

# **Is a College Degree Still the Great Equalizer? Intergenerational Mobility Across Levels of Schooling in the US.**

**Florencia Torche, New York University.**

## **Extended Abstract**

**1. Introduction and Research Question.** Twenty years ago Hout (1984, 1989) found that the intergenerational class association in the US was substantial among individuals with less than a college degree, but it virtually disappeared among college graduates. This important finding does not, naturally, mean the elimination of inequality to the extent that access to higher education is highly stratified by class origins (Kane 2004). However, it suggests that a college degree has an important meritocratic function – it erases the advantages of birth in the competition for socioeconomic success. Or, as Hout puts it, “it provides a new answer to the old question about overcoming disadvantaged origins: A college degree can do it” (1988: 1391).

International research has shown that a weaker intergenerational class association among the highly educated is not an American anomaly. A similar pattern has been found in France, Sweden, and Germany (Vallet 2004, Breen and Jonsson 2007, Breen and Luijkx 2007). The US is, however, the clearest case in which intergenerational association fully disappears among those with a college degree.

One potential explanation for this finding is the highly meritocratic nature of labor markets for college graduates (Hout 1988: 1391, Breen and Jonsson 2007). An alternative explanation refers to the unobserved selectivity of the college graduate population (Mare 1980, Boudon 1974, Gambetta 1987). Given the difficulties that lower-class youth face to graduate college, those who attain a college degree may be highly selected on unobserved attributes such as cognitive and non-cognitive ability and motivation. If these attributes are desirable for employers, positive selectivity of lower-class college graduates may result in a weak intergenerational association among those who attain a college degree.

This paper analyzes whether a college degree still erases the advantages and disadvantages of social origin in the early 21<sup>st</sup> century, after substantial changes in the American educational system and labor market, analyzing not only social class mobility, but also mobility in terms of occupational status, earnings, and total family income. It attempts to adjudicate

between alternative explanations of the low intergenerational association among college graduates – “meritocracy” and “selectivity”.

## **2. Research Motivation. Why to Reassess the Intergenerational Socioeconomic Association in the Early 21<sup>st</sup> Century?**

**2.1. Recent educational and labor market changes and the intergenerational association among college graduates:** The post-secondary educational system has experienced substantial expansion and diversification in the last two decades. If the weak intergenerational association among college graduates is at least partially driven by unobserved selectivity among lower-class graduates, growing access to college may have reduced it, resulting in a growing observed association between social origins and destinations. Horizontal differentiation at the college level – in particular, differentiation in terms of institutional prestige/selectivity and field of study – may also contribute to a growing intergenerational association among college graduates (Lucas 2001, Gerber and Cheung 2008). To the extent that upper-class students secure access the most prestigious colleges and the most lucrative fields of study, differentiation will result in a growing association between social background and economic success among college graduates.

Furthermore, earlier research treated “college graduates” as a homogeneous category, without distinguishing between BA-holders and advanced degree-holders. The growing number of the latter –from 6.3% of the working population in 1972-75 to 10.8% in 2002-06– highlights the need to analyze their mobility chances separately from those whose terminal degree is a BA.

Another important trend is the compositional change in college graduate occupations from professional to managerial and sales jobs. While 49.5% of college graduates worked in professional occupations in 1972/75, this percent dropped to 37.5% in 2002/06. In turn, the percent of college graduates working in managerial and sales jobs increased from 23.1% to 32.2%. To the extent that the latter occupations require “soft-skills” that are more likely associated with advantaged origins – such as cultural capital and social connections – this compositional change may also result in reduced mobility among college graduates (Jackson et al. 2005, Jackson 2007, Hansen 2001).

**2.2. Intergenerational Mobility of What?** The original finding of a null intergenerational association among college graduates refers specifically to *social class* mobility<sup>1</sup>. Social classes are highly aggregated groups based on occupational resources (Grusky and Weeden 2006). Measures of social class do not include those not in the labor force, do not consider extra-occupational sources of advantage, and do not explicitly consider family-level stratification processes, such as assortative mating. Analysis of class mobility may therefore provide a weak test of the meritocratic power of a college degree. Disaggregate measures of economic standing (such as occupational status and earnings), and those that consider extra-occupational sources of wellbeing (such as total family income), may provide a stronger test. I therefore analyze intergenerational mobility in terms of social class, occupational status, earnings and income. These different specifications serve not only as a robustness check, but they also help elucidate the specific mechanisms driving economic persistence (Bjorklund and Jantti 2000, Beller and Hout 2006).

### **3. Data, Variables and Methods.**

**3.1. Data:** The analysis utilizes three datasets: The General Social Survey (GSS), the National Longitudinal Survey of Youth-1979 (NLSY-79), and the Panel Study of Income Dynamics (PSID). The NLSY-79 is a nationally representative sample of 12,686 youth who were 14-22 years old when they were first surveyed in 1979. These individuals have been interviewed annually through 1994 and biennially since 1996. The PSID is a longitudinal survey that began in 1968 with a national probability sample of about 4,800 families. The sample has been re-interviewed every year through 1997 and biennially since then. The survey follows children from the original PSID families as they move out of the paternal household. The GSS is a cross-sectional survey representative of the US adult population, conducted annually between 1972-1993 (except for 1979 and 1981) and biannually since 1994.

The use of three datasets addresses specific weaknesses of each one of them, including sample design characteristics, attrition, and birth-cohorts included in the analysis<sup>2</sup>. Furthermore no single survey includes information on all socioeconomic standing measures considered in the

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<sup>1</sup> This finding was reproduced for occupational status mobility in the late 1980s (Hauser and Logan 1992, table 4).

<sup>2</sup> Specifically the analysis refers to individuals 25-64 years old in 2002-2006 in the GSS, the 1951-1965 birth cohort in the PSID, and the 1958-1965 cohort in the case of NLSY-79.

analysis. I therefore use the GSS to examine class and occupational status mobility, the NLSY-79 to study occupational status and income mobility, and the PSID to analyze mobility in earnings and total family income.

**3.2. Variables:** The analysis considers social class, occupational status, earnings and family income mobility across educational levels. Social class is measured using a six-class version of Goldthorpe's class schema (Erikson and Goldthorpe 1992: 35-44). This version distinguishes the following classes: Professionals and managers, higher level (Class I), professionals and managers, lower level (II), clerical workers (III), self-employed (IVab), skilled manual workers V-VI), and unskilled manual workers and farmers (VIIab-IVc), as operationalized by Ganzeboom and Treiman (2003) and Morgan and Tang (2007, Appendix S). Occupational status is measured using three alternative formulations – the original Socioeconomic Index (Duncan 1961), and revised versions by Stevens and Featherman (1981) and Hauser & Warren (1997) – to address potential limitations of each measure. Individual earnings are measured hourly and include all sources of labor market income. Total family income considers any proceeds from several potential sources such as wages, self-employment earnings, disability benefits, and social security. Parental and children's earnings and income measures are transformed into constant dollars, and logged. Educational attainment distinguishes the following categories: Less than high school, high school graduate, some college (including associate degree), college graduate, and advanced degree.

**3.3. Methods:** The analysis of class mobility utilizes log-linear and log-multiplicative models for the mobility table, including scaled association and log-multiplicative layer effect formulations (Hout 1983, Xie 1992). The analysis of occupational status, earnings, and income mobility utilize a regression formulation in which the parameters of interest are the regression coefficient (interpreted as an elasticity in the case of earnings and income given the double-log transformation of the variables). Single-year measures of class and occupational status are used for parents and children, based on research asserting that they provide a valid measure of permanent economic standing after individuals reach "occupational maturity" (Goldthorpe 1980: 51–52, 69–71, Breen 1994). In contrast, the literature has shown that single-year measures of income and earnings are severely biased proxies for permanent standing (Solon 1992, Mazumder

2005, Haider and Solon 2006). I therefore use several methods to reduce biases, including temporal averaging of earnings and income measures and age restrictions to define the analytical sample of parents and children.

**4. Findings:** Preliminary findings indicate that, as twenty years ago, the intergenerational class association is strong among those with less than a college degree, and it fully disappears among college graduates. Furthermore, in most instances a similar pattern of variation across levels of schooling emerges when occupational status, earnings, and total family income mobility are analyzed. Surprisingly, the intergenerational association appears to regain strength among advanced degree-holders, resulting in a U-shaped pattern of parental influence across levels of schooling. Although the reemergence of parental influence among advanced degree-holders sometimes fails to reach significance due to reduced sample sizes, the consistency of findings across datasets suggests that this U-shaped pattern is not result of random variation.

Interesting differences are also found across genders. The overall intergenerational association is stronger among men than among women, except for total family income and, to a lesser extent, social class. This finding highlights the relevant role of assortative mating in the mobility process (Chadwick and Solon 2002). Whereas the U-shaped pattern of association across educational levels is consistent across all indicators of socioeconomic standing for men, in the case of women, this pattern emerges for social class and total family income mobility, but it fails to emerge for those measures of economic standing that depend on individual labor market participation and returns, i.e. occupational status and earnings.

Overall, these preliminary findings suggest that the substantial expansion of the college system has not led to a drastic decline in unobserved selectivity in among lower-background graduates, and that the labor markets for workers with a college degree utilize recruitment and promotion criteria that are more meritocratic than the labor markets for those with less educational qualifications. The finding of a weak intergenerational association in total family earnings suggest the importance of extra-occupational mechanisms to account mobility among college graduates, whereas the limited mobility among advanced-degree holders raise important questions about mechanisms driving intergenerational persistence among the most highly-skilled individuals.

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