

DOCUMENT RESUME

ED 394 378

HE 029 004

AUTHOR Sorensen, Stephen; And Others
 TITLE Increasing Hispanic Participation in Higher Education: A Desirable Public Investment.
 INSTITUTION Rand Corp., Santa Monica, CA. Inst. on Education and Training.
 REPORT NO IP-152
 PUB DATE Sep 95
 NOTE 6p.
 AVAILABLE FROM Rand, 1700 Main St., P.O. Box 2138, Santa Monica, CA 90407-2138.
 PUB TYPE Reports - Research/Technical (143) -- Viewpoints (Opinion/Position Papers, Essays, etc.) (120)

EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *Access to Education; College Graduates; *Educational Attainment; Educational Policy; Higher Education; High School Graduates; *Hispanic Americans; *Income; Investment; Racial Differences; *Taxes

IDENTIFIERS *Public Good

ABSTRACT

This paper maintains that increasing Hispanic-American participation in higher education is a desirable public investment. It points out that the educational attainment of Hispanic-Americans has not kept pace with their increasing share of the population and the labor force, and that high school and college completion rates are lower than for other groups. This lower level of attainment translates into lower lifetime earnings and decreased tax revenues for federal and state governments. Increasing the college participation level of the cohort of Hispanic-Americans from birth through age 18 to that of White Americans would increase federal tax revenues an estimated \$10 billion per year. Increasing the high school and college completion rates of the same cohort to that of White Americans would increase federal tax revenues an estimated \$19 billion per year. (MDM)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

Issue Paper

RAND

Institute on Education and Training

SEPTEMBER 1995

Increasing Hispanic Participation in Higher Education: A Desirable Public Investment

Stephen Sorensen, Dominic J. Brewer, Stephen J. Carroll, and Eugene Bryton

ED 394 378

AE 02 9 104

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent those of ERIC position or policy.

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL
HAS BEEN GRANTED BY

RAND

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

BEST COPY AVAILABLE

Issue Paper

RAND

Institute on Education and Training

SEPTEMBER 1995

Increasing Hispanic Participation in Higher Education: A Desirable Public Investment

Stephen Sorensen, Dominic J. Brewer, Stephen J. Carroll, and Eugene Bryton

Hispanic youth represents the fastest growing segment of the U.S. population, and Hispanics now account for more than a quarter of all new entrants into the labor force. Education has historically been the path for upward occupational, economic, and social mobility in this country, but Hispanics complete college at much lower rates than other ethnic groups do and are much more likely to drop out of high school. What will it mean for the nation to have a growing, significant proportion of the population competing for low-skill jobs and locked in the lowest socioeconomic brackets?

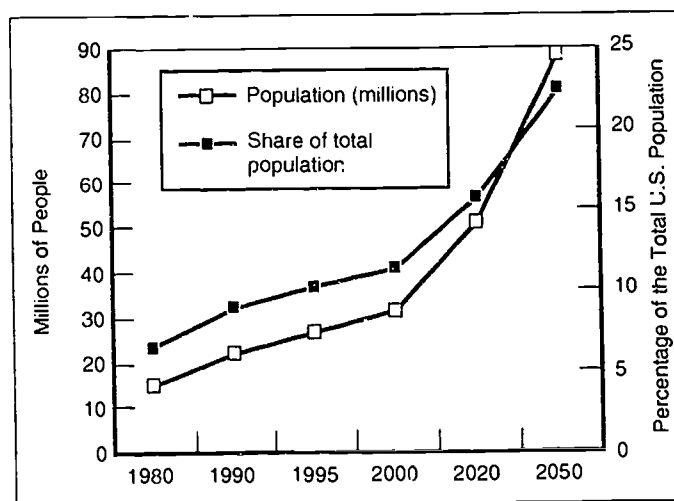
The answers to this question will require a great deal more research than has yet been done on Hispanic education and its socioeconomic effects. There are surely benefits to society of closing the educational gap between Hispanics and other ethnic groups in terms of equity and social stability, though these benefits might be difficult to quantify. However, it is possible to estimate roughly what increasing Hispanic participation in higher education would mean for individuals' income and, thus, for the U.S. tax base and funding of social programs. In this paper, we present our estimates and conclude that, given the effects, increasing Hispanic education levels seems very much in the best economic interests of the country.

A GROWING POPULATION WITH LOW EDUCATIONAL ATTAINMENT

The Hispanic population in the United States has grown remarkably. At more than 9 percent of the popula-

tion in 1990 and with projected growth of about 3.5 percent every five years, Hispanics could account for 20 percent of the U.S. population by 2020 (see Figure 1). In addition, the age structure among Hispanics is pyramid-like, with nearly 40 percent below the age of 19, compared with 29 percent for the total population. Given this structure, the Hispanic share of the labor force is likely to increase even more.

The educational achievement of Hispanics has not kept pace with their increasing share of the population and the labor force. According to the 1990 U.S. Census, high



SOURCE: U.S. Bureau of the Census.

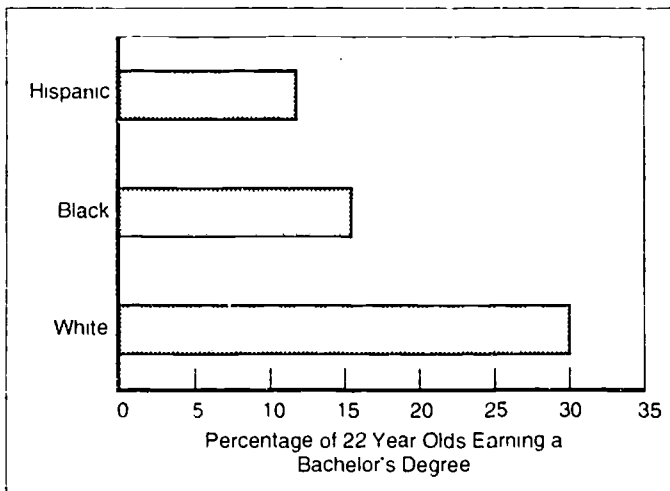
Figure 1—Hispanic Population Growth and Projections

RAND issue papers explore topics of interest to the policymaking community. Although issue papers are formally reviewed, authors have substantial latitude to express provocative views without doing full justice to other perspectives. The views and conclusions expressed in issue papers are those of the authors and do not necessarily represent those of RAND or its research sponsors.

school completion for Hispanics aged 22–24 was only 64 percent, compared with 91 and 84 percent for whites and blacks, respectively. Although this figure for all Hispanics partly reflects the entry into the United States of young adult immigrants with low levels of education, the high school completion rate of native-born Hispanics (78 percent) still remains significantly lower than for other groups. Even more alarming, the growth rate for Hispanic high school completion lags that for blacks and has been only slightly higher than that for whites.

Low high school graduation rates have obvious repercussions for Hispanic higher education. Since there is a much smaller pool of college-eligible students, one would expect Hispanic college participation to be lower than other groups' participation. In fact, Hispanics are among the most severely underrepresented groups in higher education.

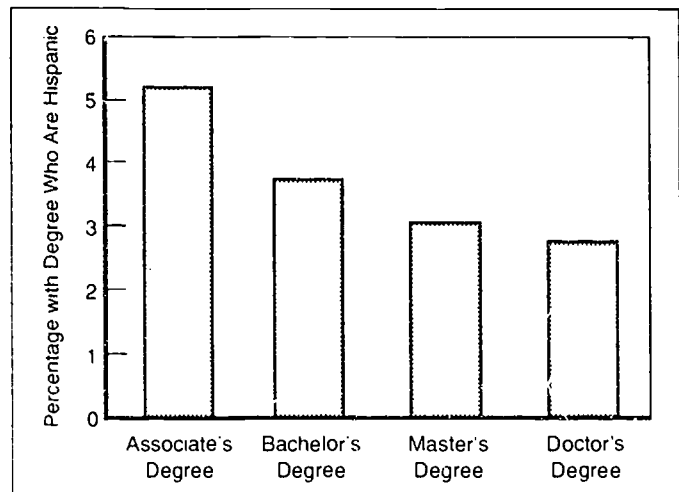
Using data from the National Center for Education Statistics' High School and Beyond database, Pelavin and Kane report that over 58 percent of white students attend some college within four years of high school graduation, compared with 45 percent of Hispanics (and 47 percent of blacks).¹ Moreover, Hispanic degree attainment is much lower than that of whites, with only 12 percent of Hispanic 22 year olds earning bachelor's degrees (see Figure 2). This rate is four-fifths of the rate for blacks and less than half of the rate for whites.



SOURCE National Center for Education Statistics

Figure 2—Hispanics Are Less Likely to Complete Bachelor's Degrees

¹Sol H. Pelavin and Michael B. Kane, *Minority Participation in Higher Education*. Washington, D.C.: Pelavin Associates, 1990.



SOURCE National Center for Education Statistics

Figure 3—Hispanic Share Falls as Degree Level Rises

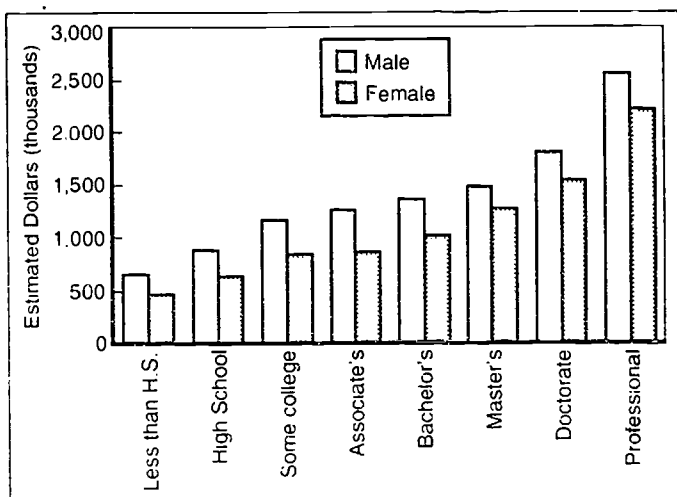
The effect of low academic attainment cascades through all levels of higher education. Figure 3 shows that the Hispanic share of the educated population dwindles as education levels increase. The disproportionately small percentage of Hispanics with bachelor's degrees necessarily means underrepresentation in professional and graduate schools, as well.

WHAT DO HISPANICS LOSE FROM LOW PARTICIPATION IN HIGHER EDUCATION?

A bumper sticker glibly asserts that "if you think education is expensive, you should try ignorance." This assertion is strongly supported by income statistics in the United States. Those with a bachelor's degree earn significantly more than those with only a high school diploma. In fact, the U.S. Census Bureau estimates the premium for a bachelor's degree (over a high school degree) at about \$600,000, or 75 percent more in lifetime earnings.

Using the Census methodology, we estimated the lifetime premiums for higher education for the current cohort of Hispanic males and females. (We calculated lifetime income for an individual under a 40-year earning horizon. We then used the current mean earnings for four age groups—25–34, 35–44, 45–54, and 55–64—as estimates of the individual's income.) Reported earnings do not reflect discounting or inflation. For further explanation, see U.S. Bureau of the Census Statistical Brief, S/94-25, Washington, D.C., 1994.

As Figure 4 shows, the premium for a bachelor's degree over a high school diploma is about \$500,000 for Hispanic men and \$400,000 for Hispanic women. More striking, the premium for a Hispanic with a professional degree is about \$1.7 million, over 200 percent more in lifetime earnings.

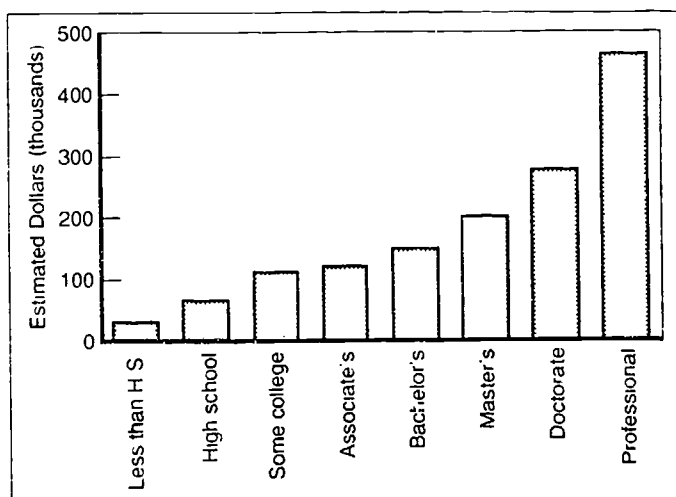


SOURCE U.S. Bureau of the Census

Figure 4—Hispanic Lifetime Earnings Rise with Education

WHAT DOES SOCIETY LOSE?

Education pays off for individuals, but there are also payoffs to society. Over a lifetime, people who have college degrees (and concomitant higher earnings) pay significantly more in taxes than people who have only high school diplomas. Figure 5 shows estimated lifetime income tax payments based on the current tax schedule for Hispanic individuals with various educational levels. Hispanics with a bachelor's degree will pay more than twice as much in taxes as those with only a high school diploma, and Hispanics with a professional degree will pay an estimated three times as much as those with a bachelor's degree. These estimates were generated under the conservative assumptions that the wage gap between Hispanics and non-Hispanics would not be closed.



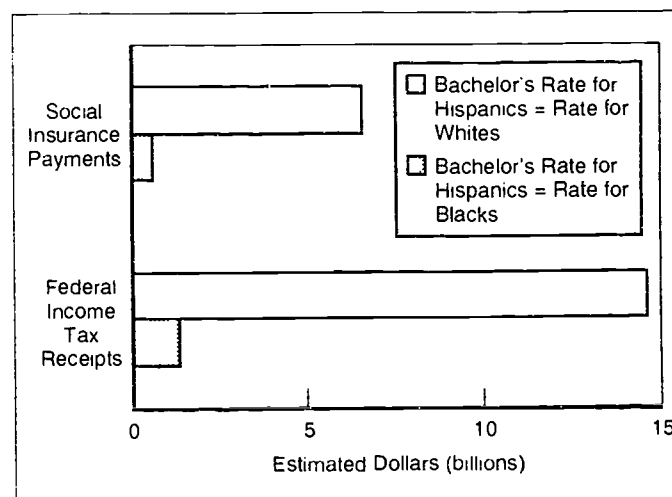
SOURCE Authors' Calculations

Figure 5—Estimated Lifetime Tax Payments for a Hispanic by Education Level

Increased Tax Revenues: Scenario One

With the caveats noted above in mind, we considered how raising Hispanic educational levels would affect tax revenues. The completion rate for bachelor's degrees is 12 percent for today's cohort of 18-year-old Hispanics. We estimated the effect of increasing Hispanic participation in higher education to either the current rate for blacks (15 percent) or the rate for whites (30 percent). Further, we assumed that the high school graduation rate for this cohort of Hispanics remained the same but that more went on to complete a bachelor's degree.

Figure 6 indicates the magnitude of the effect from raising Hispanic college participation levels. Boosting the college completion rate of that cohort to 15 percent would produce an estimated \$1 billion in federal tax payments, while raising the rate to 30 percent would generate about \$15 billion. In addition, the increased income levels would result in estimated increases in contributions to social insurance programs—Social Security and Medicare—of about \$600 million and \$6.6 billion at the rates for blacks and whites, respectively.



SOURCE Authors' calculations

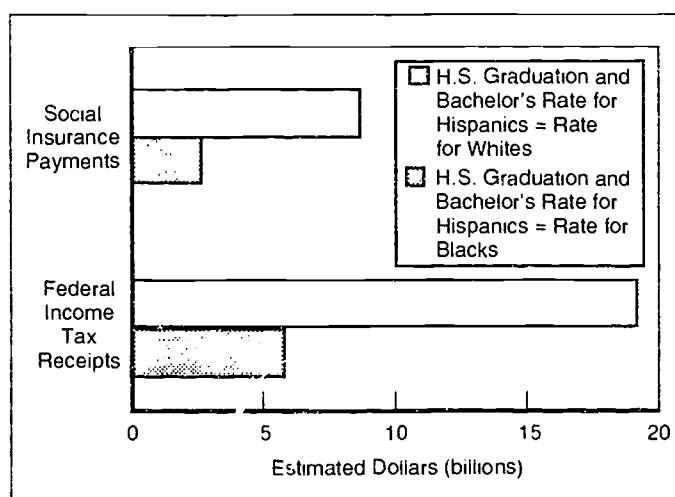
Figure 6—How Federal Revenues Might Increase with Hispanic College Education: Scenario 1

These numbers may seem small compared with the federal debt. However, these increases reflect the gross effects of increasing the college participation rate of only the current 18-year-old cohort of the Hispanic population. If we considered an entire generation, e.g., the cohort from birth to age 18, the increase in federal revenues from increasing Hispanics' college participation rates to those of whites would be on the order of \$10 billion in additional tax revenues each year.

Increased Tax Revenues: Scenario Two

Under Scenario One, we held high school completion rates for the cohort constant at the current rate. However, raising the level of Hispanic participation at the bachelor's level is likely to have positive effects at other educational levels: An increased rate of Hispanics completing college would increase motivation for Hispanic high school students to take academic subjects and complete high school. Raising the high school graduation rate would increase the pool of Hispanics eligible for college.

We tested the possible effects of increasing that pool by also raising the Hispanic rate of high school graduation to the levels of either blacks or whites (see Figure 7). With



SOURCE: Authors' calculations

Figure 7—How Federal Revenues Might Rise with Increased Hispanic College and High School Graduation Rates: Scenario 2

the rate for blacks (84 percent for high school graduation, 15 percent for college participation), the additional income tax revenue from Hispanics would be about \$6 billion. With the rate for whites (91 percent for high school graduation, 30 percent for college participation), the additional tax revenue would be about \$19 billion. These increases were for the 18-year-old cohort alone. Compounding such gains over multiple generations would generate increases exceeding \$13 billion each year.

CONCLUSIONS

Although these estimates suggest that increasing Hispanic participation in higher education would be a sound public investment, they should not be taken as predictive: A definitive conclusion about the magnitude of this increase for Hispanics is not possible given the present lack of research on how higher education affects their earnings specifically. Nevertheless, our calculations indicate that the effect is considerable enough that the continued undereducation of Hispanics will exact a high economic toll for individuals and for society. Given the experience of other undereducated groups, there are certainly concomitant human, social, and political costs. These estimates thus may serve as a lower bound of the benefits of increasing the bachelor degree attainment of Hispanics.

RAND is a nonprofit institution that helps to improve public policy through research and analysis. Results of specific studies are documented in other RAND publications and in professional journal articles and books. To obtain information about RAND studies or to order documents, contact Distribution Services (Telephone: 310-451-7002; FAX: 310-451-6915; or Internet: order@rand.org). Abstracts of all RAND documents may be viewed on the World Wide Web (<http://www.rand.org>). Publications are distributed to the trade by National Book Network.

RAND

1700 Main Street, P.O. Box 2138, Santa Monica, California 90407-2138 • Telephone 310-393-0411 • FAX 310-393-4818
2100 M St., N.W., Washington, D.C. 20037-1270 • Telephone 202-296-5000 • FAX 202-296-7960