

Who Becomes an Inventor? The Importance of Exposure to Innovation

Codebook for Online Data Tables

November 2017

Table 3: Innovation Rates by College

This table presents estimates of students' patent rates by the college they attended. We define the college each child attends as the institution the child attended for the greatest amount of time during the four calendar years in which the child turned 19-22.

The sample includes all children born in the 1980-84 birth cohorts who attend college between the ages of 19-22. We restrict the sample to U.S. citizens as of 2013 to exclude individuals who are likely to have immigrated to the U.S. as adults (for whom we cannot measure parent income).

We define an individual as an inventor if he or she is listed on a patent application between 2001 and 2012 or grant between 1996 and 2014 (see Section II.B of the paper), and as a highly-cited inventor if he or she is among the 5% of inventors with the most patent citations by 2014 within his or her birth cohort.

In addition to patenting outcomes by institution for all students, we provide outcomes by students' parent income quintile. Parents are assigned percentile ranks by ranking them based on their mean household income from 1996 to 2000 relative to other parents with children in the same birth cohort.

For each college, we report the share of students who are inventors (unconditional and conditional on parents' income quantile), the share of students in the top 5% of the patent citation distribution of their birth cohort (among all inventors matched to a college), as well as the total number of patents granted to students and patent citations received by students.

Following established disclosure standards, we report estimates for each college using regression models that pool data across several colleges. As described in Chetty et al. (2017, Appendix C), the degree of error due to this blurring procedure is smaller than the degree of sampling error in the estimates.

There is one row in this table for each college. Colleges with less than 10 inventors are omitted.

Users interested in correlating these measures with other college-level characteristics can download a set of college-level statistics from Chetty et al. (2017), Online Data Table 2 ([\[xls\]](#) [\[stata\]](#) [\[codebook\]](#)) and Online Data Table 10 ([\[xls\]](#) [\[stata\]](#) [\[codebook\]](#)).

Reference:

Raj Chetty, John Friedman, Emmanuel Saez, Nicholas Turner, and Danny Yagan. "Mobility Report Cards: The Role of Colleges in Intergenerational Mobility." *National Bureau of Economic Research Working Paper No. 23618*, July 2017.

Codebook for Table 3 – Innovation Rates by College

Variable	Description
super_opeid	Institution OPEID / Cluster ID when combining multiple OPEIDs
instnm	Name of Institution / Super-OPEID Cluster
count	Number of students
count_pq_[quintile]	Number of students with parents in quintile [quintile] of the income distribution
inventor	Share of inventors among students
inventor_pq_[quintile]	Share of inventors among students with parents in quintile [quintile] of the income distribution
top5cit	Share of individuals with total patent citations in top 5% of their birth cohort among all inventors matched to a college
total_patents	Total number of patents granted to students
total_cites	Total number of patent citations obtained by students