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Market Discipline and EU Corporate Governance Reform in the Banking Sector: Merits, Fallacies, and Cognitive Boundaries

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Much contemporary analysis has concluded that the recent financial crisis and bank failures were, inter alia, the result of a breakdown in corporate governance regimes and market discipline. New regulations strongly advocate market-based remedies such as tighter investor monitoring and greater control over executives' remuneration, in order to safeguard financial stability. We argue that this approach largely ignores three very important aspects of modern financial markets that cannot be constrained through market discipline: (a) socio-psychological phenomena; (b) the epistemological properties of financial market innovation; and (c) the inherent inability of market participants to predict uncertain risk correlations. Therefore, this article argues that excessive EU focus on corporate governance reforms, as a means to improve financial stability, detracts attention from much more significant concerns, chiefly the issue of optimal bank structure.

I. INTRODUCTION

Building the different blocs of corporate governance over several decades has been a painstaking exercise aimed at curbing the privileges of insider classes and fostering shareholder democracy. Effective corporate governance has been placed at the heart of capitalist growth initiatives and is rightly regarded as a key component of a free enterprise economy that wishes to retain its legitimacy in a liberal democracy. As a result, every time that the economy experiences some form of corporate collapse, policy-makers and the industry try to upgrade their corporate governance toolkit and legislate for ever-higher standards of governance.¹

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¹ A characteristic example, in this context, is the enactment of the US Sarbanes-Oxley Act in the aftermath of the Enron and WorldCom scandals, which were a combination of insider abuses and accounting frauds.

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Thus, it is not surprising that in the aftermath of the Global Financial Crisis (“GFC”) most commentators’ and policymakers’ analysis focused on actual and assumed corporate governance failures within big banks. According to this narrative, if reckless bankers were reigned in, and market discipline was restored, banks would be buttressed against the possibility of failure. A flurry of legislation and legislative proposals has followed, placing sound corporate governance at the heart of regulatory reforms trying to restore health to the banking sector.

While some of these initiatives constitute a marked improvement over the shambolic structures governing banks in the recent past, they are bound to disappoint in terms of effectiveness. The reason for that is not a lack of good intentions on the part of the champions of corporate governance reform, but a number of fallacies in the analysis of the standard narrative. For example, it may be plausibly argued that no corporate governance model can work when the principal actors face severe limitations in their knowledge and understanding of risk due to objective factors, such as complexity, or lack of transparency in financial transactions. The interconnected and opaque structure of banks, the increasing complexity of their operations, and the short-termism of the financial sector – that is subject more than other sectors to fads, herding, and irrational mood swings – place insurmountable obstacles both to a board’s capacity to run the bank and shareholders’ ability to monitor them.² These limitations are compounded by more general cognitive boundaries facing shareholders and directors: so-called ‘bounded rationality’.³ Lender-of-last-resort facilities and the strong possibility of a public rescue further blunt the disciplining power of the market

² For a discussion of the limitations of market discipline in the banking sector see E. Avgouleas, 'Breaking Up Mega-Banks: A New Regulatory Model for the Separation of Commercial Banking from Investment Banking' in *Financial Services at the Crossroads - Implications for Supervision, Institutional Design and Trade*, eds. P. Delimatsis and N. Helger (2011) 179.

³ Bounded rationality refers to the limited ability of humans to process information because of their limited computational ability and flawed memory. See H. A. Simon, 'A Behavioral Model of Rational Choice' (1955) 69 *Q. J. of Economics* 99. For an analysis of these biases and the contexts in which they tend to appear and decisions that they influence, even when decision makers act under conditions of intense competition and are sophisticated actors, see E. Avgouleas, 'The Global Financial Crisis and the Disclosure Paradigm in European Financial Regulation: The Case for Reform' (2009) 6 *European Company and Financial Law Rev.* 440; E. Avgouleas, 'Reforming Investor Protection Regulation: The Impact of Cognitive Biases' in *Essays in the Law and Economics of Regulation in Honour of Anthony Ogus*, ed. M. Faure & F. Stephen (2008) 143.

and provide shareholders and management with a partial shield from business risk, providing incentives for excessive risk-taking.⁴

Accordingly, this article argues that a second and more powerful narrative should be added to the standard narrative on which EU legislation and recommendations addressing problems of incentive re-alignment are based. The article suggests that bank size, structure and complexity were as much responsible for insider rent-seeking and inadequate shareholder/stakeholder monitoring. Therefore, EU and international initiatives to improve bank corporate governance may not prove effective in addressing the incentives issue, unless the structure of the banking sector is itself reformed and banks become smaller, less interconnected, and easier to manage.

This article is in five sections. The first is the present introduction. The second section will discuss EU legislation, proposals and other initiatives to revamp corporate governance in the banking sector. The third section will cast doubt on the central thesis of these reforms, namely that corporate governance in big banks can be effective and protect against the risk of systemic failure. The fourth section discusses the potential of structural reform to improve bank governance. The fifth section concludes.

II. CORPORATE GOVERNANCE REFORM IN THE EU BANKING SECTOR

1. The Corporate Governance Failure Rationale

The near collapse of many European banks, resulting from a number of disastrous corporate and regulatory policies – as well as abysmal board decisions and management control failures⁵ – brought into sharp focus corporate governance in the banking sector. Subsequently, a widespread belief that bank corporate governance was in a dismal state in the pre-GFC era has taken hold in academic and policy-

⁴ F. J. Fabozzi, F. Modigliani and M. G. Ferri, *Foundations of Financial Markets and Institutions* (2007, 4th edn.).

⁵ For example, see the damning report of the Financial Services Authority into the RBS collapse: FSA, *The failure of the Royal Bank of Scotland: Financial Services Authority Board Report* (December 2011) at 220-250, available at <<http://www.fsa.gov.uk/static/pubs/other/rbs.pdf>>.

making circles,⁶ and these views have sketched a clear roadmap towards a safer financial sector. Capital, liquidity, and other regulatory reforms would be augmented by higher governance standards and altered compensation structures in order to enhance board capacity, shareholder monitoring, and eliminate perverse incentives.

During the initial phases of the GFC, attention on bank corporate governance failures was minimal.⁷ However, as marked failures of risk management and control were revealed, regulatory focus quickly altered. The de Larosiere Report into the financial supervision of European banks conceded that corporate governance was “one of the most important failures of the recent crisis”⁸, as corporate governance systems within financial institutions provided weak incentives for consideration of long-term sustainable investment policies and neglected the interests of bank stakeholders such as government sponsored deposit-guarantors. In the UK, an independent review of corporate governance at banks was established⁹ by the British Parliament, and the FSA acknowledged that: “poor governance [whilst]... only one of many factors contributing to the crisis ... has widely been acknowledged as an important one.”¹⁰

Moreover, the debate on bankers’ remuneration has captured the attention of both the public and policymakers – and, for very good reasons. A small group of insiders was rewarded handsomely for shifting the risk of their actions to society at large. Professor Bebchuk, and others, have argued strongly that remuneration structures in banks were strewn with perverse incentives, which fostered short-

⁶ The potential drawbacks to this view are succinctly articulated by Cheffins, who has urged caution in the face of wholesale reform to corporate governance. See B. R. Cheffins, ‘Did Corporate Governance “Fail” during the 2008 Stock Market Meltdown? The Case of the S&P 500’ (2009) 65 *Business Law* 1.

⁷ As noted by O’ Mülberty: “...numerous reports, documents and statements published in 2008 dealing with the causes and consequences of the financial crisis do not even mention the corporate governance of banks. This holds true, *inter alia*, for the reports prepared by the (US) President’s Working Group on Financial Markets, the Financial Stability Board (FSB...) the IMF, the Institute of International Finance (IIF), the G-20 Study Group, the Declaration of the Washington Summit of the G-20 proposing the “Action Plan to implement Principles for Reform”, and the German Council of Economic Experts.” See P. O’ Mülberty, ‘Corporate Governance of Banks after the Financial Crisis - Theory, Evidence, Reforms’, ECGI Working Paper 130/2009 (April 2010), at 7-8 (notes omitted).

⁸ The de Larosiere Group, *The High Level Group on Financial Supervision in the EU* (February 2009), at 29.

⁹ D. Walker, *A review of corporate governance in UK banks and other financial industry entities – Final recommendations* (November 2009) available at <http://www.hm-treasury.gov.uk/walker_review_information.htm>.

¹⁰ Financial Services Authority, *Effective Corporate Governance* (Consultation Paper 10/3, January 2010) available at <<http://www.fsa.gov.uk/pubs/cp/cp103.pdf>>.

termism and excessive risk taking¹¹ and that, by implication, they were directly causative of the GFC and ensuing bank failures. Accordingly, regulation of executive remuneration¹² came to be seen as the most effective path to restoring bank health and the stability of the financial system.

2. *The State of Reform in the EU*

(a) *The Drive to Reform Bank Corporate Governance*

Following generalized clamour about corporate governance failures in the banking sector, the EC Commission released a Green Paper¹³ on corporate governance in financial institutions in June 2010.¹⁴ The Green Paper noted that: “although corporate governance did not directly cause the crisis, the lack of effective control mechanisms contributed significantly to excessive risk-taking on the part of financial institutions.”¹⁵ In summary, it highlighted the following functional failures of corporate governance in financial institutions prior to the GFC:

- (i) Deficient board oversight and control, driven particularly by a failure to challenge executives, and a lack of expertise amongst non-executive directors. This encompassed weak risk management, attributable to a failure of boards and senior management to comprehend the risks associated with financial products that were traded by institutions (leading to collective over-reliance on ratings), and insufficient consideration of aggregate risks that had been assumed across firms.¹⁶
- (ii) Insufficient shareholder control over risk-taking, derived from a mismatch between the interests of shareholders and the long-term interests of financial institutions. Structural obstacles to effective engagement between shareholders and management including monitoring costs and voting restrictions, and the limited holding periods of many bank shareholders exacerbated these issues;¹⁷ and

¹¹ L. A. Bebchuk, A. Cohen and H. Spamann, ‘The Wages of Failure: Executive Compensation at Bear Stearns and Lehman 2000–2008’ (2010) 27 *Yale J. on Regulation* 257.

¹² L. A. Bebchuk and H. Spamann, ‘Regulating Bankers’ Pay’ (2010) 98 *Georgetown Law J.* 247.

¹³ See Commission, *Green Paper on The EU Corporate Governance Framework* (COM(2011) 164).

¹⁴ EC Commission, *Green Paper on Corporate Governance in Financial Institutions and Remuneration Policies* (COM(2010) 284).

¹⁵ *id.*, at 2.

¹⁶ *id.*, 3.3.

¹⁷ *id.*, 3.5.

- (iii) Supervisory failure to effectively monitor bank governance, a fragmentation of regulatory competence, and potential conflicts of interests between financial institutions and their auditors.¹⁸

In response to these findings, the Commission recommended in its Green Paper¹⁹ that the following measures be adopted:

- (i) Increased independence and skill amongst board members at EU financial institutions to ensure effective monitoring of management. To further this, the creation of a specialist risk supervision committee, within the board of directors and with enhanced status for the chief risk officer, would assist board members in evaluating business strategies;²⁰
- (ii) A standardised shareholder ‘stewardship code’ at EU banks, on a ‘comply or explain’ basis, together with heightened transparency on voting policies. Increased monitoring of both the incentives and conflicts of interests of asset managers ought to be implemented.²¹ Further, certain corporate policies – including the remuneration of board members and senior managers – should be subject to a binding shareholder vote.²²
- (iii) Increased national supervisory resources and strengthened pan-European corporate governance oversight and co-operation amongst supervisory colleges. Governance supervisors ought to be given a duty to ensure the correct functioning and effectiveness of boards of directors, and to periodically review the risk management functions within financial institutions.²³

¹⁸ *id.*, 3.6-3.7.

¹⁹ Commission Staff Working Paper, *Corporate Governance in Financial Institutions: Lessons to be drawn from the current financial crisis, best practices* (COM(2010) 669).

²⁰ EC Commission Green Paper, *op. cit.*, n. 13, 5.1-5.2.

²¹ *id.* 5.5. This could be accomplished via an institutional investor discussion platform and implemented via changes to the Transparency Directive (Directive 2004/109/EC of the European Parliament and of the Council of 15 December 2004 on the harmonisation of transparency requirements in relation to information about issuers whose securities are admitted to trading on a regulated market and amending Directive 2001/34/EC, OJ (L 390)).

²² Commission Staff Working Paper, *op. cit.*, n. 19, 4.1.6. These powers are already provided for by the Shareholder Rights Directive (Directive 2007/36/EC of the European Parliament and of the Council of 11 July 2007 on the exercise of certain rights of shareholders in listed companies).

²³ EC Commission Green Paper, *op. cit.*, n. 13, 5.4.

(b) Regulating Executive Remuneration

The EC Commission has issued several Recommendations²⁴ in relation to executive remuneration in financial institutions since 2008.²⁵ Many of the provisions of these Recommendations were based on work undertaken by the Financial Stability Board.²⁶

The Commission Recommendation on Remuneration Policies in the Financial Sector²⁷ ('EC Remuneration Recommendation') invited Member States to adopt measures in four major areas: (1) structure of the remuneration policy; (2) governance; (3) disclosure; and (4) supervision by competent authorities.²⁸ Its provisions were designed to apply to staff whose "professional activities have a material impact on the risk profile of the financial undertaking."²⁹ According to the EU Commission, remuneration awards ought to be re-calibrated to align the "personal objectives of staff members with the long-term interests of the financial undertaking concerned".³⁰ Also, the assessment period of performance on which remuneration is based must be between three to five years.³¹ Clawback provisions should be used where remuneration is awarded on the basis of financial performance which later transpires to have been based on the adoption of excessive risk.³² Deferral of bonus payments should be utilized to ensure that any tail-risk in a financial institution's investment strategy has the chance to be winnowed out.³³ To achieve this, the "actual payment of performance-based components of remuneration [ought to be] spread over the business cycle of the company."³⁴

To enforce the Recommendation, the EC Commission implemented a new Capital Requirements Directive (Directive 2010/76/EU ("CRD III"))³⁵ which subjects

²⁴ Commission Recommendation on Remuneration Policies in the Financial Services Sector, 2009/384/EC, 2009 O.J. (L 120), at 22.

²⁵ In particular, see Commission Recommendation of 29 April 2009 C(2009) 3177 complementing Recommendations 2004/913/EC and 2005/162/EC as regards the regime for the remuneration of directors of listed companies.

²⁶ Financial Stability Board, *Principles for Sound Compensation Practices: Implementation Standards* (September 2009).

²⁷ Commission Recommendation on Remuneration, op. cit., n. 24.

²⁸ *id.*, 4–12, at 25–27.

²⁹ *id.*, para. 13.

³⁰ *id.*, para. 14.

³¹ *id.*

³² *id.*, 5.1.

³³ *id.*, 4.4.

³⁴ *id.*, 5.2.

³⁵ Directive 2010/76/EU [2010] OJ L329/3 amending the Capital Requirements Directive (Directive 2006/48/EC [2006] OJ L177/1 and Directive 2006/49/EC [2006] OJ L177/201) to recommend that capital requirements under the new Basel III framework be subject to adjustment by supervisors where

the remuneration policies of financial institutions to supervisory oversight; supervisory authorities must now monitor the implications of remuneration policies for the risk management of financial institutions. CRD III imposes a mandatory obligation for financial firms to have remuneration policies and practices that are consistent with, and promote, sound and effective risk management, and empowers supervisors to review and – where appropriate demand changes to – firm remuneration policies.

Devolution of authority to shareholders in determining executive remuneration was first recommended in the Commission’s 2004 Recommendation.³⁶ The Commission also recommended that, “Member States should ensure that the remuneration policy of a financial undertaking sets a maximum limit on the variable component.”³⁷ There have been many criticisms of the proposal to cap variable compensation; critics have contended that the issue of executive pay is one which must be considered in the traditional terms of effective incentive alignment.³⁸ These commentators regard greater market disclosure as the basis for improved efficiency in performance contracts and thereby as a solution to the principal-agent issues at financial institutions. However, as subsequent sections of this article shall note, these issues are not easily solved through market discipline.

III. IS EFFECTIVE CORPORATE GOVERNANCE OF MEGA-BANKS A REALISTIC OBJECTIVE?

1. Introductory Remarks

The authors of this article are skeptical of the ability of corporate governance reforms to achieve their declared objectives. Moreover, the authors remain fearful that much

remuneration policies appear to encourage excessive risk-taking: “The proposed amendments will impose a binding obligation on credit institutions and investment firms to have remuneration policies that are consistent with effective risk management.” See the *Accompanying Document to the Proposal for a Directive of the European Parliament and of the Council Amending Capital Requirements Directive on trading book, securitization issues and remuneration policies* (COM(2009) 362 final) (SEC(2009) 974), at 5.

³⁶ Commission Recommendation 2004/913/EC L385/55.

³⁷ Commission Recommendation on Remuneration, op. cit., n. 24, 4.1. It was clear that most EU members would ignore that plea, and EU-wide bonus caps limiting variable compensation to 100 percent of base salary have therefore been introduced, to take effect in 2014. See G. Ferrarini et al., ‘Executive Remuneration in Crisis: A Critical Assessment of Reforms in Europe’ (2010) 10 *J. of Corporate Law Studies* 73. For discussion, see L. Armitstead, ‘EU vote clears way for bank bonus cap’ *Daily Telegraph*, 16th April 2013.

³⁸ Ferrarini et al., id., at 111.

of the present focus on corporate governance obfuscates the need for regulatory reform of long-term re-structuring of the banking sector, at the expense of financial stability. It is therefore appropriate to disaggregate the claims made by those who place corporate governance at the heart of the reform agenda at the expense of other probably more effective measures, such as structural reform. Accordingly, as a first step in our analysis it is worth considering whether banks are different than other corporations and, if so, why?

Before the advent of the GFC it was widely acknowledged that banks might require differing corporate governance structures to non-financial corporations, for several reasons.³⁹ First, banks must have regard to the interests of several sets of stakeholders, which is often not the case in other corporations. Company management at non-financial firms usually are responsible only to shareholders and creditors. Banks however must additionally have regard to depositors, and government-appointed regulators. Secondly, banks perform critical (utility) functions in modern economies and the disruption of their operations can have far reaching effects. They are central to the payments and clearing systems and control the savings and investments of retail customers and businesses. Their actions therefore affect third parties and losses from financial institutions may quickly spill over into other areas of the economy. Thirdly, banks use high levels of leverage, which are not generally present in non-financial firms. They are therefore particularly vulnerable to liquidity shocks and losses of confidence, which require the provision of (frequently state-backed) deposit-guarantee schemes and a central bank-operated lender of last resort facility.

Moreover, two additional features of banks make them special for the purposes of governance. Banks tend to present much lower transparency of business and income lines, and of contractual relationships and risk exposures, than non-financial companies. In addition, bank size and greater government regulation can make bank management and shareholders rather complacent.⁴⁰ We explain in the next paragraphs how bank size, the particular nature of banks as businesses, and

³⁹ For extended discussion of these factors, see E. Avgouleas, *Governance of Global Financial Markets: The Law, the Economics, the Politics* (2012), ch. 3.

⁴⁰ G. Caprio Jnr. and R. Levine, 'Corporate governance in finance: Concepts and international observations' in *Financial Sector Governance: The Roles of the Public and Private Sectors*, eds R. E. Litan, M. Pomerleano and V. Sundararajan (2002) 17.

government regulations, such as deposit-guarantee schemes, may place considerable restrictions to the disciplining power of the market over big banks.⁴¹

2. Objective Limits to Market Discipline

Market discipline and its processes are understood (on the basis of intuition rather than precise definition)⁴² to include discipline imposed by shareholders and the market for corporate control on bank management and discipline imposed by subordinated short-term creditors, as well as other creditors,⁴³ by bank customers, and even highly mobile groups of bank employees.⁴⁴

Most of the above are assumed to have the right incentives to monitor bank behaviour in order to avoid being caught in a bank failure and a messy winding up that would bring them large losses. The most important mechanism to facilitate market discipline is thought to be disclosure of accurate information to the market, and the market's ability to process it properly. Further, the mix of debt and equity chosen by a bank is regarded as a strong determinant of the effectiveness of market discipline.⁴⁵ Yet, market discipline works only if market actors have sufficient incentives to fulfill their monitoring role and there are no impediments to information signals.⁴⁶

However, at the individual institution level, a number of perverse incentives substantially weaken the strength of market discipline. The first limitation to market discipline is placed by the opaque nature of the financial network, which generates chains of (frequently invisible) claims, increasing institutions' exposure to each other, and which create very strong ties of mutual economic dependence (interconnectedness). Moreover, although interconnectedness is an essential element of the financial network, it may also increase its vulnerability, especially because bank collapses are highly contagious and they can evolve, aided by market panic, into

⁴¹ See Avgouleas, *op. cit.*, n. 2, at 190-191.

⁴² D. T. Llewellyn, 'Inside the "Black Box" of Market Discipline' (2005) 25 *Economic Affairs* 41.

⁴³ C. W. Calomiris and C. M. Kahn, 'The Role of Demandable Debt in Structuring Optimal Banking Arrangements' (1991) 81 *Am. Economic Rev.* 497; and for a more realistic approach, see C. W. Calomiris, 'Building an Incentive- Compatible Safety Net' (1999) 23 *J. of Banking and Finance* 1499.

⁴⁴ Llewellyn, *op. cit.*, n. 42, at 189-193.

⁴⁵ A. B. Ashcraft, 'Does the Market Discipline Banks? New Evidence from the Regulatory Capital Mix', FRB of New York Staff Report No. 244 (March 2006) available at <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=14901805>.

⁴⁶ M. F. Hellwig, 'Market Discipline, Information Processing and Corporate Governance', Max Planck Institute for Research on Collective Goods, Preprint No. 2005/19 (October 2005).

full-scale financial cascades threatening the stability of the financial system.⁴⁷ Thus, interconnectedness increases the possibility of a public bailout.

Since interconnectedness is a clear obstacle to the resolvability of financial institutions, it amounts to a perverse incentive. Namely, it gives bank management a strong incentive to grow the balance sheet, since the larger the institution becomes and the more interconnected, the more likely it is that its failure will also drag down other interconnected institutions, necessitating a bailout.⁴⁸ However, in many cases, growing unnecessarily the bank's balance sheet may be a poor business decision which also makes the bank more fragile, since such expansion is normally based on increased leverage.⁴⁹ This is also a convincing explanation of the 1990s drive towards conglomeration in the financial sector, which has resulted in today's mega-banks. Size has not just shielded banks from the risk of failure⁵⁰ but also has ensured cheaper funding⁵¹ for years by creditors who charged banks interest rates lower than their risky business would warrant.⁵²

Opacity and interconnectedness also place strong obstacles to reforms aimed at enhancing market discipline through resolution regimes that lead to a wipe out of shareholders' equity, or resolution tools – such as the much discussed bail-in

⁴⁷ A. Lo, 'Regulatory Reform in the Wake of the Financial Crisis of 2007–2008' (2009) 1 *J. of Financial Economic Policy* 5, 23; A. G. Haldane, 'Rethinking the Financial Network', speech delivered at the Financial Student Association, Amsterdam (April 2009), at 12–13.

⁴⁸ The Geneva Report 2009 calls this risk the 'interconnectedness spillover'. See M. K. Brunnermeier, C. A. E. Goodhart et al., 'The Fundamental Principles of Financial Regulation', *Geneva Reports on the World Economy* 11 (January 2009), at 20–21.

⁴⁹ D. W. Diamond and R. G. Rajan, 'Liquidity Risk, Liquidity Creation and Financial Fragility' (2001) 109 *J. of Political Economy* 287.

⁵⁰ "Why were banks willing to take risks that proved so damaging both to themselves and the rest of the economy? One of the key reasons – mentioned by market participants in conversations before the crisis hit – is that the incentives to manage risk and to increase leverage were distorted by this implicit support or guarantee provided by government to creditors of banks that were seen as "too important to fail". Such banks could raise funding more cheaply and expand faster than other institutions. They had less incentive than others to guard against tail risk. Banks and their creditors knew that if they were sufficiently important to the economy or the rest of the financial system, and things went wrong, the government would always stand behind them. And they were right." Speech by M. King (Governor of the Bank of England) to Scottish Business Associations, 20 Oct. 2009, at 3, available at <www.bankofengland.co.uk/publications/speeches/2009/speech406.pdf>.

⁵¹ A. R. Admati, et al., 'Fallacies, Irrelevant Facts and Myths in the Discussion of Capital Regulation: Why Bank Equity Is Not Expensive' Rock Center for Corporate Governance at Stanford University Working Paper No. 86 (September 2010).

⁵² For example, evidence from the bond markets has shown that bond markets were taking a softer approach to big banks, assuming that they were too big to fail, or they were simply too complex in their structure for the bond market to understand and price effectively. See D. P. Morgan and K. J. Stiroh, 'Bond Market Discipline of Banks: Is the Market Tough Enough?' Federal Reserve Board of New York Staff Report No. 95 (December 1999).

instruments – which convert bank debt (including uninsured deposits) to equity.⁵³ Even if we assume that the possibility of a public bailout becomes much more remote in view of these reforms, thereby eliminating moral hazard, market monitoring by means of shareholder and creditor monitoring would still be insufficient to prevent bank failures and safeguard systemic stability, for three reasons. As mentioned earlier, there is widespread evidence of systematic and often deliberate complexity in the financial sector.⁵⁴ The financial network is so complex and opaque⁵⁵ that it would be absurd to require shareholders to be able to possess the resources and skill to effectively monitor bank business and discipline boards.⁵⁶ In today's markets, there is certainly no private institution that potentially has the ability, resources and access to information to be able to conduct a risk analysis of all financial institutions, regulated and unregulated.

Another reason relates to the nature of banking business. Due to banks' susceptibility to runs, for business competition reasons, or because of relevant confidentiality agreements, certain crucial data on a bank's business and the performance or profitability of certain business relationships will never be made public on a disaggregated basis. As a result, the effectiveness of monitoring of individual institutions by the market relying on publicly available data becomes less effective, and certainly less important than monitoring by regulators who have access to confidential data.

Finally, there is the flawed concept of market (ir)rationality leading to equilibrium outcomes and systemic stability. First, the rational behaviour of one market actor may not be used as a reliable benchmark to predict the behaviour of all other market actors, and thus of the financial system. Moreover, there is the potential

⁵³ See for instance the much lauded EU Commission proposal for a Directive establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directives 77/91/EEC and 82/891/EC, Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC and 2011/35/EC and Regulation (EU) No 1093/2010, COM(2012) 280/3.

⁵⁴ Complexity theory is an interdisciplinary framework used to understand complex systems. It holds that while some systems are too complex to accurately predict their future, they do, nevertheless, exhibit identifiable underlying patterns that can help individuals cope with those systems' complex workings. See, in general, H. A. Simon, 'The Architecture of Complexity' (1962) 106 *Proceedings of the Am. Philosophical Society* 467.

⁵⁵ S. L. Schwarcz, 'Regulating Complexity in Financial Markets' (2009) 87 *Washington University Law Rev.* 211.

⁵⁶ M. F. Hellwig, 'Systemic Risk in the Financial Sector: An Analysis of the Subprime-Mortgage Financial Crisis', Max Planck Institute for Research on Collective Goods Bonn 2008/43 (November 2008), at 59-60.

for rational behaviour to lead to disequilibrium outcomes.⁵⁷ Consider the case of a bank that suffers large losses on some of its loans. The prudent choice for this bank is to sell assets and also reduce its lending activities in line with its smaller capital base. If the bank in question is large, or the losses affect several banks at the same time, the individual bank's attempt to rebuild its capital base will drain liquidity from the system and might even result in panic sales of assets or discounts (fire-sales). In addition, less lending by some banks will translate into less funding to other banks which, if other sources of liquidity are not found, might be forced to cut lending levels. Credit restriction will, of course, have an impact on economic growth, lowering output and leading to further decreases in bank asset values, amplifying the deleveraging process.⁵⁸

3. Shareholders as monitors in the banking Sector: Subjective Limitations

(a) Board Myopia

Shareholders' agents in the corporation and supposed 'implementers' of their will are corporate boards, since shareholders have no direct directional power over key corporate executives. Yet the cognitive limitations of corporate boards, when measuring risk, especially in an industry as complex as banking, may not be underestimated.⁵⁹ These range from bounded knowledge and understanding of their business to 'groupthink'.⁶⁰ It has been postulated that "the tendency of behavioral biases to interfere with accurate thought and analysis within complex organizations", thus interfering with the acquisition, analysis, communication, and implementation of information within an organization and between an organization and external parties, constitutes intellectual hazard that ought to be seen as a systemic problem in financial markets.⁶¹

⁵⁷ Geneva Report, op. cit. n. 48, at 20-40.

⁵⁸ See M. K. Brunnermeier and L. H. Pedersen, 'Market Liquidity and Funding Liquidity' (2009) 22 *Rev. of Financial Studies* 2201.

⁵⁹ In fact, it has been suggested that these should explicitly be taken into account by the bank corporate governance framework. See J. Dermine, 'Bank Corporate Governance, Beyond the Global Banking Crisis', INSEAD Working Paper 2011/33/FIN (March 2011) available at <<http://www.insead.edu/facultyresearch/research/doc.cfm?did=47338>>.

⁶⁰ For a good analysis of these biases see D. C. Langevoort, 'Behavioral Approaches to Corporate Law' in *Research Handbook on the Economics of Corporate Law*, ed. C. A. Hill and B. H. McDonnell (2012) 442.

⁶¹ See G. P. Miller and G. Rosenfeld, 'Intellectual Hazard: How Conceptual Biases in Complex Organizations Contributed to the Global Financial Crisis' (2010) 33 *Harvard J. of Law & Public Policy* 807, at 808.

Arguably, where a CEO does not recognize that, for instance, an asset bubble has formed, his/her compensation arrangements cannot possibly affect the assumption of risk taken by his bank. On the other hand, where a CEO does recognize that a bubble has formed in credit markets, professional and career concerns driven by pressure from (boundedly-rational) shareholders, and market short-termism, may cause him to remain in (or join) a particular market; to herd. This decision will be driven by two connected – and rational – factors: firstly, by the knowledge that if the CEO does not order his bank to enter an upwardly moving market, he might be replaced, as peers gain from the markets in question; and, secondly, by the concerted hope that his/her suspicions concerning the bubble in question were ill-founded. Thus, even where it can be shown that there is no overt assumption of risk linked to performance-based compensation awards, the net result will not differ. Naturally, this finding places a limitation to the power of Professor Bebchuk's thesis on the central role of perverse compensation structures in bank failures.⁶²

(b) Shareholder Short-termism, myopia, and herding

The monitoring problems posed by bounded rationality and cognitive limitations are compounded by the limited investment horizons of most institutional investors.⁶³ First, institutional investors have very few incentives to engineer takeover bids for firms or to remove poorly performing management.⁶⁴ This places an obvious limitation to the disciplining power of the much-vaunted market for corporate control. Investment funds are charged with procuring the maximum return on investment for their beneficiaries and will simply sell their shareholdings rather than engage directly with company management.⁶⁵ Fund managers are, themselves, in competition with peer fund managers and the performance of their funds is normally benchmarked.⁶⁶ They will therefore have very few incentives to actively invoke their ability to discipline management or to launch takeover action and would rather exit a firm than

⁶² Bebchuk et al., *op. cit.*, n. 11.

⁶³ J. C. Coffee Jr., 'Liquidity versus Control: The Institutional Investor as Corporate Monitor' (1991) 91 *Columbia Law Rev.* 1277; R. J. Gilson and R. Kraakman, 'Reinventing the Outside Director: An Agenda for Institutional Investors' (1991) 43 *Stanford Law Rev.* 863; B. S. Black, 'Shareholder Passivity Re-examined' (1990) 89 *Michigan Law Rev.* 520.

⁶⁴ G. Jackson, 'A New Financial Capitalism? Explaining the persistence of voice over exit in contemporary corporate governance' (2008) 5 *European Management Rev.* 23.

⁶⁵ E. F. Fama, 'Agency Problems and the Theory of the Firm' (1980) 88 *J. Political Economy* 288.

⁶⁶ J. Chevalier and G. Ellison, 'Career Concerns Of Mutual Fund Managers' (1999) 114 *Q. J. of Economics* 389.

attempt to restructure its governance. In addition, in the UK and the US, large investors typically hold their shares for an average of just seven months, producing a relatively short effective time horizon for most institutional investors. This compares with an average holding period of four years 30 years ago, and eight years 70 years ago.⁶⁷

In fact, the assumption of greater short-term risks is a by-product of higher institutional investment: “compensation and risk-taking are not related to governance variables but co-vary with ownership by institutional investors who tend to have short-termist preferences and the power to influence firm management policies.”⁶⁸ Therefore, powerful shareholders will often desire managers who assume risk as opposed to more conservative executives: “[S]hareholders prefer excessive risk taking. So they may have an interest in pay arrangements that encourage risk-taking too much.”⁶⁹ Many large shareholders will therefore encourage a focus on the short-term and certainly cannot be expected to provide a source of extra discipline on management.⁷⁰ Herding may be tacitly encouraged by investments which appear to provide commensurate risk-adjusted returns and regulation which requires banks to hold ‘safe’ capital.⁷¹

Of course, shareholder short-termism in banks is tempered by the knowledge that any public rescue of their company will invariably mean a dilution of the value of their shares. However, competitive pressure amongst shareholders for returns and the availability of cheap debt, in an environment of low interest rates, which allows banks to maximize leverage-fuelled balance sheet returns, can easily convert shareholders from being risk-neutral to being risk-seekers. Shareholders have strong incentives for banks to operate with high leverage.⁷² The more a bank lends the more profit it

⁶⁷ In addition, computer-driven high-frequency trading (‘HFT’) has become ubiquitous on global stock exchanges. This may crowd out long-term investors who have the capacity to engage in active monitoring. See A. G. Haldane, ‘Patience and Finance’ Speech given at Oxford China Business Forum, Beijing, China (2 September 2010) available at <www.bankofengland.co.uk/publications/Documents/speeches/2010/speech445.pdf>.

⁶⁸ I. Cheng, H. Hong and J. A. Scheinkman, ‘Yesterday’s Heroes: Compensation and Creative Risk-Taking’ NBER Working Paper 16176 (July 2010).

⁶⁹ Remarks of L. A. Bechuk, ‘Governance, Executive Compensation, and Excessive Risk in the Financial Services Industry: A Research Symposium’ Columbia Business School (27-28 March 2010), 11, available at <www4.gsb.columbia.edu/rt>.

⁷⁰ K. Froot, A. Perold and J. C. Stein, ‘Shareholder Trading Practices and Corporate Investment Horizons’ NBER Working Paper No. 3638 (March 1991).

⁷¹ J. Friedman and W. Kraus, *Engineering the Financial Crisis: Systemic Risk and the Failure of Regulation* (2011).

⁷² P. O’Mülbert, ‘Corporate Governance of Banks’ (2009) 10 *European Business Organization Law Rev.* 411.

accrues. Thus, leverage-fuelled returns remove the possibility of a fruitful dialogue between principals and agents and might even crowd out investors who could make a long-term impact on executive behaviour. There is also substantial research to suggest that shareholders may be overconfident in their ability to ride asset bubbles, and ‘get out’ before a crash.⁷³ This naturally places limits on the capacity of market discipline to reduce risk-taking. Accordingly, it is rather optimistic to expect institutional investors to act as true market monitors and rely on corporate governance mechanisms to restrain rent-seeking or to remedy the flawed uses of financial innovation.

Moreover, even if institutional investors had either the incentives – or in an extreme scenario, the obligation – to monitor bank risk, they would still have failed in those duties. First, institutional investors are anything but immune to irrational exuberance and herding.⁷⁴ As a result, as soon as good times return, all pretense of effective monitoring will be abandoned in favour of higher returns. Secondly, they are also constrained by aforesaid bounded rationality and lack of expertise. There is strong evidence that those within financial institutions, who understood the potential of financial revolution, pushed it to its limits in a rent-seeking exercise, inflating institutions’ profits and traders’ and managers’ salaries.⁷⁵ Yet outsiders, mostly institutional investors, did not delve deeper to ascertain the source of financial institutions’ strong profitability that generated the hefty dividends and market price appreciation that boosted their returns from financial stocks. They also invariably approved in general meeting-after-general meeting executive compensations plans.

In fact, it appears that ‘owner-controlled’ banks had higher profits in the years before the 2008 crisis in comparison to ‘manager-controlled’ banks, but experienced larger losses and were more likely to require governmental assistance during the GFC.⁷⁶ One study after another has shown that firms with higher institutional ownership took “greater risk in their investment policies before the onset of the crisis.”⁷⁷ Coffee rightly argues that:

⁷³ M. K. Brunnermeier and S. Nagel, ‘Hedge Funds and the Technology Bubble’ (2004) 59 *J. of Finance* 2013, at 2023.

⁷⁴ E. Avgouleas, ‘The Global Financial Crisis, Behavioural Finance and Financial Regulation: In Search of A New Orthodoxy’ (2009) 9 *J. Corporate Law Studies* 23.

⁷⁵ Avgouleas, op. cit. n. 39., ch. 3.

⁷⁶ R. Gropp and M. Köhler, ‘Bank Owners or Bank Managers: Who is Keen on Risk? Evidence from the Financial Crisis’, European Business School Research Paper No. 10-02 (February 2010), at 21.

⁷⁷ D. H. Erkens, M. Hung, and P. Matos, ‘Corporate Governance in the 2007-2008 Financial Crisis: Evidence from Financial Institutions Worldwide’ (2012) 18 *J. of Corporate Finance* 389.

Such evidence suggests that even if managers would prefer to avoid high risk and leverage, their preferences can be overridden by shareholders, and that institutional investors in particular can compel firms to accept greater risk and thus cause them to suffer worse losses in a crisis.⁷⁸

It is, therefore, worth exploring further the claim that shareholder greed was at least as culpable as executive greed for high levels of bank leverage and rapid asset expansion in the pre-GFC period, which led to a series of spectacular bank collapses.

4. Corporate governance failures and risky bank behaviour

(a) Is there a corporate governance fallacy?

Studies prior to the GFC suggested that relative to manufacturing companies, banks had larger boards and the boards were objectively more independent (a greater number of independent directors). They further found that bank boards had more sub-committees, which met fractionally more frequently, and that directors of bank boards earned considerably less than their counterparts at nonfinancial firms.⁷⁹ These findings would indicate, *prima facie*, stronger governance levels at banks relative to other companies, even before the GFC.

Bank risk-taking is positively associated with comparative shareholder power, suggesting that in jurisdictions which prioritise shareholder supremacy, bank management are encouraged to take more risk.⁸⁰ This finding tallies with research which demonstrates that owners with greater voting and cashflow powers have greater influence over managerial behaviour.⁸¹ Further, it has been demonstrated from research into the performance of banks prior to – and during – the GFC, that banks with shareholder-friendly boards of directors suffered larger equity losses.⁸² This suggests that pro-shareholder governance (an indicator of ‘better governance’) might be inadequate in preventing managerial risk-taking in financial institutions.

⁷⁸ J. C. Coffee Jr., ‘Systemic Risk after Dodd-Frank: Contingent Capital and the Need for Strategies Beyond Oversight’ (2011) 111 *Columbia Law Rev.* 795, at 811.

⁷⁹ R. Adams and H. Mehran, ‘Is Corporate Governance Different for Bank Holding Companies?’ Federal Reserve Bank of New York Working Paper (March 2003); R. Adams, ‘Governance and the Financial Crisis’ ECGI Working Paper No. 248 (April 2009).

⁸⁰ L. Laeven and R. Levine, ‘Bank governance, regulation and risk taking’ (2009) 93 *J. of Financial Economics* 259.

⁸¹ A. Shleifer and R. W. Vishny, ‘Large Shareholders and Corporate Control’ (1986) 94 *J. of Political Economy* 461.

⁸² A. Beltratti and R. M. Stulz, ‘The Credit Crisis around the Globe: Why did some Banks Perform Better?’ (2012) 105 *J. of Financial Economics* 1.

Institutional ownership does not mitigate these effects. Research conducted into European commercial banks indicates that larger institutional investor ownership of banks correlates with a greater level of risk-taking by the banks concerned.⁸³ During the GFC, firms with higher institutional ownership suffered greater losses⁸⁴ as did US banks with relatively independent boards (indicated by the amount of money requested through the US Troubled Asset Relief Program (TARP)). These findings indicate that ensuring board independence is also possibly an ineffective check on bank risk-taking behaviour.⁸⁵ Furthermore, as mentioned earlier, bank shareholders have strong incentives to encourage banks to assume more debt to expand their balance sheet and thus increase leverage. The short-term investment horizons of most shareholders will, of course, be communicated to the board, and managers may be encouraged to pursue risk-laden strategies to boost short-term profits, regardless of the structure of their incentive contracts. It would appear, therefore, that the trust accorded to large shareholders to appoint boards, which will reduce risk-taking by executives, is misplaced.

Moreover, there is a convincing line of research indicating that even properly-designed compensation contracts, which seek to align principal-agent interests, may be unlikely to work as risk-reducing mechanisms, when it comes to very senior executives. Following the GFC, many commentators (most notably Fahlenbrach and Stulz⁸⁶) contend that the incentive arrangements at large financial institutions were not responsible for bank failures or the creation of excess risk within the financial system. Senior management at financial institutions held significant equity positions and suffered substantial paper losses once stock prices began to fall sharply; indeed, banks with CEOs whose interest were most aligned with the interests of shareholders performed worst.⁸⁷

⁸³ T. Barry, L. Lepetit and A. Tarazi, 'Ownership structure and risk in publicly held and privately owned banks' (2011) 35 *J. of Banking and Finance* 1327.

⁸⁴ Erkens et al., op. cit., n. 77.

⁸⁵ R. Adams, 'Governance and the Financial Crisis' ECGI Working Paper No. 248 (April 2009); B. A. Minton, J. P. A. Taillard and R. Williamson, 'Do Independence and Financial Expertise of the Board Matter for Risk Taking and Performance?' unpublished manuscript available at <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1695489>.

⁸⁶ R. Fahlenbrach and R. M. Stulz, 'Bank CEO incentives and the credit crisis' (2011) 99 *J. of Financial Economics* 11. The value of stock and options in the 'average' bank CEO's portfolio was more than ten times the value of the CEO's salary in 2006 and CEO's on average owned 1.6% of the outstanding stock of their bank.

⁸⁷ The CEOs of Bear Stearns and Lehman Brothers incurred paper losses of \$902 million and \$931 million, respectively. See Bebchuk et al. op. cit., n. 11.

The losses that CEOs suffered in these cases imply that the excessive risks present in the system were related, in addition to rent-seeking, to errors of judgment that could not be remedied by a re-alignment of incentives. According to the aforementioned research, senior executives “managed their banks in a manner they authentically believed would benefit their shareholders.”⁸⁸ Senior bankers at institutions which failed did not willingly take massive risks, according to this view. For instance, most of the MBS products purchased by banks were low-yield, and perceived to be low-risk.⁸⁹ In addition, it seems that CEOs of firms with relatively high equity stakes in their firms assumed the same level of risk as CEOs of firms with commensurately lower equity stakes.⁹⁰ Finally, there were no significant reductions in equity positions amongst bank CEOs post-2006, which meant that they bore heavy losses in the market crash of 2008; in fact, CEO holdings of shares increased on net.⁹¹ This suggests that even as the risk profile of bank investments appeared to change for the worse, bank CEOs did little to hedge their exposure to reduce any potential wealth losses⁹² although, admittedly, they cashed in a large number of stock options, which were made highly lucrative by leverage-fuelled bank profits.

Arguably, two conclusions may be drawn from the foregoing analysis. Firstly, there is convincing evidence that a number of senior managers were simply boundedly rational. They neither understood the risks that complex securities posed to their firms, nor the extent to which correlations in certain asset markets had been established across banking institutions.⁹³ Secondly, CEOs complied with shareholder pressure to take risks across the board, irrespective of their individual equity wealth. Neither finding reveals that pay packages were not flawed, fostering excessive risk-taking (Bebchuk’s thesis). Rather, they point to shareholders’ tacit approval for doing so. As Professor Coffee suggests: “shareholders, as principals, simply found ways to

⁸⁸ J. Grundfest, ‘What’s Needed is Uncommon Wisdom’ *New York Times*, 6 October 2009, at 6.

⁸⁹ V. V. Acharya and M. Richardson, ‘Causes of the Financial Crisis’ (2009) 21 *Critical Rev.* 195.

⁹⁰ Fahlenbrach and Stulz, *op. cit.*, n. 86.

⁹¹ *id.*, at 26.

⁹² According to the sample of Fahlenbrach and Stulz, on average, CEOs lost \$31.49 million between 2006 and 31st December 2008. They argue: “Had CEOs seen the crisis coming, they could have avoided most of the losses by selling their shares. They clearly did not do so.” *id.*, at 24.

⁹³ F. Norris, ‘It May Be Outrageous But Wall Street Pay Didn’t Cause This Crisis’ *New York Times*, 30th July 2009.

contract with managers, as their agents, to accept greater risk through lucrative compensation formulas.”⁹⁴

But, again, this finding begs a further question: why were shareholders willing to do so? We argue that the main explanation for shareholder behaviour was the supra-competitive returns generated by debt-fuelled balance-sheet expansion, based on the willingness to exploit big banks’ cheap funding base.⁹⁵ The same practice, of course, meant the assumption of catastrophically high levels of leverage and risk, as bank shareholders showed no inclination to lobby for a reinforcement of big banks’ slender equity bases.

Another factor influencing shareholder attitudes must have been the relative safety provided to them by perceived notions of banks being ‘too-big-to-fail’, based on (a) bank size; and (b) bank centrality in the financial network.

(b) Financial innovation, bank size and insider rent-seeking

Prior to the GFC, market discipline was seen as the paramount tool to control excessive risk-taking by financial institutions, and regulators were anchored to the view that risk had been diversified and spread amongst the various units comprising the financial system. Yet it is now clear that homogenisation of trading behaviour and risk management techniques, interconnectedness spawned by financial innovation, and the speed of transmission of shocks from one area of the system to the next, created huge potential for contagion.⁹⁶

One of us has argued elsewhere⁹⁷ that, without discarding the multitude of other causes, the best way to understand the GFC is to see it as predominantly the result of unco-ordinated risks which came together⁹⁸ because of an economic and knowledge revolution that was badly mismanaged⁹⁹ due to ignorance, complexity and opacity, excessive rent-seeking by insiders, and an inability to predict the risk correlations that new global trading channels, opened by the financial revolution,

⁹⁴ J. C. Coffee Jr., ‘The Political Economy of Dodd-Frank: Why Financial Reform Tends to be Frustrated and Systemic Risk Perpetuated’ (2012) 97 *Cornell Law Rev.* 1019, at 1053.

⁹⁵ “Based on these expectations, shareholders of major financial institutions could rationally pressure management to accept more risk than shareholders might consider advisable at industrial corporations.” *id.*

⁹⁶ Avgouleas, *op. cit.* n. 39, at 120.

⁹⁷ *id.*, chs. 2 and 3.

⁹⁸ N. Gennaioli, A. Shleifer and R. W. Vishny, ‘Neglected Risks, Financial Innovation, and Financial Stability’ NBER Working Paper No. 16068 (June 2010).

⁹⁹ J. Lerner and P. Tufano, ‘The Consequences of Financial Innovation: A Counterfactual Research Agenda’, NBER Working Paper No. 16780 (February 2011).

would bring about under conditions of widespread panic. Arguably, certain aspects of financial innovation presented a serious breakthrough in knowledge, especially as regards the distribution/diversification of quantifiable credit and project (finance)¹⁰⁰ risk and the revolutionization of the channels available to access finance.

In the past thirty years, financial innovation, technology breakthroughs and the nearly universal abdication of national capital restriction, led to the emergence of a new and poorly understood market landscape. In this landscape, capital flows across borders have been free and have taken place at extreme velocity. These flows have often supported transactions in very complex instruments. As a result, the disparate roots and branches of the global financial system became a tightly-knit and interdependent whole, rendering financial centres, national economies and individual institutions vulnerable to the volatile winds and moods of global markets. The new market landscape also provided very little room for the untangling of the purpose of individual transactions or for assertion of counterparties' solvency.

Moreover, the enormous insider rents to which information asymmetries generated by the complexity of innovative financial instruments and techniques give rise may only be curbed by controlling size and interconnectedness. Individuals within financial institutions have strong incentives to push the boundaries of complexity and obfuscation of product structure and returns.¹⁰¹ Reducing complexity will therefore lead naturally to superior corporate governance because shareholder and director interests would be become better-aligned. Corroborating evidence for this assertion is offered in the US Senate Report on the causes of the GFC, which demonstrates vividly how big US banks forced the boundaries of reckless lending in search of ever-higher returns through the use of complex securitization.¹⁰² Even in the absence of fraud, it is obvious that big banks were taking advantage of their higher sophistication and familiarity with the complex science of structured finance and were selling products to investors (including sophisticated investors) that were known to be

¹⁰⁰ F. Allen and D. Gale, *Financial Innovation and Risk Sharing* (1994).

¹⁰¹ A characteristic example is the Goldman Sachs ABACUS scheme which became the subject of an SEC complaint that was subsequently settled. What was striking about the scheme described in the SEC's complaint (apart from the colossal conflict of interests as per the SEC's allegations) was the extreme complexity of the transactions and the (allegedly) deliberate obfuscation of their true purpose by the investment bank concerned. See 'Who's, Why's & How's of Allegations vs. Goldman' NYDailynews.com, 20 April 2010 available at <<http://www.nydailynews.com/money/2010/>>.

¹⁰² See Parts II and VI of The National Commission on the Causes of the Financial and Economic Crisis in the United States, *The Financial Crisis Inquiry Report*, Pursuant to Public Law 111-21 (January 2011).

loss-making from the outset.

IV. STRUCTURAL REFORM AS A MEANS OF IMPROVING BANK CORPORATE GOVERNANCE

This article argues that structural reform and other controls on bank size, complexity and interconnectedness to eliminate the public subsidy,¹⁰³ rather than stricter corporate governance framework and executive compensation controls, *per se*, are the keys to curbing insider rents. The great emphasis that contemporary resolution regimes place on shifting losses to shareholders from taxpayers strongly supports the point that proper regulation, rather than corporate governance reform, is crucial to a safer banking sector. By the same token, structural reform may lead to smaller and less interconnected banks and greater competition in the market, improving *de facto* corporate governance standards.

The reform of the architecture of the banking sector has been widely discussed and, in some cases, acted upon by legislators both in the US and the UK.¹⁰⁴ The various proposals and legislative initiatives differ sharply from each other. In addition, some scholars have suggested variations of the Glass-Steagall approach as a model of structural reform.¹⁰⁵ Other commentators have proposed structural reform models that seek to re-conceptualize the business of banking.¹⁰⁶ Disagreement on the exact scope of structural reform is important but it should not distract from its urgency and value.¹⁰⁷

¹⁰³ Coffee, *op. cit.* n. 94, at 1048.

¹⁰⁴ See, for example, the Volcker Rule in the US, which limits proprietary trading by commercial banks; and the Vickers Report in the UK, which has provided the basis for structural reform of the UK banking sector.

¹⁰⁵ The two most prominent academic models of narrow banking are by two well-known economists, Lawrence Kotlikoff and John Kay. See L. Kotlikoff, *Jimmy Stewart Is Dead: Ending the World's Ongoing Financial Plague with Limited Purpose Banking* (2010); J. Kay, 'Narrow Banking: The Reform of Banking Regulation' (CSFI Report, 2009), available at <<http://www.johnkay.com/wp-content/uploads/2009/12/JK-Narrow-Banking.pdf>>.

¹⁰⁶ E. Avgouleas, 'The Reform of 'Too-Big-To-Fail' Bank: A New Regulatory Model for the Institutional Separation of 'Casino' from 'Utility' Banking', paper presented in the 7th Euroframe Conference on Economic Policy Issues in the EU, June 2010, available at <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1552970>.

¹⁰⁷ See A. G. Haldane and V. Madouros, 'The Dog and the Frisbee', speech delivered at the Federal Reserve Bank of Kansas City's 36th economic policy symposium, "The Changing Policy Landscape", Jackson Hole, Wyoming, 31 August 2012, available at <<http://www.bankofengland.co.uk/publications/Documents/speeches/2012/speech596.pdf>>; L. G. Baxter, 'Betting Big: Value, Caution, and Accountability in an Era of Large Banks and Complex Finance' (2011-2012) 31 *Rev. of Banking and Financial Law* 765.

Structural reform ought to be seen as an effective tool that could enhance corporate governance in the banking sector. Smaller and more focused banks would be more manageable, making the monitoring of outside ‘controllers’ such as shareholders and bondholders easier. A further benefit of structural reform, as opposed to solely improving corporate governance, would be a reduction in the widespread conflicts of interests that plague the financial services industry, and the nearly unlimited liability that big banks might incur due to those conflicts.¹⁰⁸ Namely, as the boundaries of banks’ contractual relationships increase, for instance, by means of sponsoring high-risk securitization, or other shadow banking deals, attendant exposure may not only be hidden from the board and senior management but also become unlimited, destroying shareholder value.¹⁰⁹ Recommending ever-higher corporate governance and supervision standards in the circumstances may not only prove an exercise in futility, for the reasons explained in the sections above, but also shows an unpardonable unwillingness on the part of policy-makers to grasp the true causes of financial market complexity and the risks that this brings to bank shareholders. It follows that smaller and less interconnected banks would be both more visible in their exposures and also run a smaller risk of raking up unlimited liabilities.

V. CONCLUSION

It is plausibly argued that the grand scale rent-seeking by financial institutions and expert insiders, made possible by the financial revolution, was based on banks’ ability to free-ride on public subsidies and the public guarantee. It follows that limiting public subsidies to financial institutions, placing limits on their ability to leverage their balance sheet through the use of debt to fund their asset base, and remedying the ‘too-big-to-fail’ problem are much better measures in preventing a new crisis than simply regulating bankers’ pay and re-aligning incentives within banks. Naturally,

¹⁰⁸ A characteristic example of this was the huge losses incurred by one UK trader at JP Morgan, which were caused largely by senior management’s failure to understand the complexity and risks associated with the group’s portfolio. For a discussion, see J. Kregel, ‘More Swimming Lessons from the London Whale’, Levy Institute Public Policy Brief No. 129 (April 2013), available at <<http://www.levyinstitute.org/publications/?docid=1812>>.

¹⁰⁹ See W. W. Bratton and A. J. Levitin, ‘A Transactional Genealogy of Scandal: From Michael Milken to Enron to Goldman Sachs’, University of Pennsylvania, Institute for Law & Economics Research Paper No. 12-26 (August 2012).

banker compensation and corporate governance remain issues of public fascination and part of the quest for justice, given the devastation the GFC has wrought on national economies and peoples' livelihoods. But they are not the only important issues. Thus, it is lamentable that they have stolen the limelight and taken so much of policy-makers' time during that rare window of opportunity that existed between 2008 and 2011 to redress the chronic defects in the regulation of the global financial services industry.

Accordingly, it is submitted that the EU should not have sought to reform banking sector corporate governance in isolation of the structural issues affecting governance incentives within large and complex banks. The most effective premise of good corporate governance in the financial sector is competition between smaller, less-complex and less-interconnected banks. Industry lobbying power aside, another possible explanation of this logical oversight is that age-old bias affecting policy-makers (and, less often, academic commentators) when they need it least: groupthink!