

THE FUTURE OF LAW AND FINANCE AFTER THE FINANCIAL CRISIS: NEW PERSPECTIVES ON REGULATION AND CORPORATE GOVERNANCE FOR BANKS

*Dirk Heremans**
*Katrien Bosquet***

In tribute to the lifetime achievements of Dr. Thomas S. Ulen, this Article addresses the topic of the future of law and finance within the broader context of the future of law and economics. After highlighting some of the differences between the U.S. and European approaches to law and finance, it focuses on specific law and finance issues that were involved in the financial crisis (including the regulation of financial institutions) and draws some tentative lessons for the future development of new research paradigms in law and finance. Finally, this Article advocates a more risk-based approach of corporate governance for banks as well as the need for specific corporate governance models. Far from having a declining impact on legal reforms and scholarship, the impact of law and finance is on the rise.

I. INTRODUCTION

Addressing the topic of the future of law and finance is the perfect occasion to honor the lifetime achievements of Dr. Thomas S. Ulen. There are too many good reasons to do so.

First, Dr. Ulen, constantly travelling and sailing the seven seas as a visiting scholar, has been very instrumental in advancing education and research in the interdisciplinary field of law and economics in Europe. His approach can be qualified in Latin as *suaviter in modo, fortiter in re*, i.e., smooth and gentle in his approach, but purposeful and determined in what matters. In addition, his innovative views on the so-called “scien-

* Professor Emeritus Monetary Economics, Faculty of Economics and Business, and Professor in Law and Economics, Faculty of Law, K.U. Leuven. Honorary Director, Supervisory Board for Banking and Finance, Belgium. Dirk.Heremans@econ.kuleuven.be.

** Ph.D. Candidate, K.U. Leuven. Katrien.Bosquet@econ.kuleuven.be.

tification' of [academic] legal scholarship"¹ have certainly helped law and economics to make inroads into the legal scene in Europe, much more than the "hard sell" approach of the Chicago School.² While delving into a wide variety of law and economics domains, Dr. Ulen also has contributed to the subfield of law and finance.³

Second, Dr. Ulen has drawn inspiration and motivation from studying, with loving interest, the complexities of human behavior. In transcending the boundaries of neoclassical economics by embracing insights from behavioral economics,⁴ he brought law and economics closer to the lawyers' real world. More importantly, in respect to the methodological approach in the law and finance field, Dr. Ulen has been venturing into the new behavioral paradigms that law and finance has had to embrace since the financial crisis. It has become fashionable to distinguish economists into two tribes on the basis of their perspectives of the financial crisis: the freshwater economists and the saltwater economists. While paradoxically residing, not at a coastal U.S. university, but inland at the University of Illinois, Dr. Ulen is clearly more of a "saltwater economist." He does not fit in with the "freshwater economists" found at inland schools who, as neoclassical purists, hold onto their unconditional belief in rational individuals and perfect markets by "ventur[ing] stark naked out into the chill winds of [mathematical] abstraction."⁵

With the worldwide financial crisis, Keynes' disparaging image of financial markets as a casino is back on the agenda.⁶ For many decades it had been replaced by the paradigm of "efficient financial markets," resulting in a prolific development of the field of finance as well as a string of Nobel Prizes. The present "state of 'shocked disbelief,' because 'the whole intellectual edifice' had 'collapsed,'" as mentioned by Alan Greenspan,⁷ not only challenges macroeconomics to incorporate the realities of finance, but also confronts law and finance with similar challenges.

Hence, this Article proceeds, first, by a short topical survey of law and finance, with no ambition to be exhaustive or representative; but rather highlighting some differences between U.S. and European ap-

1. See, e.g., Thomas S. Ulen, *A Nobel Prize in Legal Science: Theory, Empirical Work, and the Scientific Method in the Study of Law*, 2002 U. ILL. L. REV. 875, 897.

2. In 2007, both the law faculty and the faculty of economics and business sciences of the Catholic University of Leuven were honored to confer a *doctoris honoris causa* degree to Professor Thomas S. Ulen for all his scholarly endeavors and to register his name in the gallery of prominent scholars of the University, founded in 1425. See *Catholic University of Leuven Awards Honorary Doctorate to Professor Thomas Ulen*, U. ILL. C. L. (Sept. 18, 2007), <http://www.law.uiuc.edu/news/article/1009>.

3. See, e.g., Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CALF. L. REV. 1051 (2000).

4. See, e.g., Daniel Orr & Thomas S. Ulen, *The Role of Trust and the Law in Privatization*, 33 Q. REV. ECON. & FIN. (SPECIAL ISSUE) 135 (1993).

5. Axel Leijonhufvud, *Life Among the Econ*, 11 W. ECON. J. 327, 333-34 (1973).

6. See Paul Krugman, *How Did Economists Get It So Wrong?*, N.Y. TIMES, Sept. 6, 2009 (Magazine), at 36.

7. *Id.* at 39.

proaches. Next, it focuses on specific law and finance issues involved in the financial crisis and some tentative lessons to be drawn for the future development of law and finance. Finally, it explains that corporate governance has become the major field in law and finance, but also a major culprit for the financial crisis. Therefore, a more risk-based approach of corporate governance is advanced, pointing to the need for specific corporate governance models for banking.

II. LAW AND FINANCE: AN EMERGING FIELD

A. *A Law and Economics Approach to Finance*

The law and the economy interact in many ways. Private law focuses on individuals and groups entering into private agreements in markets. Public law attempts to correct private market failures by means of economic and social regulation. This interaction also applies to the financial domain. Positive economic and financial analysis can help to explain and predict the effects of private and public financial law. In a true law and economics approach, theoretical hypotheses from financial analyses should be subjected to empirical testing.⁸ The improved understanding of the interaction between law and the economy might then be used normatively to enhance the quality of the legal systems.⁹

Much literature in law and finance focuses on the regulation of financial markets and financial intermediaries. Such financial regulation can be broadly distinguished into two categories:

- (1) Regulation of the conduct of business in financial markets. Due to the “credence good” nature of financial products and services (e.g., the severe information asymmetries involved in creating the danger of substantial market failures), financial investors have to be protected by specific financial regulation. Financial market regulation focuses on securities market transactions and mainly on securities and investment firms.

8. See generally IAN AYRES, *SUPER CRUNCHERS: WHY THINKING-BY-NUMBERS IS THE NEW WAY TO BE SMART* (2007); Th. S. Ulen, *Law and Economics in the Future of Legal Scholarship, Education, and Practice*, 53 *REV. BUS. & ECON.* 218 (2008).

9. The research endeavor in the cross-cutting area of law and finance should also be reflected in a more interdisciplinary university education. In the United States, already for a long time, economic considerations tend to be incorporated in regular law courses. In Europe, however, academic interaction between law and economics is a more recent development and less widespread. It is mainly pursued in specialized law and economics courses and programs. Specialized interdisciplinary programs in law and finance are only very recently emerging. Examples include: The LLM in finance and law at the Duisenberg School of Finance in Amsterdam; the LLM in finance at the Institute of Law and Finance at the Goethe Universität in Frankfurt; and the masters in economics, law, and business, a joint venture of the faculty of economics and business with the law faculty at K.U. Leuven (also incorporating law and finance as a specialization option).

- (2) Prudential regulation of the safety and soundness of financial intermediaries, particularly banks, constitutes a very important domain in financial policy making.

Whereas regulation refers to the establishment of specific rules of behavior (e.g., rule making), in the financial sector, the question of supervision (e.g., monitoring and sanctioning the application of the rules) takes on a more prominent role than in other domains. Supervision is particularly important in respect of the prudential objectives pursued, both in regards to ensuring the microprudential soundness of individual financial institutions as well as the macroprudential surveillance of the stability of the whole financial system.

A complement, yet also an alternative to financial regulation, exists in “corporate governance.” Because regulation is about changing the behavior of financial institutions by means of externally imposed rules, this may also be achieved through incentives for appropriate behavior, as are often laid down in corporate governance codes. It is observed that corporate governance has become a truly interdisciplinary endeavor with much work being undertaken by researchers in economics and finance, but also in law, management, and accounting.¹⁰

B. *Financial Market Regulation and Prudential Supervision*

In Europe, law and finance research is boosted by European Union (EU) financial market integration. Hence, the literature, more inspired by policy concerns than academic interest, focuses on multilevel regulation and on legal harmonization issues. A Financial Services Action Plan (FSAP), overly ambitious in its legislative approach, was launched in the previous decade to aim at establishing an EU wide financial market.¹¹ The emphasis is on removing the remaining regulatory barriers for market integration with respect to financial services and products. In order to speed up the harmonization process, an innovative legal procedure, the so-called Lamfalussy Procedure, was set up.¹² Contrary to the European civil code’s tradition of spelling out everything in a very detailed way, legislation at the level of the EU Council and EU Parliament has to limit itself to high-level principles.¹³ At the second level, the specification and implementation of these principles are worked out by specialized committees.¹⁴ The translation of EU directives into national legislation

10. See Lucian A. Bebchuk & Michael S. Weisbach, *The State of Corporate Governance Research*, 23 REV. FIN. STUD. 939, 939 (2010). Bebchuk and Weisbach also note that the term corporate governance has appeared, in the past year, as a keyword in the abstract of nearly a thousand papers. *Id.*

11. See *Financial Services Action Plan*, EUR. COMM’N, http://ec.europa.eu/internal_market/finances/actionplan/index_en.htm (last updated June 10, 2011).

12. See JULIEN ERNOULT ET AL., EUROPEAN BANKING AND FINANCIAL SERVICES LAW 266–72 (3d ed. 2008).

13. *Id.* at 266.

14. *Id.*

of member states is further assisted by level three and level four committees.¹⁵

The Lamfalussy process has resulted in a coherent regulatory framework for the market and improved the level playing field. Still it has come at the price of maximum harmonization, and the “comitology” has resulted in very detailed and intrusive regulation. It is feared that this European legislative structure will pursue its inherent tendency to “regulatory overkill,” as already apparent from the new Market in Financial Instruments Directive (MiFID) legislation.¹⁶ The FSAP is also criticized as an attempt to use law not only to promote market integration, but also to redirect financing from the bank-based finance model predominant in continental Europe to the Anglo-Saxon market finance model.¹⁷

Law and finance issues are also involved in prudential regulation and supervision. Prudential regulation consists mainly of translating the worldwide recommendations of the Basel Committee of the Bank for International Settlements (BIS) into banking law (i.e., banking directives at the European level). Particular law and finance challenges, however, are raised by cross-border banking in the EU.¹⁸ The supervision of foreign branches remains in the hands of the home country authorities, whereas subsidiaries are controlled by the host states. As the European-wide banks are centralizing risk management and are no longer organized according to geographical lines, there is a progressive divergence between operational and legal institutions involving conflicts between member states’ supervisors, eventually also causing systemic concerns.¹⁹

C. *Legal Origin and Corporate Finance*

The major breakthrough establishing a stream of law and finance research literature, mainly in the United States, has come from the very influential work by La Porta, Lopez, Shleifer, and Vishny (LLSV).²⁰ The LLSV research opened a wide research avenue by examining the economic and financial heterogeneity across countries and linking this to differences in legal origin. Predominantly based on empirical research, it establishes a systematic causal relationship between the legal framework,

15. *Id.* at 266–67.

16. See *Investment Services Directive—Markets in Financial Instruments Directive (MiFID)*, EUR.COMM’N, http://ec.europa.eu/internal_market/securities/isd/mifid_en.htm (last updated Jan. 25, 2011).

17. For further criticisms, see Dirk Heremans & Dries De Smet, *Prudential Supervision in an Integrating EU Financial Market*, 67 DOCUMENTATIEBLAD, no. 2, 2007, at 117, http://docufin.fgov.be/intersalgnl/thema/publicaties/documenta/2007/BdocB_2007_Q2e_Heremans_DeSmet.pdf.

18. For an early analysis of bank market integration using a game theoretic approach, see Patrick Van Cayseele & Dirk Heremans, *Legal Principles of Financial Market Integration in 1992: An Economic Analysis*, 11 INT’L REV. L. & ECON. 83 (1991).

19. Dirk Heremans, *Systemic Risks and Prudential Policy: What Role for the EU?*, 6 REVUE BANCAIRE ET FINANCIERE 336 (2003).

20. See Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer & Robert Vishny, *Investor Protection and Corporate Valuation*, 57 J. FIN. 1147 (2002).

corporate financing patterns, and ultimately the development of the capital market.²¹ More specifically, it is empirically verified that greater legal protection of minority shareholders and creditors results in more external finance for the firms.²² This has important implications, also at the normative level. First, common law, which provides stronger legal protection to investors, is found to be more efficient for financial development. Second, the Anglo-Saxon dispersed shareholders' corporate governance model is deemed to perform better than the continental European-concentrated ownership model.

This law and finance research became the basis for a prolific literature. Its notoriety and prestige did not come quietly.²³ The legal academy reacted with a combination of fascination and contempt. The main criticisms centered on the danger of confusing correlations with causal relationships in the empirical research,²⁴ oversimplifications in the classification of legal systems, and, most importantly, the lack of a plausible theoretical explanation for the empirical findings.

Still, the LLSV findings have been influential in policy making. They have inspired corporate governance codes and EU legislation to converge toward the Anglo-Saxon corporate governance model.

D. Research Program in Law and Finance

On the basis of this overview of the state of the art in law and finance research, a program for future research could already be proposed. First, further theoretical research into the foundations of financial regulation should be pursued in order to address the following fundamental questions:²⁵ Why regulate and not let the market play? What choice of types and instruments of regulation? Government regulation or self-regulation? To answer these questions, financial transactions and institutions should be analyzed as explicit and implicit contracts in imperfect markets subject to informational asymmetries and agency conflicts.²⁶

Additionally, whereas regulation used to be approached by means of neoclassical economic theories relying upon rational agents, a new behavioral economics approach based on cognitive imperfections and human behavior is emerging. Hence, sellers may respond strategically to exploit systematic misperceptions of consumers by redesigning their

21. *Id.* at 1154–59.

22. *Id.* at 1160–64.

23. For an overview of the work of LLSV and related comments on their work, see Nicholas Thompson, *Common Denominator*, LEGAL AFF., Jan.–Feb. 2005, at 46.

24. Mark West mocks LLSV's work by arguing that civil-law countries are better than common-law countries in international soccer tournaments. Mark D. West, *Legal Determinants of World Cup Success* (John M. Olin Ctr. for Law & Econ., Paper No. 02-009, 2002), available at <http://ssrn.com/abstract=318940>.

25. For such an analysis into the foundations, see TINNE HEREMANS, PROFESSIONAL SERVICES IN THE EU INTERNAL MARKET: QUALITY REGULATION AND SELF REGULATION (forthcoming 2011).

26. JEAN TIROLE, THE THEORY OF CORPORATE FINANCE 2 (2006).

products (e.g., via pricing schemes, bundling of services). In the finance literature, this line of research is supported by, for example, empirical studies in the market for credit cards.²⁷

Second, for policy design, financial regulation should be better related to other complementary policy areas, such as corporate law and governance reforms, accounting and statutory auditing, competition policy, as not enough attention is being paid to these interferences by policy makers.²⁸

Third, the emphasis upon and the proper choice between a regulatory, supervisory, or corporate governance approach in the different legal systems is another area for research. In the area of transactions in financial markets, the EU is relying heavily on a rigid and intrusive legislative approach. The supervisory approach in the United States is less legislation oriented and more flexible, as it functions mainly on the basis of policy making by the supervisory authorities. It is claimed that the more flexible common law systems facilitate interagency coordination between the various supervisory authorities. In the EU countries, however, prudential supervision of financial institutions are often complemented by corporate governance codes, which is not observed in the United States.

Fourthly, with globally integrating financial markets and worldwide operating financial institutions, more research is needed on the phenomenon of multilevel regulation and multilevel supervision. The application of theories of fiscal federalism and common agency problems to regulation could provide insight into the proper assignment of responsibilities. More attention should also go to regulatory governance; in other words, to the accountability of financial regulators, as they may also be liable to principal-agent distortions.²⁹

27. See Oren Bar-Gill, Exchange, *The Behavioral Economics of Consumer Contracts*, 92 MINN. L. REV. 749 (2008); Richard A. Epstein, Exchange, *The Neoclassical Economics of Consumer Contracts*, 92 MINN. L. REV. 803 (2008).

28. See Karel Lannoo & Jean-Pierre Casey, *Capital Adequacy vs. Liquidity Requirements in Banking Supervision in the EU*, CEPS POL'Y BRIEF 8-9 (Oct. 2005), http://aei.pitt.edu/6627/01/1265_84.pdf.

29. See generally MARC QUINTYN, GOVERNANCE OF FINANCIAL SUPERVISORS AND ITS EFFECTS—A STOCKTAKING EXERCISE (2007), <http://www.suerf.org/download/studies/study20074.pdf>; Udaibir S. Das et al., *Does Regulatory Governance Matter for Financial System Stability? An Empirical Analysis* (Int'l Monetary Fund, IMF Working Paper No. WP/04/89, 2004), <http://www.imf.org/external/pubs/ft/wp/2004/wp0489.pdf>; Martin Schuler, *Incentive Problems in Banking Supervision—The European Case* (Ctr. Eur. Econ. Research, Discussion Paper No. 03-62, 2003), available at <http://ssrn.com/abstract=467840>.

III. LAW AND FINANCE: LESSONS FROM THE FINANCIAL CRISIS

As an interdisciplinary approach, law and finance should also have the ambition to improve our understanding of economic and financial realities. Hence it is tentative—if not overly ambitious—to relate law and finance to the harsh reality of the global financial crisis. The financial crisis is to be attributed to the lack of global macroeconomic governance as well as failures in the financial supervision of aggressive financial innovations and shadow banking that have been mixed into a poisonous cocktail for financial stability.

Hence, the first question is whether better law and finance insight into regulatory failures before the financial crisis could have contributed to more risk awareness and to anticipative crisis management. More specifically, two issues are to be explored: regulatory arbitrage and its contribution to the financial crisis and legal deficiencies in the crisis management framework. The second question relates to the lessons to be drawn for the future and the role of law and finance in this respect. It concerns more practical guidelines for prudential and structural reform but also broader perspectives in new research paradigms for law and finance that are emerging after the financial crisis. Finally, corporate governance failures have also been involved in the financial crisis, pointing to the need for a new risk-based approach to corporate governance for banks. This will be more extensively developed in a separate section.

A. *Regulatory Failure and Arbitrage Before the Financial Crisis*

The financial crisis found its deeper origin in global macroeconomic imbalances in trade and payments and in the globalized economy lacking world economic governance.³⁰

Leaving the macroeconomic imbalances aside, it is clear that legal developments and techniques were also instrumental in the financial crisis. Structural deregulation of the financial sector opened the door to aggressive financial innovations, as they became instruments for regulatory arbitrage to circumvent prudential reregulation. Using the power of information technology and marrying complex Value-at-Risk modeling techniques with innovative legal structures, a growing array of securities with diverse risk profiles were generated (e.g., ABS, CDO, CLO).³¹ In

30. Macroeconomic imbalances in trade and payments between the United States and China were not adjusted as they should have been by exchange-rate changes and interest-rate adjustments. Instead, the imbalances were unlimitedly financed by massive international capital flows in global financial markets. As they were accommodated by expansive monetary policies in the United States, a worldwide abundance of liquidity was created, resulting in very low interest rates. It formed the basis for massive credit expansion and asset price bubbles by actors in financial markets in their search for yield.

31. See Ashok Vir Bhatia, *New Landscape, New Challenges: Structural Change and Regulation in the U.S. Financial Sector 4* (INT'L MONETARY FUND, IMF Working Paper No. WP/07/195, 2007), <http://www.imf.org/external/pubs/ft/wp/2007/wp07195.pdf>.

the process of structured finance, different types of loans were bundled and legal techniques for further credit enhancement, such as subordination, were excessively used.³² The legal complexities involved exacerbated the information asymmetries and the mispricing of risks for investors. In addition, over-the-counter (OTC) trading, which lacked the transparency of publicly organized markets, was responsible for unlimitedly magnifying subprime securitization into a worldwide financial crisis.³³

Innovative legal structures were also instrumental in setting up new financial intermediaries in the periphery (e.g., special purpose vehicles, hedge funds, private equity funds). At the same time, more traditional relationship banks were induced to avoid regulatory burdens through similar off-balance sheet activities and to shift their activities toward more lucrative transaction banking in financial markets, resulting in an acceleration of the process of bank disintermediation.³⁴ Consequently, in the United States, transactions in the so-called “shadow financial sector” accounted for more than two-thirds of the entire financial sector.³⁵ From a prudential point of view, as risks were massively transferred from regulated banking to nonregulated shadow banking, the financial sector became heavily exposed to excessive risk taking.

Moreover, the shift from the traditional banking loan model to the “originate to distribute” model facilitated opportunism and fraud in the organization of loans. It raises legal questions concerning the liability of the originators for the predatory features of these mortgage loans. The failure of U.S. financial market regulators to manage or prevent such practices is attributed to the highly fragmented domestic financial supervisory system with dozens of independent regulators and supervisors. It raises important issues of regulatory governance, in other words, of how to govern the governors. Additionally, the lack of transparency and supervision of OTC trading in derivatives facilitated opportunism, market manipulation, and even fraud by major investment banks.

Similar regulatory governance failures created a massive window for total misperception of risks by the credit rating agencies, which were operating in a serious conflict of interest mode.

More fundamentally, due to the prevailing U.S. philosophy that new financial intermediaries are not to be included in the prudential safety and soundness supervisory system, regulation and supervision simply failed.³⁶ It was held that regulation of the new financial intermediaries

32. *See id.*

33. GARRY J. SCHINASI, SAFEGUARDING FINANCIAL STABILITY: THEORY AND PRACTICE 181–83 (2006).

34. Bhatia, *supra* note 31, at 3.

35. *Id.* at 5.

36. *Id.* at 8.

would not be feasible given their complexity and given the fact that they were easily internationally mobile.

Hence, the monitoring of new intermediaries in the periphery was left to the invisible hand of market discipline. Monitoring was (implicitly) delegated to large banks who served as the major counterparties in financing these specialized investment vehicles in the periphery. As this unregulated shadow financial sector was expanding, the unfortunate result was that the ability of regulatory authorities to directly influence the entirety of the financial system was substantially reduced.

Additionally, limiting the scope to microprudential regulation and supervision, thereby neglecting interrelations among financial submarkets and among bank and nonbank financial intermediaries undoubtedly has been a catastrophic failure. External effects are heavily ingrained in financial sector activities. A problem is that at the microlevel, financial intermediaries often have insufficient possibilities and information to assess the external effects of their activities and have a collective action incentive problem to internalize these in their risk behavior.

In order to deal with system-wide risks of individual bank failures, safety nets such as deposit insurance and emergency liquidity assistance have been introduced to the banking system. The fact, however, that a major shock originating in financial markets (such as the subprime crisis) could simultaneously affect a major part of the banking system, changing the nature of risk into correlated risk and stressing the whole safety net system, was not anticipated. In particular, the surveillance necessary to recognize that the nonbank financial intermediaries in the periphery were in fact shadowing maturity transformation by banks, whereas legally they were not classified as banks, was lacking. In fact, they were “banking” on a much larger scale by converting short-term liabilities into long-term assets, thereby creating huge liquidity risks for the whole financial system.

B. Legal Deficiencies in the Crisis Management Framework

Before the financial crisis, several warnings had already been launched on the inadequacy of the legal framework to deal with systemic crises.³⁷ As it turned out, policy coordination proved to be difficult: emergency liquidity assistance was in the hands of central banks, but bailout capital had to be provided by governments out of tax money. This coordination problem was especially acute in the EU where the European Central Bank (ECB) acted as a lender of last resort, but solvency issues fell under the sovereignty of tax authorities of national member states.

37. See, e.g., Heremans, *supra* note 19.

Numerous legal questions were addressed in the rescue and/or winding down of failing financial institutions as the economic operational reality for many institutions did not coincide with their legal forms and structure. This was particularly the case for large, complex financial institutions involved in cross-sectored financial service provisions, and for cross-border banks operating in different national legal environments.

In order to allow for emergency bailout actions in the future but at the same time avoid the moral hazard problem, interesting proposals have been launched such as the obligation for banks to draft a “living will” and to provide “contingent capital.”³⁸ A living will would, ex post, greatly facilitate bankruptcy procedures, and, ex ante, would enforce simplifications of bank structures. Within an insurance approach, contingent capital requirements imply that subordinated debt is automatically converted into capital for banks in distress. Besides the cost of debt implications for contingent liabilities, however, it is bound to raise complex legal issues on the proper tax treatment given the divergent tax regimes for equity and debt. Crisis management and systemic risks, necessitating an orderly winding down of financial institutions, may also raise the issue of whether bankruptcy law should include specific provisions for banks. In the EU, harmonization of the different bankruptcy regimes among the member states might be required.

As it turns out, actual crisis management based on the present deficient legal framework involved some unintended and even paradoxical results as it interfered with complementary policy areas. Ailing banks were saved when they were forced to merge with other banks.³⁹ It raises issues of a level playing field and fair bank competition.⁴⁰ In the United States, these mergers and acquisitions tend to be based on the “failing company” defense in antitrust law.⁴¹ In the EU, “State Aid Rules” in competition law were (temporarily) adapted and applied, selectively creating serious level playing concerns.⁴² Banks that received state aid were disciplined and penalized to substantially downsize their operations and sell off branches of activities. The larger banks arising from mergers with ailing banks—often after the latter had received state aid—were not subjected to any such sanctions. This points to trade-offs between stabili-

38. See, e.g., Nicholas Paisner & Hugo Dixon, *Newfangled Bank Capital*, N.Y. TIMES, Nov. 13, 2009, at R2; John F. Bovenzi, *Another View: Why Banks Need ‘Living Wills,’* N.Y. TIMES DEALBOOK (July 8, 2010, 12:30 PM), <http://dealbook.nytimes.com/2010/07/08/another-view-why-banks-need-living-wills/>.

39. See THORSTEN BECK ET AL., CTR. FOR ECON. POLICY RESEARCH, BAILING OUT THE BANKS: RECONCILING STABILITY AND COMPETITION 39 (2010), http://www.cepr.org/pubs/other/Bailing_out_the_banks.pdf.

40. See *id.* at 2, 7.

41. See Thomas J. Campbell, *The Efficiency of the Failing Company Defense*, 63 TEX. L. REV. 251 (1984).

42. Phedon Nicolaides & Ioana Eleonora Rusu, *The Conflicting Roles of State Aid Control: Support of Financial Institutions Versus Safeguarding the Internal Market*, 17 MAASTRICHT J. 223 (2010); Neelie Kroes, Editorial, *European Banks Cannot Set Aside the Rules*, FIN. TIMES (Apr. 27, 2009), <http://www.ft.com/intl/cms/s/0/5e5a34d8-3359-11de-8f1b-00144feabdc0.html#axzz1McesFGVs>.

ty and competition that need to be clarified. To what extent do competition authorities need to include financial stability concerns in their decisions, and, vice versa, do prudential regulatory and supervisory authorities (RSA) have to take competition goals into account?

Additionally, prudential concerns will be put to the test even further by the emergency mergers and acquisitions, as they create large institutions that are even more complex in terms of managing and monitoring risk. Did mergers between large retail-oriented banks and large investment banks in the United States not cause even more risk of contagion through shocks in volatile financial markets? Did it not result in more systematically important banks facing the “moral hazard” problem of being “too big to fail?”

C. *Structural and Prudential Regulatory Reform After the Financial Crisis*

The development of macroprudential standards in a more “system-oriented” approach is a major challenge. In this respect, proposals to limit these standards to “systemically important institutions” involve difficult economic and legal issues. The emphasis in regulatory reform has, however, remained on strengthening the existing microprudential framework. It refers to tougher Basel III capital requirements, redefined risk-weighted assets, and stricter capital definitions.⁴³ Additionally, leverage ratios and strict liquidity requirements are to be imposed.⁴⁴

A heavily debated issue, especially in the United States, concerns the return to regulation of the structural type: re-establishing the Glass-Steagall Act by returning to “narrow banking” as it had been imposed in the 1930s.⁴⁵ Narrow banking is put forward as a way to structurally avoid systemic risk, in other words, to prevent serious shocks in financial markets and to prevent a spillover of transaction banking to the basic financial infrastructure which is mainly covered by relationship banking. Besides many practical difficulties in barring these banks from trading for their own account in financial markets, however, it may be seriously questioned whether this would suffice to prevent financial crises in the future.

For that reason, the debate in Europe has taken a different turn. Rather than structural regulation of banks, the scope of prudential regulation is being extended to the new financial institutions in the periphery.

43. See *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems*, BANK INT'L SETTLEMENTS (Dec. 2010), <http://www.bis.org/publ/bcbs189.htm>.

44. Still, there remain some fundamental questions as to the reconciliation of the non-ambiguous goals of bank capital. Capital should give incentives to banks for proper risk behavior as (more of) their money is at stake, but it also provides a buffer to be used against unexpected losses.

45. Banking Glass-Steagall Act of 1933, ch. 89, §§ 20, 32, 48 Stat. 162, 188–89, 194, *repealed by* Gramm-Leach-Bliley Act, Pub. L. No. 106-102, § 101, 113 Stat. 1338, 1341 (1999); Edward Russell-Walling, *Come Back, Glass-Steagall*, NEWSTATSMAN (Jan. 8, 2010), <http://www.newstatesman.com/business/2010/01/banking-banks-capital>.

Hence, draft directives have been issued on “Alternative Investment Funds,” containing the need for a European passport for private equity funds, hedge funds, etc.⁴⁶ The underlying fear is that stricter regulation of banks alone would again induce regulatory arbitrage, in other words, further development of unregulated financial institutions in the periphery. This was a major cause of the financial crisis and is bound to repeat itself. Hence, prudential surveillance of the shadow financial sector is needed to anticipate and prevent systemic risks. It implies a more functional approach to regulatory “banking,” instead of the institutional approach limited to the category of “banks.”

More fundamentally, we question whether the underlying financial models and systems are at stake with the Anglo-Saxon financial model in particular. The Anglo-Saxon model relies upon the efficiency of financial markets: (1) the emphasis is upon its macromonetary policy model, (2) its financial regulatory model stresses efficiency of markets and market discipline, and (3) its corporate governance model is based on dispersed shareholdings and the efficiency of external finance. In the LLSV tradition, this model was thought to be the best guarantee of a healthy and competitive development of the financial services sector.⁴⁷

In the aftermath of the financial crisis, this Anglo-Saxon financial model is to be seriously questioned, as will be further documented for corporate governance issues for banks.

D. Towards New Research Paradigms in Law and Finance

After the financial crisis, the belief in the efficiency of financial markets is fundamentally shaken. The often technically sophisticated financial models based on efficient financial markets are criticized for the mispricing of risks and for not incorporating interrelations among financial markets.

The asset pricing models failed because they often assume efficient information processing and market participants with proper incentives in a perfectly competitive market. Corporate finance and banking models allow for different incentives and strategic behavior but still remain too stylized and static to capture interactions across markets. To obtain a

46. From a law and economics perspective, these draft directives should be criticized as the legislative process involves no external consultations nor any empirical work on the regulatory impact.

47. The Anglo-Saxon financial model relies upon three pillars: (1) As long as macroeconomic stabilization is achieved by the Federal Reserve setting the interest rate to target inflation, the financial infrastructure will also remain stable. See C.A.E. Goodhart, *A Framework for Assessing Financial Stability?*, 30 J. BANKING & FIN. 3415, 3415–16 (2006). (2) Prudential supervision is to be strictly limited to financial intermediaries who benefit from deposit insurance and emergency liquidity assistance involving moral hazard problems, provided also that their size has systemic importance to the whole financial system. The invisible hand of the market will take care of stability in the rest of the financial system. (3) Efficient markets for external finance, always being available, necessarily points to the Anglo-Saxon dispersed ownership model with variable remuneration for management and an active corporate takeover market. This corporate governance model should apply to all publicly listed companies, including banks and other financial intermediaries.

better description of interrelations across financial markets, both types of models should be integrated. Also, and more innovative, the models should be based on a more realistic description of individual decision making with respect to risk taking, taking into account behavioral and incentive distortions.

It points to the use of new insights in financial behavior provided by the emerging “behavioral finance” literature. Instead of the rational representative investor, the analyses should look into limits to rationality: bounded rationality, herding behavior, time inconsistency, irrational exuberance, unwarranted panic, etc.⁴⁸ Thereby, they could usefully rely on regularities in individuals risk choices as established in empirical work.⁴⁹

Another research paradigm is to be found in the field of “dysfunctional finance.”⁵⁰ It focuses not on individual choices of risk but on the strategic behavior in decision making by intermediaries, who conduct most of the trading. Their opportunistic risk strategies, being individually rational, may lead to collectively inefficient systemic risk effects.⁵¹ In 1997, Shleifer and Vishny already pointed out that problems of trust, credibility, and limited collateral can force financial agents to run with the herd.⁵² Recent academic work illustrates that momentum and reversal, which according to the efficient market theory do not exist, occur not because of irrational investors but because individual rational actions add up to a collectively irrational outcome.⁵³

These new research paradigms may help to develop more robust risk-management models but could also inform future regulatory policies.

48. See generally ROBERT J. SHILLER, *IRRATIONAL EXUBERANCE* (2000).

49. See, for example, the reflection theory of risk aversion when winning and risk seeking when losing, based on the prospect theory of Kahneman and Tversky. Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 *ECONOMETRICA* 263 (1979).

50. See Karla Hoff, *Dysfunctional Finance: Positive Shocks and Negative Outcomes* (World Bank Policy Research, Working Paper No. 5183, 2010), available at <http://ssrn.com/abstract=1539869>.

51. Two academics from the London School of Economics, Paul Woolley and Dimitri Vayanos, argue that markets are inefficient for perfectly rational reasons. Dimitri Vayanos & Paul Woolley, *An Institutional Theory of Momentum and Reversal* (Nat'l Bureau of Econ. Research, Working Paper No. 14523, 2008), available at <http://www.nber.org/papers/w14523>.

52. Shleifer and Vishny have shown that the market can stay irrational longer than a rational cool calculator can stay solvent. Andrei Shleifer & Robert W. Vishny, *The Limits of Arbitrage*, 52 *J. FIN.* 35, 48 (1997).

53. Vayanos & Woolley, *supra* note 51, at 4–5.

IV. SPECIFIC CORPORATE GOVERNANCE PERSPECTIVES FOR BANKS

In the aftermath of the financial crisis, it is being recognized, belatedly, that the lack of proper corporate governance with respect to risk taking in banking was a major cause of the banking crisis. Hence, in Europe, the RSAs were aiming at specific corporate governance reforms for the financial sector.⁵⁴ In contrast, the United States appears to be focusing more on regulatory approaches and, in particular, on structural reform.

First, starting from an analysis of the agency problems in banks, which are of a specific nature compared to the ones in nonfinancial firms, the need for specific prudential regulation arises. As corporate governance may be a substitute or complement to regulation, the question as to the need for specific corporate governance for banks also arises.

Second, a more realistic description of decision making with respect to risk is needed. It can already be found in traditional portfolio theory of finance without necessarily having recourse to behavioral finance. The implications for (excessive) risk taking by the different parties involved in banking were already documented before the outbreak of the financial crisis.⁵⁵

Finally, the risk incentives for the various parties involved in bank governance are to be related to the different corporate control systems pointing to the need for specific corporate governance for banks.

A. *Bank Characteristics and Agency Distortions*

Similar to all firms, banking firms constitute a “web or nexus of contractual relationships” and hence face agency distortions in raising (external) finance efficiently.⁵⁶ Compared to nonfinancial firms, however, banks present several specific characteristics that may affect agency problems.

First, bank products and services are of a fiduciary nature and bank balance sheets are notoriously opaque for investors. Information asymmetry problems are very serious, making it difficult to monitor the behavior of banks, whereas the multitude of debtors (i.e., small depositors) are nonexperts in monitoring. In nonfinancial companies, debt is mainly

54. See Basel Comm. on Banking Supervision, Consultative Document, *Principles for Enhancing Corporate Governance*, BANK INT'L SETTLEMENTS, 6–7 (Mar. 2010), <http://www.bis.org/publ/bcbs168.pdf>; Green Paper, *Corporate Governance in Financial Institutions and Remuneration Policies*, EUR. COMM'N 3–4 (Feb. 6, 2010), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0284:FIN:EN:PDF>.

55. Johan Devriese et al., *Corporate Governance, Regulation and Supervision of Banks*, in NAT'L BANK BELG., FINANCIAL STABILITY REVIEW 2004, at 95 (2004), http://www.nbb.be/doc/ts/Publications/FSR/FSR_En_04.pdf; Dirk Heremans, *Corporate Governance Issues for Banks: A Financial Stability Perspective* (Feb. 2007) (unpublished manuscript), available at <http://ssrn.com/abstract=1024693>.

56. Heremans, *supra* note 55, at 3.

in the hands of a few specialized debt holders, often banks themselves, which have the necessary expertise and power to play a disciplining role in case of financial distress.

Second, banks are highly leveraged firms, in other words, they have a very high debt to equity ratio on their balance sheet. An important part of their debt consists of highly liquid demand deposits. With their assets to the contrary being illiquid, the maturity mismatch involves substantial risks for their debt holders.

Finally, banking presents systemic externalities raising special concerns for bank solvency and overall stability of the financial system. Banks are subject to many shocks as they face many types of risk beyond normal business risks, which may easily spill over to other banks and endanger the whole financial system. When the basic infrastructure provided by banks is destabilized (i.e., money and deposit production for payments and savings purposes and loan production for financial investments), macroeconomic activity may be catastrophically disrupted.⁵⁷

The question then arises whether these specific bank characteristics create specific corporate governance concerns for banks compared to nonfinancial firms.

1. *Type I: Management Control Bias—
Conflicts Between Shareholders and Management*

Conflicts of interest arise in firms due to the separation of ownership and (management) control as stressed originally by Berle and Means.⁵⁸ With external finance by equity holders, managers earn less than the full return on their effort.⁵⁹ Hence, managers' incentives to exert effort may be too low, and they may have an interest in pursuing their private interests. Dispersed shareholders face a free rider problem and have little incentive to monitor managers. Excessive managerial power then amounts to the expropriation of (dispersed) shareholders by management.

As financial products are very information intensive (i.e., opaque and of a fiduciary nature due to market imperfections and information asymmetries characterizing the financial sector), it becomes even more difficult to control management in the banking sector.⁶⁰

57. For a further analysis of systemic risks in Europe in the context of a single financial services market and a consolidating financial sector, see Heremans, *supra* note 19.

58. ADOLF A. BERLE, JR. & GARDINER C. MEANS, *THE MODERN CORPORATION AND PRIVATE PROPERTY* 119–25 (1932).

59. Devriese et al., *supra* note 55, at 96.

60. *See id.* at 97.

Shareholders have the right to take decisions, i.e. formal control. They, however, may not have the ability to take decisions i.e. real control, as it typically requires prior information about the consequences of potential decisions. Shareholders dispersion, moreover, reduces shareholders incentives to acquire information and therefore to exercise real control.

2. *Type 2: Expropriation of Minority Shareholders—
Conflicts Between Controlling and Minority Shareholders*

Controlling blockholders may have incentives and the power to pursue their own private interest in companies. Through transactions which are not conducted at arm's length, especially within group structures, they may shift wealth to other members, thereby abusing small (more dispersed) shareholders.

The incentives for controlling owners to expropriate corporate resources, however, very much depend on their cash flow rights relative to their control (voting) rights. First, when control rights significantly exceed cashflow rights, incentives may indeed become seriously distorted to the disadvantage of small investors. This may be achieved by various technologies separating cashflow rights from voting rights such as trust offices, preference shares, cross-ownership, and pyramidal cascade structures of holding companies.⁶¹ This corresponds to what may be called the “levered control” model. Second, expropriation requires costly transactions, such as setting up intermediary companies, taking legal risks, etc.⁶² Hence, when cashflow rights increase, incentives for controlling owners to expropriate resources from the company decrease as it involves a greater reduction in their own cash flows.⁶³ This corresponds to what is called the “straightforward control” model.

As financial products are very opaque and the balance sheets of banks very complex, inside transactions are more difficult to control by small shareholders. Moreover, they lack the incentives and also the necessary expertise to do so. Hence, Type 2 agency problems may become more serious in banks, especially in the “levered control” case.

3. *Type 3: Risk Shifting to Debt Holders—
Conflicts Between Shareholders and Creditors*

Shareholders have convex claims on the income of the firm, whereas debt holders' claims are concave.⁶⁴ Equity holders earn the residual income; in other words, all the upside potential and only a limited downside loss. Hence, they have an incentive to engage the firm in taking (excessive) risk. In fact, these risks are shifted to debt holders who are only entitled to a fixed contractual payment.

On the other hand, it has been argued that high leverage confronts managers with the threat of illiquidity which may constrain and incentivize them. As this may apply to non-financial firms, it may be questioned whether the available safety nets providing liquidity for banks do not eliminate these market forces.

Heremans, *supra* note 55, at 6 n.5 (citing TIROLE, *supra* note 26, at 84.).

61. See generally Devriese et al., *supra* note 55.

62. See Rafael La Porta et al., *Law and Finance*, 106 J. POL. ECON. 1113 (1998).

63. Gerard Caprio et al., *Governance and Bank Valuation*, 16 J. FIN. INTERMEDIATION 584 (2007).

64. TIROLE, *supra* note 26, at 213–20.

This moral hazard problem certainly is more serious in the financial sector compared to other sectors in the economy. The high proportion of debt in total liabilities and the resulting high leverage of banks facilitate risk shifting by shareholders. The opportunities for risk shifting are also larger given that debt holders are dispersed and nonexperts compared to the monitoring by creditors in nonfinancial firms.⁶⁵ Additionally, compared to nonfinancial firms, risk profiles in banks may be changed overnight simply by reshuffling balance sheets.

Moreover, favoring (excessive) risk taking by banks (i.e., Type 3 agency distortions) may have systemic externalities when it leads to banking failures which eventually endanger the stability of the whole financial sector. Hence, compared to nonfinancial firms, Type 3 agency problems are a more serious concern for banking firms.

In order to deal mainly with the Type 3 agency problems, the banking sector is subject to specific regulatory and supervisory intervention by the financial authorities. The aim is to avoid excessive risk taking by banks and thereby avoid the shift of the risk to the depositors and other creditors. In this respect, the regulatory and supervisory authorities are to be seen as corresponding to the need for a representative of the depositors. In view of the specific debt governance problems, the authorities “mimic” the role taken by debt holders in nonfinancial firms.⁶⁶

The need for such a strong depositor representative is especially great for banks as deposit insurance and lender of last-resort facilities are being provided in order to avoid systemic risk through self-fulfilling panics. Such safety nets affect the risk behavior of banks: deposit insurance weakens the incentives for depositors to monitor bank risks, and bailout practices may increase risk incentives for shareholders. Hence, in order to limit this moral hazard behavior, extensive prudential regulation had to be introduced relying mainly upon capital adequacy requirements. Capital not only provides a buffer against losses, it also reduces risk incentives as more of the banks’ funds are at stake.⁶⁷

Already before the crisis, however, the question arose whether the higher level of regulation for banks compared to nonfinancial firms had removed the need for other governance mechanisms to deal with the agency distortions within banks. The answer was that regulatory oversight is not a substitute but rather a complement to corporate governance.⁶⁸ Implicitly, the financial regulators increasingly had to acknowl-

65. Debt in a higher leveraged firm resembles equity in a modestly leveraged one. Debt holders also basically become residual claimants at all income levels. *See id.* at 111–98.

66. MATHIAS DEWATRIPONT & JEAN TIROLE, *THE PRUDENTIAL REGULATION OF BANKS* ch. 3 (1994).

67. Dirk Heremans, *Regulation of Banking and Financial Markets*, in *ENCYCLOPEDIA OF LAW AND ECONOMICS* 950 (Boudewijn Bouckaert & Gerrit De Geest eds., 2000), available at <http://users.ugent.be/~gdegeest/>.

68. Renée Adams & Hamid Mehran, *Is Corporate Governance Different for Bank Holding Companies?*, 9 *ECON. POL’Y REV.* 123 (2003).

edge the importance of corporate governance in order to deal with structural deregulation in the financial sector, creating large, complex financial conglomerates with large potential for spillovers between business lines. Also, the use of internal models of risk management by banks to derive their regulatory capital requirements, as allowed in the Basel II approach, was putting heavy pressure on supervisory resources, limiting the effectiveness of prudential regulation.⁶⁹ Hence, supervisors have to rely more heavily on the existence of sound governance principles and practices within banks. The organization of the procedures with respect to risk management is heavily dependent on the specifics of the corporate governance of banks.⁷⁰

After the financial crisis, when it became clear that banks are particularly vulnerable to excessive risk taking, it has become all the more important to investigate how the different corporate governance arrangements affect the incentives and the power of the parties involved in banking to assume (excessive) risk.

B. Finance Theory and Risk Attitudes

What are the risk incentives of the different parties involved in the corporation and in the banking firm in particular?

According to financial portfolio theory, incentives for risk taking crucially depend on the opportunities to diversify risk. Capital Asset Pricing analysis distinguishes between systematic or market risk on the one hand and nonsystematic (idiosyncratic) or firm specific risk on the other hand.⁷¹ The latter may be diversified away in a portfolio, allowing for a higher return on investment. It follows that parties who are more diversified have an interest in more risk taking by the firm. They have an interest in taking more firm-specific risk, as they can diversify it away in their wealth portfolio.

First, in a typical firm, managers are intrinsically more risk averse than shareholders for two reasons: (1) they stand to lose invested specific human capital and, in some cases, invested wealth if the firm goes bankrupt; and (2) managers tie up all their human capital in the firm, so their degree of diversification is limited.

Hence, managers care about the total risk of the firm being the sum of systematic and idiosyncratic risk. As a result, when managers receive a mainly fixed compensation scheme, their risk appetite will be low. When they start receiving performance-based pay, however, managers

69. We refer to the First Pillar (Minimum Capital Requirements) of the Basel II regulatory framework for banks, put forward by the BIS. See *Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework*, BANK INT'L SETTLEMENTS (June 2004), <http://www.bis.org/publ/bcbs107.htm>.

70. See generally Devriese et al., *supra* note 55.

71. See William F. Sharpe, *Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk*, 19 J. FIN. 425 (1964).

face a trade-off with respect to the cashflow effect between future cash flows generated by specific human capital invested in the firm and additional cash flows generated by increased performance resulting from more risk taking.

Variable remuneration may consist of stocks, stock options, and cash bonuses, and it contributes to more risk appetite. Especially yearly cash bonuses, as shown in empirical research, may induce excessive risk taking. Also, when managers are paid with stock options, whose value can be very sensitive to the volatility of the underlying stock, managers may receive high incentives to take substantial risk to increase the value of their stock options.

Second, for shareholders, the outlook for risk-taking incentives also depends upon risk diversification opportunities. A typical financial investor is a diversified shareholder caring only about systematic risk. He or she has an interest in more risk taking by the firm as the firm-specific risk is diversified away in his or her equity portfolio. Things may be different for strategic investors with concentrated shareholdings. Big blockholders generally being less diversified, have less risk appetite as they care about total risk including firm specific risk. With levered control, however, as is the case in pyramidal groups, diversification is more likely, and consequently, the risk incentives increase.

In this respect, risk taking is also going to be influenced by the identity of the controlling shareholder. Different owners like, for example, a family, an industrial firm, or another financial institution, have different opportunities to diversify their wealth. Hence, they also have different attitudes toward risk.⁷² Moreover, they differ in their information, expertise, and monitoring capabilities.⁷³

C. *Specific Corporate Governance Models for Banks?*

Dispersed ownership, corresponding to the Anglo-Saxon corporate governance model, is characterized by diversified shareholders having more risk appetite. In addition, in order to cope with Type 1 agency problems of management control, management will benefit more from variable performance-based remuneration contributing further to excessive risk taking, exacerbating Type 3 agency problems.

In the aftermath of the financial crisis, it is increasingly being recognized that arguments against widely dispersed shareholdings carry relatively more weight for banks for several reasons. First, the short-termism of stock markets is increasingly being criticized, especially in periods of turmoil in stock markets. The obsession with liquidity and short-term re-

72. Founding families represent a unique class of shareholders that hold poorly diversified portfolios. Ronald C. Anderson & David M. Reeb, *Founding-Family Ownership and Firm Performance: Evidence from the S&P 500*, 58 J. FIN. 1301 (2003).

73. See Devriese et al., *supra* note 55, at 14.

sults, in particular when induced by short-term, performance-linked options for management, may have unintended consequences in destroying long-term value. Long-term value creation for all shareholders requires long-term commitment (i.e., stable investors).⁷⁴ Second, the trade-off between investor liquidity and investor commitment may have special relevance for banks, as only long-term players are good monitors. Investors who can easily exit by reselling at a fair price have little incentive to create long-run value improvement. The illiquidity that large investors face enhances the quality of monitoring.⁷⁵ This argument carries more weight for banking firms who notoriously are facing high monitoring costs. Third, the stability of shareholders may also be important to complement regulatory capital in the case of undercapitalization or even to bail-in ailing banks, which may prove to be more difficult when share ownership is widely dispersed.

Controlling ownership, however, corresponding to the continental-European model will, as Type 1 problems are not prominent, rely less on variable remuneration of management, reducing the risk profile of the firms. As to the risk attitudes of the controlling shareholders, a distinction needs to be made. In case of levered control (often by minority blockholders), shareholders are likely to be diversified. As they can diversify away the firm-specific risks in their portfolios, they will have more risk appetite contributing to substantial Type 3 agency conflicts. Straightforward controlling owners are less likely to be diversified. As they have fewer incentives for risk taking, Type 3 agency conflicts will be reduced.

Hence, the usual critiques against the blockholders control model, in favor of the dispersed shareholders model in the predominant LLSV literature in law and finance, have to be qualified. They fail to distinguish between levered and straightforward control, as the agency conflicts are particularly problematic for the former model. Moreover, they do not address Type 3 problems, which tend to be more severe for the dispersed owners model than for the straightforward control model.

Without making all the previous qualifications, some authors already point to the need for such a hybrid approach to corporate governance.⁷⁶ For most firms, the Anglo-Saxon dispersed shareholder model would be the most appropriate. For banks and financial institutions, the continental European-controlling shareholder model would be better, as it also takes into account the interests of other stakeholders.

74. According to Becht and Mayer, the insider model is perceived as conducive to activities with long realization periods, whereas the outsider model benefits short-term investments requiring greater flexibility. Marco Becht & Colin Mayer, *Corporate Control in Europe*, THE WORLD'S NEW FINANCIAL LANDSCAPE: CHALLENGES FOR ECONOMIC POLICY 149 (Horst Siebert ed., 2001).

75. See TIROLE, *supra* note 26, at 199–236 (discussing liquidity).

76. E.g., Jonathan R. Macey & Maureen O'Hara, in *The Corporate Governance of Banks*, 9 ECON. POL'Y REV. 91 (2003).

According to law and economics methodology, the foregoing hypotheses have to be confronted with factual data and subjected to empirical testing. Worldwide data documents that controlling shareholdership is dominant in banking, with only twenty-five percent of the banks widely held.⁷⁷ Among the controlling blocks, family ownership predominates, pointing rather to nondiversified shareholdership.⁷⁸ Previous studies were mainly inconclusive about the effect of bank ownership on such risk attitudes.⁷⁹ Recent research with respect to the financial crisis, however, documents that institutional shareholders, representative for dispersed shareholders, stand for more risk taking before the crisis and larger losses after the crisis.⁸⁰ With respect to the remuneration, banks rely more on short-term cash bonuses than other companies. Short-term cash bonuses, together with stock options, appear to have been responsible for excessive risk taking, whereas no such significant connection has been found for long-term stock participations.⁸¹ In order to arrive at more robust conclusions, however, more empirical work certainly is to be pursued.

The previous risk-based analysis of corporate governance is also to be extended to the Board of Directors (BoD), being a specialist monitor. In view of the potential conflicts of interest and the different trade-offs between various corporate governance mechanisms, the operation and the composition of the BoD becomes all the more important as a corporate governance mechanism for banks. The analysis, however, is confronted with the fundamental unresolved issue in corporate governance of exactly what role should be assigned to the BoD: a purely monitoring role or also an advisory role?⁸² Also, more formal analyses are lacking; a task for further research. In this respect, the issue that interests of directors are not completely aligned with those of the shareholders also needs to be addressed.

Corporate governance research usually focuses on the question of how to achieve a better functioning of the BoD, with an emphasis on the role of the “independent” director.⁸³ From the previous risk-oriented analysis of corporate governance of banks, it follows that the BoD has a specific role with respect to Type 3 agency conflicts. Some authors label them as “fiduciary duties” of the BoD of banks toward depositors and

77. Caprio et al., *supra* note 63, at 586–87.

78. Anderson & Reeb, *supra* note 72, at 1304–05; Caprio et al., *supra* note 63, at 595.

79. E.g., Luc Laeven & Ross Levine, *Bank Governance, Regulation and Risk Taking*, 93 J. FIN. ECON. 259 (2009).

80. See, e.g., David Erkens et al., *Corporate Governance in the 2007–2008 Financial Crisis: Evidence from Financial Institutions Worldwide*, FED. DEPOSIT INS. CORP. (Aug. 2009), http://www.fdic.gov/bank/analytical/CFR/bank_research_conference/annual_9th/Matos_P.pdf.

81. Lucian A. Bebchuk & Jesse M. Fried, *Paying for Long-Term Performance*, 158 U. PA. L. REV. 1915, 1916–17 (2010).

82. See Bebchuk & Weisbac, *supra* note 10.

83. *Id.*

other creditors.⁸⁴ Usually, the independence of a board member is evaluated by his or her independence from the management (Type 1) and from the controlling shareholder (Type 2). To these usual criteria for independence, a new refinement of prudential financial independence (Type 3) should be added. The latter criterion implies that independent directors have no financial stake in (excessive) risk taking by the bank. Hence, they should not benefit from variable performance-linked remuneration, nor should they have (substantial) shareholdings in the bank.⁸⁵ Combining these different criteria of independence, further implications as to the adequate composition of the BoD can be derived. It eventually points to different solutions for different types of ownership.

Empirical testing on the BoD remains very limited. According to the data, banks appear to have more directors than nonfinancial, publicly listed firms.⁸⁶ Banks with larger BoD also appear to perform better.⁸⁷ A potential explanation for these results is the need to reconcile more difficult agency problems in banks. During the financial crisis, boards with more independent directors were also found to be more active in replacing chief executive officers (CEOs), chief financial officers (CFOs), and chief risk officers (CROs).⁸⁸

Finally, this framework, taking into account risk attitudes and financial stability implications, is to be further extended to explore appropriate corporate governance designs for other financial institutions. In particular, corporate governance of large, systematically important financial conglomerates that combine relationship banking, investment banking, and/or insurance is becoming an even more complex matter in need of further investigation.

V. SUMMARY AND CONCLUSIONS

Law and finance is an emerging field in law and economics education and research, rising also in Europe, which is gradually narrowing the gap with the United States.

Law and finance in the United States has heavily relied upon interdisciplinary academic research, whereas in Europe it originates more from legal practice; in other words, the legislative and policy making process to bring about an integrated European financial market. In this context, the European literature focuses on issues of multilevel regula-

84. Macey & O'Hara, *supra* note 76.

85. Eventually, a director could also be qualified as a Type 3 independent if he or she has substantial shareholdings in the bank, provided that the director is not financially diversified. This may apply to directors representing straightforward controlling shareholders.

86. Adams & Mehran, *supra* note 68, at 130 tbl.3.

87. RENÉE B. ADAMS & HAMID MEHRAN, FED. RESERVE BANK OF N.Y., CORPORATE PERFORMANCE, BOARD STRUCTURE, AND THEIR DETERMINANTS IN THE BANKING INDUSTRY STAFF REPORT NO. 330 (2008), http://www.newyorkfed.org/research/staff_reports/sr330.pdf.

88. Erkens et al., *supra* note 80, at 26–28.

tion and on a potential European regulatory architecture, with U.S. federalism, however, not providing much guidance in this respect. Moreover, regulation in the EU overly relies upon a legislative approach compared to a predominantly supervisory approach in the United States.

The major LLSV literature on the causal relationship between legal origin and corporate finance has raised controversies not only in the United States, but also in European law and finance. Still, in European policy making, the LLSV message has been influential, inspiring corporate governance codes and EU legislation to converge toward the Anglo-Saxon corporate governance model.

Many lessons for law and finance are to be drawn from the recent financial crisis that was due to a poisonous cocktail of failures in the governance of global macroeconomic imbalances and in the supervision of aggressive financial innovations conducted by systemic important shadow banking. It has fundamentally flawed the prevailing Anglo-Saxon market discipline philosophy, especially with respect to shadow banking.

Crisis management had to confront legal frameworks that proved to be inadequate in order to urgently tackle bailouts and bankruptcies. The legal structures of financial institutions often did not correspond to the complex realities of cross-sectoral business models, and cross-border operations in global financial markets. Moreover, crisis resolution by emergency mergers and acquisitions of ailing banks, leading to even more complex large banking organizations, in particular in the United States, may have even increased prudential concerns for the future. In the EU, there are rather level playing field concerns that are raised due to discriminatory applications to banks of the European "state aid rules."

New controversies are arising in regulatory reform. In the United States, relying more on a regulatory strategy, reregulation proposals re-trench on narrow banking (e.g., return to structural regulation). The EU, following a more prudential strategy, is extending the scope of prudential regulation and supervision to the villain of shadow banking in the periphery. More fundamentally, however, are not the underlying financial models being questioned, and, in particular, the predominance of the Anglo-Saxon financial model?

Recent research in law and finance, departing from neoclassical economics, and venturing into behavioral finance, has already raised interesting issues in the regulation of market conduct for financial products and services (e.g., with respect to credit cards). As the belief in the paradigm of efficient financial markets is shattered by the financial crisis, new research paradigms are to be explored in order to obtain a more realistic description of risk behavior in the financial sector. The integration of asset pricing, corporate finance, and banking models is on the research agenda. Innovation in law and finance by new paradigms of behavioral finance and dysfunctional finance should be pursued in order to better inform regulatory policies in the future.

The lack of appropriate corporate governance has been singled out as a major culprit for the financial crisis. Banks are subject to more severe agency distortions with respect to management control and minority shareholders compared to nonfinancial companies. But more importantly, banks face debt agency problems by their ability to shift risks to debt holders inducing banks to excessive risk taking. Hence, complementary to specific financial regulation and supervision, there is also a need for specific corporate governance for banks in the perspective of financial stability.

Financial portfolio theory can be used to suggest that risk appetite for management and shareholders may crucially depend on their portfolio diversification possibilities. Corporate governance arrangements, with respect to ownership and remuneration, affect the power and incentives of shareholders and managers to take on (excessive) risk. Dispersed and mostly diversified shareholders, complemented by variable performance-linked pay to discipline management in the Anglo-Saxon corporate governance model, appear to increase risk taking by banks. For the continental European-blockholders model, heavily criticized in the LLSV literature, a crucial distinction is to be made. Straightforward controlling blockholders are less likely to be diversified compared to the (predatory) levered control model in which (minority) blockholders are more diversified, and hence more risk preferring. Eventually the straightforward control model might be more conducive to financial stability than the other corporate governance models. This risk-based analysis of corporate governance may also provide new insights into BoD issues for banks: fiduciary duties, independence criteria, and composition.

Finally, when Dr. Ulen was, more than ten years ago, somewhat hesitant about the future of law and economics, envisaging a declining impact “as low hanging fruits for academic work had been picked,”⁸⁹ it appears that in law and finance the impact is on the rise, certainly in the aftermath of the financial crisis. Developments in law and finance rather bear out the other law and economics predictions of Dr. Ulen—in other words, that more complex models, more econometrics, and more behavioral economics are to be involved in the scientification of academic legal scholarship.⁹⁰

89. Ian Ayres, *Very Like a Law Professor: An Essay in Honor of Tom Ulen*, 2011 U. ILL. L. REV. 1767.

90. See Thomas S. Ulen, *Very Like a Whale: Inaugural Lecture for the Alumni Distinguished Professor of Law*, U. ILL. INST. GOV'T & PUB. AFFAIRS (Oct. 15, 1997), <http://igpa.uillinois.edu/system/files/WP62-whale.pdf>.

