Theory and Society
https://doi.org/10.1007/s11186-023-09527-2

# The policy-planning capacity of the American corporate community: corporations, policy-oriented nonprofits, and the inner circle in 1935–1936 and 2010–2011

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Accepted: 18 August 2023


**Abstract**
Using a combination of network analysis and descriptive statistics, this study examines the extent to which six important and longstanding policy-oriented nonprofit organizations — foundations, think tanks, and policy-discussion groups — were connected via their directors with the 250 largest corporations in the United States in 1935–1936 and 2010–2011. The results demonstrate that the six nonprofit organizations included in the study were well integrated into corporate networks in both periods, and had an even greater integrative role in 2010–2011 than they did in 1935–1936. This finding supports the hypothesis that policy-oriented nonprofit organizations allow the corporate community to develop proposals, and to reach consensus, on major policy issues. This hypothesis is further supported by an overview of existing studies that illustrate the success of these organizations in shaping policy outcomes on a range of issues. Based on the overall results, the longstanding claim that corporations influence government primarily or solely at the "interest-group" level can be supplemented by the conclusion that policy-oriented nonprofits support a policy-planning process that links the corporate community to government on general issues. In addition, the findings cast doubt on the claim that the corporate community has lost its capacity for policy cohesion in recent decades, due primarily to a "fracturing" caused by a decline in bank centrality. Since general policies have been created within the policy-planning process since at least the mid-1930s, the decline in bank centrality is irrelevant to the corporate community's ability to formulate general policy proposals.

**Keywords** Corporate community · Corporate networks · Policy planning · Interest groups · Policy-oriented nonprofits · Inner circle

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The empirical purpose of this study is to determine the extent to which policy-oriented nonprofit organizations — foundations, think tanks, and policy-discussion groups — were integrated into networks of large American corporations in the years 1935–1936 and 2010–2011. The study thereby attempts to remedy a limitation in studies of American corporate networks, which with a few exceptions have not included policy-oriented nonprofits. It argues that such organizations play a crucial role in the US corporate community. By serving on the boards of directors of both corporations and policy-oriented nonprofits, corporate leaders are in a position to provide the cohesion and leadership necessary to transcend differences among business sectors, and thereby generate proposals on important national-level policy issues, such as social insurance benefits, labor relations, foreign policy, and trade policy.

Drawing upon the empirical results that are presented, the middle-range theoretical goal of this article is to present a network-based perspective on corporate power and policy-making in the United States (e.g., Mann, 2008; Merton, 1968). This perspective provides an alternative to two other viewpoints regarding the extent to which corporations have the capacity to develop and implement policy proposals on issues of common concern to most corporations, whatever their business sector. According to the first and most longstanding perspective, corporations have never had the ability to coordinate beyond the narrow interest-group level of specific businesses or business sectors. Instead, these scholars conclude that specific corporations and business sectors have been very successful in realizing their own narrow and short-run interests, and in fending off unwanted tax increases and regulations that would affect their ability to expand and make profits.

One of the classic post-World War II statements of this view, by political scientist McConnell (1966, p. 339), stated that "a substantial part of the government in the United States has come under the influence or control of narrowly based and largely autonomous elites," but they do not dominate the government in general because they "tend to pursue a policy of non-involvement in the large issues of statesmanship, save where such issues touch their own particular concerns." In a study of decision-making in four general policy arenas (agriculture, energy, health, and labor), other researchers concluded there is a "hollow core" in the center of the corporate network rather than an "inner circle" of "private elites" (Heinz et al., 1990, 1993). More recently, this interest-group view has been labeled as "biased pluralism," in which "the thrust of interest-group conflict and the public policies that result tend to tilt toward the wishes of corporations and business and professional associations" (Gilens & Page, 2014, p. 567).

According to a second vantage point, which was developed in the first two decades of the twenty-first century, corporations had the ability to generate policy cohesion throughout the first nine decades of the twentieth century due to the discussions and decisions at the meetings of the boards of directors of large banks (Mizruchi, 1982, 1992, 1996). Bank boards were presumed to have this ability to mediate and bring about consensus because they "consistently possessed the most important resource (capital)" (Mizruchi, 1982, p. 137). However, this analysis claims that corporations lost their policy cohesion due to a decline in the network centrality of the large commercial banks that began in the 1990s, along with a general decline in the linkages among corporations beginning in the early 2000s (Chu & Davis, 2016; Davis & Mizruchi, 1999; Mizruchi, 2013). When the bank boards could no longer serve as a purported meeting place in which the top officers of nonfinancial corporations developed a general policy consensus, mediated disputes, and on occasion disciplined those engaging in hostile takeover attempts, there was a putative "fracturing" of the "corporate elite" (Mizruchi, 2013, pp. 6–7 and Chap. 5).

Thus, insofar as this article can demonstrate that policy planning on issues of common concern among corporations (1) has taken place in policy-oriented nonprofit organizations since at least the mid-1930s, and (2) has been largely successful in the creation of new governmental legislation and new administrative agencies, then to that extent it can be argued that the interest-group and fractured-elite perspectives on corporate involvement in general policy-making are problematic, albeit for different reasons. More specifically, this article suggests that major corporations were able to develop two relatively separate networks through which they attempt to shape government policies.

The first of these networks, which facilitates the "special-interest process," makes use of lobbyists, law firms, and trade associations to influence government policies on the issues that concern specific corporations and business sectors. The second of these networks is based in the numerous foundations, think tanks, and policy-discussion groups that strive to provide new policy ideas and plans on major issues. This network of organizations supports a "policy-planning process," which provides new policy information and perspectives to the corporate leaders, corporate lawyers, and policy experts who belong to them. These corporate leaders and experts often testify before congressional committees concerning the new policy directions they agree upon, serve on the presidential commissions and task forces that discuss new policy proposals, and accept appointments to top-level positions in the executive branch that are involved in advocating for and implementing new policy proposals (Domhoff, 2020, pp. 5–10; 2022, Chaps. 4 and 7).

## Earlier studies of policy-oriented nonprofits

The possible importance of policy-oriented nonprofits for corporate leaders in the United States was first suggested in investigative reports by Washington journalists in the 1950s and 1960s (e.g., Cater, 1964; Kraft, 1958; Rowan, 1964, Chap. 4). Subsequent social science and historical case studies supported the earlier journalistic investigations in greater detail (e.g., Bulmer and Bulmer, 1981; Collins, 1981; Domhoff, 1970, Chaps. 5–6; Eakins, 1966; Fisher, 1993; Karl and Katz, 1987; Lagemann, 1989; Schulzinger, 1984).

The role of policy-oriented nonprofits in a variety of policy arenas has been substantiated for more recent decades as well (e.g., Barnes, 2017; Bonds, 2016; Burris, 1992, 2008; Eitzen et al., 1982; Mintz, 2018; Murray, 2016, 2017; Murray and Jordan, 2019; Peschek, 1987, 2018; van Apeldoorn and de Graaf, 2016; van Apeldoorn et al., 2023). There has also been a focus on think tanks specifically as organizations that span the usual institutional boundaries. Making use of methodologies usually associated with universities, think tanks provide new policy suggestions to government agencies and further the training of experts who serve in supporting roles in government (Barnes, 2023; McCann, 2007; Medvetz, 2012a, b). Finally, numerous studies report that the directors and regular members of nonprofits, many of whom are also corporate leaders, have been appointed to important positions in the federal government over the course of many decades (e.g., Brownstein and Easton, 1983; Burch, 1983; Domhoff, 2022, Chaps. 4 and 7; Murray and Jordan, 2019, p. 13, Table 1; Sklar and Lawrence, 1981; Useem, 1980, p. 209, Table 8.1; 1984).

More recent studies examining the role and influence of policy-oriented nonprofits, based on either new archival sources or quantitative methodologies, make it all the more relevant to determine the extent to which these organizations are embedded within corporate networks. Two case studies, which were made possible by archival information that became available at the General Electric Archives, the Rockefeller Archive Center, the Industrial Relations Counselors Library, and the University of Wisconsin Archives, discovered that corporate leaders involved in nonprofit policy organizations played a major role in shaping the provisions of the Agricultural Adjustment Act of 1933 and the Social Security Act of 1935 (Domhoff, 2020 Chaps. 6–7, for details on the Social Security Act; Domhoff and Webber, 2011, Chap. 4, for a step-by-step account of how the creation and passage of the Agricultural Adjustment Act unfolded). In the case of the Social Security Act, these archival sources made it possible to trace the initiatory role of leaders within the major corporate policy-discussion organization of the 1930s, the Business Advisory Council, through their involvement in a meeting group of ten of the largest corporations of that era, called the Special Conference Committee, and through their reliance on experts from a small and soon-forgotten think tank that had declined in importance by the 1940s, Industrial Relations Counselors (Domhoff, 2020, pp, 239–271).

Although the Business Advisory Council had far more influence in shaping the Social Security Act than was generally realized before the new archival sources became available (e.g., Amenta, 1998; Hacker and Pierson, 2002; Orloff, 1993), it is noteworthy that it was defeated in its efforts to alter the final version of the legislative act that was of greatest concern to all corporate leaders, the National Labor Relations Act of 1935. This setback is all the more striking because the leaders of the Business Advisory Council created the first version of the National Labor Relations Board, as shown in an account based on the detailed minutes of their meeting with the members of the Labor Advisory Committee of the National Recovery Administration (McQuaid, 1979). After that initial success, however, the reports from Industrial Relations Counselors, supplemented by letters and telegrams back and forth among the presidents of DuPont, General Electric, and Standard Oil of New Jersey, tell a story of increasing concern, disappointment, and opposition with regard to the changes proposed by Senator Robert F. Wagner of New York, who had the vocal support of his liberal and union allies. In proposing policy rules that were far more favorable to large industry-wide unions than corporate leaders found acceptable, Senator Wagner also had the tacit approval of Southern Democrats and plantation owners, based on his exclusion of agricultural and domestic workers from the provisions of the act (Domhoff, 2020, Chap. 2; Farhang and Katznelson, 2005; Gross, 1974, pp. 57–58, 89–103, 136–139). The resulting legislation led to an immediate (but unsuccessful) constitutional challenge by corporate leaders, along with several decades of legislative efforts that took over three decades to reverse private-sector union growth (Domhoff, 2020, Chaps. 3–5).

There is also evidence from the internal files of the Business Roundtable, which replaced the Business Advisory Council as the primary corporate policy-discussion group in the 1970s, that demonstrates the influence of its leaders on the Nixon Administration on issues relating to inflation, unions, and apprentice programs for electricians and construction workers (Domhoff, 2020, Chap. 5; Linder, 1999, Chap. 7). In addition, there is case-study evidence showing the Business Roundtable's success in blocking the creation of a Consumer Protection Agency in 1975, the Labor Law Reform Act in 1977, and the Clinton Administration's health care plan in 1994 (Domhoff, 2020, Chaps. 5 and 9; Green and Buchsbaum, 1980, Chap. 3). With regard to initiating new legislation, a policy statement by the Business Roundtable in 2007 laid out the principles that would be acceptable to corporate leaders as the basis for expanding government medical insurance to lower-income Americans (Business Roundtable, 2007). Those principles were not challenged in the framing of the Affordable Care Act of 2010, and President Barack Obama did everything he could to reach agreements with the pharmaceutical, medical instrument, and insurance companies, as well as with hospital associations and the American Medical Association, before the legislation was submitted. The Business Roundtable did not attempt to block the legislation, as it did in the case of the Clinton Administration's more far-reaching plan, and was kept apprised of specific changes in it (Domhoff, 2020, pp. 353–366).

There are additional recent case studies that reveal the Business Roundtable's success concerning three initiatives focused on trade expansion in the 1990s — the passage of NAFTA in 1994, entry into the World Trade Organization in 1995, and the granting of permanent trade partner status to China in 2000 — all of which were strongly opposed by organized labor and grassroots environmental groups (Dreiling & Darves, 2016, Chap. 6). According to surveys by polling companies, these initiatives were also opposed by a majority of the general public. In addition to playing a large role in shaping the main policy provisions in each case, the Business Roundtable created broad business coalitions that included top business leaders in key states as "state captains." These top leaders met with their senators and representatives in the House, and provided early campaign donations to legislators who were uncertain how they might vote. The Business Roundtable's coalitions also paid for targeted ads in favor of the legislation in states and districts in which the senators or House members were undecided, took out advertising in media in the Washington metropolitan area, hired lobbyists to talk with members of Congress, arranged for their members to testify before Congress, and successfully argued for placing its allies on government advisory committees (Domhoff, 2020, Chap. 14; Dreiling and Darves, 2016; Mayer, 1998; Woodall et al., 2000).

Not surprisingly, then, there is very good evidence that the companies in the Business Roundtable are very internationally oriented, and their discussions often include CEOs from multinational corporations based in other countries. In 2005 the Business Roundtable was involved in the founding of World Business Leaders for Growth — in effect, an international nonprofit lobbying group for multinational corporations — to monitor the activities of the World Trade Organization. This effort was led by the CEO of McGraw-Hill Companies, who was at the time the chair of the Business

Roundtable's International Trade and Investment Task Force, and subsequently the chair of the Business Roundtable itself from 2006 through mid-2009 (Staples, 2012).

The most rigorous quantitative analysis of the impact of a policy-oriented non-profit on a general issue-area used logistic regression to examine the influence of the Council on Foreign Relations — a large corporate policy-discussion group that also includes numerous policy experts, journalists, and former government officials — on 292 issues related to foreign policy and international trade between 1982 and 2002. The dataset included the policy preferences of 24 interest groups (mostly trade associations), and leaders of the Council on Foreign Relations. It also included the preferences of the general public and an "economic elite," which was defined as the top 10% of those surveyed in public opinion polls. The results first of all showed that the 24 interest groups and the general public had no impact on legislative outcomes (Luther-Davies et al., 2022, p. 644). On the other hand, the preferences of the Council on Foreign Relations were enacted on 70.5% of the issues (Luther-Davies et al., 2022, pp. 641–644, 646–647, for the detailed findings on the 292 issues studied). In the remaining instances, the "economic elite," who were "assertive nationalists" with a more isolationist and militaristic perspective than the Council on Foreign Relations, most often prevailed (Daalder & Lindsay, 2003, on the views of assertive nationalists).

Even though there is considerable evidence that the policy-oriented nonprofits have been effective in influencing policy, and have included a significant number of corporate leaders among their directors, only two published studies of US corporate networks have included both corporations and policy-oriented nonprofits. The earlier of the two studies included the directors of 201 of the largest corporations in 1970, along with the partners in 20 prominent New York corporate law firms, and the trustees of 12 universities, 11 foundations, and seven civic and cultural organizations, along with six policy-oriented nonprofits that were either policy-discussion forums or think tanks (Salzman & Domhoff, 1983). The second study included the largest 100 corporations in 1997, along with 12 policy-oriented nonprofits, 109 charitable, civic, and cultural nonprofits, and 98 federal government advisory committees (Moore et al., 2002). To determine the network centrality for each organization, both studies made use of eigenvector centrality, which assigns greater centrality to those organizations whose interlocking directors connect them to organizations that have more interlocking directors. For example, if a corporation is connected to five other organizations that are each connected to five others, that corporation would have far higher eigenvector centrality than a corporation connected to five other organizations that are each connected to only one other organization (Bonacich, 1972; Mizruchi, 1982, pp. 56–58). In the first study, six of the 17 foundations, think tanks, and policy-discussion groups were among the 25 most central organizations in the network (Salzman & Domhoff, 1983, p. 210, Table 1). In the second study, eight of the 12 policy-oriented nonprofits were among the 50 most-central organizations, and three of them were among the 10 most-central (Moore et al., 2002, p. 735).

These two studies present solid initial support for the hypothesis that corporate-linked policy-oriented nonprofits provide the basis for a policy-planning process, but the limited number of corporations included in their samples (201 and 100) may be a shortcoming. According to a recent methodological study of the impact of sample sizes on network measures, it takes “beyond 200” corporations, and ideally 250 or more, to provide the most reliable results (Huijzer & Heemskerk, 2021, pp. 798–799, 801). A sample including 250 corporations was also found to be necessary to find the bulk of the corporate connections with the major nonprofit institutions that were also included in the study (Huijzer & Heemskerk, 2021, p. 804). In addition, the two studies summarized in the previous paragraph are limited in terms of the purposes of this article in that they do not cover either the early years of large-scale policy-oriented nonprofits, or the recent period in which it has been claimed that US corporations lost their capacity to reach policy consensus.

Thus, as discussed more fully below, the data for this study include the 250 largest financial and industrial corporations for 1935–1936 and 2010–2011, and six important policy-oriented nonprofits for both eras, five of which are in both datasets. As explained below, the final nonprofit for 1935–1936, the Business Advisory Council, was created in 1933, and the final nonprofit for 2010–2011, the Business Roundtable, was gradually developed by the Business Advisory Council in the years 1969–1972, and then superseded it.

## Earlier studies of corporate networks

Despite several drawbacks that are discussed below, studies based on shared directors (“interlocking directors”) provide a valuable starting point for investigating the extent of cooperation and sharing of information that exists among large corporations, and the extent to which their leaders are able to develop common policy positions for consideration by government officials. Such connections have been extensive for over 150 years. Indeed, it is notable that the earliest corporations in major metropolitan areas were more densely interlocked in the first half of the nineteenth century than they were 100 years later.

In 1836, for example, all but two of the 20 largest banks, the 10 largest insurance companies, and the 10 largest railroads located in New York City were linked into one common network by 18% of the directors; in addition, just 23 directors with 76 board seats linked 73% of those 40 corporations (Bunting, 1983, pp. 132–133, 138). Around the same time, between 1820 and 1850, a group of about 80 men in Boston, 17 of whom served as directors of Boston banks, gradually came to own 40% of the city’s banking capital and control 31 textile companies, which accounted for 20% of the nationwide textile industry. The “Boston Associates,” as they are known to historians, also had a large role in financing the nation’s early railroads, and 11 of their members sat on the boards of five major railroad companies (Dalzell, 1987).

Still other studies demonstrate that the large-city networks of financial companies and railroads, joined by coal and telegraph companies, became a national network beginning in roughly 1886, which was found to have “remarkable centrality of its structure from the very beginning” (Roy, 1983, pp. 143–144). This network was then transformed by a massive merger movement between 1895 and 1904. These mergers included the incorporation of dozens of hitherto family-owned or partnership-owned industrial companies. These companies had only recently decided to incorporate for a variety of reasons, which included the cutthroat competition among industrialists, a surge of unionization, and pressures from a wide range of reformers. This process created a national corporate network that included huge manufacturing enterprises for the first time (Roy, 1997, for the classic sociological study of this complex transition).

Changes in the configuration of the corporate network between 1904 and 1974 capture the decline in the central role of railroads, the rise in centrality of industrial corporations, and the persistence of commercial banks and insurance companies as central organizations (Mizruchi, 1982; Mizruchi & Bunting, 1981). A series of studies comparing similar corporate networks for 1935 and 1970 found that the network had greater connectivity in 1935 than it did in 1970 (Allen, 1974, 1978a, b, 1982). Studies for the years between 1995 and 2010 conclude that banks have become less central in the corporate network (Chu & Davis, 2016; Davis & Mizruchi, 1999; Mizruchi, 2013), which has also been found in studies of corporate networks in other countries (Buchnea et al., 2020; Carroll et al., 2010).

These studies also document the waxing and waning of the number of directors who serve on a large number of corporate boards. This finding is noteworthy for longitudinal studies of network connectivity, such as this article provides, because directors who sit on numerous corporate boards "have a vastly disproportionate impact on the network's macrostructure" (Chu & Davis, 2016, p. 719). For example, "One super-connector serving on ten boards creates 45 unique ties among corporations, as much as 15 directors who serve on three boards each, or 45 directors serving on two boards each" (Chu & Davis, 2016, p. 719). It therefore matters in comparing corporate networks over time that the number of directors who serve on a large number of boards can rise or decline for a variety of reasons. For instance, in a study that included 157 corporations and 10 investment banks, the number of directors sitting on six or more corporate boards fell from 27 in 1912 to zero in 1974 (Mizruchi, 1982, p. 107). Similarly, an analysis using five or more directorships as one of its starting points found that there were 61 such directors in 2000, but only 11 in 2010, a precipitous 82.0% drop in a single decade (Chu & Davis, 2016, p. 16).

Although studies of corporate networks and interlocking directors have provided a useful window into the degree of connectivity among corporations, the broader socio-political factors that impact on appointments to company boards have to be considered in any analysis. These include changes in the economy that are caused by its constant growth, new investments, the rise of new business sectors, and problems generated by competitive practices that lead to rapid price-cutting and wage-cutting. Then, too, social movements grow in response to changes in the economy, including the labor union movement in the distant past, and the more recent social movements for diversity and inclusion, which in turn lead to searches for legislative remedies. In addition, the investor-oriented watchdog groups that began to monitor the practices and decisions by corporate boards in the late 1990s and early 2000s serve to set normative limits.

For example, when pressures against large corporations mounted during the Progressive Era, an anti-trust law passed in 1914 prohibited corporate interlocks between competing corporations. Then, as part of the attempt to deal with the disruption created by the Great Depression, banking legislation passed in 1934 forced banks to choose between commercial banking and investment banking. Both of these laws changed the structure of corporate networks (Mintz & Schwartz, 1985; Mizruchi, 1982). Then, too, financial scandals involving large corporations in the early 2000s led to a new financial disclosure law in 2002 that "not only imposed particular requirements on boards but also changed the expectations of how boards and directors should behave," which also brought about changes in how new members are selected (Withers et al., 2018, p. 57).

Due to the greater responsibilities placed on directors by the 2002 law, and their potential liability on some issues, board service became more time-consuming and onerous, which contributed to a trend toward business leaders serving on fewer corporate boards. In some cases, companies came to restrict the number of corporate boards that their top executives could join. Most recently, and outside the scope of this study, in 2022 the Department of Justice launched anti-trust investigations into the numerous overlapping board memberships in competing firms that were held by partners in private equity firms, leading to many resignations from corporate boards (Nylen, 2022).

Social movements that advocate for greater diversity have led to the selection of corporate directors whose primary career experiences are not in large corporations or corporate law firms. The non-white men, and the women of all colors, who were first appointed to corporate boards in the 1960s and 1970s, came primarily from smaller businesses, consulting firms, public relations firms, charitable and cultural organizations, and politics. Many of these individuals were among the small number of corporate directors who served on numerous corporate boards in the last three decades of the twentieth century (e.g., Ghiloni, 1984, 1986; Zweigenhaft, 2016; Zweigenhaft and Domhoff, 1998).

Most recently, independent watchdog groups ("corporate governance groups"), which monitor the actions of corporate boards in the name of pension funds and other institutional investors, have criticized corporations that add directors who already hold four or more corporate directorships. Their efforts contributed to a decline in directors with more than four corporate directorships, many of whom were women and non-white men who were appointed in the 1980s and 1990s (Chu & Davis, 2016; Zweigenhaft, 2021; Zweigenhaft & Domhoff, 2018). Given that fluctuations in the levels of connectivity among corporations have often stemmed from exogenous social and political factors, it is necessary to be cautious in attributing changes in corporate connectivity to factors internal to the corporate community.

It is also important to note that at least 80–85% of the connections between two or more corporations created by interlocking directors do not have any strategic intent from the perspective of the individual firms, as is best evidenced by the fact that the ties between two corporations created by an interlocking director are seldom restored when that director retires or dies (Fennema & Heemskerk, 2017; Gogel & Koenig, 1981; Koenig & Gogel, 1981; Mintz and Schwartz, 1985, pp. 138–139, 289 n. 16; Palmer, 1983). In addition, interview studies with corporate directors suggest there is little or no corporate-level strategic value in their appointments to other corporate boards (e.g., Hirsch, 1982; Mace, 1971).

Although the connections created by interlocking directorships rarely have any immediate strategic value, their presence nevertheless gives rise to a "small-world" network. In a small-world network, two connected organizations are more likely than in a random network to be connected to a third organization (clustering), and there are a higher proportion of short paths linking organizations (Davis et al., 2002; Watts

& Strogatz, 1998). The small-world network of companies created by interlocking directors provides the basis for differing subsets of people drawn from the same general pool of directors to interact with each other at the board meetings of a large number of corporations.

The interactions that take place in board meetings can be understood for the purposes of this article in terms of the findings on "group dynamics" in numerous studies by social psychologists over many decades, which are also known as "small-group" studies (e.g., Cartwright and Zander, 1968; Johnston and Johnston, 2013; Lott and Lott, 1965; Turner, 1991). They establish the following conclusions that can be applied to boards of directors within a large corporate network: (1) close physical proximity facilitates group solidarity; (2) the more regularly people interact, the more frequently the individual members come to like each other; (3) groups perceived by their members as high in status are more cohesive; and (4) high-status, socially cohesive groups are better able to generate common agreement because their members are more likely to be open to each other's opinions, and to change their own opinions as a result (Domhoff, 1974, pp. 90–91, for an application of these social psychology studies to the numerous small-group settings within which directors of large corporations meet).

Thus, in terms of the analysis presented in this article, the many board meetings attended by corporate directors are important in developing the social cohesion and common world view that have also been shown by small-group studies to *facilitate policy cohesion* (Domhoff, 1974, p. 96). These impacts seem to be especially important within small-world networks (Davis et al., 2002). This emphasis on social cohesion contrasts with the emphasis on the strategic nature of corporate interlocks in other theories, which is not supported by empirical studies.

## Definitions and datasets

This section first provides definitions of the main concepts that are utilized in this research, as well as noting several relevant past findings. It next presents information on the datasets for 1935–1936 and 2010–2011, and how they were constructed. It then discusses the analytical methods and presents the results.

The data utilized in this study are of the type called "two-mode" data in the general literature on social networks, meaning all the connections are between two different sets of actors; in this case, the directors make up one set, and corporations and nonprofit organizations the other. This approach is informed by a sociological understanding of a corporate network as a duality of individuals and organizations (Breiger, 1974; Huijzer & Heemskerk, 2021; Valeeva et al., 2020). Both individuals and organizations can be analyzed in a "bipartite" network that contains both individuals and the organizations they lead, or it can be converted into a "single-mode" network in which any shared affiliations give rise to direct connections within each set. Here we restrict our analysis of individuals to their affiliations in the original bipartite network, and produce single-mode networks of corporations and policy-oriented nonprofits that are connected if they share directors in common.

Analyzing corporate power as a network of affiliations leads to an understanding of the results of this study in terms of another sociological concept: the "corporate community" (see National Resources Committee, 1939, pp. 158–165 for an early use of the concept of a "corporate community," as well as a discussion of the corporate community in the 1930s). A community is most generally defined as a group of people who interact in specific settings, develop social cohesion, and share many common beliefs, values, and ways of behaving. In this case the settings are the regular (usually quarterly) meetings of the whole board of directors for each organization, along with the additional meetings of each board's several committees, consisting of different subsets of directors in each case, which together make necessary numerous face-to-face social interactions. The corporate community can, therefore, be defined as comprising, at the organizational level, all the corporations making up the largest single network (referred to as the "main component" in this article) in the overall datasets. At the personal level, the corporate community consists of *all* those individuals who sit on one or more of the boards of directors of these corporations. We refer to these individuals collectively as the "corporate leadership group" (Domhoff, 2022, pp. 42–44, 86–88).

Starting with this definition of the corporate leadership group, it is possible to examine the extent to which the leaders within the corporate community exercise societal power through their participation in community organizations, the electoral system, special White House commissions, and departments and agencies of the federal government, which Baltzell (1958) called the "sociology of leadership" method. The results of such studies have been published in numerous articles and books (e.g., Burch, 1980; Domhoff, 2022; Kendall, 2002; Moore et al., 2002; Ostrander, 1987; Useem, 1980).

For some purposes, as in the case of this study, it is also useful to focus on the most active subgroup within the overall corporate leadership group: the "inner circle," which consists of those directors who sit on the boards of directors of two or more corporations in the corporate community. The size of the inner circle usually ranges between 15% and 20% of all corporate directors, as found in this and earlier studies (Murray & Jordan, 2019, p. 13, Table 2). This definition of the inner circle borrows from Useem's (1980, 1984) studies of the corporate communities in the United States and the United Kingdom, although it should be noted that the definition here differs slightly because it excludes any interlocking directors in the data who sit on the boards of companies that are not part of the corporate community (the "main component"), as defined above.

The starting point for the analyses presented in this article consists of two comparable lists of the 250 largest corporations in the US and their directors, one from 1935 to 1936 and the other from 2010 to 2011. The mid-1930s were a turning point in American history because several pieces of major legislation were passed between 1933 and 1935 in the midst of the Great Depression, including the landmark acts discussed briefly earlier in this article. Moreover, President Franklin D. Roosevelt won a second term in 1936, which made it more likely that these legislative enactments would endure. Similarly, the years 2010–2011 were important in the early twenty-first century because the first president of African-American descent, Barack Obama, had just guided the country through the second-largest depression in American history, the Great Recession of 2008–2009. This sudden financial implosion led to bankruptcies and bank mergers that required an unprecedented bailout of the banking community, and in many ways reshaped the corporate community.

Due to the 75-year-gap between the two datasets, the lists of the 250 largest corporations used as a starting point were drawn from different sources. The 1935 list appeared in *The Structure of the American Economy*, a detailed government report produced by the National Resources Committee in 1939, and led by three well-known economists of that era: Gardner Means, Alvin Hansen, and Mordecai Ezekiel (National Resources Committee, 1939). This list, which consisted of the 50 largest financial corporations (the 30 largest banks and 20 largest insurance companies) and 200 largest nonfinancial corporations (primarily railroads, industrials, and utilities), has been the starting point for datasets used in other studies of corporate interlocks, all of which augmented or truncated the original dataset in various ways (Allen, 1974, 1978a, b, 1982; Bunting, 1983, 1987; Mizruchi, 1982). The 2010–2011 list also includes the 50 largest financial corporations and the 200 largest nonfinancial corporations, which was derived from the *Fortune 500* directory for 2010. For both years, several business publications, such as *Poor's Directory of Corporations and Directors* (which became *Standard & Poor's Directory of Corporations and Directors* in 1941) and the various incarnations of *Moody's Manual*, were used to find the members of the boards of directors for the corporations that were included. The editions of the directories that were utilized were lagged by one year to ensure as much as possible that the datasets included directors appointed during 1935 or 2010. The datasets are therefore described throughout this article as being for 1935–1936 and 2010–2011.

In both time periods, the corporations and corporate directors have been augmented by the addition of six policy-oriented nonprofits and their directors. These organizations are listed in Table 1, along with their date of founding and other relevant details. Three of the six nonprofits — the Business Advisory Council in 1935–1936 (superseded by the Business Roundtable in the 2010–2011 dataset), the Council on Foreign Relations, and the National Association of Manufacturers — serve as policy-discussion forums that include other corporate leaders as members in addition to those who are directors of the organization. In the case of the Council on Foreign Relations, its membership also includes a very large number of foreign policy experts, journalists, and former government officials. These non-director members are not included in the network analyses, so they have no impact on those results. However, they are included in two later analyses using descriptive statistics to provide an indication of the pervasiveness of the members of the policy-discussion groups within the corporate community, as will be discussed below.

Two of the nonprofits, the Rockefeller Foundation and the Carnegie Corporation, are charitable foundations that provide financial support to policy-discussion groups and make financial grants to the policy experts who take part in the policy-discussion groups, among the many grants they give on a wide variety of topics. The two foundations also sometimes sponsor special commissions on specific issues, such as higher education. The final nonprofit, The Brookings Institution, is a think tank that receives money from large foundations and employs a wide range of policy experts who take part in policy-discussion groups, write policy proposals, and provide advice to government officials.

**Table 1** The policy-oriented nonprofits included in this study

| *name & founding date* | *main activities/functions* | *more information* |
|---|---|---|
| National Association of Manufacturers (1895) | Policy discussions, developing position papers, lobbying Congress | Since 1903, its primary focus has been on limiting union growth and influence. |
| Carnegie Corporation (1911) | Donations to a wide range of nonprofit organizations | The largest foundation in the 1930s, but only #24 among family foundations in 2010. |
| Rockefeller Foundation (1913) | Donations to a wide range of nonprofit organizations | The 2nd-largest foundation in the 1930s, but only #15 among family foundations in 2010. |
| The Brookings Institution (1916) | Employs full-time experts who study and discuss a wide range of policy issues of general importance | Its employees have served on numerous committees within policy-discussion groups and in appointed positions in the government. |
| Council on Foreign Relations (1921) | Policy discussions, developing position papers | Created by New York corporate leaders to advocate greater American involvement in international affairs. |
| Business Advisory Council* (1933) | Policy discussion, interaction with government officials | Established as an advisory group for the National Recovery Administration, it became a fully independent organization in 1963 and changed its name to the "Business Council." |
| Business Roundtable (1972) | Policy discussion, interaction with government officials | Originally established as the Construction Users Anti-Inflation Roundtable in 1969; reorganized and upgraded in stature in 1972. |

* **Note**: The Business Advisory Council changed its name to the "Business Council" in 1963 when it decided to become an organization with no formal relationship with the government. However, the name "Business Advisory Council" will be used throughout this article to avoid any possible confusion.

The decision to use the same six policy-oriented nonprofits in both datasets so as to make the two eras as comparable as possible, despite the creation of many new policy-oriented nonprofits since the 1930s, was complicated by the fact that leaders within the Business Advisory Council created two different organizations over the subsequent decades in order to augment its policy-planning and lobbying capacities. It first created the now-defunct Committee for Economic Development in 1942, a policy-discussion group that included academic advisors and published numerous policy proposals on a wide range of topics (Collins, 1981; Domhoff, 2013, both of which build on the original archival sources studied by the authors). Between 1969 and 1972, leaders in the Business Advisory Council and the Committee for Economic Development jointly developed the Business Roundtable as a more activist policy-discussion organization, which was designed to have a visible lobbying presence as well as engaging in the development of published policy statements (Domhoff, 2020, Chap. 5; Gross, 1995, pp. 234–239; Linder, 1999. Chapters 7–8; Waterhouse, 2014, Chap. 3).

The role of members of the Business Advisory Council and the Committee for Economic Development in the establishment of the Business Roundtable is seen most directly in the fact that 10 of the 11 members of the Business Roundtable's founding Executive Committee, which was in effect the organization's board of directors, were members of the Business Advisory Council. Moreover, 5 of those 10 members from the Business Advisory Council were members of the Committee for Economic Development as well. It was therefore decided to treat the Business Roundtable as the successor organization to the Business Advisory Council in 1935 based on its similar role. However, this decision had little impact on the results that are reported in this article, which are very similar if the Business Advisory Council rather than the Business Roundtable is included in the 2010–2011 data, as is shown in more detailed tables and analyses that are available on GitHub: https://github.com/tamills1981/US-Corporate-Community.

Finally, it should be emphasized again that the general membership of the policy-discussion nonprofits included in this study — the Business Advisory Council (in 1935–1936), the Business Roundtable (in 2010–2011), and the National Association of Manufacturers and the Council on Foreign Relations in both years — are not part of the formal network analyses reported in this article, which only include the directors of these nonprofit organizations. The members, though, are relevant because they take part in discussions within these organizations, attend talks by policy experts, and know the basic content of the detailed reports produced by committees within these organizations, which sometimes lead to legislative proposals. So while they are not included in the network analysis, which is based on the small-group settings provided by board meetings attended by the directors, the members' pervasiveness in the overall corporate leadership group is detailed in the final subsection of the Methods and Results section below.

## Methods and results

This subsection provides a step-by-step presentation of the methods of analysis and results, including both network measures and descriptive statistics. All the network analyses were conducted using the Python library NetworkX. The scripts and networks are available on GitHub: https://github.com/tamills1981/US-Corporate-Community, along with data tables containing the results reported here as well as more detailed network measures. In addition, expanded versions of both the 1935–1936 and 2010–2011 datasets, which include larger numbers of for-profit and nonprofit organizations, are available for anyone's use at https://whorulesamerica.ucsc.edu/power_elite/. This portal also provides a user-friendly interface through which interested researchers can view the affiliations of any given organization or individual in the dataset.

The first relevant findings, which are presented in detail in Table 2, concern the size of the large inter-corporate networks in 1935–1936 and 2010–2011 that are created by those directors who sit on two or more corporate boards. The results are very similar for both years: 218 of the 250 corporations (87.2%) are part of the corporate community (the main component) in 1935–1936, and 220 of 250 (88%) in 2010–2011. However, there is a large drop in the number of connections between corporations in 2010–2011 compared with 1935–1936. This decline is seen very directly in the differences in the number of links in the networks overall, and in the mean number of links for each corporation, which declined from 10.05 in 1935–1936 to 5.14 in 2010–2011. This leads to different levels of connectivity within the corporate community as a whole in the two eras. This difference is clearly shown by the mean number of "steps" any one corporation is from any other, which is calculated on the basis of the "paths" created by shared directors. This metric is known as the "aver-

**Table 2** Network measures for the inter-organizational networks with and without the nonprofits

| | corporations only | | corporations & policy nonprofits | |
|---|---|---|---|---|
| | 1935-36 | 2010-11 | 1935-36 | 2010-11 |
| Number of orgs in one large network | 218 | 220 | 225 | 226 |
| Number of links in the network | 1095 | 565 | 1173 | 643 |
| Mean number of links | 10.05 | 5.14 | 10.43 | 5.69 |
| Mean % within 1-step reach | 4.63% | 2.35% | 4.65% | 2.53% |
| Mean % within 2-step reach | 33.58% | 13.22% | 34.55% | 15.85% |
| Mean % within 3-step reach | 78.21% | 43.51% | 79.04% | 49.29% |
| Average shortest path | 2.87 | 3.72 | 2.85 | 3.59 |

**Table 3** Corporate interlocks among directors of policy-oriented nonprofits

| | # directors | | # directors with top-250 corporate links | | % directors with top-250 corporate links | | # linked corps. per director | | # of largest 250 corps represented | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1936 | 2011 | 1936 | 2011 | 1936 | 2011 | 1936 | 2011 | 1936 | 2011 |
| BAC/BRT | 14 | 18 | 8 | 18 | 57% | 100% | 1.43 | 1.33 | 20 | 24 |
| Council on Foreign Relations | 25 | 37 | 10 | 12 | 40% | 32% | 0.60 | 0.46 | 15 | 17 |
| Nat'l Assn. of Manufacturers | 16 | 24 | 6 | 4 | 38% | 17% | 0.44 | 0.21 | 7 | 5 |
| Brookings Institution | 14 | 49 | 3 | 16 | 21% | 33% | 0.36 | 0.57 | 5 | 28 |
| Rockefeller Foundation | 28 | 25 | 8 | 1 | 29% | 4% | 0.54 | 0.04 | 15 | 1 |
| Carnegie Corporation | 17 | 24 | 5 | 2 | 29% | 8% | 0.71 | 0.08 | 12 | 2 |

Note: BAC = Business Advisory Council; BRT = Business Roundtable

age shortest path," which increased from a mean of 2.87 in 1935–1936 to 3.72 in 2010–2011.

When the six policy-oriented nonprofits are added to the 250 corporations for 1935–1936 and 2010–2011, all six are part of the corporate community. Only one of the few isolate corporations was drawn into the main component for 1935–1936 by the addition of the nonprofits, and no new corporations were drawn into the main component for 2010–2011. In addition, the differences between the 1935–1936 and 2010–2011 networks are present whether only corporations are included, or if the policy-oriented nonprofits are added to the mix. Several findings based on a variety of network measures, with and without the nonprofits included, which were briefly overviewed in this and the preceding paragraph, are brought together in Table 2.

The extent to which the policy-oriented nonprofits are part of the corporate community in both 1935–1936 and 2010–2011 can be shown by examining the number of directors of nonprofits who are also members of the overall corporate leadership group, which as already noted consists of all corporate directors who serve on one or more corporate boards. This analysis is carried out using descriptive statistics. As can be seen in Table 3, their inclusion in 1935–1936 ranges from eight of 14 directors of the Business Advisory Council, who are on the board of directors of 28 corporations, to three of 14 directors of The Brookings Institution, who sit on five corporate boards.

For 2010–2011, the figures for the Business Roundtable suggest an even greater level of integration than its forerunner, the Business Advisory Council: all 18 of the Business Roundtable directors are on at least one top-250 corporate board, and they hold 33 seats on 24 corporate boards overall. The Brookings Institution, with 16 of its 49 directors on the boards of 28 different corporations in 2010–2011, became connected to far more corporations than had been the case in 1935–1936. On the other hand, there is an extremely large decline in the number of corporate links with the Rockefeller Foundation and the Carnegie Corporation.

## Using *k*-core decomposition to find nested subnetworks

The findings presented in Tables 2 and 3 demonstrate that the policy-oriented nonprofits are part of the corporate community in both 1935–1936 and 2010–2011. However, it is possible to be more specific about their location within the corporate community on the basis of their inclusion within increasingly smaller and more tightly connected subnetworks that also include corporations. These nested subnetworks within the inter-organizational networks, which are akin to concentric circles, are identified by increasing the minimum number of organizations with which every organization must be connected in order to be included. If, for example, every organization must be connected to at least two other organizations, then 23 of the original 225 organizations in the 1935–1936 inter-organizational network are removed, creating a subnetwork that includes the remaining 202 organizations. Requiring at least three links still leaves a very large subnetwork of 187 organizations. If the number of required links is doubled from three to six, the nested subnetwork is reduced to 136 organizations. This step-by-step approach is known as "*k*-core decomposition," with "*k*" representing the minimum number of connections every member of the subnetwork must have, and it has proven to be useful in previous studies of corporate and elite networks for Canada, Denmark, and Switzerland (Huijzer & Heemskerk, 2021; Larsen & Ellersgaard, 2017; Rossier et al., 2022).

The smallest possible nested subnetwork in 1935–1936 includes a large number of organizations (99), each of which has eight connections (*k*-8), as presented in Table 4. This large *k*-core, which encompasses 44.0% of the corporate community, includes four of the six policy-oriented nonprofits — the Business Advisory Council, the Council on Foreign Relations, the Rockefeller Foundation, and the Carnegie Corporation — as well as 95 corporations.

By contrast, the largest *k*-core in 2010–2011 has only seven organizations, each of which has six or more connections (*k*-6). Yet this very small number of organizations includes both The Brookings Institution and the Council on Foreign Relations, along with such well-known corporations as FedEx and IBM. Reducing the required minimum number of organizations with which every organization must be connected to five results in a *k*-5 subnetwork of 70 organizations that also includes the Business Roundtable, as well as American Express, Boeing, Coca-Cola, Exxon Mobil, Ford Motor, General Electric, General Motors, JPMorgan Chase Bank, Morgan Stanley, Pfizer, Wal-Mart, and Wells Fargo Bank. This *k*-5 subnetwork encompasses 30.0% of the corporate community.

**Table 4** *k*-core levels for the six policy-oriented nonprofits, along with information on the percentage of the organizations in the main component that are included in each k-core level

| | # of organizations | | policy nonprofits | |
|---|---|---|---|---|
| | 1936 ($n$=225) | 2011 ($n$=226) | 1936 | 2011 |
| *k*-8 (8+links) | 99 (44.0%) | n/a | BAC, CFR, RF, CC | |
| *k*-7 (7+links) | 112 (49.8%) | n/a | BI | |
| *k*-6 (6+links) | 136 (60.4%) | 7 (3.1%) | | BI, CFR |
| *k*-5 (5+links) | 151 (67.1%) | 70 (31.0%) | NAM | BRT |
| *k*-4 (4+links) | 175 (77.8%) | 106 (46.9%) | | |
| *k*-3 (3+links) | 187 (83.1%) | 156 (69.0%) | | NAM |
| *k*-2 (2+links) | 202 (89.8%) | 200 (88.5%) | | CC |
| Corporate community (*k*-1; at least one link) | 225 (100%) | 226 (100%) | | RF |

Note: BAC=Business Advisory Council; BI=Brookings Institution; BRT=Business Roundtable; CC=Carnegie Corporation; CFR=Council on Foreign Relations; NAM=National Association of Manufacturers; RF=Rockefeller Foundation

The complete findings for the ascending levels of the nested subnetworks for both 1935–1936 and 2010–2011 are presented in Table 4. The table can be read from the top down to see how the most central subnetwork in the overall network gradually expands to include the whole network, or from the bottom up to see how the entire set of organizations that comprise the corporate community in each of the two eras gradually decreases to smaller and more densely connected subnetworks.

## Findings based on three centrality measures

In addition to determining the extent to which the policy-oriented nonprofits are part of the innermost subnetworks in the corporate community, it is also possible to determine how central each of them is within the corporate community by using three slightly differing network measures: closeness, betweenness, and eigenvector centrality. Although these three centrality measures are highly correlated, in the range of 0.70 to 0.95 in this study, they differ conceptually, and each is therefore potentially useful for different substantive reasons. The first of the three, "closeness," is defined as the reciprocal of the average number of steps (by means of director interlocks) along the shortest paths between an organization and every other organization in the corporate community. Since closeness measures each organization's position within a fully connected network, it is of theoretical importance in this study because it can indicate the extent to which one or more of the policy-oriented nonprofits are in a position to contribute towards social and policy cohesion within the corporate community as a whole.

The second centrality measure, "betweenness," is defined as the sum of the fraction of shortest paths from each organization to every other organization that includes the particular organization as a step in the path. Those organizations that are included in the largest number of short paths to other organizations in the corporate community score the highest in betweenness centrality. This measure is theoretically useful for the purposes of this article because it measures the potentially integrative impact of the nonprofits on the corporate community insofar so they connect otherwise more isolated clusters.

The third centrality measure, eigenvector centrality, is based on the extent to which any given organization is connected to other organizations that have a large number of connections. Eigenvector centrality is important because it reveals the extent to which each policy-oriented nonprofit is connected to a large number of highly connected corporations. In addition, this centrality measure makes it possible to compare the results of this study with earlier studies that relied primarily or exclusively on eigenvector centrality (Moore et al., 2002; Salzman & Domhoff, 1983).

For the most part, the closeness, betweenness, and eigenvector centrality rankings for 1935–1936 are very consistent with the *k*-8 results in that all four of the nonprofits in that large *k*-core — the Business Advisory Council, the Council on Foreign Relations, the Rockefeller Foundation, and the Carnegie Corporation — are also in the top 50 on closeness and eigenvector centrality, and two of the four — the Business Advisory Council and the Rockefeller Foundation — are in the top 50 on betweenness. In particular, the Business Advisory Council, which was deeply involved in several pieces of New Deal legislation (Domhoff, 2020; McQuaid, 1976, 1979), ranks very high on closeness (No. 23) and betweenness (No. 24), and the Council on Foreign Relations is ranked No. 18 on eigenvector centrality.

The Brookings Institution, which was in the *k*-7 subnetwork along with 111 other organizations for 1935–1936, was also at about the same level on the centrality measures— No. 102 on closeness, No. 106 on eigenvector centrality, and No. 155 on betweenness. In the case of the National Association of Manufacturers, which was the lowest-ranking nonprofit on the *k*-core measure presented in Table 4, it also had very low rankings on closeness (No. 173) and eigenvector centrality (No. 182). However, it had a much higher ranking on betweenness (No. 59), which suggests it may have had the kind of integrative role among the smaller companies in the corporate community that would be expected for a policy-discussion nonprofit that often stated its extremely conservative policy positions vigorously during the 1930s (Burch, 1973). The complete findings for the six policy-oriented nonprofits on closeness, betweenness, and eigenvector centrality for 1935–1936 are presented in Table 5.

The results on closeness, betweenness, and eigenvector centrality for 2010–2011 are even more than consistent with the *k*-core findings. They are striking in suggesting even greater centrality and an even larger integrative role for three of the policy-oriented nonprofits — the Business Roundtable, The Brookings Institution, and the Council on Foreign Relations — compared to 1935–1936. The Business Roundtable ranks No. 1 on closeness, No. 2 on betweenness, and No. 3 on eigenvector centrality, and The Brookings Institution is No. 1 on both betweenness and on eigenvector centrality, and No. 2 on closeness. The Council on Foreign Relations is also more central, ranking No. 4 on both closeness and eigenvector centrality, and No. 12 on betweenness. As for the National Association of Manufacturers, it is in the middle of the rankings on closeness (No. 115), betweenness (No. 142), and eigenvector centrality (No. 95). The Rockefeller Foundation and the Carnegie Corporation are on the periphery, as shown by their low rankings in Table 5.

**Table 5** Centrality Rankings

| | # of directors | | closeness rank | | betweenness rank | | eigenvector rank | |
|---|---|---|---|---|---|---|---|---|
| | 1936 | 2011 | 1936 | 2011 | 1936 | 2011 | 1936 | 2011 |
| BAC/BRT | 14 | 18 | 23 | 1 | 24 | 2 | 42 | 3 |
| Nat'l Assn. of Manufacturers | 16 | 24 | 173 | 115 | 59 | 142 | 182 | 95 |
| Council on Foreign Relations | 25 | 37 | 39 | 4 | 92 | 12 | 18 | 4 |
| Brookings Institution | 14 | 49 | 102 | 2 | 155 | 1 | 106 | 1 |
| Rockefeller Foundation | 28 | 25 | 28 | 199 | 36 | 199 | 30 | 193 |
| Carnegie Corporation | 17 | 24 | 50 | 147 | 107 | 176 | 38 | 137 |

Note: BAC = Business Advisory Council; BRT = Business Roundtable

## Summary of the results using network measures

As these various results indicate, the six policy-oriented nonprofits included in this study were integrated into the corporate community in both 1935–1936 and 2010–2011. This was especially the case for three of the policy-discussion groups (the Business Advisory Council in 1935–1936, the Business Roundtable in 2010–2011, and the Council on Foreign Relations in both eras). However, the remaining policy-discussion group, the National Association of Manufacturers, tended to be in or near the middle in both 1935–1936 and 2010–2011, as it also was in the aforementioned study of the 1970 dataset using the eigenvector centrality measure (Salzman & Domhoff, 1983, p. 211, Table 5). Unlike the policy-discussion groups, whose centrality (or lack thereof) was somewhat similar in 1935–1936 and 2010–2011, the two foundations (Carnegie and Rockefeller) moved from relatively high centrality scores in 1935–1936 to marginal positions in 2010–2011. This transition most likely occurred after 1970, as indicated by the fact that the Rockefeller Foundation ranked No. 10 and the Carnegie Corporation ranked No. 61 on eigenvector centrality in the 1970 dataset (Salzman & Domhoff, 1983, p. 211, Table 5). This inference is supported by studies showing that the boards of these foundations consisted in large part of corporate directors from the 1970s to the early 2000s, after which there was an increase in leaders of other American nonprofits and in business leaders from other countries (Domhoff, 1998, p. 131, Table 4.1; 2010, pp. 91–92).

Then, too, the think tank used in this study, The Brookings Institution, which was in the second-largest *k*-core in 1935–1936, along with 111 other organizations, moved into the most central subnetwork in 2010–2011 and rose very dramatically in the centrality rankings as well. The movement of The Brookings Institution toward the center is first indicated in the 1970 dataset, when it ranked No. 42 on eigenvector centrality, which is far higher than its ranking on this measure in 1935–1936 (No. 106), but far lower than its eigenvector ranking in 2010–2011 (No. 1) (Salzman & Domhoff, 1983, p. 211, Table 5). By 1997, it was also among the 10 most-central organizations on eigenvector centrality in the study that included 100 corporations and numerous charitable, civic, and cultural organizations (Moore et al., 2002, p. 737, Table 2).

More generally, the changes in centrality for several of the policy-oriented nonprofits reveal that both the corporate network, and the place of nonprofits within it, evolve over time. These changes support several earlier examples of how the policy-planning capability within the corporate community adapts to shifting circumstances (Domhoff, 2013, 2020).

## The inner circle, banks, and the pervasiveness of policy-oriented nonprofits

The "inner circle" (recall that it consists of individuals in the corporate leadership group who sit on two or more corporate boards in the corporate community) provides another angle from which to examine the position and potential role of policy-oriented nonprofits in the corporate community, and the claim that the corporate community became fractured on policy issues due to a decline in the network centrality of banks (Chu & Davis, 2016; Davis & Mizruchi, 1999; Mizruchi, 2013). In this regard, it is useful by way of comparison to examine the extent to which members of the inner circle are directors of a bank, or either directors or members of at least one of the policy-planning organizations in the corporate community. (The analyses that follow are based on descriptive statistics, not network analysis.)

There were 476 members of the inner circle in 1935–1936, which is 19.4% of all corporate directors for that year; in 2010–2011 there were 409 inner-circle members, or 18.9% of all corporate directors. These findings are within the range of 15–20% that has been found in earlier studies (Murray & Jordan, 2019). Reflecting the decline in the magnitude of connectivity of the banks in the 2010–2011 dataset, and the tendency towards smaller bank boards, the 56.1% of the inner circle who sat on at least one bank board in 1935–1936 had shrunk to only 19.6% in 2010–2011, a decline of almost two-thirds. By way of contrast, the percentage of inner-circle directors who were members or directors of a nonprofit increased from 15.5% to 24.2% between 1935–1936 and 2010–2011, a substantial increase. These findings are presented in Table 6.

The pervasiveness of the policy-oriented nonprofits within the corporate community as a whole — not just in the inner circle of the corporate leadership group — can be determined by examining the extent to which the interconnected corporations in the main component include at least one director *or* member of at least one of the six nonprofits on their board of directors. This analysis shows that members and directors of one or more of the six nonprofits were on the boards of 60% of the corporations in 1935–1936, and 77% in 2010–2011. This figure also can be calculated for individual nonprofits. The Council on Foreign Relations, whose large membership included 122 corporate directors in 1935–1936 and 190 corporate directors in 2010–2011, was connected to almost half of the corporate boards in the main component in 1935–1936, and close to 60% in 2010–2011. Similarly, 118 of the 122 members of the Business Roundtable sat on at least one corporate board in 2010–2011, col-

**Table 6** The Inner Circle's connections to banks and the policy-planning network

| | 1935–1936 ($n$=476) | 2010–2011 ($n$=409) | $p^*$ |
|---|---|---|---|
| Inner Circle directors who serve on a bank board | 56.1% | 19.6% | <0.001 |
| Inner Circle directors who are directors or members of a policy-oriented nonprofit | 15.5% | 24.2% | <0.001 |

*Statistical significance was calculated using a chi-square contingency test

**Table 7** The pervasiveness of the policy-planning network: Percentage of corporations in the main component that were linked to major policy-planning groups and foundations

| | 1936 ($n$=219) | 2011 ($n$=220) | $p^*$ |
|---|---|---|---|
| Linked to the policy-planning network | 60.3% | 77.3% | < 0.001 |
| Linked to the Council on Foreign Relations | 49.8% | 58.2% | 0.08 |
| Linked to the BAC (1935-36) or BRT (2010-11) | 20.1% | 52.3% | < 0.001 |
| Linked to the Nat'l Association of Manufacturers | 10.5% | 5.9% | 0.08 |
| Linked to the Brookings Institution | 2.3% | 12.7% | < 0.001 |
| Linked to the Rockefeller Foundation or Carnegie Corporation | 10.0% | 1.4% | < 0.001 |

*Statistical significance was calculated using a chi-square contingency test

Note: BAC = Business Advisory Council; BRT = Business Roundtable

lectively representing more than half of the top corporate boards. These and other findings are presented in Table 7.

The results in this subsection raise further doubts about the role of bank boards in developing policy consensus within the corporate community, contrary to the emphasis placed on them by fractured-elite theorists (Chu & Davis, 2016; Davis & Mizruchi, 1999; Mizruchi, 2013, Chap. 5). At the same time, they support the argument and evidence provided by Murray and Jordan (2019, p. 1), who conclude that "the inner circle was still the primary organizing group" for the corporate community in 2010–2011, and that the policy-oriented nonprofits were by then an even more integral part of the inner circle than in the past. However, to repeat another earlier point, this article makes no claim that the general membership of the three policy-discussion nonprofits makes any contribution to the social cohesion within the corporate community that was discussed earlier in the article. Instead, here we emphasize that the widespread overlap between the nonprofits and corporate boards due to the members of the three policy-discussion nonprofits means that the viewpoints that develop within the policy-discussion nonprofits can be disseminated throughout the corporate community.

## Discussion

As stressed in the section on earlier studies of corporate networks, there are limitations to network studies as windows into the corporate community. These limitations may be especially relevant in comparing the corporate network in the United States across long periods of time because a range of factors may influence network structures. They include the rise of new business sectors, merger movements, new legislative constraints, and the rise of social movements that influence business practices and cultural norms around diversity and inclusion. Nevertheless, the network data in the present study verify that since at least the mid-1930s the leadership of the largest corporations in the United States comprise a corporate community connected not only by board interlocks, but by several policy-oriented nonprofits.

The innumerable face-to-face meetings of different corporate directors at the board meetings of corporations and policy-oriented nonprofits demonstrate that the corporate community has ample opportunities to develop the social cohesion necessary to facilitate policy cohesion. The findings based on those corporate directors who are simply members of the policy discussion groups, meanwhile, reveal that the involvement of corporate directors in these organizations is pervasive, suggesting there are numerous opportunities for views developed within the policy-oriented nonprofits to be disseminated throughout the corporate community. Moreover, as briefly overviewed in the Introduction, there is considerable case-study and quantitative evidence that the nonprofit organizations included in this study have been highly effective in shaping legislative outcomes (e.g., Domhoff, 2020, 2022, Chap. 4; Dreiling and Darves, 2016; Luther-Davies et al., 2022; Useem, 1980, 1984).

The presence and effectiveness of policy-oriented nonprofits within the corporate community for at least the past 87 years raises doubts, first, about the longstanding claim that the American corporate community has never possessed the capacity to formulate general policies of common concern (e.g., Heinz et al., 1993; Heinz et al., 1990; McConnell, 1966). Theorists arguing from this perspective have tended to focus on the trade associations and lobbying firms that are indeed highly successful in government policy arenas on specific narrow issues of concern to one or another of the numerous business sectors, but they have usually not considered the role of the policy-oriented nonprofit organizations in the corporate community.

Similarly, the findings raise doubts about the conclusion that the corporate community has lost its policy-influencing capacity due to the decline in bank centrality, as well as the decline in the general connectivity of the corporate network, which purportedly led to a fracturing of the corporate elite on large-scale policy issues (Chu & Davis, 2016; Davis & Mizruchi, 1999; Mizruchi, 2013, Chap. 5). Contrary to this conclusion, there is clear evidence that policy-oriented nonprofits were the site of policy discussions in the 1990s and early 2000s, as well as in the mid-1930s. On the other hand, there is no evidence that general policy discussions took place at bank boards, or that any consensus on societal-level issues reached in such meetings was then disseminated throughout the corporate community via interlocking directors. Instead, the evidence for the importance of bank boards with regard to policy issues primarily concerns the numerous cases in which their members rejected mergers or resisted hostile takeover attempts of corporations they supported (Mintz & Schwartz, 1985, p. 77, Table 4.1). Similarly, the evidence that exists for the influence of individual corporations on other corporations only involves narrow policy issues that are of concern *within* the corporate community, such as the adoption of rules that make takeovers difficult (Davis, 1991). There is some evidence that linked corporations may give donations to the same candidates in elections (Burris, 2010; Mizruchi, 1992, 1996), but political donations to specific candidates are not evidence for the development of proposals relating to policy preferences on societal issues of importance to corporations in general.

An additional point should be noted with regard to the general decline in intercorporate links noted here and in previous studies, which is emphasized by fractured-elite theorists. A significant part of the decline in network connectivity that began early in the twenty-first century was due to the decline in directors with five or more directorships, who are "disproportionately consequential in their effect on the structure of the network" in terms of its connectivity (Chu & Davis, 2016, p. 718). In stressing this decline, fractured-elite theorists overlooked the fact that there had been a similar decline in corporate directors with six or more board memberships from 27 in 1917 to zero in 1974 (Mizruchi, 1982, p. 107). Thus, the subsequent, post-1975 increase in levels of connectivity that continued into the 1990s was likely due in good part to exogenous factors, such as the pressures generated by the civil rights and feminist movements to appoint non-traditional directors, who tended to sit on two or more corporate boards (Ghiloni, 1984; Zweigenhaft & Domhoff, 1998, 2018).

Similarly, the decline in directors with five or more board memberships in the early 2000s is also largely attributable to factors outside the corporate community. First, changes in the laws governing corporations in 2002 required greater due diligence on the part of directors, leading those with multiple directorships to limit their board directorships (Withers et al., 2018, p. 57). Second, the efforts by corporate watchdog groups to limit directors to no more than four directorships brought in new directors who had not previously held corporate directorships, and at the same time put pressure on those with multiple directorships to drop some board memberships, as noted by two fractured-elite theorists (Chu & Davis, 2016, p. 750).

The differences between the corporate community in 1935–1936 and 2010–2011 are encapsulated in a comparison of the boards of directors of two large commercial banks in the mid-1930s, J. P. Morgan & Company and Chase National Bank, with the board of directors of the largest bank in the United States in 2010–2011, JPMorgan Chase Bank. At J. P. Morgan in 1935–1936, 15 of the 17 directors held seats on 21 other corporate boards. In terms of involvement with policy-oriented nonprofits, one director also was a director of both the Carnegie Corporation and the Council on Foreign Relations. In the case of Chase, 23 of its 25 directors held seats on 33 other corporate boards. In addition, two of its directors were directors of the Rockefeller Foundation and still another was a director of the Carnegie Corporation.

By 2010–2011, the merger of J. P. Morgan and Chase National in 2000 had created JPMorgan Chase, which also had absorbed five other large banks that were among the 250 largest corporations in 1935–1936, four in New York and one in Chicago (e.g., Murray and Jordan, 2019, p. 47, Table 14). The board of this extremely large bank consisted of only 11 people, eight of whom provided connections to only 11 other corporations. This is a dramatic decline from the 15 J. P. Morgan directors who sat on 21 other corporate boards and the 23 Chase National directors who were directors of 33 other corporations in 1935–1936. In 2010–2011, five of the 11 directors had one other board seat besides their position at JPMorgan Chase, and two had two other board seats. The sole member with three other board seats was an African-American minister who served in Congress for 12 years, and then resigned to become the president of the United Negro College Fund in 1991. The CEO was on no other corporate boards than that of JPMorgan Chase, but was a leader at the Business Roundtable, as was one other JPMorgan Chase director. In addition, two other JPMorgan Chase directors were directors of The Brookings Institution. Based on this brief accounting, it can be seen that the merged bank is emblematic of the ties that existed between large corporations and the most central policy-oriented nonprofits in 2010–2011. The merged bank is also emblematic of the general reason why there is less connectivity among corporations in 2010–2011 than in 1935–1936. The corporations in 2010–2011 have smaller boards of directors, and their members tend to have three or fewer affiliations with other corporations.

As this comparison of J. P. Morgan and Chase National in 1935–1936 with JPMorgan Chase in 2010–2011 illustrates, and as the overall results of this study systematically demonstrate, bank boards are not necessary for the creation of corporate leadership groups that involve themselves in public-policy issues. However, the researchers who emphasized bank centrality did correctly find that the directors of banks were over-represented in the inner circle throughout most of the twentieth century (e.g., Mintz and Schwartz, 1981, 1985; Mizruchi, 1982). In effect, these researchers were focused on many of the relevant leaders within the corporate community in the years that they studied. However, some of them subsequently minimized or overlooked the importance of the policy-oriented nonprofits when they incorrectly claimed that the decline in bank centrality inevitably led to a decline in policy cohesion (e.g., Chu and Davis, 2016; Davis & Mizruchi, 1999; Mizruchi, 2013).

## Conclusion

The findings presented in this article on the inclusion, centrality, and effectiveness of the policy-oriented nonprofits within the American corporate community since at least the 1930s provide the basis for a reconsideration of theories claiming that large corporations do not have the cohesiveness and capability to develop shared policy positions. Such theories overlook the important role that foundations, think tanks and policy-discussion groups have within the corporate community. Financial and membership links among these three types of organizations create an institutional framework within the corporate community that supports a policy-planning process. Foundations provide financial support for corporate-friendly policy studies, and think tanks provide a focused work space for experts to exchange information and ideas on a wide range of policy issues (Medvetz, 2012b). The various policy ideas are then discussed within committees and groups supported by the large policy-discussion groups, such as the Business Roundtable and the Council on Foreign Relations, which are designed to disseminate policy ideas and positions.

At the same time, there is a network of trade associations, lobbying firms, and advocacy groups, which supports a special-interest process that furthers the more narrow and short-term interests of specific corporations and business sectors. The importance of this special-interest process is demonstrated by the many studies that reveal exactly how successful trade-association officials and hired lobbyists are in shaping the agendas and policy solutions that are considered by the Congressional committees, departments of the executive branch, and regulatory agencies of concern to them (e.g., Baumgartner et al., 2009; Gilens and Page, 2014; Heinz et al., 1990; McConnell, 1966; Schlozman et al., 2012).

The new findings and analyses in this article suggest new directions that political sociologists and political scientists could take in developing a more complete picture of corporate power in the United States in the mid-2020s. These new directions could involve carefully tracking the unfolding daily activities of one or more of the policy-oriented nonprofits over a period of the next few years; carrying out content analyses of their new publications; coding the for-or-against positions their spokespersons take in testimony before Congressional committees; tracing the movement of their members into and out of appointed government positions; and conducting interviews with their leaders and staff. Such an approach could make it possible to produce many theoretically informed studies of the direction that the most powerful currents in the corporate community are moving in the face of accelerating climate change, increasing social divisions on a range of highly charged social issues, and a rapidly changing economic environment.

Several different policy-oriented nonprofits provide good starting points for such studies, depending upon the issues of primary concern to the researchers who might carry them out. However, given the findings in this article concerning the Business Roundtable as one of the largest, most central, and most successful policy-discussion groups in the corporate community since 1975, it may provide the most useful entry point into studying the future that the American corporate community is determined to create.

**Acknowledgements** Our deepest thanks to our research assistant on this project, Adam Schneider, for the prodigious amount of work he did in creating and organizing the two large datasets, generating the findings based on descriptive statistics, creating the tables, and editing the final version of the manuscript. We also thank Val Burris for his invaluable help through his comments on an earlier draft and for his methodological suggestions.

## Declarations

**Conflicts of interest/competing interests** The authors declare no potential conflicts or competing interests.



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