

DISCUSSION PAPER SERIES

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ABSTRACT

New Evidence on the Underrepresentation of Asian Americans in Leadership Positions*

For decades, Asian Americans have been characterized as a “model minority” due to perceived success in educational attainment and labor market outcomes. However, there are concerns that Asians remain underrepresented in top level positions in the workplace. This study presents new evidence on the extent of this underrepresentation between US-born Asian American and White men and examines mechanisms driving racial leadership gaps. Results indicate that Asian men are significantly less likely to work in management and executive positions compared to White men with similar qualifications. However, Asian men are not underrepresented in other high-paying, non-leadership occupations, suggesting this is a phenomenon unique to leadership occupations. Furthermore, these gaps are only present among East Asian and Southeast Asian men, while South Asian men do not differ from White men in the likelihood of working in leadership occupations. I examine several mechanisms and find no evidence that gaps are driven by racial differences in preferences for leadership positions, selection into self-employment, intergenerational transmission effects, immigration recency, or ethnic attrition.

JEL Classification: J01, J15

Keywords: Asian Americans, leadership, labor market outcomes

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1 Introduction

Asian Americans are currently the single fastest growing racial and ethnic group in the United States (Budiman & Ruiz, 2021). Since the mid-1900s, Asian Americans have been characterized as “model minorities,” due to their perceived academic and economic successes (Wu, 2015). This stereotype is bolstered by the fact that recent immigrants from Asia are hyper-selected: immigrants in recent decades are more highly educated on average than both non-migrants in their home countries and native-born US counterparts (J. Lee & Zhou, 2015). This stereotype has been used to suggest Asian Americans have fully succeeded in assimilating and serve as a “model” for other non-White groups. However, the use of this stereotype has been criticized for ignoring the unique challenges and barriers faced by different racial and ethnic groups, as well as for obscuring the diversity of experiences within the Asian American community (Yi & Museus, 2015).

Furthermore, there are criticisms that the claim that Asian Americans have fully achieved parity with White Americans is misleading. While Asian Americans have high levels of education and earnings on average, there are concerns of their apparent lack of visibility in higher levels of leadership, such as executive or other top corporate positions. This phenomenon, which has been coined the “bamboo ceiling,” refers to the various factors that contribute to the underrepresentation of Asian Americans in leadership positions within organizations (Chin, 2020; Hyun, 2005). This study provides new evidence on the extent and nature of this underrepresentation.

Leadership representation is important for several reasons. First, individuals in leadership positions have disproportionate influence over key decisions that affect a firm. Representation in these roles ensures that a group’s perspective is heard. Second, individuals in leadership positions have the power to advocate for the needs and interests of their communities, both inside and outside a firm, potentially leading to more equitable outcomes and a greater focus on diversity and inclusion. Lastly, leadership positions are often at the top of career ladders, and barriers to these positions for a group reflect serious structural inequalities in career advancement.

In this paper, I analyze differences in leadership representation between US-born Asian and White men and assess various mechanisms that may explain racial differences in representation.¹ The primary analysis for this paper uses data from the American Community Survey (ACS), and I use two definitions of employment in a leadership position using occupation codes from the ACS: employment in a management occupation and employment in an executive occupation. Manage-

¹I limit my sample to men due to challenges in comparing women’s labor market outcomes across racial groups due to their more complicated selection patterns into employment (Neal, 2004).

ment occupations represent a broader class of leadership occupations, while executive occupations are more exclusive and refer to top level executives. I find that even though Asian men do well in the labor market overall in terms of employment rates and earnings, they are significantly less likely to work in leadership occupations compared to White men with the same educational attainment, age, and other characteristics, and results remain robust even to accounting for racial differences in selection into employment. Asian men are 2.8 percentage points less likely to work in management occupations than White men with similar qualifications, corresponding to a 27 percent decrease in the baseline propensity of working in a management position. Similarly, Asian men are 0.6 percentage points less likely to work in executive occupations than White men, corresponding to a 55 percent in the baseline propensity of working in an executive position.² These gaps in employment in leadership positions are similar to those experienced by Black and Hispanic men relative to White men. Specifically, Asian and Hispanic men experience similar gaps in management employment (with Black men experiencing larger gaps), and Asian and Black men experience similar gaps in executive employment (with Hispanic men experiencing smaller gaps). I also find that these gaps in leadership representation between White and Asian men have been persistent and fairly constant over several decades, suggesting this gap may not disappear without intervention, despite the model minority stereotype suggesting Asian Americans are successful in rapid assimilation.

One possible explanation for the underrepresentation of Asian men in leadership occupations is that this reflects a broader trend of Asian men facing barriers to accessing high-paying jobs in general, rather than reflecting a barrier that is unique to leadership occupations. To assess this possibility, I analyze differences in the propensity for Asian and White men to work in high-paying, non-leadership occupations. Results indicate that Asian men are not less likely to work in high-paying occupations outside of leadership, compared to White men with similar qualifications, suggesting that the gap in employment in management and executive occupations is a phenomenon specific to leadership positions. In contrast, I find that Black and Hispanic men, in addition to being underrepresented in management and executive occupations, are also underrepresented in higher-paying jobs more generally. This suggests that the gaps leadership employment experienced by Black and Hispanic men may at least in part reflect wider structural factors

²For reference, the magnitude of these gaps are similar to the gaps in leadership representation between employed men and women in the sample. Employed women are 2.4 percentage points less likely to work in management occupations than employed men and 0.7 percentage points less likely to work in executive occupations than employed men. One caveat with the gender estimates is that they focus on the sample of employed individuals and do not account for gender differences in selection into employment.

that prevent them from accessing high-paying jobs. This finding is also supported by the results of earnings regression estimations, which show that Asian, Black, and Hispanic men all experience lower earnings compared to White men with the same level of educational attainment and other observable characteristics. For Black and Hispanic men, this gap is significantly reduced, although still sizable, with the inclusion of industry and occupation fixed effects. For Asian men, the inclusion of occupation and industry fixed effects does not meaningfully change the estimated earnings gap, suggesting that much of the gap in earnings for Asian men is due to disparities within occupation and industry, rather than to Asian men working in lower-paying occupations or industries. This is consistent with Asian men facing barriers in advancing through the ranks of a career pipeline, more so than barriers in getting their feet in the door.

I also assess heterogeneity in Asian representation in leadership occupations across ethnic subgroups. While Asian Americans are often treated as a homogeneous group in policy discourse, they represent a diverse group of individuals in terms of cultural background, immigration history, and socioeconomic status (E. Lee, 2015; J. Lee & Zhou, 2015). Disaggregating Asian Americans by subgroup provides a more accurate understanding of the experiences and needs of this population and allows for more nuanced policy recommendations. To assess whether employment gaps in leadership occupations are similar across subgroups, I categorize Asian Americans in the sample into one of three groups: East Asian, South Asian, and Southeast Asian.³ Results indicate underrepresentation in leadership occupations is sizable for East and Southeast Asian men. In contrast, South Asian men do not differ in the probability of working in a management or executive occupation compared to White men with similar characteristics.

Next, I examine various potential mechanisms driving measured differences in leadership employment between Asian and White men. I categorize these mechanisms into two broad, loosely-defined groups: *mechanisms correlated with race* and *race-specific mechanisms*. For mechanisms correlated with race, I assess whether gaps in leadership can be explained by racial differences in the self-employment, immigration generation recency, or ethnic attrition. First, I assess the extent to which racial gaps in working in leadership occupations are driven by self-employed men or by racial differences in the propensity to be self-employed, as a large share of self-employed individuals report working in a management or executive occupation. To address this, I use multiple different methods of dealing with self-employed individuals and do not find evidence that self-employment plays a mediating role in explaining differences in leadership representation between

³Table 5 provides a breakdown of the specific ethnic groups in each subgroup.

White and Asian men. Second, I assess the extent to which gaps in leadership representation between White and Asian men reflect differences in immigration generation recency, irrespective of racial and ethnic background. This could be the case since on average, US-born Asian men are from families that have been in the US for significantly fewer generations than US-born White men. I address this channel by looking at whether there are leadership gaps for White men across different immigration generations using data from the Current Population Survey (CPS).⁴ I find no evidence that White men from families who have come to the US more recently are less likely to work in leadership occupation than White men whose families have been in the US for more generations, suggesting immigration recency cannot explain my results. Relatedly, I do not find any evidence that immigration recency differences across Asian subgroups drive subgroup heterogeneity in leadership propensity. Third, I assess whether the underrepresentation of Asians in leadership occupations is driven by ethnic attrition in Asian self-reporting. This concern is especially pertinent to this study, which focuses on individuals born in the US using self-reported race information, as prior research has shown that ethnic attrition is sizable for Asian Americans starting in the second generation (Duncan & Trejo, 2017). Ethnic attrition could lead to underrepresentation of Asian Americans in leadership if there is positive selection out of Asian self-identification with respect to leadership occupations. I assess this channel by re-estimating main results using data from the CPS and categorizing an individual's race based on their parents' birthplace to create an alternate, more "objective," metric of race. Estimates using this categorization of Asians yield similar results to those of the main ACS sample, suggesting results are not driven by ethnic attrition.

The second broad category of mechanisms examined are race-specific mechanisms. One possibility is that this gap is due to racial differences in preferences for leadership occupations, resulting from differences in tastes or comparative/absolute advantages. A second possibility is that this gap could reflect racial discrimination in the workplace, which could be taste-based or stereotype-based in nature. Finally, unobserved characteristics that are correlated with race could also be contributing to the underrepresentation of Asian men in leadership positions, such as differences in access to social networks, human capital, or cultural differences in how individuals are socialized to interact in the workplace. As one assessment of the role of preferences, I measure whether gaps in leadership representation between White and Asian men with bachelor's degrees are smaller within degree fields that are geared towards leadership roles (such as Business Management and

⁴I use CPS data because this survey contains information on parental birthplace, while the ACS does not.

Administration). Intuitively, individuals who select into these majors likely have a higher preference for working in leadership occupations. To the extent that there are racial differences in preferences for working in leadership occupations, a significant portion of these differences in preferences should be captured at the extensive margin of selection into these majors and racial gaps in leadership should be smaller for individuals who choose these majors. I find no evidence that leadership gaps between Asian and White men are smaller for individuals with leadership feeder majors, suggesting that racial gaps in leadership are not driven by preferences. Next, using data from the National Survey of College Graduates (NSCG), a survey conducted biannually of a subsample of individuals from the ACS who have a bachelor's degree, I find that Asian men report lower job satisfaction overall and lower satisfaction with their job's opportunities for advancement, compared to White men with similar characteristics. Furthermore, Asian men are just as likely, if not more likely, to rate opportunities for advancement as a very important characteristic of a job. These findings further suggest that racial gaps in leadership are likely not driven by Asians' lower preferences for leadership positions. Next, I also perform some analyses to assess the possibility that various types of unobserved differences across race may be contributing to these gaps. I first assess the role of intergenerational network transmission in affecting racial gaps in leadership propensity. I proxy for parental generation by looking at racial differences in leadership representation by race for individuals one generation earlier, using 25-64 year old men in the 1990 Census. Results indicate Asian men in the 1990 Census are also significantly less likely to hold leadership positions than White counterparts. However, I find that this is true for all Asian ethnic subgroups, and that South Asian men in 1990 are less likely to be in leadership occupations than White men and East Asian men. Thus, the fact that contemporary South Asian men are not underrepresented in leadership positions does not seem to be driven by higher access to these positions in the parent generation. Finally, I provide some analyses to assess whether results are driven by unobserved differences in human capital attainment since the ACS does not contain detailed information on graduate and professional degrees. Estimations using individuals who have bachelor's degrees and no further education and individuals who have high school degrees and no further education still yield persistent racial gaps in leadership.

The analysis of mechanisms provides novel information suggesting that the lower propensity for Asian American men to work in leadership occupations compared to White counterparts represent meaningful racial gaps that cannot be easily explained. These gaps could stem from factors including discrimination or unobserved racial differences that matter for job advancement (such

as cultural differences in how individuals are socialized to interact in the workplace or racial differences in leadership-relevant skills), or a combination of these factors. However, to the extent that representation in the workplace is valued, these gaps represent an important policy issue.

This paper relates to existing work on disparities in leadership representation. Most work in this literature has focused on gender gaps in leadership representation. There are a number of studies that focus on understanding the nature of female underrepresentation in leadership positions (Husain, Matsa, & Miller, 2021; Matsa & Miller, 2011; von Essen & Smith, 2023; Wolfers, 2006), as well as studies looking at effects of female leadership on firm outcomes (Adams & Ferreira, 2009; Ahern & Dittmar, 2011; Bertrand, Black, Jensen, & Lleras-Muney, 2019; Ferreira & Gyourko, 2014; Flabbi, Macis, Moro, & Schivardi, 2019; D. Kim & Starks, 2016; Kunze & Miller, 2017; Matsa & Miller, 2011; Tate & Yang, 2015). Less work has been done assessing racial differences in leadership representation in the workplace. One exception is Bogan, Potemkina, and Yonker (2021), which examines trends in racial diversity on US corporate boards over time. This study contributes to our understanding of the extent and nature of gaps in leadership representation between Asian and White men.

This paper also contributes to a growing body of work on Asian Americans. For labor market outcomes, a few studies have looked at labor market mobility of Asian Americans over time. Hilger (2017) traces Asian American mobility over the early- and mid-1900s, finding that Asian Americans experienced significant gains in earnings conditional on their educational attainment during this time period. Duleep and Sanders (2012) measures labor market mobility for a later time period, from 1960-1980 and finds that Asian American men experienced a large increase in earnings over this period, largely due to a decline in discrimination against Asians. In addition, a number of papers have examined earnings differences between Asians and Whites (Black, Haviland, Sanders, & Taylor, 2008; Chiswick, 1983; Duleep & Sanders, 1992; C. Kim & Sakamoto, 2010; M. Kim, 2003; Mar, 2005; Weinberger, 1998). These studies find varying degrees of earnings discrepancies between Asian Americans and Whites, although most papers find evidence that Asians earn less than White counterparts with similar labor market characteristics and qualifications.⁵

This study most closely relates to a few papers looking at Asian American representation in

⁵Recent studies have also looked at differences in the treatment of Asian American and White students in the education system. For example, Shi and Zhu (2022) documents that teachers display positive bias in their evaluation of Asian students, compared to White students with comparable standardized test scores. Arcidiacono, Kinsler, and Ransom (2022) assesses discrimination towards Asian students relative to White students in the college admissions process, finding that a significant predictor of admissions differences between observably similar White and Asian students at Harvard is an ambiguously defined “personal” score.

leadership positions. Using data from the 1980 Census, Duleep and Sanders (1992) find that Asian men are less likely than White men to be managers, conditional on observable characteristics. Mar (2005) documents a similar phenomenon using the 2000 Census. This study builds upon earlier studies in a number of ways. First, I extend prior studies to assess differences in leadership representation across different Asian ethnic subgroups, revealing significant heterogeneity across groups. Second, the ACS data allow me to assess various levels of leadership positions, providing a more nuanced analysis of leadership employment. Indeed, I find that while gaps exist in both executive and management positions more broadly, they are significantly larger for executive occupations, which represent the highest level of leadership. Third, this study provides an in-depth analysis of mechanisms contributing to racial leadership employment gaps and is able to rule out several channels as the driver of these gaps. One other paper that this study relates to is Lu, Nisbett, and Morris (2020), who use a mixed-methods approach to study leadership gaps across Asian subgroups using survey data for employees at S&P 500 companies and MBA students at a top business school. They find that East Asians are less likely than White individuals to work in leadership occupations while South Asians are more likely to do so. My paper builds upon this study in assessing Asian subgroup differences across the entire US population instead of conditioning on individuals who are employed at a select group of companies. This allows me to address both selection into employment and selection into certain companies or school, both of which may affect racial differences in leadership representation. These differences may explain the differences between the two papers regarding the representation of South Asians in leadership occupations.

In the remainder of the paper, section 2 presents the primary data source used in the study and provides descriptive patterns. Section 3 assesses the representation of Asian American men in top-level leadership positions compared to White men, and section 4 breaks down this analysis by Asian ethnic subgroups. Section 5 examines various potential mechanisms behind racial differences in leadership representation and section 6 concludes.

2 Data and Descriptive Patterns

2.1 Data

This paper uses data from the Integrated Public Use Microdata Series for the 2019 five-year American Community Survey (ACS) sample, which contains all individuals from the 1% ACS sam-

ples from 2015-2019 (Ruggles, Flood, Goeken, Schouweiler, & Sobek, 2022). The ACS, which is administered by the US Census Bureau, is a nationally representative household survey of non-institutionalized individuals in the US. I restrict the sample to US-born men aged 25-64, excluding individuals currently in school or in the military. Individuals are classified as Asian if they identify as non-Hispanic, Asian, and no other races. Similarly, individuals are classified as White or Black if they identify as non-Hispanic and with the respective single-race categories. Individuals are classified as Hispanic if they identify as Hispanic, regardless of the race reported.⁶ While the focus of this paper is on Asian-White differences in leadership representation, I provide some information on Black-White gaps and Hispanic-White gaps as well for comparison.

This study uses detailed data on labor market characteristics from the ACS, including information on occupation, industry, and earnings. Occupation classifications come from the six-digit Standard Occupational Classification (SOC) system. These codes are used to identify leadership roles in employment. I use two measures of leadership occupations in this study: management occupations and executive occupations. Management occupations are more broadly defined and represent one of 24 occupation categories. Executive occupations are a subset of management occupations and include individuals who work as “Chief Executives and Legislators,” constituting top-level leadership positions. Industry classifications come from the six-digit North American Industry Classification System. Hourly earnings are calculated by dividing an individual’s annual wage income by the total number of hours worked. All wages are adjusted to reflect real 2019 dollars.⁷

The ACS also contains information on the highest level of education attained by each individual in the sample. For those who have earned a bachelor’s degree or higher, I observe their field of study in college. The ACS includes self-reported data on an individual’s proficiency in English, with five different categories of proficiency. Additionally, I observe the state of residence, as well as metropolitan area of residence if the individual lives in one. All analyses use person weights provided by the ACS.

⁶Approximately three percent of individuals in the sample identify as two or more races, and these individuals are not included in the analysis sample.

⁷The Census Bureau top-codes the top 0.5% of earners in each state in a given year during this time period to have the average earnings of the top 0.5% in the state.

2.2 Descriptive Patterns

Table 1 presents the sociodemographic characteristics of the sample across racial and ethnic groups. On average, Asian and Hispanic men are younger than White and Black men. The average age of Asians is 38.5 and the average age of Hispanics is 40.1, while the average age of White individuals is 45.6 and the average age of Black individuals is 43.5. This in part reflects that a larger proportion of Asians and Hispanics in the US are recent immigrants, which affects the age composition of US-born individuals from these groups. The ACS measures English proficiency on a five-point scale: 1: Does not speak English, 2: Yes, but not well, 3: Yes, speaks well, 4: Yes, speaks very well, 5: Yes, speaks only English. I categorize individuals as not completely proficient in English if they report a response of 1, 2, or 3. Overall, the sample has a very high level of English proficiency, which is not surprising since everyone is US-born. However, there remain non-trivial differences in proficiency among the groups. Specifically, five percent of Asians and 10 percent of Hispanics report incomplete proficiency in English. Asian men have higher education levels on average than White men and are more likely to have a bachelor's or graduate degree. Black and Hispanic men are less likely to have a bachelor's or graduate degree compared to White men. In terms of geographic residence, Asian Americans are disproportionately located in the West compared to other groups, with 60 percent of Asian Americans living in the West, while 15 percent living in the Northeast, 19 percent living in the Midwest, and 16 percent living in the South. Additionally, Asian Americans are the most concentrated in urban areas out of all the groups, with approximately 93 percent residing in a metropolitan area.

Next, Table 2 presents labor market characteristics for the sample. Asian men are more likely to report employment in the previous year compared to other groups, with 85 percent of Asian men reporting employment, compared to 80 percent, 68 percent, and 78 percent for White, Black, and Hispanic men, respectively. Employed Asian men earn approximately \$43 an hour in 2019 dollars, compared to White men who earn \$38 an hour on average. This contrasts with means for Black and Hispanic men, who have lower hourly earnings than White men, earning \$26 per hour and \$28 per hour on average, respectively. These patterns are consistent with the differences in educational attainment across groups. The self-employment rate in this sample is five percent for Asian men, seven percent for White men, and three percent for both Black and Hispanic men. In contrast to education, earnings, and employment trends, Asian men do not appear in management or executive occupations at higher rates than White counterparts. Among the employed men in

Table 1: Sociodemographic Characteristics

	White	Asian	Black	Hispanic
Age	45.59 (11.63)	38.50 (10.80)	43.54 (11.71)	40.13 (11.07)
Not completely English proficient	0.00	0.05	0.00	0.10
Education				
Less than high school	0.07	0.04	0.14	0.17
High school	0.29	0.16	0.39	0.35
Some college	0.29	0.24	0.31	0.30
Bachelor's degree	0.23	0.36	0.11	0.13
Graduate degree	0.12	0.21	0.05	0.05
Region				
Northeast	0.18	0.15	0.13	0.14
Midwest	0.54	0.19	0.36	0.18
South	0.35	0.16	0.60	0.36
West	0.20	0.60	0.09	0.41
Resides in metropolitan area	0.73	0.93	0.82	0.89
<i>N</i>	2,487,770	43,346	320,323	258,630

Table includes US-born men ages 25-64 years old from 2015-2019, excluding individuals in school or the military. English proficiency is scored on a 5-category scale: 1: Does not speak English, 2: Yes, but not well, 3: Yes, speaks well, 4: Yes, speaks very well, 5: Yes, speaks only English. I categorize individuals as not completely proficient in English if they report a response of 1, 2, or 3.

the sample, 13 percent of Asian men worked in a management occupation, compared to 14 percent of White men, seven percent of Black men, and nine percent of Hispanic men. Additionally, 1.0 percent of Asian men worked in an executive occupation, compared to 1.6 percent of White men, 0.3 percent of Black men, and 0.5 percent of Hispanic men.

Figure 1 displays racial differences by education level in the propensity for employed men to work in management or executive occupations. Table 1 indicates there are significant differences in educational attainment by race, which could play a role in explaining racial differences in leadership since education may serve a key role in providing individuals with the skills and expertise needed for these roles. Figure 1 shows that for each education level, White men are more likely to work in a management or executive occupation compared to Asian men.

Descriptive analyses suggest that although Asian men have higher levels of education and earnings compared to White counterparts, they do not appear to have higher levels of representa-

Table 2: Labor Market Characteristics

	White	Asian	Black	Hispanic
Employed	0.80	0.85	0.68	0.78
Hourly earnings (2019\$)	38.37 (143.30)	42.61 (71.90)	25.94 (185.94)	27.99 (61.22)
Self-employed	0.07	0.05	0.03	0.03
Management occupation	0.14	0.13	0.07	0.09
Executive occupation	0.016	0.010	0.003	0.005
<i>N</i>	2,487,770	43,346	320,323	258,630

Table includes US-born individuals ages 25-64 years old from 2015-2019, excluding individuals in school or the military. Column observation counts represent the total number of individuals in each group, white earnings, self-employment, and occupation calculated from sample of employed individuals.

tion in leadership positions. In fact, Asian men appear to be less likely to work in leadership than White peers with similar education levels. However, it is possible that some of this difference may be explained by other factors such as age, English proficiency, or selection into employment. The following sections assess these factors and others to provide an accurate analysis of the magnitude and nature of the representation of Asian American men in leadership occupations.

3 Racial Differences in Leadership Representation

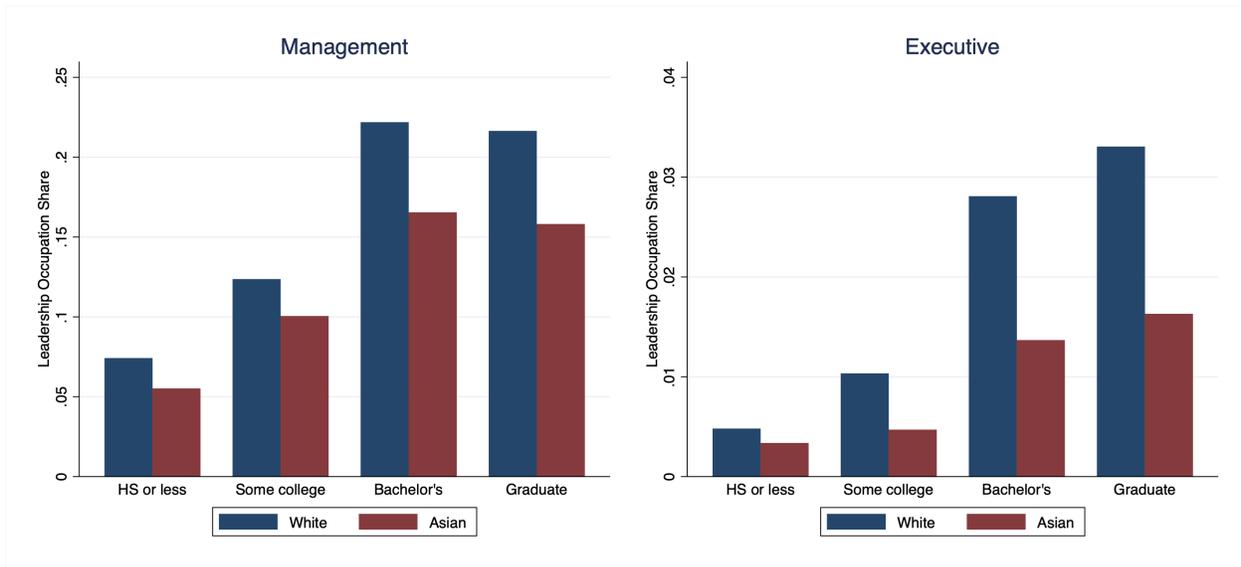
3.1 Main Analysis

I estimate the following linear probability model to evaluate differences in the propensity for Asian and White men to work in leadership occupations:

$$L_{it} = \alpha + \mathbf{Race}'_{it}\gamma + \mathbf{X}'_{it}\rho + \tau_t + \nu_{it} \quad (1)$$

where L_{it} is an indicator variable that takes a value of one if individual i works in a leadership occupation in year t and zero otherwise. I use two different measures of leadership positions: management occupations and executive occupations, as described in Section 2. The model includes a vector of controls, \mathbf{X}_{it} , to account for characteristics that may vary across race and affect an individual's occupation. These include controls for age, educational attainment, English profi-

Figure 1: Leadership Representation by Education Level



ciency, area of residence, and self-employment status. The model also includes a year fixed effect, τ_t . The coefficients on the vector of race indicator variables, \mathbf{Race}_{it} , capture differences in the propensity of individuals to work in leadership positions across racial and ethnic groups.

Table 3 presents results from Equation 1. The first two columns display estimates for the sample of employed men. Column 1 displays estimates assessing whether an individual works in a management occupation, while Column 2 displays estimates assessing whether an individual works in an executive occupation. Estimates indicate Asian men are significantly less likely to work in leadership positions relative to White men with similar characteristics. Specifically, Asian men are 3.0 percentage points less likely to work in management occupations compared to White men, which is a 23 percent decrease from the baseline probability for employed men to work in a management position. Additionally, Asian men are 0.7 percentage points less likely to work in management occupations compared to White men, which is a 54 percent decrease from the baseline probability for employed men to work in an executive position.

Columns 1 and 2 focus exclusively on employed men since only employed individuals report current occupations. However, this raises the concern that selection into employment may bias estimates. To address this, I provide alternate estimations in columns 3 and 4 of Table 3 that impute men who are not employed as not working in a management or executive position if they were employed. This imputation follows prior work in assuming that men who are not employed are negatively selected (Cahuc, Carcillo, & Zylberberg, 2014). Results using the full

Table 3: Employment in Leadership Positions

	Employed men		All men	
	Management (1)	Executive (2)	Management (3)	Executive (4)
Baseline	0.130	0.013	0.101	0.010
Asian	-0.030*** (0.002)	-0.007*** (0.001)	-0.028*** (0.002)	-0.006*** (0.001)
Black	-0.051*** (0.001)	-0.008*** (0.000)	-0.047*** (0.001)	-0.006*** (0.000)
Hispanic	-0.028*** (0.001)	-0.005*** (0.000)	-0.023*** (0.001)	-0.004*** (0.000)
<i>N</i>	2,380,529	2,380,529	3,110,069	3,110,069

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust standard errors in parentheses. Outcome: whether the individual works in a management or executive position. Omitted category: White men. All specifications include controls for age, age squared, level of educational attainment, degree field (for individuals with a bachelor's degree), English proficiency, state/metropolitan area of residence, and self-employment status. For the sample of all men, individuals who are not employed are imputed as not being in management or executive positions.

sample also find that Asian men experience a penalty in occupying leadership positions compared to White men with similar qualifications. Specifically, Asian men are 2.8 percentage points less likely to work in management occupations than White men, which is a 28 percent decrease from the baseline probability for the full sample of men to work in a management position. Similarly, Asian men are 0.6 percentage points less likely to work in executive occupations than White men, which is a 60 percent decrease from the baseline probability of working in an executive position. These gaps in employment in leadership positions are similar to those experienced by Black and Hispanic men relative to White men. Specifically, Asian and Hispanic men experience similar gaps in management employment (with Black men experiencing larger gaps), and Asian and Black men experience similar gaps in executive employment (with Hispanic men experiencing smaller gaps).

Next, I assess whether there is heterogeneity in effects by education level, geography, or industry. Table A1 in the appendix provides estimation results looking at whether results differ for individuals with and without college degrees. The findings indicate that the difference in leadership representation between Asian and White men is larger among those with a bachelor's degree or higher compared to those without a bachelor's degree. Table A2 examines the variation in racial disparities in leadership representation by region. Results show that Asian men are significantly less likely to hold leadership positions in all four major Census regions of the US: South,

West, North, and Midwest. The gap in management representation for Asian men is smaller in the North compared to other regions, although a substantial gap still exists. I do not find evidence that the gap in the propensity for Asian and White men to work in executive occupations differs across regions. Table A3 assesses whether gaps vary based on the Asian population share in an area, as calculated by the share of Asians in an individual's metropolitan statistical area (MSA) of residence.⁸ Results indicate leadership gaps are exacerbated in areas where Asians constitute a larger share of the population. Finally, Table A4 examines whether gaps in leadership representation vary across industries, based on the concentration of Asians in an industry. I restrict my analysis to the sample of employed men since individuals who are not employed do not work in any industry. I find no effect of Asian industry share on the propensity for Asian men to work in a management occupation compared to White peers, while I find that Asian men are less likely to work in executive occupations compared to White men in industries with a larger share of Asians.

To provide some context for contemporary gaps in representation between Asian and White men, Figure 2 displays gaps in leadership representation between native-born Asian and White men over time using Census and ACS cross sections. I use data from the 1980, 1990, and 2000 Census and the 2010 and 2019 five-year ACS samples.⁹ For each year, I plot coefficient estimates of Equation 1.¹⁰ I do not have information on individuals working in executive occupations before 2000, so I am unable to look at whether individuals work as executives in 1980 or 1990. Estimation results in the figure indicate that gaps in leadership representation between Asian and White men have been present and fairly constant over several decades, indicating this gap has been a persistent feature of the labor market for some time. The persistence of these gaps has important policy implications, suggesting the underrepresentation of Asian Americans in management and executive occupations will not necessarily disappear on their own, despite the stereotype of the model minority suggesting Asian Americans are successful in rapid assimilation.

Overall, findings in this section indicate a significant gap in leadership representation between White and Asian men. Despite having high levels of education and earnings, Asian men do not attain management or executive positions at the same rate as White men with similar qualifications.

⁸For individuals who do not live in an MSA, I calculate this value as the share of Asians in all non-MSA areas of the state in which an individual resides

⁹I pool together five years of data for 2010 and 2019 to increase sample size.

¹⁰One difference from estimations in Table 3 is that I do not include controls for degree field since this information was not available in earlier ACS and Census surveys.

Figure 2: Racial Leadership Representation over Time

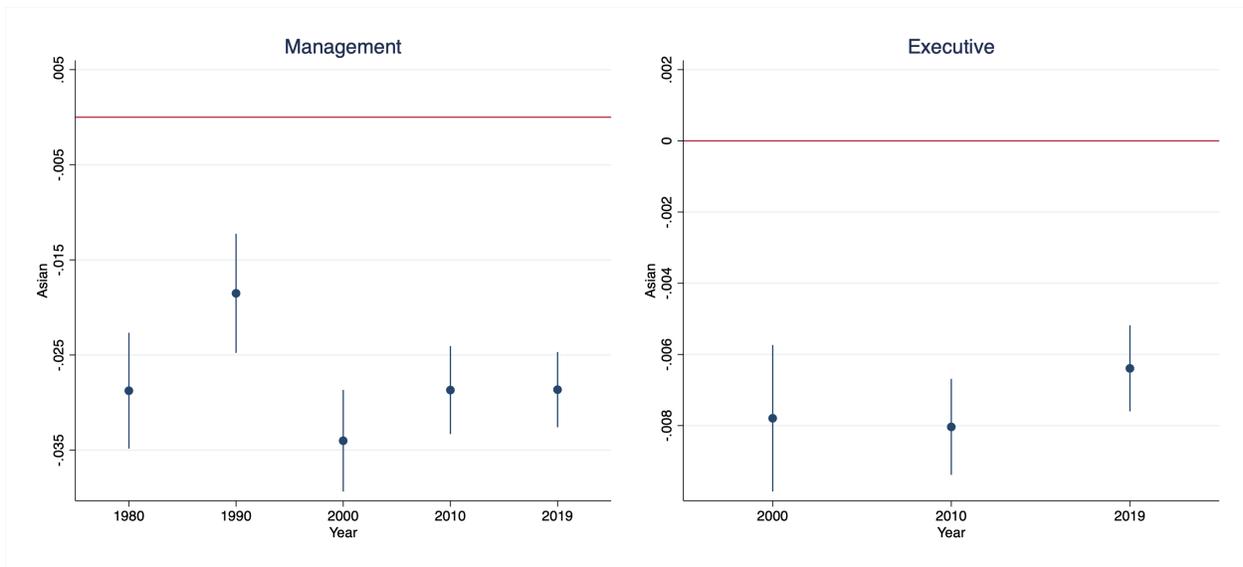


Figure displays estimations for the magnitude of the difference in the propensity for Asian men to work in a management or executive occupation compared to White men across different time cross-sections with 95% confidence intervals. Data come from the 1980 Census 5% sample, 1990 Census 5% sample, 2000 Census 5% sample, pooled 2006-2010 ACS 1% samples (labeled 2010), and pooled 2015-2019 ACS 1% samples (labeled 2019). All specifications include controls for age, age squared, level of educational attainment, English proficiency, geographic location, and self-employment status. The samples include both employed and non-employed men, and individuals who are not employed are imputed as not being in management or executive positions.

3.2 Racial Representation in High-paying, Non-leadership Occupations

One possibility is that the underrepresentation of Asian men in leadership positions is indicative of a broader phenomenon of Asian men not being able to access high-paying jobs. To determine if the barriers that Asian men face in accessing leadership positions are specific to those roles, I assess Asian representation in high-paying, non-leadership occupations to assess whether Asian men are underrepresented in these positions as well. To do so, I estimate the following specification on the sample of men who do not work in leadership occupations:

$$M_{it}^{wm} = \alpha + \mathbf{Race}'_{it}\kappa + \mathbf{X}'_{it}\phi + \tau_t + \vartheta_{it} \quad (2)$$

where M_{it}^{wm} denotes either the mean log hourly earnings or median log hourly earnings of White males in the occupation that individual i works in at time t . As in the previous regression in Equation 1, I include a vector of individual controls, \mathbf{X}_{it} . These controls include age, educational attainment, English proficiency, area of residence, and self-employment status. I also include a year fixed effect, τ_t . The estimated coefficients on the vector of race indicator variables, \mathbf{Race}_{it} , measure differences in average pay level of the occupations that individuals work in across racial and ethnic groups, where occupational pay level is measured by the mean or median log hourly earnings of White men in the occupation.¹¹

Table 4 presents the results of this analysis. The outcome variable in columns 1 and 2 is the mean log hourly earnings of White males in an individual's occupation, and the outcome variable in columns 3 and 4 is the median log hourly earnings of White males. Column 1 compares the occupational pay level of employed Asian and White men who do not work in a leadership occupation and finds no difference in the average occupational pay level between Asian and White men. Column 2 compares the occupational pay level of all Asian and White men who do not work in leadership occupations. Non-employed individuals in column 2 are given an imputed outcome value of the mean earnings of the occupation that has the lowest mean pay for White men, and I estimate results using a median regression. Coefficient estimates similarly indicate no difference in the average occupational pay level between Asian and White men. In columns 3 and 4, I perform a similar analysis in which I use median occupational earnings as an alternative measure of occupational pay. These results tell a similar story, indicating Asian men do not work

¹¹I calculate the average pay for a specific occupation using the earnings of White men only because using the earnings of all individuals in the occupation may be confounded by racial pay gaps since the racial composition of individuals varies widely across occupations.

in lower-paying occupations than White counterparts. If anything, estimates using median pay as a measure of occupational pay levels suggest Asian men may work in slightly higher-paying occupations than White men, although coefficient estimates are only weakly significant.

Table 4: Employment in High-Paying Occupations

Outcome:	Mean White Men Occupational Earnings		Median White Men Occupational Earnings	
	Employed	All	Employed	All
	(1)	(2)	(3)	(4)
Asian	0.001 (0.003)	0.002 (0.003)	0.005* (0.003)	0.005* (0.003)
Black	-0.143*** (0.001)	-0.174*** (0.001)	-0.141*** (0.001)	-0.172*** (0.001)
Hispanic	-0.055*** (0.001)	-0.029*** (0.001)	-0.054*** (0.001)	-0.028*** (0.001)
<i>N</i>	2059627	2789167	2059627	2789167

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust standard errors in parentheses. Outcome: mean or median earnings of White men in individual's occupation. Omitted category: White men. Men who are working in leadership occupations are dropped from the estimation. All specifications include controls for age, age squared, level of educational attainment, degree field (for individuals with a bachelor's degree), English proficiency, state/metropolitan area of residence, and self-employment status. For the sample of all men, individuals who are not employed are imputed as not being in management or executive positions. Columns (1) and (3) include all employed individuals who are not in leadership occupations and are estimated using an OLS regression. Columns (2) and (4) include all men who are not in leadership occupations and are estimated using a median regression. Non-employed individuals in column (2) given an imputed outcome value of the mean earnings of the occupation that has the lowest mean pay for White men, and non-employed individuals in column (4) given an imputed outcome value of the median earnings of occupation that has the lowest median pay for White men.

In contrast, results indicate that Black and Hispanic men work in sizably lower-paying occupations compared to White men. Black men work in jobs that are 17.4 percent lower paying than White men in terms of mean occupational pay and 17.2 percent lower paying than White men in terms of median occupational pay. Hispanic men work in jobs that are 2.9 percent lower paying than White men in terms of mean occupational pay and 2.8 percent lower paying than White men in terms of median occupational pay.

The findings in this section suggest that the lack of Asian representation in leadership positions is a phenomenon specific to leadership roles and not reflective of a general underrepresentation of Asian men in high-paying occupations, as Asian men do not have lower representation in high-paying occupations compared to White men. However, Black and Hispanic men are both

less likely to work in leadership positions and less likely to work in non-leadership, high-paying positions, compared to White men with similar characteristics. This suggests that the barriers to leadership positions for Black and Hispanic men may be a result of larger structural barriers that prevent them from entering high-earning positions more broadly, whereas the gaps for Asian men are unique to leadership positions.

These findings are further supported by analyses looking at racial and ethnic differences in earnings, which are presented in Appendix B. These findings indicate that Asian, Black, and Hispanic men all earn less than White men with similar qualifications. However, most of the earnings gap between Asian and White men occurs within occupation and industry, suggesting that these gaps could represent differences in the progression through the career pipeline. Intuitively, there may be various within-occupation career progressions before an individual is promoted to a managerial or executive position, and differences in progression within-race could be captured by earnings gaps within occupation and industry. In contrast, a sizable share of the gap in earnings between White men and Black and Hispanic men are driven by differences in occupation and industry of employment, suggesting the presence of barriers that prevent Black and Hispanic men from getting a foot in the door in certain fields.

4 Ethnic Subgroup Analysis

Asian Americans are often treated as a homogeneous group in policy discourse, and one criticism of this approach is that Asian Americans represent a diverse group of individuals in terms of cultural background, immigration history, and socioeconomic status (E. Lee, 2015; J. Lee & Zhou, 2015). This section disaggregates the analysis of Asian Americans by ethnic subgroups to provide a more nuanced understanding of leadership representation among Asian Americans.

4.1 Descriptive Patterns and Labor Market Returns

I separate Asians into three regional ethnic subgroups, East Asians, Southeast Asians, and South Asian, using detailed racial background information provided in the ACS. I follow the regional groupings put forth by the Asian Pacific Institute on Gender-Based Violence, and the classification is shown in Table 5.¹²

Table 6 presents descriptive characteristics of Asian men in the sample by ethnic subgroup.

¹²<https://www.api-gbv.org/resources/census-data-api-identities/>

Table 5: Ethnic Subgroup Classification

Subgroup	Race Codes
East Asian	Chinese (52.7%), Japanese (26.7%), Korean (17.7%), Taiwanese (2.9%)
South Asian	Indian (87.1%), Pakistani (10.2%), Bangladeshi (1.3%), Sri Lankan (0.8%), Nepalese (0.5%), Bhutanese (0.1%)
Southeast Asian	Filipino (54.9%), Vietnamese (22.1%), Cambodian (6.2%), Hmong (8.2%), Laotian (4.4%), Thai (3.1%), Indonesian (0.7%), Burmese (0.3%), Malaysian (0.1%)

Classification of Asians into subgroups based on ACS self-reported race. The relative share of each specific ethnic group in the broader subgroup is reported in parentheses.

The top panel of the table shows substantial heterogeneity in sociodemographic characteristics among Asian subgroups. On average, all Asian subgroups are younger than White men, with the youngest being South Asians at 35.4 years and the oldest being East Asians at 40.8 years. All Asian subgroups demonstrate lower average English proficiency than White males. East Asian and South Asian men have higher levels of education on average compared to White men, while Southeast Asian men have a more similar educational attainment profile to White men. Asian men across groups are more heavily concentrated in the West relative to White men, and this is especially true for East and Southeast Asians. All Asian subgroups of men are also more likely to reside in metropolitan areas than White men.

The bottom panel of Table 6 displays labor market characteristics across Asian subgroups. All subgroups have higher employment than White men, with employed share ranging from 89 percent for South Asians to 85 percent for East Asians. In terms of earnings, East and South Asian men earn more than White men on average, while Southeast Asian men earn less. Self-employment rates range from seven percent for White and South Asian men to three percent for Southeast Asian men. East and South Asian men are more likely to work in management positions than White men, while Southeast Asian men are less likely to do so. All differences are statistically significant at a 99 percent confidence level. In contrast, both East and South Asian men are statistically less likely to work in executive occupations than White men. South Asian men have a statistically higher propensity of working in executive positions compared to White men, although this difference is only significant at a 90 percent confidence level. East Asian men do not have a statistically different propensity to work in executive occupations. These descriptive trends suggest that there may be heterogeneity in leadership representation across different Asian subgroups, as well as heterogeneity along other factors that may affect labor market outcomes.

Table 6: Subgroup Characteristics

	White	Asian		
		East	South	Southeast
Age	45.59 (11.63)	40.80 (11.71)	35.35 (8.25)	35.79 (9.18)
Not completely English proficient	0.00	0.05	0.04	0.06
Education				
Less than high school	0.07	0.02	0.03	0.05
High school	0.29	0.09	0.07	0.20
Some college	0.29	0.19	0.13	0.32
Bachelor's degree	0.23	0.44	0.36	0.32
Graduate degree	0.12	0.26	0.41	0.11
Region				
Northeast	0.18	0.18	0.28	0.08
Midwest	0.27	0.07	0.16	0.11
South	0.35	0.12	0.29	0.18
West	0.20	0.63	0.26	0.62
Resides in metropolitan area	0.73	0.95	0.97	0.94
Employed	0.80	0.85	0.89	0.86
Hourly earnings (2019\$)	38.35 (141.98)	50.11 (97.71)	55.91 (59.76)	32.09 (35.34)
Self-employed	0.07	0.06	0.07	0.03
Management occupation	0.14	0.15	0.18	0.10
Executive occupation	0.016	0.013	0.020	0.005
<i>N</i>	2,487,770	18,545	5,377	13,033

Table includes US-born individuals ages 25-64 years old from 2015-2019, excluding individuals in school or the military. English proficiency is scored on a 5-category scale: 1: Does not speak English, 2: Yes, but not well, 3: Yes, speaks well, 4: Yes, speaks very well, 5: Yes, speaks only English. I categorize individuals as not completely proficient in English if they report a response of 1,2 or 3. Earnings, self-employment status, and occupation calculated from sample of employed individuals.

The next section measures differences in leadership occupation across subgroups after accounting for other differences across groups.

Figure 3: Subgroup Employment in Leadership Occupations

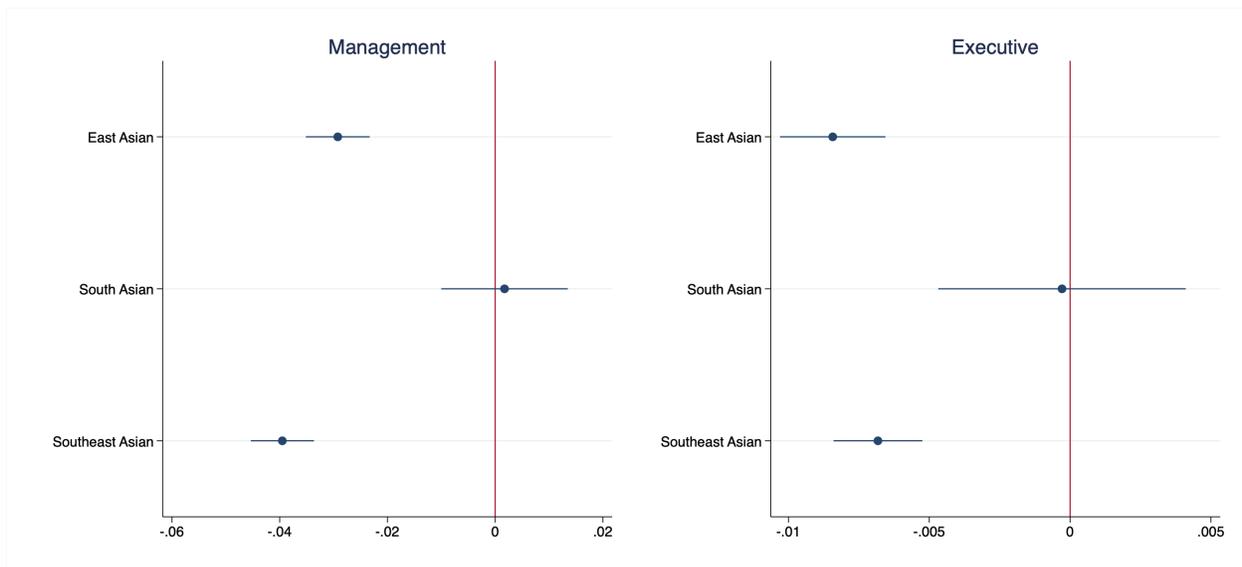


Figure displays estimations for the magnitude of the difference in the propensity for Asian men from various subgroups to work in a management or executive occupation compared to White men with 95% confidence intervals. All specifications include controls for age, age squared, level of educational attainment, English proficiency, geographic location, and self-employment status. The samples include both employed and non-employed men, and individuals who are not employed are imputed as not being in management or executive positions.

4.2 Empirical Analysis

Next, I assess differences in leadership representation across subgroups using Equation 1. Figure 3 displays estimation results using the full sample of men. The outcome of the estimation shown in the left graph is an indicator variable taking a value of one if an individual works in a management occupation and zero otherwise, and the graph on the right shows an analogous estimation for working in executive occupations. Results indicate East Asian and Southeast Asian men are significantly less likely work in both a management and executive occupation compared to White men. In contrast, South Asian men do not differ in their propensity to work in a leadership occupation using either outcome measure of leadership. Table A5 in the appendix shows estimation results in table form for both the sample of working men and the full sample of men.

For a more detailed subgroup breakdown, I also analyze leadership representation by specific country of origin. Figure A1 in the appendix compares the propensity for working in a leadership occupation between White men and Asian men from the six Asian countries with the highest representation in the sample: China, the Philippines, Japan, India, Korea, and Vietnam.¹³ Consistent

¹³Due to sample size limitations, I am unable to perform separate analyses for all Asian origin countries.

with results in Figure 3, I find that men from all country-specific ethnic subgroups except India are significantly less likely to work in management and executive positions relative to White men. In contrast, Indian men do not differ from White men in their propensity to work in leadership occupations.

Next, I assess heterogeneity in the propensity to work in high-paying, non-leadership occupations by Asian subgroup using Equation 2 in Figure 4. The left graph displays coefficient estimates looking at racial differences in occupational pay, measuring occupational pay as the mean log hourly earnings of White men in the occupation. The right graph displays the same analysis using median log hourly earnings of White men as the measure of occupational pay. In both graphs, I find that for individuals not working in leadership occupations, the occupations East Asian men work in do not differ on average in occupational pay compared to the occupations White men work in, suggesting the underrepresentation of East Asian men in management and executive positions is a phenomenon unique to these jobs. In contrast, Southeast Asian men work in lower paying occupations on average than White men, suggesting their underrepresentation in leadership occupations may reflect larger structural barriers that prevent them from accessing high-paying jobs overall. South Asian men who are not employed in leadership occupations work in higher paying occupations than White counterparts on average. One interpretation of these results is that while South Asian men do not differ in their propensity to work in leadership occupations compared to White men, their representation in leadership is lower relative to their overrepresentation in other high-paying occupations. Table A6 in the appendix shows results of this analysis in table form for both the sample of working men and the full sample of men.

Overall, results in this section indicate that the underrepresentation of Asian men in leadership occupations is not ubiquitous across subgroups. While East Asian and Southeast Asian men are less likely to work in management and executive occupations compared to White men with similar qualifications, I find no difference in the propensity for South Asian men to work in leadership occupations compared to White counterparts. These findings highlight the importance of disaggregating Asian Americans in understanding labor market outcomes for this group.

5 Mechanisms

To summarize, analyses show that US-born Asian men are significantly less likely to work in management and executive occupations compared to White counterparts with similar qualifications.

Figure 4: Subgroup Employment in High-paying, Non-leadership Occupations

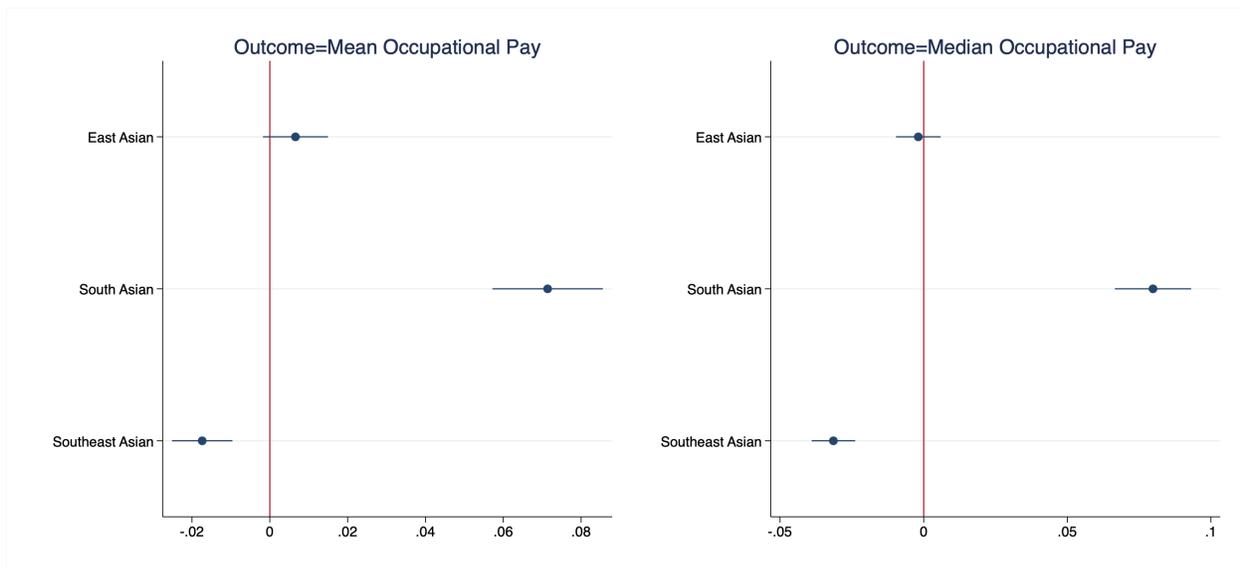


Figure displays median regression estimations for difference in occupational pay level between Asian and White men for men not working in leadership occupations with 95% confidence intervals. All specifications include controls for age, age squared, level of educational attainment, English proficiency, geographic location, and self-employment status. The samples include both employed and non-employed men, and individuals who are not employed are imputed as having the mean or median occupational pay level of the lowest-paying occupation.

However, Asian men are not less likely to work in high-paying, non-leadership occupations, suggesting this is a phenomenon unique to leadership roles. Furthermore, subgroup analyses indicate underrepresentation in leadership occupations is unique to East and Southeast Asian men. In contrast, South Asian men are not underrepresented in management or executive occupations. In this section, I explore possible mechanisms underlying these results. I categorize mechanisms broadly into two categories, *factors correlated with race* and *race-specific mechanisms*. For factors correlated with race, I examine the roles of self-employment, ethnic attrition, and immigration generation in driving leadership gaps between Asian and White men. For race-specific mechanisms, I provide a discussion of the roles of preferences, discrimination, and unobserved group differences in affecting leadership gaps.

5.1 Factors correlated with race

First, I examine the possibility that results are driven by self-employed individuals or by racial differences in selection into self-employment. This is an especially important consideration because self-employed men are significantly more likely to report working in a management or executive

occupation than men who are employees.¹⁴ In the main estimation of leadership gaps in Table 3, I include a control for whether an individual is self-employed. One concern with this approach is that working in self-employed leadership positions do not necessarily reflect the same roles and processes as working in leadership positions in wage work environments. To assess whether my findings are driven by self-employed men, I re-estimate Equation 1, excluding self-employed men from the estimation. Columns 1 and 2 in the top panel of Table 7 display results of this analysis. Results using this specification produce similar estimates to those in Table 3, finding that Asian men are significantly less likely to work in management and executive positions compared to White men. The bottom panel displays estimation results by Asian ethnic subgroup, and results are also similar to main estimates in finding that East Asian and Southeast Asian men are less likely to work in leadership occupations while South Asian men do not differ from White men in their propensity to work in these jobs. Next, I assess whether gaps in leadership representation between Asian and White men are driven by racial differences in selection into self-employment. Since leadership rates differ significantly between self-employment and wage work jobs, selection could contribute to my findings if Asian men are more likely to select into self-employment, all else equal, perhaps in response to barriers in accessing leadership occupations in wage work jobs. In columns 3 and 4 of Table 7, I re-estimate Equation 1, reclassifying self-employed individuals as not working in a management or executive occupation, regardless of reported occupation. Results are similar to the main findings: I find that Asian men are significantly less likely to work in leadership occupations than White men with similar qualifications and that these gaps are present only for East Asian and Southeast Asian men. Taken together, estimation results in Table 7 indicate leadership gaps between Asian and White men are not driven by self-employed individuals or selection into self-employment. For further analysis, I explicitly model selection into self-employment as an outcome. I estimate a multinomial logit model to assess racial gaps in leadership employment, and results are shown in Table A7 in the appendix. In addition to self-employment, outcomes include working in a non-self-employed leadership occupation and working in a non-self-employed, non-leadership occupation. These findings reaffirm that Asian men are significantly less likely to work in a leadership position than White men with similar qualifications.

Next, I examine the role of ethnic attrition, i.e., the attrition in Asian self-identification by descendants of Asian immigrants, in the underrepresentation of Asians in leadership occupations.

¹⁴ Among self-employed men, 26.2 percent report working in a management occupation and 5.6 percent report working in an executive occupation. In contrast, 12.6 percent of employee men report working in a management occupation and 1.1 percent report working in an executive occupation.

Table 7: Employment in Leadership Positions: Alternative Methods of Addressing Self-Employment

	Employed men (excluding self-employed)		All men (self-employed imputed as non-leadership)	
	Management (1)	Executive (2)	Management (3)	Executive (4)
Baseline	0.121	0.011	0.089	0.008
Asian	-0.033*** (0.002)	-0.007*** (0.001)	-0.028*** (0.002)	-0.006*** (0.001)
Black	-0.049*** (0.001)	-0.007*** (0.000)	-0.044*** (0.001)	-0.006*** (0.000)
Hispanic	-0.026*** (0.001)	-0.005*** (0.000)	-0.021*** (0.001)	-0.004*** (0.000)
East Asian	-0.036*** (0.004)	-0.010*** (0.001)	-0.030*** (0.003)	-0.008*** (0.001)
South Asian	-0.004 (0.007)	-0.001 (0.002)	-0.004 (0.006)	-0.001 (0.002)
Southeast Asian	-0.044*** (0.003)	-0.007*** (0.001)	-0.036*** (0.003)	-0.006*** (0.001)
<i>N</i>	2,223,671	2,223,671	3,110,069	3,110,069

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust standard errors in parentheses. Outcome: whether the individual works in a management or executive position. Omitted category: White men. All specifications include controls for age, age squared, level of educational attainment, degree field (for individuals with a bachelor's degree), English proficiency, and state/metropolitan area of residence. For the sample of all men, individuals who are not employed are imputed as not being in management or executive positions. Self-employed men are dropped from the sample for in columns 1 and 2, and self-employed men are re-categorized as not working in leadership management and executive occupations in columns 3 and 4, respectively. The top panel shows estimation results for aggregated racial and ethnic groups. The bottom panel shows estimation results that disaggregate Asians into ethnic subgroups. Black, Hispanic, and Asian men who do not fit into one of the subgroups are also included in this estimation, although coefficients are not displayed.

This analysis is motivated by prior research showing that ethnic attrition is sizable for Asian Americans starting in the second generation, defined as the first US-born generation (Duncan & Trejo, 2017). This could affect measured racial gaps in leadership representation if individuals who attrit are non-randomly selected with respect to occupation outcomes. One way to assess the role of ethnic attrition is to use data on the birthplace of individuals' parents as an alternative, more "objective," measure of racial and ethnic origin. A limitation of the ACS is that information is not collected on the country of birth of respondents' parents. To circumvent this issue, I use data from the Current Population Survey (CPS) monthly surveys, which do contain this information.

I restrict my sample to the first month an individual appears in the sample during this period to avoid collecting repeated observations of the same individual. While the CPS has the advantage of containing information on parents' birthplace, some disadvantages of this dataset compared to the ACS are that the ACS is a much larger sample and contains some key variables to this study that the CPS does not, namely English proficiency and field of college degree. As with the ACS, I restrict the sample to US-born men aged 25-64 from 2015-2019, excluding individuals currently in school or in the military.

Following previous work, I measure differences in outcomes between White and Asian men using self-reported measures of Asian identity, compared to an alternative measure of racial identity based on parents' country of birth (Duncan & Trejo, 2011, 2017). Since I define Asians in the ACS sample as individuals who identify as a single race and Asian, I categorize Asians in the CPS as people for whom both parents were born in an Asian country. A drawback of this robustness check is that this measure is limited to second-generation immigrants, since I am unable to trace individuals who are third-generation Asians or later.¹⁵ Another drawback is that an individual's parents may not be of Asian descent even if they were born in an Asian country, although likely accounts for a negligible share of observations. The advantage of this approach is that it allows me to investigate the role of ethnic attrition in identity in driving differences in leadership employment for White men compared to second-generation Asian men.

Using CPS data, columns 1-4 in Table 8 assess differences in the propensity for Asian and White men to work in a leadership occupation, where Asian men are categorized based on self-reported race. Reassuringly, the estimates using CPS data are similar to the estimates using ACS data in Table 3. For the full sample of men, results in Table 8 indicate Asian men are 3.4 percentage points less likely to work in a management occupation and 1.0 percentage points less likely to work in an executive occupation compared to White men with similar characteristics. Next, columns 5-8 of Table 8 estimate racial gaps in leadership occupations using the alternative method of categorizing Asian Americans. Namely, I categorize individuals as Asian if both parents are born in an Asian country, regardless of how the individual self-identifies.¹⁶ If estimates using this "objective" measure of classifying Asian Americans produces very different results from those using self-reported Asian identity, this would suggest ethnic attrition plays a significant role in driving the main estimation results in Table 3. However, results in Table 8 indicate both methods of classifying Asian

¹⁵To do so, I would need to know the countries of birth of individuals' grandparents, and this information is not contained in the CPS.

¹⁶In the sample, seven percent of individuals whose parents are born in Asian countries do not identify as Asian.

Americans produce very similar estimates. Using the parental birthplace classification method, I find that Asian men are 3.2 percentage points less likely to work in a management occupation and 1.0 percentage points less likely to work in an executive occupation than White men. These findings suggest that for second generation Asian Americans, who are currently the largest cohort of working age native-born Asian Americans, selective ethnic attrition does not play an important role in driving differences in leadership employment rates between Asian and White men.

Table 8: Employment in Leadership Positions Using Different Methods to Classify Asians

	Employed men		All men		Employed men		All men	
	Mgmt. (1)	Executive (2)	Mgmt. (3)	Executive (4)	Mgmt. (5)	Executive (6)	Mgmt. (7)	Executive (8)
Asian (self-reported)	-0.037*** (0.006)	-0.011*** (0.002)	-0.034*** (0.005)	-0.010*** (0.002)				
Asian (parents' birthplace)					-0.034*** (0.008)	-0.011*** (0.002)	-0.032*** (0.007)	-0.010*** (0.002)
<i>N</i>	205,232	205,232	250,798	250,798	202,066	202,066	246,915	246,915

*** p<0.01, ** p<0.05, * p<0.1. Robust standard errors in parentheses. Table is estimated using CPS data. The sample in columns 1-4 is restricted to individuals who self-identify as White or Asian. The sample in columns 5-8 is restricted to individuals who self-identify as White or individuals who have two parents born in an Asian country. Outcome: whether the individual works in a management or executive position. Omitted category: White men. All specifications include controls for age, age squared, education level, state/metropolitan area of residence, and self-employment. For the sample of all men, unemployed individuals are imputed as not being in management or executive positions.

Third, I explore the role of immigration recency differences across races in driving leadership gaps. US-born Asians have been in the US for significantly fewer generations than US-born Whites on average. Immigration recency could affect the propensity for individuals to work in a leadership occupation through channels such as assimilation or access to social networks, which could operate independently of race or ethnic background. To assess this channel, I use CPS data to compare the propensity of working in a leadership occupation between White men whose parents were born in the US with White men whose parents were born outside of the US. Table 9 displays the results of this analysis. Results of this analysis indicate that second generation White men in the US do not experience underrepresentation in leadership occupations compared to White men with US-born parents. In fact, I find that White second generation men have a slightly higher propensity to work in a management occupation than White men with US born parents, and the two groups do not differ in their propensity of working in an executive position. These findings suggest that the gap in leadership representation between Asian men and White men is not due to differences in immigration recency between the groups.

In a related analysis, I investigate whether subgroup heterogeneity in the propensity to work in a leadership occupation can be explained by average differences across Asian subgroups in

Table 9: Employment in Leadership Positions: Comparing White Men with US-born Parents to Second Generation White Men

	Employed men		All men	
	Management (1)	Executive (2)	Management (3)	Executive (4)
White (second generation)	0.019** (0.009)	0.000 (0.004)	0.013* (0.007)	0.000 (0.003)
<i>N</i>	193,852	193,852	237,123	237,123

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust standard errors in parentheses. Table is estimated using CPS data. The sample restricted to individuals who self-identify as White whose parents were both born in the US or both outside of the US. Outcome: whether the individual works in a management or executive position. Omitted category: White men with US-born parents. All specifications include controls for age, age squared, education level, state/metropolitan area of residence, and self-employment. For the sample of all men, unemployed individuals are imputed as not being in management or executive positions.

immigration recency. Since historical immigration timelines differ across Asian subgroups (Paik, Kula, Saito, Rahman, & Witenstein, 2014), subgroup heterogeneity in leadership representation could reflect immigration generation differences. To assess this, I once again use the CPS data to take advantage of information on parents' birthplace to compare occupation outcomes of second-generation immigrants across different ethnic subgroups. Table 10 displays the results of this analysis. Results indicate that for second-generation Asian immigrants, similar gaps emerge as those using the full sample. Namely, East and Southeast Asian men are significantly less likely to work in leadership occupations compared to White men, while South Asian men do not differ in the propensity to work in a leadership occupation relative to White men. These findings suggest that subgroup heterogeneity in leadership representation is not driven by differences in immigration recency between various Asian subgroups.

In sum, the analyses in this section provide compelling evidence that rule out certain channels as driving the gap in leadership representation between White and Asian men. Specifically, findings suggest that the underrepresentation of Asian men in leadership occupations represents a meaningful racial gap that is not explained by self-employed individuals or selection into self-employment, selective attrition from Asian self-identification, or differences in immigration recency across races or Asian ethnic subgroups.

Table 10: Asian Subgroup Employment in Leadership Positions: Restricting to Second Generation

	Employed men		All men	
	Management (1)	Executive (2)	Management (3)	Executive (4)
East Asian	-0.027** (0.013)	-0.014*** (0.004)	-0.027** (0.012)	-0.012*** (0.003)
South Asian	-0.002 (0.018)	-0.001 (0.008)	-0.007 (0.016)	-0.001 (0.007)
Southeast Asian	-0.060*** (0.010)	-0.017*** (0.002)	-0.052*** (0.009)	-0.014*** (0.002)
<i>N</i>	202,001	202,001	246,832	246,832

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust standard errors in parentheses. Table is estimated using CPS data. The sample restricted to individuals who self-identify as White or whose parents were both born in an East Asian, South Asian, or Southeast Asian country. Outcome: whether the individual works in a management or executive position. Omitted category: White men. All specifications include controls for age, age squared, education level, state/metropolitan area of residence, and self-employment. For the sample of all men, unemployed individuals are imputed as not being in management or executive positions. In the bottom panel, Black, Hispanic, and Asian men who do not fit into one of the subgroups are also included in the estimation, although coefficients are not displayed for these groups.

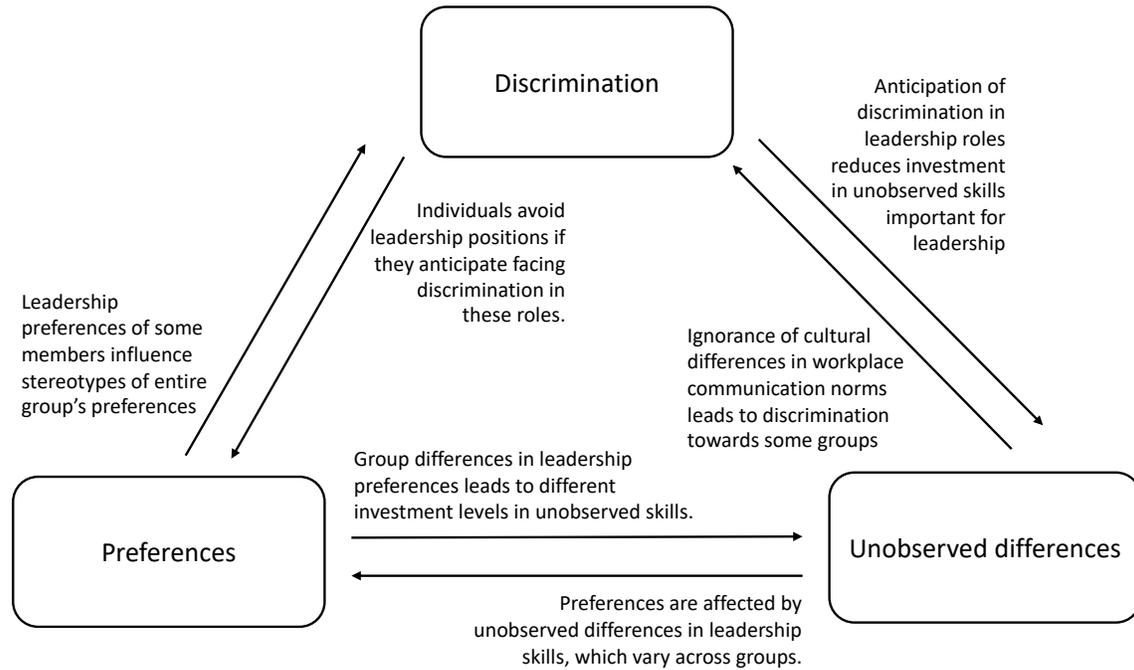
5.2 Race-specific mechanisms

The analysis in the previous section rules out various channels in driving racial gaps in leadership representation between Asian and White men. This section looks at remaining mechanisms, namely the roles of preferences, discrimination, and unobserved differences. One possibility is that this gap is due to racial differences in preferences for leadership occupations, resulting from differences in tastes or comparative/absolute advantages. A second possibility is that this gap could reflect racial discrimination in the workplace, which could be taste-based or stereotype-based in nature.¹⁷ Finally, other unmeasured characteristics that are correlated with race could also be contributing to the underrepresentation of Asian men in leadership positions, such as cultural differences in how individuals are socialized to interact in the workplace.

It is important to note that these channels are not mutually exclusive. The underrepresentation of Asian men in leadership roles may be the result of a combination or interaction of factors. For example, individuals may shift preferences away from leadership positions if they know they will be discriminated in pursuing or occupying these positions. As another example, discrimination

¹⁷Stereotype-based channels of discrimination include and are not limited to models such as standard statistical discrimination (Arrow, 1973; Phelps, 1972) or systematic stereotype-based misperceptions (Bordalo, Coffman, Gennaioli, & Shleifer, 2016; Conlon & Patel, 2003).

Figure 5: Potential Relationships between Mechanisms Influencing Leadership Representation



can evolve in response to a lack of awareness of cultural differences in workplace communication norms. Additionally, may invest differently in leadership skills that are unobserved to the econometrician based on their preferences for working in a leadership position. Figure 5 illustrates the interrelated nature of these channels with examples.

Although the interrelated nature of mechanisms makes it difficult to cleanly disentangle the relative role of each factor, this section provides some analyses of various factors to shed more light on these mechanisms. First, I assess whether there is evidence that part of the reason Asian American men may be underrepresented in leadership occupations is that they have a lower preference for working in these roles. As one assessment, I look to individuals with bachelor's degrees and measure whether gaps in leadership representation between White and Asian men differ by field of study. Intuitively, if the racial gap in leadership representation is driven by average differences in preferences, I would expect these gaps to be smaller within degree fields that are geared towards leadership roles, such as Business Management and Administration, since those who select into these degrees presumably have a high preference for working in leadership. To the extent that there are racial differences in leadership preferences, I expect a large portion of these differences to be captured at the extensive margin of major selection.

Using information on the 174 unique detailed degree field codes in the ACS, I classify whether

degrees feed into leadership occupations using two methods of classification, manual and data-driven. Manual categorizations of leadership feeder majors include all detailed degree fields that contain the words “management” or “supervision” in their title. Data-driven categorizations of leadership feeder majors into management or executive occupations include the top 10 degrees that are most likely to lead to working in a management or executive occupation, respectively. To obtain this measure, I regress an indicator for whether an individual works in a leadership occupation on their degree, conditional on age, age-squared, self-employment status, state+metropolitan area of residence, and English proficiency, in order to identify the degrees that contribute the most to working in a leadership occupation. A list of the degree fields classified as leadership feeder majors using both methods are in Table A8 in the appendix.

Table 11 shows results of the analysis looking at whether the racial gap in working in leadership occupations between Asian and White men is smaller for individuals with degrees in leadership feeder majors. The outcome of interest in columns 1-3 is an indicator for whether an individual works in a management occupation, and the outcome of interest in columns 4-6 is an indicator for whether an individual works in an executive occupation. The top panel displays aggregate race results, while the bottom panel breaks out findings by subgroups. Estimates in columns 1 and 4 replicate main results estimating racial leadership gaps on the sample of individuals with a bachelor’s degree or higher and using detailed degree field controls. As in the main results in Table 3, I find that Asian men are less likely to work in management and executive occupations relative to White counterparts with similar qualifications. The subgroup analysis is also consistent with results using the main sample, finding East Asian and Southeast Asian men are less likely to work in leadership occupations than White men while South Asian men are not.

Next, columns 2 and 4 assess whether gaps in leadership representation differ based on whether individuals hold a degree in a leadership feeder major using the manual classification of feeder majors. I find that the gap in leadership representation between White and Asian men is actually larger for individuals who hold a degree in a feeder major. For individuals with degrees in non-feeder majors, Asian men are 2.7 percentage points less likely to work in a management occupation relative to White counterparts. In contrast, for individuals with degrees in feeder majors, Asian men are 6.0 percentage points less likely to work in a management occupation relative to White counterparts. I find no difference in the propensity for Asian men to work in executive occupations relative to White men by leadership feeder major status. Using the data-driven classification of leadership feeder majors, I find no difference in the propensity for Asian men to work in

Table 11: Racial Gaps in Employment in Leadership Positions by Major Type

Outcome: Feeder definition:	Management			Executive		
	(1)	Manual (2)	Data (3)	(4)	Manual (5)	Data (6)
Asian	-0.030*** (0.003)	-0.027*** (0.003)	-0.030*** (0.003)	-0.008*** (0.001)	-0.007*** (0.001)	-0.008*** (0.001)
Asian×Feeder Major		-0.033*** (0.012)	-0.000 (0.008)		-0.006 (0.004)	-0.011* (0.006)
East Asian	-0.032*** (0.004)	-0.031*** (0.004)	-0.033*** (0.004)	-0.009*** (0.001)	-0.009*** (0.001)	-0.009*** (0.001)
South Asian	0.004 (0.007)	0.005 (0.007)	-0.001 (0.007)	0.002 (0.003)	0.002 (0.003)	0.003 (0.003)
Southeast Asian	-0.048*** (0.005)	-0.043*** (0.006)	-0.042*** (0.006)	-0.010*** (0.002)	-0.009*** (0.002)	-0.010*** (0.002)
East Asian×Feeder Major		-0.016 (0.017)	0.004 (0.011)		-0.001 (0.006)	0.001 (0.012)
South Asian×Feeder Major		-0.011 (0.036)	0.025 (0.020)		0.003 (0.017)	-0.031*** (0.004)
Southeast Asian×Feeder Major		-0.068*** (0.019)	-0.042** (0.018)		-0.017*** (0.002)	-0.022*** (0.003)
<i>N</i>	968,664	968,664	968,664	968,664	968,664	968,664

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust standard errors in parentheses. Outcome: whether the individual works in a management or executive position. Omitted category: White men. The sample includes all men with at least a bachelor's degree, and unemployed individuals are imputed as not being in management or executive positions. Race and ethnicity controls for Black and Hispanic men and interactions with being in a feeder major are included in the estimations, although coefficient estimates are not displayed in the table. All specifications include controls for age, age squared, education level, detailed degree field, English proficiency, state/metropolitan area of residence, and self-employment status.

management relative to White men by leadership feeder major status and some weakly significant estimates that the racial gap in executive representation may be larger in feeder majors. Overall, these results do not indicate racial gaps in the propensity to work in a leadership occupation are smaller for individuals who chose to major in a field geared towards leadership. Individuals who select into leadership feeder majors likely have higher preferences for working in leadership relative to the general population, and a sizable portion of racial differences in preferences should be captured at the extensive margin of major selection. Thus, the finding that racial gaps in leadership representation are not mitigated within leadership feeder majors suggests racial differences in preferences for leadership positions may not be a key driver in the underrepresentation of Asian men in these roles.

As a second assessment of the role of preferences, I bring in data from the National Survey of College Graduates (NSCG) for 2015, 2017, and 2019. The NSCG is a cross-sectional biennial survey of US college graduates, and surveyed individuals are identified through a stratified sys-

tematic sampling of ACS respondents. A benefit of the NSCG is that the survey asks questions directly pertaining to individuals' valuation for job advancement, which I use as a measure of valuation for leadership roles. I focus on men in the NSCG between 25-64 years old who are currently not in school. I assess racial differences in responses to three different survey questions. The first measure I look at is an indicator variable that takes a value of one if an individual reports that during job search, a job's opportunities for advancement are very important and zero otherwise.¹⁸ The second measure I look at is satisfaction with current job, using an indicator variable that takes a value of one if an individual reports being very satisfied with their current job and zero otherwise.¹⁹ The third measure I assess is satisfaction with current job's opportunities for advancement, using an indicator variable that takes a value of one if an individual reports being very satisfied with their current job's opportunities for advancement and zero otherwise.²⁰ I regress these measures on race to assess whether Asian men and White men differ in their valuations for job advancement and satisfaction. Estimations include controls for age, highest degree level, degree field, geographic region, survey year, and self-employment status.

Table 12 displays estimation results of this analysis. Column 1 assesses racial differences in the importance of a job's opportunities for advancement when considering a job. I find no evidence that Asian men value advancement less than White men when looking for jobs, and estimates indicate that Asian men are slightly more likely to respond that a job's opportunities for advancement are very important, although results are imprecisely estimated. Next, column 2 looks at racial differences in individuals' satisfaction with their current jobs. Asian men are 5.7 percentage points less likely to report being very satisfied with their current job compared to White men. Results in column (3) indicate that Asian men are 5.0 percentage points less likely to report being very satisfied with their current job's opportunities for advancement compared to White men.²¹ To the extent that leadership jobs represent the top-level jobs in many fields, this analysis suggests that college-educated Asian men do not display a lower preference leadership occupations compared

¹⁸The survey questionnaire asks, "When thinking about a job, how important is each of the following factors to you?—Importance of job's opportunities for advancement." Response options include, "1= very important, 2=somewhat important, 3= somewhat unimportant, 4= not important at all."

¹⁹The survey questionnaire asks, "How would you rate your overall satisfaction with the principal job you held during the week of February 1, 2019?" Response options include, "1=very satisfied, 2=somewhat satisfied, 3=somewhat dissatisfied, 4=very dissatisfied."

²⁰The survey questionnaire asks, "Thinking about your principal job held during the week of February 1, 2019, please rate your satisfaction with that job's opportunities for advancement." Response options include, "1=very satisfied, 2=somewhat satisfied, 3=somewhat dissatisfied, 4=very dissatisfied."

²¹All results are robust to the inclusion of occupation fixed effects, although occupations are more coarsely and less precisely measured in the NSCG than in the ACS.

to White men. The fact that Asian men are less satisfied with their current job’s opportunities for advancement may be indicative of dissatisfaction due to discrimination or other unobserved factors that prevent them from achieving desired career advancement.

Table 12: Racial Differences in Job Advancement and Satisfaction Ratings

Outcome:	Advancement Very Important (1)	Very Satisfied with Job (2)	Very Satisfied with Advancement (3)
Asian	0.042* (0.022)	-0.057** (0.024)	-0.050*** (0.019)
Black	0.221*** (0.018)	-0.060*** (0.020)	0.028 (0.019)
Hispanic	0.142*** (0.017)	0.007 (0.018)	0.019 (0.017)
<i>N</i>	80,344	74,758	74,758

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust standard errors in parentheses. Sample includes men from the 2015, 2017, and 2019 NSCG surveys who are between 25-64 years who are currently not in school. Omitted category: White men. The outcome in column 1 is an indicator variable taking a value of one if individuals report that when looking for a job, a job’s opportunities for advancement are very important and zero otherwise. The outcome in column 2 is an indicator variable taking a value of one if individuals report being very satisfied with their current job and zero otherwise. The outcome in column 3 is an indicator variable taking a value of one if individuals report being very satisfied with their current job’s opportunities for advancement and zero otherwise. The sample in columns 2-3 is restricted to the sample of employed men. All specifications include controls for age, age squared, highest degree level, degree field, region of residence, survey year, and self-employment status.

Next, I examine the role of various unobserved factors in driving gaps in leadership representation. One possible channel is that intergenerational transmission plays a role in contemporary leadership gaps. Individuals with parents or other family members who worked in leadership positions may be better positioned to work in these roles either through nepotistic network connections or the transfer of leadership-relevant human capital. A limitation of the cross-sectional nature of the ACS data is that I am unable to track individuals or families over time. Thus, I examine intergenerational effects by approximating the parental generation of the contemporary sample. Specifically, since I examine individuals who are 25-64 between 2015-2019, I look one generation back at individuals who are 25-64 in the 1990 Census, 25-29 years earlier.²² I include both native-born and foreign-born individuals in my analysis of the parental generation, since both groups may have native-born children. If intergenerational transmission plays a role, I ex-

²²I use the 1990 Census 5% sample for this analysis.

pect to see similar racial patterns in leadership in the parents' generation, although this does not rule out other channels. I focus on management occupations only in this analysis because data are not available for executive occupations in 1990. I estimate Equation 1 on this sample, with the exception of excluding degree field controls, which were not available in 1990. Table 13 presents estimations of racial differences in management occupations, with column 1 showing results for employed men and column 2 showing results for all men. For the 1990 sample, as in the contemporary native-born sample, Asian men are significantly less likely to work in leadership occupations compared to White men with similar qualifications. However, a different pattern emerges when looking at Asian subgroups. For the 1990 sample, Southeast Asians are significantly less likely to work in management occupations compared to White men, consistent with contemporary gaps. However, I find that East Asians do not differ in the propensity to work in leadership occupations, while South Asian men are significantly less likely to work in leadership occupations. These results differ from the gaps observed in the contemporary native-born sample, indicating that while intergeneration transmission may play a role, it is unable to fully explain racial patterns in leadership representation observed today.

Another unobserved factor that may be driving results is unobserved differences in human capital accumulation. While the ACS provides detailed information about an individual's education level, there is scope for heterogeneity within these education levels that may not be captured, especially at higher levels of education. For example, the ACS records whether an individual has a master's degree, but cannot differentiate between a master's degree in English compared to a Master's of Business Administration (MBA). Similarly, the ACS records whether an individual has a professional degree, but cannot differentiate between a JD or MD. It may be that these differences matter significantly for leadership. To assess whether these differences are driving results, columns 1 and 2 of Table 14 focus on a subset of individuals who have a Bachelor's degree and no further credentials to assess racial gaps in whether an individual works in a management or executive occupation, respectively. This analysis addresses concerns that results are driven by unobserved differences in professional degree attainment, alleviating some concerns about unobserved human capital attainment differences driving results. While I do not observe field of study for post-college degrees, I do observe and control for an individual's undergraduate major. Results of this analysis find very similar results to the main analysis: Asian men with a bachelor's degree and no further education are significantly less likely to work in management or executive occupations compared to White men with similar qualifications. These gaps are present for East

Table 13: Employment in management positions for Asian men (US-born and foreign-born) in 1990

	Employed men (1)	All men (2)
Asian	-0.027*** (0.002)	-0.023*** (0.001)
<i>N</i>	1,958,007	2,421,972
East Asian	-0.000 (0.002)	-0.000 (0.002)
South Asian	-0.035*** (0.004)	-0.029*** (0.003)
Southeast Asian	-0.064*** (0.002)	-0.053*** (0.002)
<i>N</i>	1,958,007	2,421,972

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust standard errors in parentheses. Outcome: whether the individual works in a management occupation. Omitted category: White men. Sample includes White and Asian men between 25-64 in the 1990 5% Census who are not in school or the military. I impute individuals who are not employed as not working in a management or executive occupation. All specifications include controls for age, educational attainment, English proficiency, state/metropolitan area of residence, and self-employment status.

Asian and Southeast Asian men, but not for South Asian men. A related concern is that perhaps there is significant heterogeneity within bachelor's degree institutions that matter for leadership as well. Columns 3 and 4 address this by restricting the sample to individuals with a high school diploma and no college experience. For this sample, results show similar patterns to the full sample when looking at the outcome of whether individuals work in a management occupation. In contrast, I find no difference in the propensity for individuals with a high school diploma to work in an executive occupation by race, although high school diploma holders without any college experience do not make up a sizable share of executives. Overall, these findings suggest that differences in leadership representation between Asian and White men are not driven by unobserved racial differences in formal human capital acquisition, although this analysis is unable to speak to racial differences in informal human capital acquisition.

In sum, this section examines and rules out some channels on underrepresentation of Asian men in leadership occupations. I do not find support that gaps are driven by racial differences in preferences for these positions. Furthermore, I find that intergenerational transmission or net-

Table 14: Employment in Leadership Positions for Specific Education Groups

	Bachelor's degree only		High school diploma only	
	Management (1)	Executive (2)	Management (3)	Executive (4)
Asian	-0.036*** (0.004)	-0.008*** (0.001)	-0.019*** (0.004)	-0.001 (0.001)
<i>N</i>	631,392	631,392	764,973	764,973
East Asian	-0.032*** (0.005)	-0.009*** (0.002)	-0.017** (0.008)	-0.001 (0.002)
South Asian	0.011 (0.011)	0.000 (0.004)	0.029 (0.024)	-0.002 (0.002)
Southeast Asian	-0.063*** (0.006)	-0.009*** (0.002)	-0.028*** (0.005)	0.001 (0.002)
<i>N</i>	631,392	631,392	764,973	764,973

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust standard errors in parentheses. Outcome: whether the individual works in a management or executive position. Omitted category: White men. All specifications include controls for age, age squared, degree field (for individuals with a bachelor's degree), English proficiency, state/metropolitan area of residence, and self-employment status. The sample includes both employed and non-employed men, and individuals who are not employed are imputed as not being in management or executive positions. Black and Hispanic men are included in all estimations, although coefficient estimates are not displayed for these groups.

works cannot explain the full story of racial gaps in representation, nor can unobserved differences in formal human capital acquisition.

6 Conclusion

This study presents new findings on the underrepresentation of US-born Asian American men in leadership occupations. Despite having high levels of education and earnings on average, Asian men are less likely to hold management and executive positions compared to White men with similar qualifications. This underrepresentation is specific to leadership occupations and is not observed in high-paying occupations outside of those roles. An examination of different Asian ethnic subgroups shows that this underrepresentation is present for East Asian and Southeast Asian men, while South Asian men have similar representation in leadership roles as White men.

I investigate various potential causes for the underrepresentation of Asian American men in leadership roles. My findings suggest these gaps in representation are not due to selection into self-employment, ethnic attrition of self-reported Asian identity, immigration generation effects,

or racial differences in preferences for leadership occupations. This leaves open the possibility that results are driven by discrimination or stereotyping, or other unobserved differences by race, such as cultural differences in communication styles or differences in social skills or other traits that are deemed relevant for leadership. It is important to keep in mind that these channels are interrelated, meaning it may not be possible to fully disentangle them as distinct channels.

Overall, this study provides a nuanced analysis documenting the underrepresentation of Asian men in leadership positions in the labor market. Representation is important because those in leadership positions have disproportionate influence over key decisions that affect a firm, and leaders in a firm power to advocate for the needs and interests of their communities, both inside and outside a firm. Furthermore, leadership positions are often at the top of career ladders, and barriers to these positions for a group reflect serious structural inequalities in career advancement. There are several important extensions to this research that future work may help inform. This includes research on further understanding underlying factors behind racial gaps in leadership representation, as well as an analysis of the representation of Asian American women in leadership occupations.

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A Additional Tables and Figures

Table A1: Employment in Leadership Positions: Heterogeneity by Education Level

	Employed men		All men	
	Management (1)	Executive (2)	Management (3)	Executive (4)
Baseline	0.130	0.013	0.101	0.010
Asian×College	-0.023*** (0.004)	-0.010*** (0.001)	-0.025*** (0.004)	-0.010*** (0.001)
Black×College	-0.000 (0.003)	-0.013*** (0.001)	-0.009*** (0.002)	-0.013*** (0.001)
Hispanic×College	-0.013*** (0.002)	-0.011*** (0.001)	-0.013*** (0.002)	-0.011*** (0.001)
Asian	-0.016*** (0.003)	-0.001* (0.001)	-0.014*** (0.002)	-0.001* (0.001)
Black	-0.051*** (0.001)	-0.004*** (0.000)	-0.045*** (0.001)	-0.004*** (0.000)
Hispanic	-0.024*** (0.001)	-0.002*** (0.000)	-0.020*** (0.001)	-0.002*** (0.000)
<i>N</i>	2,380,529	2,380,529	3,110,069	3,110,069

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust standard errors in parentheses. Outcome: whether the individual works in a management or executive position. Omitted category: White men. All specifications include controls for age, age squared, level of educational attainment, degree field (for individuals with a bachelor's degree), English proficiency, state/metropolitan area of residence, and self-employment status. For the sample of all men, individuals who are not employed are imputed as not being in management or executive positions. "College" is an indicator variable that takes a value of one if an individual has a bachelor's degree or higher and zero otherwise.

Table A2: Employment in Leadership Positions: Heterogeneity by Region

	Employed men		All men	
	Management (1)	Executive (2)	Management (3)	Executive (4)
Baseline	0.130	0.013	0.101	0.010
Asian	-0.028*** (0.005)	-0.006*** (0.002)	-0.027*** (0.005)	-0.005*** (0.001)
Asian × West	-0.013** (0.006)	-0.003* (0.002)	-0.008 (0.005)	-0.002 (0.002)
Asian × North	0.024*** (0.008)	0.001 (0.003)	0.019*** (0.007)	0.001 (0.002)
Asian × Midwest	0.008 (0.009)	0.001 (0.003)	0.003 (0.008)	0.000 (0.002)
<i>N</i>	2,380,529	2,380,529	3,110,069	3,110,069

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust standard errors in parentheses. Outcome: whether the individual works in a management or executive position. Omitted racial category: White men. Omitted region: South. All specifications include controls for age, age squared, level of educational attainment, degree field (for individuals with a bachelor's degree), English proficiency, state/metropolitan area of residence, and self-employment status. For the sample of all men, individuals who are not employed are imputed as not being in management or executive positions. Estimations include controls for Black and Hispanic identity and interactions with region of residence, although coefficients for these groups are not displayed.

Table A3: Employment in Leadership Positions: Heterogeneity by Asian Population Share

	Employed men		All men	
	Management (1)	Executive (2)	Management (3)	Executive (4)
Baseline	0.130	0.013	0.101	0.010
Asian	-0.026*** (0.003)	-0.007*** (0.001)	-0.025*** (0.002)	-0.006*** (0.001)
Asian × Share Asian	-0.004*** (0.001)	-0.001*** (0.000)	-0.003*** (0.001)	-0.001*** (0.000)
<i>N</i>	2,380,529	2,380,529	3,110,069	3,110,069

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust standard errors in parentheses. Outcome: whether the individual works in a management or executive position. Omitted category: White men. All specifications include controls for age, age squared, level of educational attainment, degree field (for individuals with a bachelor's degree), English proficiency, state/metropolitan area of residence, and self-employment status. For the sample of all men, individuals who are not employed are imputed as not being in management or executive positions. 'Share Asian' denotes the share of a metropolitan area that is Asian, and the value has been normalized to have a mean of zero and variance of one. For individuals who do not live in a metropolitan area, 'Share Asian' represents the share of Asians in non-metropolitan areas of an individual's state of residence.

Table A4: Employment in Leadership Positions: Heterogeneity by Share of Asians in Industry

	Employed men	
	Management (1)	Executive (2)
Baseline	0.130	0.013
Asian	-0.030*** (0.002)	-0.007*** (0.001)
Asian × Industry Asian Share	-0.001 (0.002)	-0.002** (0.001)
Industry Asian Share	0.003*** (0.000)	0.001*** (0.000)
<i>N</i>	2,380,529	2,380,529

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust standard errors in parentheses. Outcome: whether the individual works in a management or executive position. Omitted category: White men. All specifications include controls for age, age squared, level of educational attainment, degree field (for individuals with a bachelor's degree), English proficiency, state/metropolitan area of residence, and self-employment status. The sample is restricted to employed men. "Industry Asian Share" denotes the share of Asian workers in the industry in which an individual works, and the value has been normalized to have a mean of zero and variance of one. Industries are defined using six-digit North American Industry Classification System codes.

Table A5: Subgroup Employment in Leadership Occupations

	Employed men		All men	
	Management (1)	Executive (2)	Management (3)	Executive (4)
Baseline	0.130	0.013	0.101	0.010
East Asian	-0.031*** (0.003)	-0.010*** (0.001)	-0.029*** (0.003)	-0.008*** (0.001)
South Asian	0.004 (0.007)	-0.000 (0.003)	0.002 (0.006)	-0.000 (0.002)
Southeast Asian	-0.044*** (0.003)	-0.008*** (0.001)	-0.039*** (0.003)	-0.007*** (0.001)
<i>N</i>	2,380,529	2,380,529	3,110,069	3,110,069

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust standard errors in parentheses. Outcome: whether the individual works in a management or executive position. Omitted category: White men. All specifications include controls for age, age squared, level of educational attainment, degree field (for individuals with a bachelor's degree), English proficiency, state/metropolitan area of residence, and self-employment status. For the sample of all men, individuals who are not employed are imputed as not being in management or executive positions. Black, Hispanic, and Asian men who do not fit into one of the subgroups are also included in the estimation, although coefficients are not displayed for these groups.

Figure A1: Country-specific Analysis: Employment in Leadership Occupations

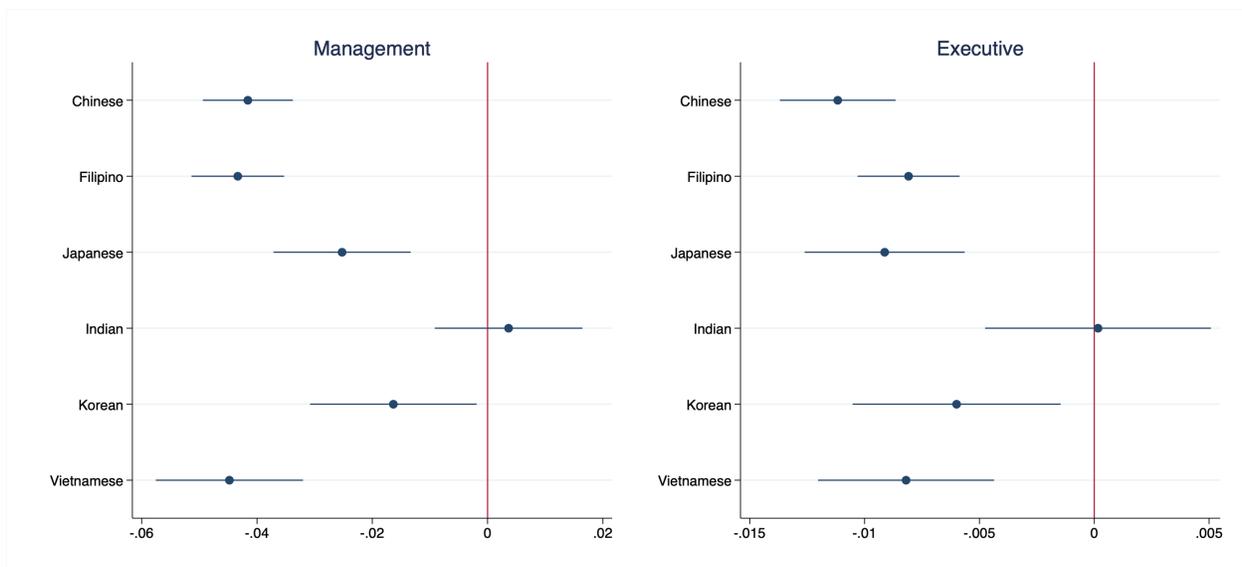


Figure displays estimations for the magnitude of the difference in the propensity for White men and Asian men from various countries with 95% confidence intervals. All specifications include controls for age, age squared, level of educational attainment, English proficiency, state/metropolitan area of residence, and self-employment status. The samples include both employed and non-employed men, and individuals who are not employed are imputed as not being in management or executive positions.

Table A6: Subgroup Employment in High-paying, Non-leadership Occupations

Outcome:	Mean White Men Occupational Earnings		Median White Men Occupational Earnings	
	Employed	All	Employed	All
	(1)	(2)	(3)	(4)
xaeast	0.016*** (0.004)	0.016*** (0.003)	0.009* (0.005)	0.009** (0.004)
xasouth	0.089*** (0.007)	0.089*** (0.006)	0.087*** (0.010)	0.087*** (0.008)
xasoutheast	-0.031*** (0.004)	-0.031*** (0.003)	-0.017*** (0.005)	-0.017*** (0.004)
<i>N</i>	2,059,627	2,059,627	2,789,167	2,789,167

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust standard errors in parentheses. Outcome: mean or median earnings of White men in individual's occupation. Omitted category: White men. Men who are working in leadership occupations are dropped from the estimation. All specifications include controls for age, age squared, level of educational attainment, degree field (for individuals with a bachelor's degree), English proficiency, state/metropolitan area of residence, and self-employment status. For the sample of all men, individuals who are not employed are imputed as not being in management or executive positions. Columns (1) and (3) include all employed individuals who are not in leadership occupations and are estimated using an OLS regression. Columns (2) and (4) include all men who are not in leadership occupations and are estimated using a median regression. Non-employed individuals in column (2) given an imputed outcome value of the mean earnings of the occupation that has the lowest mean pay for White men, and non-employed individuals in column (4) given an imputed outcome value of the median earnings of occupation that has the lowest median pay for White men.

Table A7: Employment in Leadership Positions: Multinomial Logit

	Employed men		All men	
	Management (1)	Executive (2)	Management (3)	Executive (4)
Outcome=Leadership occupation				
Asian	-0.024*** (0.002)	-0.005*** (0.001)	-0.019*** (0.001)	-0.004*** (0.000)
Black	-0.055*** (0.001)	-0.012*** (0.000)	-0.053*** (0.001)	-0.010*** (0.000)
Hispanic	-0.021*** (0.001)	-0.007*** (0.000)	-0.016*** (0.001)	-0.005*** (0.000)
Outcome=Self-employed				
Asian	-0.023*** (0.002)	-0.023*** (0.002)	-0.018*** (0.001)	-0.018*** (0.001)
Black	-0.051*** (0.001)	-0.052*** (0.001)	-0.048*** (0.001)	-0.049*** (0.001)
Hispanic	-0.039*** (0.001)	-0.039*** (0.001)	-0.030*** (0.001)	-0.030*** (0.001)
Outcome=Non-leader, non-self-emp.				
Asian	0.047*** (0.002)	0.028*** (0.002)	0.037*** (0.002)	0.021*** (0.001)
Black	0.106*** (0.001)	0.065*** (0.001)	0.102*** (0.001)	0.060*** (0.001)
Hispanic	0.060*** (0.001)	0.046*** (0.001)	0.045*** (0.001)	0.035*** (0.001)
Outcome=Leadership occupation				
East Asian	-0.021*** (0.002)	-0.005*** (0.001)	-0.017*** (0.002)	-0.004*** (0.001)
South Asian	-0.005 (0.004)	0.002 (0.001)	-0.006* (0.003)	0.001 (0.001)
Southeast Asian	-0.039*** (0.003)	-0.009*** (0.002)	-0.031*** (0.003)	-0.007*** (0.001)
Outcome=Self-employed				
East Asian	-0.020*** (0.002)	-0.020*** (0.002)	-0.016*** (0.002)	-0.015*** (0.002)
South Asian	-0.003 (0.004)	-0.003 (0.004)	-0.003 (0.003)	-0.003 (0.003)
Southeast Asian	-0.035*** (0.003)	-0.034*** (0.003)	-0.026*** (0.002)	-0.026*** (0.002)
Outcome=Non-leader, non-self-emp.				
East Asian	0.041*** (0.003)	0.025*** (0.002)	0.033*** (0.002)	0.020*** (0.002)
South Asian	0.007 (0.005)	0.001 (0.004)	0.009** (0.004)	0.002 (0.003)
Southeast Asian	0.074*** (0.004)	0.044*** (0.004)	0.057*** (0.003)	0.033*** (0.003)
<i>N</i>	2,380,535	2,380,535	3,110,075	3,110,075

*** p<0.01, ** p<0.05, * p<0.1. Robust standard errors in parentheses. Outcome: whether the individual works in a management or executive position. Omitted category: White men. All specifications include controls for age, age squared, level of educational attainment, degree field (for individuals with a bachelor's degree), English proficiency, state/metropolitan area of residence, and self-employment status. For the sample of all men, individuals who are not employed are imputed as not being in management or executive positions. The top panel shows estimation results for aggregated racial and ethnic groups. The bottom panel shows estimation results that disaggregate Asians into ethnic subgroups. Black, Hispanic, and Asian men who do not fit into one of the subgroups are also included in this estimation, although coefficients are not displayed.

Table A8: Classification of Leadership Feeder Majors

Categorization type	Majors
Manual	Business management and administration, agriculture production and management, engineering and industrial management, hospitality management, natural resources management, computer information management and security, human resources and personnel management, education administration and supervision
Data-driven—management	Petroleum engineering, accounting, construction services, finance, mining and mineral engineering, economics, business economics, agricultural economics, health and medical administration, general business
Data-driven—executive	Construction services, education administration and supervision, operations and logistics and e-commerce, hospitality management, health and medical administration, engineering and industrial management, agricultural economics, mining and mineral engineering, industrial and manufacturing engineering, miscellaneous engineering

Manual categorizations of leadership feeder majors include all detailed degree fields that contain the words “management” or “supervision” in their title. I omit Management information systems (MIS) from this categorization since “management” in this context describes information systems rather than a job role. Results are robust to the inclusion of MIS in this categorization. Data-driven categorizations of leadership feeder majors into management or executive occupations include the top 10 degrees that are most likely to lead to working in a management or executive occupation, respectively. To obtain this measure, I regress an indicator for whether an individual works in a leadership occupation on their degree, conditional on age, age-squared, self-employment status, state+metropolitan area of residence, and English proficiency, to see which degrees contribute the most to working in a leadership occupation.

B Labor Market Returns

I examine differences in earnings between Asian men and White men by estimating the following equation:

$$Y_{it} = \alpha + \mathbf{Race}_{it}'\beta + \mathbf{X}_{it}'\delta + \tau_t + [\pi^{OCC} + \phi^{IND}] + \epsilon_{it} \quad (3)$$

where Y_{it} denotes log hourly earnings for individual i in year t . The vector \mathbf{X}_{it}' controls for a set of observable characteristics, including age, educational attainment, English proficiency, area of residence, and self-employment status, as well as a year fixed effect, τ_t . I include occupation and industry fixed effects, π^{OCC} and ϕ^{IND} , in some estimations as well. The coefficients on the vector of race indicator variables, \mathbf{Race}_{it} , capture the differences in earnings across racial and ethnic groups.

Table B1 displays estimation results of the earnings regression model. Column 1 presents estimation results from Equation 3 without the inclusion of occupation or industry fixed effects. Results indicate Asian men earn 8.6 percent less than White men with the same education, age, English proficiency, and other characteristics. Gaps are also observed for Black and Hispanic men, with Black men earning 27.6 percent less and Hispanic men earning 11.2 percent less than White men with the same observed characteristics. Column 2 augments the estimation with occupation and industry fixed effects. The coefficient estimate for Asian men does not change much, and results indicate they earn 8.0 percent less than White men who work in the same occupation and industry with the same characteristics. This suggests that the earnings gap between Asian men and White men is largely not driven by Asian men working in lower-paying occupations and industries, which is consistent with findings in Section 3.2. In contrast, earnings gaps for Black and Hispanic men shrink considerably with the inclusion of occupation and industry fixed effects, although they are still sizable and significant. This suggests that a sizable portion of the earnings gap between White men and Black and Hispanic men comes from differences in occupation and industry of employment across groups.

One concern with these results is that selection effects may bias estimates, since earnings are only observed for those who are employed. Furthermore, as indicated in Table 2, there are sizable differences in employment rates of men across racial and ethnic groups. To address this concern, I follow the approach used in the literature to address selection bias for men by imputing wage values for those who are not employed (Cahuc et al., 2014). Specifically, I impute an arbitrarily

Table B1: Labor Market Returns

	OLS regression		Median regression
	(1)	(2)	(3)
Asian	-0.086*** (0.005)	-0.080*** (0.004)	-0.111*** (0.005)
Black	-0.276*** (0.002)	-0.151*** (0.002)	-454*** (0.002)
Hispanic	-0.110*** (0.003)	-0.064*** (0.002)	-0.081*** (0.003)
Occupation FE		X	
Industry FE		X	
<i>N</i>	2,380,529	2,380,529	3,110,069

*** p<0.01, ** p<0.05, * p<0.1. Robust standard errors in parentheses. Outcome: whether the individual works in a management or executive position. Omitted category: White men. All specifications include controls for age, age squared, level of educational attainment, degree field (for individuals with a bachelor's degree), English proficiency, state/metropolitan area of residence, and self-employment status. OLS sample includes all employed individuals, and median regression includes all individuals, with individuals who are not employed given an imputed hourly earnings of one dollar (log hourly earnings of zero dollars).

low earnings (hourly earnings of one dollar) for those who are not employed and run a median regression, under the assumption that men who are not employed in the labor market would earn below-median wages if they were employed. Median regression results are displayed in column 3 of Table B1. Results reinforce the findings in column 1 that Asian men earn significantly less than White men with the same observed characteristics. Specifically, at the median, Asian men earn 11.1 percent less than White men.²³

Earnings regression estimates indicate that while Asian American men are doing well in terms of average educational attainment and earnings, they still experience an earnings penalty relative to White men with the same educational attainment and other observable characteristics. These findings go against the “model minority” stereotype of Asian Americans, which suggests that Asians have fully successfully assimilated, to the point of achieving social and economic parity with Whites. Furthermore, these results are consistent with findings that Asian men are unable to access leadership occupations, even though they work in high-paying occupations overall. Results indicate that most of the earnings gap between Asian and White men occurs within occupation and industry, suggesting that these gaps could represent differences in the progression through

²³Since I do not observe an industry or occupation for individuals who are not employed, I am unable to run a median regression with occupation and industry fixed effects.

the career pipeline. Intuitively, there may be various within-occupation career progressions before an individual is promoted to a managerial or executive position, and differences in progression within-race could be captured by earnings gaps within occupation and industry. In contrast, gaps driven by differences in occupation and industry of employment suggest the presence of barriers that prevent individuals from getting their foot in the door in certain fields.