to capture the holistic and geographically disparate nature of the problem at hand. It contributes to the literature by disaggregating the phenomena of job polarization and decline in labor force participation. From this more variegated perspective, the paper points

forward to subsequent chapters in the dissertation, which take a sample of the different categories of MSA and peers into the nature of the labor market mismatch within them through an examination of job posting and résumé data. Finally, it comments on the partial but fragile recovery of labor force participation in the post-COVID boom. The results allow for the wager that, absent a more thoroughgoing alteration in the geography of labor market opportunity, the re-entrance of formerly discouraged workers into the labor force will likely prove short-lived.