Asians in Managerial Positions

Alok Narahari

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Professor Martha Olney

Introduction

Asians are frequently known as the "model minority" in America in that they achieve a degree of socioeconomic success which exceeds that of the population average. Indeed, census statistics show that Asians earn more than non-Hispanic whites, henceforth "whites", while larger minority groups such as blacks and Hispanics earn significantly less. There has been one facet, however, where Asians are said to not traditionally excel: managerial positions. Jane Hyun coined the term "bamboo ceiling" as a derivative of glass ceiling to discuss how Asians are excluded from executive and managerial positions due to individual, cultural, and organizational factors (2005). The goal of this paper is to explore whether or not it is true that Asians are less likely to become managers, and if so, what factors cause the discrepancy.

Background

Socioeconomic status is the social standing of an individual or group measured through a combination of factors that primarily consist of education, income, and occupation (American Psychological Association). On average, statistics show that Asians excel in all three major categories that typically determine socioeconomic status.

As seen in figure 1, Asians consistently have had a higher income than any other race, including whites, since the U.S. census started keeping track of their income. While the median Asian household earns around $68,000, the average white family earns approximately $11,000 less, and the average American family earns $17,000 less. Figure 2 displays that Asians also have a much higher college enrollment rate than all the other races. While the college enrollment rates have begun to converge for whites, Hispanics, and blacks, Asians remain above all the rest by a significant margin. Furthermore, Asians are on average more likely to be healthcare workers,

scientific professionals, and business professors than whites (The U.S. Equal Employment Opportunity Commission 2008).

Figure 1

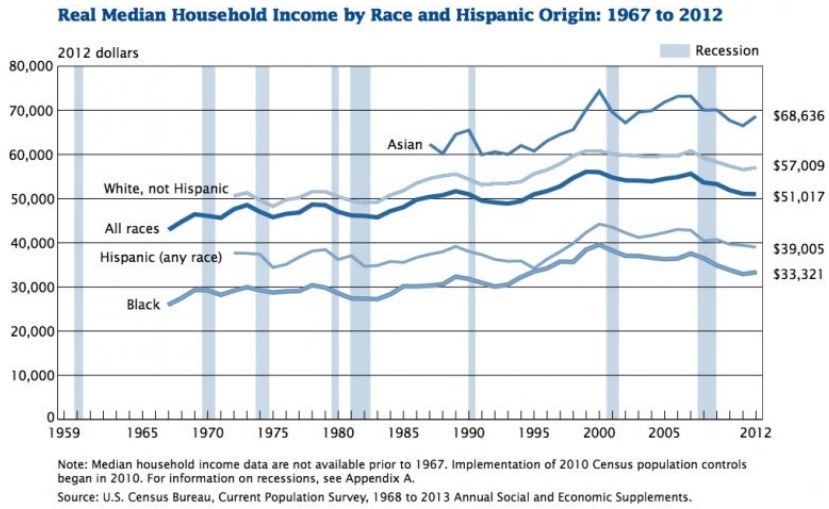
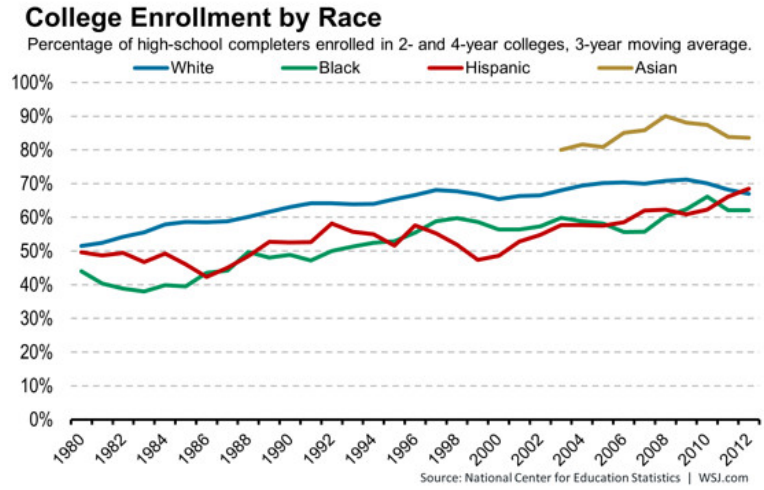


Figure 2



Despite attaining a higher level of education and entering quality jobs, however, Asians are not as represented among the top levels of jobs as whites are. In the year 2000, the United States population was approximately 4.8 percent Asian, yet Asians made up just 0.3 percent of elite corporate level positions (Hyun 2005). Even in the Bay Area in California, which has the highest percentage of Asians compared to other large metros in the country, Asians make up a third of the

workforce at the biggest firms but represent only 10 percent of officers in the 25 largest companies (Swift 2009). Asians also have the highest number of associates at the top New York law firms, but have the lowest conversion rate to partner (Hechler 2011).

The underrepresentation of Asians in higher-up positions isn't limited to just a certain industry as they seem to have limited upward mobility in the legal industry, tech industry, and financial industry. As a consequence, nearly two-thirds of Asian men and slightly less than half of Asian women who were polled in a nationally representative survey said that they felt as if their careers had stalled (Michaud 2011). While many descriptive statistics exist that detail the apparent lack of promotions for Asians, I sought to econometrically test whether or not Asians are likely to be managers through a nationally representative dataset. Another objective of this paper is to delve into different variables that could perpetuate this "bamboo ceiling" and see which ones are more influential in preventing Asians from climbing the occupational ladder.

Literature Review

Numerous academic studies have focused on the possibility of discrimination in determining who becomes a manager. Few empirical studies, however, have focused on the role of discrimination in managerial positions in relation to Asians, instead focusing on other minorities such as Hispanics and blacks (DiTomaso et al 2007; Giuliano et al 2011).

Hyun categorized the impediments to Asians as being individual, cultural, and organizational factors that can weave together to create the "bamboo ceiling" (2005). The cultural differences typically define where the Asian individual comes into conflict with the American organization. For instance, Hyun notes that most Asians are not comfortable with promoting themselves as they are not raised in a way where self-promotion is valued (2005). However, since

self-promotion is typically necessary to get ahead in American organizations, Asians could be at a disadvantage. This is one example of a cultural trait that doesn't translate well into the American organizational culture for Asians.

In general, a different approach to work, and culturally different approaches to social constructs and group communications may cause Asians to be at a disadvantage in western companies when being considered for managerial positions (Mills 2005). These differences could also manifest themselves as eventual stereotypes towards Asians such as the assumption that Asians are lacking in leadership skills and have poor communication abilities, which could negatively impact decision making when it comes to managerial promotions (Hyun 2005).

Due to the restrictions on what data can provide, however, it is difficult to test such subjective qualities such as "leadership skills" and "communication abilities" without a well-drawn out survey. Therefore, my analysis will feature qualities that can be observed instead of ones that are either unobservable, hard to measure, or not presented in any databases. While leadership or communication may play a role in the study, it is hard to empirically test without a reliable source of data.

Cultural differences, however, can also manifest themselves in language — a measurable characteristic. Asians' relative lack of proficiency in the English language has contributed to lower earnings compared to white people in certain industries such as engineering where communication may be vital (Hunt 2015).

Another impediment to Asians' success may be education itself. While those with advanced degrees are the most sought after graduates for starting positions, their median salaries plateau after 15 years and do not increase much afterwards (Livingston 1971). This is because there is little correlation between how well someone does in school and their long-term success

with a business or in a company as success is determined by numerous intangibles and lessons not necessarily learned through class (Livingston 1971). Therefore, the higher education attained by the Asians could be helpful when securing an entry-level job, but not for promotions.

It has also been proven in study that white employees are looked upon more favorably in their job reviews than minorities, even when minorities where judging, which could lead to a higher likelihood of whites being promoted to managers as compared to minorities (DiTomaso et al 2007). This is an implicit bias that is unmeasurable and therefore would not be possible to capture except in the "unexplained" term of the two-fold Blinder-Oaxaca decomposition. Furthermore, a study on a particular industry discovered that racial disparities or similarities between managers and employees affect rates of employee quits dismissals and promotions. The same study discovered that managers were more likely to promote people of the same race as them as well. (Giuliano et al 2011).

Lastly, physical traits could also be holding Asians back from becoming managers. It has also been noticed that people in officer and managerial positions are taller than average as CEOs are disproportionately composed of people above 6 feet tall when compared to the regular population (Gladwell 2008). Since Asians are typically shorter than the average American, this factor may be an another impediment in becoming a manager (Hyun 2011). Unfortunately for this study, height isn't often a characteristic that is represented on most surveys, which is a problem because height based discrimination is something that is possible and which should be studied.

Model Specification

To perform my analysis, I utilized a logit regression model to compare the likelihood of becoming manager between Asians and whites. Afterwards, I used a non-linear Blinder Oaxaca

decomposition method to discover how the difference in likelihoods of becoming manager between ethnicities is split between explained explanatory variables and unexplained factors.

Logit Regression

The logit regression to estimate the probability of becoming manager is designated by the following equation:

$$\ln\left(\frac{Yi}{1-Y_i}\right) = \alpha_i + X_iB + \varepsilon_i \quad (1)$$

where Y_i is the dependent variable of whether or not someone is a manager, X_i is is the vector of explanatory variables, B is the vector of parameters, and ε_i is the error term. Table 1 (below) describes all the variables, dependent and explanatory, in more detail.

Two-fold Blinder Oaxaca Decomposition

The two-fold Blinder Oaxaca method designed by Hlavac, and identified by equation 2, divides the difference in coefficients (i.e. the difference in the probability of becoming manager between whites and Asians) into one part that is explained by the explanatory variables, and one part that is due to the difference in coefficients, which is usually assumed to be unobserved traits or treatment (2016). The decomposition therefore displays the portion of the gap that is explained by the observed variables (endowments) included in the regression and the portion of the gap which is interpreted as other external factors (coefficients). I will use the Neumark (1988) decomposition as a guide to assign weights in the two-fold Blinder Oaxaca Decomposition.

$$\Delta\bar{Y} = \underbrace{(\bar{\boldsymbol{X}}_A - \bar{\boldsymbol{X}}_B)'\hat{\boldsymbol{\beta}}_B}_{\text{endowments}} + \underbrace{\bar{\boldsymbol{X}}'_B(\hat{\boldsymbol{\beta}}_A - \hat{\boldsymbol{\beta}}_B)}_{\text{coefficients}} + \underbrace{(\bar{\boldsymbol{X}}_A - \bar{\boldsymbol{X}}_B)'(\hat{\boldsymbol{\beta}}_A - \hat{\boldsymbol{\beta}}_B)}_{\text{interaction}} \quad (2)$$

Table 1
Variable Names and Descriptions

Name	Description
Dependent Variable	
Manager	1 if the individual is a manager, 0 otherwise
Independent Variables	
White	1 if individual is white, 0 otherwise
Asian	1 if individual is Asian, 0 otherwise
Asian A	1 if indiviual belongs to Asian A group, 0 otherwise
Asian B	1 if individual belongs to Asian B group, 0 otherwise
highschool	1 in individual's highest level of education is highschool, 0 otherwise
Some College	1 in individual's completed some college but didn't graduate, 0 otherwise
Bachelors	1 in individual's highest level of education is a bachelor's degree, 0 otherwise
Advanced Degree	1 in individual's highest level of education is a master's degree, professional degree, or doctorate, 0 otherwise
Hours Worked	Amount of hours worked in a week
Age	Age at time of survey
Self-Employed	1 if individual is self-employed, 0 otherwise
Tech	1 if individual works in the high-tech industry, 0 otherwise
Other Language	1 if indidvual speaks another language at home that is not English, 0 otherwise
English Proficiency	1 if an individual speaks english "not as well", 0 otherwise
South	1 if an individual lives in the South, 0 otherwise
Northeast	1 if an individual lives in the Northeast, 0 otherwise
West	1 if an individual lives in the West, 0 otherwise
Midwest	1 if an individual lives in the Midwest, 0 otherwise

Data

Asian vs. White

My analysis is based on data from the Integrated Public Use Microdata Series (IPUMS) for the 2014 American Community Survey (ACS). I used the 2014 ACS as it is a sample which is representative of the national population, and it is the most recent survey available in the ACS database. Furthermore, the ACS contains a large amount of observations so I had a sufficiently

sized sample of Asian individuals that I could econometrically test. The ACS also has a comprehensive directory of occupations which demarcates managerial positions from non-managerial positions — a feature particularly useful for my analysis.

I restricted the dataset to Asians and whites in the age range of 25-65 to capture those who are most likely to have full time jobs in the workforce. I further excluded anyone who didn't have a job at the time the survey was taken so that the dataset would only contain those who are employed as to not bias the regression by including those who are unemployed, retired, or too young to work. The final data frame which I analyze features 920,626 whites and 66,660 Asians.

Table 2 includes descriptive statistics about Asian and white individuals whom I am including in my regression. The table compares the employed Asian and white populations with the subset of the population who are managers. In order to label managerial status, I combined the 28 manager positions the ACS provided into a single dichotomous variable that labeled whether or not an individual was a manager. Therefore, I do not distinguish if an individual is a Chief Executive or a specific industry manager (i.e. marketing manager) as the gamut of managerial positions fall under the category of manager.

I also tailored the variable on English proficiency. The ability to speak English was measured on a four-point scale of "very well", "well", "not well", and "not at all". Under the assumption that the ability to speak English is crucial for managers, I collapsed the lower three abilities into a category called "not as well" so I could compare those who labeled themselves at the top of the English proficiency scale with those who are not as proficient. According to Table 2, managers are more likely than employees to be able to speak English very well.

Table 2
Overall Demographics and Job Traits

	Demographic Traits			
	Employed Whites	**White Managers**	**Employed Asians**	**Asian Managers**
N	920,626	115,117	66,660	7,309
Other Language Spoken[1] (% Total)	12.6	9.5	77.7	73.5
Abilty to Speak English (% Total)				
Very Well	59.7	79.2	56.4	70.2
Not as well	40.3	20.8	43.6	29.2
Age (median)	46	48	43	43
	Job Related Traits			
	Employed Whites	**White Managers**	**Employed Asians**	**Asian Managers**
% of Employed Population	100	**12.5**	100	**11***
Male (% Total)	52.7	61.6	66.5	59.7
Female	47.3	38.4	34	40
Education (% Total)				
High School Only	24	14.5	12.1	5.8
Some College, no degree	21.1	19.1	12.4	9.3
Bachelors	23.7	35.1	32.8	40.4
Advanced Degree[2]	14.8	20.9	26.9	36.6
Work in High-Tech (% Total)	7.7	12.2	16.6	24.7
Self Employed (% Total)	11.2	17.1	10.2	15.1
Wage(median)	$41,600	$70,000	$47,500	$80,000
Weekly Hours Worked (median)	40	45	40	40
Weeks Worked				
48-52	87.6	94.7	86.2	92.4
40-47	5	2.4	5.3	3.4
27-39	3.7	1.5	3.8	2.2
<27	3.7	1.4	4.5	2

Notes: *There is a statistically significant difference between whites and asians according to Pearson's Chi Squared Test

[1]This means that English isn't the only language spoken at home.

[2]Advanced degree includes master's degree, professional degree, or a doctorate degree.

Furthermore, employed whites and white managers are more likely than their Asian peers to be able to speak English very well. In terms of other language variables, around three-fourths of Asians speak another language at home. This dwarfs the white population where only around 14 percent of employed and less than 10 percent of managers speak another language at home. An interesting trend is that both white and Asian managers are less likely than their respective employed populations to speak another language at home.

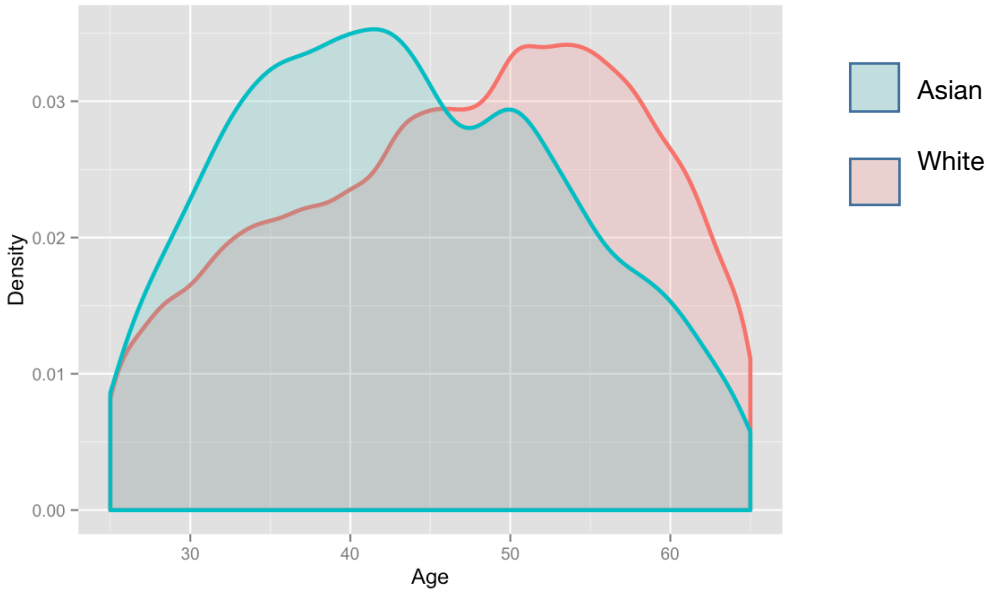
The high-tech industry is a necessary component due to its prevalence as an argument in addressing the lack of Asians in managerial positions. The ACS, however, doesn't specify particular codes for high-tech industries. Therefore, I used Kile and Phillips' classification for the optimal codes to sample high-tech industries to create the variable denoting whether or not an individual belongs to a high tech industry (2009). Contrary to the studies presented earlier in the paper, Asians are much more likely than whites to be managers in the high-tech industry. However, a limitation of my study compared to theirs is that I am unable to distinguish between the type of manager and the prestige of the firm as the previous studies about the lack of representation in the tech industry discussed the top positions in the top tech companies.

I included the binary variable for self-employed due to the assumption that if you are self-employed you are more likely to classify yourself as a manager. Whites are slightly more likely to be self-employed than Asians in both employed and managerial categories, which could be an explanation for why a higher share of whites compared to Asians are managers.

The salient aspect of Table 2 is that there is a statistically significant difference in the percent of whites who are managers (12.5) compared to Asians who are managers (11). This difference provides some empirical backing to the "bamboo ceiling" hypothesis that Asians are in fact less likely to become managers, even despite the fact that they are much more educated. As seen in Table 2, around 60 percent of employed Asians and 76 percent of Asian managers are likely to have a bachelor's degree or above while those numbers are 39 percent and 55 percent for employed whites and white managers. Therefore, even though managers have more schooling than the regular class of employees, the average employed Asian is more likely to have a college degree than the average white manager.

Age also proves to have interesting results in the white and Asian comparisons. While employed Asians are 3 years younger than employed whites, the median Asian manager age is 5 years younger than the average white manager. As seen in figure 3, the density curve for Asian managers is a mirror opposite of that of whites. While the amount of white managers tends to increase with age, the opposite trend holds for Asians, where the prevalence of Asian managers sharply decreases with age.

Figure 3 —Manager Age by Race



Additionally, the median amount of hours worked per week is higher for white managers than Asian managers while the amount of hours worked per week is the same for Asian and white employees. However, a limitation of using hours worked per week is that it is a self-estimation on the ACS, and it is impossible to measure how efficient an employee or manager was with the hours they worked.

Asian A vs. Asian B

In their paper, Flippen and Kim discussed that Asians are not a homogenous group and that certain ethnicities share more similarities than others (2015). In particular, they made a

distinction between two groups: Asian A and Asian B. They categorized Asian A as composed of Indians, Chinese, Japanese, and Filipinos while Asian B was composed of Vietnamese, Koreans, Cambodians, and all other Asian ethnicities (2015). Noting that this was a valuable insight, I decided to include the same separation of Asian nationalities using Flippen and Kim's standards for classification. Table 3 displays the comparison between Asian A and Asian B.

There is a statistically significant difference in the percent of employed Asian As who are managers (11.7) and employed Asian Bs who are managers (9.1). This gap is larger than the gap between Asians and whites. This difference could therefore imply that Asian As are more similar to whites in terms of their chance of becoming manager while Asian Bs face the brunt of the "bamboo ceiling".

Table 3
Asian Comparison

	Traits by Race	
	Asian A	**Asian B**
Total	46,320	19,097
Manager (% emp)	**11.7**	**9.1***
Wage (median)	$50,000	$32,300
Education (% Total)		
High School Only	9.9	17.1
Some College, no degree	11.2	15.1
Bachelors	34.9	27.7
Advanced Degree	30.6	18.3
Age (median)	43	42
Other Language Spoken (%)	75.8	83.7
Ability To Speak English		
Very Well	62.6	43.1
Not as Well	37.4	56.9
Self Employed (% Total)	8.7	13.9
Weekly Hours Worked (median)	40	40

Note: Asian A is Chinese, Filipino, Indian, and Japanese.
Asian B is primarily Korean, Cambodian, and Vietnamese but includes all other Asian ethnicities as well.
*Statistically sig. difference between the Asian groups

The primary reason for separating the Asian groups was because Asian A is the relatively advantaged Asian group while Asian B is the less advantaged Asian group (Flippen and Kim 2015). Therefore, Asian A would be expected to have higher socioeconomic traits than Asian B, especially regarding income and education.

As evident in Table 3, the median income for Asian A is $18,000 more than that of Asian B. Asian A also is more educated on average than Asian B and they are far more likely to attain a college degree. The percentage of Asian As with a college degree is much higher than that of Asian Bs as 64 percent of Asian As have a bachelors or advanced degree while 45 percent of Asian B's possess the same education level. This difference is largest among advanced degrees where Asian As are 12 percent more likely to have an advanced degree than Asian Bs.

There are significant differences in terms of the language variables as well. Asian Bs are more likely than Asian As to speak another language at home, which could imply that they are even less likely than Asian As to assimilate to American culture, and therefore the cultural impediments implicated by the "bamboo ceiling" might be more pronounced for Asian Bs. A large disparity exists between Asian A and Asian B in terms of English proficiency as well. While 62 percent of Asian As can speak English very well, less than half of Asian Bs can speak English very well.

Therefore, the division of Asians into Asian A and Asian B allows for further analysis in comparing the difference within the Asian community regarding the probability of becoming manager. It also allows for more analysis within the Asian community as well as they are not as homogenous as some may perceive them to be.

Empirical Results

Logit Regression

Table 4 shows the results of the logit regressions that estimate the probability of becoming a manager in terms of odds ratios. Regression (1) is the base model where only race is included as an explanatory variable. As seen in (1), Asians are approximately 14 percent less likely to become managers when compared to whites. This hold up to the theory of the "bamboo ceiling" where Asians are less likely to become managers than whites.

However, in regression (2) where all the controls (except for regional ones) are added, Asians are only around 4 percent less likely than whites to become managers. The difference widens slightly to 6 percent in regression (3) where regional controls are added as well. This implies that while there is in fact a difference between Asians and whites in their likelihoods of becoming manager, a large portion of the gap disappears when accounting for various controls.

Therefore, an Asian candidate with the same traits as a white candidate would be 6 percent less likely to become a manager. Although this is still a significant difference in magnitude, it is a lot smaller than the 14 percent difference without any controls.

Manager liklihood Regression

Table 4

(Standard Errors in parentheses)	(1)	(2)	(3)	manager (4)	(5)	(6)	(7)
Asian	0.862***	0.958***	0.943***	0.881***			
(Ref: White)	(0.013)	(0.015)	(0.015)	(0.026)			
Asian A					0.930***	0.957***	0.876***
					(0.015)	(0.017)	(0.030)
Asian B					0.706***	0.912***	0.923***
					(0.025)	(0.027)	(0.057)
Asian*Other Language Spoken				1.106***			
				(0.031)			
Asian*Tech				1.010***			
				(0.032)			
Asian A*Other Language Spoken							1.123***
							(0.035)
Asian B*Other Language Spoken							1.034***
							(0.064)
Asian A*Tech							1.051***
							(0.035)
Asian B*Tech							0.843***
							(0.070)
AGE		1.014***	1.013***	1.013***		1.013***	1.013***
		(0.0003)	(0.0003)	(0.0003)		(0.0003)	(0.0003)
Hours Worked Per Week		1.039***	1.040***	1.040***		1.040***	1.040***
		(0.0003)	(0.0003)	(0.0003)		(0.0003)	(0.0003)
Self Employed		1.651***	1.647***	1.647***		1.648***	1.647***
		(0.009)	(0.009)	(0.009)		(0.009)	(0.009)
English Proficiency		0.444***	0.441***	0.441***		0.443***	0.443***
		(0.020)	(0.020)	(0.020)		(0.020)	(0.020)
Highschool		0.484***	0.487***	0.487***		0.487***	0.487***
		(0.009)	(0.009)	(0.009)		(0.009)	(0.009)
Some College		0.751***	0.750***	0.750***		0.751***	0.750***
		(0.009)	(0.009)	(0.009)		(0.009)	(0.009)
Adv. Degree		1.133***	1.130***	1.130***		1.129***	1.129***
		(0.008)	(0.008)	(0.008)		(0.008)	(0.008)
Tech		1.594***	1.584***	1.582***		1.584***	1.582***
		(0.010)	(0.010)	(0.010)		(0.010)	(0.010)
Regional Controls	No	No	Yes	Yes	No	Yes	Yes
Constant	0.143***	0.016	0.017	0.017	0.143***	0.017	0.017
	(0.003)	(0.018)	(0.019)	(0.019)	(0.003)	(0.019)	(0.019)
Observations	987,286	987,286	987,286	987,286	987,286	987,286	987,286
Log Likelihood	-369,989.100	-347,573.300	-347,448.100	-347,442.700	-369,944.800	-347,447.700	-347,437.700
Akaike Inf. Crit.	739,982.300	695,168.600	694,924.300	694,917.400	739,895.500	694,925.300	694,913.300

Notes:

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

Regression (4) implements interaction terms between the variable for Asian and for other language spoken. This is because it could be that when Asians speak another language at home, they are penalized for it in regard to managerial promotions in comparison to whites. However, the interaction term shows that Asians who speak another language at home are actually more likely to become managers than whites who speak another language at home. Additionally, while previous articles mentioned that Asians weren't represented in higher management in the tech industry, the interaction term displays the opposite. Asians are in fact just as likely as whites to be promoted to manager within the tech industry, while Asians in the non-tech industry are around 12 percent less likely to become manager. This result displays that the "bamboo ceiling" is much more prevalent in industries that are not the tech industry.

Regression (5) breaks up the racial regressor into Asian A and Asian B to capture the heterogeneity within the Asian population. As seen in (5), there is a large and significant difference between the probability of Asian A and Asian B individuals in being promoted to manager. While Asian A is 7 percent less likely than whites to become manager, Asian B is around 30 percent less likely than whites to become manager. However, in regression (6) where all the controls are included, this likelihood narrows between the Asian groups and whites, and between the Asian groups as well. Compared to whites, Asian As are 4 percent less likely and Asian Bs are 9 percent less likely to become managers. The gap between Asian A and Asian B narrows from around 23 percent in regression (5) without controls to around 4.5 in regression (6) with the controls.

Regression (7) includes interactions between other languages spoken, the tech industry, and the Asian A and B groups. Both Asian As and Asian Bs who speak a different language at home are more likely to become a manager than whites who speak another language at home, which is

similar to the result in regression (4). However, the interaction terms between the tech industry and the Asian groups yield interesting results. While Asian As who work in tech are around 5 percent more likely to become managers than whites, Asian Bs who work in the tech industry are around 16 percent less likely to become managers. However, according to the coefficients of Asian A and Asian B in regression (7), in industries other than tech, Asian A is actually around 5 percent less likely than Asian B to become a manager.

The variable for English proficiency stayed the same throughout all the regression it was in. This variable is important as it signifies that those who did not think that they spoke English "very well" were only 44% as likely as those who spoke English very well to become manager. In other words, not having complete proficiency in English drops the probability of being a manager by over 50%. It was also similar in magnitude to only completing a high school degree which signifies the importance of knowing English in becoming a manager.

Decomposition

The results of the Blinder Oaxaca Decomposition between whites and Asians are displayed in Table 5. A total of 65.2 percent of the gap between whites and Asians is explained by the explanatory variables of the regression. That means that 35 percent of the gap is due to differences in the coefficients that could be attributed to partial treatment or omitted variables that weren't captured in the regression such as implicit biases or "soft skills", i.e. leadership.

As seen in Table 5, work related traits such as age, industry, and hours worked contributed to a widening of the gap by around 3 percent and played a negligible role. However, education and language variables provided large explanatory power in determining the gap, albeit in separate directions. In total education increased the gap by over 121 percent, with advanced degree and bachelor's degree contributing to the widening of gap. Intuitively this makes sense as a much larger

share of the Asian population has a college degree in comparison to whites, and managers are more likely to have a college degree than non-managers. Therefore, logically Asians should be represented as managers more due to their higher educational content which isn't the case.

Table 5
Asian vs. White Decomposition Results

	Difference Explained
Work Related Traits	
Age	25.1%
Hours Worked	14.9%
Region	-18.9%
Self Employed	4.2%
Industry	-28.4%
Total	**-3.1%**
Education	
Some College	27.0%
Bachelors Degree	-69.6%
Advanced Degree	-78.8%
Total	**-121.5%**
Language	
Other Language Spoken at Home	43.1%
English Proficiency	146.6%
Total	**189.7%**
Total Explained	**65.2%**

Note: Used the Neumark (1988) decomposition to assign weights in the Blinder-Oaxaca decomposition

Table 6
Asian A vs. Asian B Decomposition Results

	Difference Explained
Work Related Traits	
Age	1.8%
Hours Worked	3.0%
Region	1.8%
Self Employed	-9.2%
Industry	6.2%
Total	**3.6%**
Education	
Some College	-4.6%
Bachelors Degree	18.9%
Advanced Degree	32.3%
Total	**46.7%**
Language	
Other Language Spoken at Home	2.3%
English Proficiency	23.2%
Total	**25.5%**
Total Explained	**75.8%**

Note: Used the Neumark (1988) decomposition to assign weights in the Blinder-Oaxaca decomposition

Language variables, on the other hand, serve as the primary reason for explaining why the gap between Asians and whites exists in attaining managerial positions. English proficiency and speaking another language at home account for 190% of the gap. English proficiency in particular has a large explanatory power in showing why the gap exists. Therefore, not being able to speak English "very well" is a large reason for why the gap between Asians and whites exists in the probability of becoming a manager.

Table 6 decomposes the probabilistic difference between Asian As and Asian Bs in becoming manager. In total, three-fourths of the gap is explained by the included variables while the last quarter could be attributed to cultural differences or societal treatment of the different

groups. Education has the most explanatory power in determining why the gap exists, while language factors also contribute to the difference between the two Asian groups. In particular, the advanced degree explains a third of the difference between Asian A and Asian B as Asian As are much more likely to pursue an advanced degree than Asian Bs. Since English proficiency explains around a quarter of the gap, it shows that Asian As are more likely to become managers than Asian Bs due to their ability to better speak English.

Conclusions

Using data from the 2014 ACS, I estimated the probabilities of whites and Asians becoming managers to test the theory of the "bamboo ceiling" which stipulates that Asians are underrepresented in managerial positions. The results, although nuanced, ultimately show that Asians are less likely to become managers than whites. Including all the controls, Asians are 6 percent less likely than whites to become managers. Furthermore, upon decomposing the difference using the Blinder Oaxaca method, I discovered that 65% of the white-Asian difference in becoming a manager can be explained through the variables in my regression. Educational factors widen the gap, as Asians are more educated than whites, and language traits narrow it, as Asians are not as proficient in English as whites.

When dividing Asians into Asian A and Asian B based on each groups relative socioeconomic status, it turns out that Asian A is much more likely to become a manager than Asian B. Upon including all the controls, the gap between the Asian groups becomes smaller — although it doesn't close completely. Furthermore, through interaction terms it became clear that Asian Bs are actually more likely to become managers than Asian As in industries other than tech. The decompositions results show that 75 percent of the Asian A- Asian B gap can be explained

and that education has the biggest effect in explaining the Asian A – Asian B gap as Asian As are more educated than Asian Bs.

The results display that there is still a statistically significant difference between Asians and Whites in the probability of becoming a manager, even with the controls. Interestingly enough, there is also a difference that still persists when all the controls are accounted for between Asian A and Asian B which means other variables that capture culture differences need to be accounted for when calculating the probability of becoming a manager. The salient variables that are missing from this study are the ones that judge an individual's work ethic, leadership skills, and communication skills in a work setting. While subjective, these traits probably have large explanatory power in deciding who becomes a manager or not. Without these traits it is impossible to conclude that any policy targeting discrimination needs to be implemented. Furthermore, my study only calculated the probability of becoming a manager in general while future studies should also explore the impacts of different levels that exist in leadership as being a CEO is much more prestigious than other sorts of managerial positions.

The results of this study, however, stress the importance of being proficient in English as it can significantly improve an individual's chances of becoming a manager. Those whose English proficiency is less than "very well" are only around 44 percent as likely as those who have a very good command of the English to become manager. Furthermore, English proficiency has high explanatory power in the white-Asian gap as well as the Asian A- Asian B gap which signifies that it is a powerful factor in determining who becomes a manager.

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