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The mechanisms of institutional activism: qualified foreign institutional investors in China

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Key points

- This article examines the mechanisms available to institutional investors in China, especially Qualified Foreign Institutional Investors (QFIIs), which may allow them to engage in activism in publicly traded corporations.
- The presumption behind China's QFIIs policy is that foreign institutional investors will engage in activism and improve the corporate governance of Chinese listed companies.
- The article explores the mechanisms available to QFIIs and identifies the extent to which they have the capacity or potential capacity to engage in shareholder activism.
- The article concludes that QFIIs could potentially form shareholder consortia. However, based on Shapley–Shubik and Banzhaf–Coleman indices which measure QFIIs' voting power, it further concludes that QFIIs do not have the capacity or even the potential capacity to form shareholder consortia with sufficient weight to engage in activism.

1. Introduction

Institutional investors may engage in shareholder activism in response to corporate governance in publicly traded corporations. Engagement in activism involves shareholders using their position and rights to push for specific changes. The impact of activism will depend on investors' choices from several different options, as well as on the legal regime that determines the mechanisms available to shareholders and thus significantly influences the effectiveness and efficiency of shareholder interventions.

Traditionally, voting, as one of the fundamental rights of stockholders, was the principal channel through which stockholders expressed a view on the way a company is being managed. Voting provides an opportunity for shareholders to engage in corporate governance by supporting or opposing proposals, whether these originate from management or from other shareholders. In addition to voting, shareholders may also express their demands, formally or informally, by submitting a shareholder proposal to the general meeting to be voted upon, speaking at meetings, or engaging in dialogue with management outside of general meetings.

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Depending on the law, shareholder proposals are therefore one of the principal mechanisms through which shareholder activism can be carried out. The aim is to influence[1] rather than to control the company. Typically, this is the case even in proxy fights in the USA, which are primarily conducted through precatory (non-legally binding) shareholder resolutions. This may raise questions about the effectiveness of shareholder proposals as a mechanism for shareholder activism.[2] However, the shareholder proposal remains an important mechanism through which shareholders, especially institutional investors, engage in activism.

In recent times, the landscape and mechanisms of shareholder activism have changed with the emergence of hedge funds; this is a special category of institutional investor that differs from 'traditional institutional investors' such as mutual funds, pension funds, insurance companies and investment banks. The main difference lies in their different investment strategies, stockholding periods and expectations regarding investment returns. Although not all hedge funds are activists, those who are target companies that have underperformed or are underperforming to maximize their investment returns within the minimum investment period.[3] To this end, hedge funds commonly launch campaigns to advocate for change in targeted firms, putting pressure on management to improve corporate governance as a measure to improve performance. Once hedge funds have made their expected profits, they quickly exit by selling stocks. While some critics say that hedge fund activism is simply about making a short-term profit, it can be argued that hedge fund activism may also add value in that they leave lasting improvements in corporate governance within the companies they leave behind.

Building on this idea, China introduced the Qualified Foreign Institutional Investors (QFIIs) scheme into its stock market in 2002. The introduction of this scheme was based on the successful experience of Taiwan's QFIIs scheme. The expectation is that QFIIs will engage with portfolio companies because they have considerable practical experience in issues relating to corporate governance[4] and, under the QFIIs regulations in China, they cannot be short-term stockholders in portfolio companies.[5] By requiring QFIIs to hold shares on a medium- to long-term basis, their holdings will be illiquid and they will either have to accept existing corporate governance practices or attempt to bring about change. This raises the question of whether adequate mechanisms are available to allow QFIIs to engage in activism to improve corporate governance. It also raises the question as to

1 Jonathan M Karpoff, 'The Impact of Shareholder Activism on Target Companies: A Survey on Empirical Findings' (2001) 1, 3 https://papers.ssrn.com/so13/results.cfm> accessed 5 April 2017.

2 Paolo Santella and others, 'A Comparative Analysis of the Legal Obstacles to Institutional Investor Activism in the EU and in the US' (2012) 23(2) Eur Bus L Rev 257, 271.

3 Leo E Strine, Jr, 'Who Bleeds When the Wolves Bite? A Flesh-and-Blood Perspective on Hedge Fund Activism and Our Strange Corporate Governance System' (2017) 1, 26 https://ssrn-com.sheffield.idm.oclc.org/abstract=2921901> accessed 11 April 2017.

4 'Provisional Measures on Administration of Domestic Securities Investments of Qualified Foreign Institutional Investors' was promulgated by China Securities Regulatory Commission and People's Bank of China on 5 November 2002 and came into force on 1 December 2002. Article 6(3) requires that QFIIs 'should maintain a sound management structure and proper internal control system', which implies Chinese regulators' expectation that QFIIs may bring examples of good practice to Chinese listed companies, helping them to improve their corporate governance.

5 ibid. Article 11 requires that QFIIs are those 'with good investment records in other markets with a view to introducing mid-and-long-term investments'.

whether the range of mechanisms available differs from their home jurisdiction, as this may affect the outcomes of activism. 'If QFIIs do not engage in institutional activism, this might be because appropriate mechanisms are not available, or because there are other barriers preventing them from doing so. If this is the case, what are the potential mechanisms available to QFIIs that enable them to perform activism?' This article will propose some answers to this question, something which the literature to date has failed to do.

The rest of this article will be structured as follows. Section 2 discusses the current mechanisms of institutional activism in the USA and Europe. This includes the types of mechanisms that institutional investors currently use to engage with the companies in whom they hold shares. Section 3 examines the mechanisms available to QFIIs in China. Attention will be paid to the potential availability of mechanisms for QFIIs in Chinese listed companies. Final conclusions are then presented in Section 4.

2. The mechanisms of institutional activism in the USA and Europe

The corporate governance literature has identified several mechanisms through which institutional investors may be able to conduct shareholder activism in practice, either privately or publicly. These mechanisms mainly include shareholder proposals, jawboning,[6] targeting announcements,[7] public censure,[8] dialogue[9] and coalition[10] (also known as a 'wolf pack').[11] Private mechanisms are used by shareholders for behind-the-scenes communication and negotiation with management and are not publicly observable. Public mechanisms are used by shareholders to issue public threats to management and are observable through media such as newspapers, television or websites. Relatively speaking, institutional investors prefer private mechanisms to public mechanisms when they engage with management.[12] This is perhaps because private mechanisms are not confrontational or hostile, making it easier to communicate with management. Private mechanisms are usually used before shareholding acquisition; public mechanisms are therefore only resorted to after relevant shareholding has been acquired. If public mechanisms are used, it might imply that private mechanisms have failed. For example, 'a shareholder proposal signals the failure of direct negotiations to prompt such change'.[13] In this scenario, institutional investors may need to launch an

6 Andrei Sheifer and Robert W Vishny, 'Large Shareholders and Corporate Control' (1986) 94(3) J Polit Econ 461, 472.

7 Michael P Smith, 'Shareholder Activism by Institutional Investors: Evidence from CalPERS' (1996) 51(1) J Finance 227, 228.

8 William B Chandler, 'The Delaware Court of Chancery and Public Trust' (2009) 6(2) Univ St Thomas L J 421, 425.

9 Jeanne M Logsdon and Harry J Van Buren III, 'Beyond the Proxy Vote: Dialogues between Shareholder Activists and Corporations' (2009) 87 J Bus Ethics 353, 353.

10 Jeffrey Zwiebel, 'Block Investment and Partial Benefits of Corporate Control' (1995) 62(2) Rev Econ Stud 161, 162.

11 Literature also identifies 'Wall Street Walk' as a passive mechanism of shareholder activism, which is not discussed in this article. The mechanisms of institutional activism examined here are those actively taken by institutional investors who are involved with management, either privately or publicly. 'Wall Street Walk' is not a mechanism actively taken by shareholders who are involved with management. Activism in this sense means active involvement.

12 David A Butz, 'How Do Large Minority Shareholders Wield Control? (1994) 15(4) Manage Decis Econ 291, 296.

13 Karpoff (n 1) 30.

activist campaign and a public mechanism is probably the last resort before a divestment or takeover.

Jawboning is a form of 'informal negotiations'[14] between shareholders and management and is therefore a private and mutual form of communication. It is usually the first step shareholders take to initiate their activism and involves direct engagement with management. This is because it is less costly in practice and does not require the shareholding stake to be increased as it is large enough to influence management. In addition, shareholders can also use lobbying,[15] a form of jawboning, through the good offices of third parties, including professional bodies such as proxy consulting companies. This facilitates communication between shareholders and management and thus promotes shareholder activism. In general, jawboning, as a mechanism of shareholder activism, is much less effective in initiating changes in management due to the lack of a controlling block of shares.

Dialogue is a forum through which 'corporations and shareholder activist groups mutually agree to engage in ongoing communication to deal with'[16] a specific or obvious issue that needs to be addressed because it may result in underperformance or poor governance outcomes. For shareholder activists, the purpose of dialogue is to engender management change. Dialogue can be 'a powerful catalyst for change'[17] because it can inspire both parties to work together to arrive at mutually agreed resolutions. In this way, the relationship between shareholders and management may shift from confrontation to consultation, which may be sufficient to establish a good, or at least good enough, working relationship enabling both sides to perceive the net benefits from continued communication.[18] The advantage of dialogue is that both parties can tone down their rhetoric and instead exchange views in a way that establishes common ground[19] upon which they can achieve their goals. From this point of view, dialogue can be an alternative to a shareholder proposal, as its non-confrontational nature means that management may be more willing to communicate and negotiate with activist shareholders to keep them from launching a public campaign that exposes management to the spotlight of public opinion and damages their corporate reputation.

Compared with jawboning, dialogue is a formal negotiation that takes place between activist shareholders and corporations, although it is also conducted behind-the-scenes. The distinction between both is evident. The drawbacks of jawboning are its brevity and casualness which means that it is insufficient on its own to ensure meaningful communication between both parties. The advantage of dialogue is that its more structured and formal format can be productive in terms of information exchange between both parties and ensures constructive communication. It provides an

14 Sheifer and Vishny (n 6) 472.

15 David Vogel, 'Trends in Shareholder Activism: 1972–1982' (1983) 25(3) California Manage Rev 68, 69.

16 Logsdon and Van Buren (n 9) 354.

17 Muel Kaptein and Rob Van Tulder, 'Toward Effective Stakeholder Dialogue' (2003) 108(2) Bus Soc Rev 203, 208.

18 Logsdon and Van Buren (n 9) 356.

19 ibid 362.

opportunity for both parties to address common needs and interests and arrive at an agreement so that they can avoid costly and distracting confrontation. Research shows that some dialogue continues for years, which may suggest that workable communication continues between activist shareholders and management. However, dialogue is not a universal remedy and talking does not solve everything.[20] If this happens, dialogue should cease and activist shareholders should then resort to going public. Nonetheless, dialogue has become an increasingly popular mechanism not only for activist shareholders but also for corporate management to communicate and negotiate their common concerns.

A targeting announcement is a form of 'symbolic targeting',[21] which refers to institutional investors who announce a list of targeted shares, indicating their intention to purchase. The aim is to send a signal to companies with shares listed on the targeting list, warning about corporate governance issues or poor firm performance.[22] This makes them aware they are potential targets for shareholder activists lobbying for changes in management. It can place companies on the targeting list under 'publicity',[23] which can signal to management that there is a need to improve corporate governance and a firm's performance. If management disregards this signal, a shareholder proposal may be introduced by shareholders to initiate management change,[24] which may trigger a proxy fight. The publicity can also have the additional effect of motivating non-targeted firms to improve corporate governance to stay off the targeting list.[25] Traditional institutional investors such as mutual funds and pension funds frequently use this method to signal their concerns about the affairs of targeted companies. For example, a targeting announcement came from the California Public Employees' Retirement System (CalPERS) in 1986. It did not aim to threaten management but encourage them to engage in good practice with respect to corporate governance and firm performance.[26] Shareholder activism of this sort is also called 'CalPERS' activism'.[27]

Public censure involves publicly criticizing firms with problems in relation to corporate governance and firm performance by 'naming names'.[28] The power of the media therefore lies in its ability to 'shame'[29] corporate management. The rationale behind 'naming names' is to influence public perceptions and shape public opinion and thus provoke a backlash against management. For instance, it has been observed that public opinion has more persuasive power than individual decisions.[30] The 'shaming' can

20 Kaptein and Van Tulder (n 17) 210.

21 Lori Verstegen Ryan and Marguerite Schneider, 'The Antecedents of Institutional Investor Activism' (2002) 27(4) Academy of Management Review 554, 555.

22 Claire E Crutchley, Carl D Hudson and Marlin R H Jensen, 'Shareholder Wealth Effects of CalPERS' Activism' (1998) 7(1) Finan Serv Rev 1, 3.

23 Diane Del Guercio and Jennifer Hawkins, 'The Motivation and Impact of Pension Fund Activism (1999) 52 J Finan Econ 293, 300.

24 Crutchley, Hudson and Jensen (n 22) 2.

25 Crutchley, Hudson and Jensen (n 22).

26 Crutchley, Hudson and Jensen (n 22) 2.

27 ibid.

28 Chandler (n 8).

29 ibid.

30 YiLin Wu, 'The Impact of Public Opinion on Board Structure Changes, Director Career Progression, and CEO Turnover: Evidence from CalPERS' Corporate Governance Program' (2004) 10 J Finan 199, 203.

have ‘an important impact on corporate reputation linked to public opinion’,[31] which can engender reputational concerns among management and prompt them to act to improve corporate governance and firm performance. Public censure can take several forms, including that of a publicized letter sent either to companies or to shareholders stating the issues to be addressed,[32] a media campaign showing pictures of the board in newspapers under the headline ‘Badly-performed assets’,[33] publicizing a dissenting vote, openly criticizing management in the media,[34] or publishing letters through newspapers and websites laying out the strategy for voting down a management proposal.[35] Clearly, public censure can put corporate management in the spotlight of public criticism, which can degrade its reputation and downgrade corporate value. The effectiveness of public censure is facilitated by the reputational threat posed by media coverage and operates by inflicting reputational damage. Reputation threat may lead to management yielding to the pressure of public censure because reputational damage is lethal for both management and companies, damaging their competitiveness in a market economy.

Coalition is ‘a cooperative game’[36] whereby activist shareholders coordinate with other shareholders to join and form a voting alliance to influence management to enact change. Coalition is a coordinated action that is usually conducted behind-the-scenes. It can be taken by an activist shareholder who is ‘overweighted’ and can take the lead in organizing joint shareholder action.[37] Overweighted stock[38] provides a greater incentive for an activist shareholder to form a shareholder coalition than underweighted stock as they then stand to gain more from the success of intervention. To form a shareholder coalition or potential shareholder coalition, an activist shareholder first needs to own overweighted stock enabling them to take the lead and solicit support from fellow activist shareholders and any other shareholders in taking coordinated or potentially coordinated action. This is usually how an activist hedge fund has been created. Hedge funds do not usually have sufficient weight to effectively press for changes in targeted companies. The presence of a lead hedge fund is a necessary condition for a value-increasing coalition to emerge. This is because the lead hedge fund ‘can offer a more profitable operating strategy’[39] that is tempting to fellow hedge funds and other institutional investors.

An activist shareholder may simply own a token number of shares and lack the resources to mount a serious threat to management. The presence of a clear and

31 ibid 200.

32 ibid 203.

33 Caspar Rose, ‘The New European Shareholder Rights Directive: Removing Barriers and Creating Opportunities for More Shareholder Activism and democracy’ (2012) 16(2) J Manage & Govern 269, 270.

34 Joseph A McCahery, Zacharias Sautner and Laura T Starks, ‘Behind the Scenes: The Corporate Governance Preferences of Institutional Investors’ (2016) 71(6) J Finan 2905, 2912.

35 Barry Rehfeld, ‘A Suite Victory for Shareholders’ (1998) 32(7) Instit Invest 37, 40.

36 Zwiebel (n 10) 161.

37 Bernard S Black and John C Coffee, ‘Hail Britannia?: Institutional Investor Behaviour under Limited Regulation’ (1994) 92(7) Mich L Rev 1997, 2048.

38 ibid. ‘*overweighting* means that the institution owns a greater share of the specific company than it owns of the market generally.’

39 Sheifer and Vishny (n 6) 465.

black-and-white issue provides something concrete to rally around.[40] This is because such an issue will be the basis upon which activist shareholders can build a strong campaign strategy that may encourage fellow activist shareholders and others to join a shareholder coalition. As fiduciary shareholders, institutional investors play a crucial role in forming a shareholder coalition, which is therefore an important mechanism for shareholder activism. This is especially true of hedge funds who usually take the lead as activist shareholders in building a shareholder coalition such as the one built by the 'wolf pack' over the last decade.

A shareholder proposal is a document that shareholders formally submit to the general meeting for a vote in order to effect change in relation to corporate management. It is created by the Securities and Exchange Commission (SEC) under Section 14 of the Securities and Exchange Act of 1934 in the USA. To be submitted to the general meeting, the shareholder proposal should be included in the annual proxy statement.[41] This means that proxy access and a proxy fight can only be carried out through the shareholder proposal. Thus, it is a mechanism through which shareholders exercise their right to vote and it empowers them to engage with management, although they are often 'apathetic'[42] or 'passive'.[43] Institutional investors began to submit shareholder proposals on corporate governance issues in 1987 after the emergence of large institutional investors in the late 1980s. Nowadays, a shareholder proposal is still the dominant mechanism of shareholder activism and is widely used by shareholders, especially institutional investors, although most of them are usually apathetic.

Historically, these mechanisms developed primarily in the USA and were subsequently extended to Europe, especially the UK. However, differences may exist between USA and European institutional investors regarding their preferences for mechanisms. Current trends seem to suggest that mechanisms such as shareholder proposals, targeting announcements, public censure and shareholder coalition are dominant in the USA while in Europe mechanisms such as jawboning and dialogue are preferred.

The USA

A wave of non-confrontational shareholder activism waged by financial institutions, most commonly pension funds and mutual funds, began in the mid-1980s.[44] Observable institutional shareholder activism comes from CalPERS, which initiates the targeting announcement in the form of the Focus List (the targeting list) and serves as the mechanism of CalPERS shareholder activism. The use of a targeting announcement as a normal mechanism of shareholder activism among traditional institutional investors such

40 Rehfeld (n 35) 42.

41 In the USA, this is a requirement from the Securities and Exchange Commission (SEC) unless an exemption letter can be obtained from the SEC.

42 Cyril Moscow, 'The Independent Director' (1972) 28(1) Bus Lawyer 9, 9.

43 Frank H Eastbrook and Daniel R Fishel, 'Takeover Bids, Defensive Tactics, and Shareholder Welfare' (1981) 36(4) Bus Lawyer 1733, 1736.

44 April Klein and Emanuel Zur, 'Entrepreneurial Shareholder Activism: Hedge Funds and Other Private Investors' (2009) 64(1) J Fin 187, 193.

as mutual funds and pension funds, CalPERS especially, has been widely documented in the research literature.[45] Although still in vogue, there has recently been a shift towards new trends. For example, over the last decade, typical institutional activism in the USA has been in the form of a proxy fight, which has mainly been launched by hedge funds to form a shareholder coalition or potential shareholder coalition (wolf pack) seeking change in targeted companies. Even though a proxy fight launched by traditional institutional investors has often been unsuccessful in the past, recent proxy fights launched by hedge funds have been successful more than 60 per cent of the time.[46]

This is probably because 'a proxy fight is the shareholder's only effective weapon to bring about significant change in the target firm'.[47] A coalition, or wolf pack, is the mechanism through which activist shareholders can effect such change. Activist hedge funds can use the mechanism of a wolf pack to solicit fellow hedge funds and other institutional investors to 'hunt together and seek the same prey'.[48] In this way, activist hedge funds can increase their influence on corporate management. Currently, the wolf pack is the dominant mechanism of institutional activism in the USA. Research on hedge fund activism through the mechanism of the wolf pack has been widely reported in the literature, indicating that the debate on the merits and demerits of hedge fund activism continues.

A typical activist campaign is a sequential decision process that comprises four stages: demand negotiation, board representation request, proxy threat and a proxy fight where a range of activism tactics are used.[49] Hedge fund activism involves waging or threatening to wage a proxy fight, aiming to provoke change within management in the targeted company. Most mechanisms of shareholder activism may be used by activist hedge funds during a campaign for a proxy fight; these may be direct or indirect, depending on the type of campaign launched. Direct mechanisms attempt to affect the outcomes of strategic direction and performance while indirect mechanisms endeavour to influence them through refinements to corporate governance.[50] The former, which include jawboning, targeting announcements or dialogue are usually used before waging a proxy fight while the latter, which include public censure, shareholder coalition or shareholder proposals, are normally used after launching a proxy fight. Typically, activist shareholders therefore first contact portfolio companies when certain issues that concern them.[51] Indirect mechanisms aim to facilitate communication and negotiation between activist shareholders and management in a private, cooperative environment while direct

45 Smith (n 7).

46 April Klein and Emanuel Zur, 'Entrepreneurial Shareholder Activism: Hedge Funds and Other Private Investors' (2009) 64(1) J Fin 187, 189.

47 ibid 214.

48 Thomas W Briggs, 'Corporate Governance and the New Hedge Fund Activism: An Empirical Analysis' (2006) 32 J Corp L 681, 691.

49 Nickolay Gantchev, 'The Costs of Shareholder Activism: Evidence from a Sequential Decision Model' (2013) 107 J Fin Econ 610, 613–14. The campaign may end at each stage depending on the result either, successful or unsuccessful.

50 Ryan and Schneider (n 21).

51 Willard T Carleton, James M Nelson and Micael S Weisbach, 'The Influence of Institutions on Corporate Governance through Private Negotiations: Evidence from TIAA-CREF' (1998) 53(4) J Fin 1335, 1335.

mechanisms allow the parties confront and challenge each other in a hostile situation. Direct mechanisms mean going public, which may send a signal to the market that management refuses to cooperate with activist shareholders regarding management change. In this scenario, activist shareholders may probably need to wage a proxy fight by means of a 'wolf pack', either for real or simply as a threat. This is usually the case regarding hedge fund activism in the USA and conventional wisdom corroborates this practice.

Several reasons may account for the current trend among hedge funds to use the mechanism of the 'wolf pack' to wage activist campaigns in the USA. First, the 'wolf pack' can sidestep regulation barriers such as 'acting in concert' and 'group person'. In a 'wolf pack', only the lead activist hedge fund with more than a 5 per cent stake of shares in the target firm needs to register with the SEC for a regulation 13 D filing. Fellow activist hedge funds and other institutional investors who support the lead activist hedge fund are publicly unknown. This is because they own less than a 5 per cent stake of shares in the target firm and do not need to register with the SEC for a regulation 13 D filing. Those with more than a 5 per cent stake of shares in the target firm, such as mutual funds and pension funds, may support the activist hedge fund in secret. This makes it particularly difficult for corporate management to find evidence enabling them to charge any entity with the formation of an activist hedge fund's coalition. Thus, the 'wolf pack' cannot be caught by 'acting in concert' and 'group person'.

Second, the 'wolf pack' can exist in the form of a loose, temporary coalition. It may form when an activist hedge fund campaign starts and dissolve when the campaign ends. It can be formed, either agreed or implied, between the lead activist hedge fund and fellow activist hedge funds and other institutional investors. This means that the 'wolf pack' can be immune from the costs of building and maintaining a formal shareholder coalition, which can be formidable. Third, the 'wolf pack' is a behind-the-scenes coalition. Only the lead activist hedge fund appears in public, fellow activist hedge funds and other institutional investors then coordinate with the lead activist hedge fund in secret. The lead activist hedge fund can take advantage of this to build a coalition or potential coalition with enough coordinated shareholdings to put pressure on management in the targeted firm. Management is unaware of the danger of this threat before the activist hedge fund files a regulation 13 D registration with the SEC. This means they may underestimate the actual threat posed by activist hedge funds.

Fourth, as argued in this article, the 'wolf pack' cannot easily be weakened by entrenched managerial hegemony, unlike other mechanisms that may be available to activist hedge funds. For example, management can, if they wish, ignore shareholder proposals, jawboning, targeting announcements, dialogue and even public censure because the effectiveness of these depends on the cooperation of management. If management refuses to engage, these mechanisms are useless. For instance, if a shareholder proposal passes resolution at a shareholders' general meeting it still needs to be approved by the board of directors, who often do not give their approval in practice.

However, management cannot weaken the 'wolf pack' no matter how entrenched they have been. The reasoning is obvious. When the 'wolf pack' holds a controlling or potentially controlling interest in the shares of a targeted firm, management is powerless and may give ground. If they do not a proxy fight may ensue and there is then the additional risk of a takeover. Management may be replaced if a proxy fight is successful and if a takeover succeeds. The scenario is especially true in a stock market such as that in the USA where corporate ownership is widely dispersed and controlling shareholders are normally absent.

Europe

Unlike the USA, a proxy fight in Europe is rare or 'infrequent'.[52] Consequently, a shareholder coalition or 'wolf pack' is not a preferred mechanism of shareholder activism in Europe, even in the UK. However, hedge fund activism has indeed spread from the USA into Europe, particularly in the UK where 'wolf pack activism' has increased to some degree over the past decade. Nevertheless, there is still little direct evidence of the existence of shareholder coalitions in the UK.[53] The conventional wisdom is that hedge fund activism is carried out by means of a shareholder coalition or potential shareholder coalition, that is, a 'wolf pack'. However, there is hardly any direct research evidence for this. For example, Crespi and Renneboog used the Shapley–Shubik power index to indirectly measure the extent to which individual shareholders (or groups of shareholders) are pivotal in forming potential voting coalitions. Their aim was to identify indirect evidence for the potential existence of shareholder coalitions and their research confirms that there may be anecdotal evidence for the existence of such coalitions in the UK.[54]

One explanation for the lack of direct evidence on shareholder coalitions may be that their existence, either agreed or implied, is confidential and not made public. Such an agreement does not need to be in writing nor does it need to be legally binding, although in practice voting agreements may indeed exist. Such agreements can be either formal or informal. There is no regulatory requirement for shareholders to disclose their voting agreements in the UK. This is somewhat different from continental countries such as Italy[55] and France,[56] where there is a legal obligation for shareholders to disclose their voting agreements to their stock exchange regulators.

If a shareholder coalition does exist in the form of voting agreements, either formally or informally, it is forged on an *ad hoc* basis with a specific aim such as removing

52 Rafel Crespi and Luc Renneboog, 'Is (Institutional) Shareholder Activism New? Evidence from UK Shareholder Coalitions in the Pre-Cadbury Era' (2010) 18(4) Corp Govern Int Rev 274, 275.

53 ibid 276.

54 ibid 293.

55 Arts 22–23 of Italian Consolidated Law on Finance, Legislative Decree No 58 of 24 February 1998 impose a disclosure requirement on shareholders of listed companies for their agreements to be notified to Consob, the Italian Authority on Financial Markets.

56 Art L233-11 of French Code de Commerce requires that any clause in an agreement allowing the sale and purchase of shares traded in a regulated market representing at least 0.5 per cent of the capital or voting rights of a company must be submitted to the Autorité des marches financiers (AMF), the French stock exchange regulator.

incumbent management or reacting to a take-over announcement.[57] While *ad hoc* collective engagement such as discussions and understandings might be reached between activist shareholders and their supporters, it is unlikely to be defined as 'coming together to act in concert' under Rule 9.1 of the City Code on Takeover and Mergers.[58] The exception is when activist shareholders and their supporters, who requisition or threaten to requisition, are presumed to be 'acting in concert' if they consider a 'board control-seeking' proposal at the general meeting.[59] One implication of this presumption is that the obligation of a mandatory bid offer will be triggered if the threshold of the requisition or threatened requisition reaches 30 per cent of shares or voting rights in the target company.

This obligation makes activist shareholders acutely aware of the threshold of stake-building, which prompts them to keep their coalition or potential coalition a secret and their intentions and ownership stakes hidden from the management in the target company. However, the Financial Conduct Authority (FCA) Disclosure Guidance and Transparency Rules (DTR 5) requires a shareholder to notify the listed company of the percentage of voting rights he or she holds when the percentage of this shareholding exceeds or falls below certain thresholds.[60] In addition, Section 793 of Company Act 2006 enables a listed company to require disclosure from any person it knows or believes has had an interest in its shares at any time during the previous three years.[61] Section 793 does not apply unless a company requires such disclosure. The notification or disclosure requirement can serve as an early warning to the targeted company and help it to identify potential activist shareholders irrespective of whether they are 'acting in concert'. This may be a legal risk to activist shareholders because Rule 9.1 of the City Code on Takeover and Mergers can be triggered when their shareholdings, either individually or collectively, have been identified as being close to 30 per cent of the voting rights in that company. Although the UK Stewardship Code (Code) encourages the collective engagement of institutional investors,[62] they do need to be alert to this legal risk.

Compared to a shareholder coalition, dialogue seems to be more widely preferred by activist shareholders in the UK, where shareholder activism is often less confrontational in nature. According to the Code, engagement is regarded as purposeful dialogue between institutional investors and companies on matters and issues that are the immediate subjects of votes at general meetings.[63] Institutional investors should be prepared to enter a dialogue if they do not accept the company's position.[64] Although the Code is applied on a comply or explain basis, institutional investors typically approach portfolio

57 Crespi and Renneboog (n 52) 276.

58 Executive Panel, 'Practice Statement No.6: Shareholder Activism' (2009) 1, 3. http://www.thetakeoverpanel.org.uk/wp-content/uploads/2008/11/ps26.pdf> accessed 14 May 2017.

59 ibid.

60 Financial Conduct Authority, 'FCA Handbook', DTR 5.

61 Companies Act 2006, Section 793.

62 The UK Stewardship Code 2012, Principle 5.

63 ibid, Guidance of Principle 1.

64 ibid, Guidance of Principle 3.

companies directly and engage in dialogue constructively with management, hoping to reach a negotiated consensus. The motivation for dialogue as the preferred mechanism in the first stage of a shareholder activism campaign is not only to enable management to fully understand the issues being raised but also to enable a simple solution to become reality.

In continental Europe, fewer public mechanisms appeal to activist shareholders because public campaigns such as proxy fights are not as far-reaching, sophisticated or as extensive as they are in the USA, although their number is increasing, particularly when US activists are involved, as is the case for hedge fund activism. Their lack of appeal, however, lies in the regulation of disclosure requirements on stock ownership, which is stricter in continental Europe than it is in the USA. In the USA, the SEC Schedule 13 D requirement does not seem to directly capture hidden ownership, the method of stake-building used by the 'wolf pack'. The disclosure requirement has had an impact on hedge fund activism. However, this impact ultimately depends on the incidence of undisclosed activist stake-building. In other words, whether hedge funds can build stakes sufficient to wage or threaten to wage activist campaigns before they register their regulatory filings and disclose their ownership acquisitions in the target companies. The SEC Schedule 13 D disclosure requirement of a 10-day window allows activist hedge funds to build stakes of hidden ownership sufficient to wage their activist campaigns.

In contrast, the EU Shareholder Rights Directive (SRD) is strict on stock ownership disclosure in its member countries, and has tightened disclosure requirements on shareholder rights such as shareholder identity, investment transparency and shareholder engagement to facilitate dialogue between companies and their shareholders.[65] The SRD criticizes institutional investors who are often less than transparent about their investment strategies, their engagement policy and the implementation thereof.[66] This means that companies are often unable to identify their shareholders because shares of listed companies are held through complex chains of intermediaries.[67] To be transparent, institutional investors must develop and publicly disclose an engagement policy on a comply or explain basis[68] and companies should have the right to identify shareholders holding more than a certain percentage of shares or voting rights, which should not exceed 0.5 per cent.[69] The percentage threshold requirement does not prevent Member States from adopting, maintaining or enforcing more stringent provisions.[70]

In their engagement policies, institutional investors must describe how they exercise voting rights and other rights attached to shares, and cooperate with other shareholders.[71] Regarding their right to obtain information regarding shareholder identity, companies

65 Directive (EU) 2017/828 of the European Parliament and of the Council of 17 May 2017 amending Directive 2007/36/EC regarding the encouragement of long-term shareholder engagement.

66 ibid, Preamble (16).

67 ibid, Preamble (4).

68 ibid, Art 3g 1.

69 ibid, Art 3a 1.

70 ibid, Preamble (55).

71 ibid, Art 3g 1 (a).

can request any intermediaries holding personal data of shareholders to provide the requested information without delay.[72] The information should at the very least include the name and contact details of the shareholder, the number of shares held, the categories or classes of those shares or the date from which the shares are held.[73] The purpose of the transparency requirement regarding shareholder identification is to enable the company to identify its existing shareholders so that it can communicate with them directly and facilitate the exercise of shareholder rights and shareholder engagement with the company.[74] Therefore, shareholders, especially institutional investors, should be more transparent regarding their approach to shareholder engagement.[75]

The implications of the transparency requirement on shareholder identification is attendant on the approach shareholders take to waging their activist campaigns. The lower transparency threshold of 0.5 per cent of shares or voting rights on shareholder identification set by the SRD can enable a company to easily identify any shareholder with the potential for stake-building through a shareholder coalition. In this way, the company will be alert to a potential proxy fight in its very early stages, either real or potential. For shareholders, their intention to engage in stake-building through a shareholder coalition will be more easily identified, particularly in connection with activist institutional investors like hedge funds who are heavily dependent on the stake-building technique of a ‘wolf pack’. Even though shareholders can build stakes that are sufficient to wage or potentially wage activist campaigns, they must take into account the legal risk of a mandatory takeover bid if their attempts at stake-building are caught for acting in concert under Article 5.1 of the EU Takeover Bids Directive.[76] Moreover, the controlling share blocks in most listed companies in continental Europe presents a big barrier for activist shareholders when building stakes of shares sufficient to launch their activism campaigns.

While a shareholder coalition is legally available in almost all the European countries, it should be noted that as a mechanism of shareholder activism it is significantly distinct from a shareholder coalition as a mechanism of internal corporate control enhancement. The key distinction is that the former is not for corporate control whereas the latter is. There are several reasons for this. First, the former is for shareholder engagement, through a proxy fight, and is designed to enforce change on management while the latter is for controlling shareholders through entrenched equity ownership concentration to maintain and increase internal control. Second, the former is to enable activist shareholders to enforce change on management so that they can remove incumbent directors to improve shareholder value while the latter empowers controlling shareholders to pursue rent-seeking to the extent that they can extract the private benefits of corporate control at the expense of other shareholders. The corollary is that shareholder

72 ibid, Art 3a 2.
73 ibid, Art 2 (j).
74 ibid, Art 3a 4.
75 ibid, Preamble (17).
76 Directive 2004/25/EC of the European Parliament and of the Council on Takeover Bids, Art 5.1 [21 April 2004].

coalition is popularly used by controlling shareholders for internal corporate control; however, it is uncommon for minority shareholders to use this for shareholder activism in Europe.

In Europe, the effect of shareholder engagement voting for proxy proposal is not limited in the way that it is in the USA, where the board of directors initiate almost all major corporate decisions and shareholders who wish to influence corporate decisions must vote for the board of directors. In other words, shareholders can only influence management through the board of directors. The reality is that the board of directors usually upholds management proposals and rarely implements shareholder proposals. The only way that shareholders can introduce a new corporate decision is to reject incumbent directors by waging a proxy fight. This is perhaps the main reason why shareholder activism by means of a proxy fight is so popular in the USA. More importantly, access to proxy voting for shareholders, institutional investors especially, is relatively easier in the USA than it is in the EU. As for the removal of directors, the situation is less favourable for shareholders in the USA than in the UK, Germany, France and Italy, where national legislation gives shareholders more voting powers by allowing them to request a vote at any time. This suggests that the proxy fight is not the preferred method shareholders use to engage with companies in which they hold shares. This may explain why the US style of shareholder activism through a proxy fight is so infrequent and why shareholder activism through dialogue between activist shareholders and corporate management is preferred and encouraged in Europe, especially in the form of collective engagement.

3. The mechanisms of institutional activism among QFIIs in China

Shareholder activism, especially institutional activism, has spilled over from the USA to Europe and elsewhere, changing the corporate governance landscape across the world. However, the extent of this change differs between countries, and styles of activism differ. In Europe, the American style of shareholder activism, and particularly the typical mechanism of the shareholder coalition or 'wolf pack', has not been seen to date. One reason for this is the difference in legal and regulatory environments. The same is true for other non-European countries such as China.

Until recently, shareholder activism was wholly alien to China. Its entry into the World Trade Organisation (WTO) on 11 November 2001 has not changed this. In research on 432 activist campaigns launched by 129 activist hedge funds during the period 2000–2010 across 25 countries (including China but excluding the USA), there were no activist campaigns conducted in China.[77] Other research on shareholder activism in the share structure split reform in 2005 among Chinese companies showed that institutional investors actively participated in the reform but did so by entering alliances with, rather

77 Dionysia Katelouzou, 'Worldwide Hedge Fund Activism: Dimensions and Legal Determinants' (2014–2015) 17(3) Univ Pennsylvania J Bus L 789, 833.

than fighting against, the controlling shareholders.[78] There is anecdotal evidence to suggest that, since 2010, a few QFIIs have begun to participate actively in corporate governance in their portfolio companies. While this is not US-style shareholder activism, and such participation is infrequent, it may indicate the emergence of shareholder activism in China; this marks an emerging change in Chinese corporate governance in circumstances where shareholders, including institutional investors, have always tended to be passive. When participating in the general meeting they seldom vote against management, let alone demand changes to corporate governance. However, the atypical evidence indeed shows the potential for the development of shareholder activism in the future in China. In recent years, some institutional investors have voiced their concerns about the corporate governance of listed companies, indicating that shareholder activism has begun to emerge in China.

This form of shareholder activism is characterized by institutional investors acting together to voice their concerns about portfolio companies. Such joint engagement is more like the collective engagement encouraged by the EU SRD than the shareholder coalition (wolf pack) popular in the USA. Institutional investors engage in this style of activism because Chinese listed companies are populated by 'strong majority shareholders and weak minority shareholders'. Institutional investors tend to be minority shareholders, therefore, unless they engage jointly, they can have little influence over management which tends to be controlled by majority shareholders.

Structural barriers to shareholder activism in China

In China, the share structure of listed companies is one of high concentration where majority shareholders (usually the single largest shareholder) hold controlling shareholdings. The share structure split reform in 2005 aimed to reduce the number of shares held by the state and the SOEs to improve market liquidity. It did achieve these goals but, arguably, it only changed highly concentrated shareholding to a degree and shifted this concentration from the state and SOEs to other majority shareholders like non-SOEs. It did not fundamentally change the highly concentrated share structure in Chinese listed companies. Figure 1 provides evidence for this argument.

In the period 2001–2016, the average yearly percentage of A-shares[79] held by majority shareholders was 58.84 per cent. The maximum was 61.87 per cent in 2002 and the minimum was 56.22 per cent in 2008. The share structure split reform began in 2005 and ended in 2006, which reduced the average annual percentage of A-shares held by majority shareholders from 60.67 per cent to 57.11 per cent, a reduction of just 3.56 per cent. Interestingly, there has been a re-emergence of concentrated shareholdings held by majority shareholders since 2008, where a slight trend towards an increase in

78 Yamin Zeng, 'Dark Side of Institutional Shareholder Activism in Emerging Markets: Evidence from China's Split Share Structure Reform' (2011) 40 Asia-Pac J Financ Stud 240, 242.

79 In China, A-shares include negotiable A-shares and non-negotiable A-shares. In the Chinese stock market, The former is tradable while the latter is non-tradable. Normally, listed companies can decide the proportions of negotiable and non-negotiable A-shares, subject to the regulations of China Securities Regulatory Commission (CSRC). Since the share structure-split reform in 2005, some listed companies do not have non-negotiable A-shares.

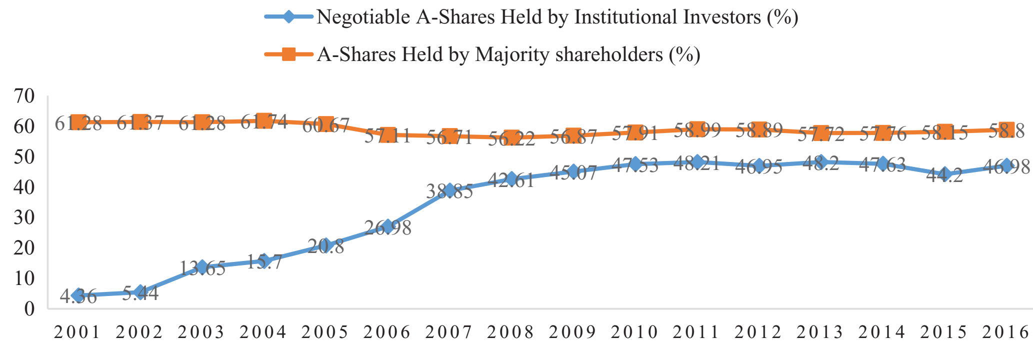


Figure 1. Distribution of A-shares held by majority shareholders and negotiable A-shares held by institutional investors in Chinese listed companies from 2001 to 2016.
Note: (a) Majority shareholders mean largest shareholders. (b) Institutional investors include both domestic institutional investors and foreign institutional investors (QFIIs).
Source: Calculated on data collected from Wind.

shareholding concentration from 2008 to 2016 can be observed. This trend is persistent, increasing at an annual average rate of 0.33 per cent. Clearly, the nature of highly concentrated shareholding in Chinese listed companies remains unchanged and majority shareholders, as controlling shareholders, still exist in many Chinese listed companies.

The average yearly percentage of negotiable A-shares held by institutional investors[80] also increased significantly from 2001 to 2016. For example, there was a steep increase in the average yearly percentage of negotiable A-shares held by institutional investors from 2002 to 2007 with an average annual increase of 6.68 per cent. From 2007 onwards, the increase in the average yearly percentage of negotiable A-shares held by institutional investors began to slow down, with an average annual increase of 0.90 per cent from 2007 to 2016, showing that the average yearly rate of increase seems to be constant. The average yearly percentage of negotiable A-shares held by institutional investors during this period was 45.42 per cent , with a maximum of 48.21 per cent in 2011. These figures indicate that institutional investors have become important equity investors in the Chinese stock market. The weight of their shareholdings means they could potentially exercise their activism in portfolio companies, although this weight is still secondary to the controlling weight of majority shareholders who hold 58.84 per cent of the average yearly percentage of A-shares, a technical barrier to institutional activism.

Legal and regulatory barriers to shareholder activism in China

Beyond the structural barrier of 'strong majority shareholders and weak minority shareholders', legal and regulatory environments affect the viability of shareholder activism and influence how it is carried out.

Most mechanisms of shareholder activism such as jawboning, targeting announcements, public censure, dialogue and coalition in the USA do not generally occur and are

80 Institutional investors in Figure 1 refer to all types of institutional investor including QFIIs in China. They can trade in negotiable A-shares in China's stock market.

practically impossible in China. Where jawboning and dialogue do occur, they are not aimed at corporate governance reform. Instead, they take the form of collusion between majority shareholders and institutional investors to extract private benefits at the expense of other minority shareholders.[81] Such conduct could potentially be the subject of public censure by the two stock exchanges in China, but minority shareholders rarely if ever make their complaints public. This leaves the shareholder proposal as perhaps the only mechanism in law allowing shareholders to influence management at shareholder meetings. Shareholders who hold more than 3 per cent of shares, either individually or jointly, in a company can submit a shareholder proposal to the shareholder meeting.[82] The threshold of 3 per cent in China is much higher than the 1 per cent required in the USA. Individual institutional investors normally fall below this threshold and therefore need to coordinate with others if they intend to submit a shareholder proposal. This suggests that joint engagement offers the greatest potential for institutional investors to engage in activism. However, legal and regulatory barriers to joint engagement may deter them. Three barriers will now be considered: portfolio limit, insider dealing liability and disclosure obligation.

Portfolio limit

The China Securities Regulatory Commission (CSRC) imposes limits on the extent of shareholdings by institutional investors in Chinese listed companies.[83] Two rules are particularly relevant. The diversification rule states that a fund cannot hold shares with a market value of more than 10 per cent of its own net assets in a single portfolio company.[84] This rule is intended to ensure that a fund maintains a diversified portfolio and limits its exposure to the price risk of a single stock.

The fragmentation rule demands that funds managed by the same fund manager cannot comprise more than 10 per cent of all the shares of a portfolio company.[85] This prevents fund managers from building a block of shares and using this position to manipulate stock prices. Market manipulation is a particularly severe problem in the Chinese stock market and institutional investors are often accused of collusion with majority shareholders to manipulate stock prices. The rule makes it impossible for a fund manager to build up a controlling, or even influential, interest in a single portfolio company.

Insider dealing liability

An institutional investor who holds more than 5 per cent of a company's shares is, in law, an insider within that company.[86] As insiders, institutional investors are subject to trading restrictions on the shares they hold in accordance with two insider-dealing rules.

81 Zeng (n 78) 241.
82 Company Law of China 2014 (amended version), Art 102 (2).
83 Measures for the Administration of the Operation of Publicly Offered Securities Investment Funds 2014.
84 ibid Art 32 (1).
85 ibid Art 32 (2).
86 Securities Law of China 2014 (amended version), Art 74 (2).

Under the short-swing profit forfeiture rule, any shareholder who holds more than 5 per cent of shares in a portfolio company and sells those shares within 6 months of purchase, or repurchases any shares sold within 6 months, must forfeit any profits from trade to that company.[87] Clearly, this rule is designed to prevent shareholders taking advantage of their position as insiders to trade on inside information and profit at the expense of other minority shareholders. However, it has a chilling effect by discouraging shareholders, particularly institutional investors, from holding more than 5 per cent of the shares of an individual company. This is because they will make no profits if they sell those shares within 6 months of purchase or repurchase them within 6 months of sale.

Under the insider-dealing liability rule, any shareholder who holds more than 5 per cent of shares of a portfolio company is an insider within that company and is presumed to have access to inside information. Under this rule, they are prohibited from trading in those stocks before such information has been disclosed publicly.[88] If they breach this rule, insider-dealing liability in the form of economic penalties and administrative sanctions may be applied.[89] Hence, shareholders are vulnerable to insider-dealing liability when they hold more than 5 per cent of shares in a portfolio company.

Disclosure obligation

There are two notable rules in laws and regulations relating to shareholders' disclosure obligations: mandatory disclosure and acting in concert. The mandatory disclosure rule requires that shareholders who hold, individually or jointly and through agreements or other arrangements, 5 per cent of shares in a portfolio company must notify the CSRC and the stock exchange and inform the company and the public within 3 days of reaching the threshold of 5 per cent.[90] Other arrangements may include administrative transfer or change, enforcement of judgement, inheritance and gifts. During this period, such shareholders should not purchase or sell stocks belonging to the same company.[91] Shareholders should further disclose each increase or decrease of 5 per cent or more of the shares of the company to the CSRC, the stock market, the company and the public.[92] They should not purchase or sell the stock of the same company within 5 days, which includes 3 days for filing to the CSRC and the stock market and then notifying the company and the public, and 2 further days after this disclosure.[93] The rule ensures that shareholders holding more than 5 per cent of shares are transparent regarding their identities, stake-holdings and other sensitive information such as monthly trading records during the 6 months leading up to the disclosure.[94] This can assist the company

87 ibid Art 47 (1).
88 ibid Art 76 (1).
89 ibid Art 202.
90 Measures for the Administration of Takeover of Listed Companies 2014 (amended version), Art 13 (1).
91 ibid.
92 ibid 13 (2).
93 ibid.
94 ibid Art 16.

concerned to identify shareholders whose stake-holdings might influence the policies and management of the company, especially in the case of shareholders acting in concert.

The acting in concert rule specifies that shareholders who form a shareholder consortium through agreement or other arrangements are acting in concert in relation to a portfolio company.[95] Shareholders acting in concert are subject to more onerous information disclosure obligations requiring them to publish their identities, the purpose of shareholding and their stake in shares, stake-holding, time and method of stake-holding, the relationship between shareholders acting in concert, stock price, major transactions between themselves and portfolio companies in the 24 months prior to their stake-holdings and so on.[96] If the information disclosure contains false statements, misrepresentations or material omissions they will be punished with administrative sanctions and financial penalties.[97] Any false information disclosure may also lead to a CSRC investigation.[98] In practice, it is not uncommon in Chinese listed companies. Another rule that may be triggered in this scenario is that when shareholders acting in concert hold more than 30 per cent of all shares of a portfolio company, they should launch a mandatory takeover bid, either full or partial, for the company's shares.[99] The acting in concert rule may thus create a double bind, comprising a more burdensome disclosure obligation and the potential legal risk of a mandatory takeover bid for shareholders who intend to form shareholder consortia.

When institutional investors intend to collaborate in shareholder activism they need to keep in mind these three legal and regulatory barriers. Institutional investors can potentially form shareholder consortia to carry out shareholder activism in China, but the legal and regulatory barriers create a dilemma. If they do not act in concert their shareholder activism is likely to be unsuccessful given their very small shareholdings compared to the controlling shareholdings held by the majority shareholders; if they are indeed acting in concert these three legal and regulatory barriers may deter them. The dilemma persists and remains unsolved. Therefore, institutional investors are normally passive investors and shareholder activism is practically non-existent. The same is true of QFIIs who invest in the Chinese stock market, to whom these three legal and regulatory barriers also apply.

Technical barriers impeding the mechanism of institutional activism among QFIIs

Legal and regulatory barriers are the more obvious obstacles; however, in practice, the technical barriers are more important. QFIIs are one category of institutional investors in China and were permitted to invest in the Chinese stock market in 2002. China permitted QFIIs to do this to fulfil its commitment to opening its market to the world, made when

95 ibid Art 5.

96 ibid Art 16 and Art 17.

97 Text to n 86, Art193

98 Administrative Measures for the Disclosure of Information of Listed Companies 2007, Art 61.

99 Text to n 90, Art 24.

it entered the WTO in 2001. Although permitted to invest in the Chinese stock market, QFIIs face strict controls on their qualifications to enter the stock market, including on investment quotas, capital thresholds, capital entry and exit, capital lock-in period, and the limit for repatriating earnings. The purpose behind these controls is presumably to guarantee that QFIIs who enter the Chinese stock market do so with a medium- or long-term investment strategy, and to control the risk of undesired capital flight. The fear is that this may cause instability in the Chinese stock market as happened in Southeast Asian countries in the 1997 Asian financial crisis. Accordingly, QFIIs may invest in the Chinese stock market in line with individual quotas approved by the Chinese government. When Chinese regulators introduced the QFIIs scheme, their assumption appears to have been that these restrictions would attract QFIIs of quality and experience, and therefore with the potential capacity to engage in activism, and these be required to invest on a medium- or long-term basis in Chinese listed companies. As a corollary, this would give QFIIs the incentive to engage with their portfolio companies. If so, QFIIs can potentially bring their experience of good practice in corporate governance and encourage Chinese listed companies to adopt appropriate arrangements, thereby improving the performance of investee companies. As of 29 June 2017, 283 QFIIs had been approved to invest in the Chinese stock market and the total quota allocated to them was US$92.774 billion, according to the State Administration of Foreign Exchange in China.

While this theory appears sound, in practice these goals do not appear to have been met. QFIIs may be able to form shareholder consortia through which to engage with their investee companies. However, in addition to the three legal and regulatory barriers, there may also be technical barriers hindering their capacity to form shareholder consortia, meaning that these legal and regulatory barriers do not even come into play.

The next section examines these technical barriers. It uses Sharpley–Shubik[100] and Banzhaf–Coleman[101] indices to measure the capacity or potential capacity of QFIIs to form shareholder consortia.

Sharpley–Shubik and Banzhaf–Coleman indices

The Shapley–Shubik and Banzhaf–Coleman indices are two popular indices that are applied in politics, law, finance and other areas, such as engineering, to measure the power or weight of a player or agent in a game with a coalition or cooperation structure. They originated in politics as a means of measuring the voting power of a Member State in an institution such as the European Union, IMF and the United Nations. They can be used, for example, to analyse the voting power of an individual voter in a political organisation, or the distribution of financial revenue to individual members of D & R alliances. This makes them well suited to analysing the influence and degree of control

100 Lloyd S Shapley and Martin Shubik, 'A Method for Evaluating the Distribution of Power in a Committee System' (1954) 48(3) Am Polit Sci Rev 787–92.

101 Guillermo Owen, 'Characterization of the Banzhaf-Coleman Index' (1978) 35(2) SIAM J Appl Math 315–27.

wielded by individuals and groups of shareholders in companies where voting rights are assigned by law.

Power indices enable us to analyse the distribution of voting power among individual voters in a voting body modelled as a simple game, which is defined as 'a cooperative/completive enterprise in which the only goal is 'winning' and the only rule is a specification of which coalitions are capable of doing so'.[102] As a numerical measure, power indices assess the extent of influence of a voter who brings about the passage or defeat of a proposed resolution, based on the voter's importance in casting the deciding vote in a voting game.[103] This means that voting power measured by power indices can be interpreted in terms of probabilistic voting, defined as the relative ability of a voter to use his position to change a coalition from one that loses to one that wins in a voting body.[104] Central to the construction of these two indices is the concept of a pivotal or swing voter, which refers to the voter who casts the deciding vote in a voting game.

The Shapley–Shubik index is a specialized Shapley value[105] used to assess the a priori measure of the power of each agent in a collective decision-making procedure modelled as a simple game.[106] The Banzhaf–Coleman index 'is a reasonable measure of the power of committee members to influence a decision in a voting situation'[107] represented as a simple game. The Shapley–Shubik index is founded on Games theory while the Banzhaf–Coleman index is premised on Probability theory.[108] Thus, the former is seen as focused on bargaining over payoffs that are realised by the winning coalition[109] while the latter is seen as focusing on 'changes as a result of members participating in coalitions'.[110] The difference behind the two indices is that the Shapley–Shubik index is concerned with how to form a winning coalition while the Banzhaf–Coleman index is concerned with how to justify a final winning coalition.[111]

In the Shapley–Shubik index, a voter is pivotal in that, given an ordering of voters, their deletion from the coalition of voters transforms it from being in a winning position

102 Pradeep Dubey and Lloyd S Shapley, 'Mathematical Properties of the Banzhaf Power Index' (1979) 4(2) Math Oper Res 99, 99.

103 Rana Barua, Satya R Chakravarty and Sonali Roy, 'On the Coleman Indices of Voting Power' (2006) 171 Eur J Oper Res 273, 273.

104 Dennis Leech, 'Power Indices and Probabilistic Voting Assumptions' (1990) 66 Public Choice 293, 293.

105 Lloyd S Shapley. 'A Value for n-Person Games' (1953) 28 Ann Math Stud 307–17. The Shapley value is a function that assigns a number for each player in the universe of all possible players in a simple game on the condition that the function obeys three axioms: symmetry, carrier and additivity. The Shapley–Shubik index is based on the Shapley value and is thus simplified as the Shapley index.

106 Annick Laruelle and Federico Valenciano, 'Shapley-Shubik and Banzhaf Indices Revisited' (2001) 26(1) Math Oper Res 89, 89.

107 Owen (n 101) 327. The Banzhaf–Coleman index is based on the Banzhaf index; originating from the Penrose measure, it is sometimes called the Penrose-Banzhaf index or simplified as the Banzhaf index. In his paper entitled 'The Elementary Statistics of Majority Voting', L S Penrose suggests that the voting power of each bloc in a voting game should be proportional to the square root of the number of voters in each voting bloc's voting list.

108 Dennis Leech, 'The Use of Coleman's Power Indices to Inform the Choice of Voting Rule with Reference to the IMF Governing Body and the EU Council of Ministers' (Warwick Economic Research Paper Number 645, July 2002) 1, 5 http://wrap.warwick.ac.uk/1541/1/WRAP_Leech_twerp645.pdf> accessed 17 August 2017.

109 ibid 4.

110 ibid.

111 Philip D Straffin, Jr, 'The Shapley-Shubik and Bazhaf Power Indices as Probabilities' in Alvin E Roth (ed), *The Shapley Value: Essays in Honor of Lloyd S. Shapley* (CUP 1988) 74.

to being in a losing position. In the Banzhaf–Coleman index, a swing voter, based on the number of coalitions in which he/she changes his/her vote, is critical in that he/she is able to change the voting outcome. A winning coalition is a set of voters whose voting weight adds up to more than the quota defined by certain decision rules such as a supermajority or a simple majority. The two indices thus measure the voting weight (capacity or potential capacity) of a pivotal or swing voter in a winning coalition based on the decision rule chosen. The Shapley–Shubik index of a pivotal voter is a truncation of the Shapley value defined by a simple game, while the Banzhaf–Coleman index of a swing voter denotes the probability of a voter being critical, assuming that all voting configurations are equally probable.[112] The former is the ratio between the number of permutations of the set of voters in which a voter is pivotal to the number of possible permutations. The latter is the number of winning coalitions that a voter belongs to and in which the voter swings. These two indices are alternative ways of measuring the power of a voter in a voting body with a coalition structure. In a voting body with a non-coalition structure, the voting power of each voter is the same.

The Banzhaf–Coleman index is usually known as the Banzhaf index, which is essentially the same as the Coleman index.[113] The Banzhaf index includes a non-normalized (absolute) Banzhaf index, which is the same as the Penrose index, and a normalized Banzhaf index. The former is the probability of swing for a player that reflects both the power of a player to prevent or initiate action and the power of players to act collectively. It is not generally equivalent to Coleman's indices and both are only equal in a simple game. The latter is the ratio between the number of swings for a player to the total number of swings for all players. The normalized Banzhaf index can be denoted as Coleman's two indices: power to prevent action and the power to initiate action, which decompose the power of a player into two different perspectives. Thus, Coleman's two indices can give information that cannot be obtained by looking at the Banzhaf index alone.[114]

In a voting body with a coalition structure, Coleman's power to prevent action is the ratio between the number of coalitions in which a voter swings to the number of winning coalitions, while Coleman's power to initiate action is the ratio between the number of coalitions in which a voter swings to the number of losing coalitions. These two indices are proportional to the Banzhaf index and to each other. The average of the two indices is equivalent to the Banzhaf index while their harmonic mean[115] is regarded as a non-normalized Banzhaf index. Coleman's two indices focus on two different aspects of members' voting power in a voting body: to measure a voter's capacity to destroy a

112 Maria Ekes, 'Banzhaf-Coleman and Shapley-Shubik Indices in Games with A Coalition Structure—A Special Case Study' in Rudolf Fara, Dennis Leech and Maurice Salles (eds), *Voting Power and Procedures: Essays in Honour of Dan Felsenthal and Moshé Machover* (Springer International Publishing 2014) 222.

113 Owen (n 101) 315.

114 Dan S Felsenthal and Moshé Machover, *The Measurement of Voting Power: Theory and Practice, Problems and Paradoxes* (Edward Elgar Publishing Blog 1998) 51.

115 The harmonic mean is the reciprocal of the arithmetic mean of the reciprocals of the given set of observations. The formula is: $(1^{-1} + 2^{-1} + \cdots \cdots + n^{-1} / n)^{-1}$.

winning coalition and to measure a voter's capacity to turn a losing coalition into a winning one. There is no difference between the indices where there is simple majority decision rule. Conversely, there is a difference between them when there is supermajority decision rule. This is especially useful in cases where the choice of threshold centres on the ability of individual members and groups of members to block decisions.[116]

As a function, a power index is a measure of the influence that a player can exert on the voting outcome in a voting game. It cannot be negative and ranges from zero to one. The closer it is to one the larger the power index, while the closer it is to zero the smaller the power index. A voter who has a power index of zero is a 'dummy',[117] meaning that the voter is neither in a 'pivotal' nor a 'swing' position and has no influence over the outcome in a voting game. As a dummy, there are no circumstances in which a voter can change the outcome by changing his/her vote. This means that a dummy can be neither a pivotal nor a swing voter in a voting game with a coalition structure. The essence of a voter's power as measured by power indices is the capacity or potential capacity of a pivotal or swing voter. As a dummy, a voter can never influence the voting outcome and will not change the power of existing voters in a voting coalition.

According to Coleman's power to prevent action, a voter with a power index of one is a blocker. A blocker can prevent or destroy any decision by leaving a winning coalition. In Coleman's power to initiate action, a voter with a power index of one is a dictator. A dictator is the unique blocker in the game and the sole minimal winning coalition in the game. Clearly, a dictator can initiate any decision or change any decision from fail to pass by joining a losing coalition. A game may have more than one blocker, but this will then mean it has no dictator. If a voting game has a dictator, he/she is the only swing voter in the game.

In the context of a corporation, the application of Shapley–Shubik and Banzhaf–Coleman indices encounters a problem in that calculating them when the number of shareholders is quite large is difficult, especially when this number is uncertain or infinite. This is a major factor that can limit the two indices as a means of measuring corporate control or the influence of shareholders in the everyday corporate world. The difficulty stems from 'incomplete data'[118] on shareholders and shareholdings. In practice, the number of shareholders in a company, especially a listed company, is vast and always changing. This is particularly true of small shareholders, who may number hundreds or thousands and whose identities may change very frequently in a very large listed company. This makes it difficult to collect complete and constant data from all shareholders in a company. More importantly, the percentage of shareholdings held by small shareholders is normally very low and most of them do not use their right to vote. In addition, the number of small shareholders is also very large, making it difficult for them to coordinate and act in concert when forming a shareholder coalition. Thus, small

116 Dennis Leech, 'Designing the Voting System for the Council of the European Union' (2002) 113 Public Choice 437, 445.

117 Barua, Chakravarty and Roy (n 103) 276.

118 Dennis Leech, 'Shareholder Voting Power and Corporate Governance: A Study of Large British Companies' (2001) 27 Nordic J Polit Econ 33, 42.

shareholders usually play little role in corporate voting. This suggests that a distinction exists between large and small shareholders regarding the method and extent of influence wielded on voting power. Thus, it is important to not only differentiate the roles played by large shareholders and small shareholders but also to calculate power indices to measure their voting power separately in a corporate voting game.

The solution to this problem lies in using Oceanic Games theory to calculate Shapley–Shubik and Banzhaf–Coleman indices in large games where there is an uncertain or infinite number of players. The theory was devised by Shapley and Shapiro who analysed the Shapley value for an uncountable 'ocean' of players in an infinite-person game.[119] Dubey and Shapley applied the theory to derive Banzhaf indices for players in such a game.[120] An oceanic game is a game in which the number of players can be uncertain or infinite. In this game, players can be treated as major or minor players. Major players are atomic players who constitute a finite discrete set while minor players are non-atomic players who constitute an infinite set. The former, whose weight is finite, are treated individually while the latter, whose weight is infinitesimal, are treated collectively. Non-atomic minor players are composed of an 'ocean' in which individual minor players are not considered. Atomic major players are those out of the 'ocean'. Therefore, the incomplete data problem that causes difficulty when calculating Shapley–Shubik and Banzhaf–Coleman indices can be ignored.

In terms of a mathematical expression, an oceanic game is denoted by

$$[c; \quad w_{1,} w_{2,\ldots,} w_m; \quad \alpha \qquad], \tag{1}$$[121]

where c denotes the 'quota' that needs to win in a voting game. $c \geq 0$. In a simple game, $c = 0.5$. M denotes a finite set of major players, which is represented by $\{1, 2, \ldots\ldots\ldots m\}$. Thus, $(w_{1,}\ w_{2,\ldots\ldots\ldots,}\ w_m)$ is a vector that corresponds to the voting weight of an individual major player in M. w represents weight. α is a positive constant that represents the collective voting weight of an infinite set of minor players in the 'ocean'. A coalition wins if and only if its fraction of the 'ocean', plus its contingent of major players, 'weighs' at least c.

Let $w_{1,} w_{2,\ldots} w_m \geq 0$, a voting weight measured by u on $\mathcal{R}$ is defined by

$$u(R) = w(R \cap M) + a\lambda(R \cap I) \ R \in \mathcal{R}, \tag{2}$$[122]

where λ denotes a Lebesgue measure and I represents the total weight of minor players in the 'ocean'. $\mathcal{R}$ is the Boolean ring generated by the subsets of the finite set M and the Lebesgue-measurable subsets of the infinite set I. $I = [0, 1]$.

119 Lloyd S Shapley and Norman Z Shapiro, 'Value of Large Games-I: A Limit Theory' (US Air Force Project Rand, November 2 1960) https://www.rand.org/pubs/research_memoranda/RM2648.html> accessed 25 August 2017.

120 Owen (n 101).

121 JW Milnor and Lloyd S Shapley, 'Values of Large Games II: Oceanic Games' (1978) 3(4) Math Oper Res 290, 291.

122 ibid.

Let $\mathrm{P}(x) = \{x_i|x_i\}\ x\quad i \in M$, the Shapley–Shubik index ϕ_i is then defined by

$$\phi_i = w\{P(x_i)\} + \alpha x_i \leq c \leq w\{P(x_i)\} + w_i + \alpha x_i \quad (3)$$

[123]

$$= \sum_{S \in M_i} \int_a^b x^s (1-s)^{\mathrm{m}-i-\mathrm{s}} \quad 1dx \quad i = 1, 2, \ldots\ldots m, \quad (4)$$

[124]

where x denotes an independent random variable and i represents a major player who is pivotal. $M_i = M - \{i\}$. Major players $(1, 2, \ldots, m)$ correspond to coordinate vector $(x_1, x_2, \ldots, x_m)$, respectively. $a = \text{median}\left(0, \left(q - w(S)\right)/\left(1 - w(M)\right), 1\right)$ and $b = \text{median}\left(0, \left(q - w(S) - w_i\right)/\left(1 - w(M)\right), 1\right)$. S denotes a subset of M that does not include a pivotal player. s is the number of elements in S. If the total value of all minor players in the 'ocean' is defined as Φ, then $\Phi + \phi(M) = \Phi + \sum \phi_i = 1$. The value of any individual minor player in the 'ocean' is zero.

Let $\mathrm{f_i}(x) = \Pr[q - -w_i \leq v_i(x)\quad q]$ and set $x = 0.5$, the Banzhaf–Coleman index β_i is defined by

$$\beta i \ = \sum_{S \in M - \{i\}} x^s \left(1 - x^{m-s-1}\right) gi(S,\ \ x), \quad (5)$$

[125]

where $v_i(x)$ denotes a random variable that counts the number of votes cast by others on the same side as i. $g_i(S, x)$ is the probability of player i swinging given that set S votes for a proposal in a voting game.

Therefore, formulas (4) and (5) are two oceanic games models that can be used to calculate the Shapley–Shubik index ϕ_i and Banzhaf–Coleman index β_i in a voting game with a finite set of major players and an infinite set of minor players.

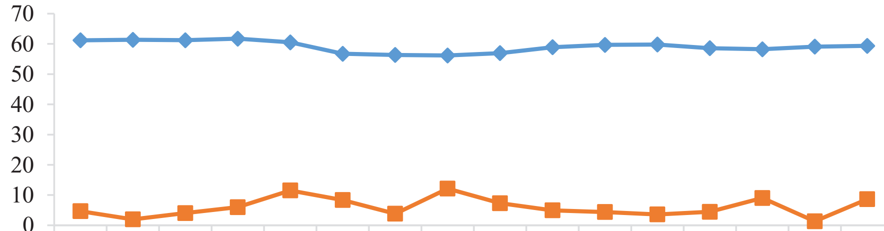
The capacity or potential capacity of QFIIs to form a shareholder consortium

The two oceanic games models introduced above apply the Shapley–Shubik and Banzhaf–Coleman indices to measure the capacity or potential capacity of QFIIs to form shareholder consortia who then engage in activism in Chinese listed companies. The models enable us to measure the voting power of shareholders, including QFIIs in Chinese listed companies, taking into consideration the specific characteristics of shareholder structure and shareholding distribution in Chinese listed companies. Shareholder structure is composed of two categories: large shareholders and small shareholders. The former consists of the 10 largest shareholders, a finite set of major shareholders, while the latter includes all the remaining shareholders, an infinite set of minor shareholders. A similar distinction between large and small shareholders is made

123 ibid.

124 Dennis Leech, 'Computation of Power Indices' (Warwick Economic Research Papers No 644, July 2002) 1, 43. https://www2.warwick.ac.uk/fac/soc/economics/research/workingpapers/2008/twerp644.pdf> accessed 26 August 2017.

125 Dennis Leech, 'Computing Power Indices for Large Voting Games' (2003) 49(6) Manage Sci 831, 833.



	2001	2002	2003	2004	2005	2005	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Average (%)	61.19	61.36	61.22	61.73	60.52	56.74	56.34	56.17	56.94	58.91	59.67	59.79	58.57	58.23	59.1	59.34
Min (%)	4.66	1.96	4.04	5.99	11.52	8.35	3.84	12.13	7.3	4.96	4.4	3.59	4.45	9.02	1.32	8.64

Figure 2. Shareholder structure and shareholding distribution of the 10 largest shareholders in Chinese listed companies 2001–2016. Source: Calculated on data collected from Wind.
Note: (a) Average means the average total yearly percentage of shareholdings held by the 10 largest shareholders. Min refers to the minimum total yearly percentage of shareholdings held by the 10 largest shareholders. (b) The percentage of shareholding includes both negotiable A-shares and non-negotiable A-shares. (c) Companies with missing data on the percentage of shareholdings from any one of the 10 largest shareholders are not included.

for shareholding distribution. Accordingly, the shareholder structure and shareholding distribution of the 10 largest shareholders are both certain, whereas they are uncertain for the remaining small shareholders.

To use the two oceanic games models, shareholders who constitute the finite set of major players in the game must be certain and data on them must be available to calculate their voting power. This is particularly important for listed companies with hundreds or thousands of shareholders. Luckily, Chinese databases normally identify the 10 largest shareholders and collect their data. This is why the 10 largest shareholders are chosen to form a finite set of major shareholders. Chinese databases also collect data on QFIIs. These encompass the characteristics of shareholder structure and shareholding distribution of Chinese listed companies.

Figure 2 shows the characteristics of shareholder structure and shareholding distribution for the 10 largest shareholders from 2001 to 2016. The average total yearly percentage of shares held by the 10 largest shareholders was 59.11 per cent during this period. This means that the remaining 40.89 per cent of the average total yearly shares were held by small shareholders. The minimum average total yearly percentage of shareholdings held by the 10 largest shareholders in 2007 was 56.34 per cent. Since then, there has been a slight trend towards an increase in the average total yearly shareholdings held by the 10 largest shareholders. The maximum average total yearly percentage of shareholdings held by the 10 largest shareholders was 12.13 per cent in 2008, since when there has been a general trend toward a decrease in this average. The minimum average total yearly percentage of shareholdings held by the 10 largest shareholders was 1.32 per cent in 2015. This means that the percentage of shareholdings held by individual small shareholders is tiny, especially given that there are normally hundreds or thousands of

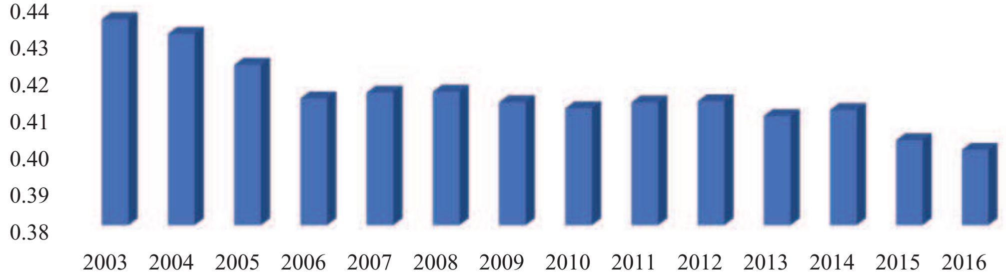


Figure 3. Yearly average Shapley–Shubik index of the largest shareholders from 2003 to 2016. *Source*: Calculated on data from Table 2.

small shareholders in a listed company. Small shareholders hold shares purely to make profits and do not use their right to vote. The data on their shareholdings are not publicly available. Therefore, their influences on corporate voting are usually zero.

QFIIs are foreign institutional investors who are permitted to invest in Chinese listed companies. Compared to other small shareholders, their shareholdings are relatively certain, meaning that data on their shareholdings will be available. This suggests that QFIIs can be drawn out of an infinite set of small shareholders and be treated 'separately'. Accordingly, QFIIs can be analysed alongside the 10 largest shareholders as a finite set of shareholders and their voting power can be measured.

The two oceanic games models based on the Shapley–Shubik and Banzhaf–Coleman indices can therefore be used to measure the voting power of large shareholders and QFIIs in Chinese listed companies. The 10 largest shareholders and QFIIs are treated as atomic players out of the 'ocean' while the other remaining small shareholders are treated as non-atomic players in the 'ocean'. This enables us to measure QFIIs' voting power and analyse their capacity or potential capacity to form shareholder consortia and thus engage in activism.

To situate QFIIs' voting power in context, the 10 largest shareholders must first be identified. Amongst these, the largest shareholders are particularly important because they may significantly influence the other nine largest shareholders as well as small shareholders. In Chinese listed companies, the largest shareholder is normally a *de jure* or *de facto* controlling or real controlling shareholder. In a company with simple majority-voting rule, the voting power of the largest shareholder is 100 per cent if they hold 50 per cent or more of the shares. Consequently, the voting power of all the other shareholders, either individually or collectively, is zero, regardless of the size of individual shareholdings or their distribution. In this scenario, it is meaningless to measure the voting power of any of the other shareholders. Therefore, companies where the largest shareholders hold 50 per cent or more of shares must be excluded. Table 1 shows the distribution of Chinese companies from 2002 to 2016, distinguishing those where the largest shareholders hold 50 per cent or more of shares from those where the largest shareholders hold less than 50 per cent of shares.

Table 1. Distribution of Chinese listed companies distinguished by the percentage of shareholdings held by the largest shareholders from 2002 to 2016

	N (Total)	*N* (50% plus)	Percentage (50% plus)	*N* (50% minus)	Percentage (50% minus)	*N*-filtered (50% minus)	Percentage-filtered (50% minus)
2002	1,130	450	39.82	680	60.18	677	59.91
2003	1,198	446	37.23	752	62.77	751	62.69
2004	1,295	451	34.83	844	65.17	844	65.17
2005	1,319	420	31.84	899	68.16	892	67.63
2006	1,430	309	21.61	1,121	78.39	1,107	77.41
2007	1,553	317	20.41	1,236	79.59	1,225	78.88
2008	1,621	352	21.71	1,269	78.29	1,262	77.85
2009	1,813	421	23.22	1,392	76.78	1,375	75.84
2010	2,144	483	22.53	1,661	77.47	1,648	76.87
2011	2,407	512	21.27	1,895	78.73	1,878	78.02
2012	2,564	571	22.27	1,993	77.73	1,982	77.30
2013	2,571	556	21.63	2,015	78.37	1,997	77.67
2014	2,737	548	20.02	2,189	79.98	2,164	79.06
2015	2,976	552	18.55	2,424	81.45	2,406	80.85
2016	3,162	505	15.97	2,657	84.03	2,422	76.60

Note: *N* (Total) means the yearly total number of Chinese listed companies. *N* (50 per cent plus) refers to the yearly number of companies with the largest shareholders who hold more than 50 per cent of shareholdings. Percentage (50 per cent plus) denotes the yearly percentage of shareholdings held by the largest shareholders who hold more than 50 per cent of shareholdings. *N* (50 per cent minus) refers to the yearly number of companies with the largest shareholders who hold less than 50 per cent of shareholdings. Percentage (50 per cent minus) denotes the yearly percentage of shareholdings held by the largest shareholders who hold less than 50 per cent of shareholdings. N-filtered (50 per cent minus) refers to the yearly number of companies with the largest shareholders who hold less than 50 per cent of shareholdings, excluding companies with missing data on any one of the 10 largest shareholders. Percentage-filtered (50 per cent minus) denotes the yearly percentage of shareholdings held by the largest shareholders who hold less than 50 per cent of shareholdings, excluding companies with missing data on any one of the 10 largest shareholders.

Source: Calculated on data collected from Wind.

Clearly, it would therefore be misleading to include companies whose largest shareholders hold more than 50 per cent of shareholdings when measuring the voting power of shareholders in Chinese listed companies. In addition, it is also inaccurate to include companies with missing data on any one of their 10 largest shareholders, provided that these shareholders constitute a finite set of atomic players. Therefore, companies where the voting power of shareholders is measured should be those whose largest shareholders hold less than 50 per cent of shareholdings, excluding companies with missing data on any one of the 10 largest shareholders from 2002 to 2016. For this reason, the companies selected must satisfy two criteria: (1) largest shareholders in selected companies hold less than 50 per cent of shareholdings and (2) there must be no missing data on the percentage of shareholdings from any one of the 10 largest shareholders in the selected companies. Columns 7 and 8 in Table 1 show the number and percentage of selected companies in the period 2002–2016.

Three observations can be made from Table 1. First, from 2002 to 2016, the average yearly percentage of companies whose largest shareholders hold more than 50 per cent of the shares was 24.86 per cent. Therefore, in one quarter of all Chinese listed companies, the largest shareholders hold more than 50 per cent of shareholdings. Although the yearly percentage of companies whose largest shareholders hold more than 50 per cent of shareholdings has decreased significantly over time, by 2016 15.67 per cent of companies still had a controlling shareholder. Second, from 2002 to 2016, the average yearly percentage of companies whose largest shareholders hold less than 50 per cent of shares was 75.14 per cent. Therefore, in three quarters of all Chinese listed companies, the largest shareholders hold less than 50 per cent of the shares. Over time, the yearly percentage of companies whose largest shareholders hold less than 50 per cent of shareholdings has risen. Third, from 2002 to 2016, the average yearly percentage of companies whose largest shareholders hold less than 50 per cent of shares, excluding companies with missing data on any one of the 10 largest shareholders, was 74.12 per cent. A difference therefore exists between Chinese listed companies whose largest shareholders hold less than 50 per cent of shareholdings and Chinese listed companies with missing data on any one of the 10 largest shareholders. This difference is 1.02 per cent. The trend in the yearly percentage of companies whose largest shareholders own less than 50 per cent of shareholdings, excluding companies with missing data on any one of the 10 largest shareholders, also increased during this period.

To measure QFIIs' voting power, the 10 largest shareholders from companies that satisfy these two criteria, plus the QFIIs, constitute a finite set of 11 atomic players. Correspondingly, other small shareholders are composed of an infinite set of non-atomic players. As such the two oceanic games models can be used to calculate Shapley–Shubik and Banzhaf–Coleman indices for the QFIIs. Data on the 10 largest shareholders and QFIIs were collected from the Wind database. These cover the period from 2003 to 2016 because yearly data on QFIIs first became available from the end of 2003. The calculations on the Shapley–Shubik and Banzhaf–Coleman indices were conducted using *ssocean* and *ipdirect* programmes.[126] The average yearly percentage of shareholdings held by the 10 largest shareholders and QFIIs were used as weights in the calculations. Quota c_{ss} for the Shapley–Shubik index was calculated from the formula: voting rule—(100 – combined weight of all atomic players) while quota c_{bc} for the Banzhaf–Coleman index was calculated from the formula: voting rule—(100 – combined weight of all atomic players)/2. The voting rule used here is simple majority rule, which was set at 50.01. Table 2 presents the Shapley–Shubik indices for the 10 largest shareholders and QFIIs from 2003 to 2016.

126 These two programmes can be accessed at http://homepages.warwick.ac.uk/~ecaae/index.html>.

Table 2. Shapley–Shubik indices of 10 largest shareholders and QFIIs in Chinese listed companies 2003–2016

	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	QFIIs	Combined
2003	0.435928	0.100095	0.044357	0.022869	0.013819	0.008817	0.006396	0.004839	0.003847	0.003233	0.012761	0.343039
2004	0.431998	0.103788	0.046566	0.024151	0.014960	0.009709	0.006972	0.005287	0.004160	0.003533	0.017154	0.331722
2005	0.423593	0.102793	0.044682	0.023331	0.014636	0.009793	0.007212	0.005671	0.004617	0.003912	0.018948	0.343912
2006	0.414492	0.088779	0.038169	0.021345	0.014556	0.010672	0.008321	0.006802	0.005723	0.004897	0.018069	0.368180
2007	0.416057	0.084481	0.036375	0.020659	0.013979	0.010400	0.008314	0.007002	0.005946	0.005157	0.017250	0.374381
2008	0.416302	0.083456	0.035759	0.019953	0.013351	0.009924	0.007950	0.006512	0.005522	0.004865	0.014611	0.381759
2009	0.413443	0.082353	0.036460	0.021288	0.014501	0.010966	0.008834	0.007377	0.006222	0.005395	0.011504	0.381656
2010	0.411773	0.086542	0.039409	0.023756	0.016502	0.012782	0.010194	0.008543	0.007359	0.006337	0.010768	0.365994
2011	0.413401	0.089612	0.041600	0.024998	0.017203	0.013152	0.010472	0.008580	0.007245	0.006265	0.013391	0.354308
2012	0.413721	0.090551	0.040015	0.024456	0.016764	0.012616	0.009985	0.008083	0.006814	0.005842	0.012204	0.356950
2013	0.409723	0.088110	0.040437	0.023388	0.016257	0.012268	0.009790	0.007916	0.006668	0.005726	0.011300	0.368415
2014	0.411340	0.085822	0.039285	0.023396	0.016453	0.010643	0.010168	0.008290	0.007047	0.006043	0.010939	0.368577
2015	0.403101	0.089032	0.042471	0.025599	0.018089	0.013840	0.011091	0.009110	0.007748	0.006689	0.010762	0.362467
2016	0.400479	0.090939	0.044486	0.027260	0.019389	0.014871	0.012027	0.009867	0.008260	0.007054	0.010441	0.354657

Note: (a) First, Second, Third, Fourth, Fifth, Sixth, Seventh, Eighth, Ninth and Tenth represent Shapley–Shubik index of 10 largest shareholders, respectively. (b) Combined denotes combined Shapley–Shubik index of 10 largest shareholders and QFIIs.

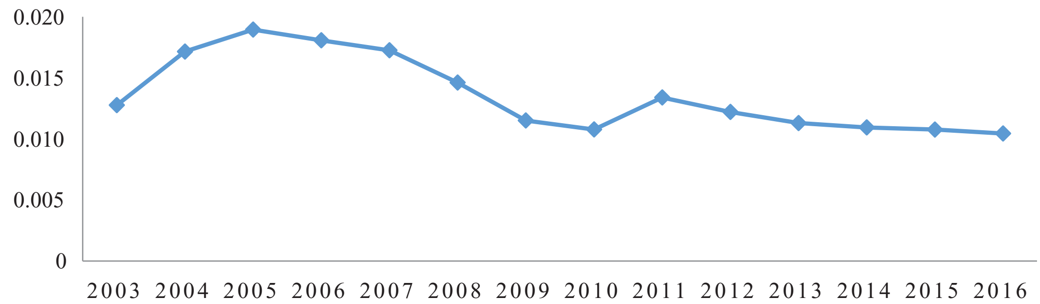


Figure 4. Yearly average Shapley–Shubik index of QFIIs from 2003 to 2016.
Source: Calculated on data from Table 2.

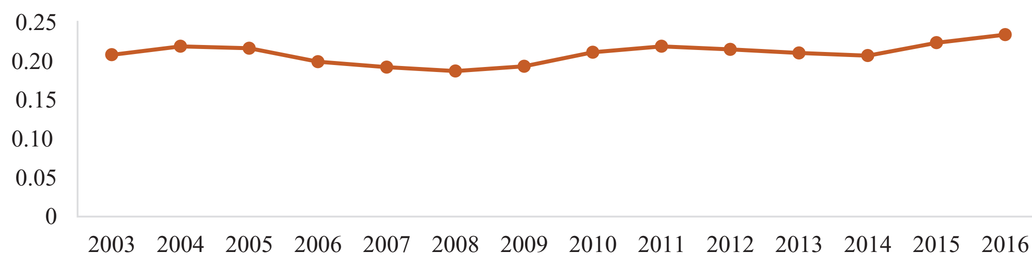


Figure 5. Average yearly sum of Shapley–Shubik indices from second to tenth largest shareholders from 2003 to 2016.
Source: Calculated on data from Table 2.

Four observations can be identified from Table 2. First, the yearly average Shapley–Shubik index of largest shareholders during this period was 0.415382. This means that the voting power of the largest shareholders is normally in the form of working or *de facto* control. Although the Shapley–Shubik index has tended to decrease, the minimum yearly Shapley–Shubik index was 0.400479 in 2016 (Figure 3). Second, the yearly average Shapley–Shubik index of QFIIs was 0.013579 and the maximum yearly Shapley–Shubik index was 0.018948 in 2005. The Shapley–Shubik index also tended to decrease during this period (Figure 4). The ratio of the average yearly sum of Shapley–Shubik indices of QFIIs to the yearly average Shapley–Shubik index of largest shareholders was 0.0327. This means that the Shapley–Shubik index of largest shareholders was about 3,057 times larger than that of QFIIs. This indicates that QFIIs' voting power was on no occasion 'pivotal' in any voting games in Chinese listed companies.

Third, the average yearly sum of Shapley–Shubik indices from the second to the tenth largest shareholders was 0.209397. The maximum yearly sum of Shapley–Shubik indices was 0.234153 in 2016 and the Shapley–Shubik index generally tended to increase during this period (Figure 5). The ratio of the average yearly sum of Shapley–Shubik indices from the second to tenth largest shareholders to the yearly average Shapley–Shubik index of the first largest shareholders was 0.5041. This means that the Shapley–Shubik index of

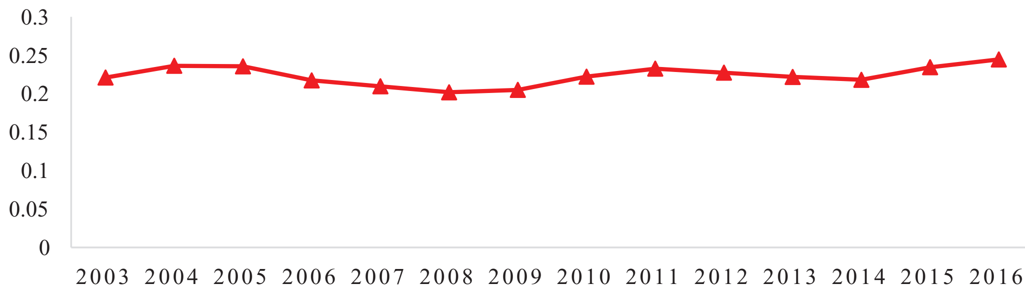


Figure 6. Average yearly sum of Shapley–Shubik indices from second to tenth largest shareholders and QFIIs from 2003 to 2016.
Source: Calculated on data from Table 2.

the largest shareholders was about twice the size of that of the other nine largest shareholders in Chinese listed companies.

Fourth, the average yearly sum of Shapley–Shubik indices from second to tenth largest shareholders and QFIIs combined was 0.223382. The maximum yearly sum of Shapley–Shubik indices was 0.244594 in 2016 and the Shapley–Shubik index tended to increase slightly during this period (Figure 6). The ratio of the average yearly sum of Shapley–Shubik indices from second to tenth largest shareholders and QFIIs to the yearly average Shapley–Shubik index of largest shareholders was 0.5888. This means that the Shapley–Shubik index of largest shareholders was about 1.70 times larger than that of the second to tenth largest shareholders and QFIIs combined. This means that the collective voting power of second to tenth largest shareholders and QFIIs was not ‘pivotal’ in any voting games in Chinese listed companies.

Table 3 presents the yearly Banzhaf–Coleman indices of the largest shareholders and QFIIs from 2003 to 2016. Two observations are immediately evident. First, the yearly Banzhaf–Coleman indices in terms of the Absolute Banzhaf Index, Normalized Banzhaf Index, Coleman’s Power to Prevent Action and Coleman’s Power to Initiate Action of the largest shareholders were all equal to one. This means that the largest shareholders were not only blockers but also dictators who held 100 per cent of the voting power in any of the oceanic games. They were able not only to initiate but also to prevent any action in any voting games. Second, the yearly Banzhaf–Coleman indices of QFIIs in terms of the Absolute Banzhaf Index, Normalized Banzhaf Index, Coleman’s Power to Prevent Action and Coleman’s Power to Initiate Action of QFIIs were all equal to zero. This means that QFIIs are dummies whose voting power is zero. Therefore, QFIIs cannot be a ‘swing’ player in any voting games. They are neither able to initiate nor able to prevent any action in any voting games in Chinese listed companies.

The following three findings can also be identified from the foregoing observations. (1) Largest shareholders normally hold the voting power which is in the form of complete control or at least working control of the result in a voting game in Chinese listed companies. This voting power can not only destroy or stop any action proposed by any other shareholders, either individually or collectively, it can also initiate or execute any

Table 3. Banzhaf–Coleman indices of largest shareholders and QFIIs from 2003 to 2016

	Absolute Banzhaf Index (Penrose Index)		Normalized Banzhaf Index		Coleman's Power to Prevent Action		Coleman's Power to Initiate Action	
	Largest	QFIIs	Largest	QFIIs	Largest	QFIIs	Largest	QFIIs
2003	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000
2004	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000
2005	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000
2006	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000
2007	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000
2008	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000
2009	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000
2010	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000
2011	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000
2012	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000
2013	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000
2014	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000
2015	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000
2016	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000	1.00000	0.00000

Note: (a) Largest denotes largest shareholders. (b) Banzhaf–Coleman index of those from second to 10 largest shareholders are all zero, which are not presented in Table 3 for the sake of saving space.

action proposed by themselves. (2) QFIIs' voting power is very trivial and cannot decisively change the result in a voting game in Chinese listed companies. Therefore, they cannot destroy or stop any action proposed by any of the largest shareholders nor initiate or execute any action proposed by themselves or any other shareholders, either individually or collectively. This is because the voting power they hold makes them unable to be either pivotal or swing voters and are thus unable to change the result of a voting game from a loss to a win in Chinese listed companies. (3) The collective voting power of second to tenth largest shareholders and QFIIs is significantly smaller than that of any of the largest shareholders and thus they are correspondingly unable to make a decisive change in any voting games in Chinese listed companies. The collective voting power of second to tenth largest shareholders and QFIIs is unable to beat or defeat the voting power of the largest shareholders even when they have formed a shareholder coalition.

Therefore, the voting power of the largest shareholder has a significant impact on the voting power of all the other shareholders, either individually or collectively, in a company with an ownership structure, especially a listed company. If a majority shareholder is the largest shareholder in a company, they have all the voting power and none of the other minority shareholders therefore has any voting power at all. However, the voting power of the largest shareholder is normally decisive in a voting game if the largest shareholder has a very substantial minority shareholding in a company. This is the case even to the extent that the largest shareholder has working control of the voting result, provided the voting power of the largest shareholder is sufficiently large. This is without considering cases where the voting power of the largest shareholder with a very substantial minority shareholding is one and the voting power of any other shareholders is zero. This is exactly the situation in Chinese listed companies.

The foregoing discussions suggest that if QFIIs join in shareholder consortia, the potential mechanism for QFIIs' institutional activism, they will have an impact on the corporate governance of investee companies. The largest shareholders are dominant controlling shareholders who can block any shareholder proposal from other shareholders in Chinese listed companies. This is the first technical barrier that QFIIs encounter when they intend to submit a shareholder proposal when striving for change in corporate governance in Chinese listed companies. In addition, QFIIs themselves are not able to change a voting result from a loss to a win in a general meeting because they are powerless to do so, simply because their joining shareholder coalition has no influence on the voting result. This is the second technical barrier they encounter when they actively engage with their portfolio companies in the Chinese stock market. Furthermore, when striving for change in corporate governance, QFIIs are not able to campaign for stake-building to form a shareholder consortium with a pooled weight of shareholdings sufficient to put pressure or potential pressure on management, who are controlled by the largest shareholders in China. The reason for this is that the collective weight of shareholdings held by the nine largest shareholders (excluding the largest shareholder) and QFIIs is still much smaller than the weight of shareholding held by the largest shareholder in a Chinese listed company. This is the third technical barrier they will encounter when they wish to launch a proxy fight and initiate change in portfolio companies by means of shareholder consortia. If QFIIs wish to campaign for stake-building to form shareholder consortia, intending to put pressure or potential pressure on management for a change in corporate governance, it is difficult for them to do so. The simple issue is that the weight of shareholdings pooled in shareholder consortia cannot compete with the weight of shareholdings represented by management, who are controlled by the largest shareholders in China.

Clearly, these three technical barriers can deter QFIIs from forming shareholder consortia and engaging in institutional activism. In theory, QFIIs have no capacity, or indeed any potential capacity, to engage themselves by way of shareholder consortia and play their role in institutional activism, as measured by Shapley–Shubik and Banzhaf–Coleman indices of voting power. In practice, an exception might exist in cases where the management of portfolio companies would be willing to communicate and negotiate with them. This may be a possibility in China and has happened in the USA and Europe. For instance, the management of Chinese listed companies may respect QFIIs who can provide advice on good corporate governance in line with the expectations of Chinese policy-makers and regulators. However, whether this comes to fruition remains to be seen, given that not only legal and regulatory barriers but also technical barriers currently frustrate QFIIs' capacity or potential capacity to form shareholder consortia.

An anecdote describes how Indus Capital Partners, a New York-based Asia focused hedge fund, entered a dialogue with China Mobile, a Chinese SOE listed in the Hong Kong and New York stock exchanges, to see whether global investors could invest in stocks of mainland companies and make profits from their stock investments. The anecdote was entitled 'Western shareholder activism arrives in China'.[127] However, many Indus Capital peers are cynical about activist campaigns in a Chinese context. Such cynicism may be justified. Activist hedge funds make profits in the USA through 'wolf pack activism'. Could Indus Capital Partners' export its American style of shareholder activism into China if Indus Capital Partners as a QFII were permitted to invest in the stocks of Chinese listed companies? 'Activism in a Chinese listed state enterprise? I don't see how it works', said the founder of one equity hedge fund in Hong Kong.[128] This is exactly true of the 'wolf pack' method of hedge fund activism, bearing in mind the legal, regulatory and technical barriers facing QFIIs in their attempts to engage in stake-building to form shareholder consortia in Chinese listed companies. In addition, the 2015 fall of China's hedge-fund king Xu Xiang, who was the founder of Zexi Investment, one of China's most successful hedge funds, may also have left a sense of lingering fear among fund managers, domestic or foreign. Thus far, there is no reported case of Western shareholder activism in the form of QFIIs' institutional activism, especially hedge fund activism or 'wolf pack' activism in the Chinese stock market.

4. Conclusion

Institutional activism may improve corporate governance and the mechanisms that can be used by institutional investors are of great importance in enabling them to execute activism. This article has identified six kinds of mechanisms that institutional investors may use to carry out institutional activism. These are shareholder proposals, jawboning, targeting announcements, public censure, dialogue and coalition. Historically, these six mechanisms were developed in the USA and have since expanded to other parts of the world, most notably Europe. However, the American style of shareholder activism, hedge fund activism especially, cannot be forged wholesale in other countries. Laws and regulation in domestic countries play an important role in limiting the expansion of the American style shareholder activism to their domestic stock markets. These have an impact on the kind of mechanism that can be used for shareholder activism by institutional investors in domestic stock markets, which is particularly evident in China.

In the USA, all six mechanisms are well developed and highly publicised. Depending on circumstances, institutional investors use all of them to initiate changes in corporate

127 Henny Sender, 'Western Shareholder Activism Arrives in China' *Financial Times* (5 July 2016) https://www.ft.com/content/400719f4-41f4-11e6-9b66-0712b3873ae1> accessed 8 September 2017.

128 ibid.

governance in their portfolio companies. Some are used more publicly than others, such as the shareholder proposal. In recent decades, a shareholder coalition in the form of a 'wolf pack' has become more popular. The 'Wolf pack' is thus in vogue as the mechanism of institutional activism, particularly in the USA. In Europe, 'Wolf pack activism' has worked to some extent in the UK but has had little influence in continental European countries, where dialogue is the preferred mechanism of institutional activism and is highly encouraged.

Institutional activism is perhaps foreign to China. QFIIs are foreign institutional investors who are permitted to invest in stocks of Chinese listed companies. They are expected to bring with them a form of institutional activism that may improve corporate governance in Chinese listed companies when they invest in the Chinese stock market. Disappointingly, the reality seems to suggest the opposite. Legal and regulatory barriers such as portfolio limits, insider dealing liability and disclosure obligations work against them. Additionally, technical barriers such as controlling largest shareholders, powerless QFIIs and weightless shareholder consortia also play a role. Moreover, QFIIs have no capacity or potential capacity to initiate change, shown by their voting power as measured by the Shapley–Shubik and Banzhaf–Coleman indices in this article. This makes them unable to form shareholder consortia that have the combined voting power sufficient to initiate any change in corporate governance in Chinese listed companies. Shareholder consortia, as the mechanism for shareholder activism in China, does not work to the extent that the 'wolf pack' has worked in the USA, even though it is legally available to shareholders, including QFIIs, of Chinese listed companies. A question therefore arises: how can shareholder consortia work if, as the mechanism of shareholder activism, it can be used by QFIIs to execute institutional activism? This is a challenge that Chinese policy-makers and regulators will have to address if they expect QFIIs to bring their good corporate governance experiences to bear in Chinese listed companies.