

The Educational Progress of U.S.-Born Mexican Americans

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Motivation

Mexican Americans are one of the largest and most rapidly growing U.S. racial/ethnic groups.

Mexican Americans also rank near the bottom in average educational attainment.

Their schooling disadvantage arises not only because of Mexican immigrants with very low levels of education.

Sizeable educational deficit persists even among 3rd+ generation Mexican Americans (**see table on next slide**).

Mexican Americans' schooling disadvantage accounts for much of their earnings disadvantage.

Average Education of Men, by Race/Ethnicity and Immigrant Generation

<u>Race/Ethnicity</u>	<u>1st Gen</u>	<u>2nd Gen</u>	<u>3rd + Gen</u>
Hispanic	10.3	13.0	12.8
Mexican	9.5	12.7	12.7
Puerto Rican	12.2	12.7	13.2
Non-Hispanic			
Asian	14.8	15.0	14.3
Black	13.5	14.0	12.9
White	14.4	14.4	13.8

Source: 2003-2016 CPS data.

Note: The samples include men ages 25-59. Patterns for women are very similar.

This Paper

We track changes in educational attainment of **U.S.-born** Mexican Americans over 7 decades.

Compare with African Americans and non-Hispanic whites.

How does Mexican-American schooling vary with:

- Year of birth
- State of birth
- Sex

Part of a larger project also investigating long-term changes in the labor supply and earnings of Mexican Americans.

Many similar studies for African Americans (e.g., Smith and Welch 1989, Collins and Margo 2006, Neal 2006), but few for Mexican Americans (although see Smith 2003, 2006).

Data

U.S. Census microdata from 1970, 1980, 1990, and 2000.

American Community Survey (ACS) microdata from 2006-2017.

Limit samples to:

U.S.-born (including those in group quarters)

Ages 25-59

3 racial/ethnic groups:

Mexican American

Non-Hispanic Black

Non-Hispanic White

Race/ethnicity assigned using race and Hispanic origin questions, which may understate attainment for Mexican Americans.

Analysis

Organize data around birth cohorts:

$$\text{Birth Year} = \text{Survey Year} - \text{Age} - 1 \quad (\text{approximation})$$

Pool data from all survey years.

Each birth cohort is observed in multiple surveys, at different ages.

Regressions with age quartic used to standardize for age:

Predicted educational outcomes at age 35.

Measures of educational attainment:

Completed years of schooling

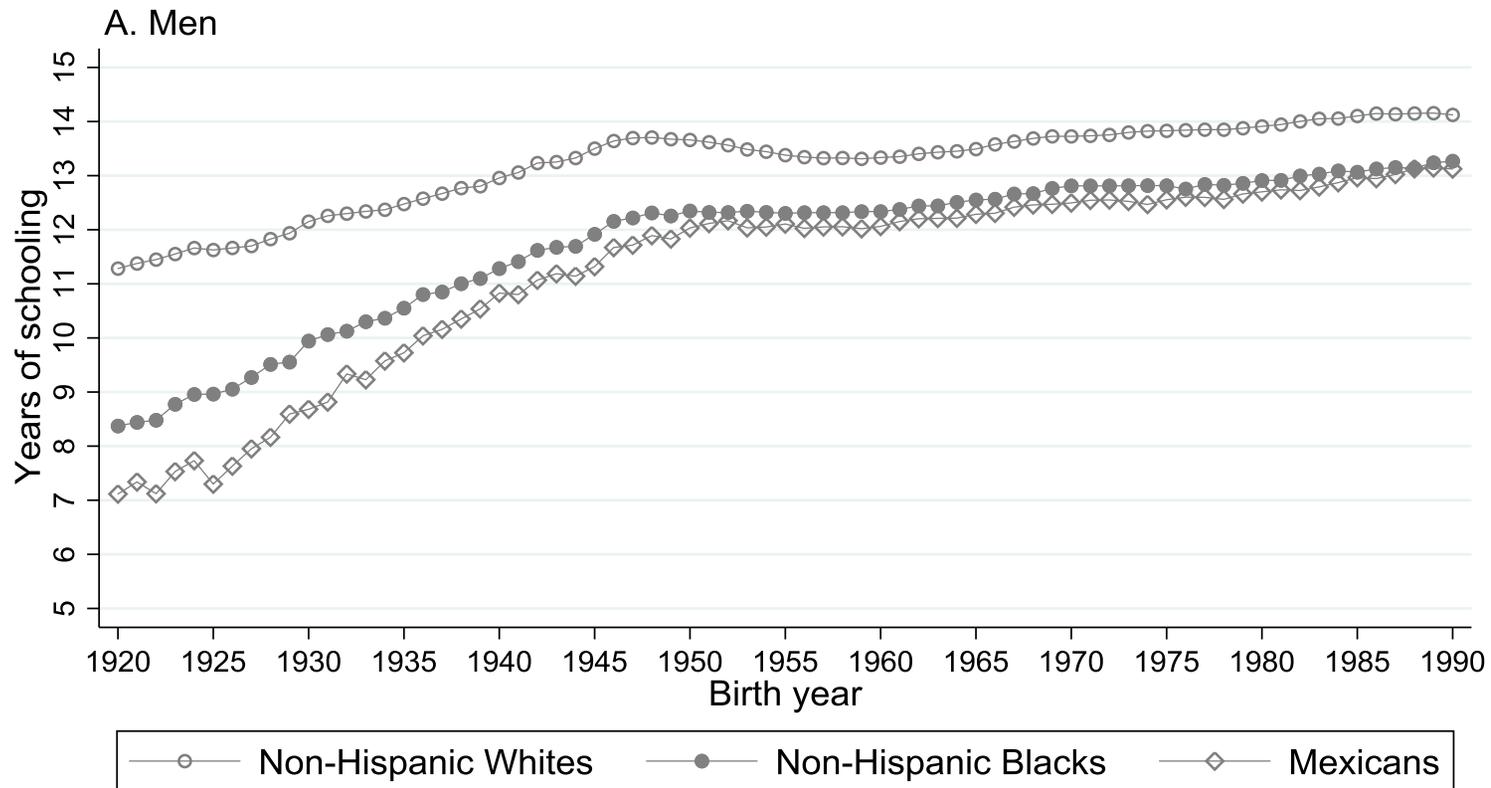
High school completion (by diploma or GED)

Bachelor's degree completion

Sampling weights employed in all calculations.

Average Years of Schooling

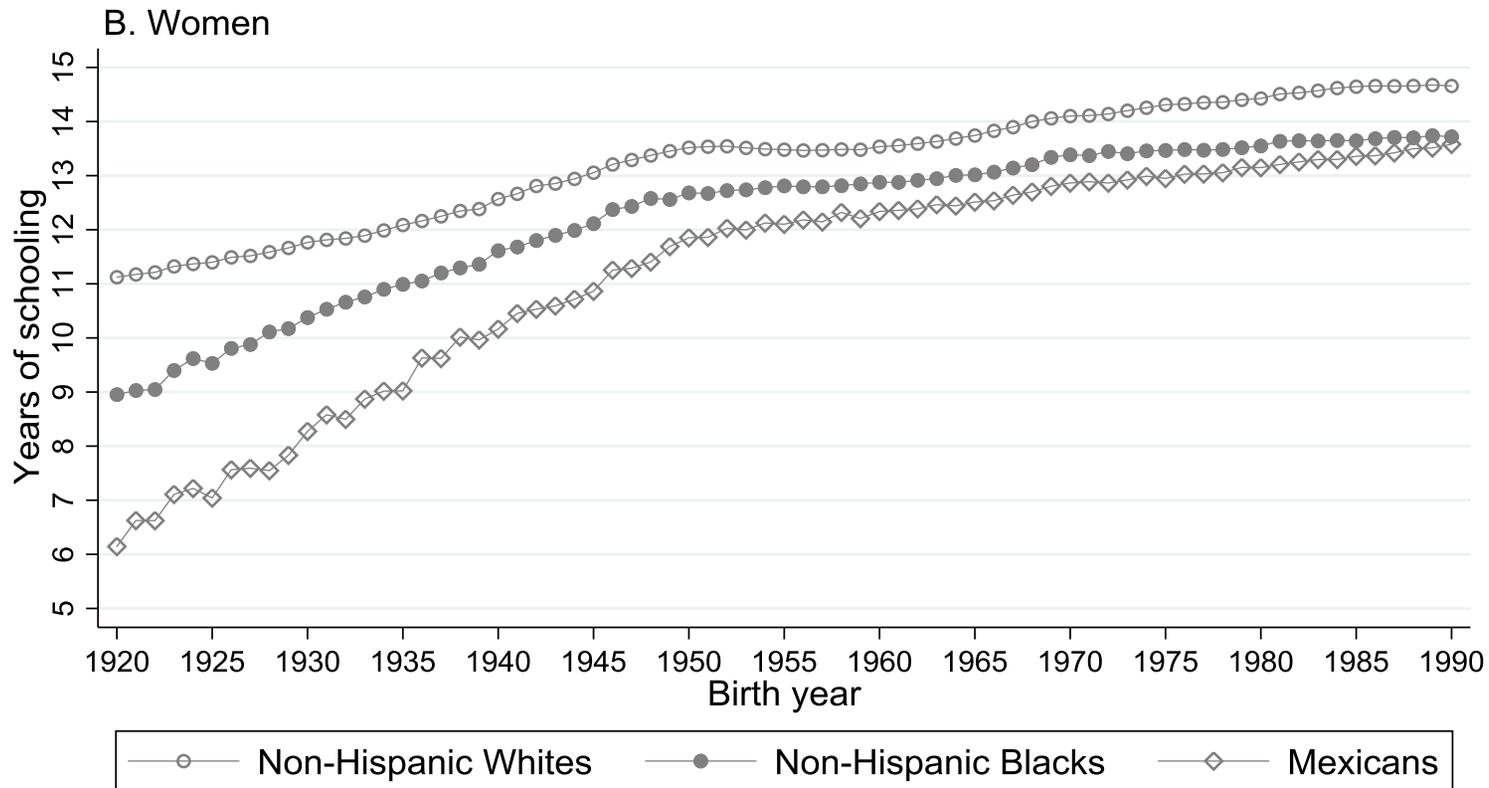
Average Years of Schooling by Birth Year, Sex, and Race/Ethnicity



Source: 1970-2000 Census data and 2006-2017 American Community Survey data.

Note: The sample includes U.S.-born individuals ages 25-59 with birth years between 1920 and 1990 who are members of one of the following racial/ethnic groups: Mexican American, non-Hispanic black, or non-Hispanic white. The plots show predicted average years of schooling at age 35 for each birth year. These predictions derive from least squares regressions of completed years of schooling on a quartic in age and dummy variables identifying cells defined by the three-way interaction of sex, race/ethnicity, and birth year.

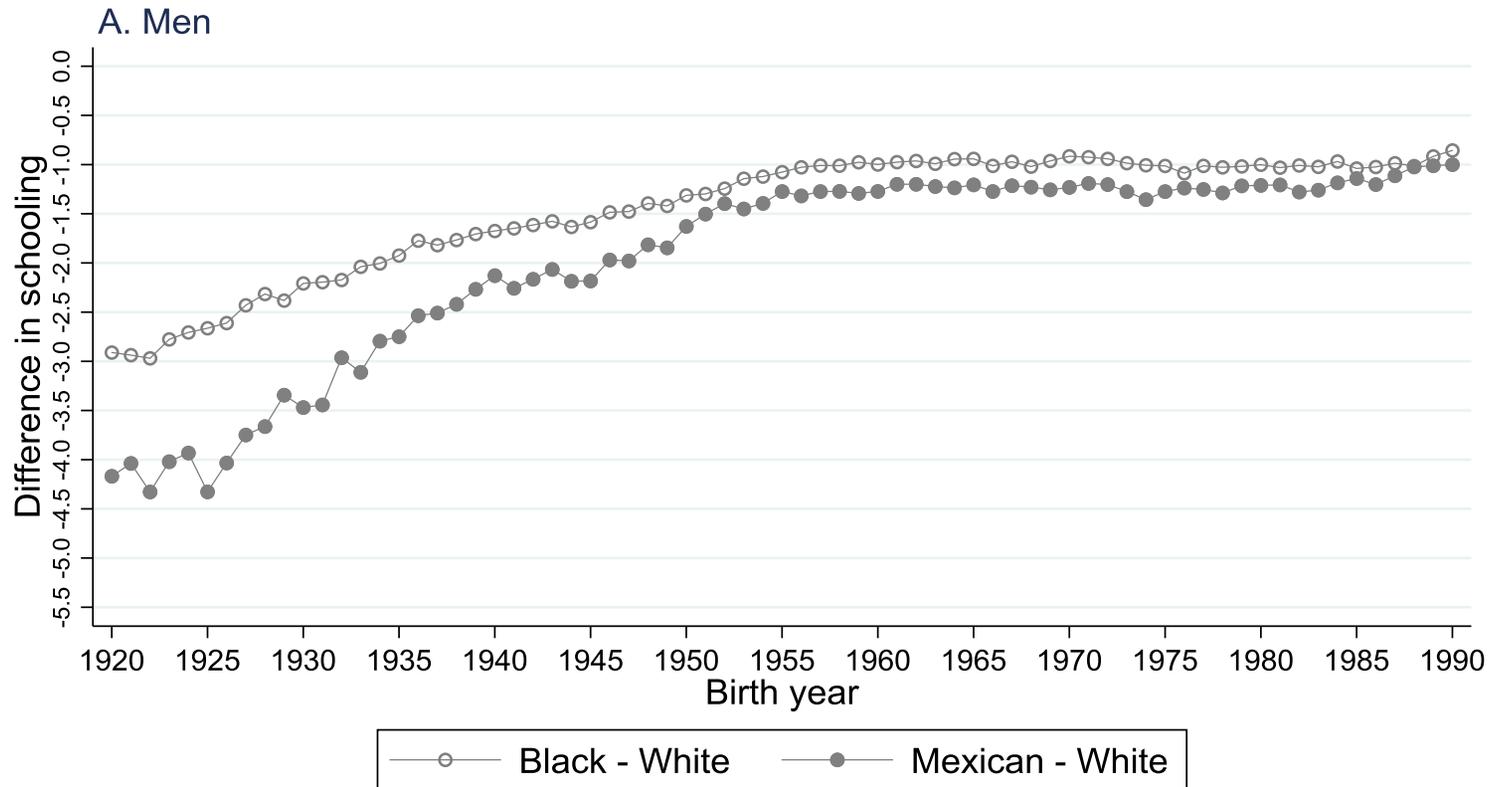
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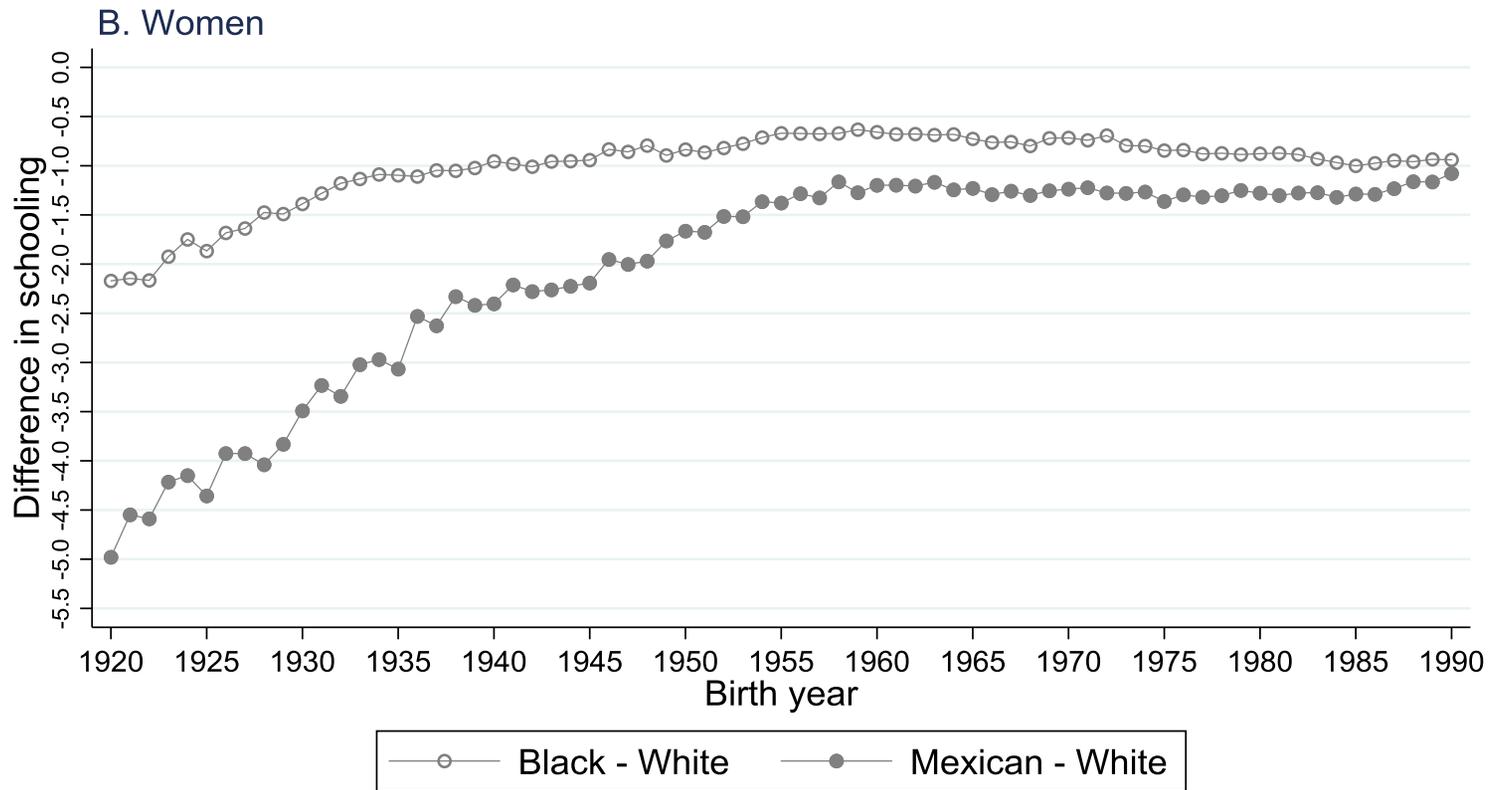
Schooling Differences (Mexican – White) and (Black – White) by Birth Year



Source: 1970-2000 Census data and 2006-2017 American Community Survey data.

Note: The sample includes U.S.-born individuals ages 25-59 with birth years between 1920 and 1990 who are members of one of the following racial/ethnic groups: Mexican American, non-Hispanic black, or non-Hispanic white.

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Source: 1970-2000 Census data and 2006-2017 American Community Survey data.

Note: The sample includes U.S.-born individuals ages 25-59 with birth years between 1920 and 1990 who are members of one of the following racial/ethnic groups: Mexican American, non-Hispanic black, or non-Hispanic white.

Average Years of Schooling, by Birth Cohort, Sex, and Race/Ethnicity

	Birth-Year Cohort							
	<u>1920-24</u>	<u>1930-34</u>	<u>1940-44</u>	<u>1950-54</u>	<u>1960-64</u>	<u>1970-74</u>	<u>1980-84</u>	<u>1985-89</u>
A. Men								
Mexican American	7.40	9.14	11.03	12.09	12.19	12.52	12.75	13.01
Non-Hispanic:								
Black	8.63	10.18	11.55	12.34	12.44	12.82	12.97	13.12
White	11.48	12.29	13.18	13.55	13.41	13.77	13.98	14.12
Relative to Whites:								
Mexican American	-4.09	-3.16	-2.15	-1.46	-1.22	-1.25	-1.23	-1.11
Black	-2.85	-2.12	-1.63	-1.21	-0.97	-0.95	-1.01	-1.00
A. Women								
Mexican American	6.81	8.66	10.51	12.01	12.41	12.91	13.23	13.41
Non-Hispanic:								
Black	9.24	10.66	11.81	12.74	12.94	13.42	13.61	13.68
White	11.26	11.87	12.78	13.53	13.61	14.16	14.51	14.64
Relative to Whites:								
Mexican American	-4.45	-3.21	-2.27	-1.53	-1.20	-1.25	-1.29	-1.24
Black	-2.02	-1.21	-0.97	-0.79	-0.68	-0.75	-0.90	-0.97

Source: 1970-2000 Census data and 2006-2017 American Community Survey data.

Note: The sample includes U.S.-born individuals ages 25-59 who are members of one of the following racial/ethnic groups: Mexican American, non-Hispanic black, or non-Hispanic white. Average years of schooling is predicted at age 35 for each five-year birth-year cohort. These predictions derive from least squares regressions of completed years of schooling on a quartic in age and dummy variables identifying cells defined by the three-way interaction of sex, race/ethnicity, and birth cohort.

Patterns for Average Years of Schooling

1. Enormous schooling gains realized by Mexican Americans across the 1920-1990 birth cohorts:
 - a. Increases in average schooling of 5.6 years for men and 6.6 years for women.
 - b. Schooling deficits relative to whites shrink from 4 years to 1 year.

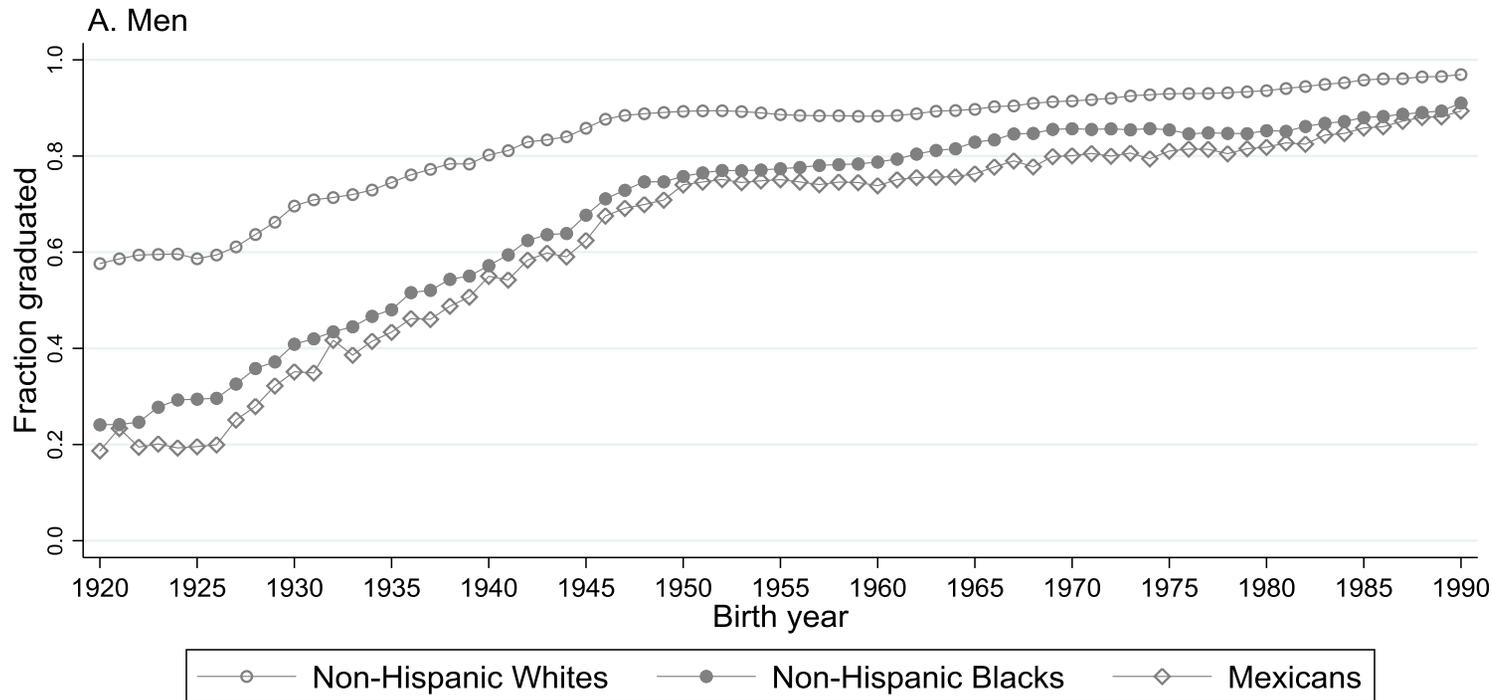
2. Nearly all of the convergence relative to whites takes place among those born prior to the mid-1950s.
 - a. For all racial/ethnic groups, schooling gains across birth cohorts are more rapid among those born prior to mid-1950s than among those born later.
 - b. Among those born prior to mid-1950s, schooling gains most rapid for Mexican Americans than for blacks or whites.
 - c. Among those born after mid-1950s, similar pace of schooling gains for all racial/ethnic groups.

3. Pattern of schooling convergence for Mexican Americans is similar to that for African Americans, but even more dramatic.
 - a. Across these birth cohorts, Mexican Americans almost completely erase initial schooling deficit of more than 1 year relative to blacks.

Rates of High School Completion

Patterns for high school completion are similar to those for average years of schooling (**see slides below**).

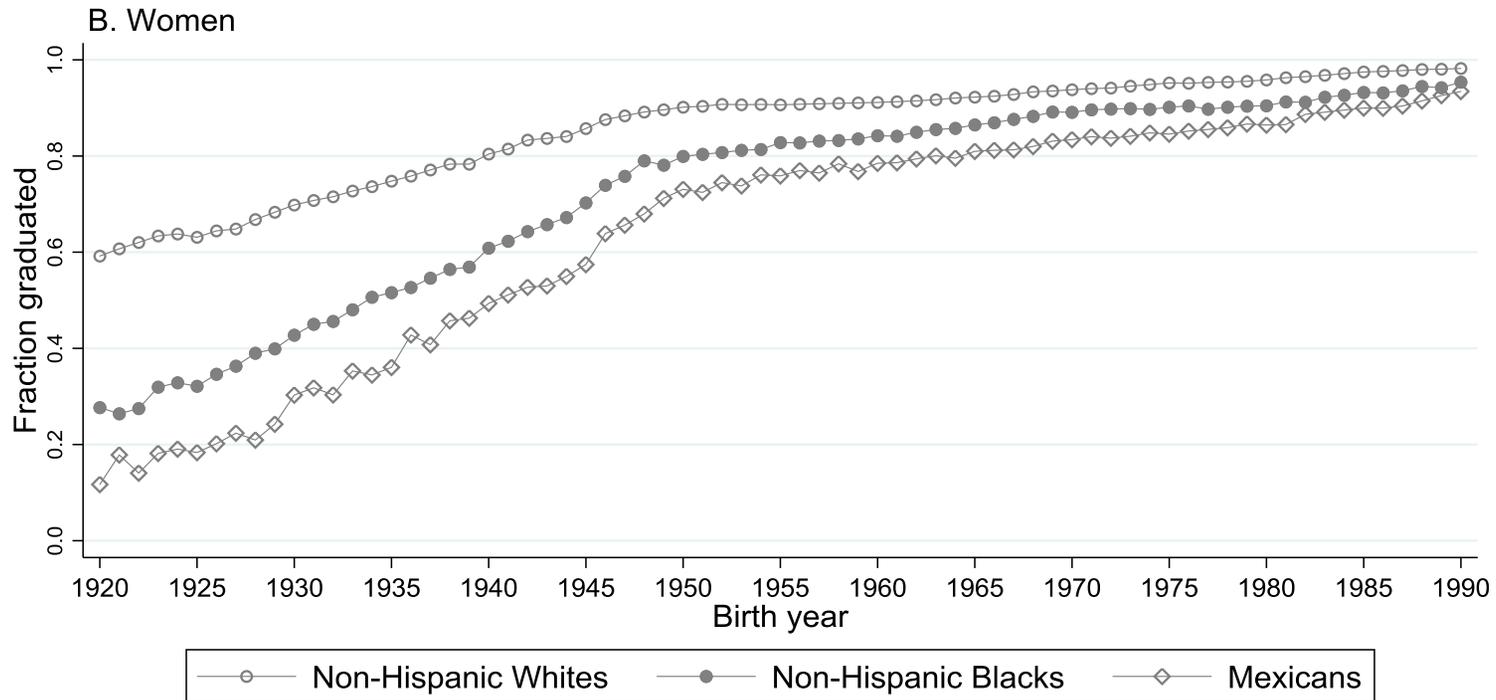
High School Completion Rates by Birth Year, Sex, and Race/Ethnicity



Source: 1970-2000 Census data and 2006-2017 American Community Survey data.

Note: The sample includes U.S.-born individuals ages 25-59 with birth years between 1920 and 1990 who are members of one of the following racial/ethnic groups: Mexican American, non-Hispanic black, or non-Hispanic white. The plots show predicted high school completion rates at age 35 for each birth year. These predictions derive from least squares regressions of an indicator for high school completion on a quartic in age and dummy variables identifying cells defined by the three-way interaction of sex, race/ethnicity, and birth year.

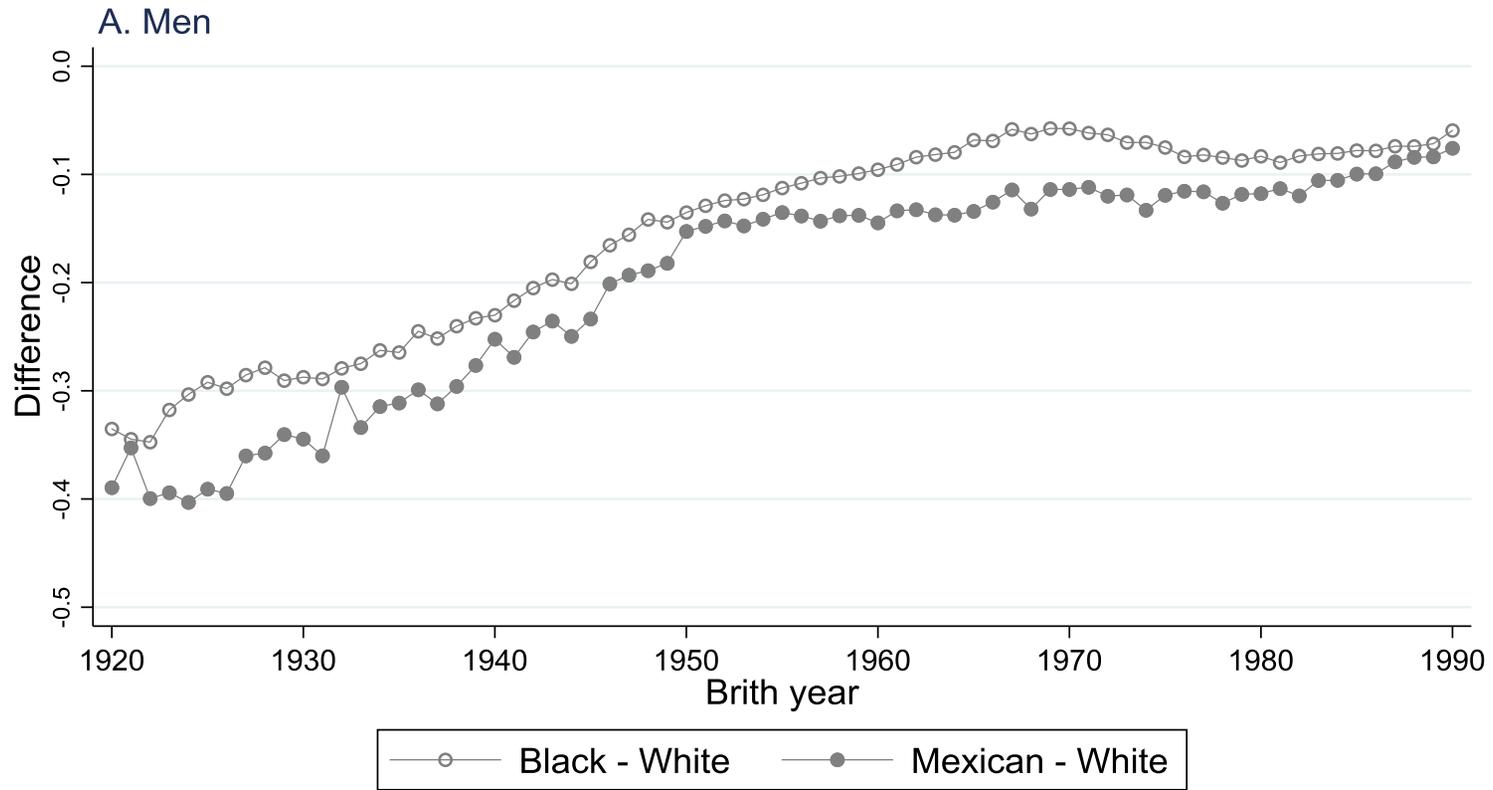
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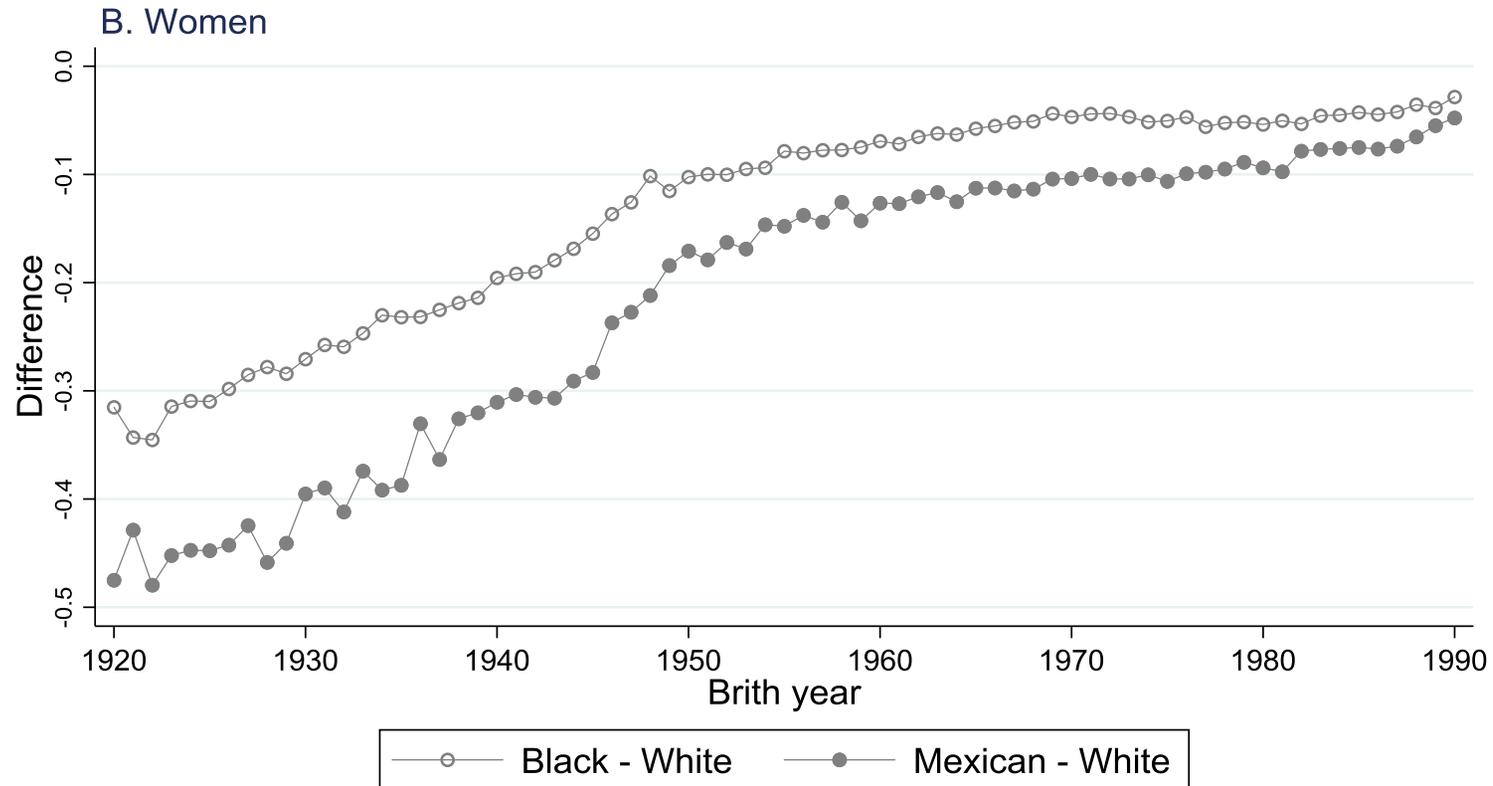
H.S. Completion Differences (Mexican – White) and (Black – White) by Birth Year



Source: 1970-2000 Census data and 2006-2017 American Community Survey data.

Note: The sample includes U.S.-born individuals ages 25-59 with birth years between 1920 and 1990 who are members of one the following racial/ethnic groups: Mexican American, non-Hispanic black, or non-Hispanic white.

H.S. Completion Differences (Mexican – White) and (Black – White) by Birth Year



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Note: The sample includes U.S.-born individuals ages 25-59 with birth years between 1920 and 1990 who are members of one the following racial/ethnic groups: Mexican American, non-Hispanic black, or non-Hispanic white.

Percent Completing High School, by Birth Cohort, Sex, and Race/Ethnicity

	Birth-Year Cohort							
	<u>1920-24</u>	<u>1930-34</u>	<u>1940-44</u>	<u>1950-54</u>	<u>1960-64</u>	<u>1970-74</u>	<u>1980-84</u>	<u>1985-89</u>
A. Men								
Mexican American	20.3	38.4	57.5	74.7	75.2	80.1	83.0	86.7
Non-Hispanic:								
Black	26.2	43.6	61.5	76.8	80.3	85.6	85.9	88.4
White	59.1	71.4	82.4	89.3	88.9	92.1	94.3	95.9
Relative to Whites:								
Mexican American	-38.8	-33.0	-24.9	-14.6	-13.7	-11.9	-11.3	-9.2
Black	-32.9	-27.8	-21.0	-12.5	-8.6	-6.4	-8.4	-7.6
A. Women								
Mexican American	16.6	32.5	52.4	74.3	79.3	84.0	87.8	90.5
Non-Hispanic:								
Black	29.5	46.5	64.2	80.9	85.0	89.6	91.3	93.4
White	62.0	71.7	82.7	90.7	91.6	94.2	96.3	97.6
Relative to Whites:								
Mexican American	-45.4	-39.2	-30.3	-16.4	-12.3	-10.2	-8.5	-7.0
Black	-32.5	-25.2	-18.5	-9.8	-6.6	-4.6	-5.0	-4.1

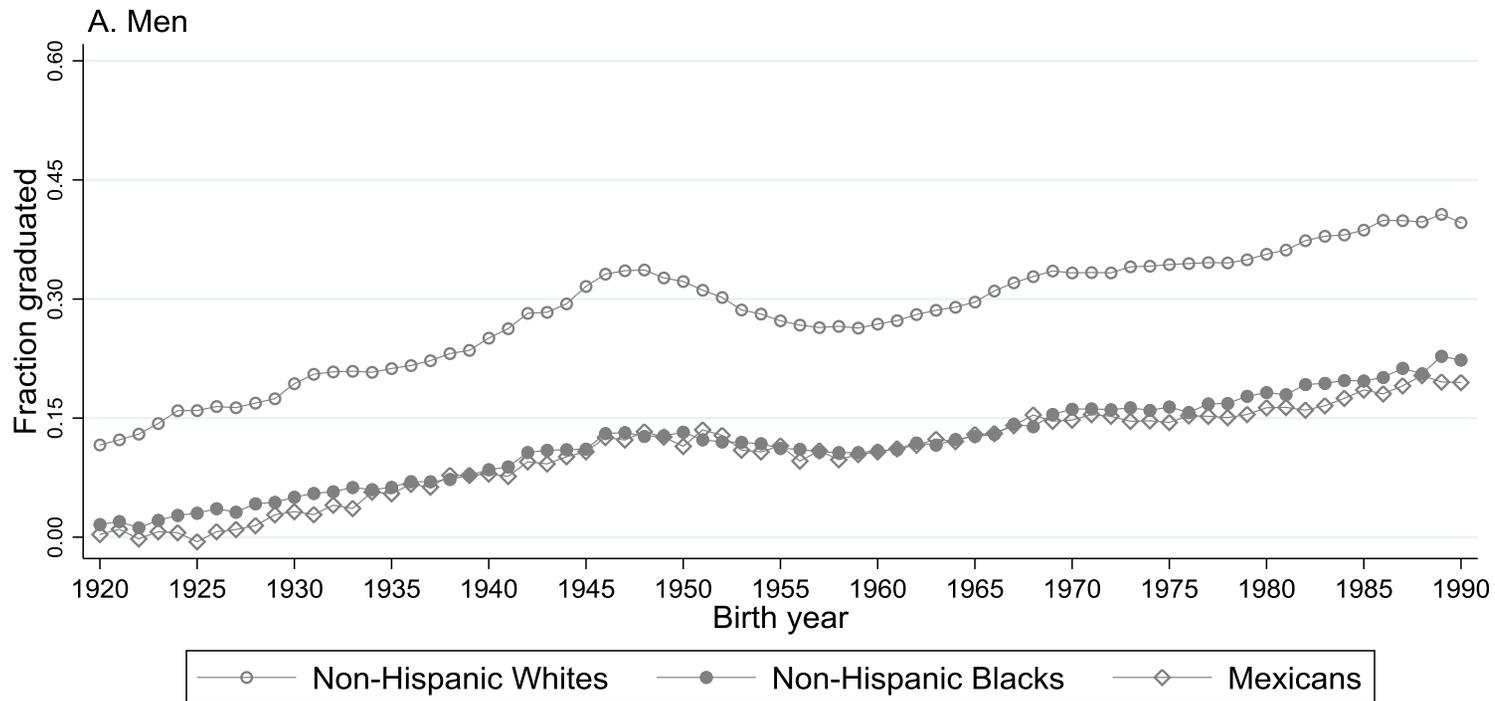
Source: 1970-2000 Census data and 2006-2017 American Community Survey data.

Note: The sample includes U.S.-born individuals ages 25-59 who are members of one of the following racial/ethnic groups: Mexican American, non-Hispanic black, or non-Hispanic white. Percent completing high school is predicted at age 35 for each five-year birth-year cohort. These predictions derive from least squares regressions of an indicator for high school completion on a quartic in age and dummy variables identifying cells defined by the three-way interaction of sex, race/ethnicity, and birth cohort.

Rates of College Completion

For completion of a bachelor's degree, very different patterns emerge (**see slides that follow**).

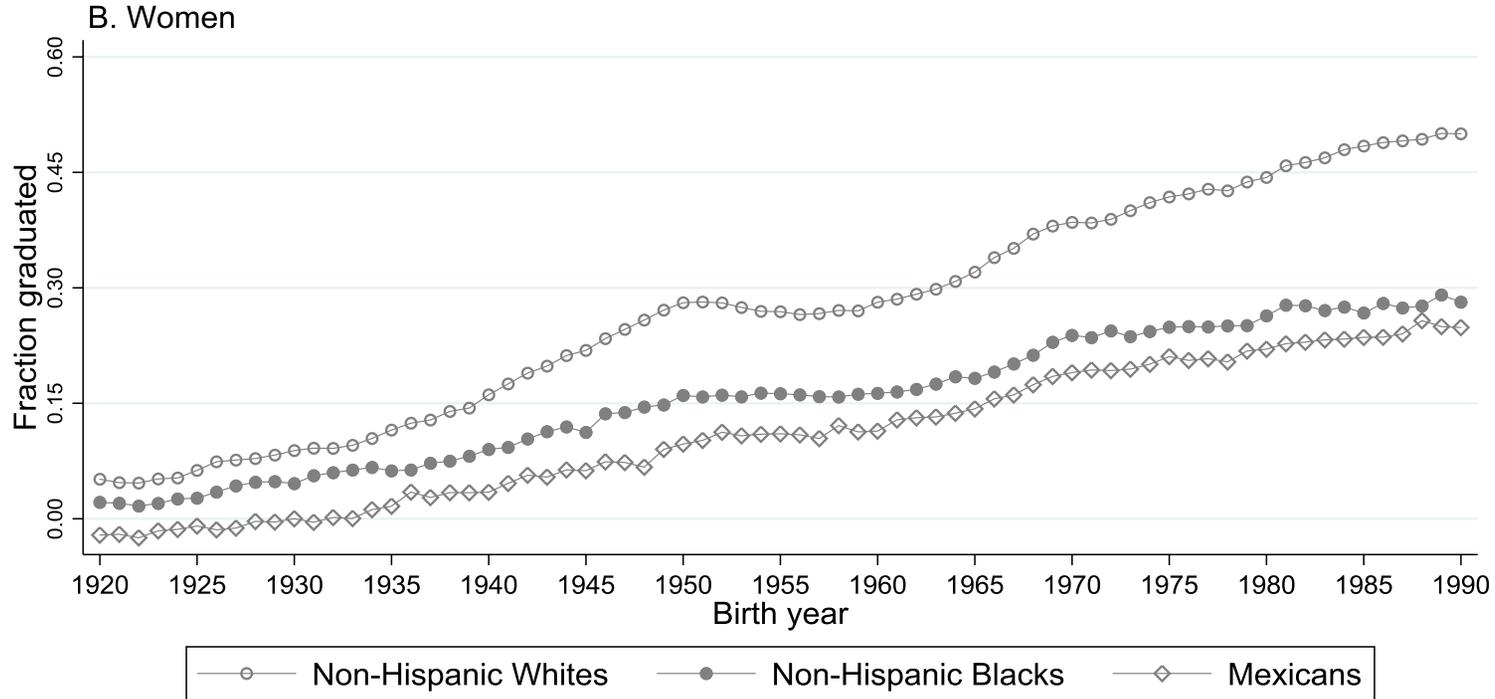
College Completion Rates by Birth Year, Sex, and Race/Ethnicity



Source: 1970-2000 Census data and 2006-2017 American Community Survey data.

Note: The sample includes U.S.-born individuals ages 25-59 with birth years between 1920 and 1990 who are members of one of the following racial/ethnic groups: Mexican American, non-Hispanic black, or non-Hispanic white. The plots show predicted college completion rates at age 35 for each birth year. These predictions derive from least squares regressions of an indicator for completion of a bachelor's degree on a quartic in age and dummy variables identifying cells defined by the three-way interaction of sex, race/ethnicity, and birth year.

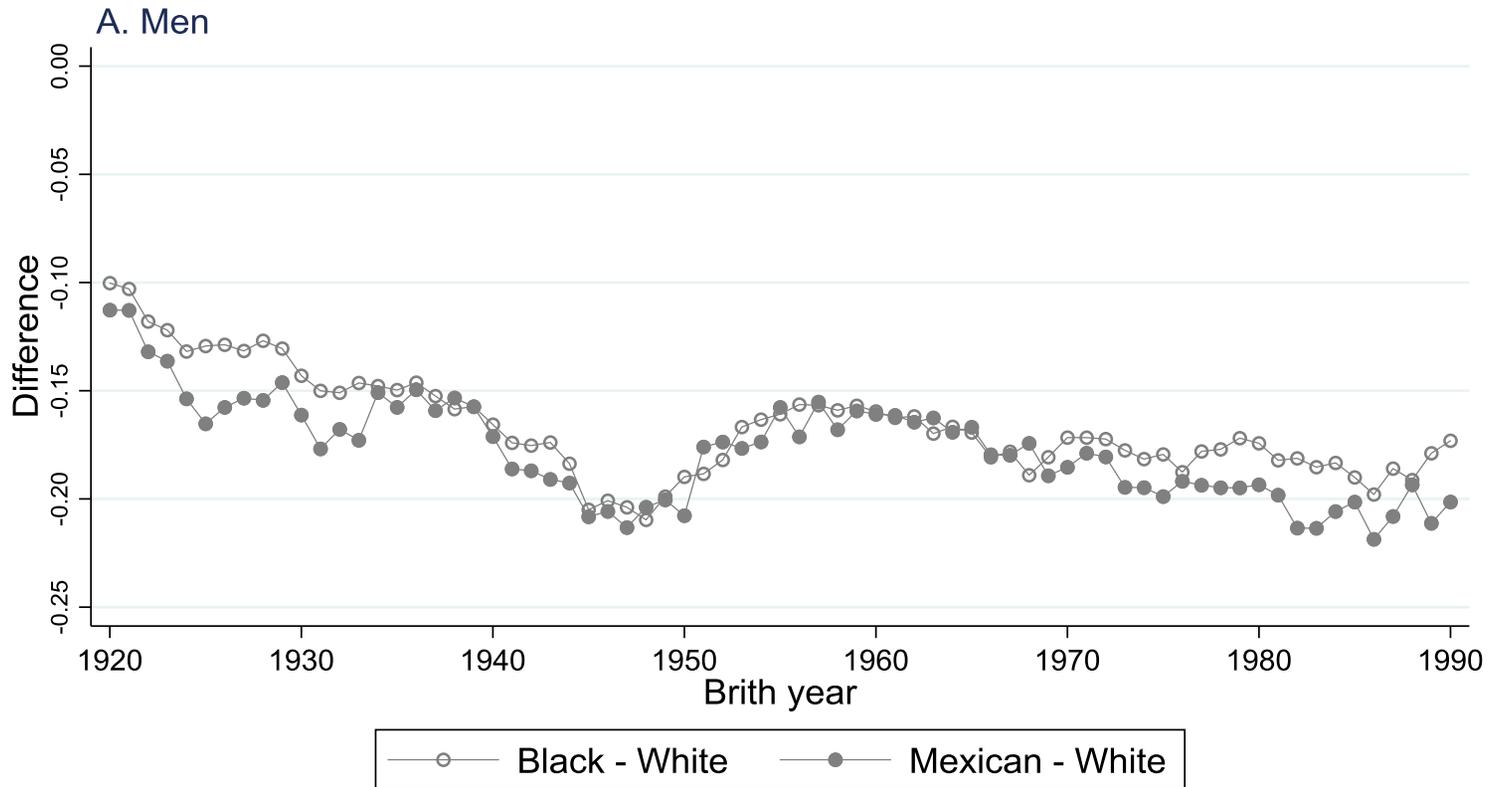
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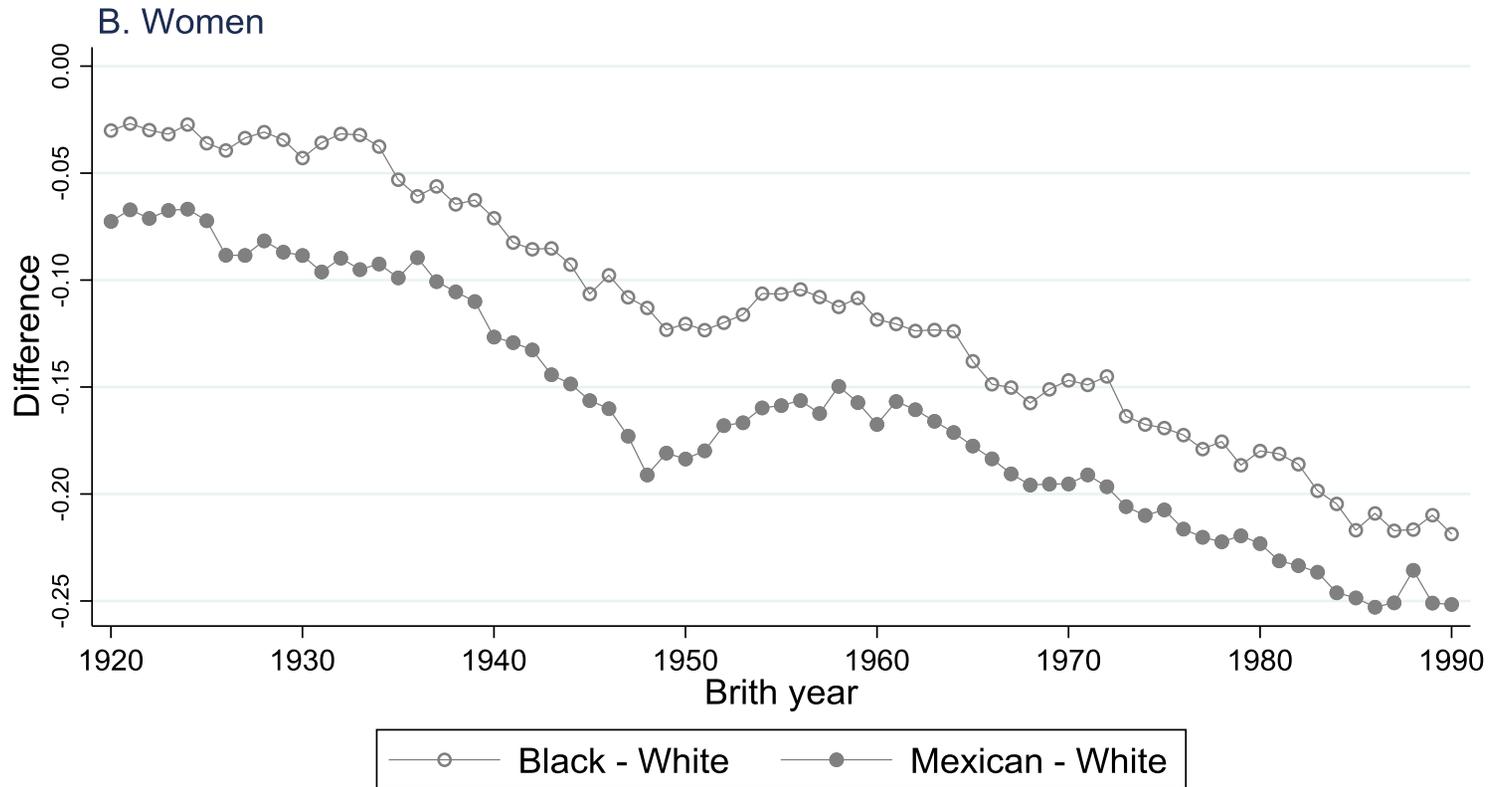
College Completion Differences (Mexican – White) and (Black – White) by Birth Year



Source: 1970-2000 Census data and 2006-2017 American Community Survey data.

Note: The sample includes U.S.-born individuals ages 25-59 with birth years between 1920 and 1990 who are members of one of the following racial/ethnic groups: Mexican American, non-Hispanic black, or non-Hispanic white.

College Completion Differences (Mexican – White) and (Black – White) by Birth Year



Source: 1970-2000 Census data and 2006-2017 American Community Survey data.

Note: The sample includes U.S.-born individuals ages 25-59 with birth years between 1920 and 1990 who are members of one of the following racial/ethnic groups: Mexican American, non-Hispanic black, or non-Hispanic white.

Percent Completing College, by Birth Cohort, Sex, and Race/Ethnicity

	Birth-Year Cohort							
	<u>1920-24</u>	<u>1930-34</u>	<u>1940-44</u>	<u>1950-54</u>	<u>1960-64</u>	<u>1970-74</u>	<u>1980-84</u>	<u>1985-89</u>
A. Men								
Mexican American	0.1	4.1	9.1	12.0	11.8	15.0	16.4	18.8
Non-Hispanic:								
Black	2.2	5.9	10.2	12.4	11.8	16.2	18.7	20.5
White	13.7	20.6	27.6	30.0	28.2	33.6	36.8	39.4
Relative to Whites:								
Mexican American	-13.0	-16.6	-18.6	-18.0	-16.3	-18.7	-20.4	-20.6
Black	-11.5	-14.7	-17.5	-17.6	-16.4	-17.5	-18.1	-18.9
A. Women								
Mexican American	-1.6	0.4	5.3	10.9	13.1	19.5	22.7	24.1
Non-Hispanic:								
Black	2.3	6.0	10.5	16.2	17.3	24.0	27.1	27.4
White	5.2	9.6	18.9	27.9	29.5	39.4	46.0	48.8
Relative to Whites:								
Mexican American	-6.9	-9.2	-13.6	-17.0	-16.4	-19.9	-23.3	-24.8
Black	-2.9	-3.6	-8.4	-11.6	-12.2	-15.4	-18.9	-21.4

Source: 1970-2000 Census data and 2006-2017 American Community Survey data.

Note: The sample includes U.S.-born individuals ages 25-59 who are members of one of the following racial/ethnic groups: Mexican American, non-Hispanic black, or non-Hispanic white. Percent completing college is predicted at age 35 for each five-year birth-year cohort. These predictions derive from least squares regressions of an indicator for completion of a bachelor's degree on a quartic in age and dummy variables identifying cells defined by the three-way interaction of sex, race/ethnicity, and birth cohort.

Patterns for College Completion

1. For all racial/ethnic groups, rates of college completion have increased substantially across birth cohorts.
 - a. For Mexican Americans, rates of bachelor's degree completion have risen from almost zero initially to 19 percent for men and 24 percent for women in the 1985-89 birth cohort.

2. Deficits in college completion relative to whites, however, have actually widened substantially across birth cohorts for Mexican Americans (and for African Americans), particularly for women.

Average Years of Schooling in California versus Texas

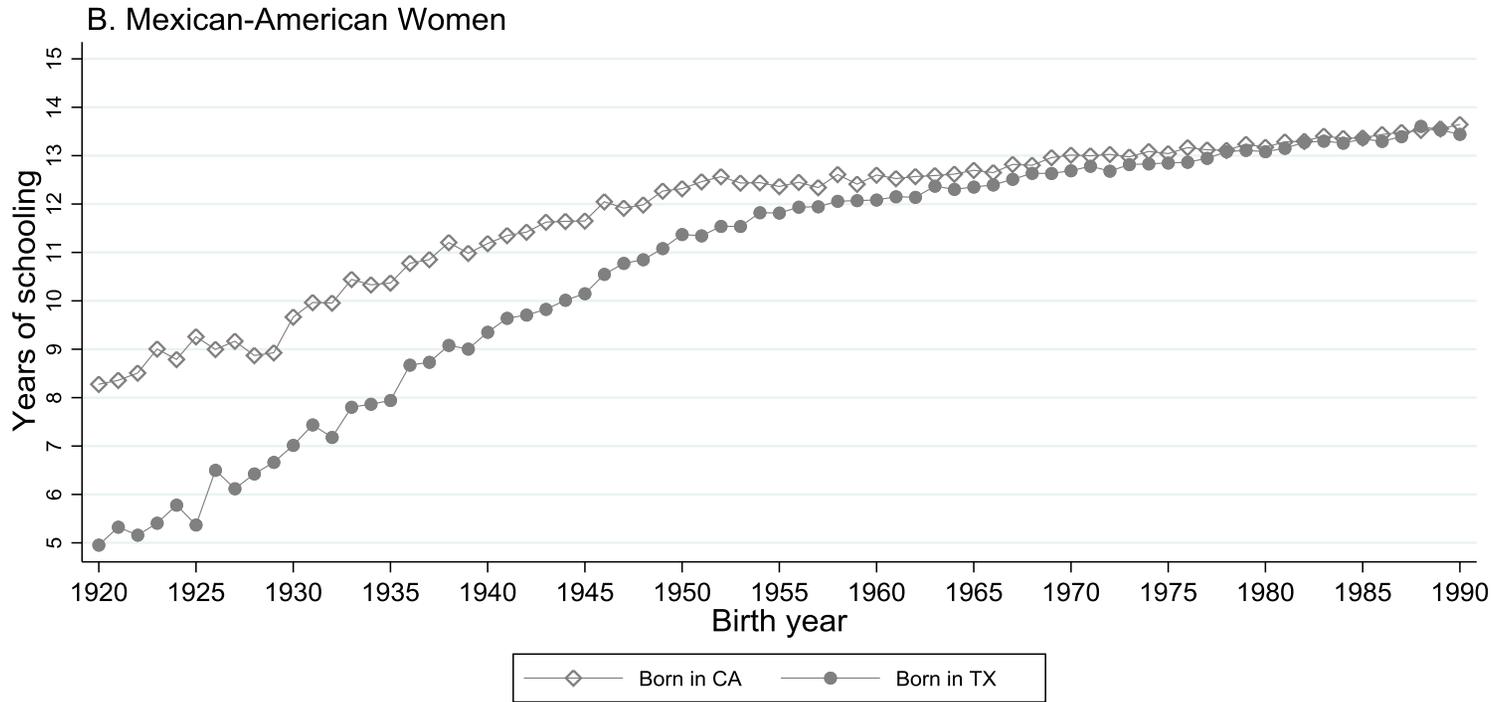
Average Years of Schooling of Mexican-Americans, by Birth Year, Sex, and Birth State



Source: 1970-2000 Census data and 2006-2017 American Community Survey data.

Note: The overall sample includes U.S.-born individuals ages 25-59 with birth years between 1920 and 1990 who are members of one of the following racial/ethnic groups: Mexican American, non-Hispanic black, or non-Hispanic white. The plots are for Mexican Americans born in California or Texas, and they show predicted average years of schooling at age 35 for each birth year. These predictions derive from least squares regressions of completed years of schooling on a quartic in age and dummy variables identifying cells defined by the four-way interaction of sex, race/ethnicity, birth year, and state of birth.

Average Years of Schooling of Mexican-Americans, by Birth Year, Sex, and Birth State



Source: 1970-2000 Census data and 2006-2017 American Community Survey data.

Note: The overall sample includes U.S.-born individuals ages 25-59 with birth years between 1920 and 1990 who are members of one of the following racial/ethnic groups: Mexican American, non-Hispanic black, or non-Hispanic white. The plots are for Mexican Americans born in California or Texas, and they show predicted average years of schooling at age 35 for each birth year. These predictions derive from least squares regressions of completed years of schooling on a quartic in age and dummy variables identifying cells defined by the four-way interaction of sex, race/ethnicity, birth year, and state of birth.

Geography and the Educational Progress of Mexican Americans

Mexican Americans are concentrated in particular regions of the United States (e.g., California and Texas).

Does this geographic concentration affect educational comparisons between Mexican Americans and whites and blacks at the national level?

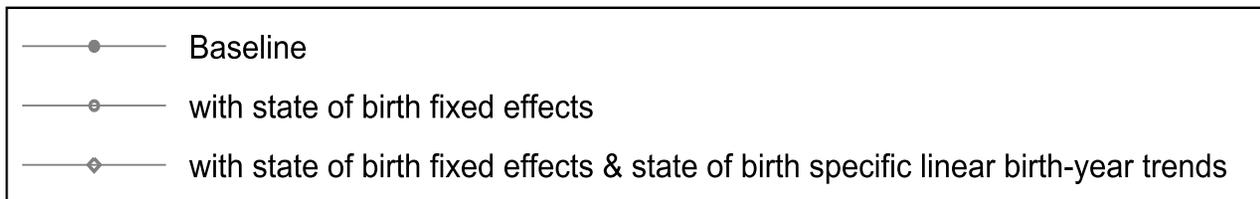
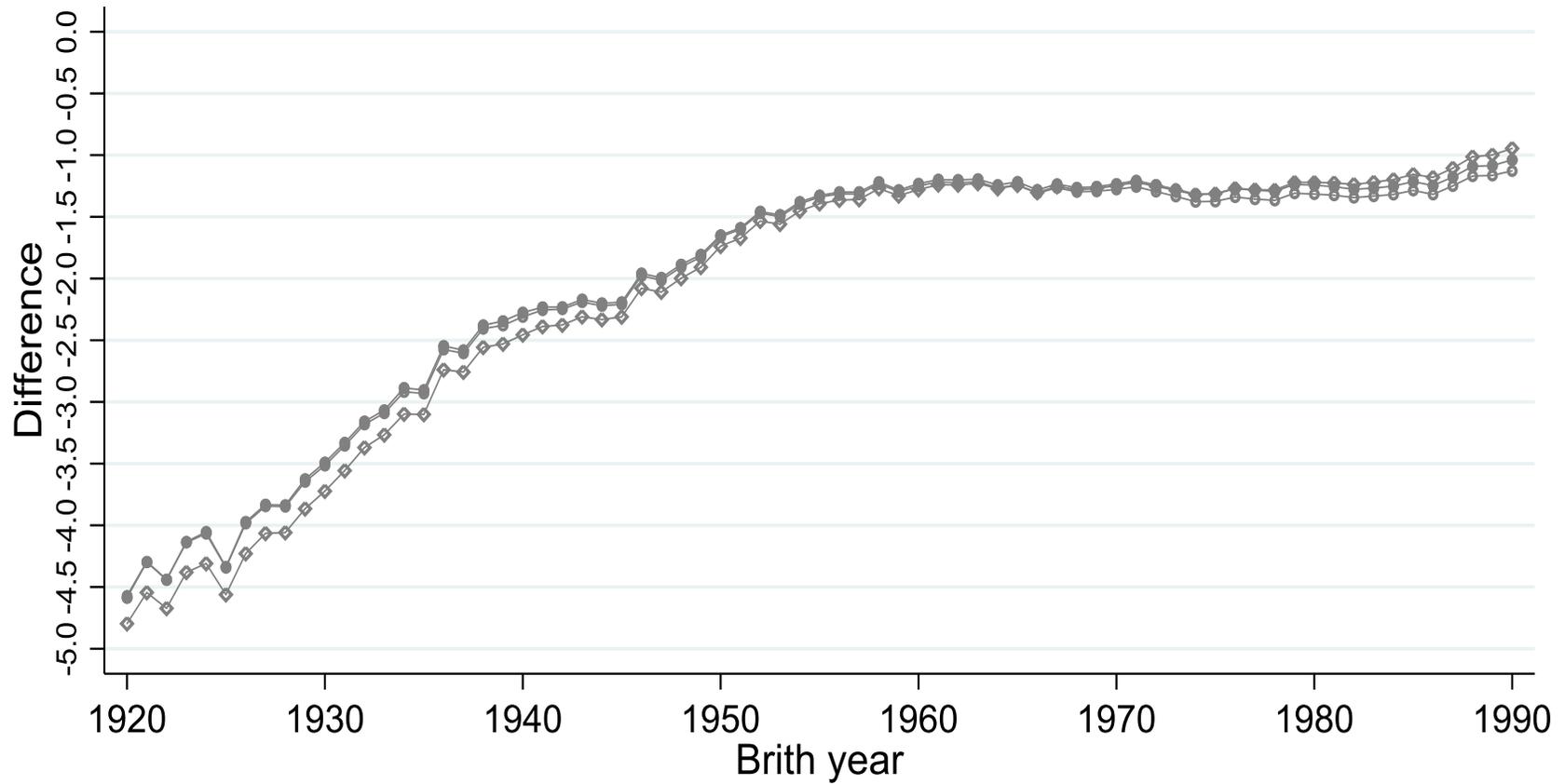
It could do so if Mexican Americans are concentrated in areas that have been disproportionately impacted by policies or shocks that encourage or discourage schooling progress (by *all* racial/ethnic groups).

e.g., secular declines in state funding for public colleges

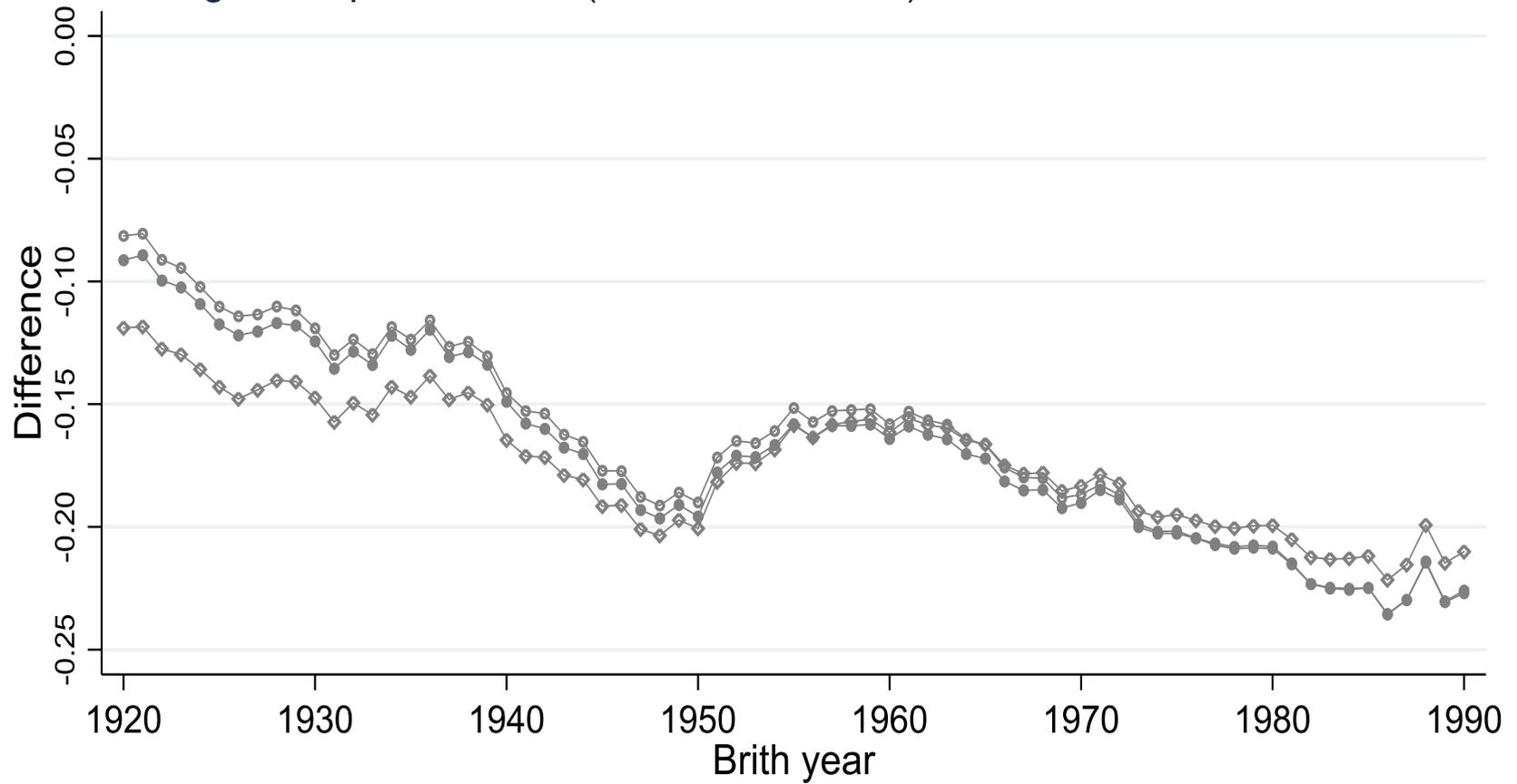
e.g., housing booms and busts

How does controlling for state of birth fixed effects and state-specific linear birth-year trends affect educational differences between racial/ethnic groups and across birth years? (**See slides that follow.**)

Years of Schooling (Mexican – White)

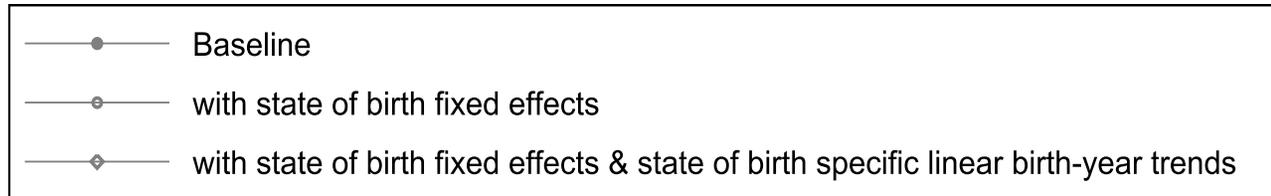
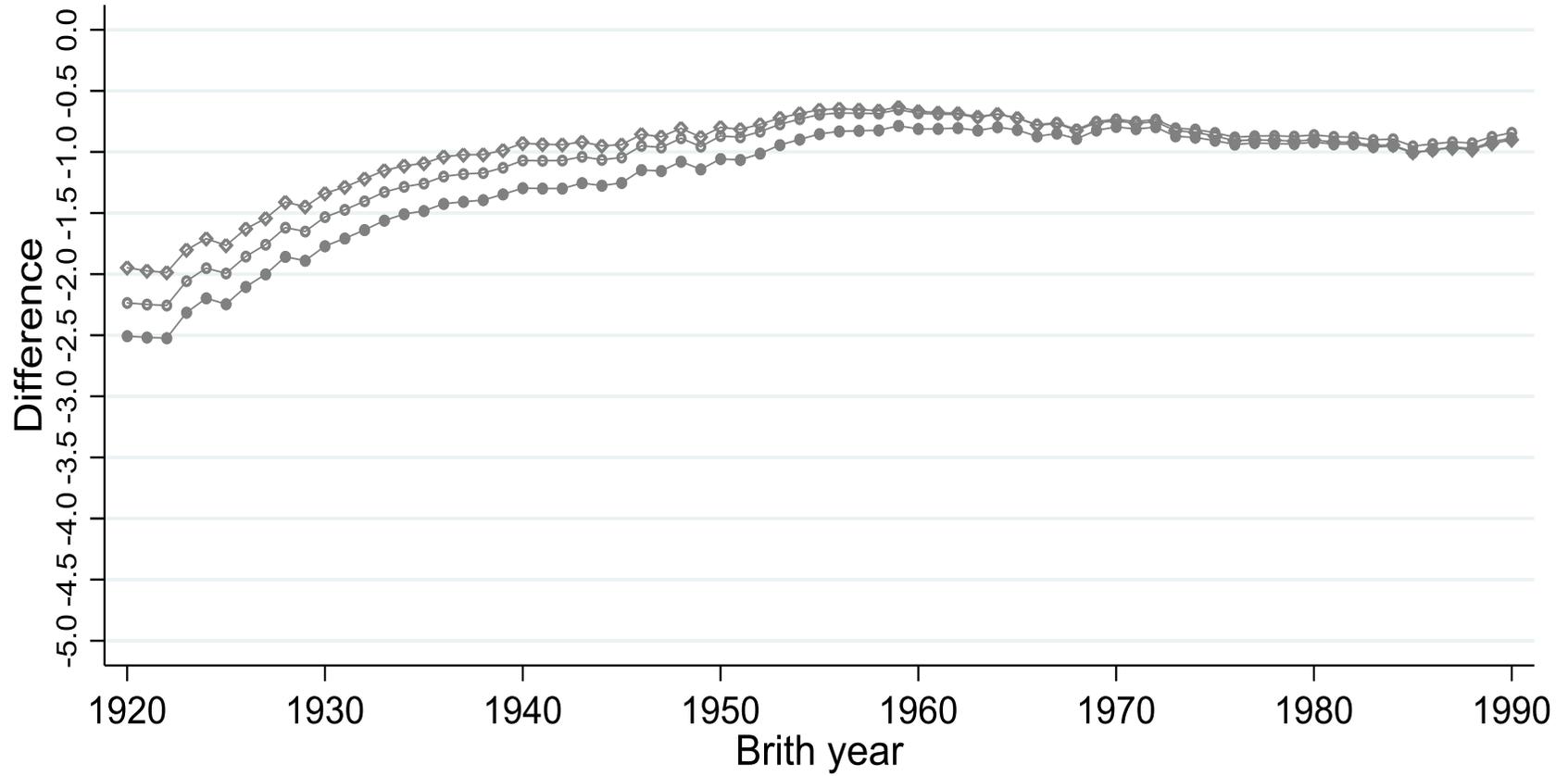


College Completion Rate (Mexican – White)

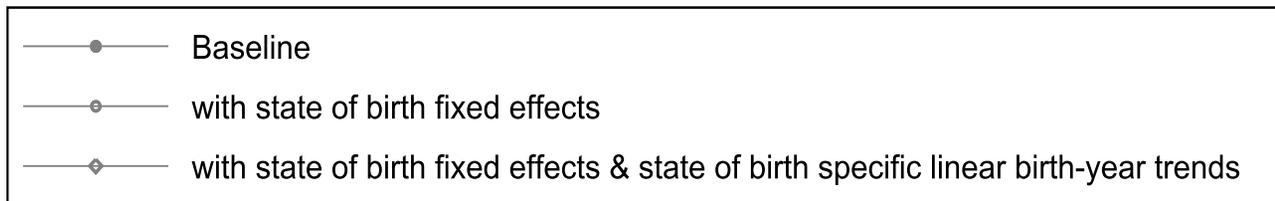
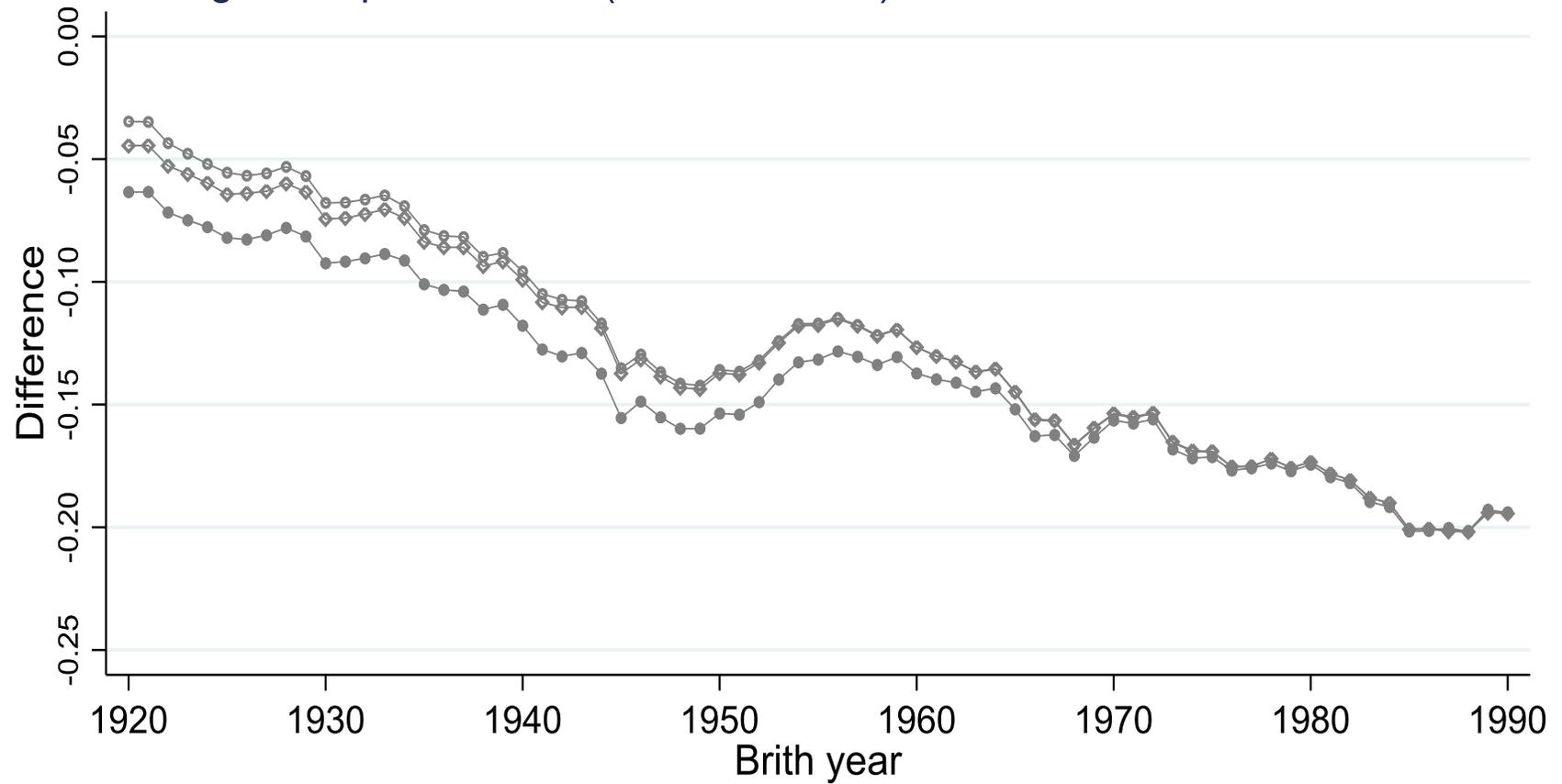


- Baseline
- with state of birth fixed effects
- ◇ with state of birth fixed effects & state of birth specific linear birth-year trends

Years of Schooling (Black – White)



College Completion Rate (Black – White)



Conclusions

This analysis of the educational attainment of U.S.-born Mexican Americans over 7 decades yields several key findings:

1. Mexican Americans have closed most of their large initial schooling deficit relative to non-Hispanic whites and almost all of their deficit relative to African Americans.
2. Progress for Mexican Americans has been greatest in the lower tail of the schooling distribution.
 - a. Dramatic reduction in deficits in high school completion.
 - b. In contrast, deficits in college completion have widened.
3. Initial schooling deficits and subsequent gains of Mexican Americans vary with their state of birth.
 - a. Suggests the potential importance of state-specific policies and institutions for shaping the educational progress of Mexican Americans.