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Appointment of racial/ethnic minority directors: Ethnic matching or visibility threat?



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ABSTRACT

The purpose of this study is to identify the industry and community-level compositional factors that influence the appointment of racial/ethnic minorities to corporate boards. We derived hypotheses from two theoretical perspectives: *ethnic matching* and *visibility threat*. Our analysis relied on data from seventy-three Standard & Poor's 500 companies between 1980 and 2000. We find important differences between and among racial/ethnic groups in terms of the mechanisms that shape board appointments. Consistent with the ethnic matching perspective, we find that the representation of Black and Hispanic board directors is strongly predicted by the racial/ethnic composition of the industry's labor force. Contrary to the visibility threat perspective, however, we find that the appointment of Asian directors is strongly predicted by the ethnic composition of the community where the firm is located.

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American corporations face strong normative pressures to pursue diversity on corporate boards. Board diversity is associated with a number of desirable corporate practices including equity and diversity policies, innovation, greater community engagement and stronger responsiveness to diverse customers and clients (Carter et al., 2003; Cook and Glass, 2015; Ely and Thomas, 2001; Yang and Konrad, 2011). Further, diverse boards are associated with greater transparency and accountability as well as more effective communication and innovative problem solving (e.g., Brown et al., 2002; Miller and Triana, 2009; Torchia et al., 2011). Despite mounting evidence of the benefits of board diversity, however, racial/ethnic minorities remain substantially underrepresented among corporate directors (ABD, 2013).

While scholars have devoted a great deal of attention to the impacts of board diversity, much less research has focused on the factors that drive or impede selection of minorities for corporate board positions. A survey of minority members of corporate boards reveals that these individuals tend to come from elite social class backgrounds and have exemplary academic credentials (Zweigenhaft and Domhoff, 1998, 2011). While CEOs tend to appoint demographically similar board members, minority directors known to CEOs are more likely to receive invitations to serve on multiple boards (Westphal and Stern, 2006; Westphal and Zajac, 1995). More recently, Rose and Bielby (2011) found that board diversity is associated with greater firm visibility with more established and high-profile firms more likely to appoint minority directors compared to firms that are younger or less well known. The same study revealed that decision-makers in such firms are highly susceptible to social norms, viewing board diversity efforts as a "buffer" against external pressures (Rose and Bielby, 2011: 855). This study seeks to build upon and advance this scholarship by analyzing the industry and community-level compositional factors that facilitate or hinder the selection of minority board members.

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This study advances scholarship on race/ethnicity and workplace authority and career mobility by identifying the compositional factors that increase or impede the appointment of racial/ethnic minority leaders to corporate boards. We derive our hypothesis from two theoretical perspectives related to racial/ethnic composition and mobility: ethnic matching and visibility threat. First, the bottom-up ascription or 'ethnic matching' perspective posits that decision-makers are more likely to appoint minorities to lead workgroups with the same or similar racial/ethnic characteristics (Elliott and Smith, 2001, 2004). Second, the visibility threat perspective posits that the leadership opportunities for minorities will be affected by the concentration of minorities within a geographic area (Blalock, 1967). When there is a greater concentration of an ethnic or racial minority group, discrimination toward and exclusion of members of that minority group will increase. While previous applications of these theoretical perspectives have tended to focus on managerial and other supervisory ranks, we extend these perspectives to consider whether the same or similar mechanisms shape board director selection.

1. Theory & literature review

1.1. Ethnic matching

The integration of racial/ethnic minorities into positions of authority has a positive impact on minority incumbents of an organization. For instance, the presence of minorities in positions of authority is associated with increased mobility, better wages and lower levels of segregation for minority subordinates (Cohen et al., 1998; Cohen and Huffman, 2007; Cotter et al., 1997; Gorman, 2005; Stoll et al., 2004). But does the composition of workers or managers within an industry affect the leadership opportunities for corporate elites? To frame this question we draw on a process termed 'bottom-up ascription' (Elliott and Smith, 2001, 2004; Smith and Elliott, 2002). Bottom up ascription occurs when minorities are appointed to positions of authority over co-ethnic work groups or subordinates. While minorities tend to face disadvantages in terms of attaining managerial or other supervisory positions (e.g., Cotter et al., 2001; Maume, 2004; Tomaskovic-Devey, 1993), certain contextual conditions increase minorities' selection and perceived suitability for positions of authority. The ethnic matching perspective argues that the composition of lower ranks within a firm or industry is one critical factor that motivates decision makers to expand leadership opportunities to minority candidates.

Bottom-up ascription or ethnic matching of managers or supervisors to incumbents or subordinates is driven by at least three mechanisms. While most applications of this perspective have focused on managerial or other supervisory ranks (e.g., Elliott and Smith, 2001, 2004), we extend this perspective to consider whether similar mechanisms shape the selection of board directors. First, the integration of lower levels of a firm or industry can motivate internal pressures and increase legitimacy for representative leadership. A greater proportion of minorities within a firm or industry can motivate calls by employee groups for greater inclusion, including among the ranks of top leaders and decision-makers (Elliott and Smith, 2001). Integration can also increase pressures on firms to adopt norms, practices and policies aimed at advancing diversity (Blum et al., 1994; Ostrower, 2007). In fact, greater integration at lower levels of an organization's hierarchy is associated with more advanced formalization of personnel systems which is known to reduce bias in hiring and promotion (Reskin, 2000). While these pressures have been shown to increase minority representation among managers and supervisors, we expect that similar pressures to pursue inclusion, representative leadership and formalized appointment systems will also increase the likelihood that firms will appoint minority directors. In fact, research on board diversity confirms that firm visibility and more systematic recruitment practices and policies are strongly associated with greater board diversity (Brown, 2002; Ostrower, 2007; Rose and Bielby, 2011).

The second mechanism that drives bottom-up ascription is the desire by decision-makers to minimize workplace conflict and encourage work commitment among employees. By matching leaders, managers or supervisors to workers, firms hope to limit worker resistance and disengagement (Elliott and Smith, 2001). The promotion of racial/ethnic minorities to higher rank leadership positions, including board directors, can also signal to workers that the firm is committed to diversity and thereby encourage workers' attachment to the firm (Shore et al., 2011). There is further evidence that ethnic matching of leaders to subordinates can improve trust, work commitment and workers' perceptions of fairness and equity (Avery et al., 2008; Elliott and Smith, 2001; Pelled and Xin, 2000; Tsui and O'Reilly, 1989). We expect the appointment of minority directors can be used as a symbolic signal to workers that the firm is committed to equal representation and representational leadership.

The final mechanism that motivates ethnic matching concerns the available labor pool. When workers and managers within an industry are more diverse in terms of race/ethnicity they provide a greater pool of potential leadership candidates for firms in the industry. Diverse labor markets generally, and diverse managerial ranks in particular, provide a greater pool of qualified diverse candidates for leadership positions and expand the opportunities for advancement for minority incumbents (Blum et al., 1994; Reskin et al., 1999). Thus not only are minority employees and managers more likely to expect greater representation of minority candidates in leadership positions but they also provide a pool from which those leaders can be selected. We expect that diversity within the industry and among the managerial ranks will provide a greater pool from which to select executives, top leaders and, importantly, board directors.

It is important to note that while bottom up ascription may increase minorities' representation in leadership roles, positions that result from processes of ethnic matching may serve to limit minority leaders' long-term career advancement (Elliott and Smith, 2001; Maume, 2012; McGinn and Milkman, 2012). For instance, Elliott and Smith (2001) argue that ethnic matching can result in a "sticky floor" for minority leaders who face limited opportunities in jobs, firms or industries where minorities are not otherwise well integrated. Similarly, Stainback and Tomaskovic-Devey (2009) found that bottom up

ascription can limit minority leaders to positions of authority in less prestigious, more segregated and more managerially intense sectors such as the service sector. And, despite the benefits of ethnic matching for subordinates, Maume (2012) found that minorities who report to minority bosses earn less than workers who report to a white boss despite a greater commitment to their job. Indeed, the promotion of minorities to positions of authority in diverse sectors, firms or industries can be used to symbolize diversity promotion in response to legal or normative pressures but can also obscure underlying biases that reinforce the status quo (Collins, 2011; Maume, 2012). Nevertheless, to the extent that minority board members shape firm outcomes in important ways, increasing their representation on corporate boards remains a priority for diversity advancement.

While the bottom-up ascription thesis was formulated to explain mobility opportunities for immediate supervisors of minority subordinates within specific workplaces (Elliott and Smith, 2001), we explore the relevance for industry-wide and firm composition. A great deal of evidence suggests that industry-wide practices and norms can shape firm-level outcomes with regard to racial composition and segregation (e.g., McTague et al., 2009). We expect that firms in diverse industries will be more likely to appoint minority directors for at least three reasons. First, as noted above, diverse industries are more likely to confront internal pressures to advance norms and practices that maximize inclusion by appointing diverse leaders and adopting formal hiring and promotion practices. Second, diverse industries will face more pressure to maximize the work commitment, engagement and trust of a diverse labor pool by advancing minority leaders. Indeed, minority leaders, including board members, may be used to signal to industry incumbents that firms are committed to diversity. Finally, diverse industries and industries with a higher concentration of racial/ethnic minorities in management will have a greater pool from which to select racial/ethnic minority top executives and, by extension, board members. As racial/ethnic minority managers move through the organizational hierarchy, they will be more likely to be visible and known to decision-makers seeking to appointment board directors. As a result, extending the ethnic matching perspective to the appointment of board directors, we expect that diverse industries will be more likely to appoint racial/ethnic minority directors to their boards. Specifically, we test the following hypotheses:

Hypothesis 1a. As the percentage of minorities in the overall workforce in the industry increases, the likelihood of Asians, Blacks, or Hispanics serving on the board of directors increases.

Hypothesis 1b. As the percentage of minorities among the managerial ranks in the industry increases, the likelihood of Asians, Blacks, or Hispanics serving on the board of directors increases.

1.2. Visibility threat

While the ethnic matching thesis posits that integration of the labor force and managerial ranks by race/ethnicity will have a positive impact on minority directors' appointment to corporate boards, the visibility threat perspective considers how a greater concentration of minorities in a geographic area can impede leadership opportunities for minorities. Visibility threat refers to the conditions under which highly visible and geographically concentrated racial/ethnic minority populations are perceived as a threat to whites (Blalock, 1956, 1967). Perceived threat due to geographic concentration can increase the salience of racial/ethnic difference, stereotypes and bias. Together these tendencies increase the likelihood that white decision makers will pursue social distancing and social closure, reserving the most desirable jobs or opportunities for ethnically/racially similar candidates (Cohen and Huffman, 2007; Tomaskovic-Devey, 1993). In fact, heightened visibility and increased bias toward racial/ethnic minorities can motivate and reproduce tendencies toward "homosocial reproduction", which prompts white decision-makers to prefer to hire, promote and socialize with others like themselves (Kanter, 1977) As a result, the greater minorities' concentration in a local community or region, the greater discrimination and exclusion minorities face and the greater the inequality between whites and minorities.

Evidence in support of visibility threat comes from attitudinal analyses that show that negative attitudes toward Blacks among whites increases as the concentration of Blacks in the local community increases (Taylor, 1998). Research on lynching patterns confirm this trend; lynchings occurred at much greater rates in locations where there was a higher concentration of Black residents (Tolnay et al., 1996). Evidence specific to labor market opportunities also supports this perspective (Cohen, 1998, 2001; Huffman and Cohen, 2004; Tomaskovic-Devey and Roscigno, 1996). Greater concentration of minorities in the local labor market increases the degree of racial/ethnic segregation (Huffman and Cohen, 2004). In addition, minorities earn less and have fewer employment opportunities in cities or regions where they are more concentrated (Cohen, 1998; Tienda and Lii, 1987).

While applications of this perspective have tended to focus on a range of work-related outcomes, we predict that the influence of visibility threat may be most impactful in terms of leadership appointments. When there is a high concentration of minorities in the local labor market, minorities are less likely to be promoted and hired for the most desirable jobs, including jobs with workplace authority (Baldi and McBrier, 1997; Tomaskovic-Devey, 1993). More recent research confirms that the underrepresentation of minorities in managerial positions is greater when there is a greater concentration of minorities in the local labor market (Cohen and Huffman, 2007). While previous studies analyze the impact of visibility threat on management and supervisory positions, we expect that this mechanism may be even more salient in terms of the appointment of top leaders, including board directors. Top leadership appointments are often highly subjective and made on the basis of interpersonal trust, loyalty and interdependence with existing incumbents—qualities that often depend on

perceived demographic and social homogeneity (Kanter, 1977). To the extent that visibility threat is heightened in communities or regions where minorities are concentrated, we expect homosocial reproduction to be heightened. Decision makers will be more likely in these contexts to rely on demographic and social sameness—including racial/ethnic similarity—when making board appointments. As a result, we test the following predictions:

Hypothesis 2. As the percentage of Asians, Blacks, or Hispanics increases in the community population of the firm's headquarter location, the likelihood of Asians, Blacks, or Hispanics (respectively) serving on the board of directors decreases.

Taken together, these two perspectives suggest that while integration of the industry by race/ethnicity can facilitate board diversity, a robust concentration of racial/ethnic minorities in the community where the firm's headquarters is located can impede the appointment of racial/ethnic minorities to the board. After discussing our data and methods, we present findings from tests of the perspectives outlined above.

2. Methods

2.1. Data and sample

To examine the impact of ethnic matching on board appointments, we were generously given access by the researchers to a previously constructed dataset (see Rose and Bielby, 2011). The portion of the dataset we used for this analysis has not been analyzed for this purpose in any other research or publication. This dataset includes 73 S&P 500 companies (Standard & Poor's 500) that were in existence from year-end 1980 through year-end 2000. Data were collected at three points in time: year-end 1980, 1990, and 2000. Examining firms from the S&P 500 ensures examination of the largest and most established companies (Rose and Bielby, 2011). Furthermore, examining firms at three points in time starting at year-end 1980 suggests the firms in our analysis have significant longevity. Industry- and firm-level variables were collected for each firm, as well as race information on the firm's board members and headquarter area. Full and verifiable race information was required for each board member for every firm.

Race information was obtained from several sources. Specifically, archival company documents, annual reports with photographs, news reports, databases, and various internet sites were used to classify board members by race (Rose and Bielby, 2011). Given the difficulty of obtaining race information on each board member, especially the collections focused on 1980, several firms were lost from the analysis. Of the S&P 500, 155 firms existed at each time point examined. Of the 155 possible firms, 73 firms had complete data including racial information for each member of the board. Although the loss of 82 firms for missing data is a sizable loss for the analysis, examination of the 73 remaining firms indicate they are indeed a representative sample of the potential 155 firms. The comparison was based on mean market values and a distribution analysis by industry (Rose and Bielby, 2011). The mean market values between the 155 firms and the 73 firms were not statistically different, and the industry distribution included in the 73 firms mirrored that of the S&P 500. If a merger occurred during the examined timeframe, the organization included in the dataset is the entity which received the controlling majority in the transaction.

3. Measures

3.1. Dependent variables

Our dependent variables are the number of Asian directors, the number of Black directors, and the number of Hispanic directors on each firm's board. These numbers are coded as the actual number on each board examined. Methods used to determine board member race were company documents such as annual reports, various biographical internet sites, news reports, and databases. As noted above, if racial information was not able to be adequately identified, the firm was not included in the analysis.

3.2. Independent variables

For predictor variables, we used community- and industry-level measures of racial composition. The community-level measures include the percentage of Asians, Blacks, and Hispanics in the firm's headquarter area. The headquarter location was determined from the firm's 10-K and annual report filings, and the percentage of Asians, Blacks, and Hispanics in the headquarter community was acquired from the Lewis Mumford Center at the University of Albany. The industry-level measures include the percentage of minorities in the industry's overall workforce and the percentage of minorities in the industry's managerial workforce. The percentage of minorities in the overall workforce and the managerial workforce was acquired from the EEOC (Equal Employment Opportunity Commission).

3.3. Control variables

The control variables relate to the firm, the type of industry, and the firm's standing in the industry. Specifically, we controlled firm size, firm performance, industry type, firm visibility, firm centrality, and headquarter location. Firm size was

measured by the total number of employees. Firm performance was measured by the change in market value as assessed by its prior two-year average. Industry was coded using 2-digit SIC (Standard Industrial Classification) codes and followed the guidelines put forth by Waddock and Graves (1997). Firm visibility was assessed by the firm's presence in 35 prominent newspapers; specifically, the number of articles that appeared mentioning the firm more than ten times. And firm centrality was determined by the number of other S&P 500 boards that enjoyed shared directorships with the focal firms' board members. We also controlled the geographical region of the firms' headquarters. This is important given that perceptions of minorities may vary depending on the location. This variable was dummy coded using the US Census' designations of regions in the United States. The resulting four regions are Northeast, Midwest, Southern, and West. Industry was also dummy coded for the analyses and resulted in nine industries being represented in the sample. The predictor and control variables are lagged when examining the dependent variables.

3.4. Analyses

We analyzed our research questions using negative binomial regression with fixed effects. This method is appropriate given our data are panel data and have repeated firm observations (Allison, 2009). By using a fixed effects model, unobserved variables that are likely consistent over time will be controlled. This, in turn, allows for a more accurate picture between the predictor and outcome variables. In addition to the panel nature of our dataset, the outcome variables are count variables. Within some analyses, count variables create issues because of overdispersion; however, negative binomial regression has an extra parameter which models the overdispersion, and as such, is a preferred method with these types of data.

4. Results

Our examination tests the relevance of two theoretical perspectives on the appointment of minorities to corporate boards of directors. First, the ethnic matching or 'bottom up ascription' perspective predicts that minorities are more likely to be appointed to leadership positions in firms or industries where minorities are concentrated. We test two hypotheses derived from this perspective: First, does the percent of racial/ethnic minorities in an industry's overall labor force increase the probabilities that minorities will serve on a firm's board of directors? And second, does the percent of racial/ethnic minorities among the industry's managerial labor force increase the probability that minorities will serve on a firm's board of directors?

The second theoretical perspective we draw upon is the visibility threat perspective. According to the theory of visibility threat, geographic concentration can increase the salience of racial/ethnic differences, stereotypes and biases and increase the likelihood that white decision-makers will pursue social distancing, social closure and homosocial reproduction. We test this perspective with regard to the relationship between the racial/ethnic composition of the community where the firm's headquarters are located and minority appointments to the board of directors. Specifically, we test whether the percent of minorities in the community decreases minority representation on a firm's board of directors. Correlations and descriptive statistics are presented in Table 1.

Our first hypothesis, Hypothesis 1a, predicts that as the percentage of minorities in the overall workforce in the industry increases, the likelihood of minorities serving on the board also increases. We tested this hypothesis with negative binomial regression with fixed effects. After taking into account our control variables and other predictor variables, we find support for this hypothesis (refer to Tables 2 and 3). Although results do not support the relationship between minorities in the workforce and Asian leaders serving on the board of directors, findings do support the relationship between minorities in the workforce

Table 1		
Descriptives	and	correlations

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Variable	n	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11
1. Number of Employees	219	97,683	130,328	_										
2. Visibility of Firm	219	20.28	35.04	0.49**	_									
3. Centrality of Firm	219	14.78	9.11	0.37**	0.19**	_								
4. Change in Market Value	219	0.23	0.58	-0.15*	-0.14*	-0.03	_							
5. Blacks in HQ Area Population	219	0.16	0.08	0.14*	0.15*	0.06	-0.02	-						
6. Hispanics in HQ Area Population	219	0.10	0.09	0.02	0.05	0.09	0.03	0.46**	-					
7. Asians in HQ Area Population	219	0.04	0.04	-0.05	0.11	-0.10	0.02	0.07	0.64**	-				
8. Minorities in the Industry Workforce	219	0.23	0.04	-0.02	-0.03	-0.24**	-0.18**	0.17*	0.26**	0.40**	_			
9. Minorities in the Industry Management	219	0.10	0.03	0.12	0.08	-0.16*	-0.19**	0.20**	0.31**	0.35**	0.83**	-		
10. Black Board Directors	219	0.65	0.73	0.25**	0.15*	0.19**	-0.15*	0.24**	0.29**	0.21**	0.43**	0.48**	_	
11. Hispanic Board Directors	219	0.18	0.42	0.01	-0.06	-0.10	-0.14*	0.02	-0.01	0.01	0.33**	0.29**	0.21**	_
12. Asian Board Directors	219	0.07	0.28	-0.01	0.04	-0.08	-0.03	-0.04	0.12	0.32**	0.21**	0.23**	0.04	0.04

^{*}p < 05 **p < 01.

Table 2Negative binomial regression with fixed effects for panel data.

IVs	Asian directors	3		Black directors			
	В	SE	IRR	В	SE	IRR	
Control Variables							
Total Employees	0.00	(0.00)	1.00	0.00***	(0.00)	1.00	
Visibility of Firm	-0.01	(0.01)	0.99	0.00	(0.00)	1.00	
Centrality of Firm	0.01	(0.05)	1.01	0.03**	(0.01)	1.03	
Change in Market Value	0.00	(0.01)	1.00	0.00	(0.00)	1.00	
Main Effects							
% Minority in Industry Workforce	-0.06	(0.13)	0.94	0.12**	(0.04)	1.12	
% Minority in Industry Management	0.30	(0.22)	1.35	0.03	(0.05)	1.03	
% Asian HQ Area	0.23***	(0.05)	1.26	_	_	_	
% Black in HQ Area	_	_	_	0.01	(0.01)	1.01	
Constant	-8.08***	(1.95)	0.00	-3.46***	(0.61)	0.03	

Note: Industry and geographical region are dummy coded. For space purposes, the values are not reported. (There are 9 different industries and 4 regions represented), N = 73 Firm Units with 219 Observations *p < 05 **p < 01 ***p < 001.

Table 3Negative binomial regression with fixed effects for panel data.

IVs	Hispanic directors					
	В	SE	Irr			
Control Variables						
Total Employees	0.00	(0.00)	1.00			
Visibility of Firm	0.00	(0.00)	1.00			
Centrality of Firm	0.02	(0.02)	1.02			
Change in Market Value	0.00	(0.00)	1.00			
Main Effects						
% Minority in Industry Workforce	0.23**	(0.07)	1.25			
% Minority in Industry Management	-0.03	(0.09)	0.98			
% Hispanic in HQ Area	-0.02	(0.02)	0.98			
Constant	-10.30***	(1.71)	0.00			

Note: Industry and geographical region are dummy coded. For space purposes, the values are not reported. (There are 9 different industries and 4 regions represented). N = 73 Firm Units with 219 Observations *p < 05 **p < 01 ***p < 001.

and both Black and Hispanic leaders serving on the board of directors. These relationship are significant at p < 0.01 for both Black and Hispanic leaders (refer to Tables 2 and 3).

And Hypothesis 1b suggests that as the percentage of minorities in the managerial workforce in the industry increases, the likelihood of minorities serving on the board also increases. Results do not support this hypothesis for any of the examined relationships. A positive trend exists for Asian leaders, but none of the relationships reach the level of statistical significance (refer to Tables 2 and 3).

Hypothesis 2 suggests that as the minority population within a firm's headquarter community increases, the likelihood of a minority serving on the board decreases. Results do not support this hypothesis and actually suggest support for a finding contrary to the visibility threat proposition. Specifically, at p < 0.001, results suggest that as the population of Asians in the community increases, the number of Asian directors on the board also increases (refer to Tables 2 and 3). A greater concentration of Blacks and Hispanics in the community where the headquarters are located has no relationship with Black and Hispanic leaders serving on the board of directors.

Asians' inclusion on the board of directors, though marginally influenced by the percent of Asians in management, is primarily influenced by the population of Asians within the headquarter community. Blacks and Hispanics inclusion on the board, however, is primarily related to the percentage of minorities in the overall workforce in the industry. Neither Blacks nor Hispanics enjoy increased board representation as a function of the community demographics.

5. Discussion

Scholars, policy-makers and business leaders alike have become increasingly concerned about the relative lack of racial/ ethnic diversity on corporate boards of directors. Extant research suggests that beyond equity and fairness, board diversity has a number of positive impacts on corporate firms. Yet research on the factors that drive selection and appointment of minority directors is limited. The purpose of this study is to analyze the industry, firm and community-level compositional factors that influence the appointment of racial/ethnic minorities to corporate boards.

We derived our hypotheses from two theoretical perspectives related to racial/ethnic composition and career mobility: *ethnic matching* and *visibility threat*. The ethnic matching or 'bottom up ascription' perspective posits that decision-makers are

more likely to appoint minorities to manage or supervise workgroups with the same or similar racial/ethnic characteristics (Elliott and Smith, 2001, 2004). We extend this perspective to analyze whether similar mechanisms shape opportunities for the appointment of racial/ethnic minority top leaders. Specifically, we analyze whether a greater concentration of minorities in the industry overall and in the industry's managerial ranks will increase opportunities for minorities to serve as board directors.

The visibility threat perspective predicts that opportunities for racial/ethnic minorities will be negatively affected by the concentration of minorities in a geographic area due to the increased salience of racial/ethnic stereotypes and tendencies toward social closure and in-group preference among whites (Blalock, 1967). We extend this perspective to consider whether the leadership opportunities for minority directors will be negatively affected by the concentration of minorities within the geographic area where the firm is located. Specifically, we analyze whether a greater concentration minorities n the community where the firm is headquartered will result in fewer opportunities for minorities to serve on corporate boards.

Our analyses resulted in mixed support for our hypotheses, and our findings reveal important nuances in terms of the factors that facilitate or impede minority representation on corporate boards of directors. First, we find mixed support for the ethnic matching perspective. Consistent with the predictions of ethnic matching, Black and Hispanic directors enjoy more opportunities in industries where the overall workforce includes a greater proportion of Black and Hispanic workers. However, contrary to the predictions of the ethnic matching perspective, the composition of the industry has no impact on Asian directors' opportunities for board appointments. Second, also contrary to the predictions of ethnic matching, we find no evidence that the racial/ethnic composition of the managerial ranks for Black, Hispanic or Asian directors. A higher concentration of racial/ethnic managers within an industry does not increase the likelihood that firms will appoint racial/ethnic directors to the board.

We interpret these findings in two ways. First, in terms of the minority concentration among the industry's labor force, it is possible that Black and Hispanic workers are more likely than Asian workers to engage in pressure from below for representative leadership. As two minority groups that have historically been excluded from leadership positions and that confront relatively high levels of bias, discrimination and occupational segregation, these groups may be more vocal in terms of expressing a desire for representative leadership on the board. As a result of these bottom-up pressures, industries without a significant proportion of Black and Hispanic workers may also be less likely to have highly formalized personnel systems, which are known to reduce bias in promotion decisions (Reskin, 2000). Thus the internal pressure on decision-makers to appoint Black and Hispanic directors may be more intense compared to the pressures they fact to appoint Asian directors even in industries with a larger concentration of Asian employees. And, furthermore, industries with a higher concentration of Black and Hispanic workers may also be more likely to have more systematic and formalized systems of recruitment, hiring and promotion that increase leadership opportunities for members of underrepresented groups. Such practices not only increase opportunities at lower levels of the organizational hierarchy but have also been found increase the representation of racial/ethnic minorities on boards of directors (Brown, 2002).

Contrary to the predictions of the ethnic matching perspective, we find no evidence of 'bottom up ascription' from the managerial ranks to the board of directors. Though there is a positive trend between managerial composition and the representation of Asian board directors, we find no relationship between the racial/ethnic composition of management and the racial/ethnic composition of the board for Blacks and Hispanics. Though this finding calls for future analyses to probe the relationship between managerial and board composition, we speculate that lack of support for our predictions may reflect important differences between and among racial/ethnic stereotypes and the ways in which decision-makers interpret pressures for board diversity. Asian directors' appointment is marginally influenced by the representation of Asian managers. Stereotypes of Asians tend to be consistent with workplace mobility and leadership. Prevalent 'model minority' stereotypes present Asians as more accomplished academically, more professional and more technically savvy than even their white peers (Chou and Feagin, 2008). Such stereotypes may be more likely to influence decision makers to appoint Asian directors from among the pool of Asian managers and supervisors. By contrast, however, dominant stereotypes of Blacks and Hispanics tend to emphasize qualities incompatible with leadership including lack of competence, motivation and intelligence (e.g., Hacker, 1992; Moss and Tilly, 2003). Thus, the mobility of Blacks and Hispanics into board seats may be impeded by the salience of such stereotypes despite their representation among managers in the industry. While decision-makers may view Black and Hispanic workers as effective managers or lower level executives or supervisors, they may be less likely to view those racial/ethnic minority managers as sufficiently competent to rise to the rank of top executive and/or board director.

The lack of support for bottom-up ascription with regard to managerial composition of the industry and the appointment of Black directors is particularly interesting given evidence of decision-makers' tendency to interpret board diversity in terms of racial diversity. In interviews with CEOs and board members about the selection of minority directors, Rose and Bielby (2011) found that most interpret the need for greater diversity in terms of appointing Black directors. They write, "American firms are subject to distinctive and relatively intense institutional pressure to manage African American representation on their boards, compared to other minority groups" (842). Support for this perspective is provided by trends in the representation of racial/ethnic minorities on boards today. Black directors far outnumber Hispanic and Asian directors on American corporate boards. In our own data, 70% of boards that have a Hispanic member and 67% of boards that have an Asian director also have a Black Director. Thus while "intense institutional pressure" to appoint Black directors may be sufficient to overcome negative racial stereotypes when the industry overall has a high concentration of Black employees, the composition of managerial ranks does not appear to exert sufficient pressure on decision-makers to increase the appointment of Black directors.

We also tested the relevance of the visibility threat perspective to understand the mechanisms that increase opportunities for racial/ethnic minority directors. Previous research on visibility threat has considered the concentration of Blacks in a region, city or community and findings reveal evidence of heightened discrimination against Blacks when the local population is more concentrated. Our findings do not support this perspective with regard to Black directors, however. On the contrary, we find that the concentration of Blacks in the community has no impact on the opportunities for appointment for Black directors. We find a similar trend with regard to Hispanics. However, with regard to Asian directors, our findings are the opposite of those predicted: a higher concentration of Asians in the community where the firm is located actually *increases* the likelihood that the firm will appoint Asian directors.

There are at least four interpretations for the lack of support for the visibility threat perspective for Blacks and Hispanics and for a reverse trend for Asians. First, diversity in the community can increase the normative pressures on firms to advance diversity; indeed, firms in diverse communities are more likely to view diversity as a strategic priority (Ostrower, 2002; Ostrower and Stone, 2006). Consistent with this interpretation, research on non-profit organizations has found that board diversity is greater in urban/metro areas where racial minority populations are more likely to reside (Ostrower, 2007). While we do not find that a Black and Hispanic communities increase opportunities for minority directors, we at least do not find evidence that these communities increase bias and discrimination for Black and Hispanic executives.

Second, to the extent that members of the local community serve as an important customer or client base, companies may face competitive demands for representative leadership. Particularly in diverse locations, firms with diverse leaders may enjoy stronger reputations among members of the local customer and client base (King et al., 2011; Roberson and Park, 2007; Yang and Konrad, 2011). Again, while we do not find that firms in diverse communities are more likely to appoint Black and Hispanic directors, we do find that firms may be responsive to community pressures to appoint Asian directors.

Finally, firms that pursue board diversity benefit in terms of perceived trustworthiness by external stakeholders, including community members (Cox and Blake, 1991; Jones et al., 1998). As firms face growing pressure to pursue socially sustainable practices and policies, including responsible community relations, they may be increasingly responsive to the needs and desires of community stakeholders over time. And, indeed, there is evidence that more diverse locations may motivate stronger "identity and race-conscious" practices among HR personnel (Konrad and Linnehan, 1995). Thus, HR practitioners in diverse locations may be more aware of and attendant to issues of inclusion, fairness and diversity and will pursue policies consistent with these values. These findings help us to understand counter-pressures that may reduce the salience of visibility threat in diverse communities and explain the lack of support for the visibility threat hypothesis with regard to Black and Hispanic directors. These findings may also provide insight into the significant relationship between the concentration of Asian populations and the appointment of Asian directors. We also speculate that, as a result of these counter-pressures, firms that do not demonstrate responsiveness in terms of representative leadership by Blacks and Hispanics may limit companies' legitimacy and reputation over time. Indeed, the significant underrepresentation of Black and Hispanic directors on the boards of American firms may undermine companies' claims that board diversity is driven by the business imperatives related to meeting the needs of culturally diverse customers and clients (Rose and Bielby, 2011: 843).

In sum, we find important differences in the external and internal mechanisms that drive the board appointments of racial/ethnic minority directors. First, we find that the strongest predictor of Black and Hispanic representation on corporate boards is the representation of Blacks and Hispanics in the industry. This suggests that ethnic matching and 'bottom up ascription' operate not only at the level of the firm but also at the industry level. Consistent with our extension of the ethnic matching perspective, decision makers appear to be attentive to the racial/ethnic composition of the industry—and perhaps the bottom-up pressures for representative leadership—when appointing Black and Hispanic board directors. By contrast, the strongest predictor of the appointment of Asian directors to the board is the concentration of Asians in the community where the firm is located. Not only does this suggest a lack of support for visibility threat for Asians, it further suggests that decision-makers may be attentive to community stakeholder concerns in communities where Asians are well represented. Though we also find no evidence of visibility threat at work, we also find that decision makers may be less responsive to community pressures in Black and Hispanic communities.

6. Conclusion

This research identified industry-wide, firm and community-level compositional factors that facilitate or impede the appointment of racial/ethnic minorities to corporate boards. We now identify ways in which future research can address key limitations to the current study. First, our study is limited to the effect of industry and community composition. Future research can identify other compositional factors, external and internal to the firm, that may impact the appointment of minority directors. For instance, if board appointments are motivated in part by the desire of companies to tap into diverse cultural communities in terms of product innovation and development, then the racial/ethnic composition of the customer or client base may have a significant impact on board appointment decisions. While we do not find evidence that community composition impacts the appointment of Black or Hispanic directors, it is likely that companies are more responsive to customer/client composition than local community composition. If so, then companies that serve Black and Hispanic customers or clients will be more responsive to the representational leadership of Blacks and Hispanics and will be more likely to appoint Black and Hispanic directors to their boards.

Our study is also limited by its focus on the factors that shape board appointments. We do not consider the status of minority directors on boards. Research on bottom-up ascription suggests that the leadership positions occupied by minorities

tend to be inferior to those occupied by whites in terms of authority and compensation and that minority leaders are more vulnerable than whites to replacement (Maume, 2012). While board members are nominally equal, their committee assignments vary significantly. Indeed, extant research suggests that women directors are less likely than men directors to serve on executive committees that tend to have more authority and influence over corporate strategy and that women directors tend to hold less powerful titles and fewer multiple directorships than male directors (Peterson and Philpot, 2007; Zelechowski and Bilimoria, 2004). Future research could explore the post-appointment experience of racial/ethnic minority directors to see if they face similar disadvantages on boards. Specifically, research might consider whether minority directors enjoy lower levels of authority, autonomy and influence within boards.

Finally, future research could build upon the current study by analyzing the role of the composition of leaders closer to the boardroom. The original formulation of bottom-up ascription considered the impact of subordinates on the appointment of immediate supervisors (Elliott and Smith, 2001). Our analysis considers the composition of broader categories, including the composition of the industry-wide labor force and managerial ranks. To build on our findings, scholars may consider the impact of the composition of the top management team or the C-suite on the appointment of minority directors. Such analyses might reveal important insights regarding the likelihood of firms with diverse leadership teams to appoint minority directors and the processes by which diversity at one level of leadership impacts the composition of leaders at another level. Such an analysis could go beyond "bottom up" and "top down" ascription to analyze processes the facilitate or impede more "lateral" ascription processes.

Author contribution

The authors contributed equally to this manuscript. For convenience they alternate author order. The authors would like to thank Clayton Rose for sharing his data with us and making this study possible. We also thank William Bielby for his support of our work and for facilitating our connection to Clayton Rose.

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