Comparative Studies between UK-Listed and Japan-Listed Banks

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Abstract

This paper studies (i) the effects of external directors and managerial ownership, and (ii) the effects of shareholder monitoring, on risk-taking at banks. The former is part of the internal control mechanisms, the latter of external control. It also examines the difference between control mechanisms in the UK and in Japan. It shows that shareholder supremacy is likely to weaken corporate governance at banks. In particular, it finds that: (i) the substituted effects between internal and external controls differ between countries, or that the substituted effects of governance mechanisms may not exist; (ii) an internal corporate governance approach to shareholder supremacy increases risk-taking at banks; and (iii) foreign shareholders are likely to increase risk-taking at banks.

Keywords

corporate governance – agency theory – listed-banks – internal control – external control
1 Introduction*

Effective corporate governance mechanisms arguably provide internal and external controls to monitor risk-taking at banks and to safeguard the interests of shareholders. Yet, effective internal and external controls are likely to vary across countries due to, amongst others, different financial systems, labour market structures, cultures and institutional frameworks.

The conventional views are that the Japanese corporate governance model is composed of strong internal controls and weak external controls as a result of the weak market for corporate control and regulatory forbearance. Moreover, the Japanese corporate governance model is considered to be a hybrid model, in which its corporate governance mechanism sits somewhere between stakeholder and shareholder supremacy.

In contrast, the UK corporate governance model is considered to emphasise shareholder supremacy. The model consists of strong external controls and relatively weak internal controls. Mechanisms such as board independence

* A part of this paper was developed during Ka Wai Mak's Ph.D. studies at SOAS University of London. Ka Wai would like to thank Dr. Shinozawa and Dr. Lawal for their supervision during her PhD. The opinions expressed are solely those of the author, Ebbe Rogge, and in no way represent those of the Dutch Authority for Financial Markets, The Netherlands. We would like to thank Zeeshan Mansoor, Ilya Kokorin and in particular the anonymous referees for providing comments on an earlier version.

1 F. Allen and D. Gale, Comparing Financial Systems (Cambridge, Mass: MIT Press, 2000).
2 R. P. Dore, Stock Market Capitalism: Welfare Capitalism: Japan and Germany Versus the Anglo-Saxons (Oxford: Oxford University Press, 2000).
3 K. Li, D. Griffin, H. Yue, and L. Zhao, “How Does Culture Influence Corporate Risk-Taking?”, Journal Corporate Finance 23 (2013) 1–22.
4 M. Aoki, Corporate Governance and Institutional Complementarity, in: Information, Corporate Governance, and Institutional Diversity: Competitiveness in Japan, the USA, and the Transitional Economies (Oxford, New York: Oxford University Press, 2003) pp. 69–75.
5 Allen and Gale (n 1); C.W. Anderson and T.L. Campbell ii, “Corporate Governance of Japanese Banks”, Journal of Corporate Finance 10 (2004) 327–354; J-K.Kang and A. Shivdasani, “Firm Performance, Corporate Governance, and Top Executive Turnover in Japan”, Journal of Financial Economics 38 (1995) 29–58.
6 M. Aoki, Comparative Corporate Governance, in: Toward a Comparative Institutional Analysis, Comparative Institutional Analysis (Cambridge, Mass: MIT Press, 2001) pp. 279–306; Dore (n 2).
7 S. Arcot, V. Bruno and A. Faure-Grimaud, “Corporate Governance in the UK: Is the Comply or Explain Approach Working?”, International Review of Law and Economics 30(2) (2010) 193–201.
8 Allen and Gale (n 5).
and performance-based remuneration are designed to align its interests with those of its shareholders.9

However, the existing literature focusing on the individual and joint effects of internal and external controls only provides limited evidence or information on the risk-taking behaviours of banks. This study, first, provides two dimensions of controls by examining: (i) the effects of external directors and managerial ownerships, which are used as internal governance mechanisms to align the interests of shareholders; and (ii) the effects of shareholder monitoring. Second, this study compares the control mechanisms between the UK and Japan.

This paper attempts to address the research gap by providing a two-dimensional control framework. It argues that, despite the differences between the two countries, their internal and external control mechanisms are designed to promote shareholder supremacy, which in turn results in increased levels of risk-taking at banks.

The conventional arguments offer a comparison of the governance effectiveness between internal and external controls, which oppose the view that external monitoring may be substituted for weak internal monitoring, or vice versa.10

This study argues that the substitution framework between internal and external controls is likely to differ as a result of shareholder supremacy, as the mechanisms for the corporate governance approach to shareholder supremacy weakens the internal governance of UK-listed and Japan-listed banks, and promotes risk-taking. This is because, first, external directors represent the interests of shareholders, such as wealth maximisation. Second, external directors with longer tenures are eager to prove their abilities to their current and prospective employers and the associate shareholders. Hence, external directors with longer tenures encourage greater risk-taking at banks. Third, managerial ownerships align the interests of shareholders, who encourage managers to act in the interests of their shareholders who forgo risk monitoring for wealth maximisation. Fourth, this study argues that

9 M.C. Jensen and W.H. Meckling, “Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure”, *Journal of Financial Economics* 3(4) (1976) 305–360.
10 S. Fung and S-C. Tsai, “Institutional Ownership and Corporate Investment Performance”, *Revue Canadienne des Sciences de l’Administration* 29 (2012) 348–365; K.A. Kim, P. Kitsabunnarat-Chatjuthamard and J.R. Nofsinger, “Large Shareholders, Board Independence, and Minority Shareholder Rights: Evidence from Europe”, *Journal of Corporate Finance* 13 (2007) 859–880; M.S. Weisbach, “Outside Directors and CEO Turnover”, *Journal of Financial Economics* 20 (1988) 431–460; O.E. Williamson, “Organization Form, Residual Claimants, and Corporate Control”, *The Journal of Law and Economics* 26 (1983) 351–366.
the effectiveness of shareholder monitoring on bank risk-taking behaviours may vary, depending on their investment objectives. Therefore, the effects of shareholder monitoring on UK-listed and Japan-listed banks differ.

Figure 1 shows the proposed risk-monitoring model between the UK and Japan, which argues that shareholders of UK-listed banks are likely to encourage their investee banks to take greater risks for greater returns. Similarly, foreign shareholders of Japan-listed banks are also likely to encourage their investee banks to take risks for the same reason. Because these shareholders can diversify their investment risks by investing in a number of companies and banks in their portfolios, they are likely to encourage their investee banks to take greater risks for greater expected returns.

On the contrary, domestic shareholders of Japan-listed banks are likely to discourage risk-taking at their investee banks, because their shareholders are required to safeguard the interests of their stakeholders, who focus on employment stability and business continuation, instead of shareholder wealth maximisation. As a result, domestic shareholders act as effective risk monitors.

This study is structured as follows. Section 2 provides the theoretical backgrounds and overviews of the internal and external governance mechanisms, and of UK-listed and Japan-listed banks. Section 3 reviews the comparative corporate governance literature as well as empirical literature focusing on Anglo-American and Japanese governance frameworks. Section 4 provides data, variables, summary statistics, and the methodology used in the empirical assessments. Section 5 discusses the empirical findings and places it in the context of existing literature as outlined in Section 3. Section 6 discusses the results of the associated robustness tests. Section 7 contains the conclusions.
2 Background

2.1 Overviews on Corporate Governance – Internal versus External

The majority of corporate governance studies are commonly divided into studies of internal and external corporate governance.\textsuperscript{11} Internal corporate governance is concerned with the internal controls of a company. The internal control mechanisms describe how the board, the highest level of control within a company, can exercise its control over decisions made by senior management.\textsuperscript{12} Elements such as the performance and skills of the board and senior management play an important role in internal corporate governance. Mechanisms of internal control include the appointment of external directors, the introduction of performance-based incentives, and board composition.

External corporate governance concerns the external elements which seek to control a company. In particular, it concerns the control exerted by capital markets. It arguably serves as another level of control in the event that the controls of internal corporate governance have failed. An example thereof would be that management from the outside could improve performance over the incumbent inefficient management, resulting in a takeover. In this context, the possibility of a hostile takeover thus serves as an external mechanism to control management. Investors, but also creditors, are therefore in a position to exert control over a company.\textsuperscript{13}

2.2 Overviews of UK-Listed and Japan-Listed Banks

The main difference in the current context between UK-listed and Japan-listed banks is that the former operate under a shareholder supremacy approach, whilst the latter operate under a mix of shareholder- and stakeholder supremacy.\textsuperscript{14} The objective of the two is therefore quite different: UK banks are likely to pursue shareholder value,\textsuperscript{15} whilst Japanese banks are expected to operate the intent to benefit their associate companies, even if their actions are

\textsuperscript{11} J.P. Walsh and J.K. Seward, “On the Efficiency of Internal and External Corporate Control Mechanisms”, \textit{The Academy of Management Review} 15(3) (1990) 421–458.
\textsuperscript{12} E.F. Fama, “Agency Problems and the Theory of the Firm”, \textit{Journal of Political Economy} 88 (1980) 288–307.
\textsuperscript{13} A. Shleifer and R.W. Vishny, “Large Shareholders and Corporate Control”, \textit{Journal of Political Economics} 94 (1986) 461–488.
\textsuperscript{14} Dore (n 2).
\textsuperscript{15} D. Walker, \textit{A Review of Corporate Governance in UK Banks and Other Financial Industry Entities – Final Recommendations}, (26 Nov 2009) https://webarchive.nationalarchives.gov.uk/+/www.hm-treasury.gov.uk/d/walker_review_261109.pdf.
detrimental to shareholder returns.\textsuperscript{16} These actions have implications for internal controls mechanisms. In a stakeholder approach, these may be extended to include, for example, the appointment of external directors to specifically safeguard stakeholder interests,\textsuperscript{17} ensure performance-based rewards contain a long-term element,\textsuperscript{18} or allow stakeholders to have their representatives on the board, e.g. employee representatives.\textsuperscript{19}

Both UK-listed banks and Japan-listed banks are subject to regulatory oversight. Although national implementations may differ, significant parts of the regulatory framework are similar due to the agreement at the international level on important aspects such as capital requirements. Overall, the research question is whether there is a difference between the effects of internal and external controls on risk-taking between UK-listed and Japan-listed banks. As stated earlier, the former operates under the shareholder supremacy approach and the latter under a mix of shareholder- and stakeholder supremacy.

2.3 Connection with Agency Theory
There are various theories describing corporate governance. In the current context, it is useful to consider the problem of controlling a company in light of the separation of ownership and control.\textsuperscript{20} Agency theory describes how dispersed shareholders can influence the board to look after their company. Put differently, it is concerned with the problem of how owners can influence their agents to look after their property, i.e. the company.\textsuperscript{21} Assuming that the agents act in their self-interest, rather than in the interest of other stakeholders, the owners need to incentivise the agents to act in the interest of the property. In doing so, the owners introduce agency costs to align the interests of the agents with their own interests.

\textsuperscript{16} K. Nishiguchi, “Future Perspective on Financial Businesses Centering on Risk Management”, Public Policy Review 7 (2011) 51–107.
\textsuperscript{17} R.V. Aguilera, “Corporate Governance and Director Accountability: an Institutional Comparative Perspective”, British Journal Management 16 (2005), S39–S53.
\textsuperscript{18} O. Falck and S. Heblich, “Corporate Social Responsibility: Doing Well By Doing Good”, Business Horizons 50 (2007) 247–254.
\textsuperscript{19} J. Goodstein, K. Gautam, and W. Boeker, “The Effects of Board Size and Diversity on Strategic Change”, Strategic Management Journal 15(3) (1994) 241–250; J. Pfeffer and G.R. Salancik, The External Control of Organizations: A Resource Dependence Perspective (New York: Harper & Row, 1978).
\textsuperscript{20} A.A Berle and G.C. Means, The Modern Corporation and Private Property (New York: Macmillan, 1932).
\textsuperscript{21} M.M. Blair, Ownership and Control: Rethinking Corporate Governance for the Twenty-First Century (Washington, D.C: Brookings Institute, 1995).
The above sets out agency theory in its most basic form. It was, however, developed in a much wider corporate governance setting. Agency theory extends to include, for example, employers and employees, or companies and creditors. These act in the same way as the previously described owners and agents. Note that, when described in this broader setting, agency theory is closely linked with contractual theory. This theory describes the company as a nexus of contracts, where contracts can be explicit or implicit, describing the relationship between various actors. Monitoring and enforcing the contracts may be compared with agency costs.

Agency costs arise when banks take excessive risks, which are likely to be caused by: (i) insufficient management oversight due to a lack of experience and/or skills; and (ii) management attempts in increase the financial performances of their companies (i.e. banks) at the expense of taking excessive risks. Nevertheless, risk-taking activities are likely to raise social costs at banks. For example, excessive risk-taking increases the levels of banking system fragility, bank failures and/or runs.

3 Corporate Governance in the UK and Japan

3.1 The UK’s Corporate Governance Framework

The UK corporate governance framework consists of the Combined Code, and the Stewardship Code, which focus on internal and external governance, respectively. The Combined Code is consolidated from the Cadbury Report and other corporate governance reports such as the Greenbury Report, the Hampel Report, the Turnbull Report, and the Myners Report.
Report (2001), the Higgs Review (2003), the Smith Report (2003), Parker review (2016) and Hampton-Alexander Review (2018).28

The Combined Code defines corporate governance as ‘the system by which companies are directed and controlled’, and primarily promotes board effectiveness. In its original version, the Cadbury Report sets out that the board is responsible for the governance of the company, and that the role of the shareholders is to appoint directors and auditors, as well as ensuring an appropriate governance structure is in place. Note that the Code works on a comply-or-explain basis for those companies with a Premium Listing of shares in the UK. Such companies must report their compliance as part of their annual report and accounts.

The Stewardship Code29 is designed to promote stewardship effectiveness, to encourage shareholder monitoring through active engagements with their investee companies and to encourage them to disclose their monitoring policies. The Stewardship Code emphasises transparency and disclosure. Those firms who want to sign up to this code must publish an annual Stewardship Report in which they set out their compliance with the code. The Financial Reporting Council will then assess this report, and whether the firm is allowed to become a signatory.

These concepts do, however, have their drawbacks. Bainbridge argues that investor activism is a rare and limited thing in practice, and activist investors may not pursue the same goals as more passive investors.30 Moreover, the Stewardship Code will apply to UK domestic investors, which given dispersed ownership are likely to be in the minority, or at least not have sufficient influence to make a meaningful impact.31 This observation is further supported by the Kay Review, which confirms that in 1981 under three percent of UK shares was foreign owned, yet in 2010 this number has increased dramatically, with well over forty percent being foreign owned.32 Furthermore, the comply-or-explain concept underlying the Combined Code provides guidance for investors, and

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28 For an overview of these reports, see: Cambridge University Judge Business School, ‘Further Corporate Governance Reports’ http://cadbury.cjbs.archios.info/report/further-reports.
29 Financial Reporting Council, The UK Stewardship Code 2020 (2020) https://www.frc.org.uk/getattachment/5aae591d-d9d3-4cf4-814a-d14e156ad87/Stewardship-Code_Dec-19-Final-Corrected.pdf.
30 S. Bainbridge, New Corporate Governance in Theory and Practice (Oxford University Press, 2008).
31 B.R. Cheffins, “The Stewardship’s Code Achilles Heel”, Modern Law Review 73 (2010) 1004 – 1025.
32 The Kay Review of UK Equity Markets and Long-Term Decision Making (July 2012) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/253454/bis-12-917-kay-review-of-equity-markets-final-report.pdf, in particular Table 1, p. 31.
allows investors to assess corporate governance practices and their effectiveness of investee companies. Increased pressures by investors towards adopting the UK corporate governance practices is needed to ensure (listed) companies pro-actively adopt such practices highlighted in the Code.33

Both the Combined Code and the Stewardship Code are two key elements of ‘soft law’ governing the corporate governance practices of UK companies. The former aims to make companies more accountable to their shareholders and stakeholders. The latter seeks to make investors, such as pension fund managers, more accountable to their beneficiaries. From a binding, or mandatory, point of view, the responsibilities of directors are emphasised under sections 172–174 of the Companies Act 2006. In particular, under s172(1), directors have a duty to promote the success of the company whilst having regard for employees, suppliers, customers, and others as well impact on the community and environment.34 It thus progresses from its predecessor, in the Companies Act 1985 s309, which merely stated directors should have regard for ‘the interests of the company’s employees in general, as well as the interest of its members’. One could therefore argue the new s172-174 go beyond ordinary shareholder value to some form of ‘enlightened shareholder value’, perhaps moving towards stakeholders more broadly.

Specific to UK banks, there are two additional reports worth mentioning, both commissioned as a consequence of the Global Financial Crisis: the Walker Review35 (2009) and the Report by the Independent Commission on Banking36 (2011), with the former being the most relevant for this research. The Walker Review concludes, amongst others, that better engagement from shareholders is needed. It appears that short-termism is prevalent, which can also be observed by the fact that exiting appears to be preferred over having a voice and monitoring.37 More shareholder engagement at banks appears

33 I. MacNeil, “Activism and Collaboration among Shareholders in UK Companies”, Capital Markets Law Journal 5 (2010) 419–439.
34 See also: P.L. Davies and S. Worthington, Gower & Davies: Principles of Modern Company law (9th edn, Sweet and Maxwell, 2012) in particular Chapter 16: Directors’ Duties.
35 Walker (n 15).
36 Independent Commission on Banking, Final Report – Recommendations, (Sep 2011) https://webarchive.nationalarchives.gov.uk/20120827143059/http://bankingcommission.independent.gov.uk/.
37 A. Reisberg, “The Role of Institutional Shareholders: Stewardship and the Long-/Short-term Debate”, in: I.H-Y. Chui (ed), The Law on Corporate Governance in Banks (Edward Elgar, 2015).
to be required, but of course not in the short-term activist sense, but in the long-term stewardship sense.\textsuperscript{38}

Specific to corporate governance at banks, and in line with the observations made by the Walker Review, there is an increased emphasis on sound risk management and internal controls.\textsuperscript{39} However, Kokkinis argues that the governance structure at banks may result in excessive risk taking: incentives provided by an ‘agency-theory corporate governance framework’ may not be suited for banks, as they appear not to address corporate governance issues, or worse, provide the wrong incentives exacerbating the issues.\textsuperscript{40} It is argued that bank opacity makes it difficult to balance the public interest with shareholder interest. Furthermore, incentives provided to the board in terms of remuneration are subject to legislative changes, although some have queried to what extent such legislative reforms are capable of creating an appropriate framework.\textsuperscript{41} Other authors, however, do make proposals in this area. Ferrarini argues how to align incentives with different interests considering systemic risk: deferred equity-linked pay would ensure alignment with shareholders; remuneration linked to the price of debt or credit default swaps for alignment with bondholders, and clawback or malus arrangements for alignment with the public interest.\textsuperscript{42}

3.2 \textit{Japan’s Corporate Governance Framework}

Before setting out the corporate governance framework in Japan, it is worth noting that, as with any legal comparison across jurisdictions, one comes across issues of comparative law.\textsuperscript{43} In the field of corporate governance,\textsuperscript{44} and

\begin{itemize}
\item \textsuperscript{38} M.C. Ungureanu, “Engagement of Institutional Investors”, in: D. Busch, G. Ferrarini, and G. van Solinge (eds), \textit{Governance of Financial Institutions} (Oxford University Press, 2019).
\item \textsuperscript{39} L. van Setten, “Risk, Risk Management, and Internal Controls”, in: D. Busch, G. Ferrarini, and G. van Solinge (eds), \textit{Governance of Financial Institutions} (Oxford University Press, 2019).
\item \textsuperscript{40} A. Kokkinis, “A Primer in Corporate Governance on Banks and Financial Institutions: Are Banks Special?”, in: I.H-Y. Chui (ed), \textit{The Law on Corporate Governance in Banks} (Edward Elgar, 2015).
\item \textsuperscript{41} M. Moore, “Design and Control of Remuneration in UK Banks”, in: I.H-Y. Chui (ed), \textit{The Law on Corporate Governance in Banks} (Edward Elgar, 2015).
\item \textsuperscript{42} G. Ferrarini, “Compensation in Financial Institutions: Systemic Risk, Regulation, and Proportionality”, in: D. Busch, G. Ferrarini, and G. van Solinge (eds), \textit{Governance of Financial Institutions} (Oxford University Press, 2019).
\item \textsuperscript{43} P. Legrand, “How to Compare Now”, \textit{Legal Studies} 16(2) (1996) 232–242; K. Zweigert and H. Kötz, \textit{Introduction to Comparative Law} (3rd edn, Oxford: Oxford University, 1998).
\item \textsuperscript{44} L.A. Bebchuk and M.J. Roe, “A Theory of Path Dependence in Corporate Ownership and Governance”, \textit{Stanford Law Review} 52 (1999) 127–170; J. Clarke, “Asset/Liability Management A Year of Improving Economic Outlook 2011”, \textit{Mass. Fam. Bus.} (2011) 12–15; A.R. Pinto, “Globalization and the Study of Comparative Corporate Governance”,
\end{itemize}
especially in relation to Japan, this is a well-trodden path. It is essential to keep in mind the context of different histories, economies and cultures to ensure a sensible comparison is made and that any conclusions are sound. Therefore, before setting out and discussing the hard- and soft law aspects of corporate governance in Japan, it is important to explain briefly the working of Japan's corporate environment.

Japan's corporate landscape traditionally consists of groups of companies working closely together: the so-called *Keiretsu*. Apart from studies focusing on business groups, scholars have attempted to examine the hybrid Japan corporate governance framework by assessing the effects of the lifetime employment, the board structures of Japanese companies, their performance-incentive schemes and the ownership structures. In addition, contrary to the Anglo-American shareholder-investee relationship, the domestic shareholder monitoring mechanism is considered to be unique in Japan, because shareholders are likely to be affiliated with a company, or in the current context, with a bank.

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Wisconsin International Law Journal 23 (2005) 477–504; M.J. Roe, “Some Differences in Corporate Structure in Germany, Japan, and the United States”, Yale Law Journal 102 (1993) 1927–2003.

D. Nelken, “Using the Concept of Legal Culture”, Australian Journal of Legal Philosophy 29 (2004) 1–28.

M.L. Gerlach, *Alliance Capitalism: the Social organization of Japanese business* (Berkeley: Univ. of California Press, 1992); K. Miyashita and D. Russell, *Keiretsu: Inside the Hidden Japanese Conglomerates* (New York: McGraw-Hill, 1994).

M. Aoki, “Toward an Economic Model of the Japanese Firm”, Journal of Economic Literature 28 (1990) 1–27.

See generally: D.H. Whittaker and S. Deakin (eds), *Corporate Governance and Managerial Reform in Japan* (Oxford University Press, 2009); S. Learmount, *Corporate Governance: What can be learned from Japan?* (Oxford University Press, 2002).

T. Araki, “Corporate Governance Reforms, Labor Law Developments, and the Future of Japan's Practice-Dependent Stakeholder Model”, Japan Labor Review 2 (2005) 26–57.

T. Yoshikawa and P.H. Phan, “Alternative Corporate Governance Systems in Japanese Firms: Implications for a Shift to Stockholder-Centered Corporate Governance”, Asia Pacific Journal of Management 18 (2001) 183–215.

K. Kubo and T. Saito, “The Relationship between Financial Incentives for Company Presidents and Firm Performance in Japan”, The Japanese Economic Review 59 (2008) 431–448.

S.M. Jacoby, “Foreign Investors and Corporate Governance in Japan”, in: D.H. Whittaker and S.F. Deakin (eds.), *Corporate Governance and Managerial Reform in Japan* (Oxford, New York: Oxford University Press, 2009) pp. 93–133.

Aoki (n 6).
Generally speaking, Japanese law is comprised of both foreign, imported laws, as well as domestic elements. Until 2005, the Commercial Code was essentially what one would call the Japanese company law. Since the crisis in the 1990s, several proposals for legal reform were introduced to improve corporate governance practices. For example, the Big Bang Reforms of 1996 and the Laws for Financial System Reformation of 1998 were designed to improve the financial system. More generally, from the early 1990s to well into the noughties incremental changes were made to the Commercial Code. In 2005, the Company Law was enacted, lifting these elements out of the Commercial Code. The Company Law includes, for example, a choice of governance structure based upon whether a company is classified as a large or non-large company. Whilst non-large companies have a variety of choices, large companies must choose between a new US-style board system with a committee structure, or the existing option requiring only a board, corporate auditor, and an accounting firm. In any case, a public company must have a board of directors comprised of at least three directors which can be appointed and dismissed by a normal majority at a shareholders’ meeting. The board must, amongst the directors, appoint representative directors to conduct the business of the company.

Next to this legal framework, the Japanese investment communities and regulatory authorities – the Japan Corporate Governance Network, the Japan Pension Fund Association and the Financial Services Agency – also encourage institutional shareholders to actively monitor their investee companies through engagement and voting activities, and to disclose their engagement and voting policies. There are also various codes relating to corporate

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55 See generally: H. Baum and M. Bälz, *Handbuch Japanisches Handels- und Wirtschaftsrecht* (Köln: Carl Heymanns Verlag, 2011); H. Oda, *Japanese Law*, (3rd edn, Oxford University Press, 2009); J.M. Ramseyer and M. Nakazato, *Japanese Law: an Economic Approach* (University of Chicago Press, 1999); and H. Tanaka and M.D.H. Smith, *The Japanese Legal System: Introductory Cases and Materials* (University of Tokyo Press, 1976).

56 H. Baum and M. Bälz, (n 55); R.J. Gilson and C.J. Milhaupt, “Choice as Regulatory Reform: The Case of Japanese Corporate Governance”, *American Journal of Comparative Law* 53 (2005) 343–377.

57 The Japan Corporate Governance Network was established in 2012, comprised of three former organisations: the Japanese Corporate Governance Forum, the Japan Independent Directors Network, and the Japan Corporate Governance Research Institute, see: https://www.cg-net.jp/english/profile.html.

58 B.E. Aronson, “A Japanese Calpers or a New Model for Institutional Investor Activism – Japan’s Pension Fund Association and the Emergence of Shareholder Activism in Japan”, *New York University Journal of Law & Business* (2011) 571–640; Financial Services Agency, *Principles for Responsible Institutional Investors«Japan’s Stewardship Code» – To Promote Sustainable Growth of Companies through Investment and Dialogue* (2014).
governance, for example, the Stewardship Code of February 2014, revised June 2017 and March 2020,\textsuperscript{59} and the Corporate Governance Code of June 2015, revised June 2018.\textsuperscript{60} The former, which is voluntary, established code of conduct for investors, whilst the latter, which operates on a comply-or-explain basis, sets outs fundamental principles for corporate governance practices at listed firms. One of the interesting aspects of these codes is that they focus on sustainable and increased growth over the mid- to long-term. One of the ways they set out to achieve this objective is by encouraging (further) unbundling of cross-shareholdings within the Keiretsu business group. This change may allow for an increased external control of corporate governance in Japan, resulting in an increased accountability of management to shareholders outside their business group. At the same time, it could also trigger more interest from foreign investors.

3.3 Bank Supervision

Some researchers suggest there are two types of bank supervision: the supervisory power (i.e. the regulator) and private power (i.e. the market forces).\textsuperscript{61} The former corresponds to the official supervisor as meant by Pillar 2 of Basel, whilst the latter corresponds with market discipline as meant by Pillar 3 of Basel. Focussing on the official supervisors, the UK and Japan's banking industries are monitored by their domestic bank supervisory authorities and are required to abide by banking and financial regulations, such as holding a minimum amount of regulatory capital.

The UK banking industry is composed of foreign and domestic banks. It is regulated by the Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA). The PRA is responsible for regulating and supervising the UK’s banking and financial industries, in particular its financial resources, while the FCA is customer protection-focused and its objective is to ensure that the banking and financial industry operates with integrity. It should be noted that the UK regulators have some provisions in their Handbooks that touch on

\textsuperscript{59} The Council of Experts on the Stewardship Code, \textit{Principles for Responsible Institutional Investors: Japan’s Stewardship Code} (March 24, 2020) https://www.fsa.go.jp/en/refer/councils/stewardship/20200324/01.pdf.

\textsuperscript{60} J.PX Tokyo Stock Exchange, \textit{Japan’s Corporate Governance Code: Seeking Sustainable Corporate Growth and Increased Corporate Value over the Mid- to Long-Term} (June 1, 2018) https://www.jpx.co.jp/english/news/1020/b5b4pj000000jvxxr-att/20180602_en.pdf.

\textsuperscript{61} F.M. Song and L. Li, “Bank Governance: Concepts and Measurements”, in: J. Barth, C. Lin, and C. Wihlborg (eds.), \textit{Research Handbook on International Banking and Governance} (Edward Elgar, 2012).
corporate governance at their supervised banks. In particular, PRIN\(^{62}\) sets out the principles for business, including that business is conducted with integrity and due care and skill and regard for customers; SYSC\(^{63}\) sets out senior management arrangements, including SYSC 19 which contains arrangements for remuneration.

The Japanese banking industry was traditionally governed under the convoy system.\(^{64}\) It was used to safeguard the soundness of the banking industry, in which competition among banks was restricted. As a result of the late 1990s financial deregulations, the effects of the convoy system diminished. The Japanese government allowed large city banks to fail, while providing funds to assist with the orderly closure of the failing banks. Competition among Japanese banks was gradually allowed to increase.\(^{65}\)

The Japanese banking industry is now regulated and monitored by the Financial Services Agency\(^{66}\) and the capital markets,\(^{67}\) and the bank regulatory monitoring mechanisms are now similar to those of the UK’s. Meanwhile, an industry report\(^{68}\) argues that the Japanese government has been implicitly supporting the banking industry by showing a willingness to support weak banks by direct equity injection and to avoid public bond defaults.

Despite the differences between the monitoring mechanisms of these two countries, banks operating in both countries must maintain the minimum capital adequacy ratio, acquire deposit insurance, and abide by financial regulations such as market abuse regulation, competition laws and anti-money laundering regulations. At the same time, it raises the question how aspects of corporate law and financial regulation interact in corporate governance at banks. Some authors conclude that there is tension between national corporate law and financial regulation, for example due to requirements on the

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62 Financial Conduct Authority, *Principles for Business* (2020) https://www.handbook.fca.org.uk/handbook/PRIN.pdf.
63 Financial Conduct Authority, *Senior Management Arrangements, Systems and Controls* (2020) https://www.handbook.fca.org.uk/handbook/PRIN.pdf.
64 Nishiguchi (n 16).
65 J.A. Bikker and L. Spierdijk, “How Banking Competition Changed Over Time”, *Discussion Paper Series No. 08–04 Tjalling C. Koopmans Research Institute, Utrecht University* (2008); M. Imai, “The Emergence of Market Monitoring in Japanese Banks: Evidence from the Subordinated Debt Market”, *Journal of Banking & Finance* 31 (2007) 1441–1460.
66 K. Murata and M. Hori, ‘End of the Convoy System and the Surge of Market Discipline’ *ESRI Discussion Paper Series No. 105m Economic and Social Research Institute, Tokyo, Japan* (2004).
67 N. Baba and M. Inada, “Why do Japanese Regional Banks Issue Subordinated Debts?”, *Japan and the World Economy* 21 (2009) 358–364; Imai, (n 65).
68 Moody’s, *Moody’s Confirms Subordinated Debt Ratings of Japanese Banks* (2013).
board or on shareholdership, and by creating such common requirements would effectively harmonise aspects of national company law regimes.\textsuperscript{69} In particular, it can be argued that the goals and incentives for the board derived from company law might not necessarily align with the regulatory prudential objectives, and banks would need to seek a right balance between taking risk in the interests of shareholders and promoting the long-term interest of the public and other stakeholders.\textsuperscript{70}

3.4 \textit{Empirical Literature}

The majority of the empirical research on agency theory focuses on the US and the UK by applying the two internal governance mechanisms of independent directors and performance-based incentive remuneration schemes.\textsuperscript{71} The results, however, are inconclusive.

Studying US companies with a majority of independent or external directors in the early 1990s, Mishra and Nielsen\textsuperscript{72} find that there is a positive relationship between board independence and asset returns, whilst observe a negative relationship.\textsuperscript{73} Similarly, studying the relationship between performance-based remuneration and asset returns, Grove et al.\textsuperscript{74} and Kor and Sundaramurthy\textsuperscript{75} find a positive relationship by using a sample set of US commercial banks and US technology firms, respectively. On the contrary, Mudambi and Nicosia\textsuperscript{76} find that concentrated share ownerships with internal directors have a negative impact on asset returns.

In the case of the UK, similar to the US, the external directors are generally found to be beneficial to their company’s performances. Several researchers conclude that directors are likely to align their interests with those of the

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\bibitem{69} K. Lieverse and C. Bulten, “Corporate Law versus Financial Regulatory Rules”, in: D. Busch, G. Ferrarini, and G. van Solinge (eds), \textit{Governance of Financial Institutions} (Oxford University Press, 2019).
\bibitem{70} A. Kokkinis, \textit{Corporate Law and Financial Stability} (Routledge, 2018).
\bibitem{71} Jensen and Meckling, (n 9).
\bibitem{72} C.S. Mishra and J.F. Nielsen, “Board Independence and Compensation Policies in Large Bank Holding Companies”, \textit{Financial Management} 29 (2000) 51–69.
\bibitem{73} S. Bhagat and B. Black, “The Uncertain Relationship Between Board Composition and Firm Performance”, \textit{Business Lawyer} 54 (1999) 921–963.
\bibitem{74} H. Grove, L. Patelli, L.M. Victorovich and P.(Tracy) Xu, “Corporate Governance and Performance in the Wake of the Financial Crisis: Evidence from US Commercial Banks”, \textit{Corporate Governance: An International Review} 19 (2011) 418–436.
\bibitem{75} Y.Y. Kor and C. Sundaramurthy, ‘Experience-Based Human Capital and Social Capital of Outside Directors’, \textit{Journal of Management} 35(4) (2009) 981–1006.
\bibitem{76} R. Mudambi and C. Nicosia, “Ownership Structure and Firm Performance: Evidence from the UK Financial Services Industry”, \textit{Applied Financial Economics} 8(2) (1998) 175–180.
\end{thebibliography}
shareholders.\textsuperscript{77} In addition, studies focusing on executive remuneration show that performance-based remuneration schemes are likely to have positive effects on risk-taking.\textsuperscript{78} This view has been more nuanced by further research, which suggests that managers’ share-ownership is positively associated with bank risk taking, but personal wealth concentration is negatively associated.\textsuperscript{79} Furthermore, long-term incentive plans appear to be associated with more bank risk-taking and higher probability of bankruptcy.\textsuperscript{80}

Further insights could be found in the empirical studies focusing on the bail-out of several large banks during the 2008 Financial Crisis. Ferreira et al. construct a ‘management insulation index’, which proxies the legal rules on allocation of power between the board and shareholders, and indicates the extent of the board is insulated in making its decisions from the wishes of the banks’ owners.\textsuperscript{81} The sample set consists of US banks operating in multiple States, for which the index is created including the different company law provisions applicable in multiple States. Whilst there certainly is merit in this methodology, for the purposes of this paper, however, it would be problematic to construct such an index: it would have to be workable in both the UK and in Japan. From a comparative law point of view, this provides a variety of issues and instead share ownership structure is used here as a proxy. It may become possible to use the insulation index, if the UK and Japan were to implement similar policies to prevent the influence of shareholders.

Thus, in the case of the Ferreira et al. study, the authors use the insulation index focusing on different jurisdictions between multiple States in the United States. Although their legal structures vary, the majority of the corporate governance mechanism is comparable. Their study supports the observation

\begin{itemize}
\item \textsuperscript{77} P. de Andres, and E. Vallelado, “Corporate Governance in Banking: The Role of the Board of Directors”, \textit{Journal of Banking and Finance} 32(12) (2008) 2570–2583; Kor and Sundaramurthy, (n 75); Mishra and Nielsen, (n 72).
\item \textsuperscript{78} R. Fahlenbrach and R.M. Stulz, “Bank CEO Incentives and the Credit Crisis”, \textit{Journal of Financial Economics} 99 (2011) 11–26; H. Mehran and J.V. Rosenberg, “The Effect of Employee Stock Options on Bank Investment Choice, Borrowing, and Capital”, \textit{Staff Reports No. 305 Federal Reserve Bank of New York} (2007); F. Suntheim, ‘Managerial Compensation in the Financial Service Industry’, \textit{Financial Conduct Authority} (2010).
\item \textsuperscript{79} K. Spong and R. Sullivan, “Bank Ownership and Risk Taking: Improving Corporate Governance in Banking after the Crisis”, in: J. Barth, C. Lin, and C. Wihlborg (eds.), \textit{Research Handbook on International Banking and Governance} (Edward Elgar, 2012).
\item \textsuperscript{80} R. Ayadi, E. Arbak and W.P. de Groen, “Executive Compensation and Risk-Taking in European Banking”, in: J. Barth, C. Lin, and C. Wihlborg (eds.), \textit{Research Handbook on International Banking and Governance} (Edward Elgar, 2012).
\item \textsuperscript{81} D. Ferreira, D. Kershaw, T. Kirchmaier, and E. Schuster, \textit{Shareholder Empowerment and Bank Bailouts}, Finance Working Papers (345/2013) ECGI http://eprints.lse.ac.uk/56083/.
\end{itemize}
that banks with a system of corporate governance with dominant shareholders performed relatively poorly, whilst banks with managers more insulated from shareholder influence performed better. The authors suggest this is due to bank shareholders having incentives for excessive risk taking beyond the ‘socially-optimal level’, pushing the banks towards less traditional and riskier activities. These findings are supported by Erkens et al., who examine how thirty banks performed during the crisis.\textsuperscript{82} They observe that banks with higher institutional ownership took more risk, resulting in larger losses.

The empirical literature discussed so far focussed mainly on the UK and US. Turning now to Japan, the institutional ownership structures are arguably different from those in the UK. The majority of empirical studies indicate that independent or external directors are less effective in Japan,\textsuperscript{83} where scholars find that there is no relationship between percentages of external directors and company performances. Horiuchi and Shimizu\textsuperscript{84} find that appointing \textit{amakudari} as external directors at banks increases the level of non-performing loans whilst reducing the capital base. \textit{Amakudari} can be translated as ‘descending from heaven’, meaning appointed external directors who are retired (semi-) government officials.

Although empirical findings are inconclusive, comparative literature suggests that the Anglo-American governance framework highlights the importance of market for corporate control, while cross-shareholder monitoring prevails in the Japan framework.\textsuperscript{85} Scholars further suggest that the differences of the effects on corporate earnings and risk-taking between the Anglo-American countries and Japan are likely due to the legal framework,\textsuperscript{86} the culture,\textsuperscript{87} and the country’s institutional framework.\textsuperscript{88} The former two argue that social consciousness is considered in the legal framework and cultural values are likely to have effects on levels of risk-taking. Their

\textsuperscript{82} D.H. Erkens, M. Hung, and P. Matos, ‘Corporate Governance in the 2007–2008 Financial Crisis: Evidence from Financial Institutions Worldwide’, \textit{Journal of Corporate Finance} 18 (2012) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1397685.

\textsuperscript{83} I. Bonn, T. Yoshikawa and P.H. Phan, “Effects of Board Structure on Firm Performance: A Comparison Between Japan and Australia”, \textit{Asian Business & Management} 3 (2004) 105–125.

\textsuperscript{84} A. Horiuchi and K. Shimizu, “Did Amakudari Undermine the Effectiveness of Regulator Monitoring in Japan?”, \textit{Journal of Banking and Finance} 25 (2001) 573–596.

\textsuperscript{85} Dore (n 2); S. Prowse, “The Corporate Governance System in Banking: What Do We Know?”, \textit{PSL Quarterly Review} 50 (2014).

\textsuperscript{86} Nottage (n 45).

\textsuperscript{87} Li, Griffin, Yue and Zhao (n 3).

\textsuperscript{88} Dore (n 2).
empirical findings show that companies operating in ‘harmony’ and ‘uncertainty avoidance’ countries are likely to take fewer risks. The latter argues that shareholder monitoring prevails over the effects of market for corporate control as a result of cross-shareholding.

4 Data, Variables and Summary Statistics

A database was compiled consisting of 582 bank-year observations of Japan-listed and UK-listed banks between 2006 and 2013, and were pooled from 550 Japan-listed bank-year observations and 32 UK-listed bank-year observations. However, compared to the Japanese banking industry, only five UK-listed banks provide retail lending.

The data was extracted from the Nikkei Telecom 21 and Orbis (formally known as Bankscope) databases. The information relating to the composition of Japan-listed bank boards was extracted from the Nikkei Telecom 21 database. Ownership information and balance sheet data were extracted from the Orbis database.

Seven hundred and six bank-year observations were extracted, of which 124 observations were removed due to missing financial information and outliers. The sample set is unbalanced.

4.1 Bank Risk-Taking

The level of bank risk-taking is a measure of a bank being insolvent (the z-score), in which the lower value of the z-score indicates a higher probability of insolvency risks at a bank, because banks with greater volatilities of earnings present greater risks.

The z-score equals

\[ \frac{\text{car}_{i,t} + \sum_{t=0}^{T} \mu_{i,t}}{\sum_{t=0}^{T} \sigma_{i,t}} \]

where the car is the ratio of a bank’s total equity to its total assets, and \( \mu_{i,t} \) and \( \sigma_{i,t} \) are the mean and standard deviations of the return on assets (ROA) of bank \( i \) at time \( t \), respectively. The ROA is defined as the ratio of net income (loss) to total assets.

Table 1 shows that, on average, the z-score of Japan-listed banks is greater than those of UK-listed banks, indicating that the incomes of Japan-listed banks tend to be less volatile and therefore they are seen as safer banks.

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89 T.H. Hannan and G.A. Hanweck, “Bank Insolvency Risk and the Market for Large Certificates of Deposit”, *Journal of Money, Credit and Banking* 20 (1988) 203–211; A.D. Roy, “Safety First and the Holding of Assets”, *Econometrica* 20 (1952) 431–449.
However, the range of the z-score of Japan-listed banks is greater than that of UK-listed banks, indicating that there is a greater range in the earning volatilities of Japan-listed banks. In addition, UK-listed banks have higher impaired loan ratios (ImpLoanR) compared to Japan-listed banks.

4.2 Board Monitoring
This study assesses the theoretical predictions that board independence and managerial ownerships affect the risk-taking behaviours of listed banks and minimise residual losses, which can be proxied using four variables: levels of external directors (ExDir), external director tenures (ExDir_T), internal director ownerships (InDir_O) and external director ownerships (ExDir_O). The former two variables measure the effectiveness of board independence. The latter two variables are used to determine the degree of alignment of board directors with their shareholders.

4.3 Shareholder Monitoring
The controlling (voting) rights are proxied by the levels of share ownerships, which reflect the abilities of shareholders to influence the affairs of their investee companies.90 Table 1 shows that 10 types of institutional shareholders are considered and are assigned into four categories of institutional shareholders: (i) foreign financial institutions (FFI), (ii) foreign non-financial institutions (FNFI),

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90 R. La Porta, F. López de Silanes, A. Shleifer and R. Vishny, “Law and finance”, Journal of Political Economy 106 (1998) 1113–1155; Shleifer and Vishny (n 15).

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### Table 1: Shareholder Categorisation

| Shareholder – Type (Bankscope) | Type of Shareholders |
|-------------------------------|----------------------|
| Bank                          | FI                   |
| Financial company             | FI                   |
| Foundation/Research Institute | NFI                  |
| Venture capital               | FI                   |
| Hedge funds                   | FI                   |
| Industrial company            | NFI                  |
| Insurance company             | FI                   |
| Mutual & Pension Fund/Trust   | FI                   |
| Private Equity firms          | FI                   |
| Public (publicly-listed companies) | NFI               |

F1 represents financial institutions. NFI represents non-financial institutions. The ownership levels are aggregated according to the following:
(iii) domestic financial institutions (DFI), and (vi) domestic non-financial institutions (DNFI).

This study includes direct ownership information on top 20 shareholders who have direct voting rights, and is used to capture the abilities of these shareholders to influence risk-taking behaviours at banks.91

4.4 Summary Statistics
Table 2 provides descriptive statistics for the sample set used in the empirical analyses. The UK-listed banks have a lower z-score and a higher ratio of impaired loans (ImpLoanR) compared to Japan-listed listed banks. But the data also shows that UK-listed banks, on average, have greater levels of total regulatory capital (TCapR) compared to Japan-listed banks. This is very interesting, because it shows that UK-listed banks are likely to take greater risks, but also to have greater buffers to absorb any resulting losses due to higher regulatory capital reserves.

On board composition, the boards of UK-listed banks are outsider-dominated, and their external directors tend to have longer tenures, while the boards of Japan-listed banks are insider-dominated. Table 2 shows that, on average, the percentage of external directors at UK-listed banks is 75 percent, while that of Japan-listed banks is 10 percent.

The external directors of UK-listed banks do not own any shares in their banks. This is not surprising, because the UK Corporate Governance Code promotes board independence and discourages managerial ownerships for external/independent directors. On the contrary, the internal and external directors of Japan-listed banks own, on average, 0.15 percent and 0.07 percent of their bank shares, respectively. The overall levels of managerial ownerships of both countries remain low. In terms of director tenure, the average tenure of UK-listed banks’ external directors is three years, while that of Japan is two years.

In terms of non-managerial ownership structures in Japan, table 2 shows that foreign and domestic financial institutions tend to cumulatively own the largest portion of shares in UK-listed and Japan-listed banks. On average, domestic and foreign financial institutions own 16.78 percent and 28.30 percent of shares in UK-listed banks, respectively. Similarly, domestic and foreign financial institutions own 14.16 percent and 4.97 percent of shares in Japan-listed banks, respectively.

The correlation matrices in Table 3–5 show that (i) the z-score of UK-listed banks is not statistically correlated with the variables of board monitoring and

91 L. Laeven and R. Levine, “Bank Governance, Regulation and Risk Taking”, Journal of Financial Economics 93 (2009) 259–275.
The following table reports the summary statistics of the regression variables, which consists of 582 bank-year observations from the UK and Japan.

| Variable                                                                 | Mean  | Std. Dev. | Min  | Max   | No. of Obs. |
|-------------------------------------------------------------------------|-------|-----------|------|-------|-------------|
| **Japan**                                                               |       |           |      |       |             |
| Domestic Financial Institutional Shareholders (DFI)                      | 14.16 | 13.81     | 0    | 83.48 | 550         |
| Domestic Non-Financial Institutional Shareholders (DNFI)                 | 0.89  | 2.12      | 0    | 14.23 | 550         |
| Foreign Financial Institutional Shareholders (FFI)                      | 4.97  | 8.49      | 0    | 75.48 | 550         |
| Foreign Non-Financial Institutional Shareholders (FNFI)                  | 0.42  | 2.43      | 0    | 40.40 | 550         |
| Gross Domestic Product (GDP)                                            | 0.62  | 2.84      | -5.53| 4.71  | 550         |
| Impaired Loan Ratio (ImpLoanR)                                          | 3.56  | 1.22      | 0.99 | 9.20  | 550         |
| Internal Director Ownerships (InDir_O)                                  | 0.15  | 0.33      | 0    | 6.86  | 550         |
| External Director (ExDir)                                               | 0.10  | 0.15      | 0    | 0.86  | 550         |
| External Director Ownerships (ExDir_O)                                  | 0.07  | 0.47      | 0    | 6.30  | 550         |
| External Director Tenures (ExDir_T)                                     | 1.85  | 3.56      | 0    | 26.00 | 550         |
| Post2008 (Post2008)                                                     | 0.76  | 0.43      | 0    | 1.00  | 550         |
| Total Regulatory Capital Ratio (TCapR)                                   | 11.68 | 1.90      | 5.71 | 18.85 | 550         |
| Tobin’s Q (TobinQ)                                                      | 0.04  | 0.02      | 0.01 | 0.14  | 550         |
| **z-score**                                                             | 123.73| 154.52    | 1.26 | 1,062.44| 550      |
| **UK**                                                                 |       |           |      |       |             |
| Domestic Financial Institutional Shareholders (DFI)                      | 16.78 | 9.08      | 0    | 32.14 | 32          |
| Domestic Non-Financial Institutional Shareholders (DNFI)                 | 0.92  | 1.13      | 0    | 6.28  | 32          |
| Foreign Financial Institutional Shareholders (FFI)                       | 28.30 | 15.62     | 0.10 | 55.49 | 32          |
| Foreign Non-Financial Institutional Shareholders (FNFI)                  | 1.62  | 1.78      | 0    | 8.08  | 32          |
| Gross Domestic Product (GDP)                                            | 0.50  | 2.24      | -4.19| 2.59  | 32          |
| Impaired Loan Ratio (ImpLoanR)                                          | 5.07  | 2.86      | 0.05 | 10.42 | 32          |
| Internal Director Ownerships (InDir_O)                                  | 0.04  | 0.04      | 0.01 | 0.18  | 32          |
| External Director (ExDir)                                               | 0.75  | 0.08      | 0.58 | 0.91  | 32          |
| External Director Ownerships (ExDir_O)                                  | 0.00  | 0.00      | 0.00 | 0.01  | 32          |
| External Director Tenures (ExDir_T)                                     | 3.34  | 1.04      | 1.67 | 6.60  | 32          |
| Post2008 (Post2008)                                                     | 0.94  | 0.25      | 0    | 1.00  | 32          |
| Total Regulatory Capital Ratio (TCapR)                                   | 15.39 | 2.03      | 11.20| 18.80 | 32          |
| Tobin’s Q (TobinQ)                                                      | 0.04  | 0.04      | 0.01 | 0.16  | 32          |
| **z-score**                                                             | 63.19 | 87.75     | 2.18 | 396.89| 32          |
**TABLE 3** Pearson correlation matrix of UK-listed banks

|                  | DFI    | DNFI   | FFI    | FNFI   | GDP    | ImpLoanR | InDir_O | ExDir   | ExDir_O | ExDir_T | Post2008 | TCapR   | TobinQ  | z-score |
|------------------|--------|--------|--------|--------|--------|----------|---------|---------|---------|---------|----------|---------|---------|---------|
| **DFI**          | 1      |        |        |        |        |          |         |         |         |         |          |         |         |         |
| **DNFI**         | 0.5431*| 1      |        |        |        |          |         |         |         |         |          |         |         |         |
| **FFI**          | 0.6637*| 0.5523*| 1      |        |        |          |         |         |         |         |          |         |         |         |
| **FNFI**         | -0.1216| -0.1213| -0.0806| 1      |        |          |         |         |         |         |          |         |         |         |
| **GDP**          | -0.3080*| -0.0609| -0.1793| -0.0818| 1      |          |         |         |         |         |          |         |         |         |
| **ImpLoanR**     | -0.4367*| -0.1102| -0.4029*| 0.2881| 0.1033 | 1        |         |         |         |         |          |         |         |         |
| **InDir_O**      | 0.2879 | 0.3791*| 0.3633*| 0.0531| 0.0747 | -0.202  | 1       |         |         |         |          |         |         |         |
| **ExDir**        | -0.3104*| 0.0538 | -0.1906| 0.2622| 0.4529*| 0.3644* | 0.0472  | 1       |         |         |          |         |         |         |
| **ExDir_O**      | 0.1671 | 0.1433 | -0.103 | -0.2132| -0.0509| 0.0029  | 0.1146  | 0.1143  | 1       |         |          |         |         |         |
| **ExDir_T**      | 0.2633 | 0.1147 | 0.2159 | -0.2211| 0.2622 | -0.6864*| 0.0054  | -0.0067| 0.1073  | 1       |          |         |         |         |
| **Post2008**     | 0.3287*| 0.2132 | 0.3984*| 0.2392| -0.2436| 0.2543  | -0.006  | -0.0239| -0.3312*| -0.4272*| 1        |         |         |         |
| **TCapR**        | -0.0407| 0.0849 | 0.3687*| 0.1794| 0.2146 | -0.0188 | 0.235   | 0.2672  | -0.4560*| -0.0078| 0.3279*  | 1       |         |         |
| **TobinQ**       | 0.1792 | 0.1329 | -0.0592| 0.4115*| -0.1198| 0.2267  | -0.0286| 0.1863  | 0.0723  | -0.2282| 0.1234  | -0.3089*| 1       |         |
| **z-score**      | -0.1862| -0.0999| 0.0702 | 0.0436| 0.2457 | -0.1952 | -0.1187| 0.0805  | -0.2354| 0.2401 | 0.0285  | 0.247   | -0.0405| 1       |

Note: This table reports the summary statistics of the regression variables, which consists of 32 bank-year observations from the UK. * indicates that the pairwise correlation coefficient is statistically significant at a 10 percent level.
### Table 4  Pearson correlation matrix of Japan-listed banks

|        | DFI       | DNFI      | FFI       | FNFI       | GDP       | ImpLoanR  | InDir_O   | ExDir     | ExDir_O   | ExDir_T   | Post2008  | TCapR     | TobinQ    | z-score   |
|--------|-----------|-----------|-----------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| DFI    | 1         |           |           |            |           |           |           |           |           |           |           |           |           |           |
| DNFI   | 0.1255*   | 1         |           |            |           |           |           |           |           |           |           |           |           |           |
| FFI    | 0.0598    | -0.07     | 1         |            |           |           |           |           |           |           |           |           |           |           |
| FNFI   | 0.063     | -0.0437   | 0.2188*   | 1          |           |           |           |           |           |           |           |           |           |           |
| GDP    | -0.0188   | -0.0401   | -0.1143*  | 0.0402     | 1         |           |           |           |           |           |           |           |           |           |
| ImpLoanR | -0.1180*  | -0.0784*  | -0.0091   | 0.0769*    | 0.0106    | 1         |           |           |           |           |           |           |           |           |
| InDir_O | -0.1063*  | -0.0217   | 0.0713*   | -0.0373    | 0.0272    | -0.1045*  | 1         |           |           |           |           |           |           |           |
| ExDir  | 0.0333    | -0.1392*  | 0.5793*   | 0.3677*    | 0.0387    | 0.1242*   | 0.0893*   | 1         |           |           |           |           |           |           |
| ExDir_O| 0.0079    | -0.0523   | 0.4192*   | 0.4436*    | -0.0064   | 0.2280*   | -0.038    | 0.4783*   | 1         |           |           |           |           |           |
| ExDir_T| 0.0405    | -0.0141   | 0.1456*   | 0.0552     | 0.0034    | 0.0684    | -0.0099   | 0.3297*   | 0.1747*   | 1         |           |           |           |           |
| Post2008| 0.0417    | 0.0123    | 0.2366*   | -0.006     | -0.2637*  | -0.2398*  | -0.0919*  | 0.0989*   | 0.0043    | 0.1106*   | 1         |           |           |           |
| TCapR  | 0.054     | 0.1475*   | 0.2270*   | 0.0216     | 0.0369    | -0.2899*  | -0.0074   | 0.1570*   | -0.0576   | 0.2421*   | 0.1632*   | 1         |           |           |
| TobinQ | -0.0987*  | -0.1253*  | -0.1262*  | -0.0249    | -0.0294   | 0.2169*   | -0.0216   | 0.0142    | 0.0151    | 0.0052    | 0.4373*   | -0.3724*  | 1         |           |
| z-score| 0.0198    | 0.0707*   | -0.1004*  | -0.0643    | 0.1270*   | -0.1671*  | -0.0491   | -0.1072*  | -0.0833*  | -0.0033*  | -0.0817*  | 0.2866*   | -0.1515*  | 1         |

Note: This table reports the summary statistics of the regression variables, which consists of 550 bank-year observations from Japan. * indicates that the pairwise correlation coefficient is statistically significant at a 10 percent level.
|             | DFI       | DNFI      | FFI  | FNFI | GDP      | ImptLoanR | InDir_O  | ExDir   | ExDir_O | ExDir_T  | Post2008 | TCapR    | TobinQ  | z-score |
|-------------|-----------|-----------|------|------|----------|-----------|----------|---------|---------|---------|----------|----------|---------|---------|
| DFI         | 1         |           |      |      |          |           |          |         |         |         |          |          |         |         |
| DNFI        | 0.13*     | 1         |      |      |          |           |          |         |         |         |          |          |         |         |
| FFI         | 0.10*     | 0.03      | 1    |      |          | -0.10*    | 0.04     | 1       |         |         |          |          |         |         |
| FNFI        | 0.06      | -0.04     | 0.22*| 1    |          |           |          |         |         |         |          |          |         |         |
| GDP         | -0.03     | -0.04     | -0.10*| 0.04 | 1        |           |          |         |         |         |          |          |         |         |
| ImptLoanR   | -0.12*    | -0.07*    | 0.05 | 0.11*| 0.02     | 1         |          |         |         |         |          |          |         |         |
| InDir_O     | -0.11*    | -0.02     | 0.02 | -0.04| 0.03     | 0.01      | 0.01     | 1       |         |         |          |          |         |         |
| ExDir       | 0.05      | -0.09*    | 0.68*| 0.33*| 0.03     | 0.27*     | 0.01     | 1       |         |         |          |          |         |         |
| ExDir_O     | 0.01      | -0.05     | 0.31*| 0.43*| -0.01    | 0.19*     | -0.04    | 0.30*   | 1       |         |          |          |         |         |
| ExDir_T     | 0.05      | -0.01     | 0.17*| 0.06 | 0.01     | 0.06      | -0.02    | 0.29*   | 0.17*   | 1       |          |          |         |         |
| Post2008    | 0.05      | 0.02      | 0.25*| 0.01 | 0.26*    | -0.16*    | 0.10*    | 0.14*   | 0       | 0.11*   | 1        |          |         |         |
| TCapR       | 0.06      | 0.13*     | 0.39*| 0.07*| 0.04     | -0.12*    | -0.04    | 0.39*   | -0.06   | 0.25*   | 0.19*    | 1        |         |         |
| TobinQ      | -0.07*    | -0.10*    | -0.06| 0.02 | -0.04    | 0.23*     | -0.03    | 0.07*   | 0.01    | 0       | 0.39*    | -0.29*   | 1       |         |
| z-score     | 0.01      | 0.07      | -0.12*| -0.07*| 0.13*    | -0.17*    | -0.04    | -0.14*  | -0.08*  | 0       | -0.09*   | 0.22*    | -0.14*  | 1       |

Note: This table reports the summary statistics of the regression variables, which consists of 582 bank-year observations from the UK and Japan. * indicates that the pairwise correlation coefficient is statistically significant at a 10 percent level.
bonding mechanisms (InDir, ExDir, ExDir_O, ExDir_T) and those of shareholder cash flow rights (DFI, DNFI, FFI and DNFI), (ii) the z-score of Japan-listed banks is statistically correlated with DNFI, FFI, ExDir and ExDir_O, suggesting that the increased foreign financial institutional ownerships and external directors are likely to promote risk-taking behaviours at Japan-listed banks. But Japan-listed banks with higher domestic non-financial share ownerships tend to have lower risks.

In addition, the correlation matrices show that (i) the z-score of UK-listed banks is not statistically correlated with the levels of impaired loans (ImpLoanR), the total regulatory capital (TCapR) and the market performances of banks (TobinQ), but (ii) the z-score of Japan-listed banks is statistically correlated with ImpLoanR, TCapR and TobinQ. This indicates that Japan-listed banks with greater risk-taking tend to have higher impaired loan ratios and better market-based performances, but with lower total regulatory capital.

### 4.5 Model and Methodology

The levels of board independence, managerial ownerships, and non-managerial shareholdings are used to proxy the effectiveness of board and shareholder monitoring.

\[
Z_{i,t} = \alpha + \beta_1 Z_{i,t-1} + \beta_2 M_{li,t-1} + \beta_3 M_{2i,t-1} + \beta_4 M_{si,t-1} + \beta_5 C_{i,t-1} + \beta_6 TCapR_{i,t-1} + \beta_7 TobinQ_{i,t-1} + \beta_8 Post2008_{i,t-1} + \beta_9 GDP_{i,t-1} + \epsilon_{i,t}
\]

where \(Z_{i,t}\) is the z-score of bank \(i\) at time \(t\), \(M_{li,t-1}\) and \(M_{si,t-1}\) are matrices of bank level board and shareholder monitoring mechanisms at time \(t-1\), \(C_{i,t-1}\) is a categorical variable in which 1 equals UK-listed banks, and 0 equals Japan-listed banks. The total capital regulatory ratio (TCapR\(_{i,t-1}\)) and levels of market-based performance (TobinQ\(_{i,t-1}\)) control for bank-specific effects. Post2008 controls for year-specific effects. Post2008 is a categorical variable in which 1 equals the years 2008–2013, and 0 equals 2005–2007. GDP controls for country-specific effects.

### 5 Empirical Findings and Discussions

The overarching messages from the regression results shown in Table 6 are that shareholder supremacy weakens bank governance, which is consistent with for
Table 6: A summary of the random-effects regression results of Table 8 that shows the relationships between the governance mechanisms (board compositions and ownership structures) and the insolvency risk levels (z-score).

|               | UK                                      | Japan                                 |
|---------------|-----------------------------------------|---------------------------------------|
| Internal      |                                         |                                       |
| External Directors (ExDir) | -270.9 ( = -48.34 – 222.6*** ) | -222.6***                             |
| Tenure of External Directors (ExDir_T) | 9.7 (= 8.832 + 0.822) | 0.822                                 |
| External Director Share Ownerships (ExDir_O) | -2,489.4 ( = -2467.7* – 21.72*** ) | -21.72***                             |
| Internal Director Share Ownerships (InDir_O) | -1,728.2 ( = -1710.3*** – 17.94** ) | -17.94**                              |
| External      |                                         |                                       |
| Foreign Financial Institutional Ownerships (FFI) | -1.5 ( = 0.709 − 2.210*** ) | -2.210***                             |
| Foreign Non-Financial Institutional Ownerships (FNFI) | -15.7 ( = -13.83 − 1.904** ) | -1.904**                              |
| Domestic Financial Institutional Ownerships (DFI) | -3.4 ( = -3.583* + 0.219 ) | 0.219                                 |
| Domestic Non-Financial Institutional Ownerships (DNFI) | -18.3 ( = -21.52** + 3.236 ) | 3.236                                 |

Notes: This table reports the summary statistics of the regression variables, which consists of 582 bank-year observations from the UK and Japan. FFI is the level of foreign financial institutional ownerships. FNFI is the level of foreign non-financial institutional ownerships. DFI is the level of domestic financial institutional ownerships. DNFI is the level of domestic non-financial institutional ownerships. ExDir is the ratio of external directors to the total number of board members. ExDir_T is the average tenure of external directors on boards. ExDir_O is the amount of external director share ownerships. InDir_O is the amount of internal director share ownerships. *, ** and *** indicates significance at 10%, 5% and 1%, respectively.
example the findings by Ferreira et al. as discussed previously. The results in Table 6 highlight that (i) the substituted effects between internal and external controls differ between countries or that the substituted effects of governance mechanisms may not exist, (ii) an internal corporate governance approach to shareholder supremacy increases risk-taking at banks, and (iii) foreign shareholders are likely to increase risk-taking at banks.

Tables 6 and 8 provide a summary of the results. The Breusch and Pagan Lagrangian multiplier (LM) test is used to test for unobserved heterogeneity, and shows that null hypotheses are not accepted and random-effects (RE) estimations are suitable. The values of $R^2$(between) are relatively high compared to those of $R^2$(within).

The standard errors of regressions in Table 6 are adjusted to control for clustering at country and bank levels, and for year-specific effects. The results show that internal mechanisms such as external directors (ExDir) and managerial ownerships (ExDir_O, InDir_O) are positively associated with risk-taking at UK-listed and Japan-listed banks. The coefficients of ExDir and ExDir_O of Japan-listed banks are economically and statistically significant at the one percent level. The coefficient of InDir_O of Japan-listed banks are statistically significant at the five percent level, but it is not economically significant.

The negative association between foreign shareholders and the $z$-score holds for both UK-listed and Japan-listed banks. Only the coefficients of foreign financial institutional ownerships (FFI) and foreign non-financial institutional ownerships (FNFI) of Japan-listed banks are statistically significant at one percent and five percent levels, respectively. The results suggest that foreign financial and non-financial institutions are likely to encourage their Japan-listed investee banks to increase their risk-taking activities.

In addition, the coefficients of domestic financial institutional ownerships (DFI) and domestic non-financial institutional ownerships (DNFI) of UK-listed banks are negatively and statistically significant at five percent and 10 percent levels, respectively. On the contrary, the coefficients of DFI and DNFI of Japan-listed banks are positively associated with the $z$-score, but are statistically insignificant. Nevertheless, the coefficients of FFI, FNFI, DFI and DNFI are economically insignificant.

Overall, these results suggest that, first, the internal and external controls are likely to be ineffective, if the objective of principals and agents is to reduce risk-taking at banks. Second, the domestic shareholders of Japan-listed companies are likely to play different roles compared to those of UK-listed banks,
indicating the possibility that external controls are likely to be sufficient in monitoring Japan-listed banks.

Two observations can be found with regard to reducing risk-taking: (i) the ineffectiveness of internal controls, and (ii) the ineffectiveness of external controls. First, the results relating to internal controls are consistent with those highlighted in Kokkinis’ observation concerning the wrong incentives,93 and with Moore’s concerns on being able to create a remuneration scheme in line with, amongst others, public interests.94 As regards the ineffectiveness of external controls to reduce risk-taking, this finding supports research conducted by Ferreira et. al., Erkens et. al., and Bainbridge: Ferreira et. al. finds that when a bank’s board is more insulated from the influence of its shareholders, it tends to perform better during the 2008 Financial Crisis,95 while Erkens et. al. show that banks with higher institutional ownership took more risk and suffered larger losses.96 The study of Bainbridge suggests that activist investors may not pursue the same goals as more passive investors, indicating that activist investors are also likely to influence management to take decisions with a focus on merely short-term profitability.97 Overall, these studies support the argument put forward by Kokkinis that incentives provided by an ‘agency-theory corporate governance framework’ may not be suited for banks as they may provide the wrong incentives, thus exacerbating governance issues.98

The second observation suggests that external controls are likely to be sufficient in monitoring Japan-listed banks. This would correspond with the conclusions by Hasan and Song, and Erkens et. al. The study of Hasan and Song suggests that banks with larger proportion of controlling shareholders tends to perform better.99 Contrary to Japanese banks,100 studying 296 banks in 30 countries at the centre of the 2008 Financial Crisis (North America, Europe, and Australia), Erkens et. al. shows that banks with higher institutional ownership tended to take more risk during the crisis, resulting in larger losses.

93 Kokkinis (n 40).
94 Moore (n 41).
95 Ferreira, Kershaw, Kirchmaier, and Schuster (n 81).
96 Erkens, Hung, and Matos (n 82).
97 Bainbridge (n 30).
98 Kokkinis (n 70); and Kokkinis (n 40).
99 I. Hasan and L. Song, “Bank Ownership and Performance: a Global Perspective”, in: J. Barth, C. Lin, and C. Wihlborg (eds.), Research Handbook on International Banking and Governance (Edward Elgar, 2012).
100 Erkens, Hung, and Matos (n 82).
6 Additional Robustness Tests

Two robustness tests are conducted. First, the system generalized method of moments (GMM) Arellano-Bond system regressions are employed. It is a robust procedure which is employed to mitigate the problems of endogeneity and simultaneity arising from the regression model estimating the relationship between dependent and independent variables. The results of the system GMM Arellano-Bond system regressions are shown in Tables 7 and 9. The majority of the results are robust, except for the FF1 coefficient for the UK.

Second, the majority of the results are robust using an alternative variable, except for DFI for Japan, and ExDir_T for the UK. The ratio of impaired loans, ImpLoanR, is the percentage of impaired loans over gross loans. The results are expected to have the opposite signs on the estimated coefficients when the z-score is replaced with ImpLoanR as the dependent variable, because ImpLoanR is negatively correlated with the z-score as indicated in Tables 3, 4, and 5.

7 Conclusions

This study offers possible explanations on the substitution frameworks at listed banks on internal and external controls between the UK and Japan, which focus on the relationships (i) between managerial ownerships and risk-taking, and between (ii) between ownership structures and risk-taking, respectively.

The conventional theories propose that, first, the UK corporate framework has weak internal controls but strong external controls, in which board independence and remuneration schemes are designed to strengthen internal controls, and in which strong external controls result from market for corporate control. Second, the Japan corporate framework has strong internal controls but weak external controls, which result from the stakeholder-based hybrid model and weak market for corporate control, respectively.

The results presented in this paper suggest that risk-taking at banks is increased by (i) an internal corporate governance approach to shareholder supremacy, and (ii) foreign share ownership. This indicates that – contrary to

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101 T. Beck and R. Levine, “Stock Markets, Banks, and Growth: Panel Evidence”, *Journal of Banking and Finance* 28(3) (2014) 423–442; M.S. Lilling, “The Link between CEO Compensation and Firm Performance: Does Simultaneity Matter?”, *Atlantic Economic Journal* 34 (2006) 101–114.

102 Aoki (n 6).

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Table 7: A summary of results of the robustness tests extracted from Tables 9 and 10.

|                | Table 9 |                              | Table 10 |                              |
|----------------|---------|-------------------------------|----------|-------------------------------|
|                | Estimation Type: GMM; Dependent Variable: z-score | Estimation Type: GMM; Dependent Variable: ImpLoanR |
| Internal       |         |                              |          |                              |
| ExDir          | $-671.7$ ($= -262.1 - 409.6^{**}$) | $-499.6^{**}$ | $1.7$ ($= 0.236 + 1.455$) | $1.455$ |
| ExDir_T        | $37.9$ ($= 27.70 + 10.24$)     | $10.24$   | $0.2$ ($= 0.265 - 0.0226$)  | $-0.0226$ |
| ExDir_O        | $-2,906.6$ ($= -2835.4 - 71.19$) | $-71.19$  | $49.7$ ($= 49.19 + 0.516$) | $0.516$ |
| InDir_O        | $-1,366.2$ ($= -1316.3 - 49.88$) | $-49.88$  | $22.2$ ($= 21.79 + 0.362$) | $0.362$ |
| External       |         |                              |          |                              |
| FFI            | $2.6$ ($= 4.855^* - 2.300$)    | $-2.300$  | $0.0$ ($= 0.00749 + 0.00112$) | $0.00112$ |
| FNFI           | $-31.3$ ($= -28.55^* - 2.738$) | $-2.738$  | $0.2$ ($= 0.122 + 0.0594^*$) | $0.0594^*$ |
| DFI            | $-5.7$ ($= -6.042 + 0.335$)    | $0.335$   | $0.1$ ($= 0.0886^* + 0.00261$) | $0.00261$ |
| DNFI           | $-9.7$ ($= -11.40 + 1.691$)    | $1.691$   | $0.2$ ($= 0.205 - 0.0145$)  | $-0.0145$ |

Notes: This table reports the summary statistics of the regression variables, which consists of 582 bank-year observations from the UK and Japan. **FFI** is the level of foreign financial institutional ownerships. **FNFI** is the level of foreign non-financial institutional ownerships. **DFI** is the level of domestic financial institutional ownerships. **DNFI** is the level of domestic non-financial institutional ownerships. **ExDir** is the ratio of external directors to the total number of board members. **ExDir_T** is the average tenure of external directors on boards. **ExDir_O** is the amount of external director share ownerships. **InDir_O** is the amount of internal director share ownerships. *, ** and *** indicates significance at 10%, 5% and 1%, respectively.
### Table 8
A summary of the results of the random effects estimations examining the relationships between the governance mechanisms (board compositions and ownership structures) and the insolvency risk levels (z-score).

| Model (1) | Model (2) | Model (3) | Model (4) |
|-----------|-----------|-----------|-----------|
| **Intercept** | -171.0* | -117.5 | -149.2* | -116.5 |
| (-2.48) | (-1.88) | (-1.84) | (-1.84) |
| **L.ExDir** | -222.6*** | -21.72*** | **L.DFI** | 0.219 |
| (-4.75) | (-5.47) | (-2.71) | (0.42) | (1.04) |
| **L.ExDir_O** | -21.72*** | -17.94** | **L.FFI** | -2.210*** |
| (-5.47) | (-2.71) | (-2.75) | (-3.56) | (-2.75) |
| **L.DFI** | 0.219 | -2.210*** | **L.FNFI** | -1.904** |
| (0.42) | (-3.56) | (-2.75) | (-3.18) |
| **L.DNFI** | 3.236 | 3.236 | 3.236 | 3.236 |
| **L.ExDir_T** | 0.822 | -19.69*** | **L.FNFI_C** | 0.709 |
| (0.25) | (-2.71) | (-3.43) | (0.50) | (-1.71) |
| **L.ExDir_T*C** | 8.832 | -1710.3*** | **L.FNFI_C** | -13.83 |
| (0.72) | (-3.43) | (-2.32) | (-1.71) | (-1.71) |
| **L.TCapR** | 25.40*** | 19.69*** | **L.TCapR** | 18.77** |
| (4.07) | (3.43) | (3.72) | (3.26) | (3.26) |
| **L.TobinQ** | -172.1 | -309.8 | **L.TobinQ** | -387.0 |
| (-0.50) | (-0.74) | (-1.01) | (-0.81) | (-0.81) |
| **L.Post2008** | 32.40 | 31.11 | **L.Post2008** | 42.56* |
| (1.95) | (1.73) | (2.43) | (1.97) | (1.97) |
| **L.GDP** | 10.27*** | 9.960*** | **L.GDP** | 9.416*** |
| (4.41) | (4.23) | (4.01) | (4.36) | (4.36) |
Table 8: A summary of the results of the random effects estimations examining the relationships between the governance mechanisms (board compositions and ownership structures) and the insolvency risk levels (z-score). (contd.)

| No. of Obs. | 582 | No. of Obs. | 582 | No. of Obs. | 582 | No. of Obs. | 582 |
|------------|-----|------------|-----|------------|-----|------------|-----|
| $R^2$ (within) | 0.0960 | $R^2$ (within) | 0.0883 | $R^2$ (within) | 0.0886 | $R^2$ (within) | 0.0881 |
| $R^2$ (between) | 0.320 | $R^2$ (between) | 0.170 | $R^2$ (between) | 0.226 | $R^2$ (between) | 0.143 |
| $R^2$ (overall) | 0.180 | $R^2$ (overall) | 0.132 | $R^2$ (overall) | 0.148 | $R^2$ (overall) | 0.121 |
| LM test: p-value | 0.000 | LM test: p-value | 0.000 | LM test: p-value | 0.000 | LM test: p-value | 0.000 |

Notes: This table reports the summary statistics of the regression variables, which consists of 582 bank-year observations from the UK and Japan. L. indicates that the levels of independent variables have a one-year lag. C is a categorical variable in which 0 equals Japan-listed banks, and 1 equals UK-listed banks. ExDir is the ratio of external directors to the total number of board members. ExDir_T is the average tenure of external directors on boards. ExDir_O is the amount of external director share ownerships. InDir_O is the amount of internal director share ownerships. FFI is the level of foreign financial institutional ownerships. FNFI is the level of foreign non-financial institutional ownerships. DFI is the level of domestic financial institutional ownerships. DNFI is the level of domestic non-financial institutional ownerships. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively.
| Model     |    | Model     |    | Model     |    | Model     |    |
|-----------|----|-----------|----|-----------|----|-----------|----|
| Intercept | -334.9 | Intercept | -231.1 | Intercept | -214.1 | Intercept | -224.1* |
|           | (-0.82) |           | (-1.93) |           | (-1.61) |           | (-2.05) |
| Lz-score  | 0.377*** | Lz-score  | 0.419*** | Lz-score  | 0.444*** | Lz-score  | 0.456*** |
|           | (3.87) |           | (4.73) |           | (4.91) |           | (5.31) |
| L.ExDir   | -409.6** | L.ExDir_O | -71.19 | L.DFI     | 0.335 | L.DNFI    | 1.691 |
|           | (-2.92) |           | (-1.36) |           | (0.41) |           | (0.44) |
| L.ExDir_T | 10.24  | L.InDir_O | -49.88 | L.FFI     | -2.300 | L.FNFI    | -2.738 |
|           | (1.38) |           | (-1.37) |           | (-1.79) |           | (-1.07) |
| L.ExDir*C | -262.1 | L.ExDir_O*C | -2835.4 | L.DFI*C   | -6.042 | L.DNFI*C  | -11.40 |
|           | (-0.86) |           | (-0.62) |           | (-1.55) |           | (-0.89) |
| L.ExDir_T*C | 27.70  | L.InDir_O*C | -1316.3 | L.FFI*C   | 4.855* | L.FNFI*C  | -28.55* |
|           | (0.90) |           | (-0.77) |           | (2.17) |           | (-2.00) |
| L.TCapR   | 18.94  | L.TCapR   | 15.60* | L.TCapR   | 13.59* | L.TCapR   | 13.59  |
|           | (1.69) |           | (2.11) |           | (2.00) |           | (1.95) |
| L.TobinQ  | -789.1 | L.TobinQ  | -958.5 | L.TobinQ  | -975.8 | L.TobinQ  | -793.9 |
|           | (-0.64) |           | (-1.27) |           | (-1.01) |           | (-0.99) |
| TCapR     | 19.28  | TCapR     | 11.75  | TCapR     | 10.51  | TCapR     | 10.99  |
|           | (0.72) |           | (1.39) |           | (1.04) |           | (1.41) |
| L.Post2008 | 35.33 | L.Post2008 | 39.53  | L.Post2008 | 55.87  | L.Post2008 | 44.89  |
|           | (0.71) |           | (1.51) |           | (1.74) |           | (1.73) |
| L.GDP     | 8.821*** | L.GDP     | 8.076** | L.GDP     | 8.086*** | L.GDP     | 8.561*** |
|           | (3.43) |           | (3.01) |           | (3.42) |           | (3.62) |
A summary of the results of the system generalized method of moments (GMM) Arellano-Bond system estimations examining the relationships between the governance mechanisms (board compositions and ownership structures) and the insolvency risk levels (z-score). (contd.)

| No. of Obs. | Sargan test: p-value | No. of Obs. | Sargan test: p-value | No. of Obs. | Sargan test: p-value | No. of Obs. | Sargan test: p-value |
|------------|---------------------|------------|---------------------|------------|---------------------|------------|---------------------|
| 582        | 0.152               | 582        | 0.116               | 582        | 0.149               | 582        | 0.149               |
| AR(1) test: p-value | 0.0128       | AR(1) test: p-value | 0.00967       | AR(1) test: p-value | 0.00787       | AR(1) test: p-value | 0.00931       |
| AR(2) test: p-value | 0.570        | AR(2) test: p-value | 0.590        | AR(2) test: p-value | 0.609        | AR(2) test: p-value | 0.525        |

Notes: This table reports the summary statistics of the regression variables, which consists of 582 bank-year observations from the UK and Japan. L. indicates that the levels of independent variables have a one-year lag. C is a categorical variable in which 0 equals Japan-listed banks, and 1 equals UK-listed banks. ExDir is the ratio of external directors to the total number of board members. ExDir_T is the average tenure of external directors on boards. ExDir_O is the amount of external director share ownerships. InDir_O is the amount of internal director share ownerships. FF1 is the level of foreign financial institutional ownerships. FNFI is the level of foreign non-financial institutional ownerships. DFI is the level of domestic financial institutional ownerships. DNFI is the level of domestic non-financial institutional ownerships. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively.
TABLE 10 A summary of the results of the system generalized method of moments (GMM) Arellano-Bond system estimations examining the relationships between the governance mechanisms (board compositions and ownership structures) and the levels of impaired loans (ImpLoanR).

| Model | (1) | Model | (2) | Model | (3) | Model | (4) |
|-------|-----|-------|-----|-------|-----|-------|-----|
| Intercept | 2.575 | Intercept | 1.907 | Intercept | 2.055 | Intercept | 1.152 |
| (1.81) |     | (1.89) |     | (1.87) |     | (1.07) |     |
| L.ImpLoanR | 0.901*** | L.ImpLoanR | 0.922*** | L.ImpLoanR | 0.833*** | L.ImpLoanR | 0.901*** |
| (13.95) |     | (12.28) |     | (12.89) |     | (14.80) |     |
| L.ExDir | 1.455 | L.ExDir_O | 0.516 | L.DFI | 0.00261 | L.DNFI | -0.0145 |
| (1.52) |     | (1.33) |     | (0.87) |     | (-0.69) |     |
| L.ExDir_T | -0.0226 | L.InDir_O | 0.362 | L.FFI | 0.00112 | L.FNFI | 0.0594* |
| (-0.51) |     | (1.24) |     | (0.08) |     | (2.20) |     |
| L.ExDir*C | 0.236 | L.ExDir_O*C | 49.19 | L.DFI*C | 0.0886* | L.DNFI*C | 0.205 |
| (0.13) |     | (1.19) |     | (1.97) |     | (0.77) |     |
| L.ExDir_T*C | 0.265 | L.InDir_O*C | 21.79 | L.FFI*C | 0.00749 | L.FNFI*C | 0.122 |
| (0.80) |     | (1.15) |     | (0.37) |     | (0.77) |     |
| L.TCapR | -0.0586 | L.TCapR | -0.0487 | L.TCapR | -0.0220 | L.TCapR | -0.0326 |
| (-1.35) |     | (-1.08) |     | (-0.48) |     | (-0.79) |     |
| L.TobinQ | 6.538 | L.TobinQ | 5.882 | L.TobinQ | 1.795 | L.TobinQ | 7.294 |
| (1.32) |     | (1.65) |     | (0.37) |     | (1.38) |     |
| TCapR | -0.186 | TCapR | -0.141 | TCapR | -0.138 | TCapR | -0.0768 |
| (-1.58) |     | (-1.49) |     | (-1.64) |     | (-0.78) |     |
| L.Post2008 | 0.208 | L.Post2008 | 0.234 | L.Post2008 | 0.160 | L.Post2008 | 0.115 |
| (1.16) |     | (1.40) |     | (0.96) |     | (0.90) |     |
| L.GDP | -0.0183 | L.GDP | -0.0166 | L.GDP | -0.00653 | L.GDP | -0.0218 |
| (-1.55) |     | (-1.55) |     | (-0.70) |     | (-1.65) |     |
**Table 10** A summary of the results of the system generalized method of moments (GMM) Arellano-Bond system estimations examining the relationships between the governance mechanisms (board compositions and ownership structures) and the levels of impaired loans (ImpLoanR). (contd.)

| No. of Obs. |   | No. of Obs. |   | No. of Obs. |   | No. of Obs. |   |
|------------|---|-------------|---|-------------|---|-------------|---|
| Sargan test: p-value | 0.185 | Sargan test: p-value | 0.182 | Sargan test: p-value | 0.155 | Sargan test: p-value | 0.137 |
| AR(1) test: p-value | 0.000 | AR(1) test: p-value | 0.000 | AR(1) test: p-value | 0.000 | AR(1) test: p-value | 0.000 |
| AR(2) test: p-value | 0.292 | AR(2) test: p-value | 0.458 | AR(2) test: p-value | 0.234 | AR(2) test: p-value | 0.666 |

Notes: This table reports the summary statistics of the regression variables, which consists of 582 bank-year observations from the UK and Japan. L indicates that the levels of independent variables have a one-year lag. C is a categorical variable in which 0 equals Japan-listed banks, and 1 equals UK-listed banks. ExDir is the ratio of external directors to the total number of board members. ExDir_T is the average tenure of external directors on boards. ExDir_O is the amount of external director share ownerships. InDir_O is the amount of internal director share ownerships. FFI is the level of foreign financial institutional ownerships. FNFI is the level of foreign non-financial institutional ownerships. DFI is the level of domestic financial institutional ownerships. DNFI is the level of domestic non-financial institutional ownerships. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively.
the conventional theories – UK-listed banks’ internal and external corporate governance controls appear to be weak, and Japan-listed banks’ external corporate governance controls appear to be weak but their internal corporate governance controls may be undetermined.

Therefore, in bank governance research, agency theory, first, may be insufficient as researchers are likely to consider the implications of the institutional frameworks of the countries being studied. Second, agency theory favours shareholder supremacy, which encourages greater risk-taking. These observations are in line with earlier research. Based on banks’ performance during the 2008 Financial Crisis, researchers have observed that banks, where management was more insulated from shareholder demands, or which had less institutional investors, performed better. Other researchers have suggested that the agency model, when applied to banks, provide the wrong incentives, which can even worsen the situation.

The current legal framework tends to favour shareholders, resulting in managers considering the interests of their shareholders when choosing management and risk strategies for their companies. The policy implications of this study indicate that regulators and policymakers may need to consider further improvements towards balancing the interests of the shareholders with the stakeholders under the Company Law and corporate governance codes or guidelines. Earlier research has shown that the current approach may not work. One reason for this is the amount of foreign ownership, which is supported by this research, because, as suggested by other authors, they may simply not be subject to the relevant codes. Furthermore, other authors suggest there is clear discrepancy between the interest of activist owners, and the passive majority. Perhaps the engagement of investors should get a more compulsory status, although one would have to be certain they will retain the long-term interests rather than the short-term view taken by current activist owners.

As a final word of caution, it should be noted that risk-taking does not necessarily equate to excessive risk taking; it may well be that increased risk taking is well within the defined risk appetite and policy as defined by the bank.

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103 Ferreira, Kershaw, Kirchmaier, and Schuster (n 81).
104 Kokkinis (n 40).
105 B. Segrestin and A. Hatchuel, “Beyond Agency Theory, a Post-crisis View of Corporate Law”, British Journal of Management 22 (2011) 484–499.
106 Kokkinis (n 70); and Kokkinis (n 40).
107 Cheffins (n 31); and The Kay Review of UK Equity Markets and Long-Term Decision Making, (n 32).
108 Bainbridge (n 30).