

The Relationship of Board Member Diversity to Organizational Performance

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ABSTRACT. Wider diversity in board member characteristics has been advocated as a means of improving organizational performance by providing boards with new insights and perspectives. With data from 240 YMCA organizations, a board diversity index was constructed and compared to multiple measures of board member diversity. Results revealed higher levels of social performance and fundraising results when board members had greater occupational diversity. Gender diversity compared favorably to the organization's level of social performance but a negative association surfaced for level of funds raised. The diversity in board member age groupings was linked to higher levels of donations.

In board of director literature, a recurring theme is that board composition can impact organizational performance. In fact, research studies have revealed associations between board member characteristics and financial measures of organizational performance. For example, some researchers have equated the insider orientation of board members (close ties to management) with greater profitability (Cochran *et al.*, 1985; Vance, 1978); others have focused on occupational characteristics of directors as important indicators of firm performance (Baysinger and Butler, 1985; Zald, 1967). Also, researchers have attempted to compare board size (Chaganti *et al.*, 1985; Hiner, 1967; Pfeffer, 1973) and gender composition (Babchuk *et al.*, 1960; Provan, 1980) to organizational performance. (See Zahra and Pearce 1989, for a complete review of the literature on boards of directors and company performance.)

Recently, the economic concern with defining the best composition of individual to direct and oversee a company's operation has been broad-

ened to include a concern with corporate social performance and the participation of underrepresented groups (Fryxell and Lerner, 1989; Zahra and Stanton, 1988). While the issue of greater representation by a variety of board member types has been advocated to provide a diversity of outlook (Bere, 1991), few empirical studies have approached board composition from this diversity perspective.

The study reported here addresses this shortcoming and extends past research efforts in the area of board composition by developing a diversity index and investigating its relationship to both social and economic organizational performance.

Theoretical framework

The assumption that the selection of particular individual directors affects organizational performance can be traced to resource dependence theory (Aldrich, 1979; Pfeffer and Salancik, 1978). According to this framework, boards are part of the organization and its environment, and by providing information and resources to the organization, boards help to cushion it against an uncertain environment. This viewpoint suggests that on an individual basis, board members bring resources to the organization as a result of their backgrounds (Zald, 1969). In addition to the environmental linkage perspective, a second framework argues that board members perform an internal control function (Pfeffer, 1973; Zald, 1969), and through administrative efforts can influence organizational efficiency. Both viewpoints suggest that properly structured governing boards have the potential to influence organiza-

tional outcomes, and earlier studies provided some empirical support for this relationship, particularly with regard to board member occupation and gender.

Occupational characteristics

Occupational distinctions were first noted by Zald (1967) who surveyed 34 YMCA organizations and found that the proportion of business leaders on the board was associated with greater organizational efficiency and program quality, while those members with non-business backgrounds tended to have better board attendance but were not associated with organizational outcomes. The importance of occupation attributes was revealed by Pfeffer (1972) as well in his study of 80 corporations where firms requiring access to external capital had directors with financial institution backgrounds and those organizations under national regulation had higher proportions of attorneys as board members than those not under regulation.

Occupational distinctions were also investigated by Baysinger and Butler (1985) who compared the affiliation of individual directors in 266 U.S. corporations with the financial performance of those firms. Superior performing operations had a mixture of directors affiliated with top management, others who were independent of management but had occupational backgrounds as general officers of corporations, and a third component of directors with professional backgrounds (such as financial and legal) to provide advice or counsel to inside management. Although the precise composition mix varied from firm to firm in response to different organizational and environmental characteristics, the author concluded that the most appropriate board composition included a diversity in board member affiliation and occupation.

Board member gender

The findings from studies involving board member gender and superior organizational performance point towards boards with greater proportions of males. In one of the first studies

dealing with this aspect of board composition, Babchuk *et al.* (1960) determined that men were more likely to be represented on boards of non-profit organizations that were ranked as highly vital to the community. In fact, Zald (1969) suggested that women rarely represented major bureaucratic organizations and thus would have less command of external resources. This notion appeared to find support in a more recent study of 100 Fortune 500 companies (Zahra and Stanton, 1988), where the ratio of board member minorities including women was inversely related to the organization's financial performance in terms of profitability and efficiency and also was inversely related to the organization's concern for customers and the environment (part of the study's social performance measure). In contrast to these results, Provan's (1980) survey of 46 human service agencies stands out as the one major study that found no relationship between the percentage of males on the board and organizational performance, represented by the agency's level of donations, which is an important resource for nonprofit organizations.

Board member diversity

Recently, discussions pertaining to diversity in board member characteristics have increased (e.g., Bere, 1991; Fryxell and Lerner, 1989; Houle, 1990; Mahoney, 1991; Widmer, 1989). According to Worthy and Neuschel (1984), individuals with business backgrounds and experience are still favored as candidates for board membership, but there is a growing desire for people who can bring new insights and perspectives to the board. As the authors point out, "The value of a board that balances a variety of skills and backgrounds is growingly apparent." (33).

In light of previous research showing board members with various occupational characteristics providing resources to the organization and in order to test the significance of having boards with wide representation of occupational types, it was hypothesized that

- H₁: Greater diversity in board member occupations would be associated with higher levels of organization performance.

On the other hand, since the majority of research pertaining to the effects of representation by women on boards tends to be negative or not significant, it was hypothesized that

H₂: Greater diversity in board member gender would be associated with lower levels of organizational performance.

In addition to recommendations for variation in board member occupational backgrounds and equal representation by women, equal proportions of younger directors are suggested mechanisms for strengthening organizational performance through a diversity of outlook (Bere, 1991); and it was hypothesized that

H₃: Boards having members with a greater spread in age would be associated with organizations having better organizational performance.

Board size

From a resource dependence perspective, larger boards have been associated with better performing organizations (Pfeffer, 1972; 1973; Provan 1980). Not only do more board members appear to increase the organization's access to external resources, but as Provan (1980) argued, larger boards would facilitate wide community representation. To test whether more diverse boards are necessarily larger boards, it was hypothesized that

H₄: Organizations with larger boards would have greater diversity in board member occupation, gender and age.

Methods

Sources of data

This research was based on data from 240 YMCA organizations, which are part of a national eastern region grouping (12 states along the east coast). This site was chosen for several reasons. First, issues regarding board member composition were of interest to this organization, since the national YMCA organization in Chicago had emphasized

greater diversity in board member characteristics since 1985. Also, YMCAs are concerned with both financial and social performance (Jones, 1984). Finally, organization officials were willing to work closely with the author in developing and pretesting a questionnaire that would be meaningful to YMCA executives.

The survey instrument was mailed to 298 organization executives in July 1989, and after one follow up mailing, responses totalled 240 usable questionnaires (81%). Sixty-six telephone interviews were conducted to complete missing data and clarify ambiguities on returned questionnaires. For example, if one occupational category was marked for all members, the respondent was called and the information was verified or corrected.

Measurements

Diversity indices and board size. Respondents listed each board member and checked off characteristics in four categories. The first category was occupational background and the subgroupings were based on existing classification guidelines from national and regional officials. Subgroupings were business owner, business chief executive, business manager, others with a business background, educator, government, homemaker, legal, medical/dental, religious, retired, and others with a non-business background. Additional categories for gender, age (under 20 years, 20–35, 36–50, 51–65 and over 65) and ethnicity (Caucasian, Black, Asian, Hispanic, other) were also included. YMCA executives have been encouraged to maintain this data on their board members so that the information in many cases was readily available. From these responses, diversity scales were constructed, and board size based on the number of members was recorded. Since 96% of the board members were Caucasian, the ethnicity category was dropped from the analysis.

The diversity scales were calculated as follows. In each category, the highest percentage of any of the subgroupings was subtracted from 100 (so that a high score would represent greater diversity) and then was multiplied by the total number

of categories with any amount of representation. For example, an organization with board members in five occupational subgroupings, the largest proportion of which was 67% would have an occupational diversity score of 165 $[(100 - 67) \times 5]$. According to this scoring, organizations with a smaller percentage in the most represented occupational group and with board members across a greater number of occupational groupings would be considered more diversified (having a higher score) than an organization with a large percentage of the members in one occupational group and fewer total occupations represented.

Organizational performance. Three measures of organizational performance were constructed for the study. The first involved social performance. YMCA organizations have nonprofit status, which is granted to organizations based on their having a social mission or purpose to provide community or charitable services (Oleck, 1980). Fulfillment of this mission takes many forms in YMCAs. For example, some provide free health club memberships to lower income community residents; others offer specialized programs for senior citizens, teens and/or young children. To assess the organization's effectiveness in achieving its social mission, a staff consultant provided rankings [ranging from poor (1) to excellent (5)] for his/her organization(s) in the region. Each YMCA had one staff consultant who monitored its yearly progress and maintained contact throughout the year with that organization but still could provide an outsider's perspective of the organization's effectiveness in this area.

The second performance measure concerned fiscal performance and consisted of the ratio of total revenues to total expenses for each organization. According to YMCA officials, the statistics from which the ratios were generated were the most consistently reported by all organizations, and the ratio was considered a good measure of the efficiency with which the organization was staffed and operational expenses controlled.

A third performance measure involved the level of donations available to each organization. Using published statistics, a ratio of total contributions (from yearly fundraising campaigns,

bequests, United Way and government grants) to total revenues was calculated. Since donations are provided from the public/community, this ratio is considered by organizational members as an index of public support.

Control variable. Since organizational size has been associated with board size (Hiner, 1967; Pfeffer, 1973), the logarithm of each firm's 1989 annual revenue was included in the analyses as a control variable.

Results

Table I reports the distribution of YMCAs by board size as well as occupational, gender and age characteristics of board membership. Board size averaged 23 members with only two boards under 10 members and 8 boards containing 41 or more directors. The largest occupational grouping was from the business sector (1410 company owners), and, on average, the four business-related groupings comprised 58.2% of the total occupational types. Board members were primarily male, and over half of the directors were between 36 and 50 years old. This profile of predominately white, male, older individuals with backgrounds in business or a professional capacity is similar to those revealed in the literature (Kohn and Mortimer, 1983; Kramer, 1981; Nason, 1977).

Table II presents means deviations and zero-order correlations for the variables in the study. Occupational diversity ranged from a minimum score of 99.9 (3 categories represented: 67% business owners, 7% chief executives, 26% business managers) to a maximum of 908.6 (all but the government occupation represented, no grouping greater than 17%).

With regards to gender diversity, scores ranged from 0 (three organizations with all male boards) to 100 (balanced representation). In only two cases did female directors comprise a higher percentage of the board than males, and thus, for the most part, as a board became more diverse in gender, it meant that more women were being added (rather than more men).

Perfect diversity in age groupings would equal a score of 400, and scores ranged from a

TABLE I
Intercorrelations among variables

Variables	Means	s.d.	1	2	3	4	5	6	7
Occupation diversity	552.70	150.63							
Gender diversity	42.82	20.37	0.1067*						
Age diversity	148.84	60.23	0.1435†	-0.1868‡					
Board size	23.3	6.9	0.3467†	-0.1420*	0.2886‡				
Operating efficiency ^a	0.997	0.06	-0.0515	-0.0316	-0.0447	-0.0278			
Social performance ^b	3.4	1.25	0.1522†	0.1228*	0.0451	0.1726†	0.0209		
Level of donations ^c	0.168	0.10	0.1430*	-0.0197	0.0668	-0.1705‡	0.0503	-0.1619‡	
Organization size ^d	13.65	0.99	-0.0104	-0.2191‡	0.0625	0.4590†	-0.0353	0.2486‡	0.5458‡

^a Ratio of total revenues to total expenses.

^b This was a 5-point scale.

^c Ratio of donated revenue to total revenue.

^d Logarithm of annual revenue.

‡ $p \leq 0.01$; † $p \leq 0.05$; * $p \leq 0.10$.

minimum of 11.2 (0 under 20, 6% between the ages of 20–35, 78% between 36–50, 5% between 51–65, and 11% over 65) to the highest score of 290.8 (0 under 20, 18% between 20–35, 27% in the remaining three categories).

The mean economic performance ratio revealed revenues slightly less than expenses (99.7%). Social performance, as perceived by the consultants, was ranked overall about average and donations comprised 16.8% of revenues.

To test the hypothesized relationships, partial correlations were calculated for each of the diversity indices against the performance measures controlling for organization size. Table III presents results.

Diversity and performance

The first hypothesis linking board member occupational diversity to organizational performance was supported with regards to the organization's social performance and fundraising results. Board members representing diverse occupational backgrounds were associated with organizations that appeared to place greater emphasis on their social agency mission and had higher levels of contributed revenue. No significant relationship between this diversity variable and operating efficiency was revealed.

Regarding gender diversity, the organization's ability to fulfill its social agency mission was enhanced by more equal representation of both sexes on the board and, in this group of organizations, by adding more women. However, the reverse occurred in terms of fundraising results, where higher percentages of women directors were associated with organizations that had lower levels of donations. No relationship surfaced between gender diversity and the organization's operating efficiency.

Diversity in age groupings had no relationship to the organization's efficiency measure or its social performance ranking. However, organizations with directors from diverse age groupings had somewhat higher levels of donations.

The last hypothesis predicted an association between board size and the diversity variables. As shown in Table III, larger boards were required for occupation as well as age diversity. However, board size was not associated with gender diversity when organization size was included as a control variable. This contrasted with the zero-order correlation, which showed a positive and significant relationship between gender diversity and board size.

Other changes occurred when organization size was controlled for in the analysis, particularly with regard to the level of donations. As in Provan's (1980) study, the zero order correlation

TABLE II
Descriptive statistics of composition variables

Size	No. of organizations	
<i>Board size distribution</i>		
10 or less	2	
11 to 20	88	
21 to 30	128	
31 to 40	14	
41 to 45	8	
Total	240	
Composition variables	Total	% of board members
<i>Board occupational groupings</i>		
Company owners	1410	25.3
Chief executives	400	7.2
Business managers	1037	18.5
Other business occ.	404	7.2
Education	427	7.7
Government	249	4.5
Homemaker	278	5.0
Legal	412	7.4
Medical	297	5.3
Religious	101	1.8
Retired	395	7.1
Other non-business	170	3.0
	5580	
<i>Board gender groupings</i>		
Male	4402	79.0
Female	1172	21.0
	5574	
<i>Board age groupings</i>		
Under 20	1	—
20 to 35	703	12.6
36 to 50	2980	53.5
51 to 65	1489	26.7
Over 65	395	7.1
	5568	

between gender diversity and the proportion of donations was not significant; yet the partial correlation was significant and negative once organizational size was included. The inclusion of organizational size also caused the association between age diversity and donation levels to

become statistically significant. Lastly, the zero order correlation between board size and donations reversed itself in the partial correlation.

Discussion

The purpose of this study was to develop an index of board member diversity and compare it to multiple measures of organizational performance. As the results showed, a contingency situation existed where the importance of board representation hinged on the type of performance being examined.

The strongest impact of board diversity was on the organization's social performance. This is particularly relevant to YMCAs, since the lack of social agency concerns by two separate organizations in two different states resulted in their being denied state tax exemption (*Nonprofit Times*, 1989; *Pittsburgh v. Board of Property Assessment*, 1989; *YMCA v. Department of Revenue*, 1989). The findings from this study suggested that boards with greater diversity in member backgrounds and gender were able to keep their social agency purpose in the forefront. Representation appeared to provide multiple viewpoints as one executive recalled in an incident involving a long-standing YMCA program. The program had not been cost effective for several years and was beginning to drain on other sources of revenue. Several board members with business backgrounds were strongly opposed to its continuance. However, viewpoints of other board members tended to stress the program's benefit of building family relationships. After hearing both sets of arguments, the board voted to continue the program for another year. As the executive noted, "This was one of our most difficult decisions, since it dealt with the organization's mission but was strongly influenced by our limited revenue base. Having a variety of viewpoints helped the board consider all aspects of the decision."

With regard to the level of donations, all composition variables were related to this measure. Board member occupation, age diversity and, to some extent, board size appeared to enhance donations, whereas gender diversity did not. As

TABLE III
Partial correlations¹

Composition variables	Performance		
	Operating efficiency	Social	Level of donations
<i>Composition variables to performance</i>			
Occupational diversity	-0.0519	0.1754**	0.1639**
Gender diversity	-0.0414	0.2085**	-0.1689**
Age diversity	-0.0426	0.0616	0.1143**
Board size	-0.0130	0.0466	0.1068*
			Board size
<i>Composition variables to board size</i>			
Occupation diversity			0.4018***
Gender diversity			-0.0448
Age diversity			0.3097***

*** $p \leq 0.01$.** $p \leq 0.05$.* $p \leq 0.10$.¹ Controlling for organization size.

Middleton (1987) suggested, women may not have access to needed economic, social and political resources, which may have influenced their success in the fundraising arena.

Diversity in any form had no impact on operating efficiency in this group of organization, and diversity does not appear to influence one way or another the board's ability or tendency to perform its control function.

The above interpretations must be viewed in light of several limitations. First, the findings apply to one organization. While we chose this approach to minimize performance measures problems and to control for environmental variation, further research should be conducted to determine whether the relationships between board diversity and organizational performance hold in other types of organizations. Second, the social performance measure represents one person's interpretation for a particular organization. For this study, the staff consultants were considered to be the least biased in their judgment, particularly in view of the sensitivity of tax exemption issues, as noted earlier. While this is a strong limitation of the social perfor-

mance variable, objective performance measures were included to capture other aspects of performance critical to this group of organizations. Lastly, the cross-sectional design of the study precludes us from inferring causality between the diversity and organizational performance measures. The theoretical premise of this study was that diversity influenced performance; however, the reverse may be occurring, and longitudinal investigations are needed to address this issue.

Despite these limitations, the study contributes to board literature in that it viewed composition from a diversity perspective. The study also included multiple measures of performance to better assess the board's influence on organizational outcomes. Finally, the importance of organization size as a control variable in research involving boards of directors has been identified. Originally thought to impact board size only, organizational size has been shown to influence diversity and performance relationship as well.

In summary, although the drawbacks discussed above limit the impact of this research, empirical data on board member diversity is overdue, and the current study attempted to test some of

the premises associated with recently publicized form of board structure.

References

- Aldrich, H. E.: 1979, *Organizations and Environments* (Prentice-Hall, Inc., Englewood Cliffs, NJ).
- Babchuk, N., R. Marsey and C. W. Gordon: 1960, 'Men and Women in Community Agencies: A Note on Power and Prestige', *American Sociological Review* **25**, 399-403.
- Baysinger, B. D. and H. N. Bulter: 1985, 'Corporate Governance and the Board of Directors: Performance Effects of Changes in Board Composition', *Journal of Law, Economics and Organizations* **I**(1), 101-124.
- Bere, J. F.: 1991, 'The Director as Servant and Leader', *Directors and Boards* **15**(3), 7-8.
- Chaganti, R. S., V. Mahjan and S. Sharma: 1985, 'Corporate Board Size, Composition and Corporate Failure in Retailing Industry', *Journal of Management Studies* **22**(4), 400-417.
- Cochran, P. L., R. A. Wood and T. B. Jones: 1985, 'The Composition of Boards of Directors and Incidence of Golden Parachutes', *Academy of Management Journal* **28**, 664-671.
- Fryxell, G. E. and L. D. Lerner: 1989, 'Contrasting Corporate Profiles: Women and Minority Representation in Top Management Positions', *Journal of Business Ethics* **8**, 341-352.
- Hiner, O. S.: 1967, 'The Size of Company Boards', *Management International Review* **7**(4), 69-81.
- Houle, C. O.: 1990, 'Who Should Be on Your Board?', *Nonprofit World* **8**(1), 33-35.
- Jones, M.: 1984, 'Shaping Up the Y', *Toronto Business Journal*.
- Kohn, P. F. and K. P. Mortimer: 1983, 'Selecting Effective Trustees', *Change* **15**(5), 30-37.
- Kramer, R. M.: 1981, *Voluntary Agencies in the Welfare State* (University of California Press, Berkeley, CA).
- Mahoney, A. L.: 1991, 'Technology, Governance and the Year 2000', *Association Management* **43**(5), 45-50.
- Middleton, M.: 1987, 'Nonprofit Boards of Directors: Beyond the Governance Function', in W. W. Powell (ed.) *The Nonprofit Sector: A Research Handbook*, 141-153.
- Nason, J.: 1977, *Trustees and the Future of Foundations* (Council on Foundations, New York, NY).
- Nonprofit Times*: 1989, 'YMCA Chief Defends Tax Exemption, Discusses New Activism' Nov., 10-14.
- Oleck, H. L.: 1980, *Nonprofit Corporations, Organizations and Associations* 4th ed. (Prentice-Hall, Inc., Englewood Cliffs, NJ).
- Pfeffer, J.: 1972, 'Size and Composition of Corporate Boards of Directors: The Organization and its Environment', *Administrative Science Quarterly* **17**, 218-228.
- Pfeffer, J.: 1973, 'Size, Composition and Function of Hospital Boards of Directors: A Study of Organization Environment Linkage', *Administrative Science Quarterly* **18**, 349-363.
- Pfeffer, J. and G. R. Salancik: 1978, *The External Control of Organizations: A Resource Dependence Perspective* (Harper & Row, New York, NY).
- Pittsburgh v. Board of Property Assessment, 564 A2d 1026: 1989.
- Provan, K. G.: 1980, 'Board Power and Organizational Effectiveness Among Human Service Agencies', *Academy of Management Journal* **23**, 221-236.
- Vance, S. C.: 1978, 'Corporate Governance: Assessing Corporate Performance by Boardroom Attributes' *Journal of Business Research* **6**, 203-220.
- Widmer, C.: 1989, 'Minority Participation on Boards of Directors of Human Service Agencies: Some Evidence and Suggestions, in R. D. Herman and J. Van Til (eds.), *Nonprofit Boards of Directors: Analyses and Applications* (Transaction Publishers, New Brunswick, NJ), pp. 139-151.
- Worthy, J. C. and R. P. Neuschel: 1984, *Emerging Issues in Corporate Governance* (Northwestern University Press, Evanston, IL).
- YMCA v. Department of Revenue, 784 P2d 1086: 1989.
- Zahra, S. A. and J. A. Pearce II.: 1989, 'Boards of Directors and Corporate Financial Performance: A Review and Integrative Model', *Journal of Management* **15**(2), 291-334.
- Zahra, S. A. and W. W. Stanton: 1988, 'The Implications of Board of Directors' Composition for Corporate Strategy and Performance', *International Journal of Management* **5**(2), 229-236.
- Zald, M. N.: 1967, 'Urban Differentiation, Characteristics of Boards of Directors and Organizational Effectiveness', *American Journal of Sociology* **73**, 261-272.
- Zald, M. N.: 1969, 'The Power and Function of Boards of Directors, A Theoretical Synthesis', *American Journal of Sociology* **75**, 97-111.

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