Youth Employment Programs Improve Lifetime Outcomes

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Extended Abstract: Recent studies have documented the effects of temporary work programs on participant outcomes up to three years later. However, there is no work done on their long-term effects and most studies do not investigate outcomes other than employment and training (Card et al. 2015, Barnow and Smith 2015). We examine the impact of the Civilian Conservation Corps (CCC) – a means-tested youth employment program during the New Deal era – on the lifetime outcomes of participants. The CCC was a relief program that employed poor, unemployed men aged 17 to 25 in environmental conservation work around the U.S. from 1933 to 1942. CCC enrollees were placed in camps that operated with military-style rules, lived in barracks, and belonged to "companies" of 20-40 other youths. Together, they worked on a range of projects while receiving on-the-job training. As compensation, they earned a wage that averaged \$25 per month, which was sent home to their "allottees," which were usually their mothers or fathers, in order to support their families at home.

We collected and digitized the entirety of available administrative service records of participants in Colorado and New Mexico from state archives and linked them to mortality records as well as records from the Social Security Administration, which contain information on individual earnings history, disability, and retirement. Our data include information on 28,343 individuals, 18,644 of whom originate from Colorado and 9,966 from New Mexico. Because we have detailed information on participants, such as the enrollee's name, the name of one of his household members, his exact birth date, and his county of residence, we are able to match 69% of individuals to mortality. This match rate is substantially higher than typical match rates in the literature using historical record linking.

We identify the effect of the program by comparing the outcomes of individuals who participated in the program for differing lengths of time. Upon enlistment, youths first enrolled for six-month terms, and upon completion of the term were given an opportunity to re-enroll and serve an additional term, for a maximum of 4 total terms (2 years). Participants sometimes left in the middle of terms for a variety of reasons, including emergencies at home, outside employment opportunities. Some simply deserted the program. Thus, there is endogenous variation in the duration of service. In our analysis, we first document the conditional correlation between duration of service and age of death using OLS and find that a year of service translates to 0.6 years of additional life and a 2-3% higher likelihood of survival to age 70. These effects are highly statistically significant and robust to varying specifications, controlling for individual characteristics.

To deal with endogeneity of duration, we exploit the pseudo-random assignment of individuals to camps and use 3 camp level measures of camp quality as instruments: 1-the leave-out mean of duration of others serving in the same camp (excluding the cohort serving with the individual), 2-the share of individuals leaving before completing a term in the last six months, and 3-exogenous decisions by the government to close certain camps due to work completion. We find that the

instrumental variables estimates of the effects of the program are larger than OLS: about 0.9 years of additional life per year of additional service and 9% higher likelihood of survival to age 70. This is indeed consistent with the observation that many who served longer were poorer and likely faced with worse outside options.