FORMER GOVERNMENT OFFICIALS AS OUTSIDE DIRECTORS: THE ROLE OF HUMAN AND SOCIAL CAPITAL

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The resources that individual directors bring to corporate boards are largely a function of their human and social capital. Although research has explored the value of having former federal government officials join boards, we study factors that make one particular former government official more, or less, attractive as a director than another. Specifically, we explore the depth, breadth, and deterioration of former government officials’ human and social capital and find that these dimensions of human and social capital are influential predictors of corporate outside directorships.

The number of public company boards that include former government officials has increased dramatically in recent decades (Korn/Ferry International, 2000). In 1973 only 14 percent of large corporate boards included former government officials, yet by 1998 this number had grown to 53 percent. During this same period, the average number of outside directors per board shrank from 16 to 9. This level of board participation strongly suggests that former government officials bring value to corporate boardrooms. However, we ask what makes one former government official more attractive as a board member than another? Our study focuses on former federal government officials, including former presidential cabinet secretaries, senators, and representatives.

Research has indicated that there are firm-level benefits to having former government officials as corporate directors (Hillman, 2005; Hillman & Hitt, 1999). A major shortcoming of this research, however, is that it treats all directors from a particular occupation (e.g., government service) alike without exploring what makes one more valuable than another. To address the issue of why some former government officials are more attractive to corporate boards than others, we develop theory regarding the depth, breadth, and deterioration of former government officials’ human and social capital. To do so, we utilize insights from resource dependence theory as well as research on human and social capital.

In our study we strive to make three contributions. First, our level of analysis—the individual director candidate—examines the issue of what makes a particular candidate attractive as a corporate director. We view this as an important contribution because extant theory has not moved much past the notion that firms should “select resource-rich directors” (Boyd, 1990), or that having directors from specific occupations (e.g., finance) is valuable (Mizruchi & Stearns, 1994). If a director’s “capital” (both human and social) is critical to a board’s resource provision function (Hillman & Dalziel, 2003), a more detailed understanding of what differentiates one director candidate from another is needed. Our focus here is on former government officials, yet we believe the dimensions of human and social capital identified here (depth, breadth, and deterioration) should be generalizable to director candidates from other professions as well.

The second contribution of our study is to examine an understudied aspect of business-government linkages; in particular, the placement of former government officials into the public sector as outside directors. Ideally, business and government operate with a degree of isolation from one another...
FORMER GOVERNMENT OFFICIALS AS OUTSIDE BOARD CANDIDATES

A key assumption of much governance research is that “when an organization appoints an individual to a board, it expects the individual will come to support the organization, will concern himself with its problems, will variably present it to others, and will try to aid it” (Pfeffer & Salancik, 1978: 163). A large body of research has supported this assumption. For example, boards have been found to provide valuable expertise, advice, and counsel to firms (Baysinger & Hoskisson, 1990; Carpenter & Westphal, 2001; Westphal, 1999); to serve as conduits for information (Haunschild & Beckman, 1998) and as links between the firm and important stakeholders (Provan, 1980; Zald, 1967) and resources (Goodstein & Boeker, 1991; Mizruchi & Stearns, 1994); to aid in strategy formulation and other important strategic decision making (Judge & Zerfath, 1992; Lorsch & MacIver, 1989); and to provide legitimacy and add to the reputation of firms (Bazerman & Schoorman, 1983; Certo, 2003).

Governments have long been acknowledged as critical sources of dependency for firms (e.g., Keim & Zeithaml, 1986; Shaffer, 1995; Schuler, 1996; Schuler, Rehbein, & Cramer, 2002). Nearly every aspect of business is shaped by government regulation, which can significantly modify firms’ opportunity sets. Government policy can affect the competitive positions of firms and influence their future performance by changing the size of markets, establishing entry and exit barriers, providing special tax or subsidy treatments, and altering firm costs through legislation on employment, safety, or environmental protection standards (Gale & Buchholz, 1987; Shaffer, 1995). Government can also be a very large customer (e.g., defense). Given firms’ dependency on government, it is not surprising that many have sought to form links with the government through their boards.

Hillman (2005) argued that the four general benefits derived from directors identified by Pfeffer and Salancik (1978) also apply to the specific context of government officials as directors. She contended that government officials can provide valuable advice and counsel regarding the public policy environment of a firm (see also Hillman et al., 1999); channels of communication to existing government officials, bureaucrats, and other political decision makers; influence over political decisions; and legitimacy. Hillman’s (2005) empirical findings support the notion that firms with government officials on their boards enjoy better financial performance than those lacking such directors. Hillman’s theory treats former government officials as homogeneous, but a purpose of our study is to differentiate among them.
THE INTERCONNECTEDNESS OF HUMAN AND SOCIAL CAPITAL

An individual’s expertise, experience, knowledge, reputation, and skills are defined by Becker (1964) and Coleman (1988) as “human capital,” whereas an individual’s “social capital” refers to “the sum of actual and potential resources embedded within, available through, and derived from, the network of relationships possessed by that individual” (Nahapiet & Ghoshal, 1998: 243). We believe that what makes any given former government official attractive as a corporate director derives from a combination of the person’s human and social capital.1 These attributes are the foundation of value creation for a firm through the resources the directors provide to the firm (Hillman & Dalziel, 2003).

Although some scholars empirically distinguish between human and social capital (e.g., Florin et al., 2003), we join Coleman (1988) and Nahapiet and Ghoshal (1998), who recognized that the two are conceptually and empirically difficult to untangle. Consequently, we do not attempt to isolate the effect of one from the other, or determine whether a director candidate was selected specifically because of either human or social capital. For example, Burt argued that “while human capital is surely necessary to success, it is useless without the social capital of opportunities in which to apply it” (1997: 339). Moreover, he contended that “managers with more social capital get higher returns to their human capital” (Burt, 1997: 339), suggesting an interactive effect. We propose three distinct dimensions of a former government official’s combined human and social capital, in an attempt to explain what makes some director candidates more (or less) attractive to firms in need of outside directors for their boards: depth, breadth, and deterioration.

Depth

The depth of human and social capital refers to the profundity of a directors’ expertise, knowledge, skills, and social networks. Each director brings a different and unique set of attributes and resources to a firm (Kosnik, 1990). The depth of these attributes and resources affects the value of the individual to the firm and thus the attractiveness of the individual as a director candidate.

Hillman, Cannella, and Paetzold (2000) argued that former government officials provide valuable nonbusiness perspectives on issues, intimate knowledge of the public policy process, legitimacy, and access to key decision makers still in government. As described above, the government is a key source of uncertainty for firms (Carroll & Hall, 1987), so having a “government insider” on a board can reduce the transaction costs of securing information about political decisions and potentially provide superior access and/or influence with current government officials.

One way to gauge the depth of a potential directors’ human and social capital is through tenure in government service. Previous work has established a relationship between the length of an employee’s service and selection, retention, and promotion decisions (e.g., McEnrue, 1988; Mills, 1958). An underlying assumption of this work is that vis-à-vis others, those with the deepest experience and most influential networks will be more valuable to their employing firms. However, tenure in government positions varies greatly. For example, in the United States, elected government officials serve either two- or six-year terms (depending on whether they are representatives or senators) and can be reelected for multiple terms. In contrast, federal appointments have an average tenure of 20 months, whereas civil officials in regulatory offices or the judiciary can serve their entire careers. Additionally, many elected federal officials gain experience at the local and state levels before moving to Washington. Therefore, the attractiveness of any given government official’s human and social capital logically flows from the knowledge, experience, and connections gained as a result of his or her time in government service (Baron, 1995). As tenure in government service increases, so will the depth of the individual’s human and social capital. Therefore:

Hypothesis 1. Depth of human and social capital is positively associated with the likelihood that a former government official will join a board as an outside director.

Breadth

The breadth of directors’ human and social capital refers to the extent of the skills, expertise, and
social networks (i.e., connections and relationships) they possess. Depth denotes focused human and social capital, breadth refers to the range or scope of human and social capital (Mizruchi, 1996; Pfeffer, 1972). Thus, director candidates with a broader set of skills, connections, and relationships will be, on average, more attractive as director candidates than those with a narrower set of skills.

Work in political economy suggests that the breadth of jurisdiction is a differentiating factor among government officials and bureaucrats involved in public policy decisions (e.g., Majone, 1996; Niskanen, 1971). Majone’s work on the European Union, for example, indicates the European Commission tries to maximize “its influence, as measured by the scope of its competencies” (1996: 65). Similarly, Bonardi, Hillman, and Keim (2005) argued that regulatory agencies engage in what Lewin (1991) termed “bureau shaping,” wherein they try to expand their jurisdiction over a broader range of issues as a way to gain power.

The breadth of human and social capital indicated by different positions within the government (e.g., cabinet, Senate, House) will make some former government officials more attractive as directors than others because it indicates not only their prestige (which may bring legitimacy to a firm), but also a range of valuable expertise and contacts that can be called upon to serve the firm (Leonard, 1990). For example, senators have a wider range of constituents and legislative issues in which they are called to play active decision-making roles than representatives, who are more specialized in political expertise and geographic influence (Baker, 1989; Oleszek, 1974). However, cabinet members possess the greatest breadth of human and social capital because they interact with the widest number of constituents and other political decision makers on both national and international stages (Cohen, 1988; Mann & Smith, 1981). Therefore:

Hypothesis 2. Breadth of human and social capital is positively associated with the likelihood that a former government official will join a board as an outside director.

Deterioration

Our theory suggests that the depth and breadth of the social and human capital of former government officials increase their capacity to provide resources and, hence, their attractiveness as outside directors. However, as noted earlier, we expect that the value of these resources will atrophy over time, in a process similar to that which occurs to muscles in the human body—without the ability to replenish, muscles deteriorate. Our setting provides a unique opportunity to capture the extent to which a director’s human and social capital may atrophy over time. There is a clear separation between those in government service and those on the outside. For example, to permit individuals to be both cabinet members and corporate directors at the same time would pose very clear conflicts of interest. Once their service ends, they are denied much of the access of sitting government officials and therefore have less policy-shaping influence than sitting government officials. Thus, their ability to access and acquire new human and social capital is severely reduced.

Furthermore, this deterioration is ongoing. For example, while in government service, he or she develops and maintains an extensive network of official and other contacts (Kotter, 1982). This network is needed for effective performance in the government role. Many of those others the person is connected to are powerful individuals inside government, whose cooperation, coordination, and support are needed (Granovetter, 1973)—precisely the same others that make the former government official highly valuable as a prospective director. However, over time, those other powerful individuals retire, are replaced, or simply feel less obligated to respond to the former official. This process greatly depreciates the social capital that the government official accumulated while in office. The effect is not limited to social capital. Indeed, the deep knowledge about key issues and the inner workings of government that the official built during his or her term of service also deteriorates over time, as key issues change, old policies are dropped, others are adopted, and so forth. Thus, we expect that the resources government officials accumulate in office are the most valuable immediately after the officials leave public service and deteriorate over time. Therefore:

Hypothesis 3. The likelihood that a former government official will join a board as an outside director decreases over time.

Finally, to sharpen our understanding of how human and social capital deteriorates after leaving public office, we consider a factor that we believe will importantly affect the deterioration process. If the political party in power (i.e., in control of both the executive branch and the Congress) is not the political party with which the former government official is affiliated, the deterioration of his or her human and social capital is likely to accelerate. As noted, old contacts retire or are replaced, and policies and key issues change. This process is sharply
accelerated when there is a change in power (i.e., from Republican to Democrat).

Shifts in government leadership brought about by the rise of one party relative to the other often lead to important and discontinuous changes in government policy. Because networks consist not only of interpersonal relationships, but also of the resources that can be accessed through those relationships (Lin, 2001), changes in government leadership may sharply depreciate the value of a former government official’s network if the change brings the opposition party to power after he or she leaves office. Moreover, changes in power imply a policy environment that fosters new regulations and laws (Sissell, 2007). Such shifts tend to diminish the value of the specific contacts, expertise, and channels of communication former government officials can offer to the companies on whose boards they serve. Therefore:

Hypothesis 4. When the party in power (i.e., in control of the House, Senate, and executive branch) is not the party that the former government official is affiliated with, the likelihood that he or she will join a board as an outside director decreases.

METHODS

Sample

We studied outside director appointments by identifying all U.S. senators, congressmen, and presidential cabinet secretaries who left office between 1988 and 2003. The unit of analysis in our study is the former government official, defined as a former senator, representative, or cabinet secretary. We chose this specific group because its members possess high name recognition and influence and include both elected and appointed government officials. Further, service at high levels in the federal government implies good national and international access and influence. We excluded lower-level appointed political officers such as undersecretaries, state, or local officials because these have lower visibility and less access and influence. Individual cabinet secretaries were identified through each of the 14 cabinet department websites, and senators and representatives were identified through the Lexis-Nexis congressional database (we included the 100th–107th Congressional terms). The year 1988 was chosen as the start date because it enabled us to examine (1) the impact of an outgoing administration (i.e., the Reagan administration) that placed our sample in the prospective director pool and (2) to utilize electronic archives for data consistency and reliability. We then consulted the Thompson SDC database of U.S. public corporations’ Securities and Exchange Commission (SEC) filings to identify any public company that elected one or more former government officials to their board. Through news accounts in Lexis-Nexis Universe and other public records (e.g., Hoover’s, firm websites), we were able to identify the date (if there was one) a former government official joined a corporate board.

Our sample consists of 66 former cabinet secretaries, 74 former senators, and 96 former representatives, a total of 236 individuals. Our group of former senators and cabinet members includes the entire set of those who served in each respective capacity and subsequently left office during our sample window. However, 433 representatives departed from office during our sample window. We therefore elected to choose 100 of them at random to make our sample more balanced over the three groups. Missing data reduced this number to 96. Demographic data on each former government official were obtained primarily through the Lexis-Nexis congressional database for senators and representatives and the respective cabinet department websites for cabinet secretaries.

Analytical Methodology

We used survival models to test Hypotheses 1, 2, and 4 because our interest lay in analyzing the likelihood of an event—a formal official’s accepting an appointment as an outside director (Cox, 1972; Cleves, Gould, & Gutierrez, 2002). Our methodology models the implications of our independent variables on the hazard rate of joining a board as an outside director. The hazard rate of an event’s occurrence is the instantaneous likelihood that the event will occur at any given time t. We used a class of models known as repeated failure models because the event can be observed multiple times within each cross-sectional unit. Put differently, former government officials can join more than one board. Therefore, the fact that a former government official has joined a board does not remove him or her from the pool available to join more. Indeed, as our models indicate, joining one board sharply increases the likelihood of joining more. Significant coefficients for our independent variables can be directly interpreted as significant impacts on the likelihood of joining a board (Box-Steffensmeier & Jones, 2004; Tuma & Hannan, 1984).

To structure the data set during our sample period, we observed each former government official from the date he or she left office until December 31, 2003, or death, whichever came first. We divided this time span into shorter spells signaled by
the occurrence of four types of events (Tuma & Hannan, 1984), each of which may terminate a span of time: (1) board joining (the key event of interest), (2) death of the person (a censoring event), (3) a change of control of the government from one political party to the other (a censoring event), and (4) December 31, 2003 (a censoring event). For board joining and changes of control, we created new time intervals, with updated independent variables, starting the day after the respective event. For death and the end of the observation period, we censored (dropped from further consideration) the person. Time, in our study, starts on the date of departure from government service.

Measures

**Board joining.** Our key dependent variable (joined board) was set to 1 when we observed a former government official joining the board of a U.S. public corporation as an outside director, and 0 otherwise.

**Depth.** We measured the depth of a former government official’s human and social capital by tenure in government service (service tenure). We obtained data for this measure from the Lexis-Nexis congressional database, which contains detailed biographies on each government official. In calculating service tenure, we included any time in government service at the local, state, or federal level. In most cases, the majority of tenure was accumulated at the last position held in federal government service. In analyses not reported here, we limited our measure to the tenure accumulated in federal government service, and the results remained unchanged.

**Breadth.** To assess the breadth of human and social capital we relied upon the last position of the government official. Previous work on job breadth suggests that job complexity and prestige are influential in assigning an overall assessment of breadth (Treiman, 1977; Xie & Johns, 1995). Accordingly, we expected presidential cabinet members to have the greatest breadth of human and social capital because their jobs involve the broadest range of constituents and interests; cabinet members are responsible at the national and sometimes international levels as members of the executive branch (Cohen, 1988; Mann & Smith, 1981). Thus, we categorized each individual on the basis of his or her last position before exiting federal service (cabinet, Senate, or House) as a set of three indicator variables (coded as 1, indicating membership in the category, and 0 otherwise).

**Deterioration.** To capture whether a former government official’s likelihood of accepting an outside board appointment depreciates over time (Hypothesis 3), we modeled the hazard function stratified by the former official’s breadth of human and social capital after removing the impact of chronological age.

To further capture changes in the environment hypothesized to diminish the value of a former government official’s human and social capital (Hypothesis 4), we initially created three dummy variables to identify whether the former government official was of the same political party as the one in control for each branch of government: Senate, House, or White House (e.g., for a Democrat senator, we asked, “Are Democrats in charge of the House, Senate, or White House?” We coded the answers as 1, “yes,” and 0, “no.”). We then created our time-varying predictor, opposition party in power (coded as 1 if none of the three branches of the government were controlled by the individual’s political party affiliation, and 0 otherwise).

**Control variables.** We controlled for individual-level characteristics shown to be influential in previous work, including political affiliation (Republican, prestigious education (Finkelstein, 1992); chronological age, business experience prior to government service, other board experience after leaving government but before the start of the specific observation, and policy expertise. Policy expertise comprised 17 categories (see Table 2) ranging from “Agriculture” to “Veterans Affairs” and was identified for cabinet secretaries by their re-

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2 House districts are redrawn every ten years, which works to aggregate similar constituent interests together, thus concentrating a representative’s constituents.

3 During our observation window, the Senate and House are correlated identically, as either Republicans or Democrats controlled both bodies at all times from 1989 to 2003. Both were under Democrat control from January 16, 1989, through January 15, 1995, and both were under Republican control from January 16, 1995 until the end of our observation period on December 31, 2003.

4 This variable is always 0 on the day government service ended. However, if and when the first board seat is secured, the value becomes 1.
spective departments and for senators and representatives through their primary committee responsibilities.

RESULTS

Table 1 reports means, standard deviations, and correlation coefficients\(^5\) for our variables, and Table 2 provides some summary categorizations. From 1988 through 2003 our 236 former government officials were elected and appointed to a total of 304 outside directorships at U.S. public corporations. By a large margin, former cabinet members were the most prolific outside director appointees, as 63.6 percent of former cabinet secretaries subsequently obtained an outside directorship, while only 39.2 percent of senators and 13.5 percent of representatives did so. Furthermore, as panel 1 in Table 2 portrays, of the top 11 individuals (i.e., those with the greatest number of board appointments after leaving office), 8 were cabinet secretaries, 2 were senators, and 1 was a representative. These top 11 represent 31.9 percent of all board joining observations. Panel 2 of this table provides a listing of all firms \((n = 10)\) that elected more than one former government official to their board during our observation window, leaving 284 firms appointing the remainder. Panels 3, 4, and 5 of Table 2 provide some additional summary statistics and frequencies. Of interest is the fact that of the 236 unique former government officials observed, 35.6 percent joined firms as outside directors, thereby leaving 64.4 percent of the sample with no public corporation directorships during our observation window. Approximately two-thirds of our sample members were either not invited to serve as outside directors for public corporation boards or had no interest in serving.

Table 3 provides the results of our Cox proportional hazard model, with coefficients reported as odds ratios. These are interpreted as the proportional change in the hazard function associated with a one-unit change in the independent variable. Odds ratios of 1 indicate no effects (similar to a regression coefficient of 0). Odds ratios greater than 1 indicate a positive association between the independent variable and the hazard of the event’s occurrence, and odds ratios of less than 1 indicate a negative association. Hypothesis 1 predicted that a former government official’s tenure (our depth proxy) in government service would be positively associated with the likelihood of his or her joining a board as an outside director. Results in Table 3 support this hypothesis, as longer tenure in government service (our depth proxy) is significantly related to the likelihood of accepting an outside directorship (odds ratio = 1.04; \(p < .001\)). Every additional year of government service increased the odds of our sample individuals joining a public corporations board as an outside director by 3.9 percent.

Regarding the breadth of human and social capital of government officials, Hypothesis 2 predicted a positive relationship between the breadth of responsibilities undertaken as a government official and the likelihood of joining a board as an outside

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\(^{5}\) Care should be taken when interpreting Table 1 because it represents an event history data set that has more than one observation per person. Additionally, the more boards a person joins, the more observations he or she has in the data set. For parsimony, we leave out our controls for political expertise. These coefficients are available from the first author on request.
TABLE 2
Summary Analysis of Former Government Officials

(a) Panel 1: Top Former Government Officials Appointed as Outside Directors, 1988–2004

<table>
<thead>
<tr>
<th>Rank</th>
<th>Name</th>
<th>Boards Joined</th>
<th>Position</th>
<th>Government Expertise</th>
<th>Left Office</th>
<th>Government Tenure</th>
<th>Average Sizea</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ann D. McLaughlin</td>
<td>13</td>
<td>Cabinet</td>
<td>Labor</td>
<td>1989</td>
<td>13</td>
<td>$14,579</td>
</tr>
<tr>
<td>2</td>
<td>Frank Carlucci</td>
<td>10</td>
<td>Cabinet</td>
<td>Defense</td>
<td>1989</td>
<td>26</td>
<td>6,311</td>
</tr>
<tr>
<td>2</td>
<td>Samuel Skinner</td>
<td>10</td>
<td>Cabinet</td>
<td>Transportation</td>
<td>1991</td>
<td>14</td>
<td>1,727</td>
</tr>
<tr>
<td>2</td>
<td>Jack Kemp</td>
<td>10</td>
<td>Cabinet</td>
<td>HUD</td>
<td>1993</td>
<td>23</td>
<td>952</td>
</tr>
<tr>
<td>2</td>
<td>Louis Sullivan</td>
<td>10</td>
<td>Cabinet</td>
<td>HHS-HEW</td>
<td>1993</td>
<td>5</td>
<td>19,541</td>
</tr>
<tr>
<td>3</td>
<td>Daniel Evans</td>
<td>8</td>
<td>Senate</td>
<td>State</td>
<td>1988</td>
<td>30</td>
<td>831</td>
</tr>
<tr>
<td>3</td>
<td>Lawrence Eagleburger</td>
<td>8</td>
<td>Cabinet</td>
<td>State</td>
<td>1993</td>
<td>33</td>
<td>5,289</td>
</tr>
<tr>
<td>4</td>
<td>Tony Coelho</td>
<td>7</td>
<td>House</td>
<td>Agriculture</td>
<td>1988</td>
<td>24</td>
<td>1,007</td>
</tr>
<tr>
<td>4</td>
<td>Clayton Yeutter</td>
<td>7</td>
<td>Cabinet</td>
<td>Agriculture</td>
<td>1991</td>
<td>14</td>
<td>8,601</td>
</tr>
<tr>
<td>4</td>
<td>Barbara Franklin</td>
<td>7</td>
<td>Cabinet</td>
<td>Commerce</td>
<td>1993</td>
<td>13</td>
<td>6,047</td>
</tr>
<tr>
<td>4</td>
<td>George Mitchell</td>
<td>7</td>
<td>Senate</td>
<td>Treasury</td>
<td>1994</td>
<td>26</td>
<td>7,332</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Firm Name</th>
<th>Cabinet</th>
<th>Senate Hired</th>
<th>House</th>
<th>Average Government Tenure</th>
<th>Government Expertise</th>
<th>Expertise Appointed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boeing</td>
<td>2</td>
<td></td>
<td></td>
<td>16</td>
<td>Defense</td>
<td>State</td>
</tr>
<tr>
<td>Comsat</td>
<td>1</td>
<td>1</td>
<td></td>
<td>22.5</td>
<td>State</td>
<td>Treasury</td>
</tr>
<tr>
<td>Dow Chemical</td>
<td>1</td>
<td>1</td>
<td></td>
<td>16</td>
<td>Commerce</td>
<td>Commerce</td>
</tr>
<tr>
<td>Everen Capital</td>
<td>2</td>
<td></td>
<td></td>
<td>18.5</td>
<td>HUD</td>
<td>Transportation</td>
</tr>
<tr>
<td>General Electric</td>
<td>1</td>
<td>1</td>
<td></td>
<td>17.5</td>
<td>Justice</td>
<td>Defense</td>
</tr>
<tr>
<td>General Motors</td>
<td>2</td>
<td></td>
<td></td>
<td>9</td>
<td>Labor</td>
<td>HHS-HEW</td>
</tr>
<tr>
<td>WR Grace</td>
<td>2</td>
<td></td>
<td></td>
<td>11</td>
<td>Treasury</td>
<td>State</td>
</tr>
<tr>
<td>Kaiser Group</td>
<td>1</td>
<td></td>
<td>1</td>
<td>27</td>
<td>Agriculture</td>
<td>Energy</td>
</tr>
<tr>
<td>Saf T Lok</td>
<td>2</td>
<td></td>
<td></td>
<td>18.5</td>
<td>Defense</td>
<td>State</td>
</tr>
<tr>
<td>Stimsonite</td>
<td>2</td>
<td></td>
<td></td>
<td>23.5</td>
<td>State</td>
<td>Transportation</td>
</tr>
</tbody>
</table>

(c) Panel 3: Mean Comparisons of Former Government Officials by Last Position Held

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cabinet</th>
<th>Senate</th>
<th>House</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government tenure</td>
<td>17.63</td>
<td>26.31</td>
<td>19.87</td>
</tr>
<tr>
<td>Education levelc</td>
<td>3.43</td>
<td>3.06</td>
<td>2.85</td>
</tr>
<tr>
<td>Prestigious education</td>
<td>0.46</td>
<td>0.29</td>
<td>0.21</td>
</tr>
<tr>
<td>Age</td>
<td>58.61</td>
<td>63.91</td>
<td>57.60</td>
</tr>
<tr>
<td>Republican</td>
<td>0.62</td>
<td>0.52</td>
<td>0.45</td>
</tr>
<tr>
<td>Business experienced</td>
<td>0.21</td>
<td>0.20</td>
<td>0.23</td>
</tr>
<tr>
<td>Legal experiencesd</td>
<td>0.59</td>
<td>0.72</td>
<td>0.59</td>
</tr>
</tbody>
</table>

(d) Panel 4: Mean Comparisons of Former Government Officials Who Did and Did Not Become Outside Directors

<table>
<thead>
<tr>
<th>Variable</th>
<th>Appointed as Outside Director</th>
<th>Not Appointed as Outside Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service tenure</td>
<td>17.09</td>
<td>18.58</td>
</tr>
<tr>
<td>Education levelc</td>
<td>3.30</td>
<td>3.66</td>
</tr>
<tr>
<td>Prestigious education</td>
<td>0.40</td>
<td>0.58</td>
</tr>
<tr>
<td>Age</td>
<td>59.30</td>
<td>57.37</td>
</tr>
<tr>
<td>Republican</td>
<td>0.64</td>
<td>0.58</td>
</tr>
<tr>
<td>Business experienced</td>
<td>0.23</td>
<td>0.16</td>
</tr>
<tr>
<td>Legal experiencesd</td>
<td>0.57</td>
<td>0.62</td>
</tr>
</tbody>
</table>
director. We selected former senators as our omitted category (the comparison group) and found that former cabinet secretaries were 2.14 times more likely to join public corporation boards as outside directors than senators (odds ratio \(2.14; p < 0.001\)). Further, representatives (who, we argued, have less breadth than senators) are 58.1 percent less likely to gain outside directorships than senators (odds ratio \(0.42; p < .01\)).\(^6\) These results support our hypothesis that those former government officials with the greatest breadth of government experience have a higher probability of joining the boards of public corporations as outside directors.

Hypothesis 3 predicted that the value of a former government officials’ human and social capital deteriorates over time. To test this hypothesis, we graphed the hazard of joining a board, controlling for chronological age. Figure 1 provides separate lines for each of our breadth categories (cabinet secretary, senator, and representative). As depicted in Figure 1, there is a sharp spike in the likelihood of obtaining an outside directorship the first year after leaving government service for cabinet members and senators. However, there is a dramatic decline in this likelihood from the second year on (although we might characterize the line for representatives as a steady decline). Former cabinet members seem to have a slight resurgence of increased likelihood to join between years four and five, which again declines around year eight. This pattern is observed to a lesser degree for senators as well. We will have more to say about this result in the discussion section. However, the graphic evidence in Figure 1 provides support for Hypothesis 3, which predicted that the value of former government officials’ human and social capital deteriorates over time.

Hypothesis 4 predicted that when the political party in control of the executive and legislative branches of government is not the political party of a former government official (opposition party in power) the value of the former official’s human and social capital would deteriorate significantly. The

---

\(^6\) We arrived at this number by subtracting the odds ratio (carried to three places) from 1 \((1 – 0.419 = 0.581, \text{ or } 58.1\%)\).
evidence from Table 3, model 2, supports this prediction (odds ratio = 0.71; p < .05). If a former government official belongs to a political party that is not in control of either the legislative or the executive branch, the chances of obtaining an outside directorship are reduced by 29.4 percent. In analyses not reported here, we considered the extent to which the opposition party was in power (a number ranging in value from 0 to 3), and whether the particular branch of government that the official had served in was under the control of the opposition party. None of these measures, however, were significant. It seems that only when the former government official’s party is completely out of power is there a significant depreciation in the value of the individual’s human and social capital as it relates to obtaining outside directorships.

### DISCUSSION

Our research highlights the growing relationship between corporations and former government officials and sheds important light on the characteristics that make one former government official more valuable to corporations than another. Our research is consistent with findings that firms are devoting increased attention and resources to a wide array of legislative activities; by doing so, they may mitigate competition from abroad, avoid costly regulatory compliance, or dodge increases in capital gains taxes in an attempt to eliminate threats, reduce uncertainty, and create opportunities (Lord, 2000). Moreover, Lipton and Harris (2007) found renewed interest by U.S. corporations in further federal legislation and market protection. It is, therefore, not surprising that former government officials are increasingly sought after for America’s corporate boardrooms (Korn/Ferry International, 2000). Although some work has examined such board appointments (Agrawal & Knoeber, 2001; Hillman, 2005), there has been less research aimed at the specific dimensions of director candidates’ human and social capital that make them more, or less, attractive as outside directors. Thus, our treatment of each government official as an individual with heterogeneous depth, breadth, and deterioration of human and social capital represents an important step forward.

Our study promised three primary contributions. First, we focused on individual director candidates, emphasizing what makes any specific candidate more attractive as a corporate director than another. We predicted that the depth and breadth of human and social capital embodied in each director candidate is an important determinant of his or her attractiveness as an outside director. Our evidence that length of service and type of service (cabinet, Senate, or House of Representatives) are strongly associated with the likelihood of accepting outside directorships provides important evidence about the depth and breadth of human capital and their importance to corporations seeking outside directors. Rather than treating all former government officials as homogeneous, our evidence suggests that their human and social capital is quite

### TABLE 3

Results of Maximum-Likelihood Survival Time Regression Analysis for Joining a Board<sup>a</sup>

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odds Ratio</td>
<td>s.e.</td>
</tr>
<tr>
<td>Independent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service tenure</td>
<td>1.04***</td>
<td>(.01)</td>
</tr>
<tr>
<td>Cabinet&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2.14***</td>
<td>(.45)</td>
</tr>
<tr>
<td>House&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.42**</td>
<td>(.13)</td>
</tr>
<tr>
<td>Opposition party in</td>
<td>0.71*</td>
<td>(.11)</td>
</tr>
<tr>
<td>power</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Republican</td>
<td>1.28 (.22)</td>
<td>1.19* (.22)</td>
</tr>
<tr>
<td>Age</td>
<td>0.97***</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Prestigious education</td>
<td>0.91</td>
<td>(0.18)</td>
</tr>
<tr>
<td>Died</td>
<td>1.00</td>
<td>(0.32)</td>
</tr>
<tr>
<td>Business experience</td>
<td>0.85</td>
<td>(0.16)</td>
</tr>
<tr>
<td>Other board experience</td>
<td>8.82***</td>
<td>(1.29)</td>
</tr>
<tr>
<td>Policy expertise&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>1.02 (.39)</td>
<td>0.86 (.37)</td>
</tr>
<tr>
<td>Commerce</td>
<td>1.25 (.35)</td>
<td>1.01* (.31)</td>
</tr>
<tr>
<td>Defense</td>
<td>1.35 (.36)</td>
<td>1.08 (.31)</td>
</tr>
<tr>
<td>Education</td>
<td>0.72 (.19)</td>
<td>0.61 (.22)</td>
</tr>
<tr>
<td>Energy</td>
<td>0.73 (.18)</td>
<td>0.51* (.17)</td>
</tr>
<tr>
<td>HHIS/HEW</td>
<td>1.79* (.61)</td>
<td>1.31 (.80)</td>
</tr>
<tr>
<td>Interior</td>
<td>0.82 (.20)</td>
<td>0.57 (.18)</td>
</tr>
<tr>
<td>Justice</td>
<td>0.49 (.26)</td>
<td>0.49 (.33)</td>
</tr>
<tr>
<td>Labor</td>
<td>1.96* (.62)</td>
<td>0.88 (.31)</td>
</tr>
<tr>
<td>State</td>
<td>1.09 (.37)</td>
<td>0.96 (.33)</td>
</tr>
<tr>
<td>Transportation</td>
<td>0.93 (.47)</td>
<td>0.69 (.40)</td>
</tr>
<tr>
<td>Rules</td>
<td>0.47 (.32)</td>
<td>0.73 (.62)</td>
</tr>
<tr>
<td>HUD</td>
<td>1.83 (.06)</td>
<td>0.75 (.42)</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>0.70 (.26)</td>
<td>0.38** (.14)</td>
</tr>
<tr>
<td>Veterans Affairs</td>
<td>0.00*** (.00)</td>
<td>0.00*** (.00)</td>
</tr>
<tr>
<td>Ways and Means</td>
<td>0.71 (.31)</td>
<td>0.85 (.40)</td>
</tr>
<tr>
<td>Wald χ²</td>
<td>1.607.68***</td>
<td>1.370.66***</td>
</tr>
</tbody>
</table>

<sup>a</sup> n = 869. Odds ratios of less than 1 represent negative associations, and those larger than 1 represent positive associations.

<sup>b</sup> The omitted category is “Senate.”

<sup>c</sup> The omitted category for policy expertise is “Treasury” (the most prevalent category).

* p < .10

** p < .05

*** p < .01

**** p < .001
heterogeneous, and that heterogeneity is reflected in opportunities for outside directorships.

Our second contribution is our focus on an important (but often ignored) factor in business-government links—corporate boards of directors. As we noted in our introduction, business and government are supposed to operate separately (Friedman, 1970), but in reality they are highly intertwined. Resource dependence theory has long held that this will be the case (Pfeffer & Salancik, 1978). However, direct co-optation (inviting sitting government officials to serve on corporate boards) is not possible. Therefore, our evidence might suggest firms wait until government service is ended before the co-optation process starts. We were, of course, unable to observe the actual resources provided by the former government officials through their directorships, so although our theory was supported, more research is needed about the specific benefits that corporations receive by inviting former government officials onto their boards. We feel this potential co-optation process deserves more scrutiny.

Moreover, our approach is based on the notion that former government officials bring valuable resources to corporate boards. However, an alternative view might be that hiring former government officials for corporate directorships represents a “tit-for-tat” (Bernheim & Whinston, 1990) phenomenon. That is, it is possible that corporate board seats are payment for services directors rendered while in government service. Certainly, it is at least theoretically possible that serving government officials who support corporate initiatives are rewarded after leaving office—a timing that would render such rewards extremely difficult for investigators to link to favors provided in the past. The idea is unpleasant (such activities might be unethical), yet we cannot discount the possibility.

Our final contribution involves highlighting that both human and social capital resources can deteriorate over time. There has been a virtual explosion in research on the upper echelons (Hambrick, 2007), and nearly all of it relies on the notion that the past experiences and interpersonal networks of executives affect their current actions. Additionally, researchers such as Mintzberg (1978) and Kotter (1982) provided qualitative descriptions of how managers build networks to gather information and exert influence over others, as well as how they gain specific knowledge on the job. Yet very little empirical research has addressed whether, or how, human and social capital may depreciate or deteri-

\[ FIGURE 1 \]

Former Government Officials Serving as Outside Directors
Adjusted for Chronological Age

\[ “Hazard” \] refers to the likelihood that a sample individual will join a board on the given day. We computed this estimate of the hazard function by calculating the hazard contributions at each observed board joining and fitting a density curve to them. “Analysis Time” is the number of days since an official left office; 1,000 days is approximately 2.7 years.
ororate over time. The context of our study provided an opportunity to examine, in an empirically rigorous way, our theory of resource deterioration. Because of the business-government separation, we could identify the exact date on which an official’s human and social capital potentially began to depreciate. We found that former government officials’ likelihood of joining corporate boards is time dependent; that is, over time and irrespective of chronological age, their attractiveness as directors tends to depreciate. Regardless of political party or position, many former government officials accepted board seats within a month or two of leaving office. Additionally, we found that political party control shifts influence the likelihood of board appointments. When a former government official’s political party was completely out of power for all three branches of the federal government, he or she was significantly less likely to gain a board appointment.

An interesting aspect of our evidence on the deterioration of human and social capital deserves mention. Our graph of the hazard rate of board joining (Figure 1) is consistent with our hypothesis. Most former government officials join boards soon after departure from their government positions. The hazard rate declines soon after. However, the hazard rate peaks twice for former cabinet members, with the second peak taking place about five years out of office. One possible explanation for this increase might be that many former cabinet members joined boards quickly after leaving government service, and their service on those boards was coming to an end. Therefore, new boards were sought. Clearly, our former government officials were, as a group, sought-after for board service, as they accepted over 300 directorships during our study period. Should this admittedly speculative explanation be borne out, it would suggest that new human and social capital was being accumulated through the outside directorships that former government officials held.

Despite the support for our hypotheses, our study is not without limitations. First and most importantly, we cannot separate the specific resources former government officials bring to boards (i.e., information, contacts, preferential access, influence, or legitimacy), nor can we isolate the effects of their human or social capital. We consider it important for future research to better isolate these forms of capital. Second, ours is a U.S.–centric view of the business-government relationship and may not be generalizable to other countries (Hillman, 2005; Hillman et al., 1999). It is possible that the relationships we uncovered are substantially different in different political systems, suggesting that future research would benefit from exploration across different institutional settings. Third, our study period covers three Republican (Reagan, Bush 41, and Bush 43) and one Democrat (Clinton) presidency but is heavily weighted toward Republicans. Fourth, we focused on public corporations’ boards for consistency and access to data. Government policies have significant impacts on the operations of both private and not-for-profit firms, and many of these may also seek the services of former government officials for their advisory or other governing boards. This issue warrants further study. Finally, we were unable to control for those former government officials who were approached about serving on corporate boards but declined the opportunity to do so.

Although our research focuses on former government officials as directors, we believe the categories of director candidates’ human and social capital introduced here (depth, breadth, and deterioration) are generalizable to other occupations sought by corporate boards (e.g., CEOs, members of financial institutions, academics, and other community leaders). Examining these categories across various professions is a natural extension of this work. Theories of human and social capital suggest that these dimensions are likely to apply to multiple types of expertise and networks, but this idea remains open to further investigation. For example, it would be interesting to explore whether the same dimensions we proposed here would affect the likelihood of former or current CEOs securing directorships. Does the depth and breadth of these candidates’ human and social capital matter in the same ways as for former government officials? Does human and social capital among former or current CEOs also deteriorate over time?

In conclusion, we believe ours is an important first step toward answering the question, Why are some candidates chosen as directors while others not? Because the literature strongly suggests that the resource provision role of corporate directors is a key one (Daily, Dalton, & Cannella, 2003), research that furthers understanding about how human and social capital create value for corporate boards is essential.

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