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**Corporate, Social, and Political Networks of Koch Industries Inc. and TD
Ameritrade Holding Corporation: Extension to the State of Nebraska**

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Abstract: The importance of interlocking board directorships among corporations and between corporations and social organizations has been confirmed for defining the modern political economy. This paper finds the networks of those interlocks for Koch Industries Inc. and TD Ameritrade Holding Corporation and extends the networks to describe and analyze the accompanying political network of contributions to Nebraska political campaigns. For corporate and social networks, conventional theoretical structures are utilized to find the new database of those networks for Koch Industries and TD Ameritrade. The new theoretical structure and database discovered in the research is for the campaign contributions of the board directors in the corporate and social networks, as they are traced to campaigns for federal offices (see columns I, J, K and L of Figure 3 and Tables 1 and 2). The new political campaign finance structure discovered here includes thousands of interconnected campaign finance conduits through which money flows to political campaigns.

Key words: corporate networks, campaign contributions, PAC conduits

JEL Codes: B52, D72, Z18

Clearly, powerful global interests have become more active in influencing policies, legislation, research, and political elections of states in the United States. One such interest often mentioned in recent media reports is Koch Industries Inc. However, Koch Industries does not function alone and has not obtained its power and influence by functioning alone. It belongs to a powerful network of economic, social, and political organizations whose policies and actions are coordinated through integrated decision makers. Without an understanding of the integrated networks, it is not possible to understand how Koch has become so powerful in government. The purpose here is to examine two integrated corporate, social, and political networks that have become active in the State of Nebraska. The two networks which operate with similar political and ideological interests are the networks to which Koch Industries Inc. and TD Ameritrade Holding Corporation belong. They are often referred to as “the Koch brothers” and “the Ricketts family” respectively¹. Those atomistic descriptors are misnomers because without the extensive network to which these families belong, they would neither have much power nor draw such attention.

The immense power that corporations have gained over the governance of political and social organizations cannot be understood without an understanding of the integrated corporate base that is their foundation for power. The foundation reaches beyond the integrated corporations to social and political institutions. This is completed by corporate directors and officers becoming directors and decision makers in social organizations and by their providing money to ideologically approved foundations, university and nonprofit research groups, political parties, political action committees (PACs), lobbying efforts, political campaigns, and so forth.

Governance and resource allocation decisions are spread from corporate networks to government, social, and political organizations. Through this system, corporation directors and officers become the nation's de facto social and economic planners—although not prepared to be so by either education or experience.

**Foundation of Corporate/Social/Political Network is
the Interlocked Corporate Boards of Directors**

The scientific literature that establishes the importance, power, and reach of corporate interlocking directorships is long, deep, and extensive. The importance of interlocking directorships in establishing powerful corporate conglomerates was established by 1900, and, since then, studies from numerous disciplines have documented more specific relationships between the interlocking directorships and other concerns (see Appendix A). The interest here is the relationship between interlocking corporate directorships and the financing of political campaigns.

It is important to recognize that what has been found in political science and sociology about the cohesion among corporate elites and between corporate elites and political decision makers reflects Aristotle's remark that things "which the political arts examines admit of much dispute and variability." However, with regard to cohesion among elites, defined by those who hold corporate directorship positions and those who make similar campaign contributions, there is much less dispute. An excellent review of the literature on this subject, in addition to being an excellent analysis of the patterns found among corporate elites and campaign contributions, is by Val Burrell (2005). He found significant political cohesion among those within corporate directorship networks made up of interlocked boards of directors (BODs) for both direct and indirect interlocks. "Directors who create those interlocks among firms are also, as individuals,

likely to exhibit similarities of political behavior” (273). The reasons for such similarities “include processes of information exchange, persuasion, deference, and conformity with group norms of the sort that have been extensively studied in the structurally oriented literature on political behavior and opinion formation (see Knoke [1990] for a review)” (273). Close proximity of direct and indirect interlocks is significantly associated with similarities of political behavior; however, “even at a distance of four or five links, indirect ties remain significantly associated with similarity of political behavior” (275). The BOD ties “are stronger by several magnitudes than the effects of shared characteristics, like common industry or geographic proximity . . .” for determining political cohesiveness measured by campaign contributions [as the dependent variable] (273). “For individual directors, both direct and indirect ties are significantly associated with similarity of political contributions” (273). Thus, the scientific foundation is sufficient to undertake analysis based on campaign contributions from members of a network of corporate board interlocks in order to identify the political influence of such a network. That is one conceptual basis for the analysis below, but not by limiting the analysis to direct campaign contributions between BOD persons and campaigns, because, as will become clear, direct connections alone do not sufficiently identify contributions.

The relationship between interlocking corporate directorships and the financing of corporate political campaigns is articulated below by examining the corporate networks formed by interlocking directorships of Koch Industries Inc. and TD Ameritrade Holding Corporation, and the extension of those networks into social and political networks, with special attention to their financing of political campaigns for elected federal offices to represent the State of Nebraska. Those two networks have established political campaigns for the conservative—extreme right wing is the term often used in media reports—takeover of Nebraska’s political

governance. National media reports clarify that the Koch network pursues such activities on a regular basis in many states across the nation while TD Ameritrade is devoted mainly to Nebraska in terms of state activities. The corporate network that forms the foundation for such political takeover is not often recognized. The research here relies on the scientific foundation about interlocking corporate directorships that function to amass power in the corporate world through cooperation among and planning by their networks. In the field of economics, these interdependent corporate decision networks are referred to as cooperative oligopolies, shared oligopolies, shared decision networks, and so forth. Given the economic and financial power concentrated in such networks, the corporations, in addition to planning among themselves, are in a position to reach out to include social and political organizations in their sphere of influence. The unified corporate/social/political networks serve to influence social movements, change laws, establish policies, initiate research agendas, and influence political outcomes in order to enhance the economic, financial, and political interests of the corporations and their officers and directors.

As explained by Hayden, Wood, and Kaya, concerns about interlocking directorships date back to the late 1800s, and have been of special interest to institutionalist scholars (2002, 694-5). Gardiner C. Means was the first to complete a study of the interlocking directorships of the 250 largest US corporations in an adjacency matrix format . . . in order to identify the corporations' interest groups, such as the JP Morgan, DuPont, and Chicago interest groups (Means 1939). John Munkirs and James Sturgeon found that interest groups in the banking, automobile, and petroleum industries functioned as "cooperative oligopolies" consistent with their interlocking directorships (Munkirs et al. 1993; Munkirs and Sturgeon 1985; Munkirs 1985). Institutional studies about power and dominance through corporate interlocking

directorships have been a common theme (Trebing and Estabrooks 1998; Munkirs 1985). Munkirs found the extensive BOD interlocks are formulated to conduct centralized private sector planning (CPSP) (1985, 52-53). “Within the context of CPSP, boards of directors perform two distinct, yet interdependent, roles. . . . They are one of the important interstitial elements in forming an organizational *structure* conducive to CPSP; and, they may also be viewed as a *functional* planning tool.” (1985, 83). Adjacency matrixes, as outlined by Means, have been manipulated in numerous ways with the development of matrix manipulation technologies based on Boolean algebra to derive coefficients for reachability, centrality, degree, and closeness (Stephenson and Hayden 1995 and Hayden and Stephenson 1993).

In general, the institutionalist literature has emphasized that the coordinated power concentrated in the interlocked BODs of large corporations is inconsistent with democratically controlled socioeconomic institutions for formulating the political economy. Yet, institutionalists have not demonstrated how the integrated BODs seek to determine who is elected to the U.S. Congress, even though members of Congress are responsible for the laws and rules that determine the political economy. The conception and explanation of neither the CPSP by Munkirs nor the corporate power-bloc sets by Hayden, Wood, and Kaya articulate the means through which those institutions gain power in Congress. To trace the use of campaign contributions from particular integrated BODs to political campaigns of politicians pursuing national public office is the purpose here. The integrated BODs that institutionalists have identified as a foundation of economic power are found below to exercise political power as well.

Overlapping Corporate Linear Triples

Two corporations can fully and effectively coordinate decisions by having top officers or directors from the two corporations on the board of a third corporation (see Hayden, Woods, and Kaya 2002). This is a format of three corporate boards connected in a row². The format of three entities so aligned is called a linear triple. A real-world example of such a linear triple is outlined across Figure 1, made up of Koch Industries Inc., Invista Inc., and E.I. DuPont de Nemours & Co. Each oval represents the board of the corporation which has its name in the oval. The arrows between ovals indicate the sharing of directors between boards. Directors from Koch Industries

[Figure 1 about here]

and DuPont serve as board directors on the board of directors of Invista, thus, the interests, needs, and plans of both Koch and DuPont can be explained and considered in board deliberations, committee meetings, and research of Invista. In a similar manner, the same can be carried to Koch and DuPont board meetings from Invista deliberations and activities. Therefore, the interests, needs, and plans of all three corporations are considered together because all board members have the responsibility to look out for the interests of the corporations on whose boards they serve. A prudent board member needs to share and protect the interests of all boards upon which he or she serves in all board meetings, therefore, board deliberations lead to decision coordination among the corporations.

Figure 1 demonstrates how the linear triple of Koch Industries Inc.—Invista Inc.—DuPont reaches across other real-world triples to generate 10 overlapping triples. In none of the ten sets are the same three corporations in a different order because a different order among the three in a set does not make the reachability different. All three can reach each other for making decisions together irrespective of order³. The 10 triples are:

1. Encore Energy—Intrust Financial Corp.—Koch Industries Inc.
2. Intrust Financial Corp.—Koch Industries Inc.—Invista Inc.
3. Koch Industries Inc.—Invista Inc.—Georgia Pacific
4. Koch Industries Inc.—Invista Inc.—Deere and Company
5. Georgia Pacific—Invista Inc. —Deere and Company
6. Koch Industries Inc. —Invista Inc. —E.I. DuPont de Nemours
7. Georgia-Pacific—Invista Inc. —E.I. DuPont de Nemours
8. Deere and Company—Invista Inc. —E.I. DuPont de Nemours
9. Invista Inc. —E.I. DuPont de Nemours—Goldman Sachs
10. E.I. DuPont de Nemours—Goldman Sachs—ExxonMobil

As this list clarifies, every three-corporation decision set contains two of the same corporations from another set, thus cementing the overlap of corporations into a continuous network. The decisions made within each triple can be carried to other corporations through the network as the triples overlap two-by-two across the decision network.

Corporate Networks of Koch Industries Inc. and TD Ameritrade Holding Corporation

Figure 1 is a simple example of partial information in order to clarify how linear triples of the corporate world overlap with each other to form a network. The full Koch Industries Inc. corporate network is, in fact, much more complicated than the example in Figure 1; with many more directorship interlocks among the corporations, with far more overlapping triples, and, therefore, with more decision reachability among corporations that can be utilized to coordinate planning and cement power as the corporations work together. The full Koch corporate network of linear triples for 2009 is demonstrated in Figure 2 (data is from columns A through F in Table 1 below). Each rectangle in Figure 2 represents the board of directors of the corporation's name

in the rectangle. The sharing of directors among corporations is represented by the lines that connect the rectangles. The same kind of corporate network of linear triples for 2009 exists for TD Ameritrade Holding Corporation (data is from columns A through F in Table 2 below).

[Figure 2 about here]

Databases for Corporate Networks of Koch Industries and TD Ameritrade

Figure 3 is utilized as an abbreviated introduction to the databases for the corporate networks of Koch Industries and TD Ameritrade found in Tables 1 and 2. Given the size of Tables 1 and 2, they are not available in the text but are available at website www._____. The columnar headings in Figure 3 are the same as for columns C through L in Tables 1 and 2.

[Figure 3 about here]

The first row of Figure 3 indicates that the corporation name (column C) is TD Ameritrade Holding Corporation, which has a director (column D) named J. Peter Ricketts who is on the corporate BOD of TD Ameritrade (column E) and on the corporate BOD of the corporation Alumni Capital Network (column F). Ricketts is also on the BOD and is president of The Platte Institute for Economic Research, Inc. (columns G and H).

The information in columns C through E continues to be repeated in subsequent rows as long as there is new information to be reported about the person in column D in any column to the right of column D.

The second row of Figure 3 indicates that Ricketts is on the board of trustees of the American Enterprise Institute (columns G and H).

The third row indicates that Ricketts, the director of TD Ameritrade, donated money to the PAC named For Our Republic's Traditions (column I). For Our Republic's Traditions is

designated as a primary monetary recipient because it is the first recipient of funds in a conduit of funds that reaches the campaign of Lee Terry, who was the Republican candidate in the Second Congressional District in Nebraska and was elected to the U.S. House of Representatives. For Our Republic's Traditions donates money to the secondary monetary recipient, which is the National Republican Congressional Committee (column J), and, in column K, the tertiary monetary recipient is Lee Terry's campaign, which received a contribution from the National Republican Congressional Committee.

The fourth row of Figure 3 indicates that William H. Hatanaka is another member of the BOD of TD Ameritrade. He is also a member of the BOD of TD Waterhouse Canada, Inc. and a member of the BOD of York University Foundation.

The last three rows of Figure 3 deal with Koch Industries, Inc. The first of the Koch Industries rows indicates that Joe Moeller is a BOD member of Koch Industries, a BOD member of the corporation Invista Inc., and member of the board of trustees at the University of Tulsa. The next-to-the-last row indicates that Joe Moeller contributed to Koch Industries Political Action Committee, which donated to the PAC named 21st Century Majority Fund, which donated to the tertiary recipient Johanss for Senate Incorporated. The latter was the election campaign fund of Republican Michael Johanss, who was elected as Nebraska's U.S. Senator. As indicated, the Johanss for Senate campaign received its funds as the quadruciary monetary recipient in the example in the last row of Figure 3. Joe Moeller made a contribution to Koch Industries Political Action Committee, which contributed to Blue Dog Political Action Committee, which contributed to Coca-Cola Refreshments USA, Inc. NonPartisan Political Action Committee for Good Government, which contributed to Johanss for Senate Incorporated.

Although other studies have examined the relationships between corporate BOD

members and political campaigns, the authors have not found other studies that have identified the provision of money through conduits as outlined in Table 3. Other's studies usually identify only direct contributions from BOD members to political campaigns or campaign PACs. That approach would not take account of any of the monetary conduits that delivered donations to the campaigns of Lee Terry and Michael Johanns as outlined in Figure 3. They would not be reported in such studies. As defined next in Tables 1 and 2, that approach would also exclude thousands of other conduits that begin with contributions from the Koch Industries and TD Ameritrade corporate BOD members.

The methodology and databases of Tables 1 and 2 are explained here in detail in order for the readers to gain a full understanding of the analysis completed, be in a position to offer criticism, make comparisons with other studies, and be able to replicate this study for other states. The databases for the corporate networks of Koch Industries and TD Ameritrade are found in columns A through F in Tables 1 and 2. The databases for the social networks that accompany the corporate networks are found in columns G and H. The political networks that accompany the corporate networks are found in columns I through L. The political networks are composed of monetary donation conduits that provide money through many different PACs before it reaches political candidates. Tables 1 and 2 are formatted in Excel spreadsheets that are presented as electronic documents at (as specified above) permanent website

www._____⁴.

Corporate Interlock Database for Koch Industries Inc.

The database of the corporate network of Koch Industries Inc. in Figure 2 is found in Table 1 titled Database for the Corporate, Social, and Political Network of Koch Industries Inc., which contains the connections among board members, officers, PACs, social organizations, and

campaign contributions. In the table, the name of an entity in each column is repeated for as many rows as necessary to make it possible to relate the information in the columns to the right of that column to the information in the original column. Information in columns A through H is for the year 2009. (Source references for all information in Tables 1 and 2 are found in columns M through P.) Columns A through F in Table 1 are formatted as follows.

Column A, Counter: When a row is referred to below, it will be referring to the counter row in column A, not the Excel numbered labels that appear on the left side of each row.

Column B, Corporations Ticker: The corporation stock ticker for the corporation of interest in column C is in column B. N/A in Column B means the corporation does not have a ticker because its stock is not publicly traded.

Column C, Corporation Name: Column C contains the name of the corporation for which network information has been collected for the relevant row. Koch Industries Inc. is the first corporation listed in column C. Koch Industries is repeated in rows 1 through 415 in order to relate the information to Koch Industries in the columns to the right of column C back to column C. The same corporation's name is repeated in column C for as many rows as needed to express all the information related to that corporation in the columns to the right of column C.

Column D, Officer/Director: The name of the director or officer (if one of the top five officers) who is on the board of directors for the corporation in column C and the corporation in column F is in column D. For example, following row 314 across from column C is the name of Charles G. Koch in column D. He is listed 30 times in column D (rows 312 to 341) because of all the information related to him in columns to the right of column D. Some corporate board members listed in column D of Tables 1 and 2 belong to few corporate boards in column F;

however, they are listed more times in column D than their number of corporation directorship positions because of their positions with social organizations listed in column G or because they are listed as a donor in a column to the right of column H.

Column E, Title/Position: Column E contains the title or position of the person in column D within the corporation in column C. Row 314 in column E indicates, for example, that Charles G. Koch is a CEO and member of the BOD of Koch Industries Inc.

Column F, Interlocked Corporation: The name of the corporation for which a corporate directorship interlock exists with the corporation in column C is in column F for the year 2009. For example, in row 314, Charles G. Koch (column D) is a director (column E) on the board of Koch Industries and a director on the board of directors of Georgia-Pacific in column F. If a subsidiary corporation has its own board of directors separate from its parent, it is considered to be a separate board in this study.

The corporations found in column F for rows 1 through 415 are the corporations which have a member of their board also being a member of Koch Industries, or, stated differently, those corporations share a direct interlock with Koch Industries. The corporations in column F are displayed in Figure 2 as the first circle of corporations around Koch Industries Inc. The lines connecting those corporations with Koch Industries Inc. in Figure 2 represent the directors listed in rows 1 through 415 in column D of Table 1.

The corporations identified in rows 1 through 415 of column F are, in turn, listed in rows 416 through 575 of column C in order to find the corporations with which they are directly interlocked in column F of rows 416 through 575, in order to complete the linear triple. For example, in row 312 Charles G. Koch is entered as a director on the boards of Koch Industries

Inc. (column C) and Invista, Inc. in column F; and, in turn, in row 431, Gary M. Pfeiffer, who serves as a director on the board of Invista, Inc. with Charles G. Koch, is also on the board of E.I. DuPont de Nemours & Co in column F. The corporations listed in column F of rows 416 through 575 are the corporations placed outside of the first circle of corporations in Figure 2, and their directorship connections with the first circle of corporations are indicated with the lines connecting the two.

As is clear in column F, there are no entries in some rows. This is because an entry in a row in a later column in Table 1 refers back to an entry in a row of a column prior to column F, for example when a person's name that applies to later columns has already been entered in a row in prior column D. In Table 1, Joe Moeller is listed in counter rows 1 and 2 in column D because he is a director on the boards of the corporations listed in both counter row 1 (Invista Inc.) and counter row 2 (Georgia-Pacific LLC) of column F, so there are entries in rows 1 and 2 of column F. In addition, Moeller made a political contribution in row 3 to Koch Industries Political Action Committee in column I, thus, row 3 is vacant in column F because the contribution entry in column I does not refer back to a corporation in column F—it refers back to him in column D.

Corporate Interlock Database for TD Ameritrade Holding Corporation

The database of the corporate network for TD Ameritrade Holding Corporation is found in Table 2 titled Database for the Corporate, Social, and Political Network of TD Ameritrade Holding Corporation that contains the connections among board members, officers, PACs, social organizations, and campaign contributions. The layout and format of Table 2 is the same as explained above for Table 1.

Social Networks of Koch Industries Inc.

and TD Ameritrade Holding Corporation

The social network is the network constructed by the linkages of social organizations specified in columns G and H, with the corporate network found in columns C through F in Tables 1 and 2. The same persons that link corporations to each other also link the corporations with the social organizations. The database for the social network is found in columns D, G, and H of Tables 1 and 2. The linkages between the corporate boards and social organizations allow for the coordination of decisions between the two and across social organizations. The person listed in column D for the corporation in column C holds a position in the social organization listed in column G. That position is specified in column H. An example for Koch Industries network in row 420 of Table 1 is Charles O. Holliday who serves on the board of directors of E.I. DuPont de Nemours & Co. and on the board of governors of the Partnership for Public Service in column G. An example for the TD Ameritrade network in row 41 in Table 2 is Allan R. Tessler, who serves on the board directors of TD Ameritrade and on the board of governors of Boys and Girls Clubs of America in column G.

A similarity discovered from this database is that both Koch Industries and TD Ameritrade have one director who specializes in holding a large number of important positions with social organizations. Other board members in these companies hold positions in social organizations but not the large number held by David H. Koch from Koch Industries and J. Peter Ricketts from TD Ameritrade. David H. Koch holds such positions with 24 social organizations (see rows 342-365, column G, Table 1), which include board of director positions as follows:

Johns Hopkins University, The Aspen Institute, The Reason Foundation, American Legislative Exchange Council (ALEC), and The Cato Institute. He is also a founder of the Americans for Prosperity Foundation and FreedomWorks. J. Peter Ricketts holds such positions with 14 social organizations (see rows 1-14, column G, Table 2) which include board of director and board of trustee positions as follows: American Enterprise Institute, The Platte Institute for Economic Research, Education Opportunity Nebraska, Nebraskans for Fiscal Accountability, and Opportunity Education Foundation.

The 49 social organizations listed in column G of Table 1 for the Koch network are interlaced with the Koch Industries corporate network in Figure 2 that was taken from columns C and F in Table 1. Likewise, the 76 social organizations in column G of Table 2 for the TD Ameritrade are interlaced with the Ameritrade corporate network in columns C and F in Table 2.

Political Networks of Koch Industries Inc. and TD Ameritrade Holding Corporation

The intertwined corporations and social organizations extend their decision-making power into the political arena through monetary contributions to political campaigns, think tanks, research foundations, universities, economic education, and so forth—contributions made by persons holding the top decision making positions in the corporate and social networks. The monetary contributions are made by the persons (in column D) who hold decision making positions in the corporations and social organizations of columns F and G. The primary, secondary, tertiary, and quadrucary recipients of such monetary contributions are reported in columns I, J, K, and L respectively in Tables 1 and 2 for the 2008 election cycle⁵.

Column I: Recipient of Monetary Donations

The designation of column I as the primary recipients of monetary donations from persons in column D means the organization in column I is either the first and final recipient or the primary recipient in a series of donations that form a conduit which carries money to other organizations. Examples of the latter case will be presented below in the explanation of columns J, K, and L.

Examples of the former case are:

(1) Donation from Charles G. Koch (row 321, column D) to primary recipient American Legislative Exchange Council⁶ in row 321 of column I in Table 1.

(2) Donation from J. Peter Ricketts (row 26, column D) to primary recipient Adrian Smith for Congress in row 26 of column I in Table 2.

The primary recipients in these examples do not donate funds to other organizations.

Column J: Secondary Recipient of Political Funds

The designation of column J as the secondary recipient of political funds from the organization in column I means that the organization in column J is either the second and final recipient in a sequence of political contributions or the secondary organization in a sequence that provides money to other organizations. Examples of the latter case will be presented below in the explanation of columns K and L. Examples of the former case are:

(1) Donation from Joe Moeller (row 3, column D) to primary recipient Koch Industries PAC (row 3, column I), and a donation from the latter to secondary recipient Lee Terry for Congress in row 3 of column J in Table 1.

(2) Donation from J. Peter Ricketts (row 23, column D) to primary recipient Sandhills PAC (row

23, column I), and a donation from the latter to secondary recipient Johanns for Senate Incorporated in row 23 of column J in Table 2.

The secondary recipients in these examples do not donate funds to other organizations.

When the designation of a series of contributions in columns J, K, and L is the same that was reported elsewhere in those columns, a note indicates where that information is found and does not repeat it. For example, row 323 of column J of Table 1 reads: “See Counter Rows 2-307 of columns J, K, and L.” This means that all the information in those rows and columns is repeated as donations that come from Koch Industries PAC in both cases. They are different as total sets because the set in rows 2-307 (columns J, K, and L) originated with Joe Moeller (column C), while the repeated set designated for columns J, K, and L at row 323 originated with Charles G. Koch. Thus, although the initial donations are from different men, their donations feed into the same pattern of conduits in the political network.

Column K: Tertiary Recipients of Political Funds

The designation of column K as the recipients of political funds from the organization in column J means that the organization in column J is either the third and final recipient in a conduit of political contributions or the third organization in a conduit which provides money to other organizations. Examples of the latter case will be presented below in the explanation of column L. Examples of the former case are:

(1) Donation from William B. Moore (row 495, column D) to primary recipient Powerpac of the Edison Electric Institute (row 495, column I), donation from the latter to secondary recipient Next Century Fund (row 495, column J), and a donation from the latter to tertiary recipient Johanns for Senate Incorporated in row 495 of column K in Table 1.

(2) Donation from Donald J. Carty (row 134, column D) to primary recipient Dell, Inc. Employee PAC (row 134, column I), donation from the latter to secondary recipient Every Republican is Crucial, and a donation from the latter to tertiary recipient Lee Terry for Congress in row 134 of column K in Table 2.

The tertiary recipients in these examples do not donate funds to other organizations.

Column L: Quadruciary Recipients of Political Funds

The designation of column L as the recipients of political funds from the organization in column K means that the organization in column L is the fourth and final recipient in a conduit of political contributions. Examples of this case are:

(1) Donation from Joe Moeller (row 14, column D) to primary recipient Koch Industries PAC (row 14, column I), donation from the latter to secondary recipient Blue Dog PAC (row 14, column J), donation from the latter to tertiary recipient AT&T Inc. Federal PAC (row 14, column K), and a donation from the latter to quadruciary recipient Johanns for Senate Incorporated in row 14 of column L in Table 1.

(2) Donation from Mark R. Patterson (row 289, column D) to primary recipient Merrill Lynch & Co. PAC (row 289, column I), donation from the latter to secondary recipient Securities Industry and Financial Markets Association PAC (row 289, column J), donation from the latter to tertiary recipient Continuing a Majority Party PAC (row 289, column K), and a donation from the latter to quadruciary recipient Lee Terry for Congress in row 289 of column L in Table 2.

Quadruciary recipients do not donate funds to other organizations in either the Koch Industries or TD Ameritrade networks.

Summary Regarding Primary, Secondary, Tertiary, and Quadruciary Recipients

The examples above of the primary, secondary, tertiary, and quadruciary recipients of monetary funds for columns I through L are selected as a means to clarify how the spreadsheets of Tables 1 and 2 are formatted, not as an attempt to capture the extensive set of different routes through which political organizations can obtain funding from the Koch Industries and TD Ameritrade networks. The examples clarify how to read Tables 1 and 2, and those tables clarify how U.S. Senator Mike Johanns and U.S. Representative Lee Terry received campaign contributions from different sequences of PAC donations in a vast interconnected network where directors of the Koch Industries and TD Ameritrade corporate networks contributed to the original funds of each sequence. The persons who made the contributions to the original funds are identified by their positions with the corporations and social organizations in columns C through G in Tables 1 and 2. In turn, many primary-recipient PACs made decisions to send contributions to secondary-recipient PACs; the secondary PAC to the tertiary PAC; and the tertiary PAC to the politicians' campaign funds. Thus, information about direct payments to a campaign fund does not reveal the network sequence of campaign contributions from a primary to a quadruciary campaign fund. As shown in Tables 1 and 2, particular political campaigns receive funds that originate from the same source in the same election cycle, separately as a primary recipient, as a secondary recipient, as a tertiary recipient, and as a quadruciary recipient. When there is a quadruciary recipient, it means that there is a set of five entities (decision nodes) that have made decisions to make and accept contributions along the sequenced conduit; the person who is the original contributor plus the primary, secondary, tertiary, and quadruciary recipients.

Discovery of New Findings

This study reveals new findings that the authors have not found in prior studies reviewed, as follows.

First, the conduits that carry monetary donations to election campaigns have not been found in past studies.

Second, a new finding is the specialization of corporate board members with regard to the servicing of other corporate boards or social organizations. Such specialization might have been expected, as specialization is the norm in organizations; however, it has not been noted in past studies. We stated earlier that J. Peter Ricketts of TD Ameritrade and David H. Koch of Koch Industries specialize in taking positions with social organizations rather than being active in serving on corporate boards, while others on their boards serve on a number of corporate boards. J. Peter Ricketts also specializes as a member of the TD Ameritrade board in being involved with political PACs more than other TD Ameritrade directors. Not all the corporations studied here practiced such specialization. Other directors who did specialize (see Table 2) are: J. Brett Harvey with Barrick Gold Corporation, Abigail S. Wexner with Limited Brands, Inc., and John Raymond Tozzi with EnerCrest, Inc. all of whom specialize in being involved with social organizations; and Mark R. Patterson with Broadpoint, Gleacher Securities Group and David L. Hauser with Enpro Industries, Inc. both of whom specialize in being involved with political PACs.

Third, some PACs appear to specialize as screening organizations to determine what PACs and campaigns are appropriate to receive money from other PACs that appear earlier in

funding sequences in the networks. Specialization for the development of such organizational niches should be expected. An example is Blue Dog PAC. Although the number of Democrats in the Blue Dog Coalition has had a substantial decrease in membership in the House of Representatives (due to failure to be reelected), the Blue Dog PAC continues to be a major source of PAC funds. It specializes in taking funds from a large number of persons and other PACs and provides funds to a large number of different PACs and campaigns through numerous different funding conduits in both the Koch Industries and TD Ameritrade networks.

Fourth, information in the political networks in columns I, J,K, and L of Tables 1 and 2 demonstrates that Koch Industries and TD Ameritrade networks both make political contributions to some of the same PACs that support interconnected conduits of campaign financing that carry funds to the same political campaigns. For those columns, there are 256 different political organizations for the Koch Industries network and 238 different political entities for the TD Ameritrade network, and 146 are the same organizations for the two political networks. The entries in each network are formed into thousands of different combinations of political campaign conduits for each network, as identified in those columns. The most prominent PACs and campaigns in Table 1 for the Koch Industries network are (in alphabetical order) Blue Dog, Freedom Fund, Johanns for Senate Incorporated, Koch Industries PAC, Nebraska Leadership PAC, Powerpac of the Edison Electric Institute, and The Freedom Project. The most prominent PACs and campaign in Table 2 for the Ameritrade network are Blue Dog; COALPAC, A PAC of the National Mining Association; Dell, Inc. Employee PAC; Duke Energy Corporation PAC; Johanns for Senate Incorporated; Merrill Lynch & Co. PAC; and The Freedom Project. All entries in both of these two lists appear in both political networks.

The closer the two networks move to a real-world political expression of ideological beliefs—that is, into the funding of political campaigns to achieve their ideological goals—the greater the degree of overlap between the activities of the two networks. When the concern is to harness government for common ideological beliefs, the two networks come together. The two networks share only one of the same corporations (Unisys Corp) in their corporate networks and only one of the same social organizations (The Conservation Fund) in their social networks; however, as is clear from Tables 1 and 2, in their political networks, the two networks have many of the same PACs appearing in similar overlapping conduits in both networks that deliver money to the same political campaigns.

A dozen examples of conduits with quadruciary recipients taken from columns I, J, K, and L in Tables 1 and 2 are presented in Table 3 to clarify the commonality between the two

[Table 3 about here]

political networks. Each conduit set contains five entries, with the network and corporate person making the original contribution in the left column and the political campaign receiving the contribution in the right column. Upon inspection of Table 3, it is clear that each conduit entry overlaps with other conduit entries. The Koch network reaches Blue Dog PAC via Koch Industries PAC while the TD Ameritrade network reaches Blue Dog PAC via Dell. The Koch network reaches Powerpac of Edison Electric Institute directly while the TD Ameritrade network reaches Powerpac of Edison Electric Institute via Duke Energy Corporation PAC, and both reach John S. Fund via Powerpac of Edison Electric Institute. The Koch network reaches The Freedom Project via Koch Industries PAC while the TD Ameritrade Network reaches The Freedom Project via COALPAC, A PAC of the National Mining Association. The Koch network reaches

the American Express Company PAC via the connection between Koch Industries PAC and The Freedom Project while the TD Ameritrade network reaches the American Express Company Express PAC via the connection between the Merrill Lynch & Co. PAC and the Growth and Prosperity PAC. These examples from Table 3 represent what is common in Tables 1 and 2, and demonstrate that the Koch and TD Ameritrade networks actively participate with many of the same PACs. It is clear upon inspection of columns I, J, K, and L in Tables 1 and 2 that such common participation multiplies profusely. Corporate networks that may not have reasons for interlocking directorships with each other in their corporate activities come together to influence elections and public policy where they share common political interests.

Finally, this research clarifies that corporations are not just concerned with making political contributions to PACs representing their own industry. Instead, as demonstrated in columns I, J, K, and L of Tables 1 and 2, they make contributions to many different kinds of PACs, and those PACs make contributions to more different kinds of PACs. This allows for a broad based net of influence so politicians are getting pressure from many different sources to fulfill a common ideology.

Further Research Needed

Given the findings above, the research about the Koch and TD Ameritrade networks should be extended in order to more fully explain the power of those networks.

One set of research that needs to be completed is to develop the political network established from the initial donations made by the corporations listed in columns C and F in Tables 1 and 2. Tables 1 and 2 contain only the ~~initial~~ donations of the persons listed in column D. These tables do not include donations made by the corporations in columns C and F. That

research should be completed in order to further define the power of these corporate networks on the state. None of that information is in this study.

Second, research that should be completed is to extend the political network developed by donations for PACs, political campaigns, and advocacy research within Nebraska. The political information in Tables 1 and 2 is concentrated mainly on campaigns for federal offices. It did not deal with the funds going to campaigns for state and local offices—the governor, state senators, county clerks, and so forth. For example, Nebraska Attorney General Jon Bruning established a “leadership PAC” named Citizens for a Better Nebraska. Such PACs are formed by politicians to help fund the campaigns of other politicians in an effort to prove party loyalty and to further their goal of being elected to a higher office. Citizens for a Better Nebraska received funds from Koch Industries Inc. and distributed funds to campaigns within the state for city, county, and state offices, as well as to Republican parties in some counties.

Third, a study of Tables 1 and 2 reveals that although most political campaign funds are received through secondary, tertiary, or quadruciary conduits, some BOD donors contribute directly to campaigns. It appears, as a causal observation of Table 3 reveals, that many different conduits deliver to the same campaigns, and that the conduits overlap in such a manner so that coordination is obvious. Other events being equal, the more links in the conduit, the more money that is amassed to give to a campaign, thus giving the contributors more influence. Or, stated differently, a quadruciary delivery exhibits more power than a secondary one. Also, as the numerous conduits come together, there is more political clout to win elections and gain influence with the official who is elected. So why do some BOD donors make contributions only as primary donations? More research is needed to answer that question.

Fourth, if the kind of data found in this paper can be collected for a series of election cycles, it makes sense to conduct Boolean network analysis such as centrality, betweenness centrality, and reachability so those network coefficients can be included as variables in a long-term statistical analysis.

Concluding Remarks

In conclusion, we see that the analysis here confirms what is already contained in prior scientific literature in some cases and discovers new findings that we should expect to see replicated in studies in other states. Three confirmations of past analysis regarding interlocked corporate boards are as follows.

First, the finding about corporate networks formed through interlocking corporate boards of directors is consistent with prior literature on the subject (although the database here for Koch Industries and TD Ameritrade is new). Corporate boards of large corporations are sufficiently interconnected to provide for planning among the corporations in the network. There appears to be little overlap between the Koch Industries and TD Ameritrade corporate networks; as indicated by comparing Tables 1 and 2, Unisys Corp. is the only corporation common to both corporate networks. Yet, the BOD network of each is extensive and highly interlocked through a set of corporate linear triples, as displayed in Figure 2.

Second, the finding about social networks formed between corporations and social organizations by the same persons holding decision-making positions in corporate and social organizations are consistent with prior literature on the subject (although the database here for Koch Industries and TD Ameritrade is new). The interconnected corporate and social networks make it possible for corporate directors to influence the ideological complexion and planning of

the social organizations. It also helps to maintain the ideological norms of the directors who are regularly in contact with each other through the board activities of both the corporate and social organizations, as is demonstrated with their political contributions.

Third, institutionalists, and sociologists and political scientists in general, have found that social activities are best explained by understanding the activities within the social systems in which they are embedded (Polanyi 1957; Knoke 1990). As this study has found, “social ties among actors have significant consequences for political action that go beyond anything that can be explained in terms of attributes measured at the level of the individual actor” (Burriss 2005, 279). Therefore, consistent with current literature, the general finding in this study is that the activity, in terms of political contributions, is consistent with the needs of the corporate and social networks.

New conclusions from this analysis are as follows.

First, although the literature reviewed does not include the relationship between different corporate networks that influence elections in a state through overlapping PAC contributions, the findings here are consistent with the political science theories of Paul A. Sabatier and Hank C. Jenkins-Smith regarding the importance of normative beliefs and ideology for the successful advocacy of government policy. Ideology is an integrated set of integrated normative beliefs, and the studies of Sabatier and Jenkins-Smith found that “stakeholder beliefs and behavior are embedded within informal networks . . .” (Sabatier and Weible 2007, 196). In the study here, beliefs and behavior of the Koch Industries and TD Ameritrade networks are embedded in the informal networks found in Figure 3 and Tables 1, 2, and 3. To enforce coordinated behavior within the networks, actors form groups as “a set of people from a variety of positions . . . who

share a particular belief system . . . and who show a non-trivial degree of coordinated activity over time” (Sabatier 1999, 267). The persons identified in Figure 3 and Tables 1, 2, and 3 who hold a variety of positions within the corporate and social networks of Koch Industries and TD Ameritrade, mainly share a particular belief system and show a non-trivial degree of coordinated activity through political donations to PACs in order to elect government officials consistent with their policy beliefs for government. Sabatier and Jenkins-Smith also found that policy beliefs are powerful in determining government activities because advocacy groups build coalitions around the policy beliefs (1999, 142-143). Such power is expressed by the overlapping PACs in the network coalitions articulated in Tables 1 and 2 and 3.

Second, we can observe a real-world example of what sociologists refer to as a communication network that keeps a system functioning. The communication network observed here is a system of interlaced monetary channels that have been woven together for the communication of the networks’ ideological beliefs through monetary contributions. In other words, money speaks.

Third, it is clear from this analysis that the political funding conduits reach from the global centers into state election campaigns, thereby circumventing a system of federalism. The same is true with regard to funding for foundations, research centers, and advocacy groups. Communities do not get to make decisions about corporate board membership, campaign financing, and the channels that carry financing into the electoral processes. When the economic power of two global networks like that of Koch Industries and TD Ameritrade is brought to bear on the selection of political leaders, the citizens of the state are at a disadvantage because their needs are infrequently considered in lawmaking and delivery of essential public services such as child welfare, public education, environmental protection, and so forth.

Finally, as a reviewer stated, this work “gives powerful evidence that BOD interlocks (or intralocks) have morphed into machines for the consolidation and exercise of political power among entities with coalescent economic interests. This aspect of the problem is not discussed in Munkirs.”

Notes

1. Koch Industries Inc. and TD Ameritrade Holding Corporation were not selected because they are dominate industries in the state of Nebraska. Their commercial activities are spread globally, to include Nebraska. They were selected because they are major political actors in the state.

Media sources have recognized the monetary devotion of the Koch brothers to conservative causes for some decades. More recently, “the brothers have funded opposition campaigns against so many Obama Administration policies—from health-care reform to the economic-stimulus program—that, in political circles, their ideological network is known as the Kochtopus” (Mayer 30 August 2010). They have also understood that if they are to have clout in Washington, D.C., it is important to influence the election of members of Congress. That has involved them in state campaigns for Congressional offices across the nation.

As the Koch brothers are active in most states, they join in common political efforts with other groups that have similar ideological interests. In Nebraska, it is with the Ricketts family. In other states, they are allies with others, for example, with Art Pope’s organization in North Carolina, (Mayer 30 August 2012).

Koch brothers corporations and foundations have taken full advantage of the *Citizens United* Supreme Court decision (January 21, 2010) that struck down laws which limited or

prohibited direct spending that corporations and nonprofit organizations can contribute to political campaigns. That decision has unleashed huge campaign contributions from the Koch and Ricketts nonprofits and corporations. “The most aggressive expansion of the Koch Brothers’ effort to influence public policy has come through the Americans for Prosperity, which runs both a charitable foundation and a grass-roots-activists group. . . . David Koch is chairman of the Americans for Prosperity Foundation” (Mayer 30 August 2012).

TD Ameritrade was originally founded in Nebraska by Joe Ricketts who is the patriarch of the Ricketts family, and, until recently, much of their campaign activity was directed toward Nebraska, with a son J. Peter Ricketts currently serving as a member of the Republican National Committee from Nebraska. More recently, the family has become more active nationally especially with activities countering President Barack Obama. “Mr. Ricketts [Joe] is increasingly putting his fortune to work in conservative politics” (Zeleny and Rutenberg 17 May 2012). For example, he contributed to all seven of the Republican presidential candidates at some point during the 2011-12 primaries and to the libertarian candidate for president (Hartman 18 May 2012).

2. Studies have confirmed that corporations at each end of a linear quadruple (four corporations in a row connected by directorship interlocks) are fully effective at coordinating decisions and plans through the two middle corporations: thus, those in a linear triple would also be equally effective (see Hayden, Woods, and Kaya).
3. If there are three corporations, A, B, and C, they are counted as a linear triple if the three are connected by a path whereby, for example, corporations A and B share a director or directors, and B and C share a director or directors. In many path studies the order along a

path is important, and, therefore, A—B—C would be counted as one triple and A—C—B as an additional triple because its order is different. However, in this study they are counted as only one triple set because if A and C can effectively reach each other for decision making in the first set, then A can effectively coordinate with B and C, so the corporations are already capable of working together. They can coordinate activities and plans without respect to the order of the three corporations in the linear set.

4. The intent in this paper is to emphasize network structure so dollar amounts are not included. The dollar amounts of contributions donated to political campaigns are available from the authors and at the permanent website address where Tables 1 and 2 are available.
5. The PACs have sources of contributions other than what is shown in Tables 1 and 2, and make donations to PACs and campaigns other than what is shown in Tables 1 and 2. The flow of a monetary conduit is analogous to a river in a regional water system. The river channel receives water from different sources (aquifers, rain runoff, streams, other rivers) and distributes water to other sources (municipal water systems, other rivers, irrigation, aquifers, wetlands) A river's flow would be different without the contributions and distributions of each. It is the system network that is important for understanding the final flow with rivers and campaign contributions. The interest here is to record all the different conduit sequences and to observe how the sequences overlap with each other in order to form the overall networks relevant to our concerns here for Koch Industries and TD Ameritrade.

6. The American Legislative Exchange Council is a politically conservative organization devoted to research, writing legislative bills, and designing legislative strategies in order to influence state laws and policies consistent with the wishes of its corporate donors.

Appendix A: Summary of Selected Interlocking Directorate (ILD) Studies

<i>Discipline</i>	<i>Author(s)</i>	<i>Orientation/Approach</i>	<i>Method of Investigation</i>	<i>Unit of Investigation</i>	<i>Key Findings</i>
Accounting (2002)	April Klein	Board Characteristics—inside and outside members; Investigates the possibility, not the existence of interlocks	Secondary data of firm earnings and board, audit committee membership; Regression analysis	Top U.S. public corporations	Reductions in board independence correspond with increasing abnormal accruals
Political Science (1988)	Mark S. Mizruchi and Linda Brewster Stearns	Board Characteristics—what firm and economic conditions lead to the appointment of financially-linked board members.	Secondary data; Longitudinal Event History analysis from 1956 to 1983	22 large U.S. industrial corporations	Declining firm solvency, profit rates, and the corresponding increasing demand for capital with falling interest rates and demand for capital with business cycle contractions are associated with appointment of financial directors.
Sociology (1996)	Mark S. Mizruchi	Reviews the investigated determinants—including collusion, cooptation and monitoring, legitimacy, career advancement, social cohesion; and the consequences of interlocks—corporate control, network embeddedness	Review of past research across disciplines and approaches	Varies across articles reviewed	There are two main criticisms of interlock research: interlocks as represented by quantitative indicators fail to account for corporate behavior; and that quantitative indicators are not useful and interlocks fail to represent board dynamics and inter-firm relations.
Sociology (2000)	Thomas A. Lyson and Annalisa Lewis Raymer	Board Characteristics—demographic and social characteristics	Secondary data of board members and their characteristics	Ten largest U.S. food and beverage firms	The largest U.S. food and beverage firms are linked through a variety of indirect social interlocks formed by board members
Political Science (1992)	Gerald F. Davis and Suzanne K. Stout	Firm monitoring of performance and subsequent actions of interlocked actors	Secondary data, Regression analysis	U.S. Fortune 500 firms in the 1980s	There is no association between the presence of a financial interlock on a firm's board and the likelihood of the firm being a target of a takeover bid.

<i>Discipline</i>	<i>Author(s)</i>	<i>Orientation/Approach</i>	<i>Method of Investigation</i>	<i>Unit of Investigation</i>	<i>Key Findings</i>
Economics (1979)	Richard Newfarmer	Transnational corporation Interlocks are investigated as a means of gaining market power	Secondary data of 100 largest consolidated electrical enterprises	114 TNCs in Brazil's electrical industry	Interlocks are found to be a possible positive contributor to market power, which in turn accounts for a portion of the growth of TNCs beyond technology and efficiency
Economics (2002)	F. Gregory Hayden, Kellee Wood, and Asuman Kaya	Interconnections and power of firms regarding policy.	Secondary data, creation of power blocs and use of matrix analysis	Central Interstate Low-Level Radioactive Waste Compact (CIC)	The CIC is connected through a vast and dense network of interlocks through Power Blocs with leading financial and Fortune 500 firms.
Management (1981)	F. David Schoorman, Max H. Bazerman and Robert S. Atkin	Interlocks as a form of uncertainty reduction	Review of past research across disciplines and approaches	Varies across articles reviewed	Interlocks may lead to reductions in environmental uncertainty through horizontal coordination linking competitors, vertical coordination linking an organization with suppliers or customers, expertise, and enhanced reputation
Economics (1969)	Peter C. Dooley	Interlocks among large firms as a means of attaining capital and possibly violating the 1914 Clayton Act	Secondary data from 1935 and from 1965; Regression analysis	200 largest nonfinancial and 50 largest financial firms in 1935; top 250 largest firms in 1965	Interlocks tend to be long lasting. Larger companies have more interlocks. The need for finance is a central focus in the appointment of interlocks with financial firms
Management (1995)	Donald O'Neal and Howard Thomas	Strategic role of board directors; including interlocks brought to the position	Interviews	Convenience sample of board members	Selection of new board members is guided by the interlocks which candidates can provide
Management (2000)	Kevin Au, Mike W. Peng and Deins Wang	Resource dependence as a reason behind the existence of interlocks among four types of firms with critical relationships	Secondary data from 1996	200 largest firms in pre-1997 Hong Kong	For differently originating firms, the presence of Chinese, British, and American board members varies

<i>Discipline</i>	<i>Author(s)</i>	<i>Orientation/Approach</i>	<i>Method of Investigation</i>	<i>Unit of Investigation</i>	<i>Key Findings</i>
Sociology (1981)	Thomas Koenig and Robert Gogel	Class hegemony theory is used to show the current majority of outside directors forms linkages that allow power to be shared within social relationships	Theoretical presentation to explain previously collected secondary data	Fortune 500 firms	Interlocks undermine management control, instead creating a shared power system through social relationships
Sociology (1979)	Thomas Koenig, Robert Gogel, and John Sonquist	Chosen director characteristics when replacement occurs due to death—are specific patterns or linkages maintained?	Secondary data of director characteristics; Regression Analysis	Largest American firms	Specific interlocks between firms are not replicated; but interlocks among some city-based groups are maintained
Journalism (2004)	Soontae An and Hyun Seung Jin	Inter-firm resource dependence as a reason for forming financial interlocks	Secondary data; Pooled cross-sectional time series analysis	13 publicly traded newspaper companies	A newspaper firm's financial situation is associated with the subsequent appointment of directors with financial linkages
Sociology (1998)	Clifford Kono, Donald Palmer, Roger Friedland and Matthew Zafonte	Interlocks are spatial phenomena with spatial determinants and causes; thus local and non-local interlocks have different correlates	Secondary data; Poisson and negative binomial count regression analyses and multinomial logistic regression analysis	Largest U.S. industrial corporations in 1964	The location of a firm's headquarters and upper-class clubs vis-à-vis other firms', location of production facilities, and location of the firm's owners impact interlocks
Sociology (2007)	Rachel A. Schwartz and Thomas A. Lyson	Direct interlocks between large competing companies forms a cohesive corporate community capable of consolidating power among a powerful few	Secondary data; matrix of interlocks created	8 leading food retailing companies in the U.S.	The existence of few direct interlocks between the top food firms suggests this sector is still regionally dominated

<i>Discipline</i>	<i>Author(s)</i>	<i>Orientation/Approach</i>	<i>Method of Investigation</i>	<i>Unit of Investigation</i>	<i>Key Findings</i>
Sociology (1997)	Gerald F. Davis and Henrich R. Greve	Interlocks (both social and geographical) as outcomes of network structures and subsequent board governance diffusion	Secondary data; Heterogeneous diffusion model	442 largest Fortune 500 U.S. industrial firms in 1980; 50 largest public banks in 1986; 25 largest retail, and transport firms in 1986	The governance practice of poison pills spread rapidly through board-to-board diffusion while golden parachutes spread slowly through geographic proximity.
Governance and Ethics (2003)	Chin-Huat Ong, David Wan and Kee-Sing Ong	Resource Dependency and Bank Control Theory	Secondary data; Regression analysis	295 public firms in Singapore	Market capitalization, board size, total assets, return on assets, return on sales, profit, and nature of firm correlate with board interlocks
Governance and Ethics (2009)	Jelena Petrovic	Impact of culture on functioning of interlocks	Qualitative interviews	13 board members in Serbia	The understanding of interlocks impact on board functioning developed in Anglo-Saxon nations does not explain interlocks elsewhere
Communication (2006)	Davide Carbonai and Giovanni Di Bartolomeo	Indirect interlocks as a means of competitor collusion and function as tacit agreements that serve to violate the assumptions of competitive markets	Secondary data; Graph theory with principal component analysis	Italian non-life insurance industry; 187 firms in 1994	Nearly a third of the market is comprised by only 9% of firms—the same firms which are members of indirect interlocks
Political Science (1996)	Edward J. Zajac and James D. Westphal	Interaction and impact of board membership and CEO power.	Secondary data; Longitudinal regression analysis	Fortune 500 U.S. firms in 1986	CEOs may choose directors based upon their interlocks in order to enhance management control of firm; within-group ties are more prevalent than between-group

<i>Discipline</i>	<i>Author(s)</i>	<i>Orientation/Approach</i>	<i>Method of Investigation</i>	<i>Unit of Investigation</i>	<i>Key Findings</i>
Economics (2006)	Lue Mampaey and Claude Serfati	Importance of financial interlocks in the consolidation and system power of the U.S. armament industry	Secondary data; no statistical analysis	Leading U.S. armament industry firms	The evolution of interconnections between the finance and armament sectors is leading a self-governing system
Management (2001)	Mike W. Peng, Kevin Y. Au and Denis Y.L. Wang	Resource dependency theory and board characteristics; suggest that MNE interlocks differ systematically from non-MNE interlocks in Thailand	Secondary data; regression analysis	Top 200 public firms in Thailand	MNEs in Thailand have more densely connected interlocks, are more central in interlock networks, appoint more military directors
Management (2001)	Loizos Heracleous and John Murray	Develop inter-organizational network typologies based on organizational interdependence, network durability, formalization of ties, and networking scope	Theoretical with propositions for further investigation	Review previous literature	Suggest that key aspects of East Asia directors' roles differ based on the type of network they are involved in based upon the developed typology
Economics (1980)	Johannes M. Pennings	Investigates interlocks from both resource dependency with financial firms and competitors as well as a means of competition reduction	Secondary data; Regression analysis	800 large public U.S. firms	Interlocks impact organizational effectiveness; the competitiveness of and existing interlocks within an industry impact future interlocks
Sociology (1983)	Ronald S. Burt	A cooptation approach to interlocking directorates within large, U.S. firms	Secondary data; Regression analyses and structural path analyses	Large public U.S. firms	Interlocking directors create ties to other firms that allow for coordination of pricing strategies; defeating the forces of market competition through explicit inter-firm coordination
Sociology (2004)	Brian Uzzi and Ryon Lancaster	Embedded relationships promote private-information flows and informal governance	Interviews and secondary data; Random effects pooled cross-sectional time series regression analysis	250 large U.S. law firms; selected interviews	A law firm's embedded relationships through lawyers serving as board members on other organizations' boards influence prices by prompting private-information flows and informal governance structures adding unique value to the good-and services provided. These ties can both increase and decrease prices for complex and basic legal services.
Economics (1984)	Michael Useem	ILDs are a means of creating and maintaining an inner circle of individuals able to communicate, and maintain control over (political) environmental uncertainties	Secondary data, Regression analysis	National case studies of British and U.S. firms and donations to political parties	Well-connected directors and corporations are able to communicate and act upon their corporate political interests.

<i>Discipline</i>	<i>Author(s)</i>	<i>Orientation/Approach</i>	<i>Method of Investigation</i>	<i>Unit of Investigation</i>	<i>Key Findings</i>
Sociology (1989)	Davita Silfen Glasberg	Bank hegemony theory	Secondary data, interviews; Regression analysis	6 case studies of large U.S. industries, firms, and banks	The majority of ILDs are formed with financial institutions. This structural unification through directors, together with control over capital flows, creates bank hegemony and empowers the banking community to impose its perception of economic and political reality.
Sociology (1970)	Robert Fitch and Mary Oppenheimer	Bank hegemony theory; interlocks as a means of inter-firm control	Theoretical with antidotal evidence	Case studies across industries and firms	Financial institutions may be able to dictate policy, by threatening or actually removing executives through positions as board members. It is also suggested that industry concentration gives financial institutions new leverage over industrial firms.
Management (2003)	Amy J. Hillman and Thomas Dalziel	Integration of resource dependency and agency theory	Theoretical paper with propositions for relationships and moderating variables	Theoretical only	Board capital serves to both monitor managers on behalf of shareholders and to provide managers with resources such as information; these functions are moderated by board incentives.
Management (1990)	James R. Lang & Daniel E. Lockhart	ILDs are indicators of inter-firm network ties formed due to resource dependency	Secondary data; Regression analysis	longitudinal study of the airline industry	Firms experiencing declining profits are more likely to appoint a financially-linked board member than firms whose profits did not decline.
Economics (1976)	David Bunting	Bank hegemony theory	Secondary data, Regression analysis	Sample of largest public U.S. Firms	Profitability and ILDs have a curvilinear relationship: at first, profitability increases with increasing interlocks; however, as interlocks continue to increase, profitability begins to decline.
Political Science (1987)	R. Jack Richardson	Resource dependency and information flows leading to coopition	Secondary data of 1963 profits and 1968 interlocks; Regression analyses	204 large public Canadian firms	Study found little to no effect of past firm ILDs on future profitability; but did find a negative impact of past profits on future interlocking. Less profitable firms tend to have more financial board members than more profitable firms.

<i>Discipline</i>	<i>Author(s)</i>	<i>Orientation/Approach</i>	<i>Method of Investigation</i>	<i>Unit of Investigation</i>	<i>Key Findings</i>
Sociology (1985)	Joseph Galaskiewicz, Stanley Wasserman, Barbara Rauschenbach, Wolfgang Bielefeld and Patti Mullaney	ILDs are a strategy of market cooptation and are based on the associated prestige of firms and/or CEOs	Secondary data from many sources regarding both firms and directors; Logit regression analyses including matrix analyses	116 manufacturing corporations in a metropolitan area during 1978, 1979, 1980	Choice and subsequent make-up of metropolitan based ILDs are not influenced by the market position of firms, dependencies across industrial sectors, or labor and consumer markets. CEOs of the region's largest firms, who were considered "social elites," tended to serve on many local boards and sit on those firm's boards whose CEOs had similar status.
Sociology (1974)	Michael Patrick Allen	ILDs are cooperative strategies to reduce environmental uncertainty	Secondary data; Regression analysis	200 largest nonfinancial and 50 largest financial firms between 1935 and 1970	The size of a firm is related to the frequency of ILDs after controlling for the size of its board. Financial firms are members of more ILDs than nonfinancial firms due to their importance for capital resources. These interlocks are increasing. A negative relationship is found between resource debt dependency and financial interlocks. Firms with local market environments maintain a greater proportion of ILDs at the local level than do national firms; although local interlocks are dwindling.
Political Science (1972)	Jeffrey Pfeffer	Boards aid firms in dealing with uncertain environments through cooptation	Secondary data; Regression analysis	80 nonfinancial firms, random sample	Board size and composition are shown to be related to factors measuring the firm's need for coopting environmental sectors. The authors propose there is an optimum board structure.

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Figure 1. Structure of Overlapping Corporate Linear Triples

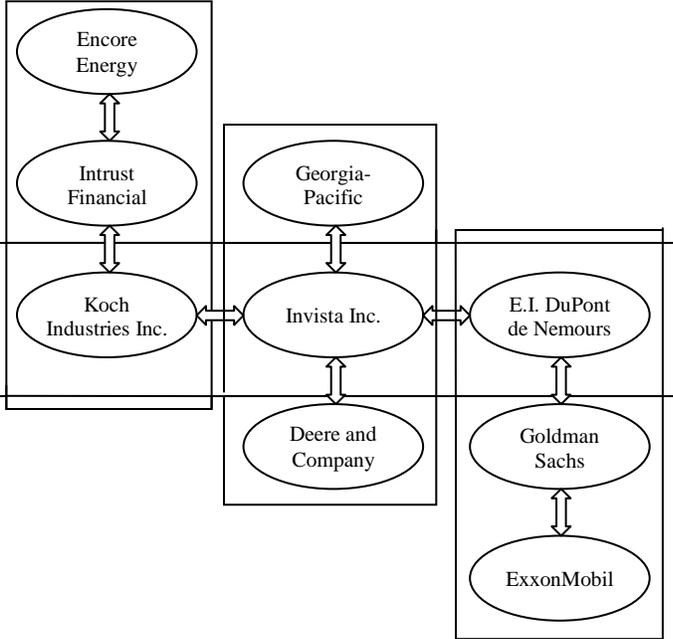
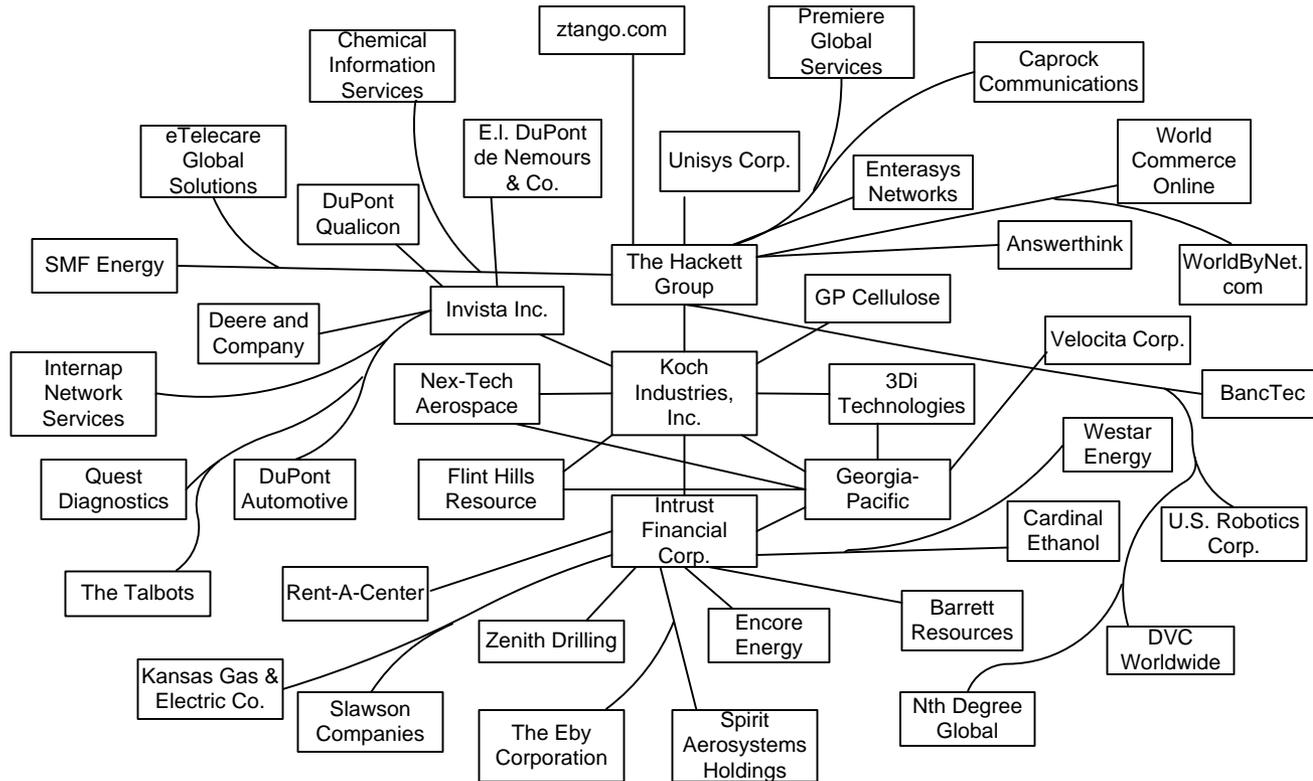


Figure 2. Corporate Network of Koch Industries, Inc.



Source: See Table 1.

Figure 3. Summary Examples from Tables 1 and 2.

C. Corporation Name	D. Officer/Director	E. Title/Position	F. Interlocked Corporation Name	G. Interlocked Social Organization	H. Title/Position	I. Primary Monetary Recipient	J. Secondary Monetary Recipient	K. Tertiary Monetary Recipient	L. Quadruciary Monetary Recipient
TD Ameritrade Holding Corporation	J. Peter Ricketts	Board of Directors	Alumni Capital Network	The Platte Institute for Economic Research, Inc.	Board of Directors/President				
TD Ameritrade Holding Corporation	J. Peter Ricketts	Board of Directors		American Enterprise Institute	Board of Trustees				
TD Ameritrade Holding Corporation	J. Peter Ricketts	Board of Directors				For Our Republic's Traditions	National Republican Congressional Committee	Lee Terry	
TD Ameritrade Holding Corporation	William H. Hatanaka	Board of Directors	TD Waterhouse Canada, Inc.	York University Foundation	Board of Directors				
Koch Industries, Inc.	Joe Moeller	Board of Directors	Invista Inc.	University of Tulsa	Board of Trustees				
Koch Industries, Inc.	Joe Moeller	Board of Directors				Koch Industries Political Action Committee	21st Century Majority Fund	Johanns for Senate Incorporated	
Koch Industries, Inc.	Joe Moeller	Board of Directors				Koch Industries Political Action Committee	Blue Dog Political Action Committee	Coca-Cola Refreshments USA, Inc. NonPartisan Political Action Committee for Good Government	Johanns for Senate Incorporated