

MPS, Outside Interests, and Corporate Boards: Too Busy to Serve?

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The corporate governance literature has often been concerned with whether individuals with a high number of board directorships are too busy to serve in their role. In the UK, many MPs also hold positions on boards of directors. This raises the question of whether MPs with board memberships are too busy to serve their constituents, party and parliament. To address this question, we construct a network of directors (including MPs) and the firms they are associated with. We then draw on measures from social network analysis to capture how embedded these individuals are in the UK corporate system. We employ a regression approach to examine the relationship between MPs' position in the corporate system and their participation in Parliament. We find that that some positions within the corporate network are associated with increased participation and others with decreased participation. MP participation increases when they have high numbers of directorships or high levels of corporate opportunity, but it decreases for those who are deeply embedded in the corporate system, sitting on the boards of well-connected firms. The latter are potentially 'too busy' to serve.

Keywords: Corporate boards, Director interlocks, Moonlighting, MPs, Outside interests

As this paper was being written, the Owen Patterson scandal broke in the UK, putting the question of MPs' 'second jobs' firmly at the top of the political agenda for a number of weeks. The issue is something that academics have been studying for some time in legislatures across the world, including in British politics.

In the literature, the phrases ‘outside interests’ and ‘moonlighting’ are commonly used to describe MPs’ external roles in companies, charities and other institutions (Campbell and Cowley, 2015). The issue of outside interests has always and everywhere been an issue in politics, and the UK’s parliamentary system has faced intermittent scandals throughout its history. In the modern era, the issue has been in the public imagination in the UK since the ‘sleaze’ of the 1990s, where MPs were caught taking payments to ask parliamentary questions, while ex-ministers were ‘acquiring lucrative jobs in the private sector after leaving office’ (Rush, 1997). The MPs’ Code of Conduct that emerged from this period specifically states that MPs ‘should not place themselves under any financial or other obligation to outside individuals or organisations that might influence them in the performance of their official duties’ (House of Commons, 2019).

This paper focuses on the company directorships held by MPs and how they are located within wider networks of interlocking directorates. MPs are not necessarily paid for being directors, but the outside interest is still potentially an ‘obligation’. These obligations could detract from the time, focus and energy given to parliamentary duties (Arnold, 2013). Existing research has shown a correlation between external roles and decreased parliamentary activity in other countries. In Italy, Gagliarducci *et al.* (2010, p. 689) show that ‘politicians with higher outside income are less committed to parliamentary activity in terms of voting attendance’. In Germany, Arnold *et al.* (2014, p. 147) find that ‘outside earnings are somewhat negatively correlated with oral contributions, interpellations, and group initiatives’, though they do not find that outside earnings correlate with absence rates and speeches. The difference between findings in Italy and Germany has been explained in terms of the difference between the two political systems, with Germany having strong party discipline, fines for MPs who miss votes, and higher cultural expectations on MPs (Arnold *et al.*, 2014). Because of the country-specific nature of these findings, similar studies are needed to investigate the phenomenon in the UK.

This paper not only makes a contribution given its UK focus, but also makes two innovations compared to existing studies of outside interests in parliaments. First, while these existing studies seek correlations between parliamentary activity and *levels of outside earnings*, this paper looks instead at company directorships, many of which are unpaid positions. This allows for a wider exploration of outside interests that is not limited to positions that provide direct, immediate and declared financial gain. Officially declared payments do not necessarily capture the broader range of benefits (financial and otherwise) that MPs accrue from taking on external roles. Second, this paper reaches out to the literature on corporate boards and ‘busy directors’. Taking this approach not only allows us to draw on a wider range of existing research, but also enables analysis that looks at the position of MPs in wider corporate networks. By applying the tools of social network

analysis (SNA), we can begin to assess the position of MPs within a ‘system of interests’, rather than simply aggregating isolated cases.

We find that degree centrality (the number of boards an MP sits on) and betweenness centrality (a measure of brokerage or opportunity in the corporate system) are both positively associated with the number of questions asked by MPs. This suggests that MPs with a high number of directorships or a high level of corporate opportunity are *more* likely to participate in parliamentary activity (though further research is needed to explore the implications of this finding). In contrast, we find that eigenvector centrality (whether MPs are highly connected and embedded in the corporate system) is negatively associated with the number of questions asked. This suggests that MPs who are deeply embedded in the corporate system, for example, by sitting on the boards of well-connected firms, may be ‘too busy’ to fulfil their parliamentary role. These differences highlight that it is not only holding a directorship that impacts MP activity (as captured by the number of questions asked), rather it is the type of directorship and position of the MP in the wider corporate system. Secondary findings include the observations that most MPs’ directorships are not based in their own constituencies, and that Conservative Party MPs are, on average, more embedded in corporate networks than those of other parties. The paper explores and brings together the literature on corporate boards and the literature on the role of MPs in order to contextualise these findings.

The first section of the paper provides an overview of the literature on corporate boards and director interlocks, and shows that the problem of ‘busy directors’ has been observed in analysis of corporate networks, especially when measured by eigenvector centrality. The paper then moves on to analyse the role of MPs in order to consider whether company directorships are part of an MP’s duties. This section also justifies our focus on parliamentary activity. Having provided this contextual analysis, the paper outlines the methodology with reference to the literature on SNA, and then presents the findings over two sections. First, we consider some key questions about the nature of MP networks, especially in relation to party affiliation and constituency activity. Second, we outline our main findings in support of the central argument that MPs who are highly embedded in corporate networks could be ‘too busy to serve’.

1. Corporate boards and busy directors

The key framework and methodological approach to understand the behaviour and impact of directors sitting on multiple corporate boards is ‘interlocking directorates’ (Mizruchi, 1996). Interlocking directorates refer to the case when a director who is affiliated with one company also sits on the board of directors of other companies (Smith and Sarabi, 2021). Within the field of interlocking directorates,

there are a number of theoretical frameworks to explain the antecedents and consequences of appointments and their impact (Caiazza and Simoni, 2019). One of the most widely used is resource dependency theory, which is used to understand why interlocking directorate ties are formed. Resource dependency theory argues that network ties between firms, created by the interlocking directors, act as a mechanism for firms to access essential sources of advice and information (Pfeffer and Salancik, 1978). These additional resources can be used to mitigate environmental uncertainties and have a positive impact on firm performance. However, there has been mixed empirical support for the resource dependency theory, with some highlighting a positive performance (Sarabi *et al.*, 2021), and others noting that interlocking directorates have a negative or no impact on firm performance (Santos *et al.*, 2012).

Directors with multiple directorships embedded in a network of firms and directors, are often referred to as the corporate elite. These well-connected directors are often considered to be the 'inner circle' of the corporate system (Useem, 1986), also referred to as the 'old boys network' given this group has historically been male dominated. In their study of the Dutch corporate elite between 1976 and 2001, Heemskerck and Fennema (2009) note that social cohesion amongst these directors was characterised by shared family and educational backgrounds (although this cohesion has declined over the period under analysis).

A further area of study that has received increased interest in recent years is the notion of busy or over boarded directors (Sarabi and Smith, 2021). Busy directors are individuals with a high level of board memberships; much of the work about these directors seeks to understand whether 'director busyness' impacts firm performance or the monitoring capabilities of the director (Kaczmarek *et al.*, 2014). Director busyness is defined using a range of metrics in the extant literature. One of the most common measures is a director holding three or more directorships (Ferris *et al.*, 2003). Although three appointments have often been utilised as a measure of director busyness, there has been some debate in recent years whether this fully captures the busyness concept (Andres *et al.*, 2013).

When considering the impact of busy directors on firm performance, many debate whether they are a valuable resource or a burden (Ferris *et al.*, 2018). According to resource dependency theory, directors with multiple appointments have access to significant resources and information (Field *et al.*, 2013). Others argue that directors with a high number of appointments are ineffective because they have too many commitments. Fich and Shivdasani (2012) examine U.S. firms and find that boards with several busy directors are associated with weak corporate governance. They find that these busy directors were not able to undertake monitoring responsibilities effectively. Therefore, busy boards (with multiple busy directors) have a negative impact on firm performance (Cooper and Uzun, 2012; Méndez *et al.*, 2015).

Whilst there are some studies examining the role of politicians in the boardroom (Agrawal and Knoeber, 2001), the interlocking ties and embeddedness of politicians in the corporate system have not been examined in detail. Extant work often focuses on whether political connections of members of the board enhance a firm's value. The resource dependency theoretical framework suggests that political figures bring additional knowledge, expertise and information resources, which can be used to increase firm value and performance (Hillman *et al.*, 2009). However, findings from empirical work on the interplay between political connections and firm performance are somewhat mixed. Goldman *et al.* (2013) examine the U.S. case and find that political board connections are beneficial to the firm, as they have a substantial impact on the allocation of government resources. Gray *et al.* (2016) find contrasting results in the case of Australia, where they note that political connections do not provide value to shareholders. Hillman (2005) investigates the impact on firm value of having former politicians on boards of directors, finding that having them is associated with increased market-based measures of performance, and that this is even more pronounced in industries that are heavily regulated. Pascual-Fuster and Crespi-Cladera (2018) find somewhat similar results in their analysis of former politicians on boards, noting that the appointment of these directors generally does not lead to reduced monitoring performance, but this varies depending on the role on the board that a former politician holds.

The present study does not seek to examine how politicians shape a firm's behaviour and performance, but rather examines how a politician holding a directorship may impact their focal role as a politician. We make use of three centrality measures to capture how embedded an MP is in the corporate interlocking directorates network. The first is degree centrality, the number of directorships an individual holds. The second is betweenness centrality, which captures the number of times an actor acts as a broker in the network, connecting otherwise disconnected individuals (brokering between them). In this context, betweenness centrality can be viewed as a measure of corporate opportunity. The final measure is eigenvector centrality, which captures not only the connectedness of an actor, but also the connectedness of an actors' contacts. For instance, an actor with high eigenvector centrality will be connected to a high number of well-connected actors. This measure captures whether an actor is deeply embedded in the corporate system. The interlocking directorates network analysed in this study and these centrality measures will be discussed in further detail in the data and methods section of the paper.

2. The roles and functions of MPs

There is a lack of official guidance about the precise role of an MP. Former MP, Tony Wright, recalls how he 'found a job without any job description at all, no

means of knowing what I should be doing, and with no means of assessing how well I was doing it' (Wright, 2010, p. 299). The official line, as indicated by the UK Parliament's guidance on 'what MPs do', is that MPs have two main functions, one relating to parliamentary work, where they work as ministers, scrutinisers and campaigners, and one relating to constituency work, where they support constituents, 'attend functions, visit schools and businesses and generally try to meet as many people as possible' (UK Parliament). [Campbell and Lovenduski \(2015\)](#) argue that this role has expanded in the last 50 years. The parliamentary work now includes management of their staff and offices, and greater involvement with committees, parliamentary questions and early day motions, in addition to the significantly increased workload of the House of Commons as a whole. At the constituency level, they hold another managerial role in their constituency office, they engage with and support constituents, they liaise with local politicians and they attend various events and functions ([Campbell and Lovenduski, 2015](#)).

These two roles are identified by Wright as the 'scrutiny function' and the 'constituency function', but he also identifies a third, the 'partisan function', arguing that most MPs spend much of their time involved in party politics, which 'structures almost everything else' (Wright, 2010, p. 303). Therefore, while the role of MPs can be characterised as a combination of scrutiny and constituency work, both are structured around the UK's party system. This does not mean that MP activity is driven by an uncritical adherence to the party line. [Crewe \(2015\)](#) finds that 'most MPs are drawn by their desire to do public service, to "change the world" or correct the damage done by others'. ([Crewe, 2015](#), p. 17). Therefore, the 'partisan function' performed by MPs must be considered as embedded in and only partially determinate of their individual parliamentary and constituency work.

The balancing of the parliamentary and constituency functions that MPs perform, and the role of party politics are the key questions asked about what roles MPs can and should perform. MPs are therefore usually studied in the context of the parliamentary and constituency activities, and in relation to the tradition-heavy, and often insular, culture of Westminster. While it is important to understand MPs in their political context, it is also crucial to consider the other roles they hold, as employees, consultants, company directors, school governors, charity trustees, freelance speakers, authors etc. When considering these other 'external' roles, a pressing question arises about why MPs hold these roles, given their parliamentary, constituency and partisan functions. Are external roles a part of these three functions, or do they represent a fourth function? Or do they arise from personal interests that have nothing to do with the functioning of an MP? Are they, in fact, counterproductive to the fulfilment of MPs' functions? The literature on the functions of MPs rarely addresses these questions, but there are a number of possible linkages between an MPs' political and external roles.

One way to understand the wider connectivity of MPs, including their roles as company directors, could be to focus on their constituency role, which was earlier said to include ‘attending events and functions’ and ‘meeting as many people as possible’. Clearly, this role as networker and civic figure merely requires that MPs are ‘in the room’ at a school, charity or business event, perhaps making a speech or cutting a ribbon; it does not require that the MP becomes a governor of the school, a trustee of the charity or a director of the business. However, research suggests that there is growing pressure from local people for MPs to ‘prioritise issues of local interest and local services’ and ultimately to ‘have long-term connections with the area’ (Campbell and Lovenduski, 2015, p. 692). While MPs might show this connection by living in the constituency, this has become a general expectation rather than a show of commitment (Wright, 2010). Therefore, taking on additional roles in local institutions, such as becoming members of the boards of local companies, could be considered a way in which MPs demonstrate their commitment to their constituency.

However, Campbell and Cowley (2015) found that the idea of MPs holding company directorships was unpopular among the public, regardless of how much was being earned. This may be because of the ‘potential of corruption that might arise from sitting MPs serving on company boards’ (Campbell and Cowley, 2015). This creates something of a trade-off for politicians because the ‘popular association between extra-parliamentary activities and the inappropriate use of office may lead such activities to affect politicians’ public image negatively’ (Geys, 2013, p. 462), to the extent MPs might ‘readjust their outside interests prior to elections’ (Geys, 2013, p. 469). This seems to detract from the suggestion that company directorships are part of an MP’s connection with their constituents.

Therefore, although we do consider the constituency function in our data, understanding outside interests primarily depends on an analysis of MPs’ parliamentary function. The parliamentary function may provide motivations for MPs to hold outside interests. For example, they may build networks in businesses and charities in order to develop their knowledge of particular policy questions. The partisan function may also provide motivations, as well-networked individuals may be well placed to raise funds for their party or to attract influential supporters. However, the literature suggests that outside interests are primarily *individual* interests, rather than a part of MPs’ role (Geys and Mause, 2013). A key strand of this literature focuses on the broader career trajectory of MPs.

Weschle (2021) finds that influential politicians tend to see an increase in their earnings shortly after leaving politics, suggesting that one reason for outside interests could be to enhance an individual’s longer-term career. Baturo and Arlow (2018) find that, after leaving office, one in ten Irish TDs (MPs) ‘turn to the corporate sector, that is, engage in consulting, lobbying or board membership’; this is known as the ‘revolving door phenomenon’. Cairney (2007) distinguishes

between careers that act as instrumental steppingstones for aspiring politicians (e.g. journalism and PR), and ‘brokerage’ careers that give their occupants the skills, the connections and often the motivation to become politicians (e.g. teaching and law). In the Labour Party, instrumental careers have risen dramatically, although Conservative MPs’ backgrounds have changed less, with a long-term trend towards business (Cairney, 2007). This would imply that Conservative MPs are more likely to be embedded in corporate networks, implying a possible link between outside interests and the partisan function (Geys and Mause, 2013).

Overall, while there is a lack of evidence on *why* MPs hold outside interests, the unpopularity of outside interests detracts from the potential importance of the constituency function as an explanatory factor. Nonetheless, we do consider this function in our data. There are potential links to MPs’ partisan function (i.e. their role as loyal members of a political party), given the divergence between parties. This too is considered. However, our data primarily focuses on the parliamentary function, where outside interests may provide channels for the flow of knowledge and expertise. The literature from Germany and Italy suggests that such interests actually lead to decreased parliamentary activity (Gagliarducci *et al.*, 2010; Arnold *et al.*, 2014), supporting the view that suggests outside interests exist not to further the role of MPs, but rather to further individual careers.

3. Data and methods

This study draws on several datasets in order to examine the corporate affiliations of MPs, and to examine whether these affiliations influence parliamentary activity. We focus on the ‘parliamentary questions’ asked by these MPs as a proxy measure for parliamentary activity. Questions asked includes written and oral questions; ‘written questions are heavily employed by MPs’ (Flinders, 2017). In the first instance, the details on MPs were chiefly extracted from the UK Parliament website.¹ The information gathered on MPs includes party, tenure as an MP, date of birth, constituency, alma mater (if any) and gender. To identify the membership of the MPs on boards of directors of UK firms, we searched for the MPs by name, using the publicly available Companies House API (Application Programming Interface) using custom software.² We then filtered the results based on date of birth and various other information (including middle names, location and occupation) to ensure that we identified the right individual. This returned a set of director IDs for MPs with a directorship recorded on Companies House. These director IDs were then used to identify the firms where MPs sit on the board of

¹These include <https://members.parliament.uk/> and <https://commonslibrary.parliament.uk/mp-data-parliamentary-activities/>

²<https://github.com/MatthewSmith430/CompaniesHouse>

directors. We examined the board directorships of MPs from December 2019 to February 2021.

As observed in the literature on the corporate elite, we utilise this data to construct an interlocking directorate network, using the MPs' affiliations as a starting point. However, a network of only the boards of directors for firms that MPs sit on does not fully capture how embedded MPs are in the wider corporate system (and does not provide complete answers to our research questions). Therefore, in this study, we go beyond simply examining the MP-firm director linkages to capture the wider range of directors and firms that an MP may be potentially exposed to. Figures 1, 2 and 3 indicate the stages used to generate this extended interlocking directorates network that MPs are embedded in. The MPs are yellow triangles, other directors are red circles and firms are blue squares. The directors with a light

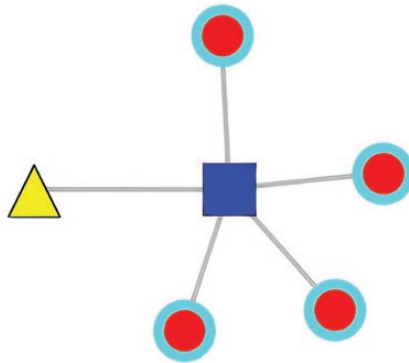


Figure 1 The link between an MP [triangle] and a firm [square] is identified. The other directors in these firms [circles] are then added.

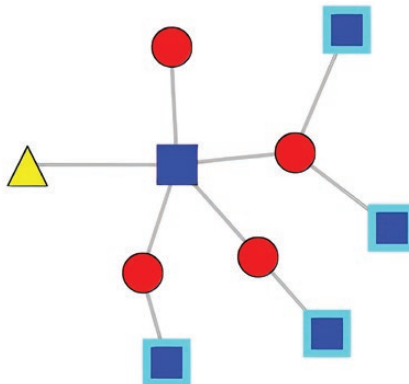


Figure 2 The additional firms that these other directors (non-MPs) sit on are then identified [squares with outlines].

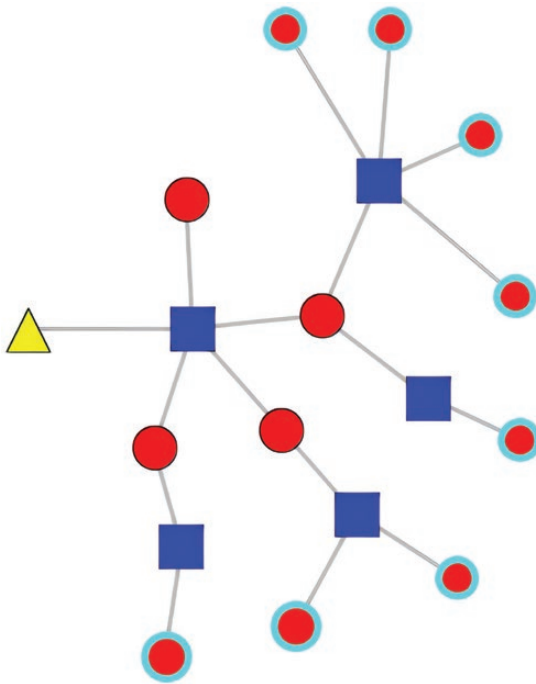


Figure 3 For all these additional firms, we identify all their directors [circles with outlines].

blue border are the elements added in each stage. This process allows us to better capture the position of an MP in the wider corporate system, and to see whether they are exposed to a wider range of corporate interest, behaviours and influence.

This network is used to identify the MPs with the highest level of exposure to business interests, which is captured by calculating the centrality of MPs embedded in this network. In order to explore the level of firm affiliations of MPs, this study utilises a descriptive approach, mapping the average number of affiliations by party, region and gender. Additionally, we draw on SNA, to analyse the MPs' interlocking directorates network (described in the previous section). More specifically, we analyse the centrality of MPs in the extended interlock network. Centrality captures the prominence of an actor within a network, and various centrality measures are available to capture the different roles and types of prominence an actor has in a network (Borgatti *et al.*, 2018).

In this study we draw on three types of centrality metrics: degree centrality, betweenness centrality and eigenvector centrality. *Degree centrality* is simply the count of corporate board memberships that an actor holds in this network. Degree centrality is the simplest measure of centrality and is frequently used due to the ease in which the measure can be applied and interpreted.

Betweenness centrality captures the extent to which an actor acts as a broker in the network, or more formally, the number of times the actor sits on the shortest path between pairs of actors in the network (White and Borgatti, 1994). Brokers are individuals that connect otherwise disconnected groups. Holding a brokerage role is often associated with several benefits, as brokers are exposed to various ideas, knowledge and opinions of the disconnected groups, and brokerage can be viewed as a measure of opportunity (Stovel and Shaw, 2012). Granovetter (1973) demonstrated this in a study of individuals securing job roles via network contacts. The study examined individuals with networks that were densely connected, where all individuals were connected to one another. Although these individual's connections were well connected with each other, with shared friends and family members, and would share information with each other quickly, it was unlikely that an individual would receive any *new* information from these contacts that would help securing a job. The study then examined individuals with other types of network ties and found that when an individual held a 'brokerage role', linking otherwise disconnected groups, this provided a bridge to new sources of information that would help the individual to secure employment. Betweenness centrality therefore represents a measure of opportunity, as individuals with high betweenness centrality are likely to hold brokerage positions and have access to a wider range of information sources (and access to available corporate opportunities).

Eigenvector centrality is based on the idea that an actor is central in the network if they are connected to well connected, central actors (Bonacich, 2007). It is important to note that the betweenness and eigenvector centrality measures consider the overall network (or system), rather than just the number of connections (as reflected by degree centrality). Whilst an actor with a high *degree centrality* is connected to many others in the network, the connectedness of those 'others' is not considered. Therefore, an actor with high degree centrality may be connected to many peripheral actors that each have a small degree centrality. In contrast, an actor with a high *eigenvector centrality* is connected to many actors that are also well connected, with high degree centralities themselves. Eigenvector centrality can thus be thought of as 'connectedness' or 'embeddedness' in the corporate system, because actors with high eigenvector centrality are likely to sit on boards with other well-connected individuals.

Figure 4 presents a network visualisation (adapted from the work of Ortiz-Arroyo, 2010) and highlights the actors with the highest centrality scores according to *degree* (yellow triangle), *betweenness* (blue square) and *eigenvector* (green diamond) centrality. This visualisation displays the differences between the centrality measures. The yellow triangle has the highest *degree centrality*, as it has the highest number of connections. The blue square has the highest *betweenness centrality* as it is linking together multiple groups, acting as a bridge between them. If the blue square was removed from the network, there would be three separate, disconnected components of the network (in contrast, if the green diamond and

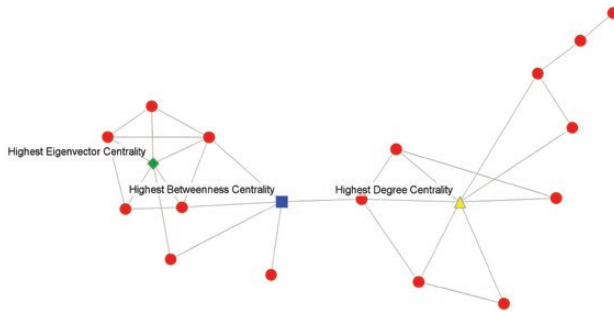


Figure 4 Network visualisation illustrating difference between centrality measures. Most central actors are highlighted: degree centrality [triangle], betweenness centrality [square] and eigenvector centrality [diamond]. Source.: [Ortiz-Arroyo \(2010\)](#)

yellow triangle were removed from the network, it would remain a single, completely connected component). The green diamond has the highest *eigenvector centrality* because it is connected to the most well-connected actors (in contrast, the yellow triangle has a higher number of connections, but it is connected to actors that are not themselves well connected). [Litterio et al. \(2017\)](#) note that high *betweenness centrality* and high *eigenvector centrality* are advantageous properties for an actor, as these positions are often associated with greater influencing potential within the network.

In order to address the research questions posed by this paper, more specifically whether MPs with corporate affiliations are too busy to serve, we make use of a regression analysis ([Harrell, 2015](#)). The dependent variable is the number of questions that an MP asked from December 2019 to February 2021; because this is count data, we employ a Poisson regression. The number of questions an MP asked is used as a proxy for MP activity. The independent variables include a range of MP attributes, such as age, gender, party (we include a dummy variable for the three largest parties: the Labour Party, SNP and the Conservative Party), time in Parliament (captured by number of times elected), along with the three centrality measures that capture an MP's role and embeddedness in the corporate system (see [Table 2](#) for details). Given that centrality measures are known to be correlated ([Valente et al., 2008](#)), we use a separate model for each. Additionally, we include a fourth model, where we do not use a measure of centrality to capture an MP's activity in the corporate system, but instead use a dummy variable to indicate whether an MP holds a seat on any firm's board of directors or not. We also include an education variable in the model specification to capture whether an MP was educated at the Universities of Oxford or Cambridge. This indicates whether an MP attended one of these two elite universities, which are often associated with

the ‘old boys network’ both in business and politics (Tholen *et al.*, 2013). MPs that do not ask questions in Parliament (such as the Speaker and members of Sinn Féin) were excluded from the analysis.

4. Party affiliation and the constituency function

Before addressing the central question of whether MPs are ‘too busy to serve’, it is useful to present some of the secondary findings from our data. Although we followed the existing literature by focussing primarily on how outside interests link to MPs’ *parliamentary* functions, we also considered links to their partisan and constituency functions.

First, on the question of an MP’s partisan function, we can consider the expectation, derived from the existing literature, that MPs of the Conservative Party are more likely to hold company directorships. Table 1 presents descriptive statistics for MPs with a company directorship, showing MP affiliations in relation to political parties. The table shows that Labour and Conservative MPs are in fact almost equally likely to hold a position on a company board; Liberal Democrat MPs are much more likely to hold such a position, though their base number is very small. There are many more Conservative than Labour MPs with company affiliations, but this reflects the fact that the Conservatives have a large majority in the Commons. However, once we factor in the number of companies that each MP is connected to, it is clear that Conservative MPs are much more connected, holding an average of 2.42 company directorships, compared to 1.7 for Labour MPs and slightly fewer for the Liberal Democrats and SNP.

This supports findings from Germany, where right wing parties have been shown to have more outside interests than left-wing parties (Geys and Mause, 2013), though the question remains open about whether the partisan function explains this difference. We could postulate that Conservative MPs hold these roles in order to support their party by building support or raising funds. However, as

Table 1 Descriptive statistics of MPs with company directorships by political party

	Conservative	Labour	Liberal democrats	SNP	Total
No. of MPs with directorship (% of all MPs belonging to the party)	145 (40)	77 (39)	7 (64)	16 (34)	259 (40)
Mean no. of directorships	2.42	1.70	1.57	1.63	2.13
No. of directorships standard deviation	2.61	1.65	0.79	1.03	2.22

noted above, the existing literature suggests that the explanation is more likely to be related to individual career paths, with Conservative MPs commonly coming from and returning to roles in private businesses (Cairney, 2007; Baturo and Arlow, 2018).

We also considered the place of company directorships in relation to MPs' constituency function. Setting aside the 1.6% firms with unavailable data, the majority of MP company directorships (73.5%) are based outside their constituency. This suggests that the constituency role is at best a partial explanation of MP directorships, which are more likely to be connected to their activities at the political centre. This is further supported by the fact that London accounted for 35.2% of the companies with an MP on the board; the South East came second with 9.7%. While this reflects the broader distribution of businesses in the UK, it also supports the suggestion that MP company directorships are not primarily linked to their constituency role.

5. Too busy to serve?

Table 2 presents the results from the regression analysis with a model for each centrality measure, along with a separate model with a dummy variable for whether an MP has a seat on a corporate board or not. We observe a significant negative effect for the dummy variables for the three major political parties, indicating that MPs from these parties are less likely to ask questions (compared to other MPs). Number of times elected tends to be positive and significant (with the exception of the betweenness centrality model), suggesting that newer MPs are less likely to ask questions, whilst those that have been in Parliament for an extended period of time are more likely.

There are several demographic variables that indicate that MPs with certain characteristics are more or less likely to be active within Parliament. There is evidence that ethnic minority MPs are slightly more likely to ask questions in Parliament. There is also a positive and significant male effect, indicating that male MPs are more than twice as likely to ask questions in Parliament. There is a negative and significant age effect (although quite small), suggesting that younger MPs are more active within Parliament. The Oxbridge variable captures whether an MP attended the University of Oxford or Cambridge (elite UK universities). The regression results suggest that MPs who attended these elite universities and are therefore more likely to be part of so-called old boys' networks are less likely to be active in Parliament (in terms of asking questions).

The dummy variable indicating whether or not an MP has a corporate affiliation is non-significant, contrasting with the centrality effects in the other models. This indicates that it is not simply the presence of a corporate affiliation that impacts on an MP's ability to serve, but rather how they are positioned within the corporate

Table 2 Poisson regression analysis results. Dependent variable: no. of question asked

	Corporate affiliation	Degree centrality	Betweenness centrality	Eigenvector centrality
(Intercept)	5.8614*** (0.0210)	5.8582*** (0.0209)	5.9051*** (0.0209)	5.8245*** (0.0213)
Party: Conservative	-1.4513*** (0.0132)	-1.4484*** (0.0131)	-1.4560*** (0.0131)	-1.4485*** (0.0131)
Party: Labour	-0.1787*** (0.0123)	-0.1723*** (0.0123)	-0.1811*** (0.0121)	-0.1779*** (0.0121)
Party: SNP	-0.6846*** (0.0168)	-0.6784*** (0.0168)	-0.6938*** (0.0167)	-0.6837*** (0.0167)
Ethnic minority	0.1361*** (0.0104)	0.1337*** (0.0103)	0.1298*** (0.0103)	0.1490*** (0.0104)
OxBridge educated (1/0)	-0.1602*** (0.0095)	-0.1595*** (0.0095)	-0.1529*** (0.0095)	-0.1661*** (0.0095)
No. of times elected	0.0102*** (0.0024)	0.0095*** (0.0024)	0.0029 (0.0024)	0.0136*** (0.0024)
Gender (male)	0.0829*** (0.0075)	0.0820*** (0.0075)	0.0858*** (0.0075)	0.0869*** (0.0075)
Age	-0.0063*** (0.0004)	-0.0064*** (0.0004)	-0.0067*** (0.0004)	-0.0066*** (0.0004)
Corporate affiliation (1/0)	0.0013 (0.0072)			
Centrality		0.0091*** (0.0022)	0.0502*** (0.0025)	-0.9680*** (0.1186)
pseudo R2	0.2953	0.2955	0.2986	0.2974
AIC	75006.24	74989.95	74658.64	74790.17
BIC	75050.89	75034.59	74703.28	74834.82
Number of observations	642	642	642	642

***p < 0.001;
**p < 0.01; *p < 0.05
Standard errors in brackets

system of interlocking directorates. The impact of director centrality, using various metrics, has been widely explored in the extant literature on corporate governance. [Crocì and Grassi \(2014\)](#) find in their study of Italian firms, that degree and eigenvector centrality has a negative impact on firm value, and they attribute this to the problem of director busyness. However, they find that there is not a substantial impact of betweenness centrality on firm value.

The effects of *degree centrality* and *betweenness centrality* are both positive and significant (and is more pronounced for betweenness centrality). This suggests that having multiple board directorships (to some extent) or holding a position of opportunity in the corporate system is associated with asking more questions in Parliament and playing a more active role. The implications of this 'more active role' are unclear, given that the positive correlation could indicate MPs using their position to further corporate interests within parliament. Whether or not this is the case will require further research that categorises the qualitative content of MP contributions and links these to the activities of connected businesses. This is an important next step for research on MPs' corporate networks.

The clearer finding of the current study is that *eigenvector centrality* is negative and significant, suggesting that MPs who are highly embedded in the UK corporate system, sitting on the boards of well-connected firms, are less likely to ask questions within Parliament, possibly because they are 'too busy' to serve. This finding mirrors the existing literature on corporate boards, which suggests that busy directors with high eigenvector centrality are linked to weak corporate governance in the companies in which they serve. The model fit is assessed using McFadden's pseudo- R^2 (McFadden, 1977), where the values for all the models are rather similar, with values between 0.295 and 0.299. For McFadden's pseudo- R^2 , values between 0.2 and 0.4 are argued to represent a model with an excellent fit (Swait *et al.*, 2000). Therefore, the McFadden's pseudo- R^2 values for these models reflect a good fit.

In summary, we find contrasting results for the different measures of an MP's position in the corporate network. Certain positions are associated with increased participation in parliament, while others are associated with decreased participation. We observe increased participation when an MP holds many directorships or where they bridge otherwise unconnected parts of the network. Given the existing literature on the corporate network, we can interpret this in terms of 'opportunity': MPs with more corporate opportunity are more likely to ask parliamentary questions. In contrast, we observe decreased participation when an MP sits on boards of well-connected firms. Again, building on the existing corporate network literature, we can interpret this in terms of 'embeddedness': MPs who are deeply embedded in the corporate network are less likely to ask parliamentary questions.

6. Conclusions

In any legislature where members have 'outside interests' or where they 'moonlight' in 'second jobs', questions will arise about commitment and integrity. In the UK, and as a result of previous scandals, MPs are prohibited from being under 'financial or other obligation to outside individuals or organisations that might

influence them in the performance of their official duties' (House of Commons, 2019). This study aimed to ask whether MPs with corporate affiliations, embedded in the UK interlocking directed system, are too busy to serve in those official duties.

We find a rather nuanced answer: an MPs position within the corporate network *does* impact their participation in parliament, but the nature of this effect depends on the nature of their position within that network. Some positions within the corporate network make MPs more likely to participate, while others make them less likely to participate. By constructing an interlocking directorates network and examining the centrality of MPs within this network, we find that MPs who sit on the boards of well-connected firms are less likely to ask written questions. This supports existing findings from Italy and Germany, where correlations between outside interests and decreased parliamentary activity have been observed. However, we also find that MPs who bridge different parts of the corporate network are *more likely* to ask written questions. Therefore, while MPs who are highly 'embedded' in the corporate network may be too busy to serve, those who have high levels of 'opportunity' may have incentives for increased participation.

The novelty of this approach means that, although there are certain limitations to the current study, there are significant opportunities for future research to understand the place of MPs in corporate networks. In this paper, we only make use of a single proxy for MP participation, the number of questions asked by MPs. Future work could seek to make use of a wider range of data to further unpack whether politicians with corporate interests are too busy to serve. The results from the degree centrality and betweenness centrality effects suggest that there is also a need to investigate the types and topics of the questions asked. This research creates the opportunity to consider how different patterns of parliamentary behaviour correlate with different positionings within corporate networks. This use of SNA can also be replicated in other countries, especially Italy and Germany where there is already existing literature on outside interests.

By introducing director interlocks and SNA to the question of MPs' 'outside interests', we have opened up a new set of research possibilities. Developing this new research agenda will require the collection of three main types of data.

First, data is needed that clarifies the benefits MPs gain from outside interests, including financial remuneration and future career advantages. The former could be measured using the Parliamentary Register of Interests, but cleaning this data is a major undertaking and would not necessarily include all financial benefits, especially those that MPs want to disguise. Future career advantages could be measured by studying the career trajectories of past MPs, but again this would require significant manual data collection.

Second, data is needed that clarifies the nature of connected companies. Part of the challenge is the inadequacy of the classification of businesses (the 'SIC codes'),

an inadequacy that the government have themselves recognised (DCMS, 2021). Further qualitative data could provide insights into how businesses explicitly justify an MP on the board, while quantitative data could replicate studies from other countries showing the dis/advantages of politicians as board members (e.g. Hillman, 2005; Goldman *et al.*, 2013).

Thirdly, data is needed on how parliamentary behaviour links to outside interests. In this paper we have used the number of written questions as a proxy, but the key next step is to find ways of categorising and quantifying the content of MPs' written *and* spoken contributions in Parliament, which could be relatively simple analysis of keywords or more sophisticated methods using natural language processing. In this case, the data is available via Hansard, but processing the data is the major challenge.

Collecting data in each of these areas has its own challenges, but each opens up new possibilities for analysing MPs outside interests. One of the most important questions about outside interests is *why*; what reasons do MPs have for holding outside interests? This is a very complex question that is beyond the scope of any individual study, but this paper has made an important contribution, by showing that the answer is unlikely to lie in MPs' 'constituency function', that there may be a link with their 'partisan function', but that the real focus should be on the 'individual interests' of MPs and how these interact with their 'parliamentary function'. On this latter point, we add weight to the existing evidence that outside interests are detrimental to this crucial parliamentary function.

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