ECONSTOR
Make Your Publications Visible.

A Service of

ZBW Leibniz-Informationszentrum Wirtschaft
Leibniz Information Centre for Economics

Acheson, Graeme G.; Campbell, Gareth; Turner, John D.

Working Paper

Common law and the origin of shareholder protection

QUCEH Working Paper Series, No. 2016-04

Provided in Cooperation with:
Queen's University Centre for Economic History (QUCEH), Queen's University Belfast

Suggested Citation: Acheson, Graeme G.; Campbell, Gareth; Turner, John D. (2016) : Common law and the origin of shareholder protection, QUCEH Working Paper Series, No. 2016-04, Queen's University Centre for Economic History (QUCEH), Belfast

This Version is available at:
https://hdl.handle.net/10419/145311

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

WWW.ECONSTOR.EU

Mitglied der Leibniz-Gemeinschaft

QUCEH WORKING PAPER SERIES
http://www.quceh.org.uk/working-papers

COMMON LAW AND THE ORIGIN OF SHAREHOLDER PROTECTION

Graeme G. Acheson (University of Stirling)
Gareth Campbell (Queen's University Belfast)
John D. Turner (Queen's University Belfast)

Working Paper 2016-04

QUEEN'S UNIVERSITY CENTRE FOR ECONOMIC HISTORY
Queen's University Belfast
185 Stranmillis Road
Belfast BT9 5EE
August 2016

Common Law and the Origin of Shareholder Protection

Graeme G. Acheson[*] Gareth Campbell[†] John D. Turner[‡]

Abstract
This paper examines the origins of investor protection under the common law by analysing the development of shareholder protection in Victorian Britain, the home of the common law. In this era, very little was codified, with corporate law simply suggesting a default template of rules. Ultimately, the matter of protection was one for the corporation and its shareholders. Using c. 500 articles of association and ownership records of publicly-traded Victorian corporations, we find that corporations afforded investors with just as much protection as is present in modern corporate law and that firms with better shareholder protection had more diffuse ownership.

Keywords: law and finance, ADRI, shareholder protection, corporate ownership, common law.

JEL codes: G32, G34, G38, K22, N23, N43, N83.

[*] University of Stirling.
[†] Queen's University Belfast.
[‡] Corresponding author: Queen's Management School and Queen's University Centre for Economic History, Queen's University of Belfast, 185 Stranmillis Road, Belfast, BT9 5EE, N. Ireland. Email: j.turner@qub.ac.uk.

Acknowledgements: Thanks to the Leverhulme Trust (Grant no. F/00203/Z) for financial support. Turner also wishes to thank Geoff Jones, Walter Friedman, and Harvard Business School for their hospitality at the outset of this project. Thanks to the archivists at the National Archives at Kew, the National Archives of Scotland, and the Guildhall Library for all their assistance. Thanks to the following for their comments: Michael Aldous, Alan de Bromhead, Shima Amini, Charlie Cai, Jean Canil, David Chambers, Chris Colvin, Marc Deloof, Bruce Grundy, Kevin Keasey, Chelsea Liu, Spencer Martin, Lyndon Moore, Janette Rutterford, Steve Toms, Garry Twite, Alfred Yawson, Ralf Zurbruegg, and seminar participants at University of Adelaide, University of Edinburgh, University of Melbourne, Leeds University, Paris School of Economics, and Queen's University Belfast.

1. Introduction

There has been ongoing interest in the role that law plays in finance, with much research suggesting a connection between particular laws and financial outcomes (e.g., Agrawal, 2013, Atanasov, 2010, Brown et al. 2013, Burkart et al., 2014). For policymakers the implication would seem to be that passing certain laws can encourage financial development. However, such a prescription ignores any historical context as to how such laws emerged, and may therefore be misleading.

In this paper, we analyse the development of shareholder protection in Britain. This is not just an isolated case study. Britain is the parent of the entire common law legal system, and of the 21 common law countries examined by La Porta et al. (2008), 16 were part of the British Empire during the late nineteenth century when corporations first became widespread. An analysis of Victorian Britain can therefore reveal the origins of the superior investor protection which is observed in most common law countries (La Porta et al., 1997, 1998, 2008). Indeed, our analysis of this period leads us to a conclusion which is almost the exact opposite of what may be implied from a simple reading of the law and finance literature. Britain codified only very basic investor protections into statutes and there were also very few judge-made precedents relating to investor protection. The approach that was taken in this era was to suggest a default template of rules, but to ultimately leave the matter between the corporation and its shareholders. This focus on private contracting gave companies the flexibility to offer different protections. Time and experience demonstrated which protections were useful, and which were not.

Britain, and those countries influenced by it, eventually ended up encoding the laws which have actually deemed to be important, post-hoc, by researchers (e.g., La Porta et al., 1997, 2008). They did this by giving companies freedom to choose how they should be run, rather than by passing laws from the beginning which would later turn out to be counter-

productive. Rather than rushing to pass new laws, it implies that countries which want to foster long-term development should promote private contracting, possibly giving a 'nudge' as to what might be beneficial. It is by giving companies contracting flexibility that optimal investor protection laws are most likely to be arrived at.

To analyse the strength of shareholder protection during the Victorian era, we not only looked at laws which had been passed, we also hand collected c.500 articles of association and corporate ownership records of publicly-traded corporations which were established in the four decades after the liberalisation of the UK's incorporation law in the late 1850s. Using these records, we create a broad Shareholder Protection Index (SPI), which measures the protection that articles of association afforded shareholders vis-à-vis company insiders. Our SPI, which contains 19 separate components, goes beyond the ADRI of La Porta et al. (1997) in that it includes: (a) the rights of shareholders to get financial information on the corporation; (b) the protection afforded shareholders from self-dealing by insiders; (c) the rights of shareholders with regards to liquidating their investment; (d) the rights of shareholders not to have their ownership stake diluted; and (e) the abilities of shareholders to exercise voice.

We find that the average company in the Victorian era had an SPI on a par with that provided for under modern-day UK corporate law and an ADRI which was not required by UK statutory corporate law until 1980. In other words, we find that, left to their own devices, company founders placed restrictions on the powers of directors and simultaneously empowered outside shareholders vis-à-vis company insiders. Thus, corporations operating in the home of the common law before the era of statutory investor protection law provided shareholders with protections which are now provided by legislation. The clauses in the articles which restrained dominant shareholders or managers were the equivalent of bright line rules or laundry lists of constraints on insider expropriation and were therefore easily

enforceable (Hay et al., 1996, p.556; La Porta et al., 1998, p.1126). Thus, the UK in this era is an example of where private action backed by strong courts, which were renowned for protecting private property rights, facilitated entrepreneurs in developing their own means of making credible commitments to outside shareholders (Coffee, 2001).

Using our corporate ownership data, we find that firms with weaker shareholder protection had more concentrated ownership. In other words, this suggests that diffuse ownership was possible in an unregulated environment because entrepreneurs who brought companies to market were able to provide small shareholders with protection against expropriation by directors and corporate insiders. Thus, our findings provide a solution to the "puzzle" of why Victorian Britain could simultaneously have weak legal protection for shareholders and diffuse ownership – corporations provided strong shareholder protection in their articles of association and this enabled them to have diffuse ownership.

The law and finance hypothesis has generated a lot of criticism in recent years (Acemoglu and Johnson, 2005; Armour et al., 2009; Berkowitz et al., 2003; Dam, 2006; Graff, 2008; Klerman and Mahoney, 2007; Licht et al., 2005; Mahoney, 2001; Pagano and Volpin, 2005; Roe and Siegel, 2011; Spamann, 2010; Stulz and Williamson, 2003). This paper contributes to this literature by responding to some of the perceived weaknesses of the law and finance hypothesis.

First, it addresses the Dam (2006) critique that statutory investor protection law in common-law countries undermines the central and important role played by judge-made law, which is said to give the common law it dynamism and pragmatic approach to solving business disputes. La Porta et al. (2008, pp.290-1) respond to this criticism by arguing that statutes merely reflect the common law way of doing things. In this paper, we are addressing the issue of whether corporations operating in the home of the common law before the era of

pervasive statutory investor protection law offered shareholders protections which are now provided under such legislation.

Second, it addresses the conundrum that Victorian Britain poses the law and finance hypothesis with its mature stock market, diffuse ownership, and yet lax investor protection law (Acheson et al., 2015; Braggion and Moore, 2013; Campbell and Turner, 2011; Cheffins, 2001, 2008; Cheffins et al., 2013; Foreman-Peck and Hannah, 2012, 2015; Franks et al., 2009; Hannah, 2007; Hannah and Foreman-Peck, 2014). We resolve this puzzle by demonstrating that corporations which offered high shareholder protection in their articles of association had a greater separation of ownership from control.

Given its historical focus, this paper also augments the growing literature which looks at the law and finance hypothesis from an historical perspective (Cheffins, 2001; Coyle and Turner, 2013; Fohlin, 2007; Guinnane et al., 2007; Lamoreaux and Rosenthal, 2005; Malmendier, 2009; Musacchio, 2008, 2009; Rajan and Zingales, 2003; Roe, 2006). However, unlike most of this literature, the findings of this paper are relatively sympathetic to the law and finance hypothesis.

Our paper also contributes to the literature which has looked at the role played by corporate by-laws in the evolution of early public and private corporations (Hilt, 2008; Musacchio, 2008, 2009; Bodenhorn, 2012; Freeman et al., 2012; Foremen-Peck and Hannah, 2015). Guinnane et al. (2014) examine a sample of articles of mainly private companies in 1892, 1912 and 1927 and find that the freedom under UK corporate law enabled company founders to provide inadequate protection for shareholders and shift the balance of power in their enterprises away from shareholders and towards themselves. However, unlike Guinnane et al.'s sample, all of the c.500 companies in our sample were public companies with shares traded on various UK stock markets.

The findings of this paper also speak to the debate on the role of the capital markets in the alleged failure of the Victorian economy and the UK's long-term industrial decline. Investors, and their decision to export capital overseas, have been largely cleared of blame for this decline (Edelstein, 1982; Goetzmann and Ukhov, 2006; Chabot and Kurz, 2010; Grossman, 2015). Nevertheless, financial infrastructure may have been somehow defective and encouraged this export of capital (Edelstein, 1982; Kennedy, 1987). Of particular relevance to this paper, is the view that the permissive nature of UK company law was a major weakness at the time (Cottrell, 1980, p.54; Kennedy, 1987, p.127). This paper contributes to this debate by suggesting that in this laissez-faire legal environment, companies, via their articles of association, committed themselves to high levels of investor protection.

2. Investor protection law in the UK

Freedom to incorporate as a limited liability company only became available in the UK with the passing of the 1855 Limited Liability Act.[1] Banks and insurance companies were excluded from this legislation, but by the time of the 1862 Companies Act, which was a consolidation of existing corporate legislation, all enterprises had the freedom to incorporate as limited liability companies.[2] Prior to this liberalisation of incorporation law, corporate charters with limited liability were only granted by Parliament or the Crown. The increase in demand for capital-intensive transportation and infrastructure projects from the mid-1820s onwards resulted in Parliament increasing the number of private incorporation bills which it heard and passed (Foreman-Peck and Hannah, 2015). Parliament typically required that standardised governance and shareholder protection clauses be inserted in statutory

[1] 18/19 Vict., c.113. This Act was repealed, but re-enacted in 1856 (19/20 Vict., c.47).

[2] Companies Act, 1862 - 25&26 Vict. c.89.

incorporation bills. Eventually, however, the 1845 Companies Clauses Consolidation Act (CCCA) prescribed the governance and shareholder protection rules that had to be included in future statutory incorporations.[3]

La Porta et al. (1998) identify six shareholder rights which they deem key for shareholder protection and they sum these six rights to create their antidirector rights index (ADRI). The six rights are as follows: (a) shareholders are allowed to attend AGMs without having to deposit shares beforehand; (b) the capital needed to call an extraordinary meeting is less than or equal to 10 per cent; (c) shareholders absent from shareholders' meetings can vote via a proxy; (d) shareholders have pre-emption rights, i.e., the first right to buy new stock; (e) shareholders holding 10 per cent or more who object to fundamental changes by directors have the right to challenge decisions in court or require company to buy their shares; (f) minority shareholders have cumulative voting or proportional representation, whereby they can elect board members.

Table 1 outlines the ADRI which prevailed under the three pieces of legislation which governed corporations in the UK in the second half of the nineteenth century. The 1845 CCCA has by some distance the highest ADRI.[4] Although the ADRI under the CCCA was relatively high, only certain companies came under the remit of the CCCA – usually companies providing public goods that needed government backing to acquire land via a

[3] Company Clauses Consolidation Act, 1845 - 8&9 Vict. c.16.

[4] According to Foreman-Peck and Hannah (2015), the CCCA scores 5 out of 6. Their score is two higher for two reasons. First, they regard the right to proxy voting as equivalent to the right of shareholders to mail proxies. We, however, stick with the La Porta et al. (1998) definition. Second, they regard the graduated voting rules of the CCCA (i.e., one vote per share up to 10, then one vote for every ten shares up to 100, and then one vote for every 10 shares thereafter) as being functionally equivalent to cumulative voting in that they strengthen the power of minority shareholders. However, these voting rules did not ensure minority representation on the board and they were ineffectual when it came to corporate governance (Campbell and Turner, 2011).

compulsory purchase (i.e., eminent domain). Railways were the most important public companies to come under the CCCA, and because of their size, they dominated the UK equity market in terms of market capitalisation in the second half of the nineteenth century (Grossman, 2002; Acheson et al., 2009). However, the vast majority of companies established in the nineteenth century incorporated under the 1862 Companies Act.

<<INSERT TABLE 1>>

As can be seen from Table 1, the 1862 Companies Act provided little in the way of protection to shareholders incorporated under it, with an ADRI of only 1 out of a possible 6. It scores a 1 because shareholders had the right to attend the AGM without depositing shares. The 1900 Companies Act increased the ADRI to 2, when a clause was inserted in the legislation to the effect that the capital required to call an extraordinary meeting was 10 per cent. The remaining components of the ADRI made their way into legislation over the course of the twentieth century. Firstly, the right to mail a proxy vote, as opposed to the right to have proxy voting, was introduced under the 1948 Companies Act (Davies and Worthington, 2012). Secondly, although provided for under Table A in the nineteenth century, it was not until the 1980 Companies Act that we see statutory provision of pre-emption rights on new stock issues (Foreman-Peck and Hannah, 2015). Finally, modern UK company law also affords shareholders with oppressed minority rights the ability to sue the company for breach of contract and petition the court as a consequence of unfair prejudicial decisions within the firm.

Compared to modern corporate law, the law on the books in the second half of the nineteenth century provided little in the way of protection to minority shareholders. However, Table A of the 1862 Companies Act provided a default set of articles of association for companies. As can be seen from Table 1, these default rules provided shareholders with more protection than the 1862 Act itself – Table A scores 3 out of 6. Table A provisions were only

default rules and the vast majority of companies established under the 1862 Act choose to ignore the Table A default provision (Edwards and Webb, 1985; Campbell and Turner, 2011, p. 574).[5]

In addition to the limited statutory protection afforded to shareholders in this era, common-law judges, influenced by laissez-faire theory and the practice of partnerships, did not believe that the courts should interfere in internal company matters and protect shareholders (Emden, 1884, pp.77-80; Jefferys, 1977, p.394). This philosophy was demonstrated in the precedent set in the 1843 case of *Foss vs. Harbottle*, where minority shareholders brought a case against company directors for purported wrongdoing and misuse of corporate assets.[6] The judgement in this case ruled that when a company is purportedly wronged by its directors, shareholders do not have a right to sue, but the company does. *Foss vs. Harbottle* was thus effective in limiting the possibility of a derivative suit, and as a result made it very difficult for an individual shareholder to sue over a grievance (Davies and Worthington, 2012, pp.648-9).

Despite the very limited shareholder protection offered by the legal system, companies may have voluntarily inserted shareholder protection clauses into their articles of association in order to attract investors and capital. We analyse the articles of association of businesses which established under the 1862 Companies Act to ascertain the levels of protection offered to investors in these companies. We then examine whether having stronger shareholder protection clauses mattered.

[5] Evidence from Lord Davey to the *Select Committee of the House of Lords on the Companies Bill* (1896), p. 36 notes that in 99 cases out of 100, the articles of association commence with a clause containing the provision, "Table A shall not apply to this company".

[6] *Foss vs Harbottle* (1843) 2 Hare 461 (Chancery Division) Wigram V-C.

3. Data on investor protection

In order to assess the level of investor protection in this laissez-faire era, we collected articles of association, which served as company constitutions and defined the rights and obligations of shareholders, for companies which incorporated under the 1862 Companies Act between 1862 and 1900, when a new Companies Act was passed. We sourced articles of association from the Companies Registration Office files at the National Archives at Kew and the National Archives of Scotland. We searched the catalogues of these two sources for the 2,765 public companies which had common stock quoted either in the *Course of the Exchange* in 1862-70 or in the *Investor's Monthly Manual* in 1870, 1885, and 1899. The former reported prices of securities on the London market, whereas the latter *also* reported prices from the numerous provincial stock markets. After searching the catalogues, we uncovered corporate records for circa 900 companies, but only 505 records contained articles of association. Seven of these articles were omitted because they were incomplete, resulting in a sample of 498.

Because we are also interested in whether investor protection mattered for ownership structure, we also collected ownership data for these same companies. Companies registered under the 1862 Companies Acts were required annually to return a hand-written standardised form (Form E) to the Registrar of Companies, which was a list of their ordinary and preference shareholders and the number of shares that they owned. Unfortunately many corporate records in the archives contained no ownership returns or ownership returns had been extensively weeded. We therefore collected ownership returns where available, and for some companies, we obtained multiple years of ownership records. Where possible, we collected ownership records closest to the date of incorporation. In total, we found ownership records for 345 of the companies for which we had articles of association.

The ownership returns allow us to measure cash-flow rights, but because we are also interested in voting rights, we collected data on each company's voting scales from their

articles of association to convert the cash-flow rights into voting rights. To enable us to calculate the ownership of company directors, we collected the names of directors from a combination of articles of association, *Burdett's Official Intelligence*, *Stock Exchange Official Intelligence*, and *Stock Exchange Year-book* and cross-referenced director names with the ownership data from Form E. Because these latter three sources only were published after 1875, we were unable to identify directors in some companies prior to this date. However, we located director names for 251 firms in our sample.

From Table 2, we see that our sample is evenly spread across the period.[7] Table 2 also reveals that our sample contains a range of companies from different industries, which broadly aligns with the industrial composition of the British capital market in this era (Grossman, 2002, pp.129-30). The largest sector in our sample is the commercial and industrial sector (e.g., bicycles, dairies, fertilizer, hotels, nitrate chemicals, oil, paper mills, plate glass, petroleum, railway carriages and rolling stock, soap and alkali, wagons), which was the growth sector in the stock market in this period (Grossman, 2002, p.130; Acheson et al., 2009, pp.1118-9).

<<INSERT TABLE 2>>

How representative is our sample? None of our sample companies would have made it into the top 100 largest public companies at the time because the largest companies between 1862 and 1900 were statutory companies (e.g., railways or utilities) or banks and insurance companies established prior to 1862 and did not come under the purview of the 1862 Companies Act. Even by 1911, 49 of the largest 100 public companies were railways (Foreman-Peck and Hannah, 2012). Over half of our sample companies were in the bottom half of non-railway companies in terms of their market capitalisation. This could bias our

[7] Several of our sample companies had established under the 1856 Act and re-registered under the 1862 Companies Act.

findings because smaller companies may have been more likely to have had dominant shareholders and concentrated ownership and thus have inserted less onerous investor protection requirements into their articles. However, as we will see below, smaller companies in this era were not necessarily more likely to have concentrated ownership.

4. Shareholder protection indices

4.1 Concepts and theory

The antidirector right index (ADRI) attempts to measure the extent to which the legal system favours minority shareholders vis-à-vis managers or dominant shareholders (La Porta et al., 1998, p.1126). In the case of companies registered under the 1862 Act, we calculate their ADRI based on their articles. Notably, two components of the ADRI were not covered by any of the articles in our sample – shareholders did not have the right to challenge fundamental changes by directors and there was no cumulative or proportional voting. Consequently, the theoretical maximum any ADRI could be was 4. In terms of the theoretical minimum, the 1862 Act had an ADRI of 1 because shareholders were not required to deposit shares before AGMs.

Legal scholars have argued that the ADRI captures only a fraction of the protection offered to shareholders under corporate law (Lele and Siems, 2007; Armour et al., 2009; Armour et al., 2009). We therefore go beyond the ADRI and develop a more comprehensive Shareholder Protection Index (SPI), which measures the complete set of protections afforded to shareholders vis-à-vis managers and dominant shareholders by articles of association. This index is composed of five sub-indexes and has a minimum and maximum score of 0 and 20 respectively. The various components of our SPI are summarised in Table 3.

<<INSERT TABLE 3>>

In constructing our index, we follow the leximetric approach of La Porta et al. (1998) and score each individual component in a binary manner (i.e., 1 if it exists, 0 otherwise), with one exception. In the case of the self-dealing index, we have identified four different levels in terms of protection (see details below) and we therefore score this index slightly differently. As with the ADRI, our SPI is unweighted, but there may be a case to be made for weighting the more important parts of the index. However, such an approach introduces subjectivity into the exercise because it is difficult to establish which components of the index were more important to contemporary investors. Our SPI, as with the ADRI, is additive, but individual components may not necessarily be independent of one another i.e., they could be complements or substitutes (Guinnane et al., 2014). We attempt to overcome the potential problems of weighting and additivity by analysing the five sub-indices. Indeed, as we will see below, there is little correlation between these sub-indices, which somewhat lessens potential concerns about additivity.

The first sub-index is the *liquidity rights index*. The ability of shareholders to liquidate their investment is a key concern for shareholders and anything which impinges on this could work counter to their interests. The first component of this index concerns the ability of directors to approbate share transfers in companies with limited liability and fully-paid shares.[8] If director approbation was required before shares could be transferred then this made shares less liquid and investors also faced the risk of having their proposed sale blocked by directors. The second component of the liquidity rights index is whether shareholders were restricted in their ability to trade shares around the dates of AGMs because the share transfer registers of the company were closed for a fixed period of time. Although shares could still

[8] Director approbation of share transfers was common for companies with extended liability and less than fully-paid shares because directors had to ensure that new shareholders had sufficient wealth to cover unpaid capital or potential calls from creditors.

be bought and sold on the open market, they were not registered in the company's books, with the result that the seller could vote at the AGM, whereas the purchaser could not. Such closures, which were widely publicised in the press, posed a risk for the purchaser and would have discouraged trading in company shares during the period of closure. The final component of this index concerns the rights and abilities of investors to liquidate a company once a certain proportion of capital has been lost. These capital loss triggers were designed to help investors get some of their initial investment returned before managers wasted any more resources trying to gamble for resurrection.

As can be seen from Table 3, the *information rights index* is the second sub-index in our SPI. The idea behind this index is to measure the ability of shareholders to access credible information on the performance of their company. Access to information is important as it enables shareholders to assess how well the managers are running the business. If the information they obtain reveals that managers are not running the company in an efficient manner, then shareholders can put pressure on managers using either voice or exit. The first component of this index is the ability of shareholders to inspect the company's books simply by turning up at the registered headquarters. The next component is whether company accounts were mailed to shareholders before the AGM, which gave them the opportunity to decide whether attendance at the AGM was worthwhile and also meant that attendance at the AGM was not necessary to obtain the accounts. The third component is whether the company's accounts were audited by independent auditors, thus ensuring the greater trustworthiness of accounts. The final component is whether the articles required that auditors had to be shareholders – such requirements may have helped to align the interests of auditors with those of shareholders.

The third sub-index we develop is a *voice rights index*, which attempts to measure the ability of shareholders to influence and vote on corporate decisions. The first component of

this index is the frequency of general meetings, with meetings taking place more than once per annum allowing for greater voice to be exercised by shareholders. The next component is the ability of minority shareholders to call an extraordinary general meeting i.e., what proportion of capital is required to call such a meeting. In keeping with La Porta et al. (1998), we suggest that less than or equal to 10 per cent makes it relatively easy for minority shareholders to call a meeting. The third component is the ease with which minority shareholders could force a poll or ballot at a general meeting. Many companies is this era had complex voting rules which would only be implemented if enough shareholders at a general meeting requested it (Guinnane et al., 2014; Acheson et al., 2015). Because Table A of the 1862 Act set the level at five shareholders, we categorize anything less than or equal to five as being advantageous to minority shareholders. The fourth component is the ability of shareholders to vote via a proxy. It is important to highlight that although proxy voting by mail was almost non-existent in the nineteenth century, and therefore all firms would have received a 0 from an ADRI perspective, proxy voting was in itself voluntary, and we have therefore coded its existence. The fifth component of our *voice rights index* codes for the ability of shareholders to remove directors who were underperforming. If a supermajority (defined as 66.6 per cent or above) is required, then this operates against minority shareholders. The final two components of this index reflect the complex voting rules which were in place in this era (Campbell and Turner, 2011). If voting was non-linear or graduated, this skewed voting towards minority shareholders (Hilt, 2008; Musacchio, 2008, 2009; Campbell and Turner, 2011). Similarly, if there was an upper limit on the number of votes any one shareholder could exercise, then this also skewed the voting structure towards minority shareholders.

Self-dealing involves corporate insiders (managers or controlling shareholders) using their power to divert wealth to themselves from other shareholders (Djankov et al., 2008).

This can occur within the bounds of the law via asset sales and contracts which are advantageous to the corporate insider (Johnson et al., 2000). The first component of our *self-dealing index* has four levels, moving from the most stringent constraints, which aim to prevent directors from selling assets, services or products at below market prices, to no constraints on self-dealing. The most stringent constraint (which scores a 3) is where (a) there is an outright ban on directors profiting from contracts with firms where they are a director and (b) a director cannot vote on an issue where he is personally involved (e.g., a company shareholder) or has a personal relationship (usually family) with a party entering a contract with the company. In the next level, which scores a 2, there is simply an outright ban on directors profiting from contracts with firms where they are a director. In the third level, which scores a 1, a director cannot vote on an issue where he is personally involved. The final level, which scores a 0, is where neither of these two constraints applies. The second component of the self-dealing index focuses on the ability of directors to use company funds to purchase company shares. The ability of directors to do this potentially enables them to artificially inflate share prices and deceive minority shareholders as to the true condition of the company. Notably, the directors of the City of Glasgow Bank did this in the months before its dramatic collapse in 1878 (Acheson and Turner, 2008). Eventually, following the precedent set in the 1887 case of *Trevor vs. Whitworth*, this practice became illegal (McDonald, 1980).

The final sub-index in our SPI is the *dilution protection rights index*. An important right for minority shareholders is the right to be protected from having their cash-flow rights diluted. This can come either through shares being issued to favoured shareholders or through the company taking on excessive debt and thus running the risk of creditors assuming control of the company. The dilution protection rights index in Table 3 has two components which reflect these risks to minority shareholders. The first component measures whether

shareholders have pre-emptive rights on new share issues and the second component asks whether limits were set on the borrowing power of directors.

4.2 Results

We first calculate the ADRI for each company. Table 4 reveals that the mean and median ADRI was 2.24 and 2 respectively. Notably, the average company had a lower ADRI score than the default contained in Table A of the 1862 Companies Act (i.e., 3). However, scores tended to be higher than was legally required by the Act, which would only have resulted in an ADRI score of 1.

<<INSERT TABLE 4>>

The SPI of the default set of articles contained in Table A of the 1862 Act was 14. However, Table A was explicitly rejected by all but 15 of our sample companies in their articles of association. Notably, only six of these 15 companies have an SPI of 14, suggesting that nine of these companies did not adopt the Table A articles, but did not say so explicitly. The statistics for our SPI in Table 4 reveal that the mean and median were 9.36 and 9 respectively. The histogram in Figure 1 indicates that just over one half of sample companies had an SPI in the 8 to 10 range, which is lower than the SPI of the default set of articles in Table A. In terms of the five SPI sub-indices, Table 4 reveals that only the liquidity rights index is higher than the score in the 1862 blueprint.

However, to put this into context, the SPI under modern-day UK corporate law is 8. In other words, the protection voluntarily offered by the majority of firms in the Victorian era was slightly higher than that afforded today under statutory law.

<<INSERT FIGURE 1>>

The correlation matrix in Table 5 reveals a correlation coefficient of 0.48 between the SPI and ADRI. The two indices should be positively correlated because they contain some of the same components, but the correlation should be substantially less than one because the SPI contains many more factors than the ADRI. In terms of the sub-components, the self-dealing index is highly correlated with the SPI and the other sub-indices are all positively correlated with the SPI but not to the same degree. In terms of the sub-indices, there is not a great deal of correlation between them, perhaps suggesting that these sub-indices were not complements or substitutes for one another. However, the liquidity rights index is negatively correlated with the voice rights index, with a correlation coefficient of -0.18. This implies that companies with high liquidity rights were more likely to have lower voice rights. One explanation for this is that the enhanced ability to exit an investment in a company made access to voice less important, which is consistent with the idea that exit and voice are alternative means afforded to minority shareholders of constraining managers.

<<INSERT TABLE 5>>

Table 6 shows the mean indices for each industry in our sample. The main issue worthy of comment is that there is very little difference between the SPI and ADRI across industries. Insurance has one of the lower SPI scores, but this is mainly due to a lower self-dealing score in this sector, perhaps because the scope for self dealing was limited in this industry. Alternatively, the average voice rights index for the insurance sector is much higher than that for other sectors, suggesting that shareholders in insurance companies had more of a voice in the running of the company.

<<INSERT TABLE 6>>

Because our sample extends over four decades, we are able to see whether companies changed the level of protection that they offered minority shareholders as the nineteenth century progressed. Table 7 shows that the mean ADRI increased between the 1860s and

1890s, but there was no change in the mean SPI. Although there was little change in the mean SPI, all of the sub-indices changed over the sample period. As can be seen from Table 7, the information and voice rights indices declined, whereas the liquidity, self-dealing and dilution indices all increased. In other words, as time progressed, shareholders had diminished rights to information and had reduced voice, but this was compensated for by increased liquidity rights and better protection of minority shareholders against self-dealing and dilution.

<<INSERT TABLE 7>>

Table 7 highlights what was driving the changes in the sub-indices. In terms of the information rights index, over time shareholders had diminished access to company account books and fewer companies required that auditors had to be shareholders. Access to account books may have diminished because new technology companies wanted to protect information from rivals. The effect was at least partially offset by an increase in the number of companies which promised to mail the accounts to shareholders before the AGM. In addition, the development of the UK accounting profession in the second half of the nineteenth century may have served as a substitute for the right of individual shareholders to examine the books (Hunt, 1936, pp.140-2; Watts and Zimmerman, 1983; Baskin and Miranti, 1997, pp.184-6). The decrease in number of companies requiring auditors to be shareholders may also be associated with the development of the accounting profession, with amateur shareholder auditors being replaced by certified accounting professionals (Watts and Zimmerman, 1983).

In terms of voice, the change mainly comes from a reduced propensity of new companies to have voting structures which were weighted towards minority shareholders. In other words, voting structures became more linear (e.g., one share one vote or five shares one vote) rather than graduated and there were no upper limits on the number of votes any one shareholder could exercise. Table 7 also reveals that companies established later in the

century required more than five shareholders to force a poll, thereby making it more difficult for minority shareholders to exercise their voice rights.

In terms of liquidity rights, Table 7 reveals that the absence of clauses requiring prior approbation of fully-paid share transfers by directors is the reason for the rise in the liquidity rights index over the sample window. This made it easier to trade in the company's shares as there was no chance the transfer could be cancelled by the directors.

The increase in the dilution rights index comes from the increased usage of limits on directors' borrowing powers. This change may have been driven by the increased availability of credit via the corporate debenture market which took off in the 1880s (Coyle and Turner, 2013), and a desire by ordinary shareholders not to lose power by issuing of debt which had preferential rights.

There is a notable decline in the limits placed on whether directors could take part in related party transactions. This gave directors more opportunity to exploit business relationships for their own personal gain, but also gave the company more flexibility. This shift is more than offset by greater limits on share repurchases. In the modern era, repurchases are a popular way of returning capital to shareholders. However, this is a relatively recent development. In this era, repurchases tended to be viewed suspiciously, as they could be used to manipulate the share price. It is notable that company policy was moving in this direction well before the practice became illegal following the 1887 case of *Trevor vs. Whitworth*.

More generally, we see that giving companies flexibility with regards their articles of association allowed a consensus about best practice to emerge, and they often moved towards modern-day approaches. For example, rules placing an upper limit on votes per shareholder, graduated voting, or requiring an auditor to be a shareholder all became less common.

However, not giving directors the power to block share transfers, and having accounts mailed before the AGM became much more common.

From the articles of association, we are able to determine the company's establishment date, nominal capital (as a proxy for size), shareholder liability, and whether or not it is a company created from scratch or an established company simply floating its shares.[9] In order to see if our SPI and its sub-indices, as well as the ADRI, are correlated with these firm characteristics, we regress these characteristics plus industry dummy variables and a dummy variable for the country (England or Scotland) where the firm was incorporated.

The results in Table 8 reveal that none of the explanatory variables are covariates of the SPI, which supports the findings outlined above. This implies that the SPI is not related to when a company was established, whether or not the company was floated from scratch, the size of the company, and shareholder liability. It also appears to be independent of industry classification, implying that our SPI is similar across industries. In terms of the ADRI, the results in Table 8 also suggest that none of the explanatory variables, apart from the breweries binary variable, are covariates.

<<INSERT TABLE 8>>

In terms of the sub-indices, establishment date is a covariate of each, with the coefficients having the sign expected from the discussion above i.e., more recently established firms had higher liquidity, self-dealing and dilution rights and lower information and voice rights. The regression results in Table 8 also suggest that companies incorporated in Scotland had similar SPIs to those incorporated in England, but they had lower liquidity and self-dealing rights and higher voice and dilution rights.

[9] Firms launching from scratch on the stock market were commonplace before the 1880s. However, after the 1880s, the majority of companies incorporating and listing on the stock market were conversions of private companies or partnerships. See Cheffins (2008, pp.181-2) and Acheson et al. (2015, p.912).

Could articles of association and hence the SPI be easily changed? If articles could easily be changed, then it raises a question as to whether shareholder protections within articles were binding. The Companies Acts 1862, s. 50-51 permitted articles to be changed by a special resolution which required 75 per cent of shareholders to agree to the modification. This was a very high barrier, which effectively made it very difficult for insiders such as directors and large shareholders to change articles in a direction which was detrimental to minority shareholders.

If articles of association were not enforced by Courts, then the protection that they offered to shareholders was minimal. Although common law judges were reluctant to interfere in the internal affairs of companies, they nevertheless were enforcers of contracts such as articles of association. Indeed, following the 1889 case of *Wood vs. Odessa Waterworks Co.*, a shareholder could bring a derivative suit to enforce the article which had been breached. In other words, when it came to articles being breached, the rule in *Foss vs. Hartbottle* did not apply in that shareholders did not have to sue through the company.

Finally, if shareholder protections in the articles were to have any bite, investors needed to be aware of them and of what they implied. While we cannot observe what investors at the time were thinking, we can observe what the financial press at the time were stating. The *Financial Times*, for example, encouraged investors to consider the articles of association before investing and on occasions would highlight what they perceived as too much power in the hands of directors at the expense of shareholders.[10] In a letter to the

[10] For example, the *Financial Times*, 31 December 1888, in an article titled 'Self-protection for investors' stated that "and last, but by no means least, give the articles of association a thorough overhauling… An hour thus spent will not be thrown away, and will often enable anyone of average intelligence to save his money by taking a peep behind the scenes". In another article on the 23 January 1897, in reference to the British Motor Syndicate, it stated that "these Articles impose monstrous disabilities on shareholders desirous of realising their

Financial Times in 1902, Henry P. Babbage, the son of Charles Babbage, stated the following: "I should like to draw attention to a point of very great and general importance and to suggest to the shareholders in every company that they should look to their articles of association and arrange them as to leave no room for secret profit and commissions".[11] He went on, in particular, to highlight the need for articles to constrain self-dealing and related transactions by directors. The choice to include such clauses and whether they attracted investors and capital is the next issue under investigation in this paper.

5. Economic outcomes of shareholder protection

5.1 Ownership structure

In this sub-section, we examine whether shareholder protection mattered for ownership structure. In other words, did firms with more diffuse ownership or a greater separation of ownership from control have a higher SPI? We hypothesise that firms with weaker investor protection will have more concentrated ownership. There are two main reasons why we might expect to find this. First, with weak protection, there might be low demand from small investors for shares, with the indirect result that ownership is more concentrated. Second, with weak shareholder protection, large shareholders may need to own more capital to exercise their control rights and have influence over managers and directors. Because the ADRI only captures a fraction of shareholder protections in the Victorian era, we do not expect it to be as correlated with ownership structure as our SPI.

In terms of how we measure ownership structure, we use a variety of measures for the sake of robustness. First, we use both cash-flow and voting rights to assess how diffuse

---

holdings" (p.4). See also *Financial Times* 31 October 1891 where the autocratic nature of the Yuruari Company's articles was highlighted because it disenfranchised small shareholders.

[11] *Financial Times*, 21 April 1902.

ownership structure is. Second, we use three ways to calculate the concentration of ownership structure: (a) proportion of shares owned by insiders i.e., directors plus owners with more than 10 per cent of capital; (b) proportion of shares owned by the top five largest shareholders; (c) Herfindhal index i.e., sum of the squared proportion of capital owned by each investor in a company. The summary statistics for these measures, which are in Table 9, reveal that the average company in the sample had relatively diffuse ownership by modern-day standards. For example, the average of the VoteLargest5 variable at 26.5 per cent compares favourably with the average capital owned by the largest shareholders in modern-day samples of US, UK and European firms (Demsetz and Villalonga, 2001; Davies et al., 2005; Maury, 2006). In our regression analysis, we take log values of our six ownership variables to obtain symmetric distributions.

<<INSERT TABLE 9>>

From Table 10, we see that our SPI is negatively correlated with all the measures of ownership concentration. In Table 11, we control for other factors which may affect ownership structure such as size, age, establishment date, shareholder liability, and industry. As can be seen from the results, the coefficients on the SPI are still negative and significant even when we control for other explanatory factors. These results suggest that higher shareholder protection is associated with more diffuse ownership or a greater separation of ownership and control, which is consistent with the view that company founders were aware of the need to offer greater protection to shareholders in order to attract small investors.

<<INSERT TABLES 10 and 11>>

As can be seen from Table 12, when we regress the ADRI and control variables on ownership concentration, most of the coefficients on the ADRI variable are negative and none of them are statistically significant. We attribute these findings to the fact that the ADRI did not come close to capturing the variation in shareholder protection in the Victorian era.

<<INSERT TABLE 12>>

From Table 13, which contains the results of regressing the five sub-indices of the SPI on ownership concentration, we see that information rights are negatively correlated with ownership concentration, suggesting that the greater access shareholders had to corporate information, the more diffuse was the firm's ownership. Notably, the coefficients on the voice rights index are negative and statistically significant in specifications 4 to 6, which suggests that the greater the voice rights accorded shareholders, the more diffuse were the voting rights and the greater the separation between ownership and control. The coefficient on the liquidity rights index in specification 1 imply that the greater liquidity rights afforded to shareholders, the lower was the cash-flow rights controlled by insiders. The coefficient on the same index in specification 4 is also negative and is not far off being significant at the 10 per cent level.

<<INSERT TABLE 13>>

5.2 Firm performance

Was the level of investor protection offered by a particular company valued by the market? There are at least two reasons why firm performance should not be affected by investor protection. First, the investor protection offered in the articles of association was chiefly concerned not with how profits are created in the first instance, but how profits are equitably distributed between corporate insiders and outside shareholders. Investor protection is more concerned with ensuring that suppliers of capital get managers to return some of the profits to them rather than how profits are generated (Shleifer and Vishny, 1986). Second, the close connection between ownership concentration and shareholder protection implies that if shareholder protection was weak, then ownership was more concentrated. Large owners can therefore monitor managers and exercise their control rights to ensure that managers perform

and increase firm value (Shleifer and Vishny, 1986). Large owners are a substitute for investor protection, implying that investor protection should not matter for firm performance.

To test whether the market values investor protection, we use a variety of performance measures. First, we use the price-par ratio on the first month of listing, which gives an indication of the value investors placed on the firm at IPO stage. Second, we use the returns on shares over the first five years of being listed. Third, we use the proportion of years in which a dividend was paid in its first five years of listing. To ensure that our measures of performance are close to when the articles were written, we only include companies who first appeared in either the *Course of the Exchange* or the *Investor's Monthly Manual* within five years of incorporation. For the returns and dividend payer variables, we also require the companies to be listed for at least three years after their first appearance. As a result, as can be seen from Table 9, we have data for about one half of our sample companies.

The univariate regression results in Table 14 reveal that the SPI and ADRI are not covariates of any of the performance measures, which is consistent with our view that performance is not affected by investor protection. The coefficient on the *Dilution* sub-index is positive and statistically significant in specification 2, but only at the 10 per cent level. In specification 4, it is negative, statistically significant, but economically small. Taken together, these two results suggest that the *Dilution* sub-index has minimal effect on performance.

<<INSERT TABLE 14>>

As an additional check, we also use the ultimate fate of a company as an alternative measure of firm performance. In effect, we are asking: (a) Was a higher SPI or ADRI associated with greater likelihood of survival over the long run? (b) Did a lower SPI or ADRI make it more likely for a firm to fail for explicit performance reasons? We obtained information on company delisting and reasons for delisting from the *London Gazette*, *Edinburgh Gazette* and the *Register of Defunct Companies*. As can be seen from Table 9, we

obtained delisting information for 451 of our firms and there are five ultimate fates. From a shareholder's ex ante perspective, *Merged* was the best outcome because most mergers in this era were due to industry rationalisation rather than poor performance (Hannah, 1974, 1976). The worst outcome would have been would have been a court order to wind up (*Court*), which usually would involve major losses for shareholders. Being struck off from the register of companies (*Removed*) usually occurred because a firm had failed. A voluntary winding up (*VolLiq*), initiated by shareholders, would usually have been associated with some losses for shareholders, but not as severe in the case of a court winding up. Reconstruction of companies (*Reconstruction*) usually resulted in raising new capital or reorganising existing capital and, on some occasions, renaming and re-registering the firm. Reconstruction in and of itself does imply that the firm had performance issues.

The multinonimal regression results in Table 15 reveal that there is no relationship between the ultimate fate of a firm and our SPI. There was also no relationship with the ADRI. These results are consistent with what we find above and reinforce the view that investor protection and firm performance are uncorrelated.

<<INSERT TABLE 15>>

As can be seen from Table 15, none of the sub-indices are correlated with the two worst outcomes (*Court* and *Removed*). Interestingly, however, Table 15 reveals that stronger information and voice rights were associated with a greater probability that a firm's final status was voluntary liquidation. This is unsurprising because if shareholders have greater information and voice, then they have the knowledge and ability to voluntarily wind up their firm and receive some return on their investment. Counterintuitively, however, the lower the liquidity rights shareholders had, the greater the probability of them entering voluntary liquidation.

6. Conclusions

How could the home of the common law have really poor statutory shareholder protection law in the pre-1900 era and yet have a thriving stock market and financial system? The evidence produced in this paper suggests that private contracts were used to provide shareholders with adequate protection in this era – company founders and their lawyers wrote articles of association which bound the firm to certain rules and types of behaviour, and the common law courts simply addressed failures of directors to adhere to contractual provisions as laid out in articles of association. Notably, the average company in the second half of the nineteenth century had an ADRI which was not required by UK statutory corporate law until 1980 and the average SPI in the Victorian era is on a par with that provided for under modern-day UK corporate law. This could be viewed as a case of the law (slowly) following corporate practice and lends some support to the La Porta et al. (1998) view that statutory corporate law in common-law countries simply reflects the common law way of doing things. Alternatively, one could view Table A of the 1862 Companies Act as "nudging" companies and potential investors in the direction of having higher ADRIs and SPIs (Foreman-Peck and Hannah, 2015). In other words, default or blueprint articles in the 1862 Companies Act outlined what the framers of the legislation thought were important aspects of investor protection (Guinnane et al., 2014). However, the ADRIs and SPIs for the vast majority of firms were a lot lower than the "guidance" suggested by Table A.

The evidence in this paper also suggests that ownership and shareholder protection were closely related because low SPI scores were correlated with more concentrated ownership. This is consistent with the view that company promoters who wanted to attract small investors placed more stringent constraints on corporate insiders as a commitment device in order to attract such investors. The implication of this finding is that diffuse ownership is possible without statutory investor protection law, but only when firms

voluntarily adopt shareholder protection clauses in their constitutions. Consequently, the "puzzle" of Victorian Britain for the law and finance hypothesis is easily resolved – diffuse ownership was possible because firms afforded outside shareholders adequate protections in their articles of association and the common law courts dealt with breaches of contract. Indeed, one could go as far as to suggest that Victorian Britain shows the common law at its best – firms freely contracting and responding to new business environments and the courts simply ensuring that such contracts were honoured.

Our findings also reveal interesting changes in shareholder protection as the nineteenth century progressed. For example, the information rights afforded to shareholders decreased as the century progressed, but this coincided with the development of the certified accounting profession. In other words, as corporate technology changed so did the nature of protection offered to shareholders in articles. This flexibility to change with new technology and a shifting business environment is usually held up as a strength of the common-law way of doing things (La Porta et al., 1998).

Voice rights also decreased over time, particularly due to the move to voting structures which were not weighted towards minority shareholders. As shareholder numbers grew and as the ownership base became more geographically dispersed, it became increasingly costly for shareholders to exercise their voice. However, this was counterbalanced by an increase in liquidity rights and increasingly liquid London and provincial stock markets. In other words, the reduction in voice rights coincided with an increased ability of shareholders to exit their investment if they did not like what managers were doing with the company. This change has not reversed and can be regarded as the beginning of the modern corporation with diffuse owners who play no role in governance and who simply sell their shares if they are dissatisfied with corporate performance or strategy.

References

Acemoglu, Daron and Simon Johnson. "Unbundling Institutions." *Journal of Political Economy* 113 (2005): 949-95.

Acheson, Graeme G. and John D. Turner. "The Death Blow to Unlimited Liability in Victorian Britain: The City of Glasgow Failure." *Explorations in Economic History*, 45 (2008): 235-53.

Acheson, Graeme G., Charles R. Hickson, John D. Turner and Qing Ye. "Rule Britannia!: British Stock Market Returns, 1825-1870." *Journal of Economic History,* 69 (2009): 1107-37.

Acheson, Graeme G., Gareth Campbell, John D. Turner and Nadia Vanteeva. "Corporate Ownership and Control in Victorian Britain." *Economic History Review* 68 (2015): 911-36.

Agrawal, Ashwini K. "The Impact of Investor Protection Law on Corporate Policy and Performance: Evidence from the Blue Sky Laws." *Journal of Financial Economics* 107 (2013): 417-435.

Armour, John, Simon Deakin, Prabirjit Sarkar, Matthias Siems, and Ajit Singh. "Shareholder Protection and Stock Market Development: An Empirical Test of the Legal Origins Hypothesis." *Journal of Empirical Legal Studies* 6 (2009): 343-80.

Armour, John, Simon Deakin, Priya Lele, and Matthias Siems. "Law and Financial Development: What We Are Learning from Time-Series Evidence." *Brigham Young University Law Review* (2009): 1435-1500.

Atanasov, Vladimir, Bernard Black, Conrad Ciccotello, and Stanley Gyoshev. "How Does Law Affect Finance? An Examination of Equity Tunneling in Bulgaria." *Journal of Financial Economics* 96 (2010): 155-173.

Baskin, Jonathan B. and Miranti, Paul J. (1997) *A History of Corporate Finance*, Cambridge University Press, Cambridge.

Berkowitz, Daniel, Katharina Pistor, and Jean-Francois Richard. "Economic Development, Legality, and the Transplant Effect." *European Economic Review* 47 (2003): 165-95.

Bodenhorn, Howard. "Voting Rights, Share Concentration, and Leverage at Nineteenth-Century US Banks." *NBER Working Paper* 17808 (2012).

Braggion, Fabio and Lyndon Moore. "Dividend Policies in an Unregulated Market: The London Stock Exchange 1895-1905." *Review of Financial Studies* 24 (2011): 2935-73.

Brown, James R., Gustav Martinsson, and Bruce C. Petersen. "Law, Stock Markets, and Innovation." *Journal of Finance* 68 (2013): 1517-1549.

Burkart, Mike, Denis Gromb, Holger M. Mueller, and Fausto Panunzi. "Legal Investor Protection and Takeovers." *Journal of Finance* 69 (2014): 1129-1165.

Campbell, Gareth and John D. Turner. "Substitutes for Legal Protection: Corporate Governance and Dividends in Victorian Britain." *Economic History Review* 64 (2011): 571-97.

Chabot, Benjamin R. and Kurz, Christopher J. "That's where the money was: foreign bias and English investment abroad, 1866-1907." *Economic Journal*, 120 (2010): 1056-79.

Cheffins, Brian R. "Does Law Matter? The Separation of Ownership and Control in the United Kingdom." *Journal of Legal Studies* 30 (2001): 459-84.

Cheffins, Brian R. *Corporate Ownership and Control: British Business Transformed*. Oxford: Oxford University Press, 2008.

Cheffins, Brian R., Dmitri K. Koustas, and David Chambers. "Ownership Dispersion and the London Stock Exchange's 'Two-Thirds Rule': An Empirical Test." *Business History* 55 (2013): 670-93.

Coffee, John C. "The Rise of Dispersed Ownership: The Roles of Law and the State in the Seprartion of Ownership from Control." *Yale Law Journal* 111 (2001): 1-82.

Cottrell, Philip L., *Industrial Finance 1830-1914: The Finance and Organization of English Manufacturing Industry*. London: Methuen, 1980.

Coyle, Christopher, and John D. Turner. "Law, Politics, and Financial Development: The Great Reversal of the U.K. Corporate Debt Market." *Journal of Economic History* 73 (2013): 809-45.

Dam, Kenneth W. "Legal Institutions, Legal Origins, and Governance." *John M. Olin Law & Economics Working Paper* 303 (2006).

Davies, J. R., David Hillier and Patrick McColgan. "Ownership Structure, Managerial Behavior and Corporate Value." *Journal of Corporate Finance* 11, no. 4 (2005): 645-60.

Davies, Paul and Sarah Worthington (2012). *Gower and Davies' Principles of Modern Corporate Law.* Sweet and Maxwell: London.

Demsetz, Harold and Belén Villalonga. "Ownership Structure and Corporate Performance." *Journal of Corporate Finance* 7, no. 3 (2001): 209-33.

Djankov, Simeon, Rafael La Porta, Florencio Lopez-De-Silanes, and Andrei Shleifer. "The Law and Economics of Self-Dealing." *Journal of Financial Economics* 88 (2008): 430-65.

Edelstein, M., *Overseas Investment in the Age of High Imperialism: The United Kingdom, 1850–1914.* New York: Columbia University Press, 1982.

Edwards, John. R. and K. M. Webb. "Use of Table A by Companies Registering under the Companies Act 1862." *Accounting and Business Research* 15: (1985): 177-95.

Emden, Alfred. *The Shareholders' Legal Guide; Being a Statement of the Law Relating to Shares, and of the Legal Rights and Responsibilities of Shareholders*. London: William Clowes and Sons, 1884.

Fohlin, Caroline. "Does Civil Law Tradition and Universal Banking Crowd Out Securities Markets? Pre-World War I Germany as a Counter-Example." *Enterprise and Society* 8 (2007): 602-41.

Foreman-Peck, James and Leslie Hannah. "Extreme Divorce: The Managerial Revolution in UK Companies before 1914." *Economic History Review* 65 (2012): 1217-38.

Foreman-Peck, James and Leslie Hannah. "UK Corporate Law and Corporate Governance before 1914: A Re-interpretation." *EHES Working Papers in Economic History* 72 (2015).

Franks, Julian, Colin Mayer, and Stefano Rossi. "Ownership: Evolution and Regulation." *Review of Financial Studies* 22 (2009): 4009-56.

Freeman, Mark Robin Pearson and James Taylor. *Shareholder Democracies? Corporate Governance in Britain and Ireland before 1850*. Chicago: University of Chicago Press, 2012.

Goetzmann, William N. and Andrey Ukhov. "British Investment Overseas 1870-1913: A Modern Portfolio Theory Approach', *Review of Finance*, 10 (2006): 261–300.

Graff, Michael. "Law and Finance: Common Law and Civil Law Countries Compared – An Empirical Critique." *Economica* 74 (2008): 60-83.

Grossman, Richard S. "New Indices of British Equity Prices, 1870-1913." *Journal of Economic History*, 62 (2002): 121-46.

Grossman, Richard S. "Bloody Foreigners! Overseas Equity on the London Stock Exchange, 1869-1928." *Economic History Review*, 68 (2015): 471-521.

Guinnane, Timothy, Ron Harris, Naomi R. Lamoreaux, and Jean-Laurent Rosenthal. "Putting the Corporation in its Place." *Enterprise and Society* 8 (2007): 687-729.

Guinnane, Timothy, Ron Harris, and Naomi R. Lamoreaux. "Contractual Freedom and the Evolution of Corporate Governance in Britain, 1862 to 1929." *NBER Working Paper* 20481 (2014).

Hannah, Leslie. "Takeover Bids in Britain Before 1950: An Exercise in Business Pre-History." *Business History* 16, no. 1 (1974): 65-77.

Hannah, Leslie. *The Rise of the Corporate Economy*. London: Methuen, 1976.

Hannah, Leslie, "The Divorce of Ownership from Control from 1900: Re-Calibrating Imagined Global Historical Trends.' *Business History* 49 (2007): 404-38.

Hannah, Leslie and James Foreman-Peck. "Ownership Dispersion and Listing Rules in Companies Large and Small: A Reply." *Business History* 56 (2014): 509-16.

Hay, Jonathan R., Andrei Shleifer, Robert W. Vishny. "Toward a Theory of Legal Reform." *European Economic Review* 40 (1996): 559-67.

Hilt, Eric. "When Did Ownership Separate from Control? Corporate Governance in the Early Nineteenth Century." *Journal of Economic History* 68 (2008): 645-85.

Hunt, Bishop Carleton (1936). *The Development of the Business Corporation in England 1800-1867*. Cambridge: Harvard University Press.

Jefferys, J. B., *Business Organisation in Great Britain 1856-1914*. New York: Arno Press, 1977.

Johnson, Simon, Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer. "Tunneling." *American Economic Review*, 90 (2000): 22-27.

Kennedy, William P. *Industrial Structure, Capital Markets and the Origins of British Economic Decline*. Cambridge: Cambridge University Press, 1987.

Klerman, Daniel and Paul G. Mahoney. "Legal Origin?" *Journal of Comparative Economics* 35 (2007): 278-93.

Lamoreaux, Naomi R. and Jean-Laurent Rosenthal. "Legal Regime and Contractual Flexibility: A Comparison of Business's Organizational Choices in France and the United States during the Era of Industrialization." *American Law and Economics Review* 7 (2005): 28-61.

La Porta, Rafael, Florencio Lopez-De-Silanes, Andrei Shleifer and Robert W. Vishny. "Legal Determinants of External Finance." *Journal of Finance* 52, (1997): 1131-50.

La Porta, Rafael, Florencio Lopez-De-Silanes, Andrei Shleifer and Robert W. Vishny. "Law and Finance." *Journal of Political Economy* 106, (1998): 1113-55.

La Porta, Rafael, Florencio Lopez-De-Silanes, and Andrei Shleifer. "Corporate Ownership around the World." *Journal of Finance* 54, (1999): 471-517.

La Porta, Rafael, Florencio Lopez-De-Silanes, Andrei Shleifer and Robert W. Vishny. "Investor Protection and Corporate Governance." *Journal of Financial Economics* 58, (2000): 3-27.

La Porta, Rafael, Florencio Lopez-De-Silanes and Andrei Shleifer. "The Economic Consequences of Legal Origins." *Journal of Economic Literature* 46, (2008): 285-332.

Lele, Priya P. and Mathis M. Siems. "Shareholder Protection: A Leximetric Approach." *Journal of Corporate Law Studies* 7 (2007): 17-50.

Licht, Amir N., Chanan Goldschmidt, and Shalom H. Schwartz. "Culture, Law, and Corporate Governance." *International Review of Law and Economics* 25 (2005): 229-55.

Mahoney, Paul G. "The Common Law and Economic Growth." *Journal of Legal Studies* 30 (2001): 503-25.

Malmendier, Ulrike. “Law and Finance ‘At the Origin’.” *Journal of Economic Literature* 47 (2009): 1076-108.

Maury, Benjamin. “Family Ownership and Firm Performance: Empirical Evidence from Western European Corporations.” *Journal of Corporate Finance* 12, no. 2 (2006), 321-41.

McDonald, D. G., *The rule in Trevor v. Whitworth: a United States perspective*, Harvard Law School LLM Thesis, 1980.

Musacchio, Aldo. “Laws Versus Contracts: Legal Origins, Shareholder Protections, and Ownership Concentration in Brazil, 1890–1950.” *Business History Review* 82 (2008): 445-73.

Musacchio, Aldo. *Experiments in Financial Democracy: Corporate Governance and Financial Development in Brazil, 1882-1950*. Cambridge: Cambridge University Press, 2009.

Pagano, Marco and Paolo Volpin. “The Political Economy of Corporate Governance.” *American Economic Review* 95 (2005): 1005-30.

Rajan, Raghuram G., and Luigi Zingales. “The Great Reversals: The Politics of Financial Development in the Twentieth Century.” *Journal of Financial Economics* 69 (2003): 5-50.

Roe, Mark J. “Legal Origins and Modern Stock Markets.” *Harvard Law Review* 120 (2006): 460-527.

Roe, Mark J. and Jordan L. Siegel. “Political Instability: Effects on Financial Development, Roots in the Severity of Economic Inequality.” *Journal of Comparative Economics* 39 (2011): 279-309.

Shleifer, Andrei and Robert W. Vishny. “Large Shareholders and Corporate Control.” *Journal of Political Economy* 94, no. 3 (1986): 461-88.

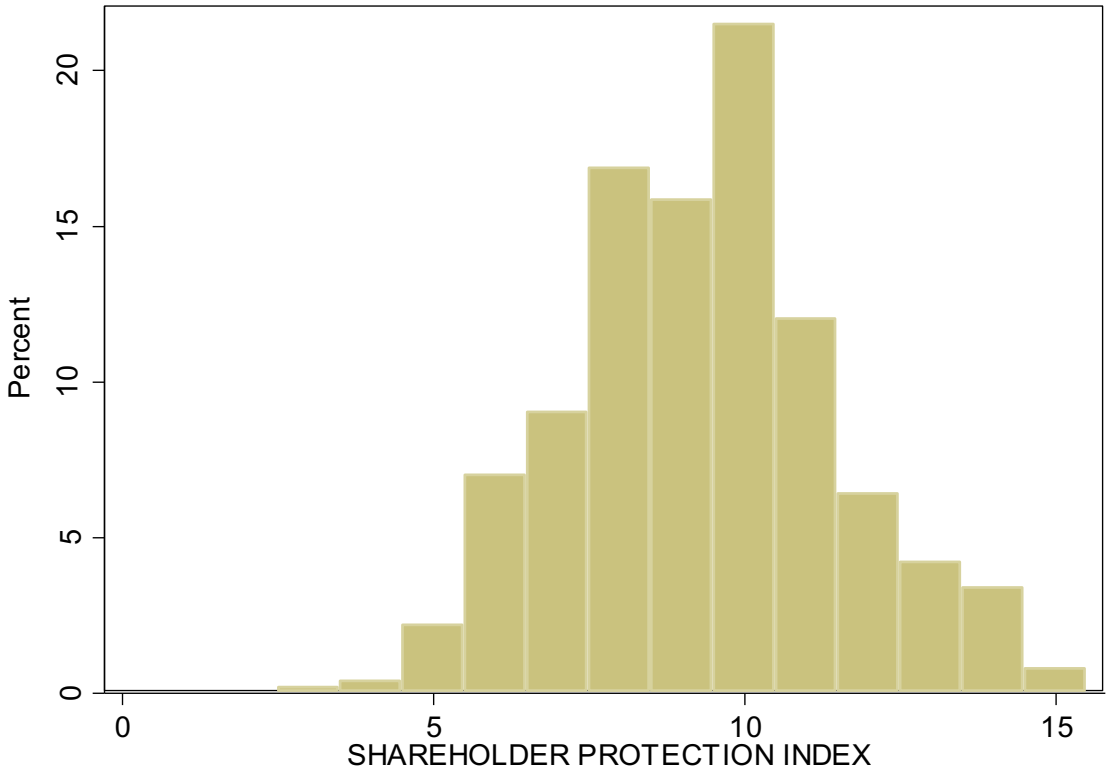
Shleifer, Andrei and Robert W. Vishny. “A Survey of Corporate Governance,” *Journal of Finance* 52, no. 2 (1997): 737-83.

Spamann, Holger. “The ‘Antidirector Rights Index’ Revisited.” *Review of Financial Studies* 23 (2010): 467-86.

Stulz, René M. and Rohan Williamson. “Culture, Openness, and Finance.” *Journal of Financial Economics* 70 (2003): 313-49.

Watts, Ross L. and Zimmerman, Jerold L., “Agency Problems, Auditing, and the Theory of the Firm: Some Evidence”, *Journal of Law and Economics*, 26 (1983): 613-33.

Figure 1: Histogram of Shareholder Protection Index



Notes: The above figures are based on the clauses contained in the articles of association of the 498 sample companies. SPI is our Shareholder Protection Index – see Table 3 for details.

Table 1: ADRI for the UK

	Mandatory Requirements				Voluntary Guidelines	
	Companies Clauses Consolidation Act (1845)	Companies Act (1862)	Companies Act (1900)	Companies Act (2006)	Table A of 1862 Companies Act (default rules)	Table A of 1906 Companies Act (default rules)
Shareholders allowed to attend AGM without depositing shares	1	1	1	1	1*	1*
Capital needed to call extraordinary meeting ≤ 10%	1	0	1	1	1#	1*
Shareholders can mail proxies**	0	0	0	1	0	0
Shareholders have first right to buy new stock – pre-emption rights	1	0	0	1	1	1
Shareholders holding 10% or more who object to fundamental changes by directors can challenge decision or require company to repurchase their shares	0	0	0	1	0	0
Cumulative voting or proportional voting	0	0	0	0	0	0
ADRI	3	1	2	5	3	3

Sources: Companies Clauses Consolidation Act (1845); Companies Act (1862); Companies Act Table A (1862); Companies Act (1900); Companies Act Table A (1906); Companies Act (2006); Spamann (2010) plus data appendix.

Notes: ** The ADRI focuses on the ability of shareholder to mail proxies, not on the existence of proxy voting. The Company Clauses Consolidation Act (1845) and Table of the 1862 and 1906 Acts permit proxies but not via mail.

* Table A of the 1862 and 1906 Companies Acts have been coded to include variables in the ADRI which had passed into statute.

Table A of 1862 Companies Act includes a suggested threshold on the proportion of shareholders needed to call an EGM, recommending a requirement of one fifth of the shareholder body to call an EGM. We have interpreted this clause as offering a similar right to shareholders as ≤10 per cent of capital because 20 per cent of shareholders could easily hold less than 10 per cent of the capital.

Table 2: Industry and Establishment Decade of Sample Companies

	1850s	1860s	1870s	1880s	1890s	1900s	Total
Banks	1	30	14	7	3	0	55
Breweries	0	3	4	15	6	0	28
Canals and Docks	0	0	1	0	0	2	3
Mortgage and Finance	2	22	13	21	6	0	64
Gas, Light and Waterworks	1	6	2	4	4	0	17
Insurance	0	8	4	3	1	0	16
Iron, Coal and Steel	0	8	20	6	3	0	37
Mines	1	8	1	11	13	2	36
Commercial and Industrial	0	57	20	37	44	0	158
Spinning and Weaving	0	2	9	2	0	0	13
Steamships	1	4	5	2	3	0	15
Tea and Coffee	0	7	1	2	3	0	13
Telegraph	1	7	8	3	1	0	20
Tramways	0	1	12	2	1	0	16
Wagon	0	3	2	2	0	0	7
Total	7	166	116	117	88	4	498

Source: See text.
Notes: The industry classification is that of contemporary stock exchange manuals such as the *Stock Exchange Official Intelligence*.

Table 3: Shareholder Protection Index

1. *Liquidity rights index* (Max = 3) is based on ability of shareholders to liquidate their holding during normal operations and when firm is in financial distress

- Approbation of transfer when fully paid: 0 if it exists, 1 if not
- Number of days transfer book is closed: 1 if =0; 0 if ≥1
- Capital loss triggers an automatic general meeting to decide whether to liquidate firm: 1 if exists, 0 if not

2. *Information rights index* (Max = 4) is based on ability of shareholders to access credible information on company

- Shareholders have access to company books: 1 if yes, 0 if no
- Shareholders entitled to have company accounts mailed to them before AGM: 1 if yes, 0 if no
- Audited accounts: 1 if yes, 0 if no
- Auditor required to be shareholder (interests of shareholders and auditors aligned): 1 if yes, 0 if no

3. *Voice rights index* (Max = 7) is based on the ability of minority shareholders to influence and vote on corporate decisions

- Frequency of general meetings: 1 if >1, 0 if =1
- % shares needed to call extraordinary general meeting: 1 if ≤ 10%, 0 otherwise
- Number of shareholders required to force a poll or ballot at general meeting and there is no requirement in terms of how much capital those shareholders own: 1≤5, 0 otherwise (5 is Table A default)
- Proxy voting: 1 if yes, 0 if no
- Supermajority (i.e., 66.6% or more) not required to remove director = 1, 0 otherwise
- An upper limit on the number of votes for any one shareholder: 1 if exists, 0 otherwise
- Graduated voting scale which weights voting in favour of minority shareholders: 1 if exists, 0 otherwise

4. *Self-dealing index* (Max = 4) is based on checks upon the ability of directors to self deal

- Limits on directors profiting from contracts with firm where they are director: 2 if exists, 0 otherwise
- Director cannot vote on an issue where they are personally involved (e.g., a company shareholder) or has a personal relationship (usually family) with a party entering a contract with the company: 1 if exists, 0 otherwise
- Ban on directors using company funds to purchase company shares: 1 if it exists, 0 otherwise (after 1887 this was illegal so every company is scored as a 1 after that date)

5. *Dilution protection rights index* (Max = 2) is based on the protection afforded shareholders with regards to dilution of their rights

- Shareholders have pre-emptive rights on new share issues: 1 if yes, 0 if no.
- Limits on directors' borrowing powers: 1 is yes, 0 if no

Notes: This Shareholder Protection Index measures the protection afforded to shareholders vis-à-vis company insiders such as managers and dominant shareholders. The minimum and maximum value of the index is 0 and 20.

Table 4: Descriptive Statistics of Indices

	Mean	Std Dev	Min	Median	Max	Default articles in Table A
Liquidity rights index [max = 3]	0.85	0.66	0	1	3	1
Information rights index [max = 4]	1.84	0.75	0	2	4	3
Voice rights index [max = 7]	3.65	1.04	1	4	7	5
Self-dealing index [max = 4]	1.74	1.11	0	2	4	3
Dilution protection rights index [max = 2]	1.28	0.70	0	1	2	2
SPI [max = 20]	9.36	2.16	3	9	15	14
ADRI [max = 6]	2.24	0.68	1	2	3	3

Notes: The above figures are based on the clauses contained in the articles of association of the 498 sample companies. SPI is our Shareholder Protection Index – see Table 3 for details. ADRI is the La Porta et al. (1998) antidirector rights index. Table A refers to the default set of articles in the 1862 Companies Act.

Table 5: Correlation between Indices

	Liquidity	Information	Voice	Self-dealing	Dilution	SPI	ADRI
Liquidity	1.00						
Information	-0.01	1.00					
Voice	-0.18***	0.14***	1.00				
Self-dealing	0.04	0.15***	0.09**	1.00			
Dilution	-0.01	0.10**	0.05	0.12***	1.00		
SPI	0.23***	0.52***	0.54***	0.67***	0.44***	1.00	
ADRI	0.01	0.16***	0.37***	0.14***	0.52***	0.48***	1.00

Notes: *** p<0.01, ** p<0.05, * p<0.1. SPI is our Shareholder Protection Index – see Table 3 for details. ADRI is the La Porta et al. (1998) antidirector rights index.

Table 6: Mean of Indices by Industry

	Liquidity	Information	Voice	Self-dealing	Dilution	SPI	ADRI
Banks	1.16	1.62	3.75	1.93	0.85	9.31	2.25
Breweries	0.96	1.89	3.39	2.11	1.25	9.61	2.50
Canals and Docks	0.33	1.67	3.00	1.67	1.33	8.00	2.67
Mortgage and Finance	0.80	1.92	3.73	1.75	1.13	9.33	2.17
Gas, Light and Waterworks	1.00	1.88	3.29	1.53	1.06	8.76	1.94
Insurance	0.50	1.44	4.44	0.81	0.94	8.13	2.19
Iron, Coal and Steel	0.89	1.84	3.68	1.76	1.68	9.84	2.35
Mines	0.64	2.06	3.47	1.56	1.50	9.22	2.19
Commercial and Industrial	0.77	1.78	3.67	1.83	1.41	9.46	2.25
Spinning and Weaving	0.54	2.38	3.77	1.31	1.54	9.54	2.38
Steamships	0.87	1.87	3.67	1.13	1.67	9.20	2.40
Tea and Coffee	0.69	1.54	3.08	1.31	1.31	7.92	2.15
Telegraph	1.25	1.85	3.70	1.95	1.00	9.75	2.25
Tramways	1.25	2.31	3.19	1.94	0.88	9.56	1.69
Wagon	0.71	2.14	4.43	1.86	1.43	10.57	2.43
Total	0.85	1.84	3.65	1.74	1.28	9.36	2.24

Notes: The above figures are based on the clauses contained in the articles of association of the 498 sample companies. SPI is our Shareholder Protection Index – see Table 3 for details. ADRI is the La Porta et al. (1998) antidirector rights index. Table A refers to the default set of articles in the 1862 Companies Act.

Table 7: Mean of Indices and Components by Establishment Date

	1860s	1870s	1880s	1890s	Diff 1890s-1860s	
LIQUIDITY	**0.69**	**0.91**	**0.91**	**1.00**	**0.31**	***
No approbation of transfer	0.28	0.56	0.62	0.77	0.49	***
Transfer books not closed	0.16	0.23	0.18	0.23	0.07	
Capital loss triggers AGM to liquidate	0.25	0.11	0.12	0.00	-0.25	***
INFORMATION	**1.98**	**1.88**	**1.65**	**1.78**	**-0.19**	**
Access to company books	0.36	0.34	0.17	0.03	-0.33	***
Accounts mailed before AGM	0.50	0.53	0.47	0.74	0.24	***
Accounts audited	0.97	0.94	0.97	1.00	0.03	
Auditor is a shareholder	0.14	0.07	0.04	0.01	-0.13	***
VOICE	**3.89**	**3.78**	**3.50**	**3.21**	**-0.68**	***
More than one AGM	0.17	0.11	0.03	0.03	-0.14	***
Less than 10% shares needed for EGM	0.55	0.59	0.56	0.78	0.23	***
Less than 5 shareholders to force poll	0.57	0.67	0.58	0.26	-0.31	***
Proxy voting	0.98	0.91	0.99	1.00	0.02	
Less than 66% needed to remove director	0.82	0.94	0.96	0.97	0.15	***
Upper limit on votes	0.27	0.19	0.15	0.03	-0.24	***
Graduated voting	0.53	0.37	0.25	0.13	-0.40	***
SELF DEALING	**1.66**	**1.72**	**1.68**	**1.97**	**0.31**	**
Ban on repurchases	0.17	0.34	0.68	1.00	0.83	***
Limits on contracting for personal benefit	1.49	1.38	1.01	0.97	-0.52	***
DILUTION	**1.16**	**1.28**	**1.32**	**1.43**	**0.28**	***
Pre-emptive rights on new share issues	0.65	0.65	0.60	0.62	-0.03	
Limits on Directors' borrowing powers	0.50	0.64	0.73	0.82	0.31	***
SPI	**9.38**	**9.58**	**9.08**	**9.39**	**0.02**	
ADRI	**2.21**	**2.23**	**2.15**	**2.40**	**0.19**	**

Notes: *** p<0.01, ** p<0.05, * p<0.1. SPI is our Shareholder Protection Index – see Table 3 for details. ADRI is the La Porta et al. (1998) antidirector rights index.

Table 8: Covariates of Indices

	(1) Liquidity	(2) Information	(3) Voice	(4) Self-dealing	(5) Dilution	(6) SPI	(7) ADRI
EstDate	0.012***	-0.013***	-0.022***	0.009**	0.006**	-0.007	0.003
	(0.003)	(0.003)	(0.004)	(0.004)	(0.003)	(0.008)	(0.003)
New	0.028	-0.058	-0.086	-0.052	0.023	-0.145	-0.038
	(0.042)	(0.047)	(0.063)	(0.070)	(0.043)	(0.132)	(0.045)
Size	-0.000	-0.000***	-0.000	-0.000	-0.000	-0.000**	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Liability	-0.990***	0.417	-0.037	0.080	-0.526**	-1.056	-0.173
	(0.125)	(0.267)	(0.337)	(0.263)	(0.208)	(0.716)	(0.203)
Country	-0.214**	-0.142	0.338**	-0.413**	0.392***	-0.039	0.143
	(0.086)	(0.107)	(0.144)	(0.189)	(0.083)	(0.325)	(0.088)
IndustryMines	-0.320***	0.251**	-0.011	-0.311	0.086	-0.305	-0.060
	(0.106)	(0.112)	(0.174)	(0.200)	(0.103)	(0.327)	(0.119)
IndustryUtility	-0.021	0.015	-0.337	-0.251	-0.322**	-0.916	-0.203
	(0.152)	(0.188)	(0.216)	(0.191)	(0.155)	(0.559)	(0.141)
IndustryFinancial	0.079	-0.059	0.034	0.101	-0.425***	-0.270	-0.063
	(0.074)	(0.087)	(0.120)	(0.145)	(0.079)	(0.268)	(0.080)
IndustryBreweries	0.034	0.100	-0.089	0.249	-0.161	0.133	0.237**
	(0.134)	(0.132)	(0.154)	(0.154)	(0.138)	(0.358)	(0.116)
Constant	-20.850***	25.169***	44.718***	-15.987**	-8.766*	24.284	-3.025
	(4.829)	(5.561)	(7.225)	(7.275)	(4.825)	(15.322)	(4.932)
Observations	498	498	498	498	498	498	498
R-squared	0.120	0.062	0.082	0.038	0.129	0.030	0.022

Notes: Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1. SPI is our Shareholder Protection Index – see Table 3 for details. ADRI is the La Porta et al. (1998) antidirector rights index. *Liquidity* is the liquidity rights index; *Information* is the information rights index; *Voice* is the voice rights index; *Self-dealing* is the self-dealing rights index and *Dilution* is the dilution rights index – see Table 3 for details. *EstDate* is the year in which the company was established; *New* is a binary variable which takes the value 1 if the company was floated from scratch on the stock market, 0 otherwise; *Size* is the natural logarithm of a company's nominal ordinary capital; *Liability* is a binary variable which equals 1 if shareholder liability is limited, 0 otherwise; *Country* is a binary variable which equals 1 for Scotland and 0 for England; *IndustryMines* is a binary variable which equals 1 if the company is in the mining industry, 0 otherwise; *IndustryUtility* is a binary variable which equals 1 if the company is a utility, 0 otherwise; *IndustryFinance* is a binary variable which equals 1 if the company is in the banking, insurance or finance industry, 0 otherwise; *IndustryBreweries* is a binary variable which equals 1 if the company is in the brewing industry, 0 otherwise.

Table 9. Summary Statistics

	N	Mean	St. Dev	Min	Median	Max
Ownership Concentration						
CapInsiders (%)	251	23.12	19.78	0.98	16.76	87.99
CapLargest5 (%)	345	30.71	17.26	5.24	25.80	81.16
CapHI (%)	345	4.69	6.02	0.31	2.41	37.40
VoteInsiders (%)	241	20.68	22.20	0.90	11.84	98.95
VoteLargest5 (%)	315	26.50	20.40	1.31	20.97	99.57
VoteHI (%)	315	4.73	9.77	0.16	1.70	79.03
Shareholder Protection						
Liquidity	498	0.85	0.66	0.00	1.00	3.00
Information	498	1.84	0.75	0.00	2.00	4.00
Voice	498	3.65	1.04	1.00	4.00	7.00
Self-dealing	498	1.74	1.11	0.00	2.00	4.00
Dilution	498	1.28	0.70	0.00	1.00	2.00
SPI	498	9.36	2.16	3.00	9.00	15.00
ADRI	498	2.24	0.68	1.00	2.00	3.00
Performance Measures						
PricePar	267	1.32	1.27	0.08	1.06	11.93
Returns	241	0.00	0.02	-0.06	0.00	0.03
DivPayer	241	0.66	0.36	0.00	0.81	1.00
Merged	451	0.34	0.47	0.00	0.00	1.00
Court	451	0.06	0.25	0.00	0.00	1.00
Removed	451	0.06	0.23	0.00	0.00	1.00
VolLiq	451	0.37	0.48	0.00	0.00	1.00
Reconstructed	451	0.17	0.38	0.00	0.00	1.00
Control Variables						
AgeOwn	358	5.01	5.85	0.00	2.00	39.00
EstDate	498	1877	12	1852	1875	1906
New	498	0.98	0.71	0.00	1.00	2.00
Size (£)	498	438,918	598,629	6,400	200,000	5,000,000
Liability	498	0.97	0.17	0.00	1.00	1.00
Country	498	0.11	0.32	0.00	0.00	1.00
IndustryMines	498	0.07	0.26	0.00	0.00	1.00
IndustryUtility	498	0.04	0.20	0.00	0.00	1.00
IndustryFinancial	498	0.27	0.44	0.00	0.00	1.00
IndustryBreweries	498	0.06	0.23	0.00	0.00	1.00

Notes: *CapInsiders* is the natural logarithm of the proportion of cash-flow rights owned by directors and shareholders who have 10 per cent or more of the cash-flow rights; *CapLargest5* is the natural logarithm of the proportion of cash-flow rights owned by the largest five shareholders; *CapHI* is the Herfindahl index of cash-flow rights; *VoteInsiders* is the natural logarithm of the proportion of voting rights owned by directors and shareholders who have 10 per cent or more of the voting rights; *VoteLargest5* is the natural logarithm of the proportion of voting rights owned by the largest five shareholders; *VoteHI* is the Hefindahl index of voting rights. *SPI* is our Shareholder Protection Index – see Table 3 for details. *Liquidity* is the liquidity rights index; *Information* is the information rights index; *Voice* is the voice rights index; *Self-dealing* is the self-dealing rights index and *Dilution* is the dilution rights index – see Table 3 for details. *ADRI* is the La Porta et al. (1998) antidirector rights index. *PricePar* is the ratio of share price to par value on the first month after listing; *Returns* is the total return earned by a shareholder over the first five years of their listing; and *DivPayer* is a binary variable which takes the value 1 if a firm has paid a dividend in its first five years after listing, 0 otherwise. *Merged* is a binary variable = 1 if firm merged with another firm, 0 otherwise; *Court* is a binary variable = 1 if firm was wound up by court order, 0 otherwise; *VolLiq* is a binary variable = 1 if firm was voluntarily wound up, 0 otherwise; *Reconstructed* is a binary variable = 1 if firm underwent a substantial change and was re-formed as a new company, 0 otherwise; *Removed* is a binary variable = 1 if firm has been struck off from the register of companies, 0 otherwise. *AgeOwn* is the age of the company at the ownership census date; *EstDate* is the year in which the company was established; *New* is a binary variable which takes the value 1 if the company was floated from scratch on the stock market, 0 otherwise; *Size* is the par value of the company's ordinary capital; *Liability* is a binary variable which equals 1 if shareholder liability is limited, 0 otherwise; *Country* is a binary variable which equals 1 for Scotland and 0 for England; *IndustryMines* is a binary variable which equals 1 if the company is in the mining industry, 0 otherwise; *IndustryUtility* is a binary variable which equals 1 if the company is a utility, 0 otherwise; *IndustryFinance* is a binary variable which equals 1 if the company is in the banking, insurance or finance industry, 0 otherwise; *IndustryBreweries* is a binary variable which equals 1 if the company is in the brewing industry, 0 otherwise.

Table 10. Univariate Regression Results – Ownership and SPI

	(1) CapInsiders	(2) CapLargest5	(3) CapHI	(4) VoteInsiders	(5) VoteLargest5	(6) VoteHI
SPI	-0.074**	-0.037***	-0.044*	-0.087**	-0.082***	-0.088***
	(0.031)	(0.014)	(0.025)	(0.033)	(0.021)	(0.027)
Constant	-1.218***	-0.995***	-3.191***	-1.342***	-0.856***	-3.053***
	(0.289)	(0.134)	(0.232)	(0.324)	(0.199)	(0.263)
Observations	251	345	345	241	315	315
R-squared	0.021	0.019	0.009	0.025	0.046	0.027

Notes: Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1. *SPI* is our Shareholder Protection Index – see Table 3 for details. *CapInsiders* is the natural logarithm of the proportion of cash-flow rights owned by directors and shareholders who have 10 per cent or more of the cash-flow rights; *CapLargest5* is the natural logarithm of the proportion of cash-flow rights owned by the largest five shareholders; *CapHI* is the Herfindahl index of cash-flow rights; *VoteInsiders* is the natural logarithm of the proportion of voting rights owned by directors and shareholders who have 10 per cent or more of the voting rights; *VoteLargest5* is the natural logarithm of the proportion of voting rights owned by the largest five shareholders; *VoteHI* is the Hefindahl index of voting rights.

Table 11. Multivariate Regression Results – Ownership and SPI

	(1) CapInsiders	(2) CapLargest5	(3) CapHI	(4) VoteInsiders	(5) VoteLargest5	(6) VoteHI
SPI	-0.083***	-0.043***	-0.051**	-0.080**	-0.081***	-0.087***
	(0.030)	(0.013)	(0.023)	(0.034)	(0.020)	(0.026)
AgeOwn	-0.030***	-0.014***	-0.028***	-0.027**	-0.006	-0.021**
	(0.009)	(0.004)	(0.007)	(0.011)	(0.006)	(0.009)
EstDate	-0.007	0.002	0.004	0.010	0.015***	0.023***
	(0.006)	(0.003)	(0.005)	(0.007)	(0.004)	(0.006)
New	0.207**	0.131***	0.226**	0.098	0.074	0.143
	(0.102)	(0.047)	(0.088)	(0.112)	(0.064)	(0.104)
Size	-0.000*	-0.000**	-0.000**	-0.000*	-0.000	-0.000*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Liability	-0.072	0.098	0.203	0.356	0.562	0.393
	(0.288)	(0.160)	(0.260)	(0.455)	(0.380)	(0.378)
Country	-0.133	-0.135	-0.207	-0.071	-0.077	-0.119
	(0.173)	(0.089)	(0.157)	(0.215)	(0.143)	(0.200)
IndustryMines	0.051	-0.062	-0.061	-0.087	-0.076	-0.112
	(0.256)	(0.152)	(0.283)	(0.270)	(0.143)	(0.253)
IndustryUtility	0.060	-0.143	-0.075	0.172	-0.031	0.102
	(0.352)	(0.174)	(0.357)	(0.346)	(0.232)	(0.431)
IndustryFinancial	-0.200	-0.330***	-0.538***	-0.147	-0.407***	-0.503***
	(0.153)	(0.076)	(0.127)	(0.169)	(0.112)	(0.149)
IndustryBreweries	-0.173	0.288**	0.531*	0.237	0.339	0.572
	(0.552)	(0.134)	(0.276)	(0.500)	(0.216)	(0.369)
Constant	12.768	-4.745	-11.555	-19.792	-29.726***	-45.518***
	(11.898)	(5.566)	(9.909)	(13.412)	(7.572)	(12.108)
Observations	249	339	339	239	310	310
R-squared	0.101	0.208	0.192	0.096	0.237	0.207

Notes: Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1. *CapInsiders* is the natural logarithm of the proportion of cash-flow rights owned by directors and shareholders who have 10 per cent or more of the cash-flow rights; *CapLargest5* is the natural logarithm of the proportion of cash-flow rights owned by the largest five shareholders; *CapHI* is the Herfindahl index of cash-flow rights; *VoteInsiders* is the natural logarithm of the proportion of voting rights owned by directors and shareholders who have 10 per cent or more of the voting rights; *VoteLargest5* is the natural logarithm of the proportion of voting rights owned by the largest five shareholders; *VoteHI* is the Hefindahl index of voting rights. *SPI* is our Shareholder Protection Index – see Table 3 for details. *AgeOwn* is the age of the company at the ownership census date; *EstDate* is the year in which the company was established; *New* is a binary variable which takes the value 1 if the company was floated from scratch on the stock market, 0 otherwise; *Size* is the par value of the company's ordinary capital; *Liability* is a binary variable which equals 1 if shareholder liability is limited, 0 otherwise; *Country* is a binary variable which equals 1 for Scotland and 0 for England; *IndustryMines* is a binary variable which equals 1 if the company is in the mining industry, 0 otherwise; *IndustryUtility* is a binary variable which equals 1 if the company is a utility, 0 otherwise; *IndustryFinance* is a binary variable which equals 1 if the company is in the banking, insurance or finance industry, 0 otherwise; *IndustryBreweries* is a binary variable which equals 1 if the company is in the brewing industry, 0 otherwise.

Table 12. Multivariate Regression Results – Ownership and ADRI

	(1) CapInsiders	(2) CapLargest5	(3) CapHI	(4) VoteInsiders	(5) VoteLargest5	(6) VoteHI
ADRI	-0.161	-0.074	-0.105	0.007	-0.038	-0.038
	(0.101)	(0.047)	(0.080)	(0.120)	(0.068)	(0.092)
AgeOwn	-0.027***	-0.013***	-0.027***	-0.024**	-0.005	-0.020**
	(0.009)	(0.005)	(0.008)	(0.011)	(0.007)	(0.009)
EstDate	-0.006	0.003	0.005	0.011	0.016***	0.024***
	(0.006)	(0.003)	(0.005)	(0.007)	(0.004)	(0.006)
New	0.217**	0.133***	0.229***	0.113	0.086	0.157
	(0.103)	(0.047)	(0.088)	(0.113)	(0.065)	(0.105)
Size	-0.000*	-0.000**	-0.000**	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Liability	0.021	0.137	0.245	0.455	0.629	0.466
	(0.280)	(0.164)	(0.260)	(0.483)	(0.415)	(0.411)
Country	-0.103	-0.127	-0.195	-0.076	-0.096	-0.140
	(0.180)	(0.093)	(0.160)	(0.227)	(0.159)	(0.213)
IndustryMines	0.009	-0.073	-0.077	-0.043	-0.059	-0.094
	(0.243)	(0.152)	(0.285)	(0.263)	(0.141)	(0.253)
IndustryUtility	0.019	-0.119	-0.052	0.237	0.075	0.218
	(0.326)	(0.162)	(0.338)	(0.323)	(0.234)	(0.411)
IndustryFinancial	-0.194	-0.320***	-0.526***	-0.127	-0.373***	-0.466***
	(0.152)	(0.075)	(0.125)	(0.169)	(0.112)	(0.147)
IndustryBreweries	-0.110	0.295**	0.542*	0.283	0.352	0.586
	(0.568)	(0.137)	(0.281)	(0.500)	(0.217)	(0.369)
Constant	9.617	-6.033	-13.108	-23.272*	-32.309***	-48.311***
	(11.801)	(5.494)	(9.806)	(13.348)	(7.733)	(12.071)
Observations	249	339	339	239	310	310
R-squared	0.086	0.191	0.185	0.076	0.195	0.182

Notes: Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1. *CapInsiders* is the natural logarithm of the proportion of cash-flow rights owned by directors and shareholders who have 10 per cent or more of the cash-flow rights; *CapLargest5* is the natural logarithm of the proportion of cash-flow rights owned by the largest five shareholders; *CapHI* is the Herfindahl index of cash-flow rights; *VoteInsiders* is the natural logarithm of the proportion of voting rights owned by directors and shareholders who have 10 per cent or more of the voting rights; *VoteLargest5* is the natural logarithm of the proportion of voting rights owned by the largest five shareholders; *VoteHI* is the Hefindahl index of voting rights. *ADRI* is the La Porta et al. (1998) anti director rights index. *AgeOwn* is the age of the company at the ownership census date; *EstDate* is the year in which the company was established; *New* is a binary variable which takes the value 1 if the company was floated from scratch on the stock market, 0 otherwise; *Size* is the par value of the company's ordinary capital; *Liability* is a binary variable which equals 1 if shareholder liability is limited, 0 otherwise; *Country* is a binary variable which equals 1 for Scotland and 0 for England; *IndustryMines* is a binary variable which equals 1 if the company is in the mining industry, 0 otherwise; *IndustryUtility* is a binary variable which equals 1 if the company is a utility, 0 otherwise; *IndustryFinance* is a binary variable which equals 1 if the company is in the banking, insurance or finance industry, 0 otherwise; *IndustryBreweries* is a binary variable which equals 1 if the company is in the brewing industry, 0 otherwise.

Table 13. Multivariate Regression Results – Ownership and Sub-Indices

	(1) CapInsiders	(2) CapLargest5	(3) CapHI	(4) VoteInsiders	(5) VoteLargest5	(6) VoteHI
Liquidity	-0.324**	-0.063	-0.092	-0.229*	-0.024	-0.059
	(0.129)	(0.047)	(0.084)	(0.139)	(0.064)	(0.095)
Information	-0.182*	-0.111***	-0.174**	-0.224**	-0.083	-0.142*
	(0.101)	(0.041)	(0.072)	(0.106)	(0.059)	(0.082)
Voice	-0.065	-0.033	-0.017	-0.157**	-0.202***	-0.186***
	(0.070)	(0.030)	(0.049)	(0.077)	(0.043)	(0.058)
Self-dealing	-0.023	-0.035	-0.031	-0.025	-0.061*	-0.069
	(0.052)	(0.026)	(0.043)	(0.057)	(0.036)	(0.047)
Dilution	-0.034	0.021	0.014	0.155	0.070	0.106
	(0.102)	(0.045)	(0.083)	(0.116)	(0.065)	(0.092)
AgeOwn	-0.031***	-0.014***	-0.028***	-0.028**	-0.008	-0.022**
	(0.009)	(0.004)	(0.008)	(0.011)	(0.006)	(0.009)
EstDate	-0.005	0.001	0.004	0.008	0.011**	0.018**
	(0.007)	(0.003)	(0.006)	(0.008)	(0.004)	(0.007)
New	0.210**	0.121**	0.214**	0.064	0.045	0.110
	(0.100)	(0.047)	(0.088)	(0.114)	(0.064)	(0.104)
Size	-0.000**	-0.000**	-0.000**	-0.000*	-0.000	-0.000*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Liability	-0.245	0.166	0.297	0.377	0.658*	0.529
	(0.354)	(0.181)	(0.303)	(0.501)	(0.369)	(0.389)
Country	-0.180	-0.166*	-0.249	-0.149	-0.062	-0.137
	(0.180)	(0.092)	(0.161)	(0.221)	(0.142)	(0.205)
IndustryMines	0.048	-0.051	-0.043	-0.064	-0.064	-0.103
	(0.255)	(0.151)	(0.278)	(0.278)	(0.144)	(0.255)
IndustryUtility	0.131	-0.100	-0.024	0.300	0.009	0.178
	(0.371)	(0.176)	(0.363)	(0.367)	(0.241)	(0.440)
IndustryFinancial	-0.172	-0.303***	-0.510***	-0.074	-0.358***	-0.434***
	(0.160)	(0.076)	(0.133)	(0.169)	(0.114)	(0.154)
IndustryBreweries	-0.191	0.311**	0.562**	0.188	0.296	0.555
	(0.541)	(0.140)	(0.285)	(0.522)	(0.210)	(0.371)
Constant	8.674	-3.023	-9.840	-15.355	-20.993**	-37.115***
	(13.733)	(6.002)	(10.730)	(15.253)	(8.137)	(13.233)
Observations	249	339	339	239	310	310
R-squared	0.128	0.220	0.202	0.131	0.273	0.226

Notes: Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1. *CapInsiders* is the natural logarithm of the proportion of cash-flow rights owned by directors and shareholders who have 10 per cent or more of the cash-flow rights; *CapLargest5* is the natural logarithm of the proportion of cash-flow rights owned by the largest five shareholders; *CapHI* is the Herfindahl index of cash-flow rights; *VoteInsiders* is the natural logarithm of the proportion of voting rights owned by directors and shareholders who have 10 per cent or more of the voting rights; *VoteLargest5* is the natural logarithm of the proportion of voting rights owned by the largest five shareholders; *VoteHI* is the Hefindahl index of voting rights. *Liquidity* is the liquidity rights index; *Information* is the information rights index; *Voice* is the voice rights index; *Self-dealing* is the self-dealing rights index and *Dilution* is the dilution rights index – see Table 3 for details. *AgeOwn* is the age of the company at the ownership census date; *EstDate* is the year in which the company was established; *New* is a binary variable which takes the value 1 if the company was floated from scratch on the stock market, 0 otherwise; *Size* is the par value of the company's ordinary capital; *Liability* is a binary variable which equals 1 if shareholder liability is limited, 0 otherwise; *Country* is a binary variable which equals 1 for Scotland and 0 for England; *IndustryMines* is a binary variable which equals 1 if the company is in the mining industry, 0 otherwise; *IndustryUtility* is a binary variable which equals 1 if the company is a utility, 0 otherwise; *IndustryFinance* is a binary variable which equals 1 if the company is in the banking, insurance or finance industry, 0 otherwise; *IndustryBreweries* is a binary variable which equals 1 if the company is in the brewing industry, 0 otherwise.

Table 14. Firm Performance and Investor Protection

	(1) PricePar	(2) PricePar	(3) PricePar	(4) Returns	(5) Returns	(6) Returns	(7) DivPayer	(8) DivPayer	(9) DivPayer
ADRI	0.092			0.000			0.012		
	(0.120)			(0.002)			(0.033)		
SPI		0.043			-0.000			0.000	
		(0.030)			(0.001)			(0.011)	
Liquidity			-0.130			-0.000			0.030
			(0.110)			(0.002)			(0.035)
Information			0.130			0.002			-0.017
			(0.137)			(0.002)			(0.036)
Voice			-0.037			0.000			0.003
			(0.063)			(0.001)			(0.027)
Self-dealing			0.027			0.000			0.026
			(0.069)			(0.001)			(0.023)
Dilution			0.195			-0.004**			-0.054
			(0.122)			(0.002)			(0.036)
Constant	1.116***	0.921***	1.042***	-0.004	-0.001	-0.001	0.639***	0.661***	0.681***
	(0.254)	(0.264)	(0.324)	(0.004)	(0.005)	(0.006)	(0.077)	(0.106)	(0.117)
Observations	267	267	267	241	241	241	241	241	241
R-squared	0.002	0.005	0.023	0.000	0.001	0.027	0.000	0.000	0.018

Notes: Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1. The dependent variables are as follows: *PricePar* is the ratio of share price to par value on the first month after listing; *Returns* is the total return earned by a shareholder over the first five years of their listing; and *DivPayer* is a binary variable which takes the value 1 if a firm has paid a dividend in its first five years after listing, 0 otherwise. *SPI* is our Shareholder Protection Index – see Table 3 for details. *Liquidity* is the liquidity rights index; *Information* is the information rights index; *Voice* is the voice rights index; *Self-dealing* is the self-dealing rights index and *Dilution* is the dilution rights index – see Table 3 for details. *ADRI* is the La Porta et al. (1998) antidirector rights index.

Table 15. Multinomial Logit Regressions - Determinants of Final Status of Companies

Panel A: ADRI

	(1) Court	(2) Removed	(3) VolLiq	(4) Reconstructed
ADRI	-0.292	0.012	-0.151	-0.151
	(0.273)	(0.343)	(0.164)	(0.213)
Constant	-1.018	-1.839**	0.420	-0.336
	(0.625)	(0.811)	(0.385)	(0.494)
Observations	451	451	451	451

Panel B: SPI

	(1) Court	(2) Removed	(3) VolLiq	(4) Reconstructed
SPI	-0.035	-0.027	0.040	-0.043
	(0.082)	(0.102)	(0.051)	(0.066)
Constant	-1.342*	-1.557	-0.301	-0.272
	(0.788)	(0.968)	(0.500)	(0.624)
Observations	451	451	451	451

Panel C: Sub-Indices

	(1) Court	(2) Removed	(3) VolLiq	(4) Reconstructed
Liquidity	-0.550	-0.378	-0.409**	-0.491**
	(0.344)	(0.387)	(0.182)	(0.208)
Information	0.327	0.215	0.337**	0.181
	(0.281)	(0.318)	(0.156)	(0.182)
Voice	0.144	0.045	0.232**	-0.117
	(0.171)	(0.213)	(0.114)	(0.137)
Self-dealing	-0.250	-0.167	-0.161	-0.211*
	(0.174)	(0.192)	(0.109)	(0.127)
Dilution	-0.023	0.059	0.021	0.448**
	(0.298)	(0.340)	(0.163)	(0.211)
Constant	-1.833**	-1.788*	-0.756	-0.382
	(0.781)	(1.067)	(0.553)	(0.733)
Observations	451	451	451	451

Notes: Base outcome is that the companies *Merged*. *Merged* is a binary variable = 1 if firm merged with another firm, 0 otherwise; *Court* is a binary variable = 1 if firm was wound up by court order, 0 otherwise; *VolLiq* is a binary variable = 1 if firm was voluntarily wound up, 0 otherwise; *Reconstructed* is a binary variable = 1 if firm underwent a substantial change and was re-formed as a new company, 0 otherwise; *Removed* is a binary variable = 1 if firm has been struck off from the register of companies, 0 otherwise. *ADRI* is the La Porta et al. (1998) anti director rights index. *SPI* is our Shareholder Protection Index – see Table 3 for details. *Liquidity* is the liquidity rights index; *Information* is the information rights index; *Voice* is the voice rights index; *Self-dealing* is the self-dealing rights index and *Dilution* is the dilution rights index.