SOCIOLOGY Vol. 32 No. 2 May 1998
321–351

ELITE NETWORKS IN GERMANY AND BRITAIN

PAUL WINDOLF

Abstract This study considers the social organisation of the economic elite in Germany and Britain. Specifically, the analysis focuses on the internal structure of this social group, which is termed an 'elite network'. The resources on which the dominance of the economic elite is based are bureaucratic power, ownership and social capital. In institutional capitalism the power of managers is based not only on their hierarchical position within large corporations, but also on the fact that they 'represent' ownership within the network of associated firms. Additional topics considered in the course of the analysis include the forms of social control to which the economic elite is subject, the degree of internal competition and co-operation, and the stability of networks over time (circulation of the elite). The analysis shows how bureaucratic control over a company is linked with ownership of a company in the context of specific network configurations. These network configurations vary between countries and lead to differing forms of managerial control within institutional capitalism.

Key words: Britain, capitalism, elite, Germany, managers, networks.

The Economic Elite

Markets, competition and ownership are among the most important economic institutions which have been developed in every modern capitalist country (Williamson 1985). However, both the historical evolution from the end of the last century to the present and cross-country comparisons show that capitalism is not monolithic, but exists in various forms (Scott 1997:16): the family capitalism of the nineteenth century differs from present-day institutional capitalism (Chandler 1990), and Japanese capitalism is rather different from the capitalist social systems found in Western Europe (Gerlach 1992). Following the collapse of socialism, this diversity is set to increase further and to be enriched with post-socialist variants (Stark 1996).

Markets and ownership are abstract regulatory media (Parsons 1978:393) which perform their function only within the framework of concrete institutions. These institutions vary according to the cultural and political context in which they are embedded (Granovetter 1985). An ensemble of institutions specialised in regulating the economic system will be termed here the 'social organisation of the economic elite'. These institutions include, among others, large corporations and their internal governance structure, employers' federations and the various forms of ownership. Ownership may be concentrated within a family, distributed among thousands of small shareholders or in the hands of institutional investors. The different forms of ownership are matched by different opportunities for the owners to exert influence and control. Economic institutions change over time and vary between countries whose political and cultural traditions differ (Fligstein 1995:502). The social organisation of elites varies accordingly.

This study considers the social organisation of the economic elite in Germany and Britain. Specifically, the analysis focuses on the internal structure of this social group, which is termed an 'elite network' (Stokman *et al.* 1985; Bearden and Mintz 1987). The resources on which the dominance of the economic elite is based are bureaucratic power, ownership and social capital. In institutional capitalism the power of managers is based not only on their hierarchical position within large corporations, but also on the fact that they 'represent' ownership within the network of associated firms (Windolf 1994). The economic elite is defined here not only by its relationship[1] to the means of production, or with respect to its technocratic competence or its social capital (networks), but rather by the specific combination of *all* the relevant resources (Bourdieu 1984:106).

Economic, cultural and social capital are resources that are available in specific institutional forms and that can be accumulated and, under certain conditions, converted.[2] For instance, economic capital can be converted into cultural capital, as is illustrated by the cultural patronage practised by large companies. What is important in this context is to show how *bureaucratic control* over a company is linked with *ownership* of a company in the context of specific *network configurations*. These network configurations vary between countries and lead to differing forms of managerial control within institutional capitalism.

Institutional Capitalism

Since the mid-1970s a steady expansion of the market for corporate control, on which entire firms or divisions of firms are bought and sold, has occurred. The commodity-producing firm has itself become a commodity. Such transactions have significant implications for the social organisation of the economic elite: they are summarised immediately below. Specifically, the changes affect the *type* of owner, the *concentration* of ownership and the potential *liquidity* of property.

(1) Buyers and sellers in the market for corporate control consist largely of firms. The price of an entire firm generally exceeds the financial capacity even of families belonging to the upper class. In institutional capitalism it is *firms* that own other firms, and these 'owners', in turn, are frequently the property of other companies. In this way networks of firms are created that are linked by ownership and interlocking directorial boards (Scott 1990). These networks constitute the institutional

framework for economic power and form part of the social organisation of the economic elite that is the object of this study.

(2) In managerial capitalism the power of managers rests on the wide distribution of ownership. Thousands of small shareholders, scarcely able to co-ordinate their interests, stand face to face with a small group of managers with a monopoly on information. The market for corporate control leads to a *reconcentration* of ownership and thus increases the power of owners *vis-à-vis* managers (Useem 1996). In contrast to small shareholders, firms have a strategic interest in their ownership and are in a position to pursue this interest. The managers of the dominant company can act as if they were in fact 'owners' towards the managers of the dependent company. When a company is sold it gains a new owner who is not tied to 'implicit contracts' (Shleifer and Summers 1988) with the existing management and workforce. Such constellations are encountered more and more frequently and are becoming a central characteristic of an economic system in which firms are no longer organised as large-scale bureaucracies, but as corporate networks.

Scott (1997:41) argues that 'the growth of corporate and institutional shareholdings is the basis of a transition from indirect personal possession to impersonal possession'. Institutional investors who are the dominant owners of large corporations in the United States and in Britain jointly constitute a 'constellation of interest' which constrains the actions of managers. Even if there is 'no group cohesion among the controlling shareholders' (Scott 1997:49) they can informally coordinate their actions whenever managers ignore their interests or violate their rights. Thus, the reconcentration of ownership (and the growing power of owners) seems to be a common characteristic of the transformations of capitalism in many industrialised countries – notwithstanding structural and institutional differences which are discussed in more detail below.

(3) On the market for corporate control fixed capital becomes *liquid* once more. 'Sunk costs' – the money invested in real estate, machines and equipment – can be liquidated at relatively short notice on the market. The faster this market expands, the quicker each firm finds a buyer. The acquisition and sale of firms make networks flexible, enabling them to contract or expand quickly in response to changing market conditions. The market for corporate control has become an important instrument of control over the internal bureaucracy. The owners, that is the managers of the dominant firm, can threaten dependent firms that they will terminate their membership of the network or split them up into separate units and sell them to various owners. The external 'borders' of companies organised as a network of semi-autonomous

firms can be changed at will by virtue of this buying and selling option.[3] In the following sections the exertion of power mediated by this new organisational form and wielded by those dominating a network of associated firms is analysed in more detail.

The new organisational forms have brought about a change in managerial control with respect both to the resources on which the power of managers is based and to the legitimacy of this power (Scott 1996). The separation of ownership and control has been replaced in key areas of the economy by a link between ownership and control. Managers have supplemented their bureaucratic power with the power of ownership. Internally they legitimise their power through their hierarchical position within the bureaucracy; for the dependent firms they represent the owners, legitimising their power in this case by virtue of their ownership rights. Managers are not literally 'owners', but they control the organisation that is the owner in the legal sense. The bureaucratic control over the dominant firm is linked with ownership of the dependent firm and it is this *link* that is characteristic of the dominance of managers in institutional capitalism.

Thus managers base their dominance on a number of different resources and on various forms of legitimation, including bureaucratic power, ownership and social capital. It is the combination of these various resources that enables managers to underpin their position of power. The following hypotheses show more precisely how different resources are combined: executive and controlling functions on the Board of Directors (1); managerial and ownership functions within the capital networks (2); and bureaucratic power and social capital within the networks of interlocking directorates (3 and 4).

Hypothesis 1: The institutional structure of German and British firms differs ('board of directors' in Britain; management board (*Vorstand*) and supervisory board (*Aufsichtsrat*) in Germany).[4] Thus it is to be expected that the structures of control will also vary between the two countries. Specifically, a clearer separation between non-executive (supervisory) and executive functions is to be expected in German firms, whereas in Britain both functions are likely to be performed by one and the same person. The combination of executive and controlling functions gives more power to managers than they have in a system where these functions are separated and embodied in different institutions.

Hypothesis 2: Germany is characterised by a relatively high concentration of ownership (combine structure), whereas the ownership structure in Britain is fragmented (institutional owners).[5] It is to be expected that in Germany managers will frequently combine executive functions with ownership functions, whereas this combination will be encountered less frequently in Britain. The differences underline the fact that institutional capitalism is not a monolithic entity, but exists in numerous variants in different countries.[6]

Hypothesis 3: Elite networks serve to promote social integration and to consolidate positions of power (Useem 1984). Given its corporatist tradition (*Gemeinschaft*) it is to be expected that in Germany the network of multiple directors will be both relatively diffuse and comprehensive and that all members of the economic elite will be integrated into a single network. In the light of its liberal tradition ('a market economy'), it is expected that in Britain the members of the elite are in competition with one another, and that there is evidence of separate 'social circles' (pluralism).

Hypothesis 4: Networks are social institutions that offer their members both protection and opportunities on the market. The denser the network the more stable it is over time and the longer its members can maintain their position in the network. Because of the higher density of the German network we expect it to be more stable over time than that of the British elite.

The following section describes the database for the subsequent analysis. In the ensuing sections the four hypotheses are discussed.

The Sample

The point of departure for the empirical survey is a list of the 694 largest firms in (West) Germany and the 520 largest firms in the United Kingdom. For the German firms each member of the management and supervisory boards was identified (N=8,952). For the British firms all the members of the boards of directors were listed (N=4,599), and a distinction was drawn between executive and non-executive directors. The executive directors are roughly equivalent to the German management board (*Vorstand*) and the non-executive managers can, with certain reservations, be compared with the members of the supervisory boards (*Aufsichtsrat*). The German managers hold a total of 11,866 positions in the network of large firms, British managers 5,258. The distribution of the managers across the positions indicates that in Germany 83.1 per cent of managers held just one position and 3.4 per cent (N=308) more than four positions. A comparison of the distributions of persons across positions reveals that on average German managers hold more positions than their British counterparts, so that the German elite network is more tightly woven than the British (see Table 1).

It is assumed here that the managers with the greatest number of high-ranking positions in the large firms form the 'core' of the economic elite. Such

Table 1
Managers and Their Positions in the Elite Network
1992–93

Number of positions	Germany (%)	Britain (%)
1	83.1	89.7
2	10.4	7.5
3	3.1	2.0
4+	3.4	0.8
Total of managers	8,952	4,599
Total of positions	11,866	5,258
Total of companies	694	520

persons are not merely a member of a board of a leading corporation, but by virtue of their seat on a number of supervisory boards can also exert an influence on decisions in other large firms. Because they have not just one, but several positions in institutions of corporate leadership they collectively constitute a 'network' that can be used to exchange information, as a means of control or co-optation, or to manage resource dependencies (Koenig *et al.* 1979).

For the purposes of this study the elite network is defined as follows. In Britain all managers holding three or more positions and half of those occupying two positions in the network were included in the analysis (N=302 multiple directors). In Germany managers holding four or more positions were selected for the network analysis (N=308). For the German and for the British managers an adjacency matrix was drawn up into which all the formal relations held by these managers with each other were entered. These include the different boards in which the managers from the various companies regularly meet.

The data were drawn from various handbooks[7] and refer to 1992–93. Because managers clearly change their positions, a number of the positions will no longer be held by the managers indicated here at the time of publication (1998). This is true, for example, of the relationships portrayed in Figure 1 (see p. 330). No attempt has been made to bring the data up to date, as it is structures and not individuals that are the object of this analysis. Structures remain relatively stable while individuals come and go.

Interdependent Relationships (Hypothesis 1)

Even prior to the First World War German legislation stipulated that executive and supervisory boards were to be separated in all joint stock companies. This institutional structure provides for a clear functional division between the management board (*Vorstand*) and the supervisory board (*Aufsichtsrat*). The *Vorstand* is the executive board, the *Aufsichtsrat* the supervisory board; those managing the firm may not exercise a supervisory function, and those responsible for supervision may not manage the firm.[8]

In Britain, as in the United States, there is no institutional division on these lines within large companies, merely a differentiation between roles: executive and supervisory managers sit together on one board of directors. The supervisory directors may originate from the firm itself (internal directors) or be recruited externally (external directors).[9] Internal directors face conflicts of loyalty in situations in which they are to supervise the activities of executive managers who are their superiors in the corporate hierarchy. Such cases lead to a dual – executive and supervisory – responsibility in the hands of one person. According to Hill (1995:253):

> Several non-executives and chief executives commented on the awkwardness of having both chief executives and other executives on the board. In terms of the managerial hierarchy, the other executives were the chief's subordinate, but as directors they sat in judgement on his actions and two chief executives disliked this confusion of the line of command.

In Germany the institutional structure of corporate governance to some extent mirrors the division of powers within the political system. Firms are large-scale bureaucracies that are run by managers (agents), who pursue interests that differ from those of the owners (principals), and whose activities are to be monitored by independent experts. It is therefore to be expected that a division of labour would develop within the German network between executive and non-executive (supervisory) managers: one group would thus be largely active on management boards, the other group performs the supervisory function as professional members of supervisory boards.

Characteristic of the group of multiple directors studied here, however, is not the division of labour, but functional fusion ('personal union'): most managers occupy positions on both management and supervisory boards (are executive and non-executive directors), a phenomenon that applies to both Germany and Britain irrespective of the different institutional structures. Table 2 shows how even in the German system with its separation of supervisory and executive boards, there is little sign of specialisation. Almost half (48.3 per cent) of the managers holding two or more positions in the elite network are members of both a management and a supervisory board (in different firms). Thus Hypothesis 1 cannot be confirmed.

Against this finding it can be objected that a clear division of functions does prevail among those managers who were *not* included in Table 2, namely those managers - around 7,440 in Germany - holding only one position within the network and who are thus self-evidently either executive or non-executive

Table 2
Combination of Executive and Supervisory Functions

Position in company	Germany (%)	Britain (%)
Executive and non-executive	48.3	53.4
Only executive	13.8	16.1
Only non-executive	24.6	30.5
Only non-executive, but former executive*	13.3	†
Total	100	100
N	1,118	474

Note: Table 2 has been computed on the basis of *all* multiple directors.
* 148 German managers (=13.3%) are only members of supervisory boards (non-executive), but they had been executive managers earlier in their professional career; on reaching retirement age, they were elected onto the supervisory board of 'their' company. † For Britain comparable data are not available.

managers, but not both. Although at first sight this argument appears convincing, it is not conclusive counter-evidence. The boundaries of a network are defined arbitrarily by delimiting a sample (such as the 694 largest firms). The survey method means that the network comes to an end at some point (Doreian and Woodard 1994). Consequently we cannot know whether these 7,440 managers also hold additional executive and non-executive positions in smaller firms not examined here. And even if this is not the case, it is evident that the most influential directors holding positions in the largest and most reputable firms perform both functions simultaneously (albeit in different firms). Generally those holding more than one position within the elite network perform both executive and supervisory functions.

Thus the fusion of functions that is forbidden in Germany at the level of the individual firm occurs in spite of this ban at the level of the network as a whole. The top managers of large firms are executive directors of their firm and members of the supervisory board of another. The supervisory board elects the members of the management board, but the supervisory board is composed to a greater or lesser extent of management board members of other large companies. As a collective the multiple directors hold executive powers and at the same time are responsible for supervising this power.[10] At the level of the network as a whole it is no longer possible to distinguish between executive and non-executive managers. Most multiple directors are electors and are elected, are supervisors and are supervised, and, as we will see in the next section, in Germany they are owners and at the same time are subject to owner control.

Discussions are under way in a number of countries on whether changes in institutional structures would enable executive managers to be subject to closer supervision. In the United States, for instance, it has been proposed that the supervisory function should primarily be performed by independent *external* directors.[11] In Germany all the supervisory directors are *de facto* external directors, but Table 2 illustrates that at the collective (network) level it is, nevertheless, not the division of labour but functional fusion that predominates. This recombination of functions at the network level can be explained in at least two ways, and these explanations are not mutually exclusive, but rather complement one another.

Firstly, like the division of powers within the political system, the distinction between supervisory and executive functions in the economic system faces two problems: informational asymmetry and the lack of professional specialisation. Independent supervisors recruited from other social systems (such as politics, the universities or the cultural establishment) lack the information on a particular company which is necessary to supervise it adequately; in this respect they are at a disadvantage compared with internal management. Thus the fact that in both Germany and Britain (and the United States) supervisors are recruited largely from within the network of executive managers can be explained with reference to the need to guarantee a minimum of information and professional competence.

A second explanatory approach emphasises the hegemonic aspect: networks are instruments by means of which the position of the dominant elites are to be maintained. The network of multiple directors serves to integrate and homogenise the managerial class and to stabilise their economic power. The link between the executive and the supervisory function closes the network to external competition and prevents the economic elite being subjected to external control.[12]

Managers as owners (Hypothesis 2)

Most of the large firms in Germany and Britain are owned not by families or individuals, but by other firms. More precisely: firms are controlled by managers who represent the owners. In the following 'managers as owners' is used as an abbreviation for the fact that the leading managers of the dominant firm represent the owners and perform their supervisory function. Once a manager has attained a dominant position in a company that owns another firm, this position offers the opportunity to exert power not merely within the first company; this manager can act as if he or she 'owned' the second company, supplementing bureaucratic power with the power of ownership.

Of the 308 managers in Germany belonging to the 'inner circle' of the economic elite 139 of them occupy a position on the supervisory board of another company in which the corporation in which they are executive director holds an equity stake. In other words, around 45 per cent of the multiple directors are executive managers of Firm A and on the supervisory board of Firm B (and Firm C) in which Firm A also holds an equity stake. Firms B and C are themselves among the 694 largest companies in Germany. Within the network of leading German companies there are a total of 396 relationships in which an executive manager simultaneously 'represents' the owner (i.e., is on the supervisory board).[13] In 96 per cent of these cases the equity stake amounts to more than 10 per cent. A total of 942 executive mangers were counted in the dependent companies, of which 110 (12 per cent) belong to the group of 308 multiple directors. The 308 multiple directors are not merely simultaneously executive and non-executive directors, some of them have also assumed the function of owner, and a further sub-group is subject to owner control. These interrelationships are illustrated in Figure 1.

R. Schmitz is a member of the management board (MB) of Deutsche Bank and at the same time chairman of the supervisory board (Chair) of Metallgesellschaft. By virtue of the fact that Deutsche Bank owns 10.8 per cent of the share capital of Metallgesellschaft, Schmitz represents on the supervisory board the interests of the largest shareholder and the interests of the creditor.[14] H. Schimmelbusch is chief executive officer (CEO) of Metallgesellschaft and the chairman of the supervisory board of Kolbenschmidt AG and represents in this firm the owner interest at a

Figure 1
Managers as Owners

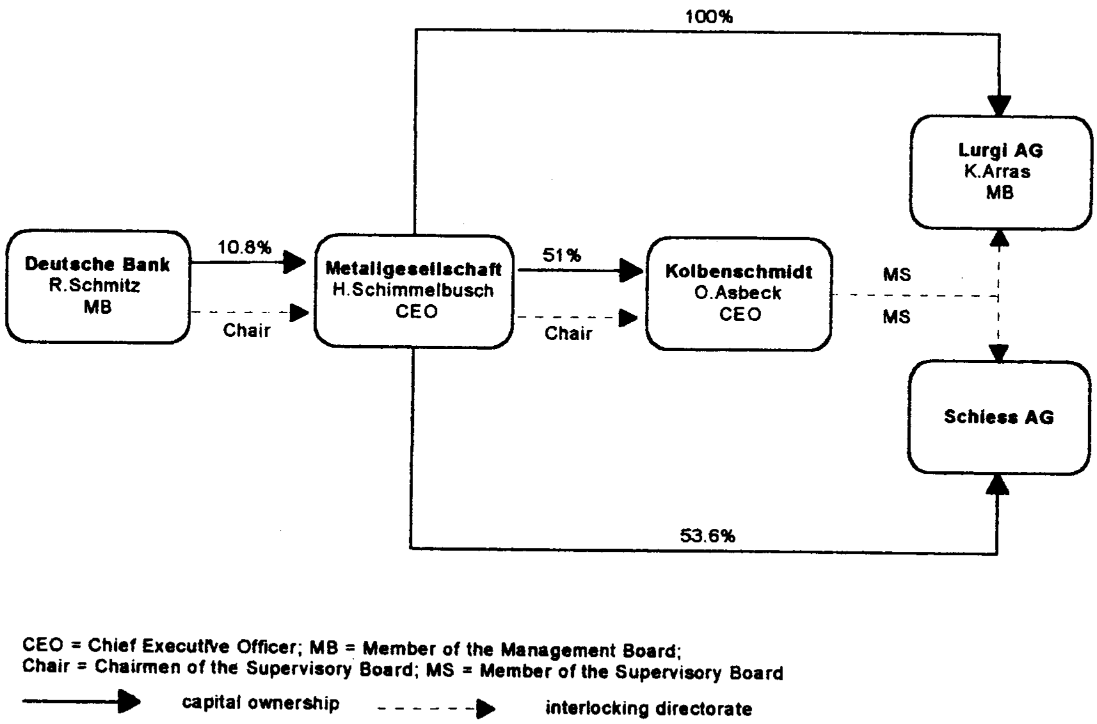
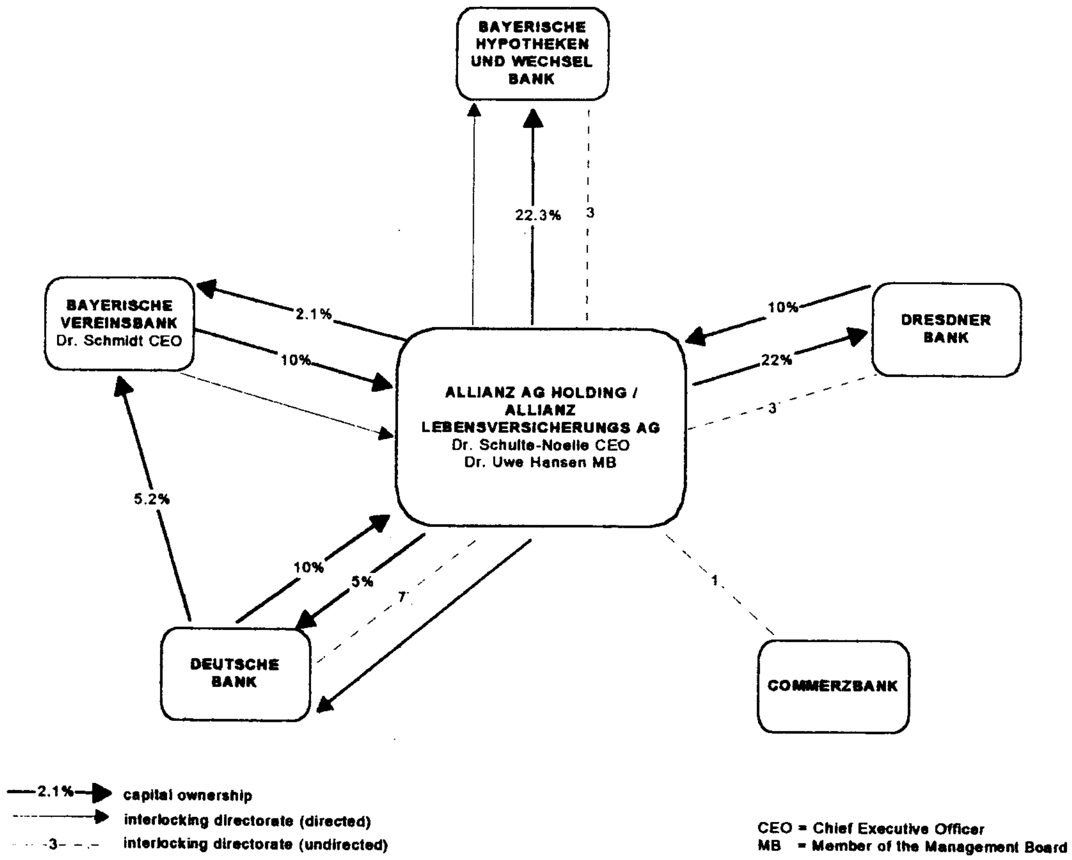


Figure 2
The Core of the German Finance Sector



subordinate level in the chain of control depicted in Figure 1. Schimmelbusch supervises the management board of Kolbenschmidt AG and, as the representative of the owner, he decides whether the shareholding (51 per cent) in Kolbenschmidt AG is to be sold, retained or increased. O. Asbeck is CEO of Kolbenschmidt and on the supervisory board of Lurgi AG and Schiess AG, where he, too, represents owner interests, namely the interests of the parent company (Metallgesellschaft). K. Arras, member of the management board of Lurgi AG and 'last man' in the chain of control belongs himself to the group of 308 multiple directors: he, too, holds four positions in the network analysed here.

The network of capital participation and interlocking directorates forms a system of interdependent relations in which managers supervise and are supervised, are owners and are controlled by other owners. Some managers are located at the end of the chain of control in one segment, but are at the head of the chain in another segment of the network. It is only those managers who are integrated within this network who can maintain their position of power in the longer term. The network forms a social institution that underpins the hegemony of the economic elite and opens up specific power opportunities to the managers involved.

Whereas Figure 1 illustrates the hierarchical structure of control and ownership relationships in a multi-layered German corporation, Figure 2 portrays the structure of interlocking relationships between the six largest (private) German financial institutes. This network can be described as follows: most of the leading banks are not directly linked, but all five banks are linked to the Allianz insurance company through both personal and capital linkages; the Commerzbank is the one exception here in which the link is purely personal. The Allianz forms the centre of a 'star' on which the banks are dependent, but on which they can also exert an influence (through reciprocal shareholdings).

Although it is not possible to draw direct conclusions regarding strategy from structures, it is extremely unlikely that the structural pattern shown in Figure 2 emerged 'coincidentally': it is to be assumed that mutual co-ordination of capital stakes and the distribution of board positions has occurred, a co-ordination based on three principles: firstly, the Allianz largely protects four leading German banks from external influence (such as hostile takeovers); secondly, the banks themselves gain influence on the 'centre' in the form of positions on the supervisory board and reciprocal shareholdings; thirdly, no one firm in this 'star' can dominate another. A further striking feature is that some personal interlocking is redundant (Burt 1992:21): there are a total of seven managers with positions on the supervisory boards of both Deutsche Bank and Allianz Insurance (two of whom are employee representatives).[15] Germany's financial centre has a network configuration similar to the Japanese *keiretsu* group. From a strategic point of view the pattern of mutual control can also be interpreted as 'exchange of hostages' (Williamson 1985:167).

As has already been shown, due to often parallel capital and personal interlocking, there are a total of 396 relationships within the German network in which an executive manager represents the owner on the supervisory board of the dependent firm. There are only twenty such relationships in the British network. Reciprocal relationships such as those illustrated in Figure 2 are entirely absent in the British system. On this point the researcher can merely conclude that network configurations that in Germany can be interpreted as hierarchical power relationships (Figure 1) or as mutual control (Figure 2) cannot be observed in the British system. The British network is rather diffuse and, as will be shown in the next section, is focused on the financial sector. The parallel system of capital stakes and interlocking directorships only occurs in situations where ownership is highly concentrated. Such a strategy is difficult to bring about in countries in which the structure of ownership is fragmented. This serves to confirm Hypothesis 2.

Social Circles (Hypothesis 3)

The multiple directors constitute a social network in which supervisors and the supervised are mutually linked at the collective level and in which the bureaucratic power of managers is linked with the power of ownership (in Germany). In this section we will consider the question of whether the managers form a network in which each individual is connected with every other individual, or whether there are a number of separate cliques which, to take up a term coined by Simmel (1908), can be termed 'social circles'.

A social circle is defined as an informal social group which does not keep a list of members, which lacks formal (written) rules, and hierarchical structures or leaders. A social circle and its delineations are defined by the mutual relationships between its members. Individuals bound by close social relationships constitute a social circle, while those without contacts to these persons do not belong to the circle (Kadushin 1966; Alba and Moore 1978).

Useem (1984) has postulated that multiple directors holding leading positions in several firms transcend the narrow horizons of firm-specific interests and represent the collective interests of large corporations as a whole. Due to the competing obligations placed upon them by their multiple boardships, they are forced to pursue 'global' interests shared by many large firms. If this hypothesis is correct we would expect the network of multiple directors to form a single large 'circle', the structure of which is relatively diffuse. The connections would not be restricted to separate groups of managers or corporate groups, but would be relatively open and unstructured and would encompass more or less all managers. In Germany the trend to comprehensive social circles is reinforced by traditions of corporatism and 'controlled competition' (Nörr 1995).

An alternative hypothesis, one postulating a number of separate social circles can point to the following line of argument. The managers of the large corporations are subject to tough competition on the market for corporate control, irrespective of whether or not they produce competing products (Fligstein 1990). During recent decades the expansion of large corporate groups has been achieved largely by external growth, i.e., by acquiring firms on the market for corporate control. Only those companies that are in a position to acquire other firms and thus to accelerate their own expansion have the chance of becoming and remaining one of the one or two hundred largest corporations in a country. These objective competitive relations between firms influence the structure of the elite network, splitting it up into social circles, the relationships between which are competitive in nature. In view of its liberal 'market tradition' it is expected that this network configuration predominates in Britain. In the following these hypotheses will be examined in the light of the empirical data.

A matrix was drawn up for the 308 multiple directors into which all the relationships were entered which these persons had with one another on the basis of their joint membership on the boards (*Vorstand* and *Aufsichtsrat*) of the 694 largest German firms. A similar matrix was drawn up for the 302 British multiple directors. A number of statistical procedures were tested in order to identify separate social circles (cliques) within these matrices:[16] block model analysis, clique analysis, cluster analysis and factor analysis. Two criteria are decisive in evaluating the results: the density of the relationships *within* a group should be as a high as possible, the density of the relationships *between* the groups should be as low as possible. The various procedures generated similar results. Tables 3 and 4 present the results of the factor analysis, as it was this that met the two criteria most closely.

From the matrix of German managers twenty factors were extracted which are interpreted here as 'social circles' (see Table 3). The density of relationship (path length 1) within these circles varies between 0.97 (DBV Holding) and 0.37 (Daimler-Benz/RWE; see column 3). The relationships between the circles is described in Table A1 in the Appendix. The highest densities between two circles are 0.22 (circle 2 with circle 17) and 0.20 (circle 3 with circle 10).

The core of a circle is often formed by a single corporate group (Daimler-Benz, Thyssen, RWE etc.), which is then used as the name of the circle. The twenty-one managers (column 1) assigned to social circle no. 2 (Daimler-Benz) hold a total of 120 positions (column 2); each member occupies 5.7 positions on average. Of these 120 positions 71.6 per cent are held within the Daimler-Benz combine itself (column 5), whereby the combine includes any firm in which the Daimler-Benz Holding has a stake of at least 50.1 per cent. The periphery of the circle consists of managers from a large number of other firms who occupy positions on supervisory boards alongside managers from Daimler-Benz. Of the 120 positions 17.5 per cent are on management boards, 82.5 per cent on supervisory boards (columns 7 and 8).

The social circle 'Deutsche Bank/Siemens' consists of twenty-four managers in all, who together occupy 148 positions in the elite network (an average of 6.2 positions). Of these 148 positions, however, just 11 per cent are in firms belonging to the Deutsche Bank combine (column 5); the remainder are held in other firms. Eleven positions (7.6 per cent) are held in the Siemens combine (combine II, column 6).

These two examples illustrate the fact that the social circles within the elite network are structured in different ways. Two types of social circle can be distinguished:

(1) *Integration networks:* In the 'Daimler-Benz' social circle (and in other circles exhibiting a high percentage value in column 5), a large proportion of the positions are held within the combine itself. Moreover, the interrelationships within these circles tend to be very dense (for example, density in the Daimler-Benz circle 0.94; Metallgesellschaft 0.91; see column 3). The high density means that within these

Table 3
Social Circles of Managers in Germany

Social circle	(1) Dir	(2) Posit	(3) Density P1	(4) Density P2	(5) Combine I %	(6) Combine II %	(7) Exec %	(8) Super %	(9) Var %	(10) 1978
1 DBV-Holding*	12	70	0.97	0.03	95.7	—	74.3	25.7	5.1	6
2 Daimler Benz	21	120	0.94	0.06	71.6	—	17.5	82.5	5.7	5
3 Metallges./Allianz*	11	61	0.91	0.09	65.5	9.8	21.3	78.7	3.3	4
4 Thyssen	15	95	0.69	0.31	61.0	—	16.8	83.2	3.6	6
5 VEBA	15	91	0.76	0.24	57.1	—	25.3	74.7	3.9	3
6 RWE	11	81	0.80	0.20	56.7	—	17.3	82.7	2.6	2
7 Hoesch-Krupp/ABB	11	62	0.75	0.25	54.8	6.5	17.8	82.2	1.7	2
8 Dillinger Hütte/Volksf.*	8	36	0.82	0.18	50.0	11.1	25.0	75.0	1.4	0
9 Mannesmann	12	83	0.64	0.36	49.4	—	9.7	90.3	2.1	4
10 Stora/Metallgesellsch.	11	58	0.80	0.20	46.5	13.8	18.9	81.1	1.8	2
11 Ruhrkohle/Allianz*	13	78	0.53	0.47	37.1	5.1	14.1	85.9	2.1	4
12 Kaufhof (Metro)/Asko	12	53	0.56	0.38	35.8	20.8	15.1	84.9	1.5	3
13 Victoria-Vers.* /Hoechst	12	62	0.42	0.52	29.0	22.6	19.4	80.6	1.4	4
14 MAN	15	91	0.60	0.37	26.3	—	15.4	84.6	2.3	4
15 VIAG/Bayernwerk	14	79	0.51	0.47	25.3	12.7	13.9	86.1	1.5	6
16 Preussag/VW	10	56	0.84	0.16	25.0	5.4	14.3	85.7	1.6	4
17 Daimler Benz/RWE	18	100	0.37	0.38	20.0	6.0	11.0	89.0	1.9	0
18 BHF Bank*/Babcock	13	64	0.89	0.11	18.7	6.3	9.4	90.6	2.8	6
19 Dresdner B.*/ Fam. Quandt	21	122	0.54	0.40	11.4	7.4	13.2	86.8	2.2	6
20 Deutsche Bank*/Siemens	24	148	0.57	0.42	10.8	7.6	13.5	86.5	3.1	8
Total/average	279	1,610					18.3	81.7	51.5	79

*	Financial institution (bank, insurance company)
Social Circle	Name of the company/combine with most positions (core).
Dir	Number of directors in social circle (total number of directors: 279).
Posit	Number of positions which are held by directors in this social circle (total number of positions: 1,610).
Density	P1: Density in social circle of path length 1 (direct contact); P2: density of path length 2 (friends of friends).
Combine	Proportion of positions held in Combine I/Combine II.
Exec	Proportion of executive positions (positions on the management board).
Super	Proportion of non-executive positions (positions on the supervisory board).
Var	Proportion of variance explained by this factor (=social circle); total variance explained 51.5%.
1978	Number of directors who belonged to the same social circle between 1978–1982.

combine-centred circles almost every manager is in direct contact with virtually all other members.[17] These circles are inwardly oriented, their aim is integration within the group. Their structure is less suited to maintaining contacts to the external environment or to obtaining information on other firms. This does not mean that such circles consist solely of managers from the combine itself, although in such circles the number of managers from other firms is relatively small. The fact that even here the 'world outside' is not neglected is shown, among other things, by the presence within the 'Daimler-Benz' circle of two politicians from the State of Bavaria.

(2) *Cosmopolitan networks:* These networks are characterised by the fact that only a small proportion of the positions are held within the combine and by a lower internal density. In such networks managers occupying positions in a large number of firms/combines meet. They are frequently dominated by managers from the banking sector (Deutsche Bank, Dresdner Bank, etc.). The aim of these networks is to procure information, particularly that relevant to the careers of banking and finance managers. Their positions on supervisory boards provide them with insider information on firms in receipt of large-scale loans or in which the banks hold a significant equity stake.

In Table 3 the social circles (factors) have been ranked according to the number of positions held within the dominant combine (column 5). The top position on this criterion is held by DBV Holding (95.7 per cent); Deutsche Bank/Siemens brings up the rear with (10.8 per cent). The classification into integration and cosmopolitan networks is based on the two terminal points of a continuum, and Table 3 (column 5) shows clearly that the borderline between them is fluid.

The network of the British economic elite was also examined for evidence of separate social circles. The results of the factor analysis are summarised in Table 4. Comparing these results with those for the German economic elite, three central structural differences emerge. Firstly, the density within each circle is substantially lower than in Germany. This finding reflects the generally lower density of relationships within the British economic elite.[18] Secondly, the proportion of positions held within the corporate group is lower. This implies that the social circles in Britain are less centred around a single corporation, encompassing managers from different corporate groupings.[19] Thirdly, in the majority of British social circles it is a financial corporation that forms the central core; this is true of eleven of the twenty circles.

While the financial networks (cosmopolitan) in Germany and Britain are structured in similar fashion, integration network patterns do not exist in Britain. The highest percentage figure in column 5 (proportion of positions held within the dominant group) amounts to 34.6 per cent in Britain