Contracts as regulation

Model, applications and legal implications in over-the-counter financial markets

Maciej Konrad Borowicz

Thesis submitted for assessment with a view to obtaining
the degree of Doctor of Laws of the European University Institute

Florence, 15 June 2016

European University Institute
Department of Law

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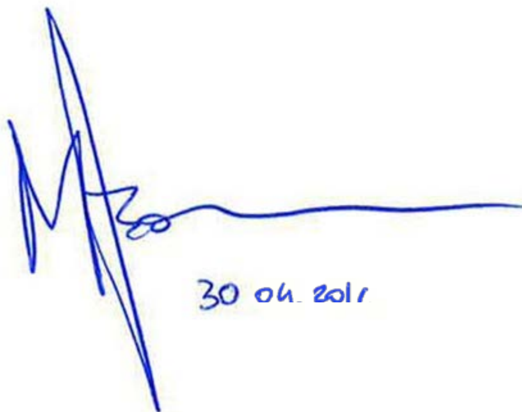

To my parents, with gratitude

Summary

We develop a conceptual model of contracts as regulatory instruments in over-the-counter (OTC) financial markets. The model is informed by the functional understanding of financial regulation as addressing problems of counterparty risk, liquidity, information and systemic risk and structural understanding of regulation as a process of standard-setting, monitoring and enforcement. The justification of conceptualization contracts as regulatory instruments is found in the nature of the political economy considerations that inform the definition of certain contracts used in OTC financial markets. While many scholars rely on conceptualization of the said contracts as boilerplate, we argue that there exist important qualitative differences between boilerplate and regulatory contracts, which we link to a broader spectrum of interests taken into account in their definition in the process of standard-setting. The model and its application to loan and derivatives markets help to highlight the impact of governance features of the organization developing the contract and the regulatory competition to which the organization is exposed on the scope of the regulatory function. We also use a number of indicators and attributions to examine the effectiveness of regulatory contracts. While the contractual model displays some weaknesses in terms of both standard-setting (conflicts of interest) and enforcement (reliance on delegation) compared to its better established counterpart – the organizational model associated with exchanges – the contractual model helps to account for important self-regulatory features of OTC financial markets and offers suggestions as to how the structure of OTC financial markets can be improved.

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Introduction

The instruments of transnational private regulation

While many contract theorists would acknowledge that our understanding of contracts should be linked to the political economy that informs their definition[i], the implications of this simple proposition are not easily translated into the study of contracts and their adjudication.[ii] It can be suggested that this is primarily because of the conceptual and empirical difficulties related to identification of the channels through which contracts are affected by political economy and the related difficulties with incorporation of this analysis into the rigid confines of legal, and in particular contract, doctrine.[iii]At the same time, as the successful examples of such conceptualizations, including standardized contracts (linking contracts to transformation of industrial organization)[iv] and relational contracts (linking

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[i] By political economy we simply mean scope of economic interests taken into account.

[ii] This difficulty is well iilustrated by the long-standing debates between the so-called 'formalist' and 'functionalist' approaches to contract theory. The formalist view, deriving from the sociological work of Max Weber, perceives contracts as relationships arising under conditions of complete autonomy. *See generally* MAX WEBER, THE THEORY OF SOCIAL AND ECONOMIC ORGANIZATION (1915, 1947). The basic critique of the early formalist view came from the legal realist movement in the United States, which question the degree of autonomy that agents enjoyed under the conditons of dramatically changing organization of industrial relations. See e.g. KARL N. LLEWELLYN, THE COMMON LAW TRADITION: DECIDING APPEALS (1960). Peer Zumbansen, *The law of society: governance through contract*, 14 Indiana Journal of Global Legal Studies 191 (2007) (for an overview of the debate).

[iii] *Compare* HANOCH DAGAN & MICHAEL HELLER, FREEDOM OF CONTRACTS THE CHOICE THEORY OF CONTRACTUAL OBLIGATION (forthcoming, 2016)

> "Over the past century, contract theory has progressively lost touch with the role of contract types. If you ask theorists about diverse marriage contract types, many answer: that's family law, not contracts. How about employment contracts? That's labor law. Consumer transactions? Part of the regulatory state. Rather than embracing diverse types, contract theory has shrunk its focus to a single universal, trans-substantive image – the arm's length commercial widget sale." *Id.*

[iv] *See* Clayton P. Gillette, "Standard Form Contracts," *in* GERRIT DE GEEST (ED.), ENCYCLOPEDIA OF LAW AND ECONOMICS.

contracts to social norms)[v] suggest any such attempt requires a careful examination of the political and economic context in which contracts operate and analysis of how that context affects both the function and structure of contractual practices.

In this monograph we will seek to link the function and structure of certain contractual practices to *regulatory capitalism*, a form of political and economic order, which, as it has been suggested, "has been in the making since the 1980s and differs qualitatively from older forms of capitalist governance in its reliance on rules and rule enforcement."[vi] The conception of regulatory capitalism is characterized by a number of features, including delegation, reliance on experts and use of new technologies of regulation.[vii] Most importantly, however, it denotes a pervasive reach of both public and private regulatory measures into virtually every domain of economic activity.

Regulatory capitalism is further linked to globalization - the rapid dissemination of knowledge, people and practice as a result of political, economic and technological transformations that occurred in the last three decades of the XX century. While governments were in many ways the formal orchestrators of it developments, these were corporations, non-governmental organizations and various informal bodies, both public and private that have implemented it. These developments are said to have give rise to transnational private regulation (TPR) -

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[v] *See* Ian R. Macneil, *The Many Futures of Contracts*, 47 S. CAL. L. REV. 691, 865 (1974). *See also* Ian R. Macneil, *Contracts: Adjustment of Long-Term Economic Relations Under Classical, Neoclassical and Relational Contract Law*, 72 NORTHWESTERN UNIVERSITY L. REV. 1978. *See also* (by the same author), CONTRACTS: EXCHANGE AND RELATIONS (1978); *Reflections on Relational Contract*, 141 J. INST. & THEOR. ECON. 541-546 (1985). For a useful introduction into Macneil's work *see* IAN MACNEIL (DAVID CAMPBELL, ED.). RELATIONAL THEORY OF CONTRACT: SELECTED WORKS OF IAN MACNEIL (2001).
[vi] David Levi-Faur, *The Diffusion of Regulatory Capitalism*, Volume 598 of ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE 4, 17 (2005). *See also* JOHN BRAITHWAITE, REGULATORY CAPITALISM: HOW IT WORKS, IDEAS FOR MAKING IT WORK BETTER (2008).
[vii] Levi-Faur, *The Diffusion* (2005) supra note vi at 27.

"a new body of rules, practices and processes, created primarily by private actors, firms, NGOs, independent experts like technical standard-setters and epistemic communities, either: exercising autonomous regulatory power or implementing delegated power, conferred by international law or by national legislation."[viii]

Few domains have benefited more from regulatory capitalism and, indeed, TPR, more than financial markets. In the late 1970s a number of financial innovations started to emerge in the United States, including derivatives, securitization and leveraged finance. This was facilitated by regulatory deference to the private sector and a favorable macroeconomic environment enabling finance to expand. The advances in telecommunications technology added to the efficiency with which transaction could be executed. Soon enough finance exploded both in terms of volume and geographical scope outgrowing the value of the 'real' economy.

A large portion of that growth can be attributed to the rise to prominence of over-the-counter (OTC) markets, which have until then operated in the shadow of exchanges; both in terms of their smaller size and less efficient structure, relative to both the size and efficiency of exchanges.[ix] Paradoxically, it was precisely their 'less efficient' structure that led to their exponential growth. These 'inefficiencies' had to do with the complex nature of the products traded in OTC markets. For example, as Duffie notes,

> "a wide range of collateralized debt obligations and other structured credit products are thinly traded and have complex contractual

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[viii] *See* Fabrizio Cafaggi, *New Foundations of Transnational Private Regulation*, 36 Journal of Law & Society (2011).

[ix] DARRELL DUFFIE, DARK MARKETS: ASSET PRICING AND INFORMATION TRANSMISSION IN OVER-THE-COUNTER MARKETS (2012) [hereinafter DUFFIE, DARK MARKETS]. See also Colleen M. Baker, *Regulating the Invisible: The Case of Over-The-Counter Derivatives*, 85 Notre Dame Law Review 4 (2010).

> features that could be analyzed well by only a narrow range of specialized investors. Even if such instruments were traded on an exchange, liquidity and transparency would be lacking. In any case, many such instruments could rarely achieve the volume and breadth of participation that would justify exchanged-based trade. These are natural candidates for OTC trading, where customization of financial products to the needs of investors is more easily arranged."[x]

OTC markets required a different form of regulation. They relied on a form of regulation, which derived from the organizational model association with exchanges, but remained contractual in nature. Perhaps the most notorious example a contract around which such regime has been established is the Master Agreement developed by the International Swaps and Derivatives Association (ISDA)(the ISDA MA), which inspired a whole generation of contracts used throughout a number markets. In fact, virtually all OTC markets rely, in one way or another, on such contracts for regulation. However just what that function consists of, how it is performed and what implications does it have for legal analysis is not clear.

This is regrettable because these contracts have facilitated and shaped supply of capital, creation of investment opportunities and risk transfer as OTC markets expanded beyond the US and Western Europe to South-East Asia, Eastern Europe, Latin America and Africa. Their story, which this monograph sets to tell, is one of alliances across, within, across and beyond national borders and across the private and public sectors that culminate in contractual formulations that govern, or more appropriately, regulate trillions of dollars worth of transactions on a daily basis throughout the world.

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[x] DUFFIE, DARK MARKETS supra note ix.

The global financial crisis of 2007-2008 has, of course, prompted questions about the use of the contractual model for regultion. However, never has the regulatory nature of these contracts been clearer than in the past few years, when these contracts became the focal point of political discussions. The enlisting of private regulators, including ISDA, to assist with the rebuilding of the effectiveness of the regulatory efforts is a testament to the political nature of the considerations that go, and increasingly will go into the definition of those contracts and should be reflected in how we think and what kind of decisions do we make about those contracts. [xi]

Transnational private regulators

There is, of course, a concept that is commonly used to describe them – financial boilerplate.[xii] But the use of this concept to account for the functional and structural features of these contracts strikingly ignores the context from which the concept of boilerplate emerged and for which it is indeed best suited – unilaterally defined

[xi] *Compare* Stavros Gadinis, From Independence to Politics in Financial Regulation, 101 CAL. L. REV. 327, 332 (2013). *See also* Adam J. Leviting, *The Politics of Financial Regulation and the Regulation of Financial Politics: a Review Essay*, 127 Harv. L. Rev, 1, 73 (2014)

> ("The lesson from these recent books on the financial crisis is that we are simply having the wrong debate about financial regulation . . . the financial regulatory debate needs to be about how to change the political environment for regulation. Whether and when this goal is best served by leaning into or pulling back from political contests remains an important question for future research. Yet only by reforming the politics of financial regulation will we achieve lasting financial regulation that achieves the socially optimal balance of stability and growth. Reforming financial politics requires a change in governance structures for financial regulation to account for the myriad ways in which political influence can affect regulation beyond those actions governed by administrative law procedures. The experience of 2008 and its aftermath teaches that those who wish to reform the regulation of the financial system need to concentrate their efforts on reforming its politics.").

[xii] Financial boilerplate is a term used by practitioners and scholars alike to describe standardized financial contracts, typically relating to OTC financial markets. *See e.g.* PHILIP R. WOOD, SET-OFF AND NETTING, DERIVATIVES, CLEARING SYSTEMS, Volume 4, ¶12-054 (2nd ed., 2007)

bilateral relationships.[xiii] Adoption of the lens of boilerplate makes it difficult to see that these contracts constitute a very particular form of private ordering, which is not only different from boilerplate in terms of the technology through which it is produced, but also in terms of the underlying politicaly economy of the substantive choices it represents. While some scholars and decision-makers tend to lump all standardized contracts into the same category, this monograph argues that this may be an oversimplification and that some of these contracts should not be referred to as standardized or boilerplate contracts at all.

One of the limitations of the literature on financial boilerplate is to be found in the fact that it focuses on the role of lawyers and financial advisors in defining boilerplate contracts.[xiv] Standardization of contracts in finance, or at least certain areas of finance, is attributed primarily to delegation of large parts of drafting authority to law firms. Because both lawyers and financial advisors involved in large financing transactions tend to be quite concentrated and risk-averse they are inclined to use standardized forms. While these efforts can indeed bring about certain effects that may be market wide, such as learning and network externalities, their qualitative nature is quite different from what we are concerned with here. [xv]

Kevin Davis made this point, when he suggested that “[t]here are good reasons to believe that significant amounts of contractual innovation occur outside of financial contracts produced by law firms, and that we should learn more about

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[xiii] *Compare* OMRI BEN-SHAHAR (ED.), BOILERPLATE: THE FOUNDATION OF MARKET CONTRACTS (2007).
[xiv] Early contributions include Michael J. Powell, *Professional Innovation: Corporate Lawyers and Private Lawmaking*, 18 LAW & SOC. INQUIRY 423, 427–29 (1993); Marcel Kahan & Michael Klausner, *Standardization and Innovation in Corporate Contracting (or „The Economics of Boilerplate”),* 83 VA. L. REV. 713 (1997). More recently see in particular MITU GULATI & ROBERT E. SCOTT, THE THREE AND A HALF MINUTE TRANSACTION: BOILERPLATE AND THE LIMITS OF CONTRACT DESIGN 9 (2012).
[xv] Stephen J. Choi & G. Mitu Gulati, *Contract as Statue*, 104 MICH. L. REV. 5, 1129-1173 ("Boilerplate": Foundations of Market Contracts Symposium, Mar., 2006).

those forms of innovation."[xvi] Davis pointed out the role of non-profit organizations, such as trade associations, which bring together market participants and therefore offer a broader view of what kind of support is needed for a particular type of transaction or market. The questions about what it is that their presensce brings remains open.

One dimension of the answer, it can be suggested, may have to do with the potentially broader functional outlook of those actors as compared with the functional outlook of, say law firms. While law firms may clearly be interested in the contract having important credit risk and transaction cost reducing properties, the functional scope can be wider. Trade associations, by contrast, may have a broader set of objectives in mind; give the broader interest base they represent. This raises question about how far, from a functional standpoint, does the role of those organizations go? Can it be understood as regulatory? Can they complement public regulatory efforts or perhaps altogether replace them?

A second dimension concerns the link between structure and functions. Boilerplate developed by law firms and other actors has a lot of inefficient the features of decentralization, such as costly communication and information processing. By contrast, centralized development of these contracts suggests decreased costs of communication and information processing. Indeed, Choi and Gulati who contrasted the contractual response to adverse litigation concerning the *pari passu* clause in the realm of sovereign debt, where it is primarily law firms defining provisions, with the adverse consequence of litigation concerning the term 'restructuring' in the realm of derivatives markets, where ISDA is present found a

[xvi] Kevin E. Davis, *Contracts as Technology*, 88 N.Y.U. L. REV. 1, 84-127, 87 (2013) .

remarkable difference between the effects of decentralization and centralization on production of boilerplate, which appear to be particularly striking given that it was virtually the same lawyers who participated in the process.

> "The same lawyers, who took years to respond to litigation or other interpretive shocks in the absence of a centralized standard setter, responded extremely quickly when there existed an effective standard-setting body such as ISDA to work through. With ISDA, the response was immediate. The presence of ISDA ensured a mechanism for coordination and prompt response—a point that finds support in other examples of prompt ISDA respons*es to* documentation problems. In the *pari passu* case, although there was discussion about the need to form an expert committee and produce a report, there was no committee formed and the uncertainty remains unresolved six years later; moreover, sovereign debt contracts as of this writing still all contain the same unclear *pari passu* language. Significantly, the *pari passu* and Eternity contract ambiguities were not isolated cases. They were arguably the two biggest contractual ambiguities that the sovereign debt market has had to deal with in fifty years."[xvii]

ISDA's role in the setting and monitoring of the standard cannot be disputed, but, arguably, it also to extends beyond it. The conceptual framework that will guide our analysis of ISDA as well as other organizations will seek to uncover the nature and impact of centralized standard-setting and monitoring and its implications for enforcement. How far does the reach of the structural impact extend given these organizations typically do not link standardization with membership, and hence tend to have direct enforcement powers? Are there any mechanisms of enforcement? What is the role of public regulators and courts *vis a vis* these contracts? These are the kinds of questions we need to answer to get a better understanding of regulatory contracts.

[xvii] Choi & Gulati, *Contract as Statue*, supra note xiv.

Regulatory contracts: a conceptual model

The contractual model of regulation developed in this monograph is informed by the functional understanding of financial regulation as addressing problems of counterparty risk, liquidity, information and systemic risk and structural understanding of regulation as a process of standard-setting, monitoring and enforcement.

On the functional side, it is commonly accepted in economics that the function of regulation consists of addressing market failures, such as information problems, externalities and monopoly.[xviii] Of course, these market failures manifest themselves differently in different markets. In finance information problems take the form of counterparty risk, liquidity, information and systemic risk.

The structure of regulation in regulatory theory is commonly thought to encompass standard-setting, monitoring and enforcement.[xix] The principal difficulty in constructing the contractual model of regulation lies in outlining how does the process of standard-setting enable for definition of the function of the contract in way that extends beyond the particular of individual market participants and how is the standard enforced, given that, unlike in the organizational model associated with exchange, the contractual model does not link standardization with membership?

In Chapter 1 we suggest that functional scope is the function of governance features of the organization (including scope of membership, composition of the board etc.) and regulatory competition to which the organization is exposed and that in the case of the contractual model enforcement is delegated to market

[xviii] ANTHONY I. OGUS, REGULATION: LEGAL FORM AND ECONOMIC THEORY at … and passim.
[xix] *Id.*

participants and courts. The contractual model of regulation revolves around these two propositions.

The purpose of this model is to help outline certain features of the OTC markets organized around it. OTC markets are oftentimes labelled as 'opaque', but there is very little in the litterature to account for the rules governing OTC markets. In Chapters 2, 3 and 4 we apply the model to US and European loan and the global derivatives markets. The choice of the case studies has been motivated by the comparative possibilities afforded by those contracts in terms of cross-sectional impact of the structue (governance and regulatory competition) as an independent variable on the scope of the regulatory function as a dependent variable. The empirical material used in the analysis consists of contracts developed, for the US loan markets, by the Loan Syndications and Trading Association (LSTA), for the European loan markets, by the Loan Markets Association (LMA) and by ISDA for the global derivatives markets.[xx] We also relied on various publications prepared by the organizations and the materials available on their websites. We have also relied on a number of legal memoranda prepared by law firms and conducted a limited number of interviews (including by email, phone and in person) with representatives of the LMA and ISDA, as well as with a number of lawyers in New York and London.

In Chapter 5 we examine how the similarities and differences in structure (in particular with regard to governance and regulatory competition) that have been identified in the case studies bear on definition of the scope of the regulatory function. To answer this question we employ comparative methods focusing on the impact of structure as an independent variable on the scope of the regulatory

[xx] While I quote relevant sections of the contracts where appropriate, it was not possible due to copyright protection, to attach the contracts to this monograph. Throughout the monograph terms capitalized but not defined have the meaning attributed to them in the relevant contracts.

function as a dependent variable. The comparative analysis will allow us, in Chapter 6, to determine how law, regulation and adjudication should approach regulatory contracts in order to fully realize their regulatory capabilities. These have been questioned in the immediate aftermath of the crisis; there is no escape from embracing the regulatory function of contracts. Hopefully, this thesis can offer some guidance as to how to go about it.

London, April 2016

Chapter 1

Regulatory contracts in over-the-counter financial markets: the conceptual framework

1.1. Transnational private regulation in financial markets

1.1.1. Contract governance in finance and financial markets

Perhaps the greatest challenge in conceptualizing contracts as regulatory instruments lies in the fact that a lot of practitioners and scholars alike believe there is a fine line between commercial and regulatory activity. The juxtaposition follows from analytical attempts in neo-classical economics to distinguish between the two. Under the neo-classical model commercial activity is represented by a set of prices as focal points of voluntary exchanges. These prices, under certain conditions such as perfect informatio and lack of externalities, represent an equilibrium.[1] To the extent that these conditions are not met and the equlibrium is disturbed, external intervention is neeed. This, of course, is the role for regulation.

While it may be possible and even desirable to draw a sharp distinction between commercial and regulatory activity in some cases, scholars in the institutional tradition have long shown that this perspective leaves out institutions as important drivers of economic outcomes.[2] The notion of 'institutions', as it is used

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[1] The first attempt in economics to model prices for a whole economy by seeking to prove that a set of prices exists that will result in an overall equilibrium was made by Léon Walras. *See* LÉON WALRAS, ELEMENTS OF PURE ECONOMICS (1877). *See also* ALFRED MARSHALL, PRINCIPLES OF ECONOMICS, VOLUME 1, BOOK V ("The Theory of Equilibrium of Demand and Supply") (1895). For a contemporary version of the classical model *see generally* JOSEPH STIGLITZ, ECONOMICS (2005).

[2] See ERIC BROUSSEAU AND JEAN-MICHEL GLACHANT, NEW INSTITUTIONAL ECONOMICS: A GUIDEBOOK (2008). For an early example of the argument see JOHN M. CLARK, SOCIAL CONTROL OF BUSINESS (1969 reprinted second edition, originally 1939, first edition 1926). In his work Professor Clark's made the

in the institutional literature, is broad and encompasses all kinds of arrangements supporting economic activity, including social norms, contracts, organizations and the law. In the relam of finance, institutions so understood enable and help coordinate economic activity by, among other things, mitigating risks and reducing transaction costs for parties to financing transactions.

1.1.1.1. Credit risk and transaction costs in financing transactions

Consider a simple financing transaction between a borrower and a lender. The lender is contemplating whether to lend money to the borrower. The loan is going to be contingent on something that will happen in the future. For example, the lender may lend money to a company for it to invest the funds into acquisition of a new business. The investment is contingent not only on the success of the transaction, but also on the success of the acquiring and acquired companies. It is only if both are successful and generate the expected returns that the financier will be paid back. Every investment is thus, by its very nature, uncertain.

While the notion of uncertainty is commonly used in the economic literature, the financial literature uses the notion of risk to describe the same idea. A simple example derived from the transactional realm is credit risk. In the finance literature credit risk is "the risk of changes in value associated with unexpected changes in credit quality."[3] As such credit risk is one sided and, at least according to the

observation that it is simplistic, if not plainly wrong, to say that "business exists first and then it is controlled." Quite on the contrary, he noted, "[c]ontrol is rather an integral part of business, without which it could not be business at all. The one implies the other, and the two have grown together." Id. See also JOHN COMMONS, LEGAL FOUNDATIONS OF CAPITALISM (1924). In the context of financ see in particular Katharina Pistor, *A Legal Theory of Finance*, Journal of Comparartive Economics (2013).

[3] DARRELL DUFFIE, KENNETH J. SINGLETON, CREDIT RISK: PRICING, MEASUREMENT, AND MANAGEMENT 3 (2003).

financial literature, can be estimated clearly, provided that there is sufficient information about the borrower.

Credit risk is perhaps the most important concern of parties to financing transactions because it affects the price of the funding being extended. The higher the risk, the higher (from the point of view of the borrower) the price of the loan, i.e. the interest rate. Generally speaking, even the riskiest loans will find their financiers as long as the interest rate is sufficiently high. This is attributed to the operation of the price mechanism per which the matching of supply and demand is a matter of finding the right price.

However, as Ronald Coase famously pointed out in his seminal 1937 article "The Nature of the Firm", there is a "cost associated with the price mechanism."[4] That is to say it is costly to find the right price and the right party. Professor Coase did not provide a precise definition of what this cost was, but rather gave some examples: price discovery, negotiation of contracts, enforcement.[5] Later in his career he referred to these costs as 'transaction costs' and further argued that they prevent efficient bargaining or coordination between buyers and sellers and are in fact the primary reason why regulation is needed.[6]

Professor Coase's insights gave an impetus to development of transaction cost economics (TCE) most commonly associated with the later work of Oliver Williamson. Professor Williamson cleverly did away with a lot of the discussion about what actually counts as transaction costs and substituted asset specificity for

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[4] Ronald Coase, *The Nature of the Firm*, 4 ECONOMICA 16, 386–405, 390 (1937).
[5] *Id.* at 390-91.
[6] Ronald Coase, *The Problem of Social Cost*, III J. L & ECON., 1-44, 15 and *passim* (1960).

transaction costs.[7] The more uncertainty and the more specific the asset, the more support or governance will be needed for transactions. This is known in the literature as the discriminating alignment hypothesis.[8] Under the hypothesis, the more uncertainty, and the more specific the asset, the more likely the investors are to use equity rather than debt.[9] Equity, of course, represents the organizational variant of governance.

1.1.1.2. Organizations and contracts as governance structures

Institutional theory suggests that commercial activity or transactions ought to be analyzed within a complex institutional matrix constituted by contracts and organizations.[10] These two institutional dimensions – contracts and organizations – have different coordinating or *governance* capabilities.[11] Contracts allow parties to a transaction to enjoy the many benefits of transactions and with a considerable degree of security and certainty by formally outlining their respective rights and

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[7] Oliver E. Williamson, *Transaction Cost Economics: The Governance of Contractual Relations*, 22 J. L. & Econ. 2, 233-261, 239 (1979).

[8] Oliver E. Williamson, Economics of Governance, 95 AM. ECON. REV. 2, 1-18 (2005). Jeffery T. Macher and Barack D. Richman note that the majority of empirical research in transaction cost economics is a variation of the discriminating alignment hypothesis identified above. "Organizational mode is the dependent variable, while transactional properties, as well as other control variables, serve as independent variables. The most common empirical approach is to conceptualize organizational form as one of three broad discrete types: market, hierarchy, or various hybrid and intermediate modes. Hybrid modes of governance include joint ventures, relational contracting, and bilateral governance." [Internal citations omitted – MB] Jeffrey T. Macher and Barack D. Richman, *Transaction Cost Economics: An Assessment of Empirical Research in Social Sciences*, 10 BUSIN. & POLIT. 1, 1-63 (2008).

[9] Oliver E. Williamson, *Corporate Finance and Corporate Governance*, Journal of Finance, 567-91 (1988).

[10] *See in particular* Williamson, *Transaction Cost Economics*, supra note 7. See also Oliver E. Williamson, *The New Institutional Economics: Taking Stock, Looking Ahead*, 38 J. ECON. LIT., 3, 595-613, 597 (2000).

[11] Williamson understood governance in terms of optimization of. *See* Williamson, *Transaction Costs*, *supra* note 7 at 24 ("Governance structures . . . are properly regarded as part of the optimization problem").

obligations and the manners of their execution. Organizations have the added benefit of streamlining various aspects of the transactional process, such as negotiation and enforcement. This line of theoretical research, supported by a reach empirical literature, proved to be one of the most fruitful research paradigms of the last three decades in economics and beyond.

The governance framework has initially been constructed rather narrowly. As Williamson noted "[t]he economics of governance . . . is principally an exercise in bilateral private ordering, by which I mean that the immediate parties to an exchange are actively involved in the provision of good order and workable arrangements."[12] Thus, we speak of governance of transactions (or contractual relations) and not markets; we speak of governance and not regulation.

However, the conceptualization of governance structures as arrangements seeking to minimize cost for all 'patrons' or 'stakeholders' who may be affected by a particular transaction or set of transactions[13] lends itself comfortably to application beyond bilateral relations. This is to say that organizations are perfectly capable of governing not only transactions, but also markets.[14] In fact, application of the governance framework to account for the nature and features of exchanges has yielded insightful analysis explaining why are particular governance structures

[12] Williamson, *Economics of Governance*, supra note 8.
[13] Henry B. Hansmann, *The Role of Nonprofit Enterprise*, 89 Yale Law Journal 5, 835-901, 838 (1980).
[14] As Spulber puts it: "[f]irms centralize markets by intermediating transactions." They become hubs of exchange helping consumers optimize on the various transaction costs – communication and information processing, search and matching, bargaining and contracting and opportunism. They collect information about buyers and sellers. They supply information about goods and services and terms of the exchange (including price). They use information systems to process information. They aggregate information about demand and supply. They can break large orders into small ones and vice versa thereby matching the supply and demand sides more efficiently. They offer standardized contracts and business processes. They offer posted prices and operate auctions. They also help reduce opportunism through monitoring and incentive contracts. *See* SPULBER, THE THEORY OF THE FIRM (2009), supra note 58.

adopted by exchanges, how do governance structures affects their behavior and why do these structures change.[15] Exchanges are commonly considered as the paradigmatic self-regulatory organizations.

At the same time, there is little in the literature (and for that matter theory) to account for contracts governing markets. The literature on the role of contracts in governing markets (third party effects, both positive and negative) is sparse. It was only the financial crisis of 2007-2008 that has triggered scholarly interets in empirical and conceptual examination of contracts governing markets.[16] In the aftermath of the crisis, new approaches have emerged, which generally advocate a broader understanding of contracts governance and the governance of contracts in finance and financial markets.[17]

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[15] RUBEN LEE, WHAT IS AN EXCHANGE (1999). *See also* (by the same author), RUNNING THE WORLD'S MARKETS: THE GOVERNANCE OF FINANCIAL INFRASTRUCTURE (2011).

[16] This failure has to be understood as a failure to appreciate the role of markets as a source of financial instability. For a long time the debate about financial regulation has centered on financial intermediaries. The focus had been on financial intermediaries, such as banks, because of their importance for the traditional financial system. In the traditional financial system banks were the principal source of financing for the economy. By taking short-term deposits and making long-term loans they engaged in maturity transformation. It was believed that the maturity mismatch that resulted on banks' balance sheets warranted the regulation of their capital. These regulations required banks to hold, in principle, enough capital to withstand a normal amount of withdrawals. Hence the most important regulations were banking regulations that were supposed to prevent banking panics. However, the financial crisis was primarily the result of failure of markets. It was the examination of markets for repurchase agreements, asset backed securities and derivatives that provided some of the most informative explanations of the causes of the financial crisis and, more generally, of markets as source of instability.

[17] For a good overview of these approaches see STEFAN GRUNDMANN, FLORIAN MÖSLEIN & KARL RIESENHUBER (EDS.), CONTRACT GOVERNANCE DIMENSIONS IN LAW AND INTERDISCIPLINARY RESEARCH (2015). See also Andre Verstein, *Ex Tempore Contracting*, 55 WILLIAM & MARRY L. REV.5 (2014).

1.1.2. Contract governance and the governance of contracts: boilerplate, lex mercatoria and transnational private regulation

One of the most influential strands of literature seeking to account for contracts governing markets is the boilerplate literature. The boilerplate literature expands the purview of governance suggesting that boilerplate can have market-wide effects through learning and network externalities.[18] A number of studies in the realm of sovereign debt contracting in particular showed the complex political and economic dynamic behind the emergence and operation of certain provisions and even entire contracts.[19] The literature highlighted the critical role of those provisions and contracts as well as explored the inefficiencies of decentralized boilerplate production.

Lex mercatoria is another strand of contract governance literature that seeks to account for market wide effects of contract governance. The term itself, of course, originally refered to a complex body of rules followed by medieval merchants reflecting the pluralistic sources of rights and obligations at that time.[20] A number of scholars have suggested that it might be useful to think about certain contracts used in finance and financial markets along the same lines.[21] Specifically, the argument

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[18] We discuss this literature in greater detail in Section 1.4.1.1. *infra*.
[19] *See in particular* Stephen J. Choi, Mitu Gulati & Eric A. Posner, *The Dynamics of Contract Evolution*, 88 N.Y.U. L. REV. 1, 2-50 (2013).
[20] Nils Jansen & Ralf Michaels, "Private Law Beyond the State? Europeanization, Privatization, Globalization" and (by the same authors) "Private Law and the State: Comparative Perceptions and Historical Observations", in NILS JANSEN & RALF MICHAELS (EDS.), PRIVATE LAW BEYOND THE STATE (2008). *See also* PEER ZUMBANSEN & GRALF-PETER CALLIESS, ROUGH CONSENSUS AND RUNNING CODE: A THEORY OF TRANSNATIONAL PRIVATE LAW (2010).
[21] Hugh Collins, „Flipping Wreck: Lex Mercatoria on the Shoals of Ius Cogens", in GRUNDMAN ET AL., CONTRACT GOVERNANCE (2015), supra note 16. *See also* Fabrizio Cafaggi, *The Many Features of Transnational Private Rule-Making: Unexplored Relationships between Custom, Jura Mercatorum and Global Private Regulation*, 36 University of Pennsylvania Journal of International Law 4 (2015).

goes, *lex mercatoria* constitutes a *sui generis* source of normativity, which courts could recognize by broadening the scope of the rule of recognition.[22]

Both the boilerplate literature and *lex mercatoria* approaches offer important insights into the nature of governance effects existing around certain contracts. However, there may be some doubts as to whether they are well suited to account for all of those effects and inform legal analysis. The principal problem with boilerplate is that it has, both conceptually and doctrinally, evolved in the context of vertical integration of business and has largely served the purpose of facilitating (both on the inside and the outside) the internally segmented hierarchical structure.[23] This has led many scholars, and indeed, judges as well, to view them with a certain degree of suspicion to the point that there should not be enforceable.[24] While there is some evidence that courts are inclined to treat

[22] This, of course, refers to the conception of law put forward by H.L.A. Hart. Hart argued that law can be understood as an interplay of primary rules and secondary rules, where the latter (demeed as 'rules of recgonition) determine the validity of primary rules. H.L.A. HART, THE CONCEPT OF LAW (1961)
[23] See Friedrich Kessler, *Automobile Dealer Franchises: Vertical Integration by Contract*, 66 YALE L. J. 8, 1135 (1957); Todd D. Rakoff, *Contracts of Adhesion: An Essay in Reconstruction*, 96 HARV. L. REV. 1173 (1983). For a more recent perspective *see* Omri Ben-Shahar & James White, *Boilerplate and Economic Power in Auto-Manufacturing Contracts, in* BEN-SHAHAR, BOILERPLATE (2007), supra note xii at 43.
[24] Both Kessler and Rakoff argued boilerplate should be unenforceable. More recently, experiences with boilerplate associated in particular with the practice of Internet contracting, have further reinforced the assumption about the 'abusie' nature of boilerplate. See e.g. Robert A. Hillman & Jeffrey H. Rachlinski, *Standard Form Contracting in the Electronic Age*, 77 N.Y.U. L. REV. 429-495 (2002). See also NANCY S. KIM, WRAP CONTRACTS: FOUNDATIONS AND RAMIFICATIONS (2013). Margaret Jane Radin suggests that the ineffecitiveness of contract law to deal with these 'abusive' practices warrants the use of tort law. MARGARET JANE RADIN, BOILERPLATE: THE FINE PRINT, VANISHING RIGHTS, AND THE RULE OF LAW (2012). For a critique see Omri Ben-Shahar, *Regulation Through Boilerplate: An Apologia*, Michigan L. Rev. and response by Radin, *What Boilerplate Said: A Response to Omri Ben-Shahar (and a Diagnosis*) (in the same volume). For earlier critique see Alan Schwarz and Louis L. Wilde, *Intervening in Markets on the Basis of Imperfect Information: A Legal and Economic Analysis*, 27 U. Pa. L. Rev. 631 1978-1979. *See also* Alan Schwarz and Louis L. Wilde, *Imperfect Information In Markets For Contract Terms: The Examples of Warranties and Security Interests*, 69 Virgina Law Review 1394-1485 (1983); Charles Goetz and Robert Scott, *The Limits of Expanded Choice: An*

financial boilerplate more favorably (in paticular because of the sophisticated nature of the parties involved), there may be doubts whether the conception itself sufficiently reflects the nature and scope of regulatory considerations that go into the definiton of those contracts.

The limitations of the *lex mercatoria* approach are conceptual, doctrinal and empirical. Coneptually and doctrinally, recognition of *lex mercatoria* a source of law requires judges to take a conceptual step they are unlikely to take, as "state law has only been prepared to recognize other states as providing a source of law, because that process of mutual recognition tends to confirm the cartel of states with regard to law-making powers."[25] Empirically, there exists major disagreements as to what *lex mercatoria* might actually be. These disagreements are similar to those already identified in the context of custom.[26] Finally, similarly as in the context of boilerplate, there may be doubts as to whether the conception of lex mercatoria accurately reflects the nature and scope of regulatory considerations that go into the definiton of those contracts. Unlike custom, these contracts tend to be quite formal.

A TPR approach can help overcome the limitations of the boilerplate and *lex mercatoria* literatures by linking-up the definition of contracts with a broad set of interests aligned through a private regulatory orgnizations and at the same time preserving reliance on the formal contractual form. From a TPR point of view, these contracts are not just casually evolving standards or accepted practices followed by financiers; rather they are part of a multi-level regulatory structure, which

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Analysis of the Interactions Between Express and Implied Contract Terms, California Law Review, 73, 261 (1985).

[25] Collins, Flipping Wreck, supra note 20 (referring to Ralf Michaels, Ralf Michaels, *The Re-State-Ment of Non-State Law: The State, Choice of Law, and the Challenge from Global Legal Pluralism* (2005) 51 Wayne Law Review 1209-1259, 1233).

[26] Lisa Bernstein*, The Questionable Empirical Basis of Article 2's Incorporation Strategy: A Preliminary Study*, 66 U. CHI. L. REV. 710, 740–42 (1999).

complements public regulatory efforts in the same way that the private regulatory efforts of exchanges have long complemented the public regulatory efforts of securities regulators. Admittedly, at this point this may be more of conceptual rather than positive claim; but as we shall argue in this monograph, such a conceptual claim is instrumental for development for our better understanding of OTC markets.

The TPR, of course, comes with its own baggage of provlems. One problem with private regulation is that, to some, it sounds like an oxymoron. Regulation is supposed to address market failures, and to the extent private parties address a give problem, the cannot possible considered a market failure. We would suggest this view is simplistic for at least two reasons. First, it is based on a simplistic conception of markets. In reality markets are very complex and encompass a broad range of market participants who are motivated by different factors and we need to make a distinction between the activity of parties to a commercial transactions and the activity of members of a trade associaiton, both of which technical part of the 'market'.[27] Second, it is based on a very narrower understanding of regulation. While market failures are important, there is a wide range of third-party effects, both positive and negative that can be considered regulatory in nature. Many of these effects can be associated with the activities, and in particular contract production-related, activities of trade associations. While, admittedly, these organizations do not consider themselves as regulatory organizations, as we shall demonstrate,over time they find themselves in a position where they have to recognize their part in the regulatory structures. This is, indeed, something that happened with exchanges. We would like to suggest that this is also likely to happen

[27] *Compare* SPULBER, THE THEORY OF THE FIRM (2009), supra note 12.

with regard to trade association that stand at the center of the contractual model of regulation.

1.2. Contracts as regulation: a conceptual model

The contractual model can be said to build on the organizational model of regulation and organizational approaches to contract.[28] The organizational model of regulation suggests that is possible for private structures (such as organizations) to perform a regulatory function). Rules can take a number of forms and there is no inherent reason why privately generated rules could not perform regulatory functions. [29] Organizational approaches to contract, in turn, emphasize the link between the governance features of the organization that develops the contract and the substantive rules to be be found in that contract.[30]

[28] I use the notion of a contractual model to denote a description of certain features of contract governance (i.e. what the contract does) and governance of contracts (i.e. impact on the contract of various factors external to the contract). The principal goal of such model is to enable market participants and decision makers to develop an easily understood interpretation of the markets by enhancing their understanding, facilitating exchange of details between stakeholders, providing a point of reference for regulatory to extract market specifications and finally, document the markets for future reference. These features coincide with features of conceptual model as they are used and developed in the context of systems design. *Compare* C. Kung & A. Solvberg, „Activity modeling and behavior modeling", in T. OLLE, H. SOL & A. VERRIJN-STUART (EDS.), INFORMATION SYSTEMS DESIGN METHODOLOGIES: IMPROVING PRACTICE (1986).
[29] Compare Gillian Hadfield & Eric Talley, On Public versus Private Provision of Corporate Law, 22 Journal of Law, Economics and Organization 414-441 (2006) ("What is less clear, however, is why the economic functions of law—the market structuring functions—are produced by the state. Why does the state assume responsibility for designing the structure of the relationships within and between economic entities when the instrumental objective is not democratic legitimacy, but rather market efficiency? Law in its economic function is largely a service. It enhances the value of transactions; it coordinates activities, provides a means of commitment, and resolves disputes in the cooperative endeavors that characterize economic activity. The optimal provision of law in these functions means the efficient design and implementation of the rules that structure and regulate the market economy.")
[30] See Brayden King & D. Gordon Smith, Contracts as Organizations, 51 Arizona Law Review 1 (2009).

Building on these two approaches it can be suggested that for acontract to be considered regulatory it has to perform a function associated with regulation and it also has to have the structure of regulation, i.e. follow the tripartite process of standard-setting, monitoring and enforcement. The structural dimension presupposes that the standard will be set in a way that will allow for incorporation of regulatory considerations and that enforcement or threat thereof will limit the parties' freedom of contracts.

This above conception of regulatory contracts bridges the gap between contract and regulation. If a contract performs a regulatory function, there is no real *economic* difference between contract and regulation. Naturally there will be difference in scope, structure, effectiveness, legitimacy etc., as they exist in the context of the organizational model.he principal difficulty in constructing the contractual model of regulation lies in outlining how does the process of standard-setting enable for definition of the function of the contract in way that extends beyond the particular of individual market participants and how is the standard enforced, given that, unlike in the organizational model associated with exchange, the contractual model does not link standardization with membership?

1.3. Functional dimension

For a contract to perform a regulatory function it has to perform one of the functions associated with financial regulation - counterparty risk (settlement, replacement, default risk), liquidity, information and systemic risk. However, it is important to note that the function of financial regulation has to be defined with regard to the particular market structure to which it applies. While much of the literature on financial regulation discusses the function of regulation with regard to exchanges, the proper function of financial regulation with regard to OTC markets

will be somewhat different. This is largely because, as Duffie, one of the authorities on OTC market structure notes,

> "[a]n OTC market does not use a centralized trading mechanism, such as an auction, specialist, or limit-order book, to aggregate bids and offers and to allocate trades. Instead, buyers and sellers negotiate terms privately, often in ignorance of the prices currently available from other potential counterparties and with limited knowledge of trades recently negotiated elsewhere in the market."[31]

This structure of OTC markets is justified primarily due the fairly idiosyncratic nature of assets trade in OTC markets – in terms of the underlying obligations, the size of the transactions and the parties involved. For example, whereas equities, future or options traded on exchanges represent standardized bundles of rights and obligations, the rights and obligations of parties to loans or swaps traded OTC can vary profoundly. Further, whereas the value of equities, futures and options traded on exchanges also tend to be quite limited (and is sometimes restricted) per transaction, the value of OTC trades in loans or swaps typically reaches tens of and hundreds of millions of dollars per transaction. Finally, whereas a large part of trades in equities, futures and options is entered into by retail investors, a large part of OTC trades is conducted in the inter-dealer market between a very limited number of very large financial institutions as well as the dealer-to-customer market, between large financial institutions and large corporations, governments, municipalities etc.. Each of these, as well as other attributes of OTC markets feed into the particular definition of the scope of financial regulation as outlined below.

[31] DUFFIE, DARK MARKETS, supra note ix (Introduction) at 1.

1.3.1. Counterparty risk

Purchasers of financial assets face the underlying credit risk associated with the asset, but when they engage in a trade in financial markets, they also face an additional risk – the risk of unexpected change in credit quality of its counterparty. Counterparty risk is a subset of credit risk and hence is sometimes referred to as counterparty credit risk.[32] However, unlike credit risk, which is one-sided, counterparty risk is two-sided in the sense that, depending on market factors, may materialize for either party[33] in one of three forms: settlement, replacement of default risk.

Settlement risk is when transaction fails to settle or is delayed. This results in uncertainty with regard to rights and obligations for parties to the immediate transaction and subsequent purchasers. Replacement is the risk that it may be difficult to find a replacement transaction.[34] This particularly relevant for dealers who need to balance their portfolio and meet various targets. Default risk

[32] JON GREGORY, COUNTERPARTY CREDIT RISK AND CREDIT VALUE ADJUSTMENT: A CONTINUING CHALLENGE FOR GLOBAL FINANCIAL MARKETS (2013).
[33] While credit risk has for a long time been considered one-sided, the failure of Lehman Brothers demonstrates that banks too can fail. Banks do in fact fail.
[34] This is also sometimes associated with short selling.Short selling is the practice of selling with the view to repurchase it in the future at a lower price. This practice is a major source of concern for stock exchanges. The London Stock Exchange recently issued a memorandum on the effect of short selling on liquidity and warning members of its effects. "Short selling on a substantial scale can lead to significant settlement problems, which in turn can result in the Exchange having to issue a market status message warning the market of settlement problems." *See* London Stock Exchange Rules http://www.londonstockexchange.com/traders-and-brokers/rulesregula-tions/rules-lse.pdf. For a quantitative analysis of the economics effects of short selling, including its liquidity implications *see* GREG N. GREGORIOU (ED.) HANDBOOK OF SHORT SELLING (2012). Short selling is also a major concern also for dealers in OTC markets, who like exchanges, make markets by buying and selling assets. *Cf.* Hans Stroll, *Alternative Views of Market Making*, *in* Y. AMIHUD, R. SCHWARTZ & T.S.Y. YO, MARKET MAKING AND THE CHANGING STRUCTURES OF THE SECURITIES INDUSTRY 67 (1985) (discussing different functions of market makers as auctioneers, price stablizers, information processors, and suppliers of immediacy).

materializes when the transaction fails to pay because of the failure of the counterparty. Especially in the case of settlement and default risk, counterparty risk is much more likely then credit risk to have third party (market) effects, in the first case triggering uncertainties in the legal situation of subsequent purchasers, and in the second possibly increasing systemic risk.

1.3.2. Liquidity

The ability to sell an asset in secondary markets depends, of course, on someone being willing to buy it. In a financial context this is what is known as liquidity. While the problem of liquidity is universally acknowledged, it is notoriously difficult to define. As Hasbrouck notes, "[p]recise definitions [of liquidity – MB] only exist in the context of particular models, but the qualities associated with the word are sufficiently widely accepted and understood that the term is useful in practical and academic discourse."[35] These qualities are generally associated with markets, in which there is a lot of trading activity for a particular asset and as a result is possible to buy/sell quickly without a discount from the asking price. Market structure is said to be an important driver of liquidity.[36] This does not mean any specific trading mechanism, but rather, as O'Hara notes, "the rules by which trades occur. These rules dictate what can be traded, who can trade, when and how orders can be submitted, who may see or handle the order, and how orders are processed. The

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[35] JOEL HASBROUCK, EMPIRICAL MARKET MICROSTRUCTURE: THE INSTITUTIONS, ECONOMICS, AND ECONOMIETRICS OF SECURITIES TRADING 4 (2007).

[36] "While factors such as market structure, diversification of the investor base and issuance size are some of the underlying drivers of the liquidity of financial products, trying to measure them is also unlikely to deliver meaningful results. This is because one will never be able to define a complete list of all factors that can impact liquidity: many are either unobservable or hard to quantify. Moreover, the relative importance of the different factors is unclear." Maureen O'Hara, Overview: Market structure issues in market liquidity, available at http://www.bis.org/publ/bppdf/bispap02a.pdf.

rules determine how market structures work, and thus how prices are formed."[37] While in the context of exchanges these rules are aimed primarily at search and matching through an auction, specialist or a limit-order book, in the context of OTC markets liquidity is said to be enhanced by creating rules that facilitate search and bargaining.[38] Since, liquidity in OTC markets is only available if dealers make markets, dealers need incentives and the have to be able to adjust depending on whom they are dealing with. Naturally, buyers also need incentives to enter the markets, so the rules have to be flexible enough to account for their interests as well. Further, a certain degree of standardization is also needed to reduce transaction costs and further enhance liquidity. In this context standardization refers in particular to description of the asset being traded. This is to say that, in OTC markets, liqudiity is enhanced thorugh mandatory standaridzed description of the asset as well as default standardized trading rules.

1.3.3. Information

One of the principal regulatory problems related to markets identified in the economic literature is that sellers may have more information about a widget than buyers. In other words, there exists an information asymmetry between the two.[39] This also applies to markets for capital; financial theory consistently posits that

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[37] Id.

[38] Darrell Duffie, Nicolae Gârleanu & Lasse Heje Pedersen, *Over-the-Counter Markets*, 73 ECONOMETRICA, 6, 1815–1847 (2005).

[39] Hayne E. Leland & David H. Pyle were the first to discuss application of the classical problem of information asymmetry to lending. *See* Hayne E. Leland & David H. Pyle, *Informational Asymmetries, Financial Structure, and Financial Intermediation*, 32 J. FIN. 2, 371-387 (Papers and Proceedings of the Thirty-Fifth Annual Meeting of the American Finance Association, Atlantic City, New Jersey, September 16-18, 1976) (May, 1977). Douglas Diamond extended the model to several lenders. Douglas Diamond, *Monitoring and reputation: The choice between bank loans and privately placed debt*, 99 J. POLIT. ECON. 689–721 (1991).

information is the key to well functioning capital markets.[40] Information key because investment always occurs under conditions of uncertainty.[41] Investors allocate their assets hoping to earn a return on their investment. In the realm of finance that uncertainty or risk is the condition for profit to exist. Much of the theoretical study of finance consists of attempts to measure risk.[42] Risk is measured with information. If there is insufficient information risk cannot be adequately measured. By extension the same is said to be true of financial markets, in which the products originated in capital markets as well as their various derivatives are traded. Accordingly, the focus in financial regulation is on *price* and specifically pre-trade and post-trade transparency. Pre-trade transparency refers to disclosure of bid-ask spreads.[43] Post-trade transparency refers to disclosure of already executed trades.

However, OTC markets warrant a somewhat different approach. As Duffie notes,

> "[t]he profits of a dealer depend on the volume of trades it handles and on the average differences between bid and ask prices, which in turn depends on the degree to which the dealer's customers are likely to have information relevant to prices available elsewhere in the

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[40] This contribution is most commonly attributed to Eugene Fama who shared the Nobel Prize in Economics in 2014. *See* Merton H. Miller, *The History of Finance*, 13 J. APPLIED CORP. FIN. 11 (2000). Fama's contribution was in showing that in a world of abundance of information, no abnormal returns from trading activity are possible. While the idea of 'random walks' appeared much earlier in the work of Bachelier, Mandelbrot and Samuelson, Fama was the first to systemize it and test it. This is what has become to known as the Efficient Market Hypothesis (EMH). *See* Eugene Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, 25 J. FIN., 2, 383-417 (Papers and Proceedings of the Twenty-Eighth Annual Meeting of the American Finance Association New York, N.Y. December, 28-30, 1969)(May, 1970).

[41] FRANK KNIGHT, RISK, UNCERTAINTY AND PROFIT (1964).

[42] Miller, *The History of Finance*, supra note 40.

[43] *See* Nazli Sila Alan & Robert A. Schwartz, *Price Discovery: The Economic Function of a Stock Exchange*, 40 J. PORTFOL. MANAG. 1, 124-132 (Fall 2013)(arguing that price discovery it's the primary function of a stock exchange).

> markets. Dealers therefore prefer at least some degree of market opaqueness. As pre-trade and post-trade transparency increases, dealers have incentives to narrow their bid-offer spreads in order to compete for trading opportunities. If price transparency is too great, however, some dealers may lose the incentive to intermediate, given their fixed costs and the risk of adverse selection by informed customers. Unless the potential demand to trade a financial product is sufficient to justify exchange trading, a sufficiently large increase in OTC market transparency could therefore potentially reduce trading opportunities for investors."[44]

From that point of view, focus in regulation of information of OTC markets is on making sure that information is not manipulated or misused. Market participants may have the incentive to manipulate information, either by concealing/modifying it directly or indirectly through development of complex products that may be difficult to understand and accurately price[45] as well as using the information they acquire in one trade for other trades. Hence, information regulation in OTC markets ought to be focused on addressing these problems with information flows and information accuracy.

1.3.4. Systemic risk

Systemic risk is the central problem that has emerged from the 2008 financial crisis.[46] It is usually defined in terms of adverse consequences of institutional failure for the financial system as a whole.[47] From the point of view of that definition it is

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[44] DUFFIE, DARK MARKETS, supra note ix (Introduction) at 5.

[45] Michael Simkovic, *Secret Liens and the Financial Crisis of 2008*, 83 Am. Bankr. L. J. 253 (2009).

[46] As one commentator put it, risk transfer in itself is not bad, but can have dire consequences when the regulators loose track of how much risk has actually been transferred. *See* Steven Schwarcz, *Marginalizing Risk*, 89 WASH. UNIV. L. REV. 3 (2012).

[47] *See e.g.* Hal S. Scott, *The Reduction of Systemic Risk in the United States Financial System*, 33 HARV. J. L. &. PUB. POL'Y 671, 672 (2010) ("[systemic risk is] the risk that the failure of one significant financial

hardly surprising that the systemic risk protections have historically focused on financial institutions, or organizations.[48] But a failure of even a large financial firm is unlikely, on its own, to produce systemic effects. It is only when that institution is interconnected with other parts of the financial system that a systemic shock can be expected. The most straightforward way in which financial firms are interconnected in a network is through contracts.[49] We can see that there is a link between counterparty risk (default risk) and systemic risk as well as informational and regulatory transparency and systemic risk.[50]

1.3.5. Summary

The four functional dimensions of financial regulation identified in the economic literature display certain specificities in the context of OTC markets. This appears to be true in particular with regard to the trade-off between information and liquidity. While information and liquidity are thought to be positively correlated in the context of exchanges, the relationship appears to be more complex in the context of OTC market. Further, the four dimensions display various other correlations. The degree of counterparty risk may affect systemic risk. Further, degree of information may also affect systemic risk. In some cases it may be difficult to determine and isolate the effect of regulation with respect to one dimension only. Rather the effects

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institution can cause or significantly contribute to the failure of other significant financial institutions as a result of their linkages to each other.").

[48] "Ex ante, regulatory capital requirements have been the chief measure to reduce systemic risk. Capital requirements, which have focused principally on banks, are designed to decrease the likelihood of financial institution failure. If institutions do not fail, the problem of systemic risk largely disappears." *Id. a*t 679.

[49] Iman Anabtawi & Steven L. Schwarcz, *Regulating Systemic Risk: Towards an Analytical Framewor*k, 86 NOTRE DAME L. REV. 23 (2011).

[50] Indeed, as the Counterparty Risk Management Policy Group noted in its 2005 Report "[counterparty risk is] probably the single most important variable in determining whether and with what speed financial disturbances become financial shocks, with potential systemic traits." Counterparty Risk Management Policy Group (2005).

are likely to be multidimensional as well as include various other unanticipated correlations. Overall, however, counterparty risk, liquidity, information and systemic risk define the scope of the regulatory function and we will use them as dependent variable, with the view to determine the impact of structure as an independent variable on the definition of the scope of the regulatory function.

1.4. Structural dimension

For the contract to perform a regulatory function it also has have the structural features of regulation, i.e. follow the tripartite process of standard-setting, monitoring and enforcement. The structural dimension presupposes that the standard will be set in a way that will allow for incorporation of regulatory considerations and that enforcement or threat thereof will limit the parties' freedom of contracts. In the discussion that follows we focus on the distinction between decentralized and centralized standard-setting and examine the range of enforcement modes associated with private regulation. The goal is to identify structure as an independent variable and examine how the differences in structurs translate into the scope of the regulatory function.

1.4.1. Standard-setting and monitoring

1.4.1.1. Decentralized standard-setting and monitoring

Finance is one of those areas where legal scholars have already come to terms with the fact that contracts are only to a limited extent a reflection of the interest of the signing parties. This is because the parties do generally not produce contracts. Rather the parties rely on agents, on law firms, who draft contracts for them. In a number of markets small group of large international law firms represents borrowers and lenders. There is multiplicity of law firms involved in any single transaction, which means there is competition, but also cooperation and learning

from those interactions. To the extent that market participants rely on contract precedents they are said to benefit from learning externalities.[51] Kahan and Klausner suggest that there are drafting efficiencies, judicial precedent and familiarity that can be seen as some of the most important drivers of learning externalities.[52]

> "Each [law firm] has specialized expertise in the design and drafting of contracts and is likely to keep abreast of contractual innovations and improvements through research, professional conferences, training programs, and publications. They are also likely to have more information than their clients about which terms have been judicially interpreted and which terms are familiar to other professionals and to investors."[53]

Kahan's and Klausner's study in the realm of corporate contracting offers moderate support for the thesis. Similarly modest support for the learning externalities hypothesis comes from the work of Choi and Gulati, who, by examining the *pari passu* clause in sovereign debt contracts, find that, despite problems with its interpretation, the clause continued to be included in the contracts used by market participants.[54] "When a coordinated response came, it was in the form of a litigation response and not in drafting a clearer set of terms. The language of the *pari passu* clause in the new contracts being issued remained the same across a wide number of contracts."[55]

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[51] Perhaps the first exposition of that view can be found in the work of Schwartz and Scott who suggest that learning externalities come with experience in using of at term. ALAN SCHWARTZ & ROBERT E. SCOTT, SALES LAW AND THE CONTRACTING PROCESS 190 (1991).
[52] Kahan & Klausner, Standardization, supra note xii (Introduction).
[53] *Id.*
[54] Choi & Gulati, *Contract as Statue*, *supra* note iv (Introduction).
[55] *Id.*

Kahan and Klausner also emphasize the role of underwriters or banks in helping their clients to coordinate provisions to generate network externalities.[56] "Network products become more valuable as their use becomes more widespread. One source of this enhanced value is the increased availability and lower cost of complementary products resulting from economies of scale in their production."[57] That is to say the more agents use it; the more value can be extracted from them. A firm's competitors or customers may start using its boilerplate form if they believe that its use will help attract additional business.

Concentration of agency within a limited number of law firms and banks accounts for alignment of interest of market participants and thereby the 'stickiness' of boilerplate in financial contracts. This does not mean that boilerplate is static. To the contrary, interest evolve, and are continuously challenged. Choi, Gulati and Eric developed a model to account for the evolution of boilerplate.[58] Their model assumes a pre-existing standard set of provisions being used in stage one. The transition from stage one to stage two requires a shock to overcome the inertia of the existing dominant standard. They predict that in stage two, players at the margins begin to experiment with modifications of the existing models. The dominant players are likely to resist the change, at least initially. Eventually, if there are enough shocks leading to large enough dissatisfaction in the market with the existing standards or external pressure from the public sector, the participants in the market will realize that a new standard is likely if not inevitable. Once market participants accept the move to a new standard, they posit that contracting activity

[56] *Id.* at 737-738.
[57] Kahan & Klausner, *Standardization*, *supra* note xii at 725.
[58] Choi et al., *The Dynamics,* supra note 19.

enters into a new standardization stage, referred to here as stage three, in which the majority of market participants embraces the new standard.[59]

In the decentralized model of boilerplate evolution outlined by Choi et al, it is the users and law firms/bankers have to handle communication tasks concerning particular contracts, provisions. And yet not only different law firms may have different views, but even within one law firms, different lawyers may hold different views regarding the viability of a given provision or form. Not to mention the different views that may be held by lawyers and bankers.[60] While decentralized alignment of interest may ultimately be effective, this is likely to take a long time. As

[59] A good example of the dynamic, from which the model derives, are collective action clauses (CACs) in sovereign bonds. CACs require a certain majority of creditors' consent whenever an action with regard to the bonds, in particular related to restructuring, is taken. Their prevalence in bond documentation is a fairly recent phenomenon. As Choi et al note, "[p]rior to 1990, for the most part, if the sovereign debtor needed to request debt relief, it needed to conclude a debt reduction agreement with each of the individual bond- holders under the prevailing UAC." Id. at 11. This became problematic as both the number and geographical dispersion of bondholders grew and in particular as a number of small bondholders, in particular vulture funds started to challenge the process, effectively holding other creditors out. It was at this point that industry experts started to discuss the possibility of implementation of CACs. For discussions of this collective action problem in sovereign debt, see, for example, Sergio J. Galvis & Angel L. Saad, *Collective Action Clauses: Recent Progress and Challenges Ahead*, 35 GEO. J. INT'L L. 713, 713–29 (2004). See also Robert Gray, *Collective Action Clauses: Theory and Practice*, 35 GEO. J. INT'L L. 693, 693–96 (2004). There has also been pressure from regulators, in particular the Department of Treasury. Randal Quarles, *Herding Cats: Collective Action Clauses in Sovereign Debt—The Genesis of the Project to Change Market Practice in 2001 Through 2003*, 73 LAW & CONTEMP. PROBS. 29, 30-38 (2010). In fact it was their involvement that, arguably, turned the tide and drove the market towards the use of CACs. https://www.imf.org/external/np/pp/eng/2014/090214.pdf

[60] The inefficiencies of the decentralized model of boilerplate production are similar to those encountered in any decentralized model of production. As Daniel Spulber notes,

> "[w]ithout firms acting as intermediaries, markets tend to be decentralized, with individual buyers and sellers handling all communication and computation tasks. Allocations in decentralized markets are characterized by constraints on communications and computation. Costly communication is likely to lead to random search and inefficient matching of buyers and sellers. Costly computation is likely to involve asymmetric information and inefficient allocation mechanism. Individuals thus encounter network constraints that limit the efficiency of decentralized exchange." DANIEL F. SPULBER, THE THEORY OF THE FIRM 28-34 (2009)

Choi et al. note, that, even though the provisions they studied "did change and often did so meaningfully; these were not just cases of contract language being modified around the margins, but that entirely new provisions showed up and old provision disappeared,"[61] they admit it took over fifty years!

1.4.1.2. Centralized standard-setting and monitoring

By contrast, centralization of the production process brings important efficiencies. In a centralized model, in principle, many of the same actors–law firms and banks–are involved. However, the efforts of those agents are channeled through a third-party organization, such as a trade association. Involvement of a third party organization, which channels the interests, is likely to give the contracts different qualitative characteristic. The characteristic will depend on the scope of interests taken into account, which in turn will depend on internal governance of the organization.

The existence of an organization presupposes a governance structure, which will impact what kinds of interests are being taken into account in the definition of the contract. An organization is more than just a sum of its parts. As Jensen and Meckling note

> "the firm is not an individual. It is a legal fiction which serves as a focus for a complex process in which the conflicting objectives of individuals (some of whom may "represent" other organizations) are brought into equilibrium within a framework of contractual relations. In this sense the "behavior" of the firm is like the behavior of a market, that is, the outcome of a complex equilibrium process."[62]

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[61] Choi et al., supra note 19.
[62] M.C. Jensen and W. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs, and Capital Structure*, 3 Journal of Financial Economics, 305-60, 311 (1976).

While not all insights about the firm can be directly transposed to the non-profit context, also non-profit organizations can be represent a wide set of interests.[63] Examination of the impact of the governance features of the organization on the contracts requires examination of composition of membership, voting and scope of goals and how they may impact the definition of the functional dimension.

1.4.1.3. Competition and regulatory competition

The governance features of the organization that sets the rules will also have an impact on antitrust analysis of the activities of the organization. Antitrust analysis focuses on identification of market power and determination whether the behavior of an entity displaying significant market power does not impact have a negative impact on consumers. Trade associations are clearly not free from scrutiny. Indeed, as it is sometimes noted, "association meeting are probably the single most dangerous point of the operation of a business from an antitrust viewpoint."[64] The concern with regulatory contracts may be that activities of the organization are detrimental to certain market participants. While it is easy to see how this may be the case, for example, when it comes to price fixing, or the fixing of certain parametric benchmarks, the antitrust case against setting of market rules seems harder to make. It seems unlikely that regulatory contracts would hamper competition. To the contrary, they create competition by creating alternative market structures**.** Generally, the more open to broad interests the organization, the less of a concern regulatory contracts are likely to be from an antitrust point of view.

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[63] Henry B. Hansmann, *The Role of Nonprofit Enterprise*, 89 Yale Law Journal 5, 835-901, 838 (1980).
[64] W. HANCOCK, MATERIALS ON ANTITRUST COMPLIANCE, Par. 1.002 (2003) (cited in Alain M. Christenfeld & Barbara Goodstein, *Analyzing Antitrust Issues in Lending*, 249 New York Law Journal, 108 (June 6, 2013).

Further, antitrust concerns are alleviated when the organization embraces a regulatory position. In such a case it is no longer seen as potential obstacle of competition, but rather as contributing to regulatory competition. Regulatory competition may exist across several dimensions. One is within market structure. This is to say that it is possible that different regulatory contracts exist. It is also possible that we have competition between market structures, i.e. OTC vs. exchanges. While its scope would be limited to the products that can be traded in both structures, it can play an important role. Finally, we can have competition between OTC and public regulators. The role of public regulators is also important in setting the parameters of regulatory competition with regard to the first two dimensions.

Regulatory competition is sometimes said to result in satisfaction of a more diverse set of preferences of regulatees and, possibly, discovery of better rules, but there is the possibility of externalities, imperfect information, economics of scale and lobbying and other problem associated with regulatory competition.[65] Thus there exist important questions with regard to the nature and scope of regulatory competition. The limits of regulatory competition are further illustrated by the need for regulatory coordination when implementing transnational regulations.

1.4.2. Enforcement

While centralization of the process of standard-setting brings important benefits to the standard-setting process, it does not extend to enforcement. This is, in fact, where the contractual model is likely to face the most challenging conceptual

[65] BARBARA GABOR, REGULATORY COMPETITION IN THE INTERNAL MARKET: COMPARING MODELS FOR CORPORATE, SECURITIES AND COMPETITION LAW 5 and *passim* (2013).

criticism. However, this does not preclude the conceptualization because private regulators can rely on delegation. In fact, in the public regulatory context, delegation of enforcement is common.[66] The challenge is to understand how delegated enforcement works in the context of the contractual model. We suggest that delegate enforcement works either through extra-legal or legal means.

1.4.2.1. Delegation to market participants (extra-legal)

A useful way to approach the challenge is to ask why would private regulators want to enforce it in the first place? The answer is that it may not be the incentive of the regulators, but of market participants. The rules deal with various regulatory problems, which market participants believe are important and affect market outcomes. Private regulators devise rules that seek to mitigate these problems. Specifically, deal with certain risks. Alteration of those rules given market participants' utility function incorporating their risk attitudes and valuation of money is likely to affect price of the asset.[67]As a result, "[a]ny single actor attempting a change in its contracts faces a risk that the lack of uniformity with

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[66] Kenneth A. Bamberger, Regulation as Delegation: Private Firms, Decisionmaking and Accountability in the Administrative State, 56 DUKE L. J. 2, 377 (2005). Compare also MARTHA MINOW, JODY FREEMAN (EDS.), GOVERNMENT BY CONTRACT: OUTSOURCING AND AMERICAN DEMOCRACY (2009).

[67] As Tapiero notes, "[r]isk is an adverse consequence, valued explicitly or latent in the objectives, the information, and the attitudes that investors have. Measured risks and their cash value are not always easy to calculate, however." This is why in some areas, such as portfolio management, no express valuation of risk is made. Instead these approaches focus on variations (standard deviation, variance, range etc.) to characterize risk, while lacking a market for an exchange of these variations and thus being unable to price these variations. "Their presumptions are that the standard deviation of a process is correlated to risk and, therefore, reducing (controlling) one reduces the other." CHARLES S. TAPIERO, RISK FINANCE AND ASSET PRICING: VALUE, MEASUREMENTS, AND MARKETS 143 (2010). The utility approach, on the other hand, "combines both decision makers' risk attitudes and their valuation of money embedded in a parametric utility function. While the functional from of a utility function is used to capture a personal rationality, its parameters provide a specific estimate of such rationality based on both experimentation and observed behavior." Id. In other words, any altered contract term that is likely to change the risk profile of an asset will change the utility function of that asset for investors. Because they are used any changes to the material terms means increased risk that risk is likely to be reflected in the change in price.

standard market prototypes will result in a significant pricing penalty." [68] This further suggests that these pricing penalties may act as provision of enforcement. The limitation of this mechanism is that it does not force market participants to follow the rules, it just penalizes them for not doing so. Alternatively, market participants may also refuse to engage with a party in breach thereby de facto denying them market access.

1.4.2.2. Delegation to courts and arbitration (legal)

Beyond the extra-legal mechanisms outlined above, the more conventional toolkit of enforcement instruments includes legal mechanisms such administrative, judicial non-judicial private enforcement measures.[69] The most important feature of those mechanisms is that they will enforce the rules subject to their consistency with the law. Legal structure is a factor that both enables and constrains the scope of the regulatory function. The ability of courts to impact the scope suggests that courts are an integral part of the regulatory chain, in particular in terms of resolving disputes between the regulated.

This begs the questions of the ability of generalist courts to perform that role. It is sometimes recognized that courts are likely to err whenever they try determine the meaning outside of the contract.[70] However, the contractual model assists them with the process explicitly describing the rules. Further, the organization is there to

[68] SCOTT & GULATI, THE THREE-AND-A-HALF MINUTE TRANSACTION, *supra* note iii (Introduction) at 35 (referring inter alia to Franklin Allen & Douglas Gale, Financial Innovation and Risk Sharing (1994)).
[69] See Fabrizio Cafaggi (ed.), Enforcement of Transnational Private Regulation: Ensuring Compliance in a Global World, (2013).
[70] See e.g. Eric Posner, A Theory of Contract Law under Conditions of Radical Judicial Error, 94 Northwestern University Law Review (2000).

clarify the meaning. Of course, this kind of inquiry entails choices about the appropriate role of the contractual model in governance. As Gelpern notes,

> "under the circumstances, a court may pursue an administrative-style inquiry into the group's representative character, internal processes, and other factors affecting legitimacy, including novel ones, such as the extent of competition among private standard setters. This may partly displace traditional inquiries into the particular intent of the contracting parties or the optimal design of incentives in a given business context."[71]

The role of courts is much simpler (and more limited), if we consider arbitration. Arbitration is generally seen as a key answer to the limits of private regulation with regard to enforcement. Provision for arbitration in the regulatory contract coupled with the broad scope of the New York Convention offers an attractive alternative to enforcement of regulatory contracts.[72]

Finally, the role of specialized courts should also be noted. For example, the establishment of the Financial List, a special list set up in 2015 to handle claims related to the financial markets and operating as a joint initiative involving the Chancery Division and the Commercial Court in London, and make sure that "which would benefit from being heard by judges with particular expertise in the financial markets or which raise issues of general importance to the financial markets are dealt with by judges with suitable expertise and experience"[73] will be a good opportunity to see whether specialist courts are likely to make decisions better aligned with the actual function of regulatory contracts.

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[71] Anna Gelpern, Commentary, Arizona Law Review, Vol. 51, No. 1, 2009.
[72] See Convention on the Recognition and Enforcement of Foreign Arbitral Awards (1958).
[73] Guide to the Financial List, By authority of The Chancellor of the High Court, Sir Terence Etherton, and The Hon. Mr Justice Flaux, Judge in charge of the Commercial Cour (1 October 2015), available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/465590/financial-list-guide.pdf (last visited April 27, 2016).

1.4.3. Summary

As already noted, the principal difficulty in constructing the contractual model of regulation lies in outlining how does the process of standard-setting enable for definition of the function of the contract in way that extends beyond the particular interests of individual market participants and how is the standard enforced, given that, unlike in the organizational model associated with exchange, the contractual model does not link standardization with membership? In the discussion above we suggested that the answers to those questions can be found in looking at the impact of the process of contract production. Contracts produced by multiple parties representing a broad set of interests are more likely to end up defining the function of a contract in a way that extends beyond the particular interests of individual market participants. However, even with the multilateral model we are likely to see differences depending on whether the process of contract definition is decentralized and centralized. While the difference between is likely to have an impact principally in terms of the efficiency of contract production, it may also bear on the scope of the functional dimension and/or effectiveness.

1.5. Regulatory effectiveness

We noted that the conception of regulatory contracts bridges the gap between governance and regulation. If the function of a contract is consistent with the economic function of regulation, there is no real *economic* difference between contract and regulation. In these case contract *is* regulation. The caveat is, of course, the structure and specifically reliance on governance structure of private regulators, regulatory competition and delegated enforcement. How effective can the contractual model be?

While there exist no established framework for evaluation of private regulation[74], Cary Coglianese's framework developed for systematic evaluation of performance of regulations and regulatory policies in the public context can be used to establish certain methodological criteria for evaluation of private regulation and specifically regulatory contracts.[75]

Generally speaking,

> "[e]valuating regulation ... entails an inquiry, after regulation has been put in place, into how it has changed behavior as well as, ultimately, its impacts on conditions in the world. To ask how well regulation is working is really to ask about regulation's impacts, positive and negative. What difference does regulation make in terms of the problems it purportedly seeks to solve?"[76]

As Coglianese further suggests, one important methodological point concerns the questions effectiveness *of what* exactly is being measured? In the analysis, it is important to specify whether we are talking about the effect of individual rules or a collection of rules (regulatory provisions vs. regulatory contracts). It is also important to specify effectiveness *on what*? Coglianese usefully distinguishes between behavioral change, intermediate outcomes (change of the initial conditions in the world flowing directly from behavioral change) and ultimate outcomes (i.e. solution of the ultimate problem that regulation purported to change.[77]

How do we know that a measure had been effective? Coglianese distinguishes between indicators, which are empirical *outcomes* and attributions, which are empirical *inferences*. For example, bid-ask spreads are commonly used as

[74] But see Fabrizio Cafaggi & Andrea Renda, Measuring the Effectiveness of Transnational Private Regulation (for an excellent discussion of the drivers of effectiveness of TPR).
[75] Cary Coglianese, *Measuring Regulatory Performance: Evaluating the Impact of Regulation and Regulatory Policy* (OECD Expert Paper No. 1, August 2012).
[76] *Id.* at 8.
[77] *Id.* at 12.

indicators for informational transparency. Settlement times can be used as indicators of counterparty risk. By contrast, it is quite difficult to identify indicators of liquidity. Volume of trading is sometimes used, but “examining transactional volumes in isolation is not sufficient, particularly for OTC traded products, most of which do not trade on a regular basis. Gauging trading activity will only cover a limited part of the universe of tradable products, trade data is not always freely available, and turnover for a product could suddenly dry up.”[78] Transaction volumes, can, however be used as an inference of effectiveness.

The final step is to examine causation, i.e. establish whether it was the instruments that caused the observed change. It is possible to observe the state of the world without asking what caused them. As Coliagnese notes,

> “[a]s long as conditions improve, perhaps it should not matter how that improvement came about. But as much as an improvement might be cause for celebration, to ensure that this happy outcome can be achieved again in the future – as well as perhaps with respect to other similar problems – it will be essential to know whether the improvement came about because of the regulatory treatment.”

This is clearly important if we want to consider the viability of contracts as regulatory instruments in general. Is the contractual model suitable to address all regulatory problems? It is possible to determine that a contract has worked in one market, but will it work in another market? Are contracts as regulatory instruments viable for secondary markets, but also primary markets? Causation is therefore important because, in principle, it ought to allow us to replicate the desired or eliminate the undesirable results.

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[78] David Austin & Gavan Nolan, Measuring Liquidity: A Challenge in OTC Markets (2010).

One important method for establishing causation is to rely on observational studies. "Observational studies exploit variation in the application of legal rules and . . . control for other factors that might explain differences in outcomes associated with the variation in the legal rules."[79] This may entail, for example, observation of certain outcomes associated with operation of regulatory contracts and isolation of certain idiosyncratic factors, such as nature of the asset and other.[80]

Alternatively, it may be useful to examine the use of regulatory contracts which may differ structurally across markets to see whether there are any differences. When differences exist they can be attributed to differences in the structure.

To be sure, the above metrics are highly imperfect and we should therefore be cautious in drawing any conclusions with regard to the impact of regulatory contracts on these outcomes. However, even some degree of correlation would suffice to support the claim that contracts perform regulatory functions. Cleary, the

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[79] Coglianese, *Measuring*, supra note 77.

[80] This is, of course, difficult, because market structure is an endogenous variable. *Compare* Bruno Biais and Richard C. Green, The Microstructure of the Bond Market in the 20th Century, IDEI Working Paper, n. 482 (2007).

> "Are the differences in the structures of the markets . . . an efficient resposne to the needs of the different types of investors holding these securities? It is inherently problemtic to trade bonds on a transparent limit order book? Or, are the differences in the market structures the result of institutional inertia or the influence of entrenched interst groups? Could mandated changes in disclosure of price and volume information, ir in the mechanism through which trade is organized, lower costs for investors? Or, would such regulatory inferference simply surpress a natural diversity in institutional arrangements benefiting investors?"

As Biais and Green note these questions are difficult to answer through cross-sectional comparison of existing markets because volume, prices and trading mechanisms are all jointly endogenous variables.

> "Perhaps corporate and municipal bonds have low liquidity and trading costs because they are traded in opaque and decentralized dealer markets. Alternatively, perhaps they trade OTC because the infrequent need for trade, and sophisitication of the traders involved, renders the continuous maitnenance of a widely disseminated, centeralized limit-order book wasteful and costly?" Id.

contractual model is less efficient that the organizational model, but it is better suited to regulate certain markets and therefore any impact that can be identified is useful.

1.6. Summary

In this Chapter we developed a conceptual model of contracts as regulatory instruments in OTC financial markets. The model is informed by the functional understanding of financial regulation as addressing problems of information, liquidity, counterparty risk and systemic risk and structural understanding of regulation as a process of standard-setting, monitoring and enforcement. The justification of conceptualization contracts are regulatory instruments is found in the nature of the political economy considerations that inform the definition of certain contracts used in financial markets. While many scholars tend to conceptualize them as boilerplate, we argue that there exist important qualitative differences between boilerplate and regulatory contracts, which we link with a broader spectrum of interests taken into account in their definition in the process of standard-setting by private regulators.

Specifically, the model suggest that the definition of the scope of the regulatory function is determined through governance features of the organization that develops it and regulatory competition to which it is exposed. The rules can be enforced either through extra-legal or legal means. Extra-legal enforcement consists of either price penalties or de facto restrictions on market access. Legal enforcement takes the form of judicial and non-judicial private enforcement. The effectiveness of regulatory contracts can be measured by looking at behavioral change, intermediate outcomes and ultimate outcomes in the market.

In the three chapters that follow we will use the model to help outline certain features of the OTC US loan (Chapter 2) European loan (Chapter 3) and derivatives (Chapter 4) markets. The goal is to identify the ways in which governance features of the organizations and the regulatory competition to which they are exposed may affect the scope of regulatory function and ultimately effectiveness of the regulatory contracts. The case studies will be guided by the following questions:

- What is the scope of the functional dimension? Does it encompass counterparty risk, liquidity, information and systemic risk?
- What are the features of the organizational dimension (in terms of membership, board of directors, funding and committees)?
- How did the organizational dimension affect the scope of the functional dimension?
- How did regulatory competition affect the scope of the functional dimension, if at all?
- How are the rules enforced? Extra-legal (price penalties, de facto market access restrictions) or legal means (judicial, non-judicial private)?
- What were the features of judicial enforcement?
- How effective have regulatory contracts been?

Chapter 2

Regulatory contracts in US loan markets

2.1. Contracting in US loan markets in the 1990s

2.1.1. Early days of loan trading

Historically loans, and specifically large syndicated loans[1], have been originated and held on banks' balance sheets. As Scott Page and Payson Swaffield note describing their experience of joining a lending department of large New York commercial bank in the 1980s,

> "[c]ertainly no one was concerned with creating instruments that would trade and be valued in a market. Corporate loans were then, and had always been private, customized contracts between the bank and its customer, not an asset class to be managed using the same portfolio management techniques that are applied to stocks and bonds."[2]

This changed in the early 1980s.[3] The demand for loans came from buy-side – savings and loans associations, insurance companies and mutual funds. [4] But these early loan markets were not very attractive, because – as one commentator put it –

> "[they] offered none of the . . . feature that institutional investors expect such as the ability to access market data and third-party credit

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[1] A syndicate is a loan underwritten by a syndicate, i.e. a group of banks.
[2] Scott Page & Payson Swaffield, *An Introduction to the Loan Asset Class*, *in* ALLISON TAYLOR & ALICIA SANSONE (EDS.) THE HANDBOOK OF LOAN SYNDICATIONS AND TRADING 4 (2007).
[3] "Many have laid claim to having create the first structures on the buy side of the bank loan asset class, and it is difficult to determine with accuracy who did what first." *Id.* at 6. It is generally accepted that loan markets developed on the 'back' of acquisition financing in the mid- to late-1980s. *See* Allison A. Taylor & Ruth Yang, *Evolution of the Primary and Secondary Leveraged Loan Markets*, *in* TAYLOR & SANSONE, *supra* note 1 at 23- 24.
[4] "High-yield bond investors founded credit risk portfolio management, thereby creating the buy side, from which the bank loan asset class eventually emerged." Page & Swaffield, *An Introduction*, *supra* note 1 at 5.

> ratings . . . [f]ew data on the risk and return profiles of bank loans existed, and the components and structuring features that are taken for granted today were still under development, being tested through trial and error. There was no market pricing or pricing service, no standardized settlement procedures or documentation, and no agreed-upon procedures for structuring and capitalizing Collateralized Loan Obligations (CLOs)[5]."[6]

At the same time, as Page and Swaffield note,

> "the largest and most influential banks understood the mutual benefit for both the buy and sell sides of development of this new asset class. Manufacture's Hanover and Chemical Bank, Bankers Trust, Continental Bank, Chase Manhattan, Citibank, and a number of other important institutions embraced the development of mutual fund and CLO investors. Each year saw the creation of more investors, and the concept gained greater acceptance by all banks, deceasing search and matching costs. As the 1990s progressed, the market grew stronger each year. At many conferences, generally taking the form of one or two panels in a small conference room, the buy- and sell-side communities surrounding syndicated loans, not bonds, began to gather and take form."[7]

2.1.2. Mechanics of loan trading

Before a loan can be sold it first has to be originated.[8] As the loan is being put together people at the sales desks of the arranging banks contact the (earlier agreed) target group of investors. Once the allocation among facilities is made the loan immediately starts trading in the secondary markets. These markets, as most OTC markets, have two segments – one in which dealers trade with customers

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[5] A CLO or collateralized obligation is a pool of loans held by a special purpose vehicle (SPV). The SPV issues notes to fund the loans. Laurie S. Goodman, Frank J. Fabozzi, Collateralized Debt Obligations: Structures and Analysis 194 (2002).
[6] Page & Swaffield, *An Introduction*, *supra* note 1 at 5. at. 6.
[7] *Id.* at 5-6.
[8] For an overview of the trade process and strategies, *see* Robert Milam, *How to Trade Loans and the Strategies to Use*, *in* TAYLOR & SANSONE, THE HANDBOOK, *supra* note 1at 403 *and passim*.

(customer segment) and one in which dealers trade with each other (inter-dealer segment).[9]

Traditionally most trades occurred over the phone. These oral trades were typically confirmed in writing. However, discrepancies between different confirmations caused settlement delays.[10] As an example, Allison A. Taylor, one of the traders at ING Barings at the time, provide settlement issues.

> "In 1995, as a secondary trader of performing loans called par/near par loans, I bought a $10 million piece of a very large, recently syndicated performing loan from a co-agent. The transaction took six weeks to close, i.e. to settle the loan from the trade date. (By way of comparison, it took one day for stocks to settle from the trade date.) As the buyer, I owned the credit risk as of the trade date . . . However, the seller of the loan was still the lender of record and was collecting and accruing interest . . . If this had been an isolated incident, I would have moved on to bigger things. But it wasn't. This long settlement period was becoming more of a norm than an outlier. As a result something needed to be done – standards were needed."[11]
>
> In 1995 Taylor contacted fifteen other traders…
>
> "…asking them if they also felt that we needed a standard settlement period on loans and, if so, what that standard settlement period should be . . . Fourteen of the fifteen traders responded enthusiastically with yes. (The fifteenth trader was a trader of distressed loans. This trader believed that he would make more money if there were no standards in the market.) The entire market

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[9] "In the early 1990s banks began to establish trading groups that could hold inventory and take positions in names, thereby creating a significantly more liquid and attractive secondary market for loans. While brokers remain active in today's secondary loan market, traders are now the dominant players." Taylor & Yang, *Evolution*, *in* TAYLOR & SANSONE, THE HANDBOOK, *supra* note 1 at 29.

[10] Allison Taylor, *Market Standards for Loan Trading in the Secondary Market*, *in* FRANK FABOZZI (ED.), BANK LOANS: SECONDARY MARKET AND PORTFOLIO MANAGEMENT 84-85 (2007).

[11] Allison A. Taylor, *The LSTA and Its Role in the Promotion of the Corporate Loan Asset Class*, *in* TAYLOR & SANSONE, THE HANDBOOK, *supra* note 1 at 61-62.

was losing too much money because of delayed settlements . . . We knew that we needed a standard trade confirmation in order to implement a standard settlement period. In addition, a standard trade confirmation would eliminate unnecessary arguments and disagreements between buyers and sellers. Delayed settlement equaled increased costs; increase costs decreased profits."[12]

As she further recounts:

„In order to create a standard trade confirmation, it was necessary to hire a law firm [Milbank, Tweed, Hadley and McCloy – MB] to facilitate the consensus-building process between the traders and the in-house lawyers. And, as we all know, hiring law firms requires money. As a result, it became necessary for us to establish a trade association in order to achieve our goal. In the beginning, three firms – ING, Morgan Guaranty Trust Co. of New York, and Goldman Sachs – stepped up and contributed $100,000 each to fund the organization. Shortly thereafter, another nine firms joined the effort; each contributed $100,000, and the LSTA [The Loan Syndications and Trading Association-MB] was formed. The additional nine firms were Bank of America, Bank of Montreal, Bankers Trust Company, Bear Stearns Cos., Inc., Chemical Bank, Citibank, First Chicago, Lehman Brothers, Inc., and Merrill Lynch & Co." [13]

[12] *Id.* at 62-63.
[13] *Id.* at 63.

2.2. The LSTA Confirmation, Standard Terms and Conditions, Purchase and Sale Agreement and the Model Credit Agreement Provisions

In 1997, the LSTA launched both its first Par/Near Par Confirmation[14] and Standard Terms and Conditions for Par/Near Par Trades.[15] The most recent versions of the Confirmations and Standard Terms and Conditions are the August 31, 2015 Par/Near Par Trade Confirmations (hereafter "Confirmation") [16] and (as of the same date) Standard Terms and Conditions for Par/Near Par Trade Confirmations ("LSTA STC") and the distressed equivalents.

While the LSTA was initially focused on secondary markets, as the market grew, it was quickly realized that discrepancies between provisions in credit

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[14] Par or near par means that the borrower is in a good financial situation and accordingly its loans will be traded in the secondary market at a value similar to its original value (par). Distressed or leveraged are loans to companies that are either in default or in distress. [14] As Yago and MacCarthy notes, there are two broad ways to classify loans as leveraged or non-leveraged. "The first is based on credit ratings, and the second is based on a loan's initial interest rate spread over LIBOR. The extent to which a credit is leveraged reflects the leverage ratios of a borrower with higher ratios resulting in higher spreads or lower credit ratings." *See* Glenn Yago & Donald MacCarthy (Milken Institute), The U.S. Leveraged Loan Market: A Primer (October 2004) (available at http://www.milkeninstitute.org-/pdf/loan_primer_1004.pdf) (last visited November 1, 2013). Since purchase of such debt represents significant risks tend to trade at significant discount to their intrinsic value. At the same time they offer the higher yield.

[15] The distressed followed in 1998. Since purchase of such debt represents significant risks tend to trade at significant discount to their intrinsic value. At the same time they offer the higher yield. This is why most of the liquidity (i.e. loans that are most frequently traded) today can be found in the distressed segment. Blaise Gadanecz, *The syndicated loan market: structure, development and implications*, BIS QUART. REV. 75, 75 (December 2004).

[16] The Confirmation describes the basic economic and legal parameters of the deal. The economic parameters include: amount, type, purchase rate (%) price of debt and interest treatment. Legal parameters include: form of purchase, credit documents to be provided by seller. The Confirmation also provides that, if market participants were to have a disagreement regarding the price (in the case of a buy-in/sell-out scenario, a mechanics to which we shall return later) any dispute as to the reasonableness of a buy-in or sell-out price to binding arbitration in accordance with the LSTA "Rules Governing Arbitration Between Loan Traders With Regard to Failed Trades."

agreements may affect secondary market activity. This is why in 2003 the LSTA published its Model Credit Agreement Provisions (LSTA MCAP) for investment grade in 2003.[17] The LSTA MCAP has been most recently updated in 2014.[18]

2.3. Functional dimension

2.3.1. Counterparty risk

2.3.1.1. Trade is a trade

Given the prevalence of oral trades in the early days of loan markets, the 'trade is a trade' provision has been developed to address settlement risk. [19] The provision dictates that if a trade has been conducted orally, but no Confirmation has been executed, the trade will nevertheless be binding as long as long as the material terms have been agreed on. As a result parties will be obliged to settle by means of entering into supplemental documentation. As Rothenberg and Yearick note:

> „Under LSTA par transactions the only other operative document that will typically need to be agreed upon in finalizing the transaction (outside of a funding memorandum setting forth the purchase price calculation) will be an assignment and acceptance agreement or transfer certificate in substantially the form set forth as an exhibit to the underlying credit agreement. Hence, on par trades, once the

[17] For an excellent review of the agreement *see* RICHARD WIGHT, WARREN COOKE, RICHARD GRAY, THE LSTA'S COMPLETE CREDIT AGREEMENT GUIDE (2009).
[18] LSTA, Model Credit Agreement Provisions (Aug. 8, 2014).
[19] Section 22 (Binding Effect) ("Neither party will assert as a defense to liability under such agreement the lack of a writing signed by it that would otherwise be required to satisfy any statute of frauds, including §1-206 of the New York Uniform Commercial Code, or any comparable statute."). Furthermore, as Rothenberg and Yearick note, "LSTA trade confirmations further provide that once parties have executed an LSTA trade confirmation incorporating LSTA standard terms to such loan trade, the parties to such confirmation agree to be bound to any other transaction between them with respect to the purchase or sale of bank loans upon reaching agreement to terms (whether by telephone, exchange of e-mail or otherwise)." Kenneth L. Rothenberg and Angelina M. Yearick, *LSTA v. LMA: Comparing and Contrasting Loan Secondary Trading Documentation Used Across the Pond*, *in* THOMAS MELLOR, THE INTERNATIONAL COMPARATIVE LEGAL GUIDE TO: LENDING & SECURED FINANCE (2014).

> assignment agreement is executed and the purchase price is paid, the rights and obligations of the party to settle the transfer of the loan will be satisfied and performed."[20]

In a distressed context, the parties will also enter into a Purchase and Sale Agreement (PSA), which – as noted above, provides for certain representations, warranties and indemnifications given from the seller to the buyer and, when executed, supersedes the Confirmation.

2.3.1.2. Mandatory settlement

The process of transferring of rights can be a complicated and cause settlement delays. Settlement delays, as noted by Taylor, have been the major issue in the market and the major source of settlement risk that the LSTA sought to tackle with the LSTA STC. As Torrado and Piorkowski of Bear Stearns noted,

> "[p]erhaps the greatest difference between loan trades and trades in virtually every other tradable asset is how loan trades settle. Whereas stocks, bond, and most other tradable assets settle electronically over computerized systems, loans, because of their complexity, close on the basis of negotiated documents . . . While the LSTA has made great strides in shortening the settlement process and making loans more transparency, loan market participants still struggle to close many loans trades on a timely basis in an efficient manner."[21]

This is primarily because the preferred methods of transfer – assignment or outright transfer of tittle following which buyers becomes the lender of record and are entitled to voting in the syndicate – are far from mechanical. Unlike the context of securities, where following the purchase, the security settles in the account of the

[20] Rothenberg & Yearick, supra note 19.
[21] Laura Torrado and Michele B. Piorkowski, *The Secondary Loan Market Settling Loan Transactions*, *in* TAYLOR & SANSONE, THE HANDBOOK, *supra* note 1 at 420.

purchaser at a depository organization, such as the Depository Trust Company (DTC) in the United States, in the case of loans, the buyer may sometimes not even be eligible to become a lender of record (e.g. when borrower disagrees). This why while the LSTA STC provide that, unless parties agree otherwise, the trade will close as an assignment, but when assignment is not possible, the trade will close as participation. In the latter case the buyer may enjoy some, but not all voting rights in the syndicate. [22]

2.3.1.3. Delayed settlement

To provide market participants with additional incentives to settle as quickly as possible, the LSTA was developed the "T+10" trading convention for par trades, according to which a par trade ought to settle within ten days of the trade date.[23] Over time it has been reduced to T+7.[24] The LSTA also developed delayed

[22] LSTA STC, *supra* note 22, Section 1 („Target Settlement/Settlement Date/Transfer of Debt").

> "Unless an alternative election is made in the 'Form of Purchase' section of the Confirmation, the form of purchase of the Purchase Amount of the Debt shall be an assignment . . . If Buyer and Seller are unable to effect settlement of the Transaction as specified in the Confirmation, a valid and binding obligation to settle the trade nevertheless continues to exist between Buyer and Seller. If a Transaction that is to be settled by assignment cannot be settled on such basis, such Transaction shall be settled as a participation; provided that if settlement by participation cannot be effected, the Transaction shall be settled on the basis of a mutually agreeable alternative structure or other arrangement that affords Buyer and Seller the economic equivalent of the agreed-upon trade; provided, further, that if 'Assignment Only' is elected in the 'Form of Purchase' section of the Confirmation (an 'Assignment Only Election') and the Transaction cannot be settled on such basis, Buyer and Seller shall not settle the Transaction as a participation but shall instead settle on the basis of a mutually agreeable alternative structure or other arrangement that affords Buyer and Seller the economic equivalent of the agreed-upon trade."

[23] Taylor, *Market Standards*, *supra* note 9 at 86. ("The most significant accomplishment of LSTA since its inception has been the establishment of standard settlement procedures, otherwise known as T+10 for Par Loans (settlement date=trade date+10 business days). This convention was formally introduced by LSTA in December 1995 and was quickly adopted by the loan trading marketplace.")

[24] Note that Section 1 („Target Settlement/Settlement Date/Transfer of Debt") of the LSTA STC actually talks about an obligation to conclude the trade "as soon as practicable."

compensation starting at T+8.[25] If delayed compensation applies, if will affect the Purchase Price.[26]

2.3.1.4. Buy-in/Sell-out

While delayed compensation may incentivize the seller to settle, it does not solve the problem of failure to deliver the asset to the purchaser. The Buy-in/Sell-out (BISO) clause was designed to address replacement risk. If the trade has not occurred after T+15 the non-defaulting party can send a BISO notice.[27] The defaulting party has five days to cure. If obligations are not cured within that time frame all obligations other than BISO are terminated. The performing party identifies a substitute transaction and enters into a Close-Out Confirmation and

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> "Target Settlement/Settlement Date/Transfer of Debt: The transfer of the Purchase Amount (as defined below) of the Debt (as defined below) specified in the Confirmation shall be effected as soon as practicable on or after the Trade Date. Any alternative agreement between Buyer and Seller as to a targeted date of settlement shall be specified in the Confirmation."

T+7 comes from Section 6, which defines 'Delayed Settlement Date' as "the date following the Commencement Date on which settlement actually occurs." Commencement Date is defined as "(a) for Early Day Trades, the date fourteen (14) Business Days after the Trigger Date and (b) for all other trades, the date seven (7) Business days after the Trade Date." *Id.* Section 6 ("Compensation for Delayed Settlement").

[25] LSTA STC, *supra* note 22, Section 6 ("Compensation for Delayed Settlement").

[26] *Id.* Section 4 („Purchase Price Calculation").

> "The Purchase Price is calculated by (a) the Purchase Rate multiplied by the funded principal amount of such Purchase Amount as of the Settlement Date minus (b) (100% minus the Purchase Rate) multiplied by the unfunded commitments (if any), which shall include the face amount of any issued but undrawn letter of credit, assumed by Buyer as of the Settlement Date minus (c) (100% minus the Purchase Rate) multiplied by any Permanent Reductions on or after the Trade Date minus (d) any Non- Recurring Fees (as defined below) received by Seller on or before the Settlement Date."

[27] *Id.* Section 16 („Buy-in/Sell-out"). BISO only concerns trades that close as assignments. The distressed version initially it did not include a BISO provision and merely a bankruptcy proceeding provision provides the Seller with obligations of delivery of proof of claim relating to the Debt if the obligor under the Credit Agreement goes bankrupt. In 2010 BISO was introduced in the LSTA documentation for distressed trades.

sends it to the defaulting party within one business day with a request to cover the difference between the original price and the cover price. If the transaction is a buy-in, Seller has to pay damages to compensate the Buyer for its default, if the buy-in price exceeds the original Purchase Price for the specified Debt[28] and if the transaction is a sell-out, the Buyer has to pay damage to compensate the Seller for its default if the sell-out price is lower than the original Sell Price for the Specified Debt.[29] If the defaulting party contests the price, the dispute goes into arbitration administered by the LSTA.

2.3.2. Liquidity

The range of provisions with potential liquidity implications is quite broad and includes a number of provisions seeking to facilitate search and bargaining. In the context of the LSTA, this includes breakfunding, permanent reductions, certain provisions relating to interest payments and fees (settled without accrued interest, paid on settlement date, trades flat)[30] and other provisions.

Consider breakfunding under the LSTA STC. Typically under a loan agreement the borrower can do multiple drawdowns at different reference rate (such as the Federal Funds Rate). One of the issues that a breakfunding provision has to address is whether the buyer of the loan in the secondary market will

[28] *Id.* Section 17 (Buy-in Damages).
[29] *Id.* Section 18 (Sell-out Damages).
[30] Three types: (ordinary) Interest and Accruing Fess stemming from the Credit Agreement, such as commitment, facility, letter of credit fees); Payment-in-Kind Interest and No-Recurring Fees. As a default, all Interest and Accrued fees after the trade date but before settlement date are for the account of the seller, but are not included in the purchase price. This is called 'settled without accrued interest'. The convention adopted in 1997 was that payment of accrued interest only occurred after traded date to seller only after they are paid to buyer. Parties can, however, specify in the Confirmation, that they are 'paid on settlement date'. Unless specified otherwise in the Confirmation, all Non-Recurring Fees are for the Account of the buyer. Unless specified in the Confirmation, all PIK Interest are allocated on a 'trades flat' basis.

compensate the seller to the extent that the reference rate decreased between the original date of the reference rate contracts and the date of funding of secondary markets. As Gomez puts it "the members of the LSTA decided that it would enhance the liquidity and transparency of the loan market if the convention of break-funding were dropped."[31] Accordingly, the LSTA STC provide that, unless the parties agree otherwise, breakfunding will not apply.

Introduction of standardized documentation for trading has resulted in the increasing homogeneity and commoditization of syndicated loans to "the point where the appetite of the secondary markets for syndicated loans is becoming an increasingly important element of the syndication strategy for syndicated loan."[32] From that point of view one of the factors hampering the development of this market was the range of differences in the terms of the underlying loan agreements.

The provision with greatest implications for secondary markets the one that allows any lender to assign the loan.[33] Importantly the assignment has been made subject to a condition that it satisfies certain minimum amounts.[34] In principle no

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[31] Elliot Gomez, The LSTA - A Regulatory and Documentation Review, in TAYLOR & SANSONE, THE HANDBOOK, supra note 1 at 77

[32] ANDREW FIGHT, SYNDICATED LENDING 6 (2004).

[33] LSTA MODEL CREDIT AGREEMENT PROVISIONS, Section 8. "(b) Assignment by Lenders. Any Lender may at any time assign to one or more assignees all or a portion of its rights and obligations under this Agreement (including all or a portion of its Commitment and the Loans at the time owing to it)." *Cf.* Gadanecz, *supra* note 22 („A measure of the tradability of loans on the secondary market is the prevalence of transferability clauses, which allow the transfer of the claim to another creditor.").

[34] *Id.*

> "Minimum Amounts. (A) in the case of an assignment of the entire remaining amount of the assigning Lender's Commitment and the Loans at the time owing to it or in the case of an assignment to a Lender, an Affiliate of a Lender or an Approved Fund, no minimum requirement. (B) in any case not described in paragraph (b)(i)(A) of this Section, the aggregate amount of the Commitment (which for this purpose includes Loans outstanding thereunder) or, if the applicable Commitment is not then in effect, the principal outstanding

consents are required, unless the loan agreement states otherwise.[35] No consents are required if the trade closes as a participation.[36]

2.3.3. Information

While, purchasers of loans in secondary markets are likely to collect information on borrowers from various sources,[37] the LSTA STCs gives them the right to request

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balance of the Loans of the assigning Lender subject to each such assignment (determined as of the date the Assignment and Assumption with respect to such assignment is delivered to the Administrative Agent or, if "Trade Date" is specified in the Assignment and Assumption, as of the Trade Date) shall not be less than $5,000,000.[34] In the case of any assignment in respect of a revolving facility or $1,000,000 in the case of any assignment in respect of a term facility, unless each of the Administrative Agent and, so long as no [*Institution to select appropriate cross-reference to default*] has occurred and is continuing, the Borrower otherwise."

[35] *Id.* ("Required Consents").
"No consent shall be required for any assignment except to the extent required by paragraph (b)(i)(B) of this Section and, in addition, (A) the consent of the Borrower (such consent not be unreasonably withheld or delayed) shall be required unless (x) [Institution to select appropriate cross-reference to default] has occurred and is continuing at the time of such assignment or (y) such assignment is to a Lender, an Affiliate or a Lender or an Approved Fund; (B) the consent of the Administrative Agent (under certain circumstances…) (C) the consent of the Issuing Bank (under certain circumstances…) (v) No Assignment to Borrower. No such assignment shall be made to the Borrower or any of the Borrower's Affiliates or Subsidiaries. Also (vi) No Assignment to Natural Person."

[36] *Id*. ("(d) Participants"). Any Lender can sell, without any consents, if she remains solely responsible. There also exist limitations on Participant Rights (e)."

[37] One of the LSTA's first initiatives was development of a month-end secondary pricing service for leveraged loans – later known as the Leveraged Loan Index (LLI). "The LLI, on a real-time basis, tracks the current outstanding balances and spreads over LIBOR (London Interbank Offered Rate) for fully funded term loans in which several of the market's largest investor's participate. The LSTA/Loan Pricing Corporation (LPC) pricing service provides secondary market pricing levels through average bids, while Financial Computer Software's Wall Street Office back-end system manages the data. Standard & Poor's Index Services Group, that also oversees the S&P 500, provides the performance calculation and analytics platform." As … notes, "Prior to the creation of the service, traders faxed their list of holding to all the other traders to obtain quotes on the bid/offer prices so that their controllers would have an outsider's view on the price the trader was recording on his books. However the traders did not like sharing this type of information with their competitors, and in reaction to their dissatisfaction, in November 1995, the LSTA arranged for an accounting firm to compile a list of loans that the traders were holding and a bid and offer price for each of them. In

syndicate confidential information.[38] Syndicate confidential informational generally encompasses information provided to the syndicate at the time or origination as well as in the course of the life of a loan and which may contain material non-publc information.[39] In the process purchasers may also acquire borrower confidential infomration, which encompasses information on the borrower, which is not part of the syndicate information. Any such information may, potentially, be used by prospective purchasers either in violation of securities law (for example, when they own holdings across the capital structure of the borrower, including listed securities) or against the borrower (for example, by undermining restructuring efforts). This risk is somewhat mitigated through the provisions, which require buyers requesting and receiving any such information to "execute and deliver to Seller a Confidentiality Agreement in the form stipulated in the Credit Agreement or, in the absence of same, a reasonably acceptable Confidentiality Agreement containing customary terms."[40] These confidentiality obligations have to be read in conjunction with the LSTA principles on trading on confidential information,[41] which do not prevent a loan market participant trading on syndicate confidential information, if she among other things, "reasonably believes that its counterparty has otherwise received such information or, in the case where the counterparty is already a syndicate member, the counterparty has had the opportunity to receive

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December 1995, prices on 155 different facilities were disseminated to traders for their month-end price marks, and the old system was replaced for good." *Id.* at 68-69.

[38] Paragraph 10 (Syndicated Confidential Information) provides that if "Yes" is specified in a Confirmation, Seller shall furnish Buyer a true and complete copy of the Credit Agreement (including all schedules, and, if requested by Buyer, exhibits), together with all amendments thereto, as promptly as practicable following the Trade Date.

[39] LSTA, Confidential Information Supplement (October 1, 2008).

[40] Taylor, "Market Standards", in FABOZZI, BANKS LOANS, supra note 10.

[41] See LSTA, Statement of Principles for the Communication and Use of Confidential Information by Loan Market Participants (December 2006).

such information" [42] or "reasonably believes that the counterparty is sophisticated."[43]

In a trade on LSTA documentation the seller under also provides certain representations and warranties on its own behalf as well as transfers all its rights against the previous seller (in an 'upstream-chain' of title). LSTA's distressed documentation refers to the PSA which includes representations with regard to title, pending litigation, acts and omissions, among other.[44] LSTA's distressed documentation also includes step-up protections providing additional assurances with regard to accuracy of the information provided by the seller at the time of the sale and help with further reduction of information problems between the seller and the buyer and the borrower and the buyer.[45] If a loan starts trading as par, but over time the market decides it is distressed, credit and counterparty risk increase.

> "Loans which are purchased on par documentation after the Shift Date are considered 'defective' as the owner of such loans has no protection against any possible misconduct of the lender or prior lenders that sold on par documents (the 'Par Sellers'). In such cases, the market requires the owner of the defective loans and chain of title, if selling on LSTA distressed documentation, to 'step-up' and indemnify the purchaser for the risks associated with the misconduct of the Par Sellers. The form LSTA PSA for Distressed Trades provides a simple 'check the box' mechanism to facilitate the seller providing these step-up protections."[46]

[42] Id. Section III(A)(2).
[43] Id. Section III(A)(3)(c).
[44] See Section 11 in connection with Section B of the PSA.
[45] See Section 12 of the LSTA STC.
[46] Paul B. Haskel and James J. Ohlig, New LSTA Trading Documents, March 15, 2010, available at http://www.lexology.com/library/detail.aspx?g=f03f8d51-63b9-43d8-aa8e-0f42f4459207 (last visited July 7, 2015). Also, an elaborate mechanism to determine Shift Dates.

The most recent version of the LSTA MCAP also includes a language that seeks to address blacklists, which is another problem with potential impact on liquidity. The Merriam-Webster Dictionary defines blacklist as "a list of persons who are disapproved of or are to be punished or boycotted."[47] The practice of blacklisting is typically linked to weak confidentiality protection afforded by the LSTA documentation. However, a number of commentators have suggested that blacklisting is problematic as it can limit liquidity of the loans being traded.[48] The LSTA MCAP seeks to mitigate these effects by limiting the rights of disqualified institutions to receive certain information.[49]

2.3.4. Systemic risk

To the extent that trades have not settled before the default of one of the counterparties, the non-defaulting counterparty with the open positions may find

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[47] Merriam-Webster Dictionary, available at http://www.merriam-webster.com/dictionary/-blacklisting.

[48] Greg Margolies, a senior partner at Los Angeles-based Ares Management LP, which manages about $80 billion in assets including speculative-grade debt and real estate. "Ares will not invest in a name where secondary liquidity can dry up immediately because an issuer has decided to blacklist a number of market participants." Nabila Ahmed & Kristen Haunss, *The Blacklist That Rules Wall Street's Loan Market*, BLOOMBERG.COM (December 18, 2014), available at http://www.bloomberg.com/news/articles/2014-12-18/there-s-a-blacklist-in-800-billion-of-u-s-loans-and-it-s-legal (last visited September 13, 2015).

[49] "Under the 2014 MCAPs, the list of disqualified institutions is created by the borrower before the closing of the credit facility. After the closing, the borrower may update the list by adding "competitors." The exact definition of competitor is left for negotiation, but it is intended to be defined in reference to the particular borrower and its business." Barbara M. Goodstein, *MCAPs: Capping Off Lessons From the Credit Crisis*, 252 N.Y.L.J. 65 (October 2, 2014). As Godstein notes,

> "an assignment or participation in violation of these provisions is not void. Such a result would raise practical as well as legal issues. Instead, a disqualified institution (1) will not have the right to receive and/or access information provided to the other lenders, (2) will not have the right to attend meetings of the lenders, and (3) prior to and following a bankruptcy proceeding of the borrower, will not have voting rights as the other lenders do with respect to certain actions taken under the credit agreement." Id.

itself exposed not only to legal and economic uncertainty, but also large losses. If the defaulting counterparty happens to be a large dealer, this looses could become systemic. Systemic risk considerations have not thus far affected the LSTA STC.

Systemic risk considerations have affected the LST MCAP. This is largely as a result of the discussions revolving around the moral hazard associated with bail-outs. In 2009 industry members begun to discussions of a reverse mechanism – bail-in.[50] Bail-in is a technique of capital restructuring subjecting note holders to haircuts or equity conversion. In December 2015, the LSTA published its own bail-in rules.[51]

2.4. Structural dimension

2.4.1. Standard-setting and monitoring

2.4.1.1. Governance

[50] The idea is said to have emerged from Credit Suisse. In early 2010, Paul Calello, then head of the Investment Bank and Wilson Ervin, Vice Chairman, set out a condensed version of this proposal in an op-ed published in The Economist. *See* https://www.credit-suisse.com/uk/en/news-and-expertise/banking/articles/news-and-expertise/2013/05/en/bail-in-the-best-alternative-to-address-systemic-risk.html

[51] See EU Bail-In Rule Form of Contractual Recognition Provision: LSTA Variant (December 22, 2015). "Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any EEA Financial Institution arising under any Loan Document, to the extent such liability is unsecured, may be subject to the write-down and conversion powers of an EEA Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by: (a) the application of any Write-Down and Conversion Powers by an EEA Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an EEA Financial Institution; and (b) the effects of any Bail-in Action on any such liability, including, if applicable: (i) a reduction in full or in part or cancellation of any such liability; (ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such EEA Financial Institution, its parent undertaking, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or (iii) the variation of the terms of such liability in connection with the exercise of the write-down and conversion powers of any EEA Resolution Authority." Id.

2.4.1.1.1. Membership

As noted, the LSTA was set up as a New York not-for-profit corporation by a handful of sell-side institutions.[52] The LSTA's membership quickly expanded beyond the sell-side and encompassed buy-side financial institutions, law firms and other organizations involved in the market. The type of involvement has also been used as the primary criterion in distinguishing between different groups of members within the governance structure of the LSTA. The first group consists of financial institutions that are likely to be loan arrangers, traders and other active participants in the loan market. These members are referred to as 'full' members.[53] The second group consists of actors that may engage in trading, but are less active.[54] These members are referred to as 'associate' members. The third group consists of law firms, rating agencies, accountancy firms, smaller financial institutions and other professionals with an interest in the market.[55] These members are referred to as

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[52] The LSTA was incorporated under the name 'Debt Traders Association', but soon change its name to the more inclusive 'LSTA'.

[53] Article I, Section 1(a) of the BYLAWS OF THE LOAN SYNDICATIONS AND TRADING ASSOCIATION.

> ("Every investment, merchant or commercial bank or other corporation, partnership or other business organization that, directly or through an affiliate, as part of its business (whether for its own account or as agent), acts as a trader, dealer or broker for bank debt (as defined by the Association from time to time) and actively and frequently trades such bank debt shall be eligible for election in the Association as a Full Member.")

[54] *Id.* Section 1(b).

> ("Any investment, merchant or commercial bank or other corporation, partnership or other business organization that, directly or through an affiliate, as part of its business (whether for its own account or as agent), acts as a trader, dealer or broker for bank debt (as defined by the Association from time to time) but is not eligible for election to membership in the Association as a Full Member shall be eligible for election in the Association as an Associate Member or an Affiliate Member, at its option.")

[55] *Id.* Section 1(c).

> ("Any individual or entity not eligible for membership in the Association as a Full Member or an Associate Member (or any entity that exercises its option to decline eligibility for election as an Associate Member) shall be eligible for election to membership in the Association as an Affiliate Member.")

'affiliat' members. Chart 1 illustrates membership composition by type of activity, which is corelated with membership types, but only to a limited extent (for example, some full members represent the buy-side).

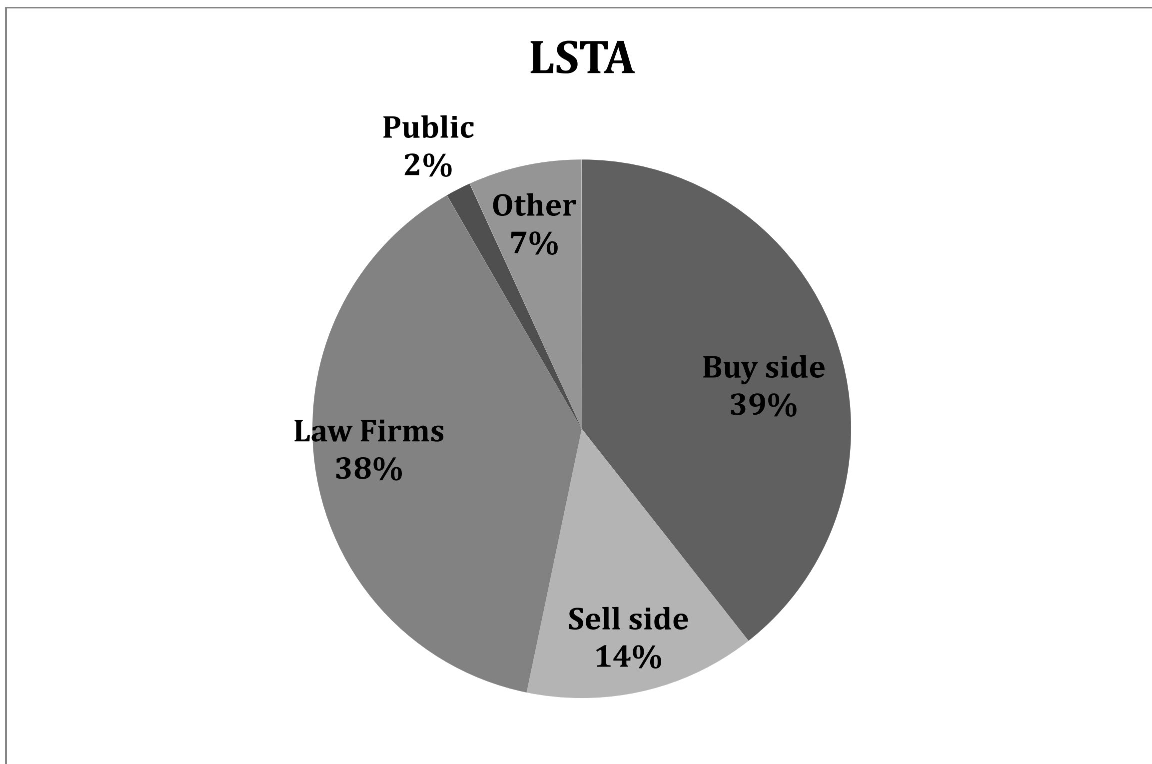

Chart 1 LSTA membership composition by type of activity (source: LSTA)

2.4.1.1.2. Board of Directors

Both full and associate members enjoy the right to vote in the meetings of the Association on all matters submitted to a vote of membership.[56] Selection of directors is among the most important matters that can be vote on as it is the board of directors that makes decisions, including on the adoption of new/revised forms,

[56] *Id.* Article III, Section 8. ("Except as may be required by law, Affiliate Members shall not be entitled to vote.").

including establishing the date on which they become effective.[57] Candidates for directors can be nominated from among the full and associate members, usually for two years,[58] and serve the organization without compensation.[59] While the board had been initially dominated by the sell-side this has changed in the mid-2000s. Mike McAdams of Four Corners Capital Management was the first buy-side chairperson. Scott Kraise of Oak Hill Advisors was the second when he was elected in 2005. Over time the Board became even more representative of the market, with the buy-side representing more than half of the board at the end of 2015.[60]

2.4.1.1.3. Funding

In the early days, apart from membership fees, the LSTA largely relied on licensing fees from LLI to fund its operations. These started to quickly decrease with emergence of competing loan market data providers. Buy-siders initially also seemed unwilling to fund the activities of the organizations. As Taylor put it at one of LSTA's annual meetings in the early 2000s, "[w]e are a non-profit organization

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[57] *Id.* Article IV, Section 1 ("The Association shall be managed by its Board of Directors, which shall have all powers necessary and proper for the conduct of the Association's business and the advancement of its purposes.").

[58] *Id.* Article IV, Section 4(b).

> ("Only those persons who have been nominated by a Voting Member at the annual meeting (or a special meeting called for the purpose of electing directors) or who have been nominated in advance of such annual meeting (or special meeting called for the purpose of electing directors) by the Board Nominating Committee of the Association shall be eligible for election as a director of the Association.")

[59] *Id.* Article IV, Section 14.

[60] Apart from the Directors, the LSTA also has an executive arm consisting of individuals with substantial experience in the markets, which work for the LSTA full time and are compensated for their work for the organization. Allison Taylor used to be one of the first and long standing executive directors serving the organization between 1998 and 2008. Currently, Bram Smith is the Executive Director for the LSTA. Ted Basta, Meredith Coffey and Elliot Ganz are all Executive Vice Presidents. These individuals retain important roles within the organization.

and we need their money."[61] Taylor speculated that some institutions held back because the membership fees would have to come directly out of pocket for a lot of the funds, which are made up of partners. "They look at the market and say 'Oh, the sell-side will pay.'"[62] This had put the organization's finances in quite some difficulties.[63] A bold and prompt response was required and came in 2003 when the LSTA Board of Directors approved a new dues structure "designed to ensure that larger, more active members pay a greater proportion of overall dues."[64] Each organization pays a base rate, which depending on the size of the institution varies from $8.000 to $25.000 as well as additional rates depending on the volume of trades/underwriting it has been involved in a given year. [65]

2.4.1.1.4. Committees

The core of the LSTA's activity is organized around committees. The Trade Practices and Forms Committee (TPFC), responsible for secondary market documentation, is the largest LSTA Committee with more than 300 members. As the LSTA notes,

> "[s]ince its inception, the Committee has worked to identify key market issues and to build consensus toward resolving those issues through the drafting and adoption of standard documents and market practices. The Committee's membership is open to all members and currently includes business people, lawyers, and closers. It is recommended that each member of the LSTA nominate at least one person to be on this Committee so that the member is kept informed about secondary

[61] LSTA calls on non-members for support, Global Capital (October 27, 2002).
[62] *Id.*
[63] In fact, in 2002 LSTA projected negative net income of $121 million for 2002 and an estimated loss of $668 million for 2003.
[64] See LSTA Membership Types, available at http://www.lsta.org/about/membership/types (last visited March 16, 2016).
[65] *See id.* "Full Dealer and Full Other assessments will be based on their volumes as leveraged lead arrangers (as measured by Loan Pricing Corp's League Tables), and their levels of secondary trading volume. Full and Associate Institutional Investors will see an assessment based upon their primary allocations volume (as measured by Standard & Poor's)."

> trading practices and developments, credit-specific market advisories, and documentation revisions."[66]

Further, the TPFC will oftentimes seek input from other committees[67] or even third parties.[68] However, inclusiveness of the TPFC committees is not necessarily a sentiment that had always been shared or that is shared by all parties. As Chris Pucillo of Stanfield Capital noted at one of LSTA's events in early 2000s – "it is the existing members of the LSTA - the banks and dealers - are the ones who have to drive the process."[69] Taylor responded by saying: "If hedge funds and vulture funds do not come to the table, then the rest of the market can make decisions that go against their wishes."[70]

The Primary Market Committee addresses issues particularly relevant for borrowers and lenders, but also investors in the primary markets.[71] Starting in the

[66] For an overview see http://www.lsta.org/legal-and-documentation/committees-and-working-groups.
[67] As an example, in 2015 the Liquidity Committee, together with the Operations Steering Group, determined, among other things, the Best Practices for both Primary and Secondary Trade Settlements. It was the Liquidity Committee's view that delayed compensation should be revised from a "no-fault" to a "fault" provision wherein the party that is to receive delayed compensation should complete certain tasks. The LSTA's Board of Directors recently adopted the provision.
[68] A good example was the Q&A session held in February 2004 for the newly revised confirmation. The goal of the session, as Jane Summers notes, was "to facilitate implementation of the new forms". As she further said, the LSTA "as we continue to make strides toward settlement, we need to see participation by the distressed buy-side and are gratified they turned out."LSTA Sees Distressed Player Interest in Trade Docs, GlobalCapital (13 February 2004), available at http://www.globalcapital.com/article/k6c9j5f5m4s7/lsta-sees-distressed-player-interest-in-trade-docs (last viewed March10, 2016).
[69] LSTA calls on non-members for support, supra note 61.
[70] At that time, the LSTA had no hedge fund membership.
[71] Inudstry Moves Forward on Primary Funding, GlobalCapital (4 June 2004), available at http://www.globalcapital.com/article/k6c3xfqx7z9g/industry-moves-forward-on-primary-funding, last viewed March 10, 2016. The testimonials in the article illustrate some of the incentives driving the process. „Scott Krase, portfolio manager with Oak Hill Advisors, became involved in the effort because of his frustration with post-closing follow up… 'To have consistency in all aspects, you have a market that is much more liquid and allows many more investors to participate so they know what to

early 2000s it worked on developing standards for primary market documentation provisions with greatest impact on secondary market liquidity, including in particular transfer provisions. Recent activities of the Primary Committee have been largely driven by such trends as the large volume of loan refinancing, the trend of borrowers more actively managing their syndicate (blacklists) and increased regulation. With regard to increased regulation, as the LSTA noted,

> „[a]lthough we do not plan to include in the MCAPs regulatory representations and covenants, which are now finding their way into many credit agreements, we have launched a series of educational Regulatory Roundtables for our members, with the first held in December 2013 on the Office of Foreign Assets Control and also plan to produce related regulatory guidance, drafting tips, and, where appropriate, sample credit agreement language."[72]

Recognizing the importance of dialogue with public regulators, the LSTA started a Regulatory Committee, which develops and supervises the LSTA's strategy for interfacing with regulators and other government entities. Unlike many other committees, this Committee is open to LSTA members by invitation only.

2.4.1.2. Competition and regulatory competition

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expect' - he said. "Everything on there makes sense. Nothing should strike anybody as 'Boy, that's new. I can't believe that was or was not going on before.' Glenn Stewart, head of Bank of America's syndicate desk co-led the effort. Stewart believes issuers, arrangers and investors will benefit from the standards. 'Any time you can put in some best practices that provide some guidelines on how people should do business so they are not surprised by twists and turns of certain deals is a help for everybody,' - he said. 'It's another positive that the industry is working together to standardize the business while leaving the huge flexibility that our asset class has.' Stewart said the next step is for everyone in the business to communicate the new standards throughout their franchise to make sure everyone understands them." *Id.*

[72] LSTA, Quarterly Review (February 2014), avaialble at http://www.lsta.org/uploaded/files/Feb-2014-Quarterly.pdf (last visited April 30, 2016).

By facilitating interactions between market participants, the LSTA potentially increases the risk of behavior or may create the appearance of behavior that could violate antitrust laws. This is why the LSTA developed its antitrust guidelines, which outline certain 'do's' and 'don't' in relation to meetings held in relation to LSTA's activities.[73] The Guidelines caution members against any agreements to fix commissions, fees, share certain type of information or boycott certain customers. Interestingly, the Guidelines also caution members "not to agree that the standards will be the only terms on which they will deal with others" and "not [to] suggest 'standing up" to groups of competitors or anyone except the government."[74] These last two recommendations highlight the ambiguous position of the LSTA in the context of competition and regulatory competition. It has to act like a regulatory organization to establish its credibility vis a vis public regulators, but it cannot do that until and unless it is considered (and it considers itself) as a regulatory organization. Currently, largely due to the nature of the underlying assets, occupying a debatable position between borrowing and investment instruments, the market takes advantage from the fact that it is legally not considered a securities market. As Bason et al note the advantages results from two related legal considerations: "first, the absence of any requirement to either to go through the registration process with the SEC or to ensure that the transaction satisfied all technical requirements for an exemption from the registration requirements of the

[73] LSTA Antitrust Guidelines (2014).
[74] *Id.*

securities laws, and second, the absence of exposure to antifraud liability under securities laws."[75]

While there have been attempts to include them in a regulatory purview of public regulators, these attempts have been largely unsuccessful. In holding that loan participations and syndications are not securities, the lower courts which have considered the question have applied tests previously employed by the Supreme Court in analyzing notes (and stock) as securities.[76] In this regard, the Supreme Court has analyzed whether an instrument may be viewed as an "investment contract,"[77], is issued in an "investment" as opposed to a "commercial" or "consumer" context[78] or bears a strong "family resemblance" to a judicially recognized exception to the definition of a security.[79] The leading case regarding loan participations is Banco Espanol de Credito v. Security Pacific National Bank, in which the Second Circuit, concluded that the loan participations at issue were analogous to loans issued by banks for commercial purposes and, thus, were not securities.[80] This distinction seems to rest on an increasingly shaky ground and it would not be overly surprising if we saw a major shift here in the mid-term.[81] But

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[75] Tiziana M. Bason, Michael P. Kaplan & Bradley Y. Smith, *Effect of the Legal Characterization of Loans under Securities Laws*, *in* TAYLOR & SANSONE *supra* note 1 at 56.
[76] *See* Broker-Dealer & Investment Management Regulation Group, *Syndicated Loans as Securities* (April 2011), available at http://www.proskauer.com/files-/uploads/broker-dealer/Syndicated-Loans-as-Securities.pdf (last visited April 8, 2015).
[77] SEC v. W.J. Howey Co., 328 U.S. 293 (1946).
[78] Reves v. Ernst & Young, 494 U.S. 56 (1990), reh'g denied 494 U.S. 1092 (1990).
[79] *Id.*
[80] Banco Espanol de Credito v. Security Pacific National Bank, 973 F.2d 51 (2d Cir. 1992), cert. denied, 509 U.S. 903 (1993).
[81] In his dissenting opinion in Banco Espanol de Credito, the Second Circuit's Chief Judge strongly disagreed with the Court's analysis. Siding with the views of the Securities and Exchange Commission ("SEC"), which had submitted a brief amicus curiae, the Chief Judge distinguished the subject program from a traditional loan participation program on the basis of the number and type of participants, the sales approach and the availability of information regarding the borrower. The Judge prefaced his opinion with the remark that the majority opinion "misreads the facts, makes bad

while the shift is not unlikely, there remain important questions what form should that transformation take and what would the role of the LSTA and its contracts be in that context? Would it remove itself from the picture or assert a firm regulatory position?

Loan markets are, of course, not immune from regulatory pressures. In recent years this has been true in particular of primary markets as a result of restrictions imposed on banks in terms of lending. Many commentators suggested that risk lending has been among the principal causes of the crisis. The objective of the leveraged lending guidelines promulgated by the SEC, the Federal Reserve Board , and other federal banking agencies[82] was to "deter origination of criticized or below-standard loan."[83] The concern was not only with credit risk, but also systemic risk, i.e. the secondary market. The LSTA's concern was that 'leveraged loans' would be defined too broadly. To the extent that it has not been successful, the LSTA has filed a suit challenging the agencies.[84] The case is pending.

Public regulation of derivatives also had the potential to extend to loans. One of the early drafts of the Dodd-Frank Act[85], which sought to curb the use of certain

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banking law and bad securities law, and stands on its head the law of this circuit and of the Supreme Court in Reves v. Ernst & Young." He considered that the participants,

> "rather than being commercial lenders who engage in traditional loan participations, were instead in many cases non-financial entities not acting as commercial lenders but making an investment, and even though there were some banks that purchased the so-called loan notes, they generally did so not through their lending departments but through their investment and trading departments. These participants were motivated not by the commercial purpose of operating a lending business in which participations are taken as an adjunct to direct lending operations, but were motivated by an investment purpose." *Id.*

[82] Leveraged Lending Guidance (78 F.R. 17771).
[83] *Id.*
[84] Loan Syndication and Trading Association v. SEC, et al. (Case No. 14-1240).
[85] Dodd-Frank Wall Street Reform and Consumer Protection Act (Pub.L. 111-203, H.R. 4173.)

derivatives instruments – total return swaps – was drafted in a way that would encompass loan participations.[86] Because legally speaking, a participant has no legal interest in the loan, but has economic exposure; it resembles a total-return swap. In it submissions to the SEC and the Commodity Futures Trading Commission (CFTC), the LSTA argued that loan participations are different, because they do convey a current or future ownership interest in the loan. As the LSTA argued,

> "without such action, the unintended consequences of Dodd-Frank would include (1) diminished utility and function of the loan participation as a transfer structure in the syndicated loan market, (2) decreased liquidity in that stable and robust market, (3) constrained bank lending activities, and (4) decreased flow of new capital for existing businesses."[87]

The final rules released by the SEC and the CFTC excluded participation from the definition of total return swaps – a major victory for the LSTA.

2.4.2. Enforcement

2.4.2.1. Extra-legal

The LSTA has to rely on market participants for enforcement, because "it has no authority to compel the use of any of its forms by any market participant."[88]

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[86] Sections 712(d) of Dodd-Frank requires the Commissions, in consultation with the Federal Reserve Board, jointly to define further the terms "swap" and "security-based swap." Sections 721(c) and 761(b) also require the Commissions to define these terms further. "any agreement, contract, or transaction ... that provides ... for the exchange ... of 1 or more payments based on the value ... of 1 or more interest or other rates, ... instruments of indebtedness, ... or other financial or economic interests or property of any kind, ... and that transfers ... in whole or in part, the financial risk associated with a future change in any such value ... without also conveying a current or future direct or indirect ownership interest in an asset ... or liability that incorporates the risk so transferred ...." *Id.*

[87] LSTA, Comment Letter to the Commodities Futures Trading Commission and the Securities and Exchange Commission (January 25 2011), File No. S7-16-10.

[88] Taylor, *Market Standards, supra* note 9 at 86.

However, as Taylor notes, “in almost all cases, the market adopts our policies and procedures.”[89] Two channels of delegate enforcement can be identified. The first type of delegated enforcement relies on pricing penalties. Taylor provides some examples of provisions the change of which is likely to affect the price. These include:

- settlement times;
- delayed compensation;
- no breakfunding;
- closing of the trade as an assignment;

On the other hand, provisions such as:

- seller will prepare confirmations;
- seller will provide credit agreement if requested;
- terms of the trade will be kept confidential,
- representation as to making an informed decisions

are deemed to be less likely to affect the price of the loan.

The second type of delegated enforcement is de facto restrictions on market access. Laura Unger’s (former SEC Commissioner) observation at one of the LSTA’s conferences are indicative. Asked what happens if someone does not comply, she said that the LSTA has to enforce its rules. She suggested that the market refuses to do business with maverick players who do not comply with the consensus

[89] LSTA, Market Ease Settlement Rules, GlobalCapital (23 September 2001), available at http://www.globalcapital.com/article/k6dbfr4xdjcl/lsta-market-ease-settlement-rules (last viewed on March 10, 2016).

standards.[90] Indeed, anecdotal evidence suggests that the LSTA can rely on de facto market access restrictions as a mode of delegated enforcement.[91]

2.4.2.2. Legal

While pricing penalties and de facto market access restrictions may work in some instances, in other instances market participants may have to enforce the rules through courts. Examination of the cases pertaining to the LSTA suggests that this bound to result in uncertainty of the outcome.[92] Consider 'trade is a trade,' which we have suggested is important from the point of view of counterparty risk management. For the provision to be effective under New York law, an exemption from the New York State Statue of Frauds law was required. The law provides for a writing requirement for certain types of transactions. The LSTA successfully sought to amend the New York State Statue of Frauds law to exempt loan trading, so that oral traded are binding so long as all material terms of the trade have been established.[93] In October 2002 the loan trading exemption from the Statue of Frauds became effective, "a milestone accomplishment for the LSTA."[94]

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[90] Unger Advises Loan Market on Avoiding Regulation, GlobalCapital (27 October 2002), available at http://www.globalcapital.com/article/k6cx7394xkjz/unger-advises-loan-market-on-avoiding-regulation (last viewed March 10, 2016).

[91] A good example is what happened post September 11. Trading has largely stopped in the days following the attack. Moreover, some of the sites have been affected. At a meeting on September 14 between board members and representative from lending banks it was decided that trading will resume gradually. "For trades before September 17, where a delay is attributable to the events of the terrorist attacks, the LSTA recommends that delay compensation is suspended."

[92] The LSTA has a policy on how it interacts with courts. The relevant paragraph in the policy states that "amicus curiae brief . . . may be filed with any court of competent jurisdiction if the legal issue presented are ripe for consideration and raise serious policy issues that broadly affect any one, or all, of the markets and market participants represented by the Association." *Id.* at 80.

[93] NEW YORK GENERAL OBLIGATIONS LAW ("NY GOL") § 5-701(b) (exempting loan trades from the statute of frauds and outlining what constitutes sufficient evidence of a binding trade). As Elliot Ganz notes "[p]rior to the amendment, when a buyer and a seller orally agreed to a loan trade, they did not have

However, even the explicit exemption granted does not guarantee that the standard is going to be enforced as intended. In Highland Capital Management, L.P. v. Bank of America, Nat. Ass'n the court rejected the proposition that the LSTA STC will apply to BofA where there is evidence of intention to the contrary, stating, inter alia, that "[t]he LSTA standard terms are not binding law, and so long as [BofA] expressed an intent not to be governed by the LSTA, anything that the LSTA has to say about contract formation is of no import."[95] As D'Aversa et al note,

> "Although New York law includes an exemption to the Statute of Frauds for financial contracts like loan and claim trades, courts do not apply it automatically. Rather, courts consider all of the facts and circumstances surrounding the transaction when determining whether the parties intended to enter into a binding oral agreement … The cases discussed above also show courts being critical of parties who they view as being too reliant upon industry practice and standard documentation when it comes to contract formation."[96]

More recently, in Stonehill Capital Mgmt. LLC v. Bank of the W.[97] the Appellate Division of the New York Supreme Court found that because the agreement of the parties was subject to final written documentation, the parties did not intend to be bound. In its amicus curiae submission, the LSTA argued that "[t]he

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a legally binding contract until the confirmation was signed. This was unlike other asset classes, where oral trades are legally binding." Gomez, *The LSTA*, *supra* note 31 at 77.

[94] The 2010 version provides additional language to that effect by stating that "[n]either party will assert as a defense to liability under such agreement the lack of a writing signed by it that would otherwise be required to satisfy any statue of frauds, including §1-206 of the New York Uniform Commercial Code, or any comparable statue." Section 21 („Binding Effect").

[95] Highland Capital Management, L.P. v. Bank of America, Nat. Ass'n, No 13-11026 (5th Cir. 2014) at 488.

[96] Raniero D'Aversa, Amy G. Pasacreta and Matthew Fechik, *United States: Enforceability Of Oral Contracts For Loan And Claim Trades, Mondaq* (June 3, 2015), available at http://www.mondaq.com/unitedstates/x/401764/Financial+Services/Enforceability+Of+Oral+Contracts+For+Loan+And+Claim+Trades (last visited September 9, 2015)

[97] Stonehill Capital Mgmt. LLC v. Bank of the W., N.Y.S.3d 91, 91 (1st Dep't 2015).

Appellate Division's decision undermines a rule of law on which a large and growing secondary market for syndicated loans is predicated: oral trades are enforceable so long as all material terms have been agreed upon and there is a sufficient written record to confirm the agreement, ever if the contract is still 'subject to final documentation'[98] and that "[t]he decision is likely to interfere with the efficient operation and growth of the Loan Market, which requires that buyers and sellers have certainty about when a trade is binding."[99] As it further noted,

> "If the Appellate Division's decision is permitted to stand, the disruption to the current orderly functioning of Loan Market auctions could be significant. Both buyers and sellers would lack certainty regarding Loan Market transactions until the execution of final documentation, which presents the risk of price movements following the date on which agreement on price is reached. The period of time between the trade and the execution of the written documentation could be viewed as an option, with either side free to walk in the event of a price movement."[100]

2.5. Regulatory effectiveness

2.5.1. Counterparty risk

Settlement risk has been addressed by trade is a trade, mandatory settlement and delayed settlement provisions of the LSTA STC. These provisions seek to reduce settlement risk principally by reducing settlement times. There have been no systematic data on settlement before the LSTA was set up, but anecdotal evidence invoked by Taylor suggests that it had took many weeks to settle par transactions. The goal of the LSTA was to have par loans to settle within seven business days from

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[98] Brief of *Amicus Curiae* The Loan Syndications and Trading Association in Support of Plaintiffs-Respondents' Motion For Leave To Appeal (August 10, 2015) at 2.
[99] Id. At 4.
[100] Id. at 7-8.

the trade date and within 20 business days from the trade date for distressed trades. The Q4 2013 LSTA Secondary Trading & Settlement Study found that for LSTA par and distressed trades, the median number of business days between trade and settlement date in Q4 2013 was 15 and 49 days, respectively. While these results are below the goals and certainly compare poorly to other securities (and have earned loan markets the label of "some of the most inefficient markets in the world"[101]), if accounted for factors such as agent delays, credit freezes, delays in obtaining borrower consent and an upstream party not owing the loans being sold and other factors, which securities market participants do not have to deal with, can be regarded as moderately successful and attributed largely to the documentation. Similar opinions are expressed with regard to BISO, which was designed primarily with replacement risk in mind. As one commentator note, "Although it is difficult to measure empirically whether implementation of the par BISO provisions has helped improve settlement times in the secondary par loan market, the perception in the trading community is that they have been a helpful tool to "spur recalcitrant counterparties to move promptly to settle trades."[102]

2.5.2. Liquidity

As Taylor acknowledged: "[i]t's difficult to graph or demonstrate the success that the LSTA has had on the market as each initiative is adopted. However, the LSTA has shown the effect that the LSTA's adoption of standard minimum assignment amounts had on liquidity on the market. In 2001, the LSTA adopted a new standard

[101] Joe Widner, Clearing the Way for Electronic Loan Processing (2 February, 2010), available at https://www.markit.com/assets/en/docs/events/MarkitSERV%20presentations%202Feb10.pdf (last viewed June 21, 2015).
[102] Haskel & Ohlig, New LSTA, supra note 46.

of a minimum assignment for term loans of $1mm and for revolvers of $5mm. By the end of 2001, the average minimum standard assignment for term loans reached $1.48 mm, down from $6.25mm in 1995." This reflects an enlarged investor base (activity of smaller funds).

> "The development and rise of the secondary market for loans has been a significant contributor to the market as a whole because loan investors, banks and nonbanks alike, need liquidity. Liquidity is an essential tool of portfolio management. Without liquidity, portfolio managers would not be able to manage the credit-risk profiles of their portfolios."[103]

The sheer volume of growth of secondary markets can be used to illustrate how significant source of liquidity secondary loan markets are. Chart 2 illustrates the growth of the volume of trades in US secondary loan markets in the years 1999-2010. Even though this is linked to a number of factors, the LSTA's documentation, both for primary and secondary markets, is commonly said to be an important one.[104]

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[103] Taylor & Yang, *Evolution*, *supra* note 2 at. 26.

[104] LSTA Implements Second Generation Provisions, Global Capital (January 18, 2002), available at http://www.globalcapital.com/article/k6d6ffsl3tkl/lsta-implements-second-generation-provisions (last visited January 14, 2016) ("having a standard promotes liquidity so as new provisions are accepted and used in new deals, we will see a real improvement.").

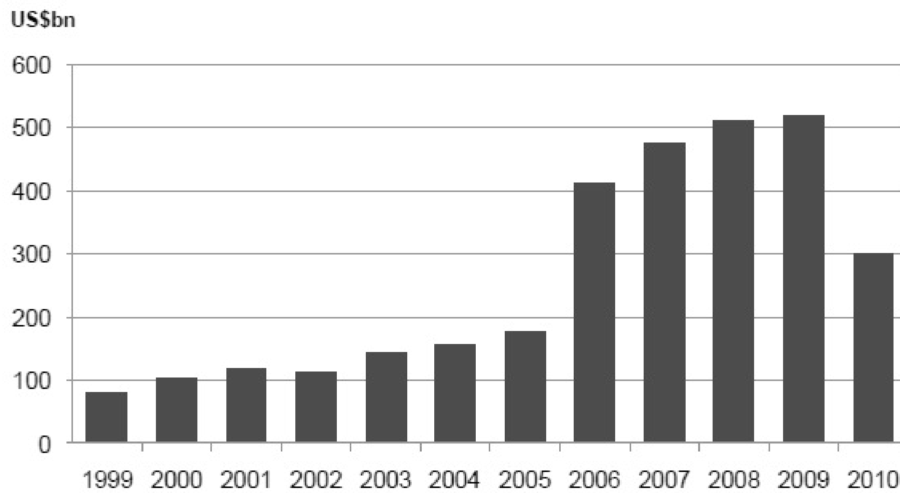

Chart 2 US secondary loan markets volume of trading

2.5.3. Information

LSTA has conducted a number of studies, which show that that the relationship between mark-to-market (the accounting measure of the effect of the sold loan on the price of the retained portion) and trade prices has tightened;[105] however there are some areas in which these two fall apart. [106] This is the case in particular in situations, where there is some problem with information flows or liquidity.[107] Problems of information flows generally seem to be positively related to firm- and loan-specific characteristics associated with a high information asymmetry

[105] This basically means that investors are able accurately to evaluate the price.
[106] Taylor, *The LSTA*, *supra* note 10 at 72.
[107] Bridget Marsh & Ted Basta, *Loan Syndications and Trading: A Recap of 2008*, available at http://apps.americanbar.org/buslaw/committees/CL190000pub/newsletter/200903/marsh.pdf (last viewed June 21, 2015).

environment.[108] As Wittenberg-Moerman notes, "there is clear evidence that loans of private firms are traded at higher spreads than loans of publicly reporting firms. The bid-ask spread is also significantly higher on loans without an available credit rating."[109] Unfortunately, no meaningful inference can be derived from these findings for the purpose of evaluating effectiveness of regulatory contracts. Clearly, the provisions that enable transfer of borrower information do help mitigate problems with information flows, but the information provided here does not provide a comprehensive picture of the business and financial conditions of borrowers. Further, blacklists are also said to be a problem. As noted in Bloomberg News in 2014, "data gathered by Xtract Research show that 77 percent of all loan deals in the third quarter included provisions giving borrowers the ability to block individual lenders, up from 51 percent at the end of last year." [110]

2.5.4. Systemic risk

Since the role of LSTA's documentation with respect to default and systemic risk has been limited, there is also limited data about its effects. One of the interesting points is lack of termination provisions. This in fact what happened with the failure of Lehman Brothers. There is no explicit mechanism under the LSTA STC that would deal with the problem, and Lehman's failure demonstrated that. Upon Lehman's failure particular concerns existed in particular with regard to unsettled trades. In many cases Lehman's counterparties were left with "unsecured pre-petition claims

[108] Regina Wittenberg Moerman, *The role of information asymmetry and financial reporting quality in debt contracting: Evidence from the secondary loan market*, 46 J. ACCOUNT. &. ECON. 2-3, 240-260 (2008).
[109] Id.
[110] Ahmed & Haunss, *The Blacklist*, supra note 48.

for rejection damages likely to yield far less than the benefit of their respective contractual bargains."[111] []

2.6. Summary

The contractual model of regulation offers a useful way of thinking about US loan markets and, specifically, their regulation. US loan market are regulated through a set of rules embodied in a set of contracts developed by the LSTA – the LSTA STC, the PSA, the LSTA MCAP. On the functional side, the LSTA STC seek to mitigate counterparty risk through the trade is a trade, mandatory settlement, delayed settlement and BISO provisions. A host of provisions under the LSTA STC, including breakfunding, permanent reductions, certain provisions relating to interest payments and fees and other seek to increase liquidity. The same is also true of certain provisions under the LSTA MCAP, and in particular the assignability provisions. Both the LSTA STC and the PSA include certain provisions, which seek to streamline information flows, including provision of credit agreement and representations and warranties. There are no provisions addressing systemic risk under the LSTA STC; the contractual recognition of bail-in under the LSTA MCAP can be said to address systemic risk considerations. The scope of the regulatory function is defined primarily through the LSTA, which – through its fairly inclusive governance structure facilitates discussion an agreements on matters of interest to both sides of the market, such as counterparty risk and liquidity. Information is a variable that can affect different market participants in different ways, in particular the dealers do not necessarily want more of it, so we see more limited regulation of

[111] See Kieselstein, Upstreams, available at http://www.kieselaw.com/claims-trading-faq/upstreams-2 (last visited April 4, 2016).

information. We identified negligible impact of regulatory competition. From an enforcement perspective it relies primarily on legal mechanisms, but a limited role of price penalties and de facto restricitions on market access has also been identified.

Chapter 3

Regulatory contracts in European loan markets

3.1. Contracting in European loan markets in the 1990s

In Europe, interest in trading of loans initially came from the banks' increasing need to free capital as returns from primary lending were low, while shareholder pressure for better returns on equity meant there was a renewed focus on risk and portfolio management.[1] But, as David Cox notes, "in the mid-1990s there was no organized secondary loan market [in Europe – MB] as such. There were some isolated secondary sales, but buying and selling loans in the secondary market was generally frowned upon, with many sales being tainted by their linkage to failed primary syndications."[2] According to Mike Johnstone, one of the key events that gave them the boost was the appearance of the Imperial Chemical Industries' (ICI) US$8.5bn acquisition facility in 1997, raised for the purchase of one of Unilever's chemical businesses. "This was the first of the freely transferable jumbo acquisition facilities, which boosted trading volumes significantly."[3] Since the deal had to be close quickly ICI agreed, upon a suggestion from Goldman Sachs and HBSC and SBC Warburg - the underwriters, to include a transferability clause, which would enable

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[1]*See* David Cox, *LMA turns 10*, INT'L FIN. REV., available at http://www.ifre.com/the-lma-turns-10/538686.article (last viewed July 7, 2015). *See also* Nicholas Voisey & Ameila Slocombe, "To Liquidity and Beyond: the Development of the Leveraged Loan in Europe", *in* NICHOLAS VOISEY AND AMELIA SLOCOMBE (EDS,), THE LOAN BOOK (2011).

[2] Cox, *LMA*, *supra* note 2.

[3] Mike Johnston, *From Small Things: a History of the Secondary Loan Market*, *in* VOISEY & SLOCOMBE, THE LOAN BOOK, *supra* note 1.

portions of the underwritten amount to be re-sold.[4] The success of the deal is said to have bolstered activity in the secondary market. At the end of 1997 another jumbo $8bn deal had been launched for British American Tobacco to back the demerger of the company's tobacco and financial services business. The success of both those transactions quickly spread interest in the asset class among other institutional participants. As Nicholas Voisey observed, "[h]ealthy returns meant that traditional banks were unlikely to remain the only players in what was becoming an increasingly competitive market, and it was not long before pension funds, insurance companies and hedge funds, keen to diversify their revenue streams, were making a steady market."[5]

3.2. The LMA Confirmation, Standard Terms and Conditions and LMA Facilities Agreement for Investment Grade Borrowers

In 1996 seven major financial institutions operating in Europe - Barclays, Credit Suisse, Fuji Bank (later Mizuho), HSBC, JP Morgan, NatWest and SBC Warburg - set up the Loan Market Association (LMA) with the view to, among other things,

- "promote growth, liquidity and product development in the primary and secondary markets for the purchase and sale of loans and commitments to lend and other forms of indebtedness and commitments to extend credit" …
- "facilitate and promote the standardization and simplification of primary loan documentation, purchase and sale documentation and other trading documentation" …

[4] "There was also clearly a degree of surprise among syndicated loans teams at Goldman Sachs' appointment by ICI. "People were surprised, but they should not have been. What Goldman Sachs is exceptionally good at is exploiting cross-selling opportunities once they get their foot in the door. In this case it was the advisory foot and all credit to them for maximizing the opportunity once it came their way."

[5] Cox, *LMA supra* note 1.

- "develop and promote standard trading, settlement and valuation procedures and practices in the market and to make representations to participants in the market and others concerning trading practices common to the market or carried on by one or more participant in such market whether to promote such standardization or otherwise." [6]

The LMA first developed a form of Confirmation and Standard Terms and Conditions for par trades. The distressed documentation first appeared in 1999. Both set of documents remained largely unchanged until 2005 when the first amendments have been made. In 2010 the market saw the combination of the par and distressed documentation, which has been refined in 2015 as the Standard Terms and Conditions for Par and Distressed Trade Transactions (Bank Debt/Claims) ("LMA STC").[7]

The LMA also developed primary market documentation with the view to better align the terms of secondary market documentation and the credit agreements used in the market. This first facility agreement for investment grade borrowers was published in 1999. The form for leveraged facilities followed in 2004.[8] The most recent version of the leveraged facility agreement is the 2013 LMA

[6] Certificate of Incorporation of a Private Limited Company, Company No, 3284544 (21 November 1996). This does not mean that there was no activity beforehand. In 1995, according to the presentation delivered by Tim Ritchie in New York in January, there were six banks committed to the development of loan trading in Europe, made up primarily of the US quintet of JP Morgan, Bank of America, Bankers Trust, Goldman Sachs and Citibank, and complemented by LFC. Changing relationships for loans, Global Capital (March 1, 1998), available at http://www.globalcapital.com/article/k6fdftghz162/changing-relationships-for-loans (last visited February 18, 2016).

[7] The also LMA developed a whole library of trade support documentation, including Participation Agreement, Transfer Agreement and Confidentiality Agreement, as well as User Guides and explanatory memos.

[8] Over time the LMA also developed a set of agreements for real estate finance, commodity finance, private placement and other as well as investment grade agreements under French, German and Spanish law.

Senior Multicurrency Term and Revolving Facilities Agreement for Leveraged Transactions (“LMA FALT”).

3.3. Functional dimension

3.3.1. Counterparty risk

3.3.1.1. Trade is a trade

Under the early version of the LMA STC parties could have subjected their transactions to various conditions, which is said to have increased settlement times. In 2005 the LMA STC introduced the ‘trade is a trade’ principle to European loan markets, doing away with the conditionality and making the trade only subject to agreement on all material terms. [9]

3.3.1.2. Mandatory settlement

While loan market participants typically seek to close their transactions as assignments or, as it is known under English law, legal transfers, in order to get the full economic benefits of the purchase, this may not be always possible.[10] Even if the parties use the LMA Form of Transfer Certificate, there may arise some issues, for example in cross-border transactions. The LMA STC provide that in such cases the

[9] LMA Revamp Targeted for Summer, Global Capital (15 April 2005), available at http://www.globalcapital.com/article/k6bqk8n6b5kd/lma-revamp-targeted-for-summer (last visited, March 9, 2016). The principle can be found in Section 2 of the LMA STC („Contract Point”) (“A binding contract for the sale or participation by the Seller to the Buyer of the Purchased Assets shall come into effect between the Seller and the Buyer upon oral or, in the absence of such oral agreement, written agreement of the terms on the Trade Date and shall be documented and completed in accordance with these Conditions.”).

[10] In the UK the legal terminology differs somewhat from the US. Transfer of all rights and obligations is refered to as transfer by novation, while the term assignement is reserved for situations in which only rights are transfered, but not the obligations. This would not be an appropriate method of transfer for loans for which there are outstanding obligations on part of the lender.

transaction will close as participation.[11] If the transaction cannot close as participation[12] or parties choose that the trade can close as a legal transfer only, the parties are under no obligation to settle through participation. Under the LMA STC they will be obliged to close the transaction in some alternative, mutually agreeable way.[13]

3.3.1.3. Delayed settlement

The LMA STCs seek to incentive market participants to settle as quickly as possible. LMA STCs provide that the parties ought to settle as soon as reasonably

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[11] LMA STC, Section 6.2(a)("Mandatory settlement").

> "If the Agreed Terms provide that the Form of Purchase for the transaction is a Legal Transfer then the transaction shall be settled by way of novation or assignment (as provided in the Agreed Terms) unless: (i) any condition specified in the Agreed Terms remains unfulfilled on the proposed Settlement Date; or (ii) any third party consent required in connection with the transaction has not been obtained by the proposed Settlement Date or at any time prior to the Settlement Date the Seller receives notice that any third party consent required in connection with the transaction has not been granted, and in such cases the transaction shall, unless paragraph (b) below applies, be settled on the terms of a funded participation (using an LMA recommended form of funded participation with such changes as are mutually agreed between the parties). If settlement of the transaction cannot be effected by a funded participation, or if the parties fail to agree on any proposed change to such LMA recommended form of funded participation, the transaction shall be settled on the basis of an alternative structure or arrangement mutually acceptable to the Seller and the Buyer that provides the Seller and the Buyer with the economic equivalent of the agreed-upon trade (including, for the avoidance of doubt, cash settlement)."

[12] This will be the case also if the transaction cannot close as participation. For example, while novation has a fairly broad meaning under English contract law, it has a much more narrow meaning under Polish law and "there are doubts as to whether it can be used as the basis for transfers of loan participations to third parties. Rafal Zakrzewski, LMA documentation in Poland, LMA News H1 2016 at 26.

[13] *Id.*

> "Section 6(b). In such cases, the Seller and the Buyer shall instead be obliged to settle the transaction on the basis of an alternative structure or arrangement mutually acceptable to the Seller and the Buyer which provides the Seller and the Buyer with the economic equivalent of the agreed-upon trade (including, for the avoidance of doubt, cash settlement)."

practicable.[14] In 2005 The LMA has also introduced delayed settlement compensation as an option into its Par Trade Confirmation document.[15] The combined terms also include this. If this is the case parties have to effectively settle within T+10 if it is par and T+20 if it is distressed.[16] The confirmation produced in 2005 also for the first time included a delayed compensation provision. It only applies to par trades and only if all other conditions have been satisfied.[17]

3.3.1.4. BISO

The LMA STC contain a BISO clause. It provides that,

> "if the transaction is not settled on or before the date that is 60 Business Days after the Trade Date because either party fails to perform its Settlement Delivery Obligations to the other party on or before the Trigger Date, the other party (the "non-defaulting party") may, at any time thereafter, give written notice (the "Buy in/Sell out Notice") to that party (the "defaulting party") of its intention to terminate its obligations in respect of the transaction and to effect a Substitute Transaction (as defined below) in respect of the Traded Portion."[18]

Subsequently, the defaulting party then has a further 15 business days to provide the non-defaulting counterparty with a confirmation and any related transaction documentation that may be required.[19] After expiration of that period,

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[14] LMA STC, *supra* note 16, Section 10.1 („Settlement date") "Unless otherwise specified in the Agreed Terms, the Seller and the Buyer shall use their reasonable endeavors to settle the transaction as soon as reasonably practicable."

[15] *Id.* Section 10.2. ("Delayed settlement").

[16] *Id.* Section 1.2. ("Interpretation"). "Delay Period Commencement Date" means in the case of a Par Trade, the date ten Business Days after the Trade Date and, in the case of a Distressed Trade, the date twenty Business Days after the Trade Date."

[17] LMA sorts out confirmation language, Global Capital, available at http://www.globalcapital.com/article/k5dnk7rqd5b0/lma-sorts-out-confirmation-language (last visited, February 4, 2016).

[18] Section 22.3(b).

[19] Section 22.3(c).

the non-defaulting party has a further 15 business days to enter into a substitute transaction.[20] The LMA Pricing Panel will resolve any disputes pertaining to the price of the substitute transaction.[21]

3.3.2. Liquidity

A number of provisions under the LMA STC have been designed to facilitate search and bargaining. This includes permanent reductions, certain provisions relating to interest payments and fees (settled without accrued interest, paid on settlement date, trades flat), breakfunding, set-off and other). These provisions allow the parties to adjust the terms of the trade depending on the specific business needs.

With regard to primary market documentation, assignment is the key provision with implications for secondary market.[22] If a loan cannot be assigned or transferred, or there are major restrictions, the liquidity of that asset in the secondary market will be reduced. Similarly, as the LMA noted in its recent

[20] Section 22.3(d).
[21] Section 22.3(e)(ii). "Short selling was identified as a cause in delayed settlements. With the implementation of the BISO provisions, a mechanism now exists where a buyer can identify a short seller to remedy the short sale." David J. Hoyt and Kenneth L. Rothenberg, LSTA Finalizes Distressed Buy-In/Sell-Out Provisions, September 22, 2011 (available at https://www.andrewskurth.com/insights-839.html) (last visited March 9, 2016).
[22] LMA FACILITIES AGREEMENT FOR LEVERAGED TRANSACTIONS (LMA FALT), Clause 29.1 Assignments and transfers by the Lenders.

> "Subject to this Clause 29 [and Clause 30 (*Restriction on Debt Purchase Transactions*)]/[Clause 30 (*Debt Purchase Transactions*)], a Lender (the "Existing Lender") may: (a) assign any of its rights; or (b) transfer by novation any of its rights and obligations, under any Finance Document to another bank or financial institution or to a trust, fund or other entity which is regularly engaged in or established for the purpose of making, purchasing or investing in loans, securities or other financial assets (the "New Lender")." Id.

Finally, under a sub-participation no direct link between the borrower and the purchase is establihsed. For further background see Slaughter & May, Syndicated Loan Facilities: non-bank Lenders and the influence of credit derivatives: current opportunities for Borrowers, (prepared for the Association of Corporate Treasurers, July 2007).

publication – "Improving Liquidity in the Secondary Market" – "[w]hen first looking at a new transaction, particular care should be taken when agreeing the structure. Specifically the number of utilizations, any currencies and the interest periods requested should be given careful consideration, as they can all impact on liquidity and settlement times in the secondary market."[23] For example,

> "Agents will typically freeze transfers of any given facility up to 3 business days prior to an individual loan rollover. Where a borrower is afforded flexibility to have several loans outstanding under one facility (or tradable sub-tranche of a facility) for interest periods of one month (or indeed less if permitted), and where the individual loans have varying maturities within a given period, this can give rise to limited availability for agent banks to effect transfers, thus significantly impacting secondary settlement times for the asset in question."[24]

Choice of law appears to be an important liquidity enhancing provision in the context of jurisdictionally fragmented European markets. Many of the larger loans have been issued under laws other than English law and in currencies other than the US dollar or Pound Sterling. While this has changed to some extent with introduction of the euro, it still did not change for borrower from emerging markets. In order to increase liquidity in these assets, the LMA seek to have more emerging market borrowers use English law governed documents.[25]

Finally, a more particular liquidity enhancing provision (and relevant for the investment grade documents) made it into the LMA forms when the European Central Bank considered purchasing loans as part of its quantitative easing program.

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[23] LMA, Improving Liquidity in the Secondary Market (September 2015) at 4.
[24] *Id.*
[25] The LMA issued a guide to English law in cooperation with Clifford Chance to help emerging market borrowers familiarize themselves with its features. Since it is easier (more predictable) to claim rights under English law, choice of law is can be said to have liquidity enhancing properties.

The LMA quickly developed a provision entitling lenders to create security over their rights in favor of central banks was also designed with the view of enhancing liquidity.[26] However, eventually this turned out to be of little impact, as the ECB decided not to proceed with the plan of purchasing loans.

3.3.1. Information

Purchasers of loans in secondary markets are likely to collect information on borrowers from various sources.[27] The LMA STCs provides for rights to request

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[26] Nicola Wherity, *LMA Investment Grade Documentation: How it Stood up to the Crisis of 2007-2009 and the LMA Response*, *in* VOISEY AND SLOCOMBE, *supra* note 1 at 147.

[27] As Voisey and Slocombe note, "pricing in the early days of investment grade corporate lending was generally considered to be linked to relationships and borrower name recognition, and less to external events taking place in the market. This resulted in a lack of performance date, which meant that there was also no data on pricing. By the early 1990s, the notion that money would be lent simply on the basis of borrower name began to change and pricing began to creep upwards, fueled by the prospect of a looming global recession and the implementation of new capital adequacy rules (Basel I). It was also at this point that lenders became more sophisticated in their pricing models, pricing loans in accordance with borrower's rating, market risk, concentration risk and a credit appraisal linked to both the borrower and the structure of the deal." Voisey & Slocombe, "To Liquidity and Beyond", *in* S VOISEY & SLOCOMBE, THE LOAN BOOK (2011), *supra* note 1 at 28. Rating agencies' role has initially been much more limited as compared with the US. As Slade notes, "[h]istorically, the European loan market had eschewed the need for the services of rating agencies." David Slade, *Development of the Rating Agencies: the Investor Perspective*, *in* VOISEY AND SLOCOMBE, THE LOAN BOOK, *supra* note 1 at 139. This had to do with the prevalence of investment grade loans. Banks did their own due diligence and had a lot of expertise and standardized practices. "There was an acknowledgement that if a company issued high-yield bonds or tapped the US institutional loan market, a public rating was essential. However, if the capital structure was entirely private (i.e. consisted entirely of loans) there seemed no justification as to why a third-party credit analysis of a company should be made public." *Id.* at 141. Consequently the process of "credit estimates" developed, whereby the relevant rating agency performed a desktop credit analysis of the borrower and the structure and produced and implied rating exposure. *Id.* at 139. This resulted in the ratings being, at best, moderately accurate. When the credit crunch hit, CRAs reacted quite aggressively, "resulting in severe asset price reductions, suspension of fee payments to managers and fire sales of assets, leading into a downward spiral on asset prices generally. One rating agency – S&P – went further and announced the cessation of the provision of credit estimates for deals involving more than 750mm euro of debt facilities (including undrawn and subordinated)." Id. at. 140. "Whilst the number of deals, it was a relatively low percentage of the total deal count affected, in volume terms

syndicate and borrower confidential information. The buyer has the right to see credit documentation.[28] This right may be subject to execution of a confidentiality agreement. As it is suggested, "[i]n order to avoid settlement delays occurring in the secondary market, it is suggested that there are benefits in using LMA confidentiality letters without modification, unless changes are absolutely necessary."[29] The LMA guidelines further specify the restrictions on trading on confidential information. While they permit trading on syndicate confidential information they explicitly restrict trading on borrower confidential information,

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the proportion was significant, even more so when none took account of the fact that many smaller deals were bank club syndicates and so not relevant to the broader institutional market . . . Some private equity firms saw this as an opportunity to homogenize the European market and bring it close to the US model. They argued that ongoing complaints about the demands of the loan market for due diligence materials that had limited value in terms of assessing a transaction and incurred significant production costs, could be resolved by a formal rating process, which would undoubtedly be cheaper and satisfy the requirements of many institutions." Id. As Slade notes, "this was a clear attempt to move the loan market into accepting public ratings." "In July 2008 S&P issued its planned changes to rating leveraged transactions in Europe, with a number of compromises from its previous positions. It split the market into three elements based on the size of debt raised: below 500mm euro, the agency would continue to issue credit estimates; above 1billion euro, only public ratings would be available. For deal sizes in between those two limits (loosely assumed to be "mid-market") a new concept of a "private" rating was introduced." "This would be assessed and monitored in the same way as a traditional public rating but would not be publicly disseminated. There was a caveat that any element of a capital structure that tapped a market requiring a public rating would result in the entire structure being rated publically, irrespective of size." Id. at 141.

[28] See Section 7.2. ("Credit Documentation and other information. If the Agreed Terms specify that the Credit Documentation shall be delivered to the Buyer then: (a) to the extent that it has not already done so prior to the Trade Date, the Buyer shall sign and deliver to the Seller at its request a confidentiality agreement in the form prescribed by the Credit Documentation or, if no such form is so prescribed, in the then current recommended form of the LMA or such other form agreed between the Buyer and the Seller; and (b) subject to receipt of the confidentiality agreement where requested and to all necessary consents (if any) having been obtained, the Seller shall, if it has not already done so prior to the Trade Date, provide to the Buyer: (i) *a true and complete copy of the Credit Documentation* (that, to the extent that there is an Agent under the Credit Documentation, the Agent has made generally available to the Lenders) as promptly as practicable following the Trade Date and; (ii) *a copy of each notice or other document received by the Seller* (in its capacity either as a Lender or as a buyer under a trade pursuant to which it has agreed to acquire the Purchased Assets) on or after the Trade Date and on or before the Settlement Date pursuant to either the Credit Documentation or that trade as promptly as practicable following receipt thereof.").

[29] LMA, Improving Liquidity in the Secondary Market (September 2015) at 13.

even if both parties to the trade are believed to be in possession of the relevant information.[30]

The representations and warranties provided by the seller under the LMA STCs seek to further reduce informational problems between borrowers and prospective purchasers. This is true in particular because sellers are asked to provide representations not only on their own behalf, but also on behalf of all of their predecessors in title. [31] As Rothenberg and Yearick note,

> "[s]ince the seller under an LMA loan trade provides recourse to its buyer for all prior sellers of the loan with respect to certain representations, the buyer has recourse against its immediate seller for any breach of such representations regardless of whether such breach relates to an action (or inaction) or the status of the specific selling party."

The position of purchasers has been further strengthened following combination of documentation for par and distressed trades. One of the most important consequences of combining of par and distressed documentation is the merging of the applicable representation and warranties. The combined set is based on the previous distressed version. [32] "A seller in a distressed trade still provides

[30] See Linklaters, The use of non-public confidential information and secondary debt trading (March 2015).

[31] *See* LMA STC, Section 21.4(d) („No impairment: neither it nor, any of its Predecessors-in-Title has received any notice and it is not otherwise to the best of its knowledge aware that the Purchased Assets or any portion thereof or any guarantees or Collateral or any of the Credit Documentation are subject to any Claim Impairment or are invalid or void.").

[32] One of the reasons that can account for that change is that it has become increasingly difficult to distinguish between par and distressed debt at times of liquidity stress. As Brosnan et al. note, before the crisis prices of securities was generally regarded as a reliable indicator of the assets' value. But, "with default rates increasing and credit quality decreasing [during the crisis –MB], more credits traded as 'distressed.' Treating credits as distressed unnecessarily costs money, time and stresses the transfer infrastructure and harms liquidity. This is why more and more (potentially) distressed securities have been traded as par." Joe Brosnan, Vikram Nataraja and Ted Basta, W*hat you need to*

additional representations and warranties reflecting the greater risk of borrower insolvency, but a par seller now gives some of the representations and warranties that used to apply only in a distressed trade scenario."[33]

3.3.4. Systemic risk

While termination is aimed primarily at default risk, it could, arguably, help mitigate the systemic effects of a large dealer's failure. The LMA STCs contain a termination provision.[34] It is a new provision, introduced in 2011 in recognition of the disruptive market potential of a dealer's failure. Under the LMA STC termination is optional whenever the counterparty is deemed insolvent at any time between trade date and settlement date.[35] In these cases, after service of an early termination notice, the non-insolvent party can assert damages against the defaulting party.[36]

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know about distressed trading, (Presentation, available at http://www.lsta.org/-WorkArea/linkit.aspx?LinkIdentifier=id&ItemID-=5498 (last visited June 1, 2014). This, from the point of view of the LMA, warranted introduction of additional security in the documentation. Hence the amendments in par documentation based on the distressed form. Any LMA trade entered into on or after 25 January 2010 shall be settled using the revised form of documentation. Louisa Watt & Roxanne Yanofsky, Effective 25 January 2010 - a new LMA approach to trading European loans, Lexology (January 25, 2010)

[33] *Id. Compare with* LMA STC, Section 21 ("Representations and undertakings").

[34] *Id.* Section 3 ("Termination").

[35] Watt & Roxanne Yanofsky, Effective 25 January 2010, supra note 32.

> "The default position is that a trade is terminated when the non-insolvent party serves notice to the insolvent party, following its insolvency. The non-insolvent party may stipulate that termination is effective upon notice being served, or can give a date for termination of up to 20 business days following the giving of such notice. However, this can be altered by either party by means of: notification at any time prior to a party becoming insolvent that automatic termination will apply; or including automatic termination as a specific term of trade in the trade confirmation."

[36] *Id.*

> "Following early termination, the non-insolvent party shall obtain quotes from at least two broker-dealers on the current price of the traded amount and then calculate the settlement amount (the "Early Termination Amount") using the same mechanisms as if the trade had settled on the standard LMA terms, except that the purchase rate will be revised based on the average of the quotes obtained by the non-insolvent party. Once calculations have been

In the realm of primary market documentation a similar effect has been achieved through the Market Conditions Provisions. Before the crisis most loans included a market disruption clause, which allowed lenders to charge borrower an interest that represents the lender's true cost of funding the loan. In 2009 there was some talk of them being triggered.[37] But the failure of Lehman Brothers uncovered a different problem – what if the lender defaults. Wherity put it, "during the crisis, finance lawyers were being asked to explain clauses dealing with the fundamentals of market liquidity, to opine on what would happen if a lender defaulted on its obligations to lend and to address queries on how lenders were taking credit risk on each other. It was a new world."[38]

In this context, it was in particular the failure of Lehman that has tested them. Many questions remained unanswered, including how to deal with an amendment request that is an all-lender decision, when there is no one at the insolvent lender to make the decision? How can the defaulting lender be substituted? In 2009 the LMA published the MCPs as an option for inclusion in the Investment Grade Agreement. As the preamble to the Provisions notes, "[t]he need for provisions of this kind became apparent in the aftermath of the collapse of Lehman Brothers in October 2008."[39] The failure of Lehman demonstrated how

made, the non-insolvent party shall provide the insolvent party with a statement showing such calculations and specifying the revised date for settlement (the "Early Termination Payment Date"). Additionally, the non-insolvent party is permitted to assign its rights to receive any early termination payment amount without the consent of the insolvent party."

[37] Market Disruption debate rages among lenders, GlobalCapital (17 October 2008), available at http://www.globalcapital.com/article/k4tgj6c967vy/market-disruption-debate-rages-among-lenders (last visited March 9, 2016).

[38] Wherity, supra note 26.

[39] Slaughter May, The ACT Borrower s Guide to LMA Loan Documentation for Investment Grade Borrowers (April 2013) at 11.

problematic the default of a lender or agent may be for the day-to-day operations of loan markets. Accordingly, MCPs have been designed with these two problems in mind.[40] In case of a lender's default, MCPs allow the borrower to:

- "cancel the undrawn Commitment of the Defaulting Lender, which can be immediately or later assumed by a new or existing Lender selected by the Borrower";[41]
- "to (optionally) cancel the Defaulting Lender's Commitment Fee";[42]
- "disenfranchise the Defaulting Lender to the extent of its undrawn Commitments and on its drawn Commitments if it fails to respond in the specified timeframe".[43]

Similar provisions allow an "Impaired Agent" to be removed by Majority Lenders, and for Borrowers and Lenders to make payments to each other and to communicate with each other directly, rather than through the Agent.[44] While these provisions were not designed to address systemic risk as such, they are arguably designed to protect from effects of systemic risk associated with failure of a large financial institution. These are mandatory under the LMA FALT.

While the failure of lender would be probably more disruptive (i.e. more systemic) in financial markets, it would also be disruptive in capital markets. This would not only be in terms of default risk for the borrower, but also potentially

[40] LMA INVESTMENT GRADE AGREEMENT, Section 1.1 (*Definitions*) (for a definition of both the Defaulting Lender and Defaulting Agent). "A Defaulting Lender is a Lender: which fails to fund, or gives notice that it will do so; which rescinds or repudiates a Finance Document; or in respect of which an Insolvency Event occurs." Id.
[41] *Id.* Sections 2.2 (*Increase*) and 8.6 (*Right of replacement or repayment and cancellation in relation to a single Lender*).
[42] *Id.* Section 12 (*Fees*).
[43] *Id.* Section 35 (*Amendments and Waivers).*
[44] *Id.*

systemic risk, when the proceeds of the loan were to be used, for example, for general corporate purposes – to pay suppliers etc.

Bail-in provisions, which anticipate the possibility of conversion of part of a defaulting bank's debt into equity, were also designed to address the problem of systemic risk. [45]

3.4. Structural dimension

3.4.1. Standard-setting and monitoring

3.4.1.1. Governance

3.4.1.1.1. Membership

The LMA was set up as a company limited by a guarantee[46] by a small group of sell side institution. Its membership quickly expanded to encompass the buy-side as well as law firms, financial data services, international organizations and other. The

[45] Loan Market Association, The Recommended Form of Bail-In Clause and Users Guide (December 22, 2015).

> "Notwithstanding any other term of any Finance Document or any other agreement, arrangement or understanding between the Parties, each Party acknowledges and accepts that any liability of any Party to any other Party under or in connection with the Finance Documents may be subject to Bail-In Action by the relevant Resolution Authority and acknowledges and accepts to be bound by the effect of:
> (a) any Bail-In Action in relation to any such liability, including (without limitation):
> (i) a reduction, in full or in part, in the principal amount, or outstanding amount due (including any accrued but unpaid interest) in respect of any such liability;
> (ii) a conversion of all, or part of, any such liability into shares or other instruments of ownership that may be issued to, or conferred on, it; and
> (iii) a cancellation of any such liability; and
> (b) a variation of any term of any Finance Document to the extent necessary to give effect to any Bail-In Action in relation to any such liability." *Id.*

[46] In a company limited by a guarantee membership can be purchased by agreeing to pay a sum of money (a guarantee) if the company goes into bankruptcy. The guarantee itself, however, is not a form of funding. *See generally* ELIZABETH WEST, COMPANIES LIMITED BY GUARANTEE (2004).

LMA generally distinguishes between ‘full’ and ‘associate’ members. Full membership consists of financial institutions that are likely to be loan arrangers, traders and other active participants in the loan market. Associate members are likely to be law firms, rating agencies, accountancy firms, smaller financial institutions and other professionals with an interest in the market. The LMA also has ‘courtesy’ members awarded at the discretion of the Board of Directors and include, among other, representative of some of the other trade associations, including the LSTA. Chart 1 illustrates membership composition by type of activity, which is corelated with membershup types, but only to a limited extent.

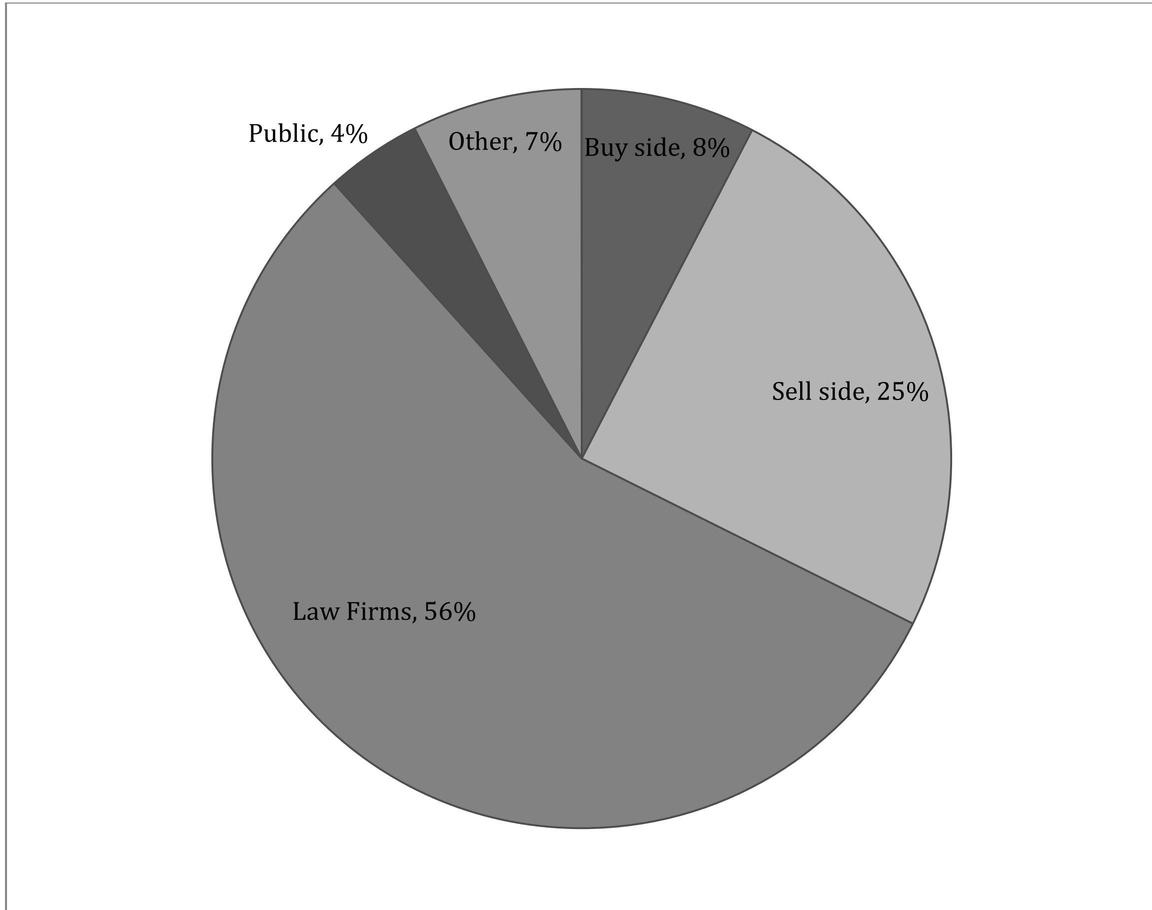

Chart 3 LMA membership composition by type of activity (source: LMA)

Notably, the LMA also accommodates interests of borrowers through its relationship with and Association of Corporate Treasurers (ACT) – the largest European organization brining together representatives of borrowers[47] and courtesy member with the LMA. As Wherity notes, "Primary Documents . . . have been negotiated with the ACT and so aim to provide a sensible compromise between

[47] View from the Top: Tim Ritchie, Barclays Capital, Treasury Today (October 2001), available at https://treasurytoday.com/2001/10/interview-barclays-capital-tim-ritchie, (last viewed March 10, 2016).

the interests of lenders and borrowers. This negotiation does not take place in the case of LMA Recommended Form for leveraged transactions."[48] Further, the LMA's guidelines on trading on borrower confidential information have been developed largely in response to the concern that hedge funds will use the private information they get from loan purchasers to trade in other markets, such as the CDS markets.[49] "This shift has prompted the ACT to press the Loan Market Association to call for loan documents to include more stringent confidentiality clauses."[50] The LMA also maintains close ties with the LSTA. LMA has LSTA's representatives on its Board, but without voting rights. Moreover, the LMA also works with the Asia Pacific Loan Market Association and the African Loan Market Association.

3.4.1.1.2. Board of Directors

The Board of Directors is the decision-making body of the LMA. It is selected by full members at the general meeting.[51] Full members have traditionally chosen executives from biggest banks for the board and these roles have been largely uncontested.[52] As the organization grew, there has been both an increased pressure

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[48] Nicola Wherity, "LMA Investment Grade Documentation: How it Stood up to the Crisis of 2007-2000 and the LMA Response", in VOISEY & SLOCOMBE, THE LOAN BOOK, *supra* note 1 at 145.
[49] *See e.g.* Joint Market Practices Forum, European Working Group, Statement of Principles and Recommendations Regarding the Handling of Material Nonpublic Information by Credit Market Participants (European Supplement)(May 2005), available at (http://www.isda.org/press/euroJmpf05.pdf)(last viewed March 10, 2016).
[50] Gillian Tett & Peter Thal Larsen, FSA takes closer look at credit markets, FT.com (July 3, 2006), available at http://www.ft.com/intl/cms/s/0/a76c82f8-0a2f-11db-ac3b-0000779e2340.html (last visited September 26, 2015).
[51] ARTICLES OF ASSOCIATION OF THE LOAN MARKET ASSOCIATION, Sections 12, 15 and 16.
[52] Tim Ritchie was the chairman for nine consecutive years. He stepped down in 2005 and was replaced by Kim Humphreys of Mizuho Corporate Bank.

to enlarge the board and the pool of candidates.[53] However, the board remains dominated by representative of banks. [54]

3.4.1.1.3. Funding

The LMA from the outset relied primarily on subscription fees for its funding. The funds it has historically collected were not only sufficient to support operations of

[53] In 2005 for the first time there were more nominees than seats on the board. 22 candidates stood for the board, but only 18 have been elected. Humphreys was replaced after he quit Mizuho in 2007. Humphrey's departure is said to have been triggered by a re-shuffle at the bank's syndication desk related to her alleged commitment to the work at the LMA, which conflicted with some of his duties at the bank. *See* Kim Humphreys quits Mizuho as Fenn climbs, Global Capital (June 8, 2007), available at http://www.globalcapital.com/article/k52sqc8nl7ff/kim-humphreys-quits-mizuho-as-fenn-climbs (last visited March 2, 2016). The editorial at Euroweek read "Perhaps it is time for the loan market to stump up the money and pay for the professional body it needs." *See* The LMA needs beefing up, Global Capital (July 17, 2007), available at http://www.globalcapital.com/article/k52cpynmh3v2/the-lma-needs-beefing-up (last visited March 2, 2016). Bankers were calling for the new chairman to combine an executive position. This has not happened with election of David Slade, managing director of Credit Suisse's investment banking division. Slade resigned in 2009 and it took a few months before new one was elected. There was a lot of discussion about lack of leadership in the market.

> "The workload is immense, and there is no doubt that the LMA has been hampered in recent months by the loss of its chairman, of other board members through redundancies, and by the discord which reigns among its members. According to some loan officials, the range of agendas influencing members of the board, split between bankers and investors, hinders decision-making. But it should be the chairman's job to address this – fighting the good fight on behalf of the wider loan market, shooting down bad ideas and tackling ignorance. If the decision to postpone the election of a chairman cannot be reversed, the LMA should at least focus on how it can step up to the challenge when it does have one." *See* Wanted: loan market gunslinger, available at http://www.globalcapital.com/article/k4yjp0g3pdqt-/wanted-loan-market-gunslinger (last visited March 2, 2016).

However, with the exception of Ian Fitzgerald, who was the chairman for another year even after he stepped from his position as the head of loan markets at Lloyd's, this has not changed. When Roland Boehm replaced Fitzgerald he retained his position as head of debt capital market as Commerzbank and retains his position to date.

[54] The board is supported by the executive, which consists of a Chief Executive Director, two Managing Directors and a number of other directors. These tend to be recruited from the industry, even though many of them, including Clare Dawson, have been with the LMA from early on.

the organization, but also earned the organizations profit.[55] In addition to subscription fess the LMA also derives other operating income from other sources (primarily documents sales, training events and conferences etc.) and a small amount of interest income.

3.4.1.1.4. Committees

The majority of LMA's activity is channeled through committees. Various committees and working parties established by the LMA from time to time have been instrumental to achievement of one of LMA's goal

> "to establish a liaison between the participants in the market and to encourage closer co-operation, greater understanding and a free and informal exchange of information between the participants in the market" and "promote, encourage, advance and co-ordinate the consideration and discussion of all questions affecting growth, development and liquidity in the market."[56]

Membership in the LMA's committees are generally by invitation only.Some of the commitees existing in the early days included Information Committee, Documentation Committee, Settlement and Trading Practices Committee, Valuation Committee, Portfolio Management Committee and Distressed Debt Committee.

The Secondary Market Committee has been set up in 2008 and, as Justin Conway - senior counsel at Goldman Sachs and member of the board of directors of the LMA and of the Secondary Committee notes, 2008 had as its primary goal the

[55] The LMA is funded principally from subscriptions. Full subscription costs £12,500 + VAT per year. Associate subscription for companies with a UK office is £8,600 + VAT per year. The LMA's subscription income for 2014 was £4,494,157, a major increase from the previous year (£3,781,035). The total operating income of the LMA for 2014 was 4,858,446 compared with 4,282,047 for 2013. Profit on ordinary activities after taxation was 931,600 for 2014 compared to 688,875 for 2013. Combined with the retained profit for previous year, the LMA enjoys a fairly healthy financial situation with over 6,099,220 of assets. Loan Market Association (A company limited by guarantee), Annual report and financial statements for the year ended 31 December 2014.

[56] LMA ARTICLE OF ASSOCIATION, supra note 53.

production of a single set of standard terms and conditions and trading documentation for both par and distressed trading. The new documentation was to be based on the recently revised distressed documentation and was to update the par trading documentation, which had never seen substantial review and revision. However, as Conway notes, "the committee's attention soon turned to the financial crisis and how the secondary trading documentation could be improved. Two broad themes emerged: 1) the continued effort to reduce settlement times; and 2) termination on insolvency."[57]

According to Conway, reduction of settlement times was the primary driver behind the decision to combine the par and distressed terms.

> "Participants in the secondary market and, in particular, the closing and servicing function, would not be required to be familiar with two sets of rules for ostensibly the same product. Further, some of the 'drags' on settlement times were eliminated, such as break-funding on par trades, and the standardisation of both the calculation of delayed settlement compensation and the approach to interest apportionment and calculations."[58]

Settlement times are also said to have been the main drivers of the revision of BISO.

> "Whilst BISO existed in the previous par standard terms and conditions, and continues to exist in the combined standard terms and conditions, it remains a little used tool – most likely due to the

[57] Justin Conway, LMA Secondary Documentation, in VOISEY & SLOCOMBE, THE LOAN BOOK, *supra* note 1.
[58] As he further notes, "break-funding only applies to par trades where it is specified at the time of trade, resulting in the elimination of the calculation for all but a few outlying trades. Given that the calculation was often debated between closing functions, and rarely exceeded a three-figure number, its elimination from the majority of par trades must be welcomed. Likewise, the uniform approach to interest and delayed settlement calculations has meant a reduction in the number of disputes over the calculation of the settlement amount for trades. Whilst these issues seem 'minor' in theory, in practice they would often add significant delays to the closing process." *Id.*

> franchise/relationship issues that it would create on exercise. Whether or not its mere presence has reduced settlement times is unknown. Anecdotal evidence with respect to its equivalent use under LSTA documentation would suggest that it has been triggered in dealer/dealer trades but not in dealer/client trades – again likely due to the franchise/relationship issue."[59]

Another theme that arose in the discussion within the Committee was termination. "Given the advent of insolvency among various market participants during the global financial crisis, the conditions looked to address the issue of how to deal with the situation in which one of the parties becomes insolvent."[60] As noted, this resulted in introduction of the termination provisions into the LMA STCs.[61]

Much of activity in the Primary Market Documentation Committee has historically been driven by emergence of a new group of investors. As Polglase and Field note,

> "[t]he LMA Leveraged Agreement has seen various changes introduced to reflect the changing investor base. The provisions allowing a borrower to transfer the participations of lenders who do not consent to all-lender or, in some cases, super-majority decisions provided a specified consent threshold is achieved ('yank-the-bank') and to ignore lenders who fail to respond to a waiver request within a specified time period when calculating consent levels for majority (and sometimes all-lender) decisions ('snooze-and-lose') introduced in December 2005 and September 2008 respectively are good examples."[62]

This was particularly true of CLOs.

> "Prior to the emergence of the CLO market, documentation and practices in the primary and secondary markets were drafted to

[59] *Id.*
[60] *Id.*
[61] *See supra* Section 3.3.4.
[62] Tim Polglase & Anna Field, Stress-tested: How the LMA Leveraged Agreement Stood up to the Crisis of 2007-2009 and Future Challenges, in VOISEY & SLOCOMBE, THE LOAN BOOK, *supra* note 1 at 151.

> accommodate the legal, tax and regulatory positions of banks. The position of CLOs and other vehicles for institutional capital was not really accounted for. Examples of this include the standard transfer language in leveraged loan documentation, which restricted permitted transfers to banks and other financial institutions. For those engaged in transferring loans to CLOs, this required either a robust interpretation of what constitutes a financial institution or that consents to transfer be obtained. Typically CLO managers would seek consent, in large measure driven by their legal advisers, who were required to issue legal opinions to the rating agencies and the trustee on the validity of the transfer and its compliance with the transfer restrictions in the relevant loan agreement. Driven in part by the requirements of the rating agencies and the trustees that loan transfer opinions be issued, the CLO market imposed a new level of rigor to the secondary loan market's compliance with contractual transfer provisions, as well as the tax and regulatory aspects of the secondary loan market."[63]

Other examples of provisions catering to CLOs include the ability of a lender to grant security over its rights under a loan, ability to disclose borrower information to rating agencies and other.

3.4.1.2. Competition and regulatory competition

The LMA has not been subject to antitrust investigations. It also faced limited regulatory competition from the European High Yield Association (EHYA), especially with regard.[64] Some bond market participants consider the amount of

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[63] Michael Smith & David Quirolo, Evolution of Lending Structures: The rise of the CLO, in [] at 126-127.

[64] EHYA to lobby syndicated loan banks to level playing field on disclosure, Global Capital (20 Octover 2006), available at http://www.globalcapital.com/article/k56ttzlpdbsc/ehya-to-lobby-syndicated-loan-banks-to-level-playing-field-on-disclosure (last visited March 10, 2016). See also LMA and EHYA meet to discuss rules for borrower disclosure, GlobalCapital (27 Oct 2006), available at http://www.globalcapital.com/article/k56xj40j5q56/lma-and-ehya-meet-to-discuss-rules-for-borrower-disclosure (last viewed March 10, 2016).

information revealed by borrowers to be insufficient. "Rules aimed at preventing insider trading are supposed to stop public investors from acting on private information. But the EHYA will argue that traditional boundaries between market participants are receding, giving private buyers an unfair advantage when playing in the same deals as purely public investors."[65]

Public regulators have generally stayed away from loan markets as well. Early on in the UK itself the Financial Services Authority (FSA) said that regulating this market would require a change in legislation. The one area in which it sought to act was insider trading.[66] When in 2010 the UK Treasury issued a discussion paper on non-bank lending, which the LMA (as well as the ACT) harshly criticized arguing that the proposals would not benefit the market.[67]

Beyond the UK, the LMA has established itself the main contact for public banking regulators. The Basel accords (dating back to 1988) have been a major driver of capital regulation. The revamp of the framework in the early 2000s has intensified the dialogue between the LMA and the Basel Committee on Banking Supervision (BCBS) in relation to its consultative document on the New Basel Capital Accord. The LMA noted that it believes that "liquidity in the loan market is

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[65] *Id.*
[66] Tett & Larsen, FSA takes closer look, supra note [] *See also* Financial Services Authority's Market Watch Issue No. 10 - July 2004.
[67] Hands off our loans, say LMA and ACT, GlobalCapital (17 Feb 2010), availalbe at http://www.globalcapital.com/article/k4ypf3d24j85/hands-off-our-loans-say-lma-and-act (last viewed March 10, 2016). For the discussion paper itself see, UK Treasury, Discussion paper on developing non-bank lending channels for UK businesses (12 January 2010).

not only a desirable outcome in itself but also contributes to a stable banking system."[68] And further explained

> "By enabling efficient syndication and loan transfer processes, liquidity is a key facilitator in the management of risk both within banks and within the banking system. Banks that can access deep, liquid loan markets are better able to manage their portfolios dynamically and therefore optimize their risk management techniques. The same is also true for the markets for credit risk transfer instruments. Portfolio management can be conducted more efficiently using liquid instruments than illiquid ones. This contributes to a virtuous circle: liquid markets enable efficient risk transfer to those institutions best able to manage that risk and increased use of those markets by participants enhances liquidity."[69]

Overall, the Basel II framework was rather favorably received by banks. Application of the internal risk models gave banks a lot of leeway and facilitated further development of the syndicated model.[70] It was only Basel III that was about to impose more burdensome regulation, which could restrict primary market activity and have implications for liquidity in the secondary market. The LMA set up a liquidity working party made up of around six European banks to engage with the BCBS directly.[71] It separately issued comments and also restated some of the arguments in its submission to the European Commission, when new regulatory proposals came out.

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[68] Loan Market Association, *Submission to Basel Committee on Banking Supervision in relation to its consultative document on the New Basel Capital Accord* (May 23, 2001) available at http://www.bis.org/bcbs/ca/loamarass.pdf (last visited October 31, 2013).
[69] *Id.*
[70] *See* "The internal ratings-based and advanced measurement approaches for regulatory capital under the Basel regime", *in* GEOFFREY P. MILLER & FABRIZIO CAFAGGI (EDS.) THE GOVERNANCE AND REGULATION OF INTERNATIONAL FINANCE 167-208 (2013).
[71] LMA prepares defences against Basel III with working party, Global Capital (June 24, 2010), available at http://www.globalcapital.com/article/k4whf5jd63bl/lma-prepares-defences-against-basel-iii-with-working-party (last visited April 8, 2016).

> „In particular we see no reason why secondary market loan purchases should expose a bank to additional risk or increase systemic risk within the banking system generally. Secondary purchases and sales are an important tool through which banks are able to effectively manage their balance sheets, undertake prudent portfolio management and substitute risk weighted assets as and when required; they should not be includd within any definition of 'risk trading activity'. Incorproation of secondary loans as a 'risk trading activity' will result in more loans becoming 'loan to own' and would be likely to result in a reduction of credit in the market, as banks seek to manage their capital and liquidity obligations." [72]

Because of the potential extraterritorial effects of US legislation, the LMA also engaged with US regulators. It has issued submissions to the SEC and CFTC related to swap regulation.[73]

Times have changed, as the LMA has recognized,

> "No longer may the loan product be seen as an independently operating asset class, to which detailed regulation and macro-economic events do not apply – rather, the loan market, whether intentional or not, is now very much in the midst of a permanently changing financial landscape."[74]

While the LMA is clearly an important part of that landscape, just what its role is and will be in the future remains an open question.

3.4.2. Enforcement

3.4.2.1. Extra-legal

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[72] See LMA, Response to European Commission Consultation Paper: Reforming the Structure of the European banking sector (9 July 2013) .
[73] LMA, Letter to Mr. David A, Stawick and Ms. Elizabeth M. Murphy, File No. 57-16-11: Further Definition of "Swap' "Security-Based Swap" and "Security- Based Swap Agreement'; Mixed Swaps; Security-Based Swap Agreement Recordkeeping (22 July 2011).
[74] The LMA, Regulation and the Loan Markets at 3.

The LMA is said not to be a regulatory body and have no powers of enforcement.[75] It has to rely on market participants, who may either price deviation or restrict market access. With regard to the former, while there is no indication which will increase the price, with the exception of the provisions that can be modified through confirmations, "it is a market practice to take them as they are."[76] Further, Nicholas Voisey of the LMA talks about the distinction between 'hard' and 'soft' provisions in LMA's documentation.[77] Hard are said to concern the mechanics of the deal, whereas soft the economic aspects.

Second method is de facto market access.

> "Arguably, the financial crisis has had the benefit of leading to a 180 degree change in approach by secondary market participants. The 'old way' of agreeing price and quantity only, with other fundamental terms of trade remaining 'to be determined' has given way to a far more considered and diligent approach to trading. As a result, secondary market participants are agreeing the material terms of trade, in advance of the trade. To assist this approach, the LMA has published a guide to the issues that secondary market participants should consider prior to and immediately after a trade. Such agreement minimizes time and cost consuming negotiations after the trade has taken place, and mitigates the counterparty risk associated with delayed settlement."[78]

3.4.2.2. Legal

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[75] Latham & Watkins, *New LMA Guidelines on Transparency and the Use of Information in Debt Trading* (Client Alert Number 1216, 18 July 2011).
[76] Hogan Lovells, Loan Trading under LMA Documentation: A Guide for Traders and In-house Counsel, available at http://www.iwirc.com/file.cfm/925/content/loan-trading-under-lma-documentation.- pdf (accessed July 8, 2015).
[77] Nicholas Voisey, *Introduction to the LMA: Structure, Objectives and Core Activities* (Presentation to the Association of Regional Banks of Russia) (27 September 2011).
[78] Justin Conway, LMA Secondary Documentation, supra note 57 at 164.

Judicial enforcement is the most important legal mechanism of enforcement in the context of the LMA. However, judicial enforcement of LMA's contracts entails uncertainty. In Bearn Stearns vs. Form Global Equity the main issue in this case was whether the claimants (UK-based Bear Stearns) concluded a valid oral contract with the defendants (Italy-based Forum) under which Bear Stearns would acquire from Forum some distressed debt by way of notes issued by companies in the Parmalat group.[79] Bear Stearns claimed that such a contract was concluded in a telephone conversation. After the conversation the lawyers of the respective parties have exchanged confirmations, but for a couple of months disagreed about the form of purchase. Thus the case rested on two questions: whether a contract had been concluded and what form of purchase ought to chosen.

The courts found that there has been a contract. In the words of judge Smith, "I do not so regard the confirmations as being merely proposals or draft documents if that connotes that they indicated that no deal had been concluded. They were described in the email under cover of which they were sent as 'confirms', and it seems to me that on their face they confirmed an agreement made." [80] The court contended that it would be against established conventions to accept that a contract of this kind will be void or unenforceable because the parties have not agreed upon the form of purchase[81] and said that law will provide thereby rejecting to

[79] Bear Stearns Bank Plc v. Forum Global Equity Ltd., [2007] EWHC (Comm) 1576.

[80] The court relied on expert testimony of Mr. Tucker relied on established conventions and stated that

> "it would be surprising to those operating in the market if the law did not give effect to an agreement because the parties have not specified a time for execution or settlement of a transaction of this kind. He said, and I accept, that there is no expectation or practice that a settlement date has to be agreed." Bear Stearns vs. Forum Global Equity, *supra* note 17 (Chapter 4) para 165.

[81] *Id.* para 166.

incorporate the terms of the LMA. The court found that even though the parties had agreed that they should adopt standard terms used in the market for documenting a deal such as theirs and then the evidence was that "there was no set of standard terms to which they could have been referring other than the LMA terms,"[82] it also found that "there was no convincing evidence of a notorious and certain usage or custom that LMA standard terms should apply to sales of any kind of note or instrument."[83] In part this was due to the fact that around that time some American investors were looking to apply LSTA terms when trading in European assets.[84] The effect of the decision, however, was the same as if the court applied the LMA terms, i.e. settlement as participation was deemed to be valid. But the LMA also makes few efforts to intervene.

> "Again there was evidence about what happens in practice: Mr. Pigott explained that (whether or not the transaction is made on LMA terms) in documenting a transaction such as this, the usual course is first to consider whether it can sensibly be executed by transferring the asset; if it can be, to adopt such a structure; and if it cannot, to look to structure the contract on the basis of a participation. I accept this evidence."

[82] As Mr. Tucker put it, and as I accept, "If "standard terms" were agreed to apply, that could, realistically, only have meant LMA standard terms." *Id.* para 144.

[83] *Id.* para 144.

> "When Mr. Franzese was speaking to SP about "standard terms", he indicated not that the parties would adopt a standard set of terms used in the market but that the lawyers would draft the terms, and he reassured SP that lawyers would be able to use terms that were "pretty standard", that is to say, that the lawyers would not have to draft a document from scratch but would have readily available wording that they commonly use for transactions of this kind."

[84] *Id.* para 146.

3.5. Regulatory effectiveness

3.5.1. Counterparty risk

Settlement times are a problem in Europe largely because of the fragmented regulatory (i.e. diverse confidentiality obligations) and tax frameworks.[85]As one of participants in a recent industry conference noted, it took him six months to settle one of his trades.[86] However, overall the times are much lower. The following tables illustrate the median and average times to settlement times for par and distressed trades in 2015.

Par	Q1	Q2	Q3	Q4
Med	57.3	41.0	41.3	40.3
Ave	69.2	54.5	54.7	53.7

Table 1 Settlement times (par) - median and average (source: LMA, Operations Committee)Source: LMA, Operations Committee

Distressed	Q1	Q2	Q3	Q4
Med	88.8	63.3	82.5	75.4
Ave	116	91.4	106.6	97.2

Table 2 Settlement times (distressed) - median and average (source: LMA, Operations Committee)

[85] Danielle Myles, *Secondary loan settlement must standardise*, INTERNATIONAL FINANCIAL LAW REVIEW (16 September 2014), available at http://www.iflr.com/Article/3380414/Secondary-loan-settlement-must-standardise.html (last visited June 21, 2015).
[86] *Id.*

3.5.2. Liquidity

The use of loans as collateral is one possible indicator of liquidity in European loan markets.[87] Documentation has been seen as an important factor contributing to the increase use, but there are other impediments. As the study acknowledged, it is not clear what they are.[88] More generally, the documentation is said to have contributed to the growth of the markets. The chart below illustrates the growth of EMEA leveraged loans (both issuances and secondary volumes).

[87] *See* Kentaro Tamura and Evangelos Tabakis, *The use of credit claims as collateral for Eurosystem credit operations* (ECB Occasional Paper Series, June 2013). One of the basic problems may be identification.

> "CSDs have been seeking to develop and facilitate the usage of credit claims as collateral for interbank transactions in Europe. One initiative is to provide an identification number for each credit claim and to ensure that ICSDs record relevant information that is required for secondary market transactions. While there is no unified rule which identifies loans in Europe similar to the ISIN number for securities, some see the market-wide initiatives for the identification of loans as a precondition for expanding secondary market transactions in credit claims." Id.

[88] Id.

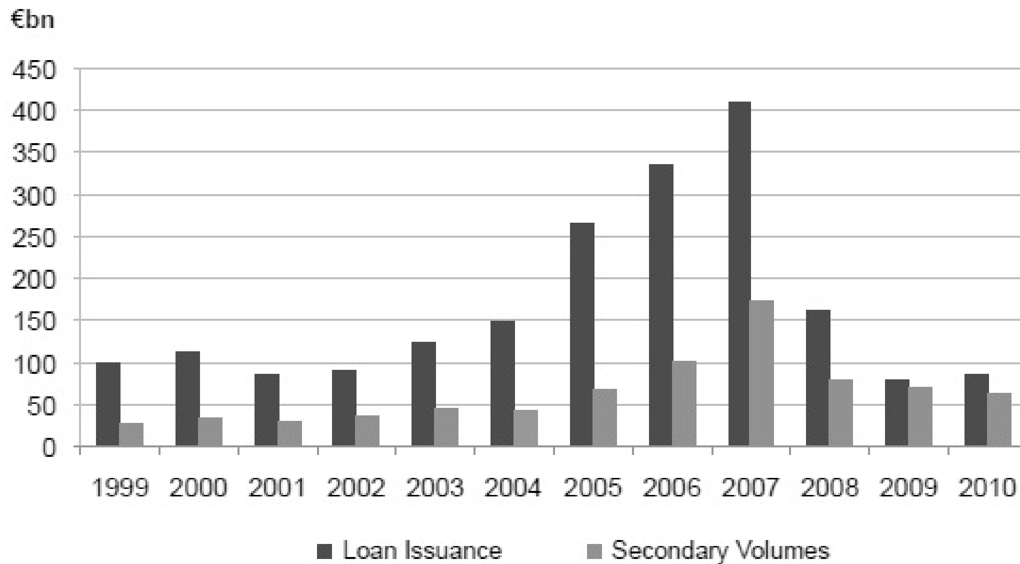
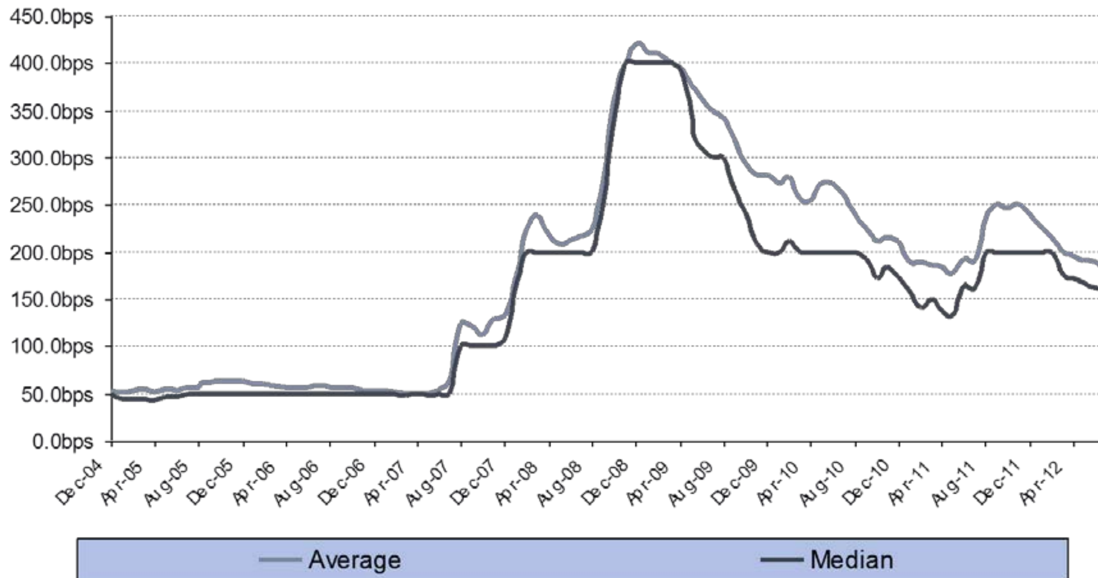


Chart 4 EMA loan volumens (issuances and secondary)

3.5.3. Information

The LMA is generally of the opinion that, despite not being quoted via an exchange, "loans are relatively transparency in terms of price."[89] Indeed, except for case of general market volatility, the bid-ask spreads in Europe have remained relatively stable.

[89] See LMA, Response to European Commission consultation document: Undertakings for Collective Investment in Transferable Securities (18 October 2012), available at http://ec.europa.eu/internal_market/consultations/2012/ucits/registered-organisations/loan-market-association_en.pdf (last visited April 19, 2016).



Unfortunately, no meaningful inference can be derived from these findings for the purpose of evaluating effectiveness of regulatory contracts. Clearly, the provisions that enabler for transfer of borrower information do help mitigate problems with information flows, but the information provided here does not provide a comprehensive picture of the business and financial situation of borrowers. Further,

> “[b]y contrast with the US, where many borrowers have to disclose details of their financing packages such as loan covenants, the European market has only in recent years moved from a cliquey, bank-dominated world towards one increasingly dominated by institutional investors. So far European junk borrowers have not had to disclose the same level of information as required in the US.”[90]

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[90] Anousha Sakoui, Backing for greater transparency on leveraged loans and junk bonds, FT, June 17, 2008.

This can be partially attributed to the stance of the ACT, which does not necessarily want to see more non-bank investors. According to the ACT "a key underling part of bank loan arrangements is that banks are available to maintain a relationship with a borrower, to consider modifications of terms."[91] And further, "availability, reliability and the terms of lender [are] much higher concerns to companies than spreads."[92]

3.5.4. Systemic risk

We have not been able to identify any qualitative or quantitative data with regard to systemic risk.

3.6. Summary

The contractual model of regulation offers a useful way of thinking about European loan markets and, specifically, their regulation. European loan markets are regulated through a set of rules embodied in a set of contracts developed by the LMA – the LMA STC, and LMA FALT. On the functional side, the LMA STC seek to mitigate counterparty risk through the trade is a trade, mandatory settlement, delayed settlement and BISO provisions. A host of provisions under the LMA STC, including breakfunding, permanent reductions, certain provisions relating to interest payments and fees and other seek to increase liquidity. The same is also true of certain provisions under the LMA FALT, including assignability, choice of law and other. The LMA STC include certain provisions, which seek to streamline information flows, including provision of credit agreement and representations and warranties. The LMA STC includes a termination provisions and the LMA FALT

[91] Hands off our loans, *supra* note 67.
[92] *Id.*

includes the MCPs (optionally) as well as the provision for contractual recognition of bail-in. The scope of the regulatory function is defined primarily through the LMA, which is bank-dominated. While this does affect the scope of the regulatory function, the LMA also recgonizes certain interests of borrowers through its alliance with the ACT. We identified negligible impact of regulatory competition. From an enforcement perspective it relies primarily on legal mechanisms, but a limited role of price penalties and de facto restricitions on market access has also been identified.

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Chapter 4

Regulatory contracts in global derivatives markets

4.1. Contracting in derivatives markets in the 1980s

4.1.1. Futures, options, swaps

Derivatives (futures options, swaps) are commonly used as risk transfer instruments.[1] Futures allow parties to transfer risk associated with movement in prices of assets by giving them a right (and obligation) to buy or sell an asset in the future at a given price. Options allow parties to transfer risk associated with movement in prices by giving them a right (but not an obligation) to buy an asset in the future at a given price. Swaps allow the parties to exchange a series of payments with reference to performance of an underlying asset or index. One major difference between futures and options, on the one hand, and swaps, on the other, is that whereas in the former payments are exchanged at the end of the transactions, in a swap the parties exchange streams of payments throughout its duration. The second major difference is that while futures and options are generally traded on exchanges, [2] swaps have historically be traded primarily OTC. This is largely because

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[1] *See* RICHARD FLAWELL, SWAPS AND OTHER DERIVATIVES (2012).

[2] The first exchange for financial derivatives - the International Monetary Market (IMM) - has been set up in 1972 in Chicago, as part of the Chicago Mercantile Exchange.PERRY MEHRLING, FISCHER BLACK AND THE REVOLUTIONARY IDEA OF FINANCE 167 (2005). The first exchange for financial derivatives - the International Monetary Market (IMM) - has been set up in 1972 in Chicago, as part of the Chicago Mercantile Exchange. Other commodity derivatives exchanges, including the Chicago Board of Trade and the New York Mercantile Exchange, quickly followed suit and developed their financial derivatives lines of business. Also in Europe the business of financial derivatives exchange trading developed with the opening of the London International Financial Futures and Options Exchange (LIFFE) in 1982, Deutsche Terminbörse (DTB) in Frankfurt in 1990 and Eurnext in Frankfurt in 2000. In recent years we have witnessed a wave of consolidations of exchanges, including derivatives

options and futures cover more standardized assets (such as equities), while swaps tend to help transfer risk in relation to more bespoke assets (such as loans).

Swaps can be referred to as credit default swaps (for transfer of credit risk), interest rate swaps (for transfer of interest rate risk), and currency swaps (for transfer of foreign exchange risk) depending on the type of the underlying. Solomon Brothers is sometimes said to have arranged for the first currency swap in the early 1980s.[3] Popularity of swaps quickly increased and prompted a number of investment banks to develop their own standard form contracts. The problem was that "[e]ach swap dealer's standard contract, including the definitions of the terms used in the contract, was unique. The result was that . . . when dealers traded with one another, substantial effort was required to bridge the gap between the two parties' forms and definitions."[4] In response in 1984 Salomon Brothers organized a meeting of eleven swap markets participants in New York the purpose of which was

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exchanges. The owner of the Chicago Mercantile Exchange – the CME Group – acquired both the Chicago Board of Trade in 2007 and the New York Mercantile Exchange in 2008 to form "the world's leading and most diverse derivatives marketplace, handling 3 billion contracts worth approximately $1 quadrillion annually (on average)" and "offer the widest range of global benchmark products across all major asset classes, including futures and options based on interest rates, equity indexes, foreign exchange, energy, agricultural commodities, metals, weather and real estate." http://www.cmegroup.com/company/history/ Both LIFFE and DTB (later Euronext) are now part of Intercontinental Exchange, Inc. - a global network of exchanges and clearing houses for financial and commodity markets, which owns and operates 23 regulated exchanges and marketplaces. Its biggest competitor in Europe is Eurex.

[3] In the mid 1970s, IBM had bonds denominated in German marks and Swiss francs. Since both currencies rapidly depreciated against the US dollar in 1981, IBM enjoyed an unexpected capital gain. The World Bank, on the other hand, needed additional German marks and Swiss francs for its operations in Germany and Switzerland, respectively, but could not obtain them due to governmental currency controls. Salomon Brothers helped the parties swap their currency flows. See Frederic Lau, Derivatives in Plain Words (Chapter 5, "Swaps") (1997).

[4] Sean M. Flanagan, *The Rise of a Trade Association*, 6 HARV. NEGOT. L. REV. 211 (2001) [hereinafter Flanagan, *The Rise*] (describing in detail the origins of the ISDA).

to discuss the discrepancies that existed between the different set of documents.[5] Whereas the discrepancies were apparent, the contracts that existed were considered by the law firms as proprietary and neither of the law firm wanted its terms to be used. Since a consensus was difficult to reach, the said group appointed the law firm of Cravath, Swaine & Moore to assist with the process of developing a standard.[6]

4.1.2. Swaps Code

Even the involvement of a prominent New York firm, however, was not enough to align the interests of the group members. Accordingly, a 'less' ambitious project had been embarked upon – development of standard definitions for terms commonly used in swap documentation. The effort resulted in publication of the SWAPS Code in 1985.[7] The Code was "presented in menu format rather than in a form recognizable as a complete contract."[8] One of its authors, Jeffery Golden, observed that

> "this helped the participants in the drafting meeting focus on substance rather than on form. The unusual menu format avoided the negative visceral reactions that greeted the initial attempt at developing a contract. None of the participants thought 'This contract looks more like their standard form than ours,' because it did not resemble anybody's

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[5] Bank of America NT & SA; Bankers Trust Company; Chemical Bank; Citibank, N.A.; Dean Witter Reynolds Inc.; Drexel Burnham Lambert Government Securities, Inc.; Goldman, Sachs & Co.; Harris Trust and Savings Bank; Kleinwort Benson Cross Financing Inc.; Manufacturers Hanover Trust Company; Merrill Lynch Capital Markets; Morgan Guaranty Trust Company of New York; Morgan Stanley & Co. Incorporated; Banque Paribas Capital Markets; Salomon Brothers Inc; Shearson Lehman Brothers Inc.; The First Boston Corporation; and The First National Bank of Chicago.
[6] Id.
[7] CODE OF STANDARDS WORDING, ASSUMPTIONS AND PROVISIONS FOR SWAPS 1985 EDITION (ISDA) [hereinafter 1985 CODE].
[8] Flanagan, supra note 4 at 236 (quoting an interview with Golden).

> contract. Instead, the parties negotiating over the definitions were faced with each term in isolation with no coherent relation to the others."[9]

The Code applied to US dollar interest swaps only (1985 Swaps Code and its modified 1986 version). Under the Code one party (fixed rate payer) pays a fixed amount on an applicable payment date determined by reference to a calculation period,[10] which essentially represents the duration for which the swap is entered.[11] The other party (floating rate payor) pays a floating amount determined by reference to a floating rate option and a calculation period.[12] Each swap is with reference to a notional amount, which is not transferred between the parties. The payment occurs on the date specified, or in accordance with the Eurodollar convention, or a date determined on termination. [13]

Under the Code, the respective obligations of the parties were subject to a condition precedent, "that no Event of Default or event that with the giving of notice or lapse of time (or both) would become an Event of Default, in respect of the other party has occurred and was continuing."[14] This is to say that neither party was obliged to make any payments to the extent that it counterparty found itself in some difficulty.

If there was an Event of Default with respect to one of the parties, the non-defaulting counterparty can choose to terminate the contract. An Early Termination Date could be designated by a party to a rate swap, if an Event of Default in respect of the other party or a Termination Event has occurred and was continuing at the

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[9] Id.
[10] ISDA Code, *supra* note 7, Section 4.1 („Fixed Amount").
[11] *Id.* Section 4.7 ("Calculation Period").
[12] *Id.* Section 4.2 („Floating Amount").
[13] *Id.* Section 4.5 ("Payment Date").
[14] ISDA, CODE, *supra* note 7, Section 10.2 („Conditions Precedent").

time the Early Termination Date was designated, by giving to the other party such notice as the rate swap requires (specifying in reasonable detail in such notice the basis upon which it is given).[15]

The Code provided two methods of calculation of the amounts owed upon Early Termination – Market Quotation[16] and Loss.**[17]** Under the Market Method the non-defaulting counterparty was required to obtain three quotations for replacement cost of the relevant transaction from three other dealers. However,

> "[i]f fewer than three quotations are provided (i.e. a Market Quotation cannot be determined) or a Market Quotation would not (in the reasonable belief of the party making the determination) produce a commercially reasonable result, Loss will apply in respect of the relevant transaction or groups of transactions."[18] […] The Loss Method was of course one that was favored by market participants, because it gave them more flexibility and was quicker.

4.2. Confirmation, Definitions, ISDA MA, Schedule, Credit Support Annex, Protocols

The Code was followed by the 1987 Interest Rate Swap Agreement. A more comprehensive form that also covered currency swaps - the Interest Rate and Currency Exchange Agreement – was published later that year. It marked the first step towards harmonizing swap documentation in the form of a master agreement. The ISDA MA was first published in January 1993 as the "1992 ISDA Master Agreement."[19] It build on the section of the Code, which outlined the relationship

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[15] *Id.* Section 11.1 („Early Termination Date").
[16] *Id.* Section 12.2(a)(„Certain Definitions Related to Agreement Value"/"Market Quotation").
[17] *Id.* Section 12.2(b))(„Certain Definitions Related to Agreement Value"/"Loss").
[18] ISDA, *Market Quotations under the 1992 ISDA Master Agreement*, available at http://www.isda.org/companies/lehman/pdf/Valuation-FAQ.pdf (last visited July 1, 2015).
[19] It covered the following products: interest rate swaps, currency swaps, forward rate agreement, commodity swaps, equity/index swaps, options (e.g. interest rate, bond, currency, equity, commodity

between the parties, in particular termination upon default. Certain parts of the MA could be amended through a Schedule. The Schedule amends the standard terms of the MA and this is what negotiators negotiate. This is usually divided into six parts covering Termination Provisions; Tax Representations; Agreement to deliver Documents; Foreign Exchange Transactions and Currency Options and other. After introduction of the MA, the parts of the Code that have described the product (e.g. the swap) formed part of the Definitions. The first Credit Definitions (CDs) describing credit default swaps first appeared in 1999, have been amended in 2003 and, most recently in 2014.

This basic architecture of ISDA's documentation[20] is complemented by multilateral mechanism developed for the purpose of amending of the documentation – the protocol mechanism.[21] As ISDA notes, "[t]he benefit to an adhering party to a protocol is that it eliminates the necessity for costly and time-consuming bilateral negotiations."[22] Instead, market participants are asked to sign

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etc.), foreign exchange transactions, credit derivatives etc. The 1992 agreement was divided into 14 sections: Interpretation, Obligations, Representations, Agreements, Events of Default and Termination Events, Transfer, Contractual Currency, Miscellaneous, Offices: Multi-branch Parties, Expenses, Notices, Governing Law and Jurisdiction, Definitions. PAUL HARDING, MASTERING THE ISDA MASTER AGREEMENTS (1992 AND 2002): A PRACTICAL GUIDE FOR NEGOTIATION 25-26 (2010).

[20] One important element which is left out from the above because its concerns credit risk points is collateral documentation. The perception of increased counterparty risk prompted market participants to start collateralizing their transactions. To facilitate the process ISDA developed Credit Support Documents under both New York and English law, each reflecting the specific features related to provision of security in the particular jurisdiction.

[21] The 1998 ISDA EMU Protocol addressing issues arising in relation to introduction of the Euro was the first one developed by ISDA. ISDA, EMU Protocol (May 6, 1998), available at http://www.isda.org/protocol/fprot95.pdf (last visited September 13, 2015).

[22] ISDA, *About ISDA Protocols*, available at http://www2.isda.org/functional-areas/protocol-management/about-isda-protocols (last visited September 13, 2015). And further,

> "[m]arket participants who adhered to an ISDA protocol in recent years are familiar with a process that involved submitting signed and conformed copies of an adherence letter to a designated email address. A new process was established in August 2012, when ISDA, in an

on to a multilateral contract under which all of their past and future agreements will be affected. "Rather than bilaterally agreeing to a set of amendments (the combination of which will be specific to the client), clients will adhere to an ISDA protocol, agreeing to contractual amendments published by ISDA and elected on the system."[23] Protocols thus establish contractual links between virtually all market participants.

4.3. Functional dimension

4.3.1. Counterparty risk

4.3.1.1. Mandatory settlement

Composing a Confirmation for a CDS the buyer of protection indicates a Reference Entity, a Reference Obligation and Credit Events against which it wants to be protected. The Credit Events in the Definitions are similar to those in the MA.[24] Furthermore, parties will specify Deliverable Obligation. These are the types of Obligations of the Reference Entity that may be delivered in connection with

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effort to provide a more streamlined and efficient method, developed a technical solution to further automate adherence. The adhering party will still need to provide a letter signed by an authorized signatory in order to validate the adherence, but the new process will make this easier and will allow that adhering party to monitor the status of that adherence from the submission stage to the approval stage." Id.

[23] ISDA Dodd-Frank Documentation Initiative and August 2012 Dodd-Frank Protocol FAQ (August 13, 2012).

"Unlike with previous ISDA protocols where amendments were effected solely with delivery of an adherence letter by each party to the underlying document to be amended (i.e., a master agreement), the DF protocol included additional bilateral delivery requirements in order to effectuate the amendments . . Each party that submits an Adherence Letter must also deliver a completed Protocol Questionnaire to each relevant counterparty for the amendments to be effective. As a result of these additional bilateral delivery requirements, ISDA together with Markit have developed a technology-based solution ("ISDA/Markit platform") to automate the information-gathering process and provide sharing of submitted data and documents to permissioned counterparties." Id.

[24] 2003 ISDA CREDIT DERIVATIVES DEFINITIONS, Article IV („Credit Events") .

Physical Settlement.[25] Physical settlement denotes a situation in which, upon default of the reference entity/reference obligation, the buyer of protection delivers the obligation in question to the seller of protection in exchange for a payment. Deliverable obligations are also selected ex ante by choosing a Deliverable Obligation Category and Deliverable Obligation Characteristic. There is also a special fallback for loans. If a loan cannot be assigned (for example no consent of the borrower), the Definitions provide fallback to participation.[26]

4.3.1.2. Cash settlement

Given the prevalence of physical settlement in the early days of the CDS market, a problem would sometimes arise when the amount of outstanding CDS was larger than the volume of the underlying.[27] This in fact started to happen increasingly frequently as CDS cased to be used merely as credit risk mitigating tools and became tradable, liquid assets.

> "For investors with only the derivative position, physical settlement is not appealing. Protection buyers would have to go to the open market to source bonds, and protection sellers would be left with cash positions after the auction . . . Furthermore, with the CDS outstanding greater by multiples than the volume of bonds issued, the bonds would have to be 'recycled' a number of times through the market to settle all the CDS trades. Investors recognizing this would rush to source bonds, artificially raising the price of the bonds higher than the

[25] *Id.* Article VIII ("Terms Relating to Physical Settlement").
[26] *Id.* Section 9.6 („Partial cash settlement of participations").
[27] *See* The Honorable Sarah Sharer Curley and Elizabeth Fella, *Where to Hide? How Valuation of Derivatives Haunts the Courts – Even After BAPCPA*, 83 AM. BANKR. L. J. 297, 316 (2009) (discussing the case concerning Deplhi, who only issued $2 billion in bonds, byt just prior to filing its bankruptcy petition, there were $20 billion of credit default swaps in the market with Delphi as a reference point).

> expected recovery value, and increasing the volatility of the bonds post default, which is undesirable for a number of reasons."[28]

If physical settlement is not possible (for example due to illegality or market conditions), there exists a fallback provision to partial cash settlement.[29] While cash settlement was the obvious first-best alternative, a mechanism was needed to set a price that the market could use to settle transactions. Auction was thought to be a feasible alternative and it has in fact been used in the past and endorsed by ISDA. In those cases, however, ISDA was not the auction administrator. Rather, it relied on Markit and Creditex as well as dealers to fix a weekly price for the main indices. Over time, ISDA got more involved and developed the so-called 'Big Bang Protocol', which implemented a standard auction mechanism into CDS trading documentation.[30] Under the Big Bang Protocol, upon a potential even of default a petition can be made by market participants to ISDA's Credit Determination Committees (CDCs). The CDCs make determination and, where appropriate arrange for an auction.[31]

4.3.1.3. Delayed settlement

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[28] *See* Markit and Creditex, "Credit Event Auction Primer," available at http://www.creditfixings-.com/-information/affiliations/fixings/auctions/docs/credit_event_auction_primer.pdf. *See also* Jean Helwege, Samuel Maurer, Asani Sarkar, Yuan Wang, *Credit Default Swap Auction* (Federal Reserve Bank of New York, Staff Report no 372, May 2009 at 5 and *passim*).

[29] *Id.* Section 9.3 ("Partial cash settlement due to impossibility or illegality").

[30] ISDA, 2009 ISDA Credit Derivatives Determinations Committees and Auction Settlement CDS Protocol (March 12, 2009).

[31] Auction Date is 30 calendar days less 3 Business Days after Credit Event Request Resolution Date, unless DC resolves otherwise. The auction process consists of two stages. In the first stage, interested parties submit their requests to dealers. These requests represent offers to buy the debt instruments at a given price. Simultaneously, dealers make a market in the debt instruments of the defaulting entity. Both these inputs are used to computer certain metrics used in the second stage of the auction. In the second stage the buy and sell requests are matched. There is a penalty for dealers for submitting bids that off-market. The proceeds of the penalty are paid to ISDA.

ISDA's also has a delayed settlement provisions can be found in Section 9(h)(i)(1) and (2), which provide for interests on defaulted payments and compensation for defaulted deliveries, respectively. These provisions are designed to incentive the parties to settle as quickly as possible and resolve any uncertainty that may result from unsettled trades.

4.3.1.4. BISO

The Definitions provide for a BISO mechanism applicable to bonds.[32] The Seller has a right to buy-in if the buyer does not deliver the bonds within five days from Physical Settlement Date. After delivering the Buy-In notice, the seller will seek quotations from five or more dealers. Following an offer from one of the dealers, the Seller delivers and the Buyer is obliged to pay the balance. This helps remedy short-selling.

4.3.2. Liquidity

The Schedule to the MA is the most important tool that enables the parties to account for their counterparty's attributes. As Harding notes, "many banks compose a general Schedule and base variants for specific entities (e.g. corporates, building societies, pension funds trustees and hedge funds) upon it."[33] The changes can be substantial and many banks have their own extensive schedules for different types of products or clients. These features of the ISDA architecture encourage participation and enhance liquidity.

[32] *Id.* Section 9.9 ("Buy-in of bonds not delivered").
[33] Harding discusses possible variations on pp. 421 and *passim*. HARDING, MASTERING, *supra* note 19.

However, liquidity is also facilitated by fixing certain parameters of the relationship through the MA. This is reflected in the language of a confirmation, which, despite stating that "[it] evidences a complete and binding agreement," also state that until the agreement is executed "this Confirmation . . . shall supplement, form part of, and be subject to, an agreement in the form of the 1992 ISDA MA." Thus, even if the MA has not been negotiated[34] at time that parties have entered into the transaction, the pre-printed form of the ISDA MA will govern any and all transactions between the parties.[35]

The freedom of parties to deviate is also limited when it comes to description of the underlying product – the CDS. The Confirmation gives the parties a number of options with regard to CDs. In turn, the CDsread that they "provide the basic framework for the documentation of certain privately negotiated credit derivatives transactions. For ease of use, certain sections of the Definitions provide fallback provisions that will apply to a transaction if the parties do not specify otherwise in the Confirmation."[36] And further "[a]s in the case of other product-specific definitions published by ISDA, parties using Definitions to document privately

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[34] Typically, the most important and contentious point is when an event of default can be called. As GuyLaine Charles notes, "The party that is viewed as the more creditworthy counterparty, usually the sell-side participant (although post-Lehman that assumption can be challenged), will seek to broaden the Events of Default and to shorten the cure periods under the ISDA form to maximize its ability to terminate the trades under the Agreement promptly. Conversely, the party that is viewed as the less creditworthy counterparty will seek to limit the Events of Default and maintain the lengthier cure periods." GuyLaine Charles, *The ISDA Master Agreement – Part II: Negotiated Provisions, Practical Risk Management and Compliance For the Securities Industry* […] (May-June 2012), available at http://teiglandhunt.com/wp-content/uploads/2013/09/81.pdf (last visited September 13, 2015). Accordingly, some the most frequently negotiated aspects are Cross-Default provision, Default under Specified Transaction and Additional Termination Events.

[35] *See e.g.* Credit Suisse Financial Products v. Societe Generale d'Enterprises [1997] C.L.C. 168; 7E Ecommunications Ltd. V Vertex Antennentdink Gmbh [2007] 2 Lloyd's Rep. 411; Caylon v Wytwornia Sprzetu Komunikacyjnego PZL Swidnik SA [2009] 2 All E.R. (Comm.) 603. *See also* FIRTH, DERIVATIVES, *supra* note 40, ¶11.003 (2015).

[36] The 2003 ISDA Credit Derivative Definitions at v.

negotiated credit derivatives transactions may adapt or supplement the standard provisions set out in these Definitions in accordance with specific economic terms agreed between the parties to the relevant transaction."[37]

4.3.3. Information

Both the ISDA MA and the CDs include representations and warranties enhancing information flows. The ISDA MA contains certain basic representations related to status, powers, consents, absence of litigation and other.[38] In addition, the CDs contain certain representations related to the Reference Entities and Obligations.[39] However, it was only the early 2010s brought a major revamp of the information obligations with the introduction of the ISDA DF 2012 Protocol,[40] which requires swap dealers, upon the request of counterparty to provide information "on the design of, as scenario analysis to allow CP to assess its potential exposure."[41] Furthermore, the ISDA DF 2012 August Supplement authorizes disclosure of certain

[37] Id.
[38] ISDA MA, Section 3 (Representations).
[39] ISDA, 2003 Credit Defnitions, Section 9.1. Additional Representations and Agreements of the Parties and Section 9.2. Additional Representations and Agreements for Physical Settlement
[40] ISDA August 2012 DF Protocol Agreement (August 13, 2012) and ISDA March 2013 DF Protocol Agreement (March 22, 2013). As the Protocol states
„This Protocol Agreement is intended for use without negotiation, but without prejudice to any amendment, modification or waiver in respect of a Protocol Covered Agreement that the parties may otherwise effect in accordance with the terms of that Protocol Covered Agreement or as otherwise provided by applicable law." ISDA DF Protocol, *supra* note 277, Section 5(b). Moreover, it also states that „(i) In adhering to this Protocol Agreement, a party may not specify additional provisions, conditions or limitations in its Adherence Letter; and (ii) Any purported adherence that ISDA, as agent, determines in good faith is not in compliance with this Protocol Agreement will be void and ISDA will inform the relevant parties of such fact as soon as reasonably possible after making such determination and will remove the party's Adherence Letter from the ISDA website." *Id.* Section 5(b) (i) and (ii).
[41] Id. Section 2.22.

information.[42] Specifically, it authorizes disclosure of certain pre-trade mid-market marks as well as basic material economic terms including price, notional amount and termination date by swap dealers.[43] It also allows for this, even if information may be otherwise confidential,[44] addresses potential issues of insider trading that could arise in this context,[45] and seeks to induce transparency, even if this is not required by the home jurisdiction of one of the parties.[46] Finally, the DF March 2013 Supplement also includes some new provisions pertaining to calculation of risk valuations for CFTC Swaps Entities.[47]

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[42] "Notwithstanding anything to the contrary in the Agreement or in any non-disclosure, confidentiality or similar agreement between the parties, each party hereby consents to the disclosure of information to the extent required by the DF Supplement Rules which mandate reporting of transaction and similar information." Schedule 2 ("Agreements Between a Swap Dealer and Any Other Party"), Part I ("Representations and Agreements"), Section 2.5.

[43] Id. Part III ("Representations and Agreements of a Counterparty that is not a Swap Dealer"), Section 2.12.

[44] "Subject to any conditions on the disclosure of Material Confidential Information to governmental authorities, regulatory authorities or self-regulatory organizations previously agreed by the parties, CP agrees that SD is authorized to disclose Material Confidential Information provided to SD by (or on behalf of) CP to comply with a request of any regulatory authority or self-regulatory organization with jurisdiction over SD or of which SD is a member or as otherwise required by applicable law (whether by statute, law, rule, regulation, court order, subpoena, deposition, civil investigative demand or otherwise)." Id. Section 2.13.

[45] "Notwithstanding the foregoing, no such Material Confidential Information will be disclosed to any person acting in a structuring, sales or trading capacity for SD or any affiliate of SD." Id. Section 2.15.

[46] Id. "For the avoidance of doubt, to the extent that applicable non-disclosure, confidentiality, bank secrecy or other law imposes non-disclosure requirements on transaction and similar information required to be disclosed pursuant to the DF Supplement Rules but permits a party to waive such requirements by consent, the consent and acknowledgements provided herein shall be a consent by each party for purposes of such other applicable law." See also id., Part II ("Agreements of Non-Reporting Counterparty"), Section 2.9. ("Each party agrees that if it is the Non-Reporting Counterparty with respect to a Swap under the Agreement that is an "international swap" (as that term is defined in CFTC Regulation 45.1), it shall notify the Reporting Counterparty to such international swap, as soon as practicable and in accordance with the Notice Procedures, of the (i) identity of each non-U.S. trade repository not registered with the CFTC to which the Non-Reporting Counterparty or its agent has reported the Swap, and (ii) swap identifier used by such non-U.S. trade repository to identify the swap.").

[47] ISDA DF March 2013 Supplement, Schedule 2, Part III.

4.3.4. Systemic risk

Incorporation of the condition precedent that no Event of Default or Default has occurred and is continuing in the earliest version of ISDA's documentation reflected a general recognition of the problem of counterparty risk in OTC derivatives markets.[48] OTC derivatives markets are dominated by market-making dealers or "intermediaries . . . willing to act as counterparty for the trades of his customers."[49] Their willingness to make markets will largely depend on their ability to match the exposure they created from themselves through a trade with their customer. Counterparty risk is thus highly concentrated in OTC derivatives markets[50] and, as a result, sytemic risk is high.

4.3.4.1. Single agreement rule

The high concentration of dealers who stand at the center of derivatives markets means that they tend to have multiple, sometimes many multiples of exposures towards the same counterparties. In these cases the ISDA MA operates as n umbrella agreement that captures all transactions between the parties. This enables the counterparties to always be exposed to each other with reference to one notional amount. The single agreement rule is reflected in the first provision (Section 1) of the MA.[51] It reads: "All Transactions are entered into in reliance on the fact that this Master Agreement and all Confirmations form a single agreement between the

[48] Derivatives can also be traded on exchanges or over the counter. Exchanges, which allowed derivatives, traditionally had fixed ranges of products and fixed units of size, as well as fixed length of contracts. They also have other features of exchange trading, such as centralization and clearing, which are among the most effective tools of reducing counterparty risk.
[49] HASBROUCK, EMPIRICAL MARKET MICROSTRUCTURE, supra note 37 (Chapter 1).
[50] *See* GEOFFREY POITRAS, RISK MANAGEMENT, SPECULATION, AND DERIVATIVE SECURITIES 294-295 (2002).
[51] SIMON FIRTH, DERIVATIVES LAW AND PRACTICE ¶11.004 (2015).

parties . . . and the parties would not otherwise enter into any Transactions."[52] The single agreement rule is a crucal provision, which the entire market acts in reliance one.

4.3.4.2. Close-out netting

Section 2 of the MA formulates the general obligations of the parties, which essentially come down to the simple statement that each party will make their respective payments.[53] The general obligation, as it was the case in the Code, is subject to the condition precedent that no Event of Default has occurred and is continuing.[54] This is the critical provision, which, in principle, allows the non-defaulting party to suspend its payments upon its counterparties default.[55] Default in this context is understood rather broadly and includes[56]: Failure to Pay or Deliver; Breach of Agreement; Repudiation of Agreement; Credit Support Default; Misrepresentation; Default Under Specified Transaction; Cross-Default; Bankruptcy; and Merger Without Assumption. Separately, the MA also includes Termination Events,[57] which include: Illegality; Force Majeure Event; Tax Event; Tax Event Upon

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[52] ISDA MA, Section 1(c).
[53] ISDA Master Agreement, Section 2(a)(i) („General obligations").
[54] *Id.* Section 2(a)(iii).

> „Each obligation of each party under Section 2(a)(i) is subject to (1) the condition precedent that no Event of Default or Potential Event of Default with respect to the other party has occurred and is continuing, (2) the condition precedent that no Early Termination Date in respect of the relevant Transaction has occurred or been effectively designated and (3) each other condition specified in this Agreement to be a condition precedent for the purpose of this Section 2(a)(iii)."

[55] While the close-out netting was designed principally with counterparty risk in mind, it also had important liquidity enhancing properties. "Netting, close-out serves the needs of market participants even when there is no systemic threat: they facilitate market risk and counterparty credit risk management; and they permit expansion of dealer activities, enhancing the depth and liquidity of the derivatives markets." *See* Bliss & Kaufman, *Derivatives and Systemic Risk, supra* note 62 (Chapter 5).
[56] ISDA Master Agreement, Section 5(a) Events of Default.
[57] *Id.* Section 5 (b) Termination Events.

Merger; Credit Event Upon Merger.[58] The difference between Events of Default and Termination Events is that whereas the former are fault-events the latter are no-fault events.

Upon the occurrence of an Event of Default or a Termination Event the MA gives the parties the right to terminate.[59] Early termination may be elective or automatic.[60] Parties need to calculate owned amounts. As noted, historically parties

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[58] MA also established a hierarchy of events shall some of them turn out to be conflicting. *See* Section 5 (c) Hierarchy of Events.

> "(i) An event or circumstance that constitutes or gives rise to an Illegality or a Force Majeure Event will not, for so long as that is the case, also constitute or give rise to an Event of Default under Section 5(a)(i), 5(a)(ii)(1) or 5(a)(iii)(1) insofar as such event or circumstance relates to the failure to make any payment or delivery or a failure to comply with any other material provision of this Agreement or a Credit Support Document, as the case may be. (ii) Except in circumstances contemplated by clause (i) above, if an event or circumstance which would otherwise constitute or give rise to an Illegality or a Force Majeure Event also constitutes an Event of Default or any other Termination Event, it will be treated as an Event of Default or such other Termination Event, as the case may be, and will not constitute or give rise to an Illegality or a Force Majeure Event. (iii) If an event or circumstance, which would otherwise constitute or give rise to a Force Majeure Event also constitutes an Illegality, it will be treated as an Illegality, except as described in clause (ii) above, and not a Force Majeure Event."

[59] *Id.* Section 6 (a) Right to Terminate Following Event of Default.

> "If at any time an Event of Default with respect to a party (the "Defaulting Party") has occurred and is then continuing, the other party (the "Non-defaulting Party") may, by not more than 20 days notice to the Defaulting Party specifying the relevant Event of Default, designate a day not earlier than the day such notice is effective as an Early Termination Date in respect of all outstanding Transactions. Section 6(b)(i). If a Termination Event other than a Force Majeure Event occurs, an Affected Party will, promptly upon becoming aware of it, notify the other party, specifying the nature of that Termination Event and each Affected Transaction, and will also give the other party such other information about that Termination Event as the other party may reasonably require. If a Force Majeure Event occurs, each party will, promptly upon becoming aware of it, use all reasonable efforts to notify the other party, specifying the nature of that Force Majeure Event, and will also give the other party such other information about that Force Majeure Event as the other party may reasonably require."

[60] *Id.* Section 6(a).

> "If, however, "Automatic Early Termination" is specified in the Schedule as applying to a party, then an Early Termination Date in respect of all outstanding Transactions will occur

relied on the Market Quotation or Loss Method outlined for the first time in the Code, and later included in the 1992 ISDA MA. Recognizing the problems with the method, which arose in particular as a result Russian and Asian crises of the late 1990s and in particular the failure of the Hong—Kong broker dealer Peregrine Investments Holdings Limited, exchange controls imposed by the Malaysian central bank on the ringgit, the 90 day moratorium imposed by the Russian government in August 1998 on certain foreign payments by Russian residents, and the crisis of LTCM – ISDA developed the 2002 version of the MA.[61] In the 2002 ISDA MA Market Quotation and Loss was replaced by Close-out Amount, a provision that sets out a single measure of damages where trades are being terminated as a result of an "Event or Default" or a "Termination Event." Close-out Amount is often described as a hybrid of Market Quotation and Loss, because it combines the information gathered from third-party quotes with relevant market data and the non-defaulting parties' own internal sources. [62]

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immediately upon the occurrence with respect to such party of an Event of Default specified in Section 5(a)(vii)(1), (3), (5), (6) or, to the extent analogous thereto, (8), and as of the time immediately preceding the institution of the relevant proceeding or the presentation of the relevant petition upon the occurrence with respect to such party of an Event of Default specified in Section 5(a)(vii)(4) or, to the extent analogous thereto, (8)."

[61] In January 1999 the Counterparty Risk Management Policy Group was set up by 12 international and commercial banks to review the events of 1997/1998 and to recommend changes. In June 1999 it published its report – Improving counterparty risk management practices. The report contained a section on documentation policies and practices especially in troubled markets. It noted that variations in events of default, grace periods, close-out, valuation and notice provisions among the various types of master agreements used in the markets created documentation basis risk because of inconsistencies. HARDING, MASTERING, *supra* note 27 (Chapter 5) at 167-169.

[62] ISDA MA, Section 14 („Definitions"/"Close-out amount"). Under the previous version, the parties had to use Market Quotation. However, "[i]If fewer than three quotations are provided (i.e. a Market Quotation cannot be determined) or a Market Quotation would not (in the reasonable belief of the party making the determination) produce a commercially reasonable result, Loss will apply in respect of the relevant transaction or groups of transactions." ISDA, *Market Quotations under the 1992 ISDA Master Agreement*, available at http://www.isda.org/companies/lehman/pdf/Valuation-FAQ.pdf (last visited July 1, 2015). The Loss Method was of course one that was favored by market

4.3.4.3. Clearing

These important initiatives to reduce counterparty risk notwithstanding, more recently ISDA developed provisions for clearing of certain derivatives. Clearing has many benefits, including reduction of systemic risk by netting offsetting exposures and mutualizing counterparty risk among all of their members.[63] This changes the structure of the trade, because – legally – the single bilateral contract between the counterparties is replaced by two bilateral contracts – between the buyer and the CCP and the CCP and the seller. ISDA March 2013 DF Supplement provides a notification that upon acceptance by the CCP, the original swap extinguishes and is replaced by the swap with the CCP and "all terms of the Swap shall conform to the

participants, because it gave them more flexibility and was quicker. In *Lehman Bros. Intern. (Europe) v. AG Financial Products, Inc.* the court established that the use of Loss could have deprived LB of "the benefit of the bargain" and, accordingly, the AG's choice of Loss was not being deemed as fraudulent. *See* Lehman Bros. Intern. (Europe) v. AG Financial Products, Inc., 969 N.Y.S. 2d 804 (N.Y. Sup. Ct. 2013). ISDA acknowledges, "these measures could and should produce different results in certain scenarios" and ought to be used in the ways prescribed in the MA. *See* International Swaps And Derivatives Association Inc.'s Amicus Curiae Memorandum Of Law In Support Of Defendant Intel Corporation's Motion For Summary Judgment in LEHMAN BROTHERS HOLDINGS INC., et al., Lehman Brothers Holdings Inc. And Lehman Brothers Otc Derivatives Inc., V. Intel Corporation, Case No. 08-13555 (SCC) (Jointly Administered).

[63] But clearing is not without flaws. For example, as one of Financial Times' most prominent contributors remarked on one occasion: "there has been remarkably little public discussion among politicians – or even among regulators – about how to guarantee that any future clearinghouse will indeed by strong enough to withstand future shocks." Gillian Tett, The Clearing House Rules, FINANCIAL TIMES, Nov. 5, 2009, available at http://www.ft.com/cms/s/0/-5874e922-cald-11de-a5b5-00144feabdc0.html (quoted in Jeremy C. Kress, Credit Default Swaps, Clearinghouses, and Systemic Risk: Why Centralized Counterparties Must Have Access to Central Bank Liquidity, 48 HARV. J. LEGIS. 49-93 (2011). "The robustness of a clearinghouse from a creditworthiness perspective will depend on a number of factors including how much margin it takes and how it holds it, and how much capital the clearinghouse has to fall back on." Id. These concerns have also been echoed in scholarly publications. It cannot be precluded that the regulatory function of the clearinghouse can have both positive effects (reducing systemic risk) as well as negative effects (magnifying systemic risk).

product specifications of the cleared Swap established under the DCO's rules."[64] But it also focuses a lot on exclusions, i.e. situations where the parties may not have chose to clear their swaps typically because they are not the type of entities that have to clear (for example benefiting from the end-user exception).

4.4. Structural dimension

4.4.1. Standard-setting and monitoring

4.4.1.1. Governance

4.4.1.1.1. Membership

ISDA has been set up buy the sell-side, large dealer banks based in New York. However, it quickly expanded its membership to also encompass users, including various buy-siders (both investment firms and corporations), law firms, international organizations and central banks. ISDA's members are classified, depending on the type of their involvement in the market, into three categories of membership: primary, associate and subscriber. The primary member category encompasses financial institutions and other corporations that "deal in derivatives" provided, however, that they enter derivatives transactions "solely for the purpose of risk hedging or asset or liability management."[65] As the By-laws note, "Any person or entity not eligible for membership in the Association as a Primary Member which provides professional or other similar services to persons eligible to be Primary Members (including, without limitation, law firms, accounting firms and

[64] Part III ("Clearing"). Section 2.5 of the ISDA March 2013 DF Supplement published on March 22, 2013 by the International Swaps and Derivatives Association, Inc.. See also Part IV ("End-User Exception").
[65] *See* BYLAWS OF THE INTERNATIONAL SWAPS AND DERIVATIVES ASSOCIATION, Section 1(a) [hereafter ISDA BYLAWS]. There are further sub-categories: Primary-Global, Primary-International and Primary-Regional.

consulting firms) shall be eligible for election to membership in the Association as an Associate Member." [66] Finally, all other parties can participant as subscriber members. [67] Chart 5 illustrate ISDA's membership composition by type of activity, which is corelated with membership types, but only to a limited extent.

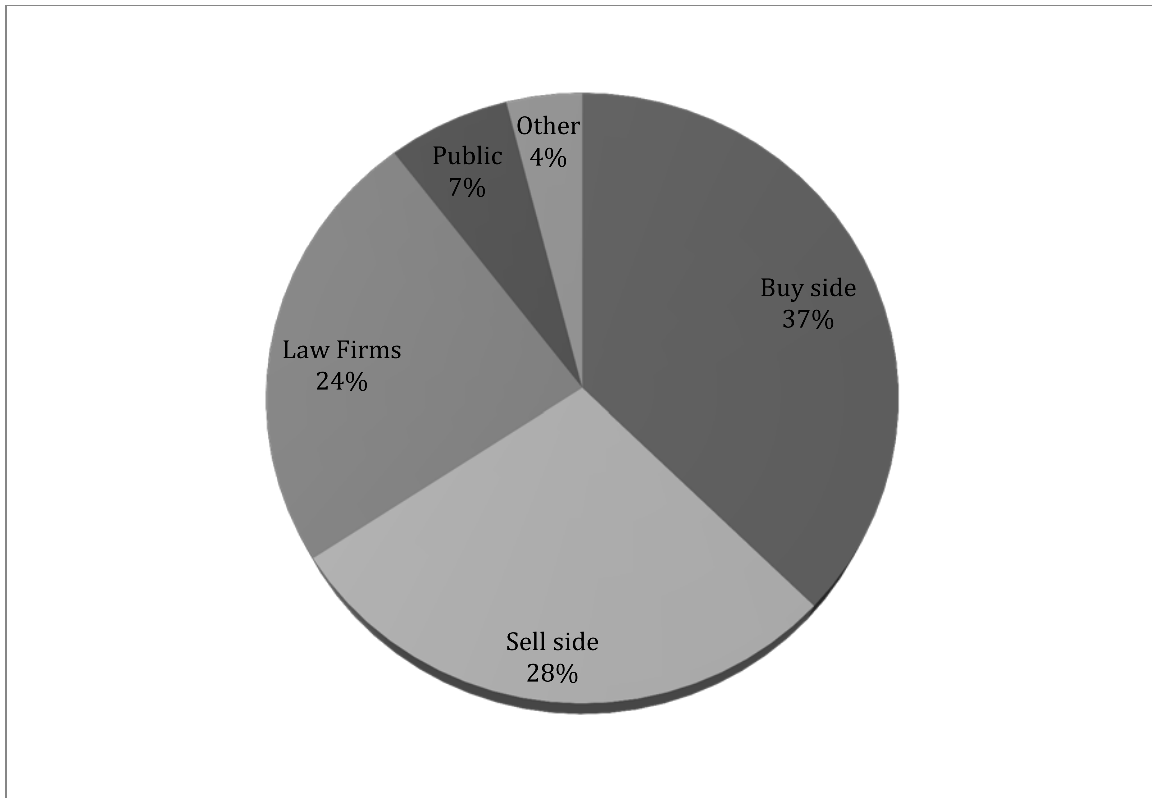

Chart 5 ISDA membership composition by type of activity (source: ISDA)

[66] See ISDA BYLAWS, Section 1(b). There are further four sub-categories: Associate-Global, Associate Broker Global, Associate Broker and Associate.
[67] See ISDA bylaws, Section 1(c).

4.4.1.1.2. Board of Directors

Only primary members may vote on "all matters submitted to a vote of the membership."[68] In effect only primary members select ISDA's decision-making body – the board of Directors. Nominees to the board can, in principle, be nominated by the membership at large, but as Flagan notes, this has never been used. "The nominating committee has nominated all directors, presenting a slate that has always been elected at the annual meetings."[69] Furthermore,

> "[a]lthough there are no formal criteria for the selection of directors, the primary goals of the nominating committee have been to nominate individuals from institutions that are representative of the membership as a whole in terms of the nationalities and the volumes of transactions in the industry (i.e., institutions that engage in a large number of high-value transactions are more heavily represented on the board than smaller institutions that are only peripheral industry players)."

This is still true today, with the vast majority of the Board representing sell-side institutions. However, ISDA has gradually increased not only the size, but also composition of the Board. As ISDA's Chairman, Eric Livtack, noted upon most recent (January 2016) expansion, "[c]hanges in regulation and market structure are altering the dynamics of the derivatives market, and are resulting in the entrance of a variety of new participants. The expansion ensures the composition of the Board reflects ISDA's already broad and diverse membership."[70]

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[68] See Section 10 of ISDA bylaws, which also further reads "Except as may be required by law, Associate Members and Subscribers shall not be entitled to vote."

[69] Flanagan, *The Rise of*, supra note 4 at 245

[70] ISDA Announces Expansion of Board of Directors and Updates Strategy Statement (January 12, 2016), available at http://www2.isda.org/news/isda-announces-expansion-of-board-of-directors-and-updates-strategy-statement (last visited April 26, 2016).

4.4.1.1.3. Funding

ISDA relies on membership fees as the primary source of funding for the organization. In fact, revenue increase is sometimes said to have been among the principal drivers of membership expansion.[71]

4.4.1.1.4. Committees

ISDA's activity is channeled primarily through its committees. As one commentator put it,

> "Industry needs dictated committee formation. If a new product or market was gaining in importance, a committee would be formed to address it. Often this would occur when a "critical mass" of members pressed for a committee. The committee would then serve as a forum for members to gather and share views on the subject and coordinate action with regard to it. This structure allows ISDA members to stay updated on developments in many committees without requiring them to commit the time and personnel to actively participate in each of them. The wide range of committee shapes and sizes also allows groups to structure themselves in the most efficient form for their task."[72]

The composition and functioning of ISDA's committees vary widely. As Flanagan noted, "models range from relatively small committees with a fixed membership, such as the U.S. Regulatory Committee, to enormous committees with numerous subcommittees, such as the Documentation Committee. Certain committees have a core group that meets regularly. Other committees meet more sporadically, as their work requires, and have a broad membership with varying levels of participation."[73] Especially in the case of important amendments, much of

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[71] Flanagan, *The Rise of*, supra note 4 at 251.
[72] Flanagan, supra note 4 ar 241.
[73] *Id.* at 243.

the work is done in sub-committees (whose size is strictly limited) so that small, efficient groups could work quickly and report back to a larger committee open to all members.[74] The committee then makes recommendations to the board, which adopts the standards. Sometimes the sub-committees make recommendations directly to the board and the general documentation committee only has opportunity to comments.

As an example, the development of the Resolution Stay Protocol has been initiated by a small working group in response to consultative document produced by the UK Treasury in 2009. The group engaged in a dialouge with the Treasury as well as the Bank of England and the Financial Services Authority (later transformed into the Financial Conduct Authority). The focus of those discussions has been principally the scope of the amendments that should be made to section 2(a)(iii).

> "On 31 January 2014 ISDA circulated to the full membership for comment a revised and simplified approach to the drafting of the proposed amendments to Section 2(a)(iii), reflecting the eventual outcome of the dialogue on scope with the FSA and, over the past year, the FCA. A number of very useful comments were received from

[74] This is also true of some other committee and working groups, like the Collateral Working Group. In 1996, "[i]nterested members of the Collateral Working Groups formed focus groups in London and New York under the leadership of Kishwer Aziz of Citibank (in London) and Vicky Manasses of ABN AMRO Bank N.V. (in New York). In consultation with the larger Collateral Working Group, the focus groups identified topics for the Guidelines including: collateral eligibility and haircuts, communication tools, credit issues, legal issues, systems and operations, and valuation issues. Each focus group was responsible for writing sections of the guidelines and a list of focus group members is included in Appendix 1. While all focus group members contributed to the Guidelines, special thanks go to Richard Evans (Euroclear), Stephanie Grady (Citibank), Neil Smith (Abbey National), Claude Brown (Clifford Chance) Adedisi Adekunle (Societe Generale), Penny Davenport (JP Morgan), Chris Bucchino (Morgan Stanley) Phil Bokovoy (Bank of America), Karen Arneson (Bank of America), Stephanie Swanton (Sungard), Patrick Harris (Goldman Sachs) and Angela Brojan (Bear Stearns) who actually undertook to author various sections of the Guidelines. Drafts of the Guidelines were reviewed by members of the Collateral Working Groups, outside counsel, and the ISDA Board of Directors." ISDA Guide for Collateral Practitioners at 1. The 2000 ISDA document "Market Review of OTC Bilateral Collateralization Practices" provides an updated view.

> members and are reflected in the final version of the Amendment, which nonetheless broadly reflects the approach proposed in the January 2014 consultation with members."[75]

While the process clearly helps to streamline decision-making, it may leave certain interets out of the scope of discussion. As an example, on the occasion of release of ISDA's draft regarding "Additional Provisions for Consent to, and Confirmation of, Transfer by Novation of OTC Derivatives Transactions" in the summer of 2010, the American Benefits Council and the Committee on the Investment of Employee Benefit Assets send ISDA a letter, in which they expressed a concerns that

> "buy-side participants, including fiduciaries to pension plans, are not being given the opportunity to be meaningfully involved in the Additional Provisions. For example, ISDA members only had four business days to review the Additional Provisions draft and to provide comments. In addition, the cover e-mail accompanying the draft Additional Provisions indicated that the comments will only be considered for one day before a final version is published. We very much understand the desire of ISDA to act quickly. But this comment process is not adequate; there needs to be opportunity for meaningful discussions. As an additional point, it would be very helpful if more buy-side input was considered in the preparation of the protocols, so that the protocols more closely reflect ISDA's membership."[76]

This is why arguments have been made with regard to one-sided nature. Partnoy and Skeel suggested ISDA may "develop standardized documentation and approaches that benefit ISDA members at the expense of others, either because they

[75] ISDA, Guidance Note on the form of Amendment to ISDA Master Agreement for use in relation to Section 2(a)(iii)(July 2014).
[76] American Benefits Council and the Committee on the Investment of Employee Benefit Assets, Letter to ISDA, Re: Additional Provisiosn for Novation (August 17, 2010)..

redistribute resources among parties, create or take advantage of informational asymmetries, or create negative externalities."[77] As they put it:

> "If a few major dealers control ISDA documents, those agreements might be written either with dealer -to-dealer contracts in mind (and therefore might not be appropriate for-contracts between a dealer and an end-user), or might be constructed to advantage dealers in dealer-to-end-user contracts. The leadership of ISDA does appear to be dominated by a small number of major dealers. In contrast, end-users of derivatives are much more numerous and diffuse, and therefore face collective action problems in creating a plausible set of alternative legal rules. Moreover, end-users are not entitled to vote on ISDA decisions, and do not have any substantial role in formulating legal rules."[78]

These views have also been shared by some market participants. In a series of letters sent to ISDA between 2001 and 2002, the Managed Funds Association – an alternative investment trade group with then some 700 members – expressed a concern that the changes made to the documentation will favor sell-side firms. While ISDA's executive director sought to alleviate these concerns at the MFA's meeting in Washington in August 2001, soon thereafter the MFA's general counsel publicly fired a very harsh criticism of how the issues were being handled. "[ISDA is] drafting this from the dealers side" – he said. "They weren't looking to sit down with us and work things out … ISDA don't even have the decency to send us a written response. We've gone to the trouble of writing a letter to them and they've thumbed their nose at us. I wonder if they even really care about customers." [79]

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[77] *See* Frank Partnoy & David A. Skeel Jr., *The Promise and Perils of Credit Derivatives*, 75 U. CIN. L. REV. 3, 1019 (2007)

[78] *Id.* at 1039.

[79] Alternative Investment Group Blasts ISDA, GlobalCapital (24 Sep. 2001), available at http://www.globalcapital.com/article/k667bw91r2qd/alternative-investment-group-blasts-isda (last visited March 15, 2016).

However, this criticism has been countered by William Miller at the End Users of Derivatives Council of the Association of Financial Professionals. He said he was "very encouraged" by the attention ISDA paid to end user concerns at the August meeting and added that "ISDA is beginning to realized that in the future it needs to consider end users before it begins drafting changes."[80] Indeed, when the 2002 MA was finally published, it was generally believe to be more balanced. As Slaughter and May lawyers noted, "[i]t is possible that the 2002 Agreement will be more readily accepted by derivatives dealers than "end users" as the principal changes to the 1992 Agreement have been put forward by the dealer community."[81]

4.4.1.2. Competition and regulatory competition

4.4.1.2.1. ISDA European antitrust investigation

In the summer of 2013 the European Commission launched an investigation into CDS markets alleging that 13 banks as well as ISDA and Markit engaged in anticompetitive practices in violation of European competition law. The investigation followed the unsuccessful attempts made by two exchanges - Deutsche Börse and the Chicago Mercantile Exchange – to enter the CDS markets. As the Europeam Commission's statement of objections noted,

> "the exchanges turned to ISDA and Markit to obtain necessary licenses for data and index benchmarks, but, according to the preliminary findings of the Commission, the banks controlling these bodies instructed them to license only for "over-the-counter" (OTC) trading purposes and not for exchange trading. Several of the investment

[80] *Id.*
[81] Slaughter and May, *2002 Master Agreement: Guide to Principal Changes* (March 2003), available at https://www.slaughterandmay.com/media/38944/2002_isda_master_agreement_guide_to_principal_changes.pdf (last visited July 7, 2015).

> banks also sought to shut out exchanges in other ways, for example by coordinating the choice of their preferred clearing house."[82]

In December 2015 the Commission cleared the banks, but the investigation into ISDA and Markit is pending. Without prejudicing the outcome, it can be noted that ihe investigation is related to parametric benchmarks, and not the rules embodied in the MA or the CDs. The rules, if anything, enable competition by creating markets. Competition on the rules (at least within the same market structure) may not only harm compeititon, but also poses additional risks. When a European Master Agreement for Financial Transactions has been published in a collaborative venture between the European Banking Federation, European Savings Bank Group and European Association of Co-Operative Banks[83] ISDA was strongly opposed to these contracts. Consider the following passage:

> "we are deeply concerned by the prospect for fragmentation of derivatives documentation raised by the Banking Federation project. Prudent risk management and cost control considerations have led market participants to see the clear benefits of employing as few standard market agreements as possible, a position supported by regulatory pronouncements concerned with the potential legal risk of multiplicty of documents. Introducing a new agreement in the absence of a clear market need undermines these goals by adding to firms legal costs, complicating the transaction management process, delaying completion of documentation, confusing custoemrs, creating

[82] European Commission, Antitrust: Commission sends statement of objections to 13 investment banks, ISDA and Markit in credit default swaps investigation, Press release (1 July 2013).

[83] The EMA can document repurchase (repo), securities lending and derivatives transactions. The EMA was launched in 1999 and is especially suited to Eurozone and European Economic Area (EEA) jurisdictions but is also useable for cross-border transactions. The EMA sought to replace individual national level locally devised Master Agreements, which prevailed in certain jurisdictions prior to their accession to the Euro. It is not obvious that this contract is widely used.

> additional risk mangement burdens and raising potential prudential issues." [84]

4.4.1.2.2. OTC vs. exchanges

To the extent that there is space for regulatory competition, it is primarily with regard to swaps (and swaps only) between OTC and exchange.[85] One of the reasons why OTC markets attracted a lot of liquidity is that derivatives traded on exchanges have traditionally been cleared. Clearing may entail security, but it also entails costs. To the extent that clearing was not mandatory in the OTC space, many market participants choose to use OTC markets over exchanges. This is slowly beginning to change and an, as a result of post-crisis public efforts to regulate OTC derivatives, an increasing number of OTC is now also being cleared. New players, such as CCPs and SEFs, are entering the regulatory space.

Unlike CCPs, which have existed and served the securities industry for a long time, SEFs are traded facilities the business model for which has been created by regulation.[86] The fundamental purpose of a SEF is to connect market participants. In doing so, SEFs preform a variety of functions, including price discovery, order matching, unique swap identifier (USI) generation, submission of trades to the designated central counterparty and trade reporting to swap data repositories." [87][88]

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[84] *See* ISDA, *Letter to Patrice Cahart Re: European Master Agreement for Financial Transactions* (June 19th 1998), available at http://www.isda.org/speeches/pdf/european-master-agreement-for-financial-tansactions-19jun99.pdf (last visited November 13, 2013).

[85] As highlighted in a judgement of the European Court of Justice, OTC and exchange generally do not compete with each other. See Deutsche Börse AG v European Commission, Case T-175/12.

[86] The major players are the Chicago Mercantile Exchange, Intercontinental Exchange and London Clearing House.

[87] Jim Myers, Kimon Mikroulis, Paul Gibson, *Swap Execution Facilities: A Catalyst for OTC Market Change?* Crossings: The Sapient Journal of Trading & Risk Management (Spring 2014), available at http://www.sapientmphasize.com/content/dam/sapient/sapientglobalmarkets-/pdf/thought-leadership/Crossings_Spring14_SWAP.pdf (last visited July 7, 2015).

This has been said to move the OTC model closer to the exchange traded model, but it has its downside. As one ISDA representative recently noted,

> "ISDA believes now is the time to focus on ensuring regulatory regimes are consistent and harmonised across borders, and to ensure they support risk management that enables economic activity and growth. According to the organisation, many of the challenges stem from a lack coordination and cooperation between global legislators and regulators. Discrepancies in implementation schedules and in the substance of the regulation in different jurisdictions have emerged as a result, leading to the fragmentation of global liquidity pools. This reduces choice, increases costs, and could make it more challenging for derivatives users to enter into or unwind large transactions, particularly in stressed market conditions."

These developments highlight the importance of not only regulatory competition, but also coordination,[89] which is particulary important in transnational markets.

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[88]Even before these rules have been formally introduced additional initiatives have been undertaken which aim at preparing the ISDA MA for centralized clearing. For example, the Futures Industry Association, together with the ISDA has published the "FIA-ISDA Cleared Derivatives Execution Agreement." As the memorandum accompanying its release states, this Agreement only attempts to provide

> "some initial structure in what all agree is an uncertain legal and regulatory environment…[u]ntil cleared swap market rules and regulations have been adopted and implemented…this Agreement sets out certain terms and conditions that cleared swap market participants who enter into execution agreements may consider addressing, such as the parties' respective rights and obligations in the event a swap that is intended to be cleared fails to clear." *Id.*

[89] As an example, while data reporting can help increase informational and regulatory transparency lack of uniform data reporting format is a serious obstacle to successful implementation of that objective. In terms of data collection, the biggest hopeful is the FpML (Financial products Markup Language). FpML is "an open derivatives industry computer-readable format for communicating descriptions of derivatives transactions between and within firms, supported by ISDA. *See* http://www.fpml.org (accessed July 5, 2015). At the same time,

> "[w]hile FpML is widely used in the derivatives industry, it is important to note that not all derivative transactions can fully be reduced to FpML or another standardized computer readable language. For highly customized products it is not practical to create a standardized parametric XML representation that is suitable for confirmation purposes. For these products ISDA recommends that where electronic reporting is required, a summary

4.4.1.2.3. Regulatory competition and governance structure

Part of the solution to the problem of regulatory coordination is better structuring of the relationship between ISDA and public regulators. In late 2009 ISDA published a governance structure for the OTC derivatives industry's market practice and post-trade activities.[90] "The industry's governance structure determines its relationships with other industry stakeholders, including regulators and vendors, as well as other industry infrastructure providers."[91] Broadly speaking, the industry governance structure has been refashioned to resemble a three-layered structure comprising:

- the ISDA Industry Governance Committee (IIGC);
- the Steering Committees (SCs); and
- the Implementation layer.

The IIGC is at the center the structure. It is responsible for liaising with public regulators, including the CFTC, SEC, ESMA, FSA and other. It gets feedback from the steering committees and ISDA's board. It passes on instructions to the implementation groups.

> representation should be used. The information set forth in this letter should not lead the Commission to conclude that it is reasonable to require by regulation that all transactions be electronically confirmed and cleared using FpML. Such a rule would stifle the ability of the derivatives market to offer tailored products for clients and to innovate and create new solutions to clients' needs."

ISDA, Letter to the CFTC (December 21, 2010).

[90] ISDA, "OTC Derivatives Industry Governance Structure", 2nd Edition (15 December 2010) available at www.isda.org/c_and_a/pdf/Industry-Governance.pdf (last visited November 5, 2012).

[91] Id.

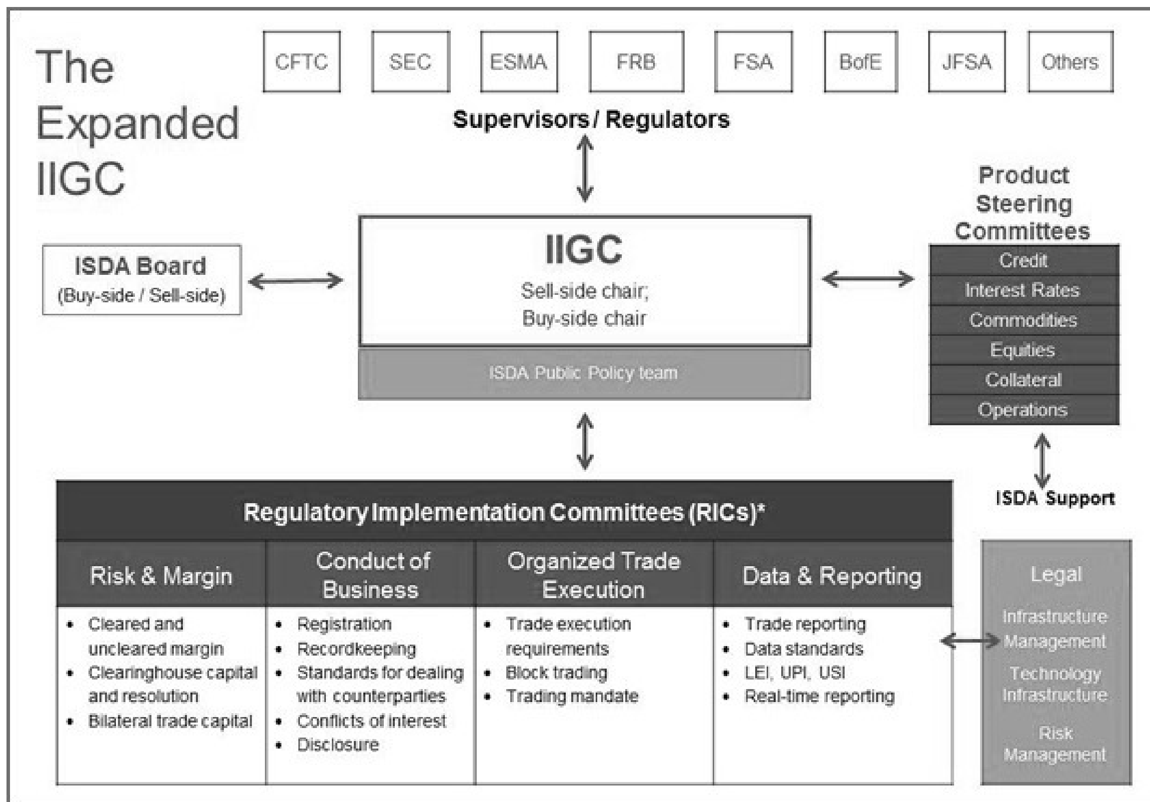

Figure 1 ISDA's governance structures (source: ISDA)

ISDA asserts that there are "two underlying and fundamental principles of the governance structure in relation to (i) where responsibility and ownership lie for the strategic direction of market practice and post-trade activities, and (ii) which groups are responsible for liaising with regulators, and at what levels."[92] This helps establish the channels through which regulatory competition is established.

In 2010 ISDA announced that is broadening the leadership of the ISDA Documentation Committee by forming an Advisory Board. The Advisory Board "will encompass buy- and sell-side institutions to better represent global documentation

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[92] *Id.* at 2.

needs across constituencies."[93] It will provide strategic guidance and leadership to the Documentation Committee's work on a range of topics, including new product documentation, resource allocation across projects, legal opinion scope and coverage of Amicus Briefs, and will replace the existing regional chairmanship structure.[94]

4.4.1.2.4. Regulatory coordination – Resolution Stay

Regulatory coordination has, in fact, proved to be the key element of sucessful implementation of certain public regulatory measures following the financial crisis. The measure concerned the operation of close-out netting, which – after the crisis – has become far from uncontroversial. The problem with the systemic risk argument in favor of the safe harbors has been identified by a number of scholars. Bliss and Kaufman in particular noted that this protection can lead to increase in systemic risk, in particular through concentration of a set of SIFI on that can kind of activity.[95] For example, the American Insurance Group (AIG) turned out to be exposed to collateral calls on derivatives to which it was a party that magnified its liquidity and solvency problems. As Skeel and Jackson pointed out, when AIG's financial difficulties became apparent the company was forced to begin posting collateral for its large portfolio of CDS [credit default swaps – MB] due to ratings downgrade. "AIG's counterparties demanded higher levels of collateral to be posted to the extent

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[93] ISDA Augments Documentation Committee Leadership, Adds Advisory Board with Buy-side Expertise (February 5, 2010), available at http://www.isda.org/media/press/2010-/press020510doc.html (last visited March 15, 2016).
[94] Id.
[95] Robert R. Bliss and George G. Kaufman, *Derivatives and Systemic Risk: Netting, Collateral, and Closeout*, 2 J. FIN. STAB. (1), 55-70 (2006). Edwards and Morrison pointed out that the argument relies on the premise that only the failure of a SIFI will lead to contagion and this hardly justifies a blanket exemption of all derivatives. Franklin R. Edwards & Edward R. Morrison, Derivatives and the Bankruptcy Code: Why the Special Treatment?, 22 Y. J. Reg. 91 (2005).

that further compliance with those demands threatened the existence of AIG."[96] To the extent that AIG was not able to satisfy them, its counterparties have netted and closed-out the transaction exposing AIG to massive losses, which, in turned, exposed other AIG's debtors. The situation became so dramatic, that the US Department of Treasury decided to intervene by effectively 'bailing-out' AIG.[97]

In the wake of the crisis, statutory special resolution regimes have been developed that, among other things, temporarily stay the exercise of certain default rights that arise in the context of resolution to give resolution authorities time to take actions to stabilize a failing SIFI; so long as certain creditor protections are satisfied, these temporary stays can become permanent overrides of resolution-based default rights. In the United States, Title VII of the Dodd-Franck Act provides for the mechanics of curtailment of those special rights. While on their face the mechanics seem to resolve the problem, there remain questions about the effectiveness of the DF Act mechanics, particularly when dealing with cross-border transactions. The mechanics mandated by the DF Act would clearly apply to a US entity such as AIG. But what about its foreign counterparties, such as financial institutions incorporated in the United Kingdom, Hong Kong, Japan, Germany or France? To the extent that they have not enacted such protections, the efforts of US authorities, could be impeded. As Scott O'Malia put it

> ". . . if a US financial group enters resolution, then Dodd-Frank would apply and a stay would be imposed on terminations by its derivatives counterparties – at least, those subject to US law. If that US company

[96] David Skeel & Thomas Jackson, *Transaction Consistency and the New Finance in Bankruptcy*, 112 COLUMB. L. REV. 152, 166 (2012).
[97] For a detailed account see United States. Congress. House. Committee on Oversight and Government Reform, The Causes and Effects of the AIG Bailout: Hearing Before the Committee on Oversight and Government Reform, House of Representatives, One Hundred Tenth Congress, Second Session, October 7, 2008.

> has traded with a UK counterparty under English law, however, then there is some doubt as to whether the stay would apply, potentially impeding the efforts of the US resolution authority to deal with the situation."[98]

One possibility of the addressing the problem was to have similar stays imposed on derivatives in those jurisdictions as well. However, many of those jurisdictions subscribe to the safe harbors model, which over the past decades became firmly entrenched in their bankruptcy laws. Even the enactment of extraordinary regulatory powers through means such as the Dodd Frank Act was likely to take a long time. The concern with this solution was that a cross-counter legislative solution was not a practical one.

Another possibility was to have financial institutions agree between themselves that they will stay certain contractual early termination rights of counterparties that might otherwise arise upon the resolution of such SIFIs. Accordingly, ISDA working with 18 largest banks and the Financial Stability Board developed a Protocol that will "impose a stay on cross-default and early termination rights within standard ISDA derivatives contracts between G-18 firms in the event one of them is subject to resolution action in its jurisdiction. The stay is intended to give regulators time to facilitate an orderly resolution of a troubled bank."[99]

4.4.2. Enforcement

4.4.2.1. Extra-legal

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[98] Scott O'Malia, "Comment: Solving the too-big-to-fail puzzle," FINANCIAL TIMES, (October 24, 2014).
[99] ISDA, *Major Banks Agree to Sign ISDA Resolution Stay Protocol* (October 14, 2014), available at http://www2.isda.org/news/major-banks-agree-to-sign-isda-resolution-stay-protocol (last visited, February 27, 2015).

Implementation of Resolution Stay suggests that ISDA's role extends beyond standard-setting and monitoring. By having the major dealers sign up to the Protocol ISDA effectively imposed the rule on other market participants (many of which, in particular hedge funds) where quite unhappy about the potential consequences. We have seen smilar market access restricting dynamic in the past. For example, while before the crisis many transactions were concluded without the MA in reliance on the so-called long-form Confirmations, nowadays, as Paul Harding notes "many banks will not trade with a counterparty, particularly an unrated one, unless they have signed ISDA Master Agreement first. This, of course, reduced ISDA backlogs where a deal has already been done but tends to infuriate traders who cannot understand why it should take so long to negotiate an ISDA Master Agreement." [100]

4.4.2.2. Legal

4.4.2.2.1. CDCs

ISDA also plays a role facilitating legal enforcement. We already noted the role of the CDCs. The CDCs facilitate enforcement by determining if triggering events have occurred. They also facilitate settlement by arranging for an auction. However, they have been subject to criticism as they are dominated by the sell-side.[101] The conflicted nature of the DC mechanism is mitigated in situations in which the 80% threshold required for a DC decision is not met, and the decision goes to external

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[100] Harding, *supra* note 253 at 12.

[101] *See* ISDA, 2016 Credit Derivatives Determinations Committees Rules, available at http://dc.isda.org/wp-content/files_mf/1452524496NY23756850v13DC_Rules__Jan_2016_Update.-pdf (last visited March 14, 2016). For a discussions, including critism see Maciej Borowicz, Private Power and Interntional Law: the International Swaps and Derivatives Association, 5 European Journal of Legal Studies (2015). See also Dan Awrey, The Limits of Private Ordering Within Modern Financial Markets 34 Review of Banking and Financial Law (2015).

review.[102] According to ISDA, the robustness of the review process derives from its reliance on independent, third-party professionals with market and/or legal expertise. External review involves formal arbitration-style briefing and argument, with all written arguments made public. ISDA members can submit a brief in connection with the reviewed question.[103]

4.4.2.2.2. Arbitration

CDCs are not arbitral institutions. Arbitration has, notably, been long missing from the ISDA regime. As Peter Werner notes arguably this is because ISDA emerged from the sell-side and there was no need for it. As it started to encompass a broader membership base issues started to arise. [104] In 2013 ISDA published model arbitration clauses for use with the ISDA MA. As the ISDA Arbitration Guide notes,

> "The clauses have been drafted primarily with cross-border transactions in mind and based upon member feedback. In particular, the choices of seats and arbitral institutions have been determined on

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[102] *Id.* 4.3 Composition of the External Review Panels
"(a) Conflicts. Upon the existence of an Eligible Review Question, any Convened DC Voting Member may identify any Pool Member from the External Review Panel List for the same Region as such Convened DC for purposes of analyzing their availability and potential conflicts of interest with respect to such Eligible Review Question (each such Pool Member, a "Potential External Reviewer"). Each Potential External Reviewer shall notify the Convened DC, via the DC Secretary, by 5:00 p.m. Relevant City Time on the first Relevant City Business Day after being designated a Potential External Reviewer or such other time as the Convened DC Resolves by a Majority, of its availability and disclose to the Convened DC any conflict of interest which exists or is foreseeable with respect to either the Reviewable Question or the related DC Questions which may be deliberated by the Convened DC. Any 46 Convened DC Voting Member or Convened DC Consultative Member may also raise an existing or potential conflict of interest with respect to a Potential External Reviewer or may ask for additional information to be disclosed." *Id.*

[103] *See e.g.* briefs submitted in connection with the CEMEX External Review, available at: http://www.isda.org/dc/view.asp?issuenum=2009100901 (last visited February 20, 2016).

[104] King & Wood Mallesons, The ISDA-fication of arbitration (14 August 2014), available at http://www.kwm.com/en/uk/knowledge/insights/the-isda-fication-of-arbitration-an-interview-with-peter-werner-20140814 (last visited February 20, 2016).

> the basis of members' comments as to which to priorities; inclusion in this Guide is not an endorsement of these seats and institutions to the exclusion of others, and parties are, of course, free to choose other seats and rules if they wish."[105]

4.4.2.2.3. Courts

Not all disputes are suitable for arbitration. Legal enforcement of derivatives is something that has been rather carefully crafted. In the case of derivatives this meant seeking exemptions from gambling laws and bankruptcy law. The latter is particularly interesting. Close-out netting to work in bankruptcy a special exemption from the general rule that stays all contract actions had to be granted. ISDA worked towards this using precisely this argument namely that this not as much important for the individual transactions (even though it clearly benefited the users), but for the market. It persuaded regulators. Since the early 1990s the U.S. Code provided for such a safe harbor in the US and similar provisions have been enshrined in bankruptcy codes around the world after ISDA's lobbying.[106]

Outside of its home jurisdictions – New York and London[107] - ISDA has lobbied national governments and competent authorities on the desirability of netting, especially close-out netting, and how to go about facilitating this under existing legislation, how to improve incoming omnibus legislation or in relation to

[105] ISDA Arbitration Guide (2013), Section 3.4.

[106] In 2006 ISDA released what is known as the Model Netting Act in order to facilitate recognition of close-out netting across the world. The Model Netting Act is available on ISDA's website under "Opinions," available at http://www2.isda.org/functional-areas/legal-and-documentation/opinions/ (last visited on November 20, 2012). This section of ISDA's website includes a list of jurisdictions, which, however, has not been updated since 2006.

[107] As Flanagan notes, in the mid-1990s, ISDA began formally internationalizing the organization's staff by opening an office in London. "From the time of its creation, the London office began to participate in documentation projects (taking the lead role in some) and to coordinate European input into the organization." Flanagan, *The Rise*, *supra* note 4.

the introduction of new legislation altogether. ISDA furher commissions legal opinions covering enforceability of close-out netting.

> "The practice of seeking legal opinions from senior legal practitioners involves ISDA posing a number of questions 'in the context of a fact pattern' tailored to the specific characteristics of the OTCD market in the jurisdiction in question. These opinions are made available to ISDA members and provide a mechanism for boosting confidence that transactions are not liable to be disrupted by unforeseen interpretations of the provisions. These opinions indicate the enforceability of netting and the status of safe harbors in individual jurisdictions."[108]

Even these carefully crafted measures cannot guarantee enforcement. A good example is the discussion of section 2(a)(iii). The problem arose in a case concerning one of the entities in the Lehman Brothers Holding International – Lehman Brother Special Financing, which was responsible for many of the derivatives trades of the group.[109] Upon LBHI's bankruptcy filing, one of LBSF's counterparties, Metavante ceased to make payments, but did not terminate the agreement, as it owed money to LBSF. The Bankruptcy cour ruled in favor of Lehman finding that through its inaction Metavante has implicitly waived its rights to terminate the contract.

As Cadwalader lawyers note in their insightful review of the case:

> "The court noted that while the Bankruptcy Code does not specify that non-defaulting counterparties must act promptly after a filing in order to rely on the protection afforded by its safe harbor provisions, the legislative history of the Bankruptcy Code establishes that Congress intended only to shield parties to financial contracts from the systemic risk that would result from cascading losses due to a

[108] John Biggins, OTC Derivatives (Case Study Report, October 2011) at 81 (on file with author).
[109] In re Lehman Brothers Holdings, Inc., Case No. 08-13555 et seq. (JMP) (jointly administered).

> counterparty's bankruptcy filing. Because the degree of systemic risk that could result from a single filing diminishes over time, both this decision and existing precedent held that the safe harbor only protects actions that are taken reasonably promptly after the filing date."[110]

The Metavante decision came at odds with a decision of the English Appeal's Court in *Lomas v JFB Firth Rixson*. Not only under English law are such ipso facto clauses enforceable, in this particular case the court found that under English law payments could in fact be withheld indefinitely. [111] The Court observed that it is only the performance of the obligation that is being suspended, and not the obligation itself.[112] This interpretation, the court noted, is in accordance with the express language of s.2(a)(iii), which states that the condition precedent to payment is to subsist for so long as the event of default or potential event of default "has occurred and is continuing." As Moller et al. note, "the suggestion that the suspension lasts only for a reasonable period was, according to the judge, contrary to that express provision as to the duration of the payment suspension."[113]

[110] Mark Ellenberg, Nick Shiren, Leslie Chervokas and Assia Damianova (Cadwalader), *Same question, different outcome: s 2(a)(iii) of the ISDA Master Agreement under English and US insolvency law*, BUTTERWORTHS J. INT'L BANK. & FIN. L. 149-152, 150 (March 2011).
[111] Lomas v. JFB Firth Rixson Inc. [2012] 2 All E.R. (Comm.).
[112] Id. at …
[113] Stephen H. Moller, Anthony R. G. Nolan, Howard M. Goldwasser, Section 2(a)(iii) of the ISDA Master Agreement and Emerging Swaps Jurisprudence in the Shadow of Lehman Brothers, J. INT'L BANK. L. & REG., Issue 7 (2011). As they further noted,

> "before dealing with each of the various alternative interpretations of s.2(a)(iii) advanced by the Joint Administrators and by the respondents, the judge referred to two general considerations in interpreting s.2(a)(iii). The first was the need, given the widespread use of the ISDA master agreement, for 'clarity, certainty and predictability in its interpretation.' The second concerned the limited circumstances in which an English court will find that a term is implied into a contract . . There is no scope for the court to find that a term is implied simply because it makes commercial sense or even because reasonable parties to the contract would have adopted the term had it been suggested to them." Id.

4.5. Regulatory effectiveness

4.5.1. Counterparty risk

There is a number of trends identified in particular throughthe ISDA Operations Benchmarking Surveys (OPS),[114] which speak to reduction of counterparty risk. One trend is the decline inaverage monthly levels of outstanding confirmations. The tables below show the average monthly levels of all confirmations outstanding expressed as a day's worth of business and relative to the size of the transaction.

Table 3 Average monthly levels of confirmations outstanding

G15	2009	2010	2011	2012	2013
Interest Rate	6,9	2,9	2	1,5	1
Credit	3,5	1,0	0,4	0,4	0,3
Equity	9,7	7,4	6,5	6,5	6,1
Currency Options	2,6	1,3	1,8	1,8	1,6
Commodity	2,6	1,3	1	1,0	0,7

Large	2009	2010	2011	2012	2013
Interest Rate	6,8	2,8	2,1	1,5	0,9
Credit	3,5	1,0	0,5	0,4	0,3
Equity	9,7	7,3	6,7	6,4	5,0
Currency Options	2,6	1,3	1,8	1,8	1,5
Commodity	2,4	1,2	0,9	1,0	0,6

[114] "The ISDA Operations Benchmarking Survey identifies and tracks operations processing trends in privately-negotiated, over-the-counter (OTC) derivatives. The results provide individual firms with a benchmark against which to measure the promptness and accuracy of their trade data capture, confirmation, and settlement procedures, as well as the level of automation of their operational processes." ISDA Operations Benchmarking Survey (2013).

Medium	2009	2010	2011	2012	2013
Interest Rate	4,7	1,3	2,2	1,2	1,4
Credit	2,4	1,6	0,6	0,1	0,1
Equity	3	4,3	2	1,5	3,5
Currency Options	1,8	0,5	0,6	0,4	0,4
Commodity	1,5	1	1,1	1,0	2,2

Small	2009	2010	2011	2012	2013
Interest Rate	5,4	3,5	1,8	1,9	2
Credit	3,6	1,3	1,2	1,4	0,7
Equity	9,8	7,2	6	4,1	2,9
Currency Options	6,4	1,3	3,3	3,1	6
Commodity	2,9	1,6	7	1,8	1

The ISDA OSP also suggests that a signed MA is an important criterion for prioritization of outstanding confirmations.

Table 4 Criteria used to prioritise outstanding confirmations

	Interest Rate	Credit	Equity	Currency Options	Commodity
Unrecognised Trade	1	1	1	2	2
Business Days Outstanding	2	2	2	1	1
Type of Counterparty	3	3	3	3	3
Master Agreement Signed	4	4	5	5	4
Type of Transaction	5	5	4	4	5
Net Present Value	6	7	7	6	6
Caollateral Held/ Collateral Agreement Signed	8	6	6	7	7
Credit Rating of Counterparty	7	8	8	7	10
Broker Confirmation Checked	9	11	8	11	7
Positive Feedback from Settlement Departments	9	9	11	10	9
Others	11	9	8	9	11
Positive Feedback from Collateral Departments	12	12	12	12	12

4.5.2. Liquidity/information

Following the crisis, ISDA developed the Interest Rate Swap Liquidity Test, which looks at outcomes with regard to information and liquidity.[115] The test essentially consist of a simulation in which selected large investment firms solicit price quotes from dealers on selected types of interest rate swaps. As ISDA noted, "the dealer quotes were then compared against each other, and to Bloomberg page IRSB, to measure and benchmark their competitiveness and the market's liquidity and transparency."[116] According to the IRS Test's results there were very small variations between price quotes (from 0.0000% to 0.013%) with the average difference between the best and worst quotes for each swap was a mere 0.0038%. The interactions have also been very quick and in many cases facilitated by "live" dealers screens. Overall, the test is said to have demonstrated "that these markets are extremely liquid with excellent price transparency and competitiveness for standard-structure swaps between active market participants and major dealers."

ISDA has also conducted separate end-user surveys to evaluate transparency in the market. As ISDA noted,

> "in terms of price competitiveness: most surveyed end-users believe the prices they receive from dealers for IRS are competitive; very few believe that they are not competitive. On a 1 to 5 scale, 62% rate IRS price competitiveness at a 4 or 5. Only 10% of IRS end-users rate it at a 1 or 2.

[115] Atrevida Partners, Interest Rate Liquidity Test (Commissioned by ISDA, November 2010), available at http://www.isda.org/media/pdf/ISDATestReport.pdf (last visited May 16, 2014).
[116] *Id.* at 3.

> In terms of liquidity, a strong majority of the surveyed IRS end-users rate the liquidity of the IRS market as equal to or better than the liquidity of the FX, equity, corporate bond and ABS markets."[117]

Admittedly, this was for IRS. However, CDS information has also improved when Markit established the first pricing service for CDS. By collecting data from market makers, cleaning and aggregating it, and then sending it back to users, CDS traders could gain access to a market-wide perspective on particular credits, rather than the view of a single market maker.[118] This has been an important move towards introducing greater pre-trade transparency.

Even though it is hard to say how documentation contributed to these results, ISDA as well as other market actors suggests that standardization is among the key factor affecting liquidity. Among the factors affecting confirmation dispatch times identified in the 2013 Survey non-standard language was among the most important ones.

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[117] *Id*.

[118] *See* Markit Financial Information Services at http://www.markit.com/Product/Pricing-Data-CDS.

> "More specifically, the data consisted of daily composite spread quotes on CDS contracts with maturities at 6 month, 1, 2, 3, 5, 7, 10, 20, and 30 years. These composite quotes represent the average of the midpoint of bid and ask quotes from a number of major dealers. Markit calculates daily values only for contracts that have quotes from at least three different contributors after they filter out outliers, stale quotes, and flat curves."

Over time Markit has expanded the range of data it collects. Today it also faces major competition from services such as Bloomberg. *See* Gillian Tett, Bloomberg to aid CDS traders, FIN. TIMES (July 4, 2006).

Table 5 Factors affecting confirmation dispatch

	Interest Rate	Credit	Equity	Currency Options	Commodity
New or Non-Standard Product	1	2	2	1	1
Awaiting Data or Approval from Trades/Marketers	2	1	1	2	2
Non-Standard Language	3	3	3	4	3
High Volumes	4	6	4	3	4
Systems/Technology issues	6	3	5	5	6
Awaiting Data or Approval from Legal/ Compliance	5	6	6	6	5
Awaiting Data/Details from External Source such as KYC Documentation, Static Data etc.	7	5	7	7	7
Awaiting Data or Approval from Credit or Collateral Department	8	8	8	8	8

More recently ISDA's end-users' survey looked into the perception of the effect of public regulatory measures aimed at increase of regulatory transparency on liquidity. 54% of the users surveyed agreed that fragmentation is occurring as a result of the regulatory framework being put into place in key jurisdictions.[119] 52% agreed that this has a negative impact on their ability to mange risks and 36% agreed that this is as a result of liquidity deterioration. 40% agreed that this has had a small impact on the price of hedging.

[119] ISDA, A survey of issues and trends for the derivatives end-user community (April 2015).

4.5.3. Systemic risk

While there have been some early initiatives to measure market outcomes by ISDA before the financial crisis, it was only after the crisis that these initiative have gained momentum, largely because the increased demand for public information about the working of derivatives markets, which have been seen as one of the concurrent causes of the financial crisis. In this regard, relying on data from the Office of the Controller of the Currency Quarterly Report on Bank Trading and Derivatives Activities First Quarter 2011, ISDA found that:

- "Very limited counterparty credit losses at the bank level. Since 2007, losses on OTC derivatives positions in the US banking system due to counterparty defaults have totaled less than $2.7 billion, a period that includes the failures of over 350 banks with assets of more than $600 billion, as well as the failures of firms such as Lehman Brothers, Fannie Mae and Freddie Mac.
- Netting plays a major role in reducing counterparty credit risk. After netting, the Net Current Credit Exposure (NCCE) of the US banking system is only 14 basis points, or 0.14%, of the $244 trillion of the gross notional outstanding held at US banks."[120]

4.6. Summary

The contractual model of regulation offers a useful way of thinking about global derivatives markets and, specifically, their regulation. Global derivatives markets are regulated through a set of rules embodied in a set of contracts developed by the

[120] ISDA, Counterparty Credit Risk Management in the US Over-the-Counter (OTC) Derivatives Markets (August 2011).

ISDA – the ISDA MA, the ISDA CDs and various Protocols. On the functional side, the ISDA MA and ISDA CDs seek to mitigate counterparty risk through mandatory settlement, cash settlemet, delayed settlement and BISO provisions. The ability of the parties to tailor their relationships under the MA through the Schedule, on the one hand, and the limited ability of the parties to alter the description of the asset on the other, are designed to increase liquidity. Both the ISDA MA and the CDs include certain provisions, which seek to streamline information flows, including certain representations and warranties. However, the most comprehensive suite of information related provisions has been introduced through the ISDA DF Protocols. The ISDA also includes a whole suite of provisions designed to address systemic risk – this includes the single agreement rules, close-out netting provisions and the provisions for clearing. The scope of the regulatory function is defined primarily through the ISDA, however we have observed a rather substnatial degree of regulatory competition from both exchanges/SEFs and public regulators, which explains the emphasis on information in the DF Protocol. From an enforcement perspective it relies primarily on legal mechanisms, but a role of de facto restricitions on market access has also been identified.

Chapter 5
Regulatory contracts in financial markets: comparative observations

5.1. Purpose and method of comparison

The application of the contractual model to loan and derivatives markets helped us to highlight certain features of those markets. Regulation of loan and derivatives markets revolves around rules, which are defined by the LSTA, LMA and ISDA and take the form of contracts enforced by market participants and courts. There exist remarkable similarities as well as some differences with regard to the scope of the regulatory function, which can be attributed to similarities and differences in the structural features of the regulatory contracts (governance of the organizations and regulatory competition). The purpose of this chapter is to examine how the similarities and differences in structure (in particular with regard to governance and regulatory competition) that have been identified in the case studies bear on definition of the scope of the regulatory function. To answer this question we will employ comparative methods focusing on the impact of structure as an independent variable on the scope of the regulatory function as a dependent variable. In the discussion that follows we, first, describe comparatively the functional scope of regulatory contracts, second, describe comparatively the structural features of regulatory contracts, third, examine the impact of the structure on the functional scope and, finally, seek to attribute effectiveness of the regulatory contracts to the regulatory impacts.

5.2. Functional dimension

5.2.1. Counterparty risk

Settlement delays are problematic from a market point of view because they result in uncertainty concerning the attribution of rights and obligations of the parties to a transaction and parties to subsequent trades. In the case of both the LSTA STC and LMA STC this uncertainty is mitigated through 'trade is a trade' provisions, which provide for validity of oral trades and the 'mandatory settlement' provisions, which induce parties to settle even if there are some obstacles with regard to the form of settlement they had originally chosen. [1] Under both regulatory contracts, if the transaction cannot close as an assignment, it will close as participation. The parties are further incentivized to settle quickly though the delayed settlement provisions, which apply to par trades under both the LSTA and LMA documentation.

ISDA's settlement provisions perform a similar function to the settlement provisions in the regulatory contracts deployed in loan markets.[2] In particular, in the case of physical settlement of CDS on loans under the ISDA CDs, if the loan cannot be assigned, the transaction can still settle as participation. ISDA MA also has a delayed settlement provisions encompassing interests on defaulted payments (when cash settlement applies) and compensation for defaulted deliveries (when physical settlement applies).

Settlement risk	**LSTA**	**LMA**	**ISDA**

[1] *See* Section 2.3.3 (for the LSTA) *and* Section 3.3.3 (for the LMA) supra.
[2] See section 4.3.3.

Trade is trade	Yes	Yes	No
Mandatory settlement	Yes	Yes	Yes
Delayed compensation	Yes	Yes	Yes

Parties to transactions that fail to settle oftentimes have to find replacement for their trades. This is true in particular of CLO managers in the context of loans and derivatives dealers who have to offset their exposures. In the case of loans replacement risk has been addressed through the BISO provisions. The LSTA applies to both par and distressed trades and LMA one only applies to par trades.[3]

BISO is separate from delayed compensation. The BISO provisions under both the LSTA STC and LMA STC refer to pricing mechanisms operated or supported by the the LSTA and LMA, respectively, which resolve disputes related to disagreements related to the pricing of substitute transactions. ISDA also has a BISO mechanism that applies to failed bond trades.

Each of the LSTA STC, LMA STC and ISDA CDs provide for cash settlement provisions. In the case of loans, if settlement through participation is not possible, the parties will have to find an alternative, mutually agreeable form, which will typically take the form of cash settlement. ISDA CDs provide for cash settlement

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[3] *Compar*e Section 2.3.3.4 (for the LSTA) with 3.3.3.4 (for the LMA). The LSTA introduced BISO for par as early as 2009 and for distressed later in 2011. This is because distressed trading is generally associated with greater complexities. The LMA started with BISO for par on 2010, but it is not unlikely that this will also soon encompass distressed trades.

when physical settlement is not available.[4] The viability of the CDS cash settlement provision is further enhanced through operation of the CDC and auction mechanics. 'Hardwired' into the universe of ISDA transaction through the Big-ban Protocol, both CDC and auctions provide an efficient mechanics for setting the price of the defaulting assets.

Replacement risk	**LSTA**	**LMA**	**ISDA**
BISO	Yes	Yes	Yes
Replacement pricing mechanics	Yes	Yes	Yes

Default risk is dealt primarily through termination provisions. Termination provisions enable the non-defaulting counterparty to close-out the transaction and walk away from the deal upon default of the counterparty. ISDA's close-out provision[5] set the precedent for addressing default risk across financial markets. The provision is included in the ISDA MA so that the mechanism covers counterparty risk under all transactions with a given counterparty. This is achieved through operation of the single agreement rule. [6] LMA's termination provision has been modeled after ISDA's. Under the LMA STC termination is optional whenever the counterparty is deemed insolvent at any time between trade date and settlement date. LSTA's forms do not include such provision. In the ISDA case

[4] See Section 4.3.3.2.
[5] *See* Section 4.3.4.2 supra.
[6] See Section 4.3.4.1 supra

default risk has more recently been further reduced through provisions for clearing.[7]

Default risk	**LSTA**	**LMA**	**ISDA**
	No	Yes (limited)	Yes

5.2.2. Liquidity

All contracts contain provisions facilitating search and bargaining.[8] While the search process in OTC markets is fairly simple due to a limited number of actors on the sell-side, the bargaining aspect is critical and this is where contractual documentation has the greatest role to play. Standardization generally facilitates bargaining, however, each of the LSTA STC, LMA STC, the ISDA MA leave the parties some discretion as to how to structure their relationship thereby, depending on the context, providing the incentives to either the sell-side or the buy-side to enter into the relationship. This is why we have some discretion with regard to interest, fees and other in the case of the LSTA and LMA. Similarly, in the case of ISDA the parties can adjust their counterparty exposure through the Schedule. This kind of liquidity-enhancing standardization is usefully understood as 'default standardization'.

While a certain degree of flexibility with regard to trading rules enhances liquidity, liquidity of a particular asset is enhanced through restrictions on modification of the underlying rights. There is a number provisions in primary market documentation, such as utilizations (in the case of revolving facilities),

[7] See Section 4.3.4.3 supra.
[8] See Section 2.3.2. (for the LSTA), 3.3.2. (for the LMA) and 4.3.2. (for ISDA).

choice of law and other that may have liquidity and, indeed, settlement implications with potential liquidity implications. The same is, of course, true of assignability provisions as well as certain more idiosyncratic provisions, such as creation of security over rights in favor of central banks. Similarly, in the case of ISDA, whilst the ISDA CDs give the parties some scope of maneuver, it is more restricted than in in the case of the ISDA MA.

5.2.1. Information

Both the LSTA and LMA seek to improve information flows through rules pertaining to provision of credit agreements, confidentiality and representations and warranties (including step-up protections).[9] While the rules have been substantially similar, there were some differences with regard to the scope of representations provided to the seller. Whereas the LSTA only provide for the seller's representations, the LMA representations also provide for representations on behalf of all predecessors in title. There also existed differences in the guidelines concerning trading on confidential information. The LSTA allows market participants to trade on borrower confidential information, but this is not the case for LMA.

While ISDA has historically offered similar rules, more recently it developed rules that go beyond improvements in information flows and facilitate more exchange-like transparency measure revolving around pre-trade and post-trade transparency.[10] Specifically, ISDA's documentation puts greater emphasis on pre-trade informational transparency through the DF Protocol. Among the most

[9] See Sections 2.3.1. (for the LSTA) and 3.3.1. (for the LMA).
[10] See Section 4.3.1.

important provisions are the information provisions imposed on swap dealers to provide information about scenario analysis. In terms of post-trade transparency, the Protocols authorized disclosure of certain information to public regulators, including in case when the counterparty is not subject to similar requirements in its country of incorporation.

5.2.4. Systemic risk

Default risk is particularly problematic in the case of large dealers. The default of a large dealer transforms default risk into systemic risk. To the extent that systemic risk is generated through interconnections and these interconnections are established through contracts, contracts are also the best mechanisms to cut these interconnections and reduce contagion. From the outset ISDA argued that its counterparty risk provisions can help mitigate systemic risk.[11] Termination provisions under the LMA STC introduced 2011 have also been designed with systemic risk inmind.

Insofar as primary market loan documentation is concerned, the MCPs introduced by the LMA in 2009 as optional for inclusion in its Investment Grade Agreement[12] as well the contractual recgonition of bail-in provisions found in both the LSTA and LMA primary market documentation were all designed with systemic risk in mind.[13]

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[11] See discussion in Section 4.3.4 supra.
[12] See Section 3.2.3.4 supra.
[13] Compare Section 2.2.3.4 with Section 3.2.3.4 supra.

5.3. Structural dimension

5.3.1. Standard-setting and monitoring

5.3.1.1. Governance

5.3.1.1.1. Membership

In the case of each of the LSTA, LMA and ISDA the regulatory function is defined by the organization.[14] In each case the organization is a nonprofit set up by the sell-side.[15] In fact, initially, membership was limited to the sell-side only. However, all three organizations soon expanded their membership to encompass the buy-side. This meant, in the case of the LSTA and LMA, investors and, in the case of ISDA, various parties purchasing financial risk protection, including investors, corporations, municipalities and other. A large proportion of membership is constituted of law firms (this is true in particular of the LMA, where more than half of the members are law firms). Other actors include financial data companies (including credit rating agencies), clearing institutions, exchanges, international organizations and various other public organizations, including central banks. Chart 6 illustrates the current cross-sectional composition of membership across the three organizations.

[14] See Section 2.4.1.1.1. (for the LSTA), 3.4.1.1.1. (for the LMA) and 4.4.1.1.1. (for ISDA).

[15] The LMA is an English company limited by a guarantee, but the structural features of that type of company are broadly similar to that of a non-for-profit corporation under New York law. In particular the company typically does not have share capital (and shareholders), but is merely guaranteed by its members.

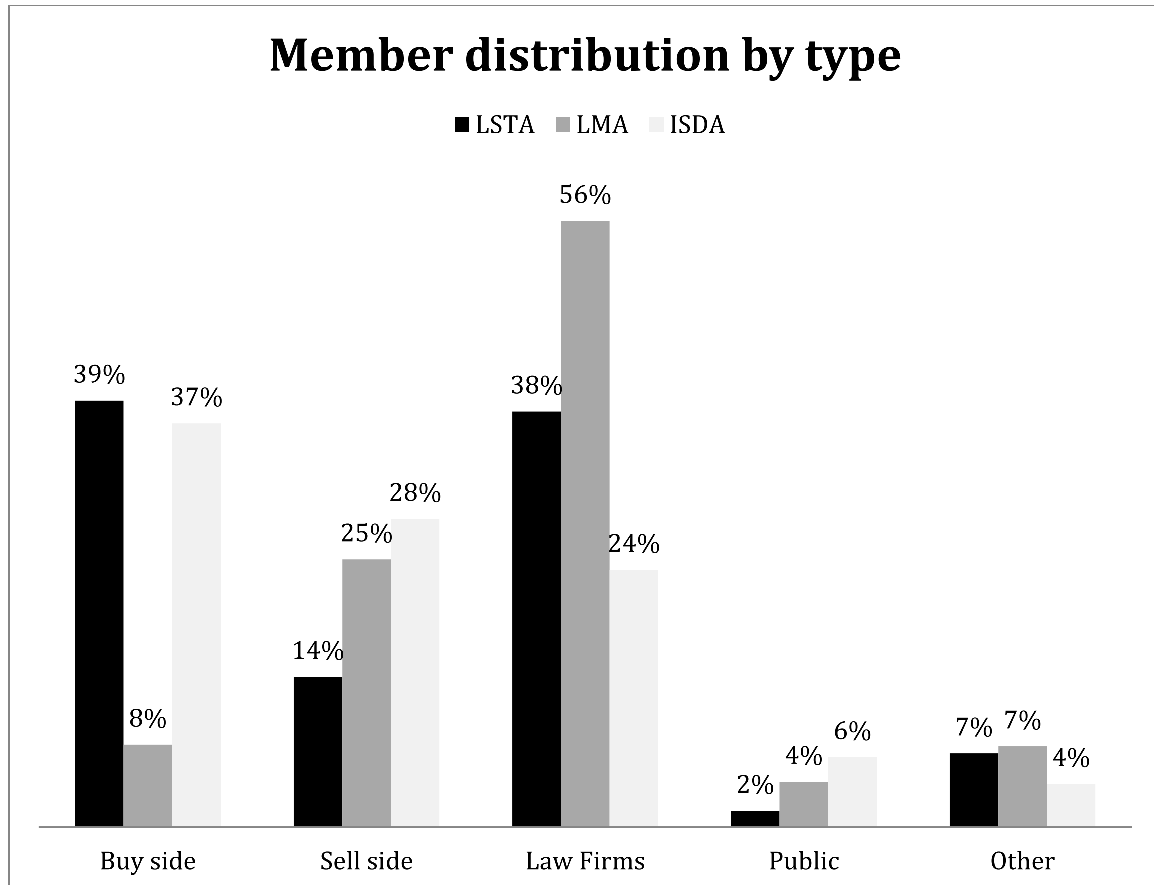

Chart 6 Membership distribution by type (cross-sectional comparison) (source: LSTA, LMA, ISDA)

Expansion of membership was accompanied by differentiation of rights of the members in the governance of the organizations. These were, in all cases, linked to the type of involvement in the market. Generally, sell-side representatives have the greatest powers, including the power to select directors. Buy-side organizations only have that right in the LSTA. Other members are restricted to participation in other activities of the organization, including committees, working groups, access to documentation, data etc.

5.3.1.1.2. Board of Directors

This typically translates to their underrepresentation (or lack of representation) on the boards of the organizations. Both the LMA and ISDA boards of directors tend to be dominated by the sell-side.[16] The LSTA has a more balanced board.[17] In each case, but the LMA, we identified a trend towards enlargement of the boards and greater inclusion of the buys-side.

5.3.1.1.3. Funding

All three organizations fund themselves primarily through membership fees. There a few models possible. The most sophisticated one has been developed by the LSTA, which charges membership fees based on calculated involvement in the market.[18] A much simpler way is to charge flat fees based on the type of institution like the LMA and ISDA.[19] A smaller portion of funding is also derived from various other activities, such as organization of conferences, events etc.

5.3.1.1.4. Committees

Activities of the organizations channeled primarily through committee and working groups.[20] Documentation committees tend to be fairly inclusive. Each organization has made efforts to account for as broad of a member base as possible aware of the fact that it would ultimately be general acceptance that would drive the success of those documents and, ultimately, the markets. However, there do not seem to exist any clear rules or procedures used to develop the rules. Rather, development of the

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[16] Compare Sections 3.4.1.1.2. (for the LMA) and 4..4.1.1.2 (for ISDA).
[17] See Section 2.4.1.1.2. However, while the role of the boards in each case is important, also the executive performs an important role is the driving force behind many of the initiatives.
[18] See Section 2.4.1.1.3.
[19] See Sections 3.4.1.1.3 (for the LMA) and 4.4.1.1.3 (for ISDA).
[20] Compare Sections 2.4.1.1.4 (for the LSTA), 3.4.1.1.4 (for the LMA) and 4.4.1.1.4 (for ISDA).

rules typically follows an *ad hoc* procedure and tends to be lead by groups with greatest interest in a particular matter. Further, inclusing across the committees is not equal and access to certain committees can be restricted to a certain group of members. In each case this has been true in particular of regulatory committees, which liaise with public regulators.

5.3.1.2. Competition and regulatory competition

Competition is one of the most interesting dimensions of regulatory contracts and the key for understanding of the role of regulatory contracts within the greater regulatory scheme of things. Formally speaking, only ISDA faced antitrust scrutiny, however, it is clearly also on the LSTA's radar given its fairly extensive antitrust guidelines, which it asks its members to oberve. Arguably, the principal concern with the activities of these organizations from an antitrust point of view is that they may facilitate price fixing. While not implausible, it seems somewhat unlikely especially given that all organizations have largely outsourced their data collection and benchmark setting. Indeed, the European antitrust proceeding against ISDA looks primarily into the acitivites of Markit – a private corporation, which provide data support services for a number of markets, including derivatives markets.

In theory, there is also the possibility that regulatory contracts themselves may harm competition. That is to say, the rules contained therein may be anticompetitve. While not implausible (especially with regard to primary loan market documentation – 'blacklisting' comes to mind), it should be noted that the rules, in the first place, create competition. The rules created markets, which – in the case of loan markets – compete with bond markets and – in the case of OTC derivatives – compete with exchange-traded derivatives. Regulatory contracts held establish alternative markets (loans vs. bonds) and alternative market structures

(OTC vs. exchanges). This clearly is a pro-competitive effect enhnacing the width and depth of capital and financial markets.

From that point of view it may be, both conceptually and normatively, advisable to think about the competition these organization face and should face as *regulatory competiton*. While limited, there is space for regulatory competition between US and European loan markets,[21] and perhaps more importantly between OTC and exchange-trade swaps. [22] One of the challenges for public regulators is to oversee and faciliate that kind of regulatory competition. Notably, any type of regulatory competition between private and public regulators has been missing in the case of loan markets. The ISDA case study is a much better template for how regulatory competition can be managed, provided that this also requires a certain degree of regulatory coordination.

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[21] We have identified very few examples of regulatory competition within loan market. One of the few exceptions where trade associations in the same class have competed is the LSTA and LMA trading guidelines. While the former allow for trading on borrower confidential information, this is not the case with the latter. As Fransella notes,

> "Neither the LMA Guidelines nor the accompanying press release discusses the rationale for this departure from LSTA practice, with which the LMA has in recent years generally tried to move toward harmonizing. The reference to whether a transaction "adversely affect[s] other members of the syndicate/ market," however, suggests that the LMA may view trading that takes place solely among "insiders" to be antithetical to the health of the loan market, and may be trying to promote an ethos in which trading opportunities must be or ought to be shared with the market at large. The LMA Guidelines should also be considered in the context of the market trend toward purchases of loans by borrowers, sponsors, or their respective affiliates or controlled funds, which trend largely occurred after issuance of the LSTA Guidelines and could be seen as increasing the opportunities for insider dealing in syndicated loans to the exclusion of other market participants." Michael Fransella, LMA Release Guideliens for Use of Nonpublic/Confidential Information in Secondary Loan Trading (June 16, 2011), Morrison & Foerster Client Alert (available at http://media.mofo.com/files/Uploads/Images/110615-LMA-Guidelines-Secondary-Loan-Trading.pdf) (last visited February 15, 2016).

[22] See Section 2.4.1.2 (for the LSTA), 3.4.1.2. (for the LMA) and 4.4.1.2 . (for the ISDA).

5.3.1.3. Impact of structure on the functional scope

In this section we will outline the link between the structural and functional dimension in some more detail. Firstly, the fact the scope of the functional dimension encompasses certain regulatory considerations (in particular counterparty risk and liquidity) in all three case studies seems to be corelated with the fact that all three organizations seek, through broad membership base, incorporate interests of both side of the marekts. The sell-side needs the buy-side. While the inter-dealer market is important, a large part of selling revenue for dealers comes from dealer-to-customer interactions. Given that, in both the case of loan and derivatives markets, the markets were new, a great deal of efforts was required to prompt development of the buy-side. This required not only marketing efforts, but also recognition of concerns that the buyside may have in entering these new markets. This is reflected in the composition of the documentation committees. Documentation committees tend to be fairly inclusive. Each organization has made efforts to account for as broad of a member base as possible aware of the fact that it would ultimately be general acceptance that would drive the success of those documents and, ultimately, the markets.

Incorporation of the buy-side is not always easy. The buy-side is much more dispersed, there exist important collective action problems and it is less likely to spend money on the organization or even get involved at all. Representation of the buy-side (as well as any other party/group of interests) is most effective when its interests are represented on a collective-basis by some type of an organization. The role of the ACT in securing the interests of borrowers under the LMA documentation is a very good example of the key role that such organization may play in articulating voice.

However, even formal incorporation of a broad spectrum of interests within the organization is unlikely to result in regulatory contracts encompassing all four functional dimensions of regulation. While both sides of the market, as well as various third parties, arguably, benefit from reduction of counterparty risk (has traditionally been thought to be a bigger problem from a sell-side perspective, but Lehman showed sell-side can also fail) and increase of liquidity, their interests with regard to information flows are much more conflicted in the case of OTC markets. While investors may want to see greater transparency in the loan markets, this is not necessarily the case for either banks or borrowers. While end-users may want to see greater transparency in swaps markets, this is not necessairly the case for dealers. Similiarly, measures seeking to reduce systemic risk (such as clearing) also typically entail grater costs for market participants.

This is also we get to the limitation of governance as a driver of the functional scope. This type of governance is likely to result in provisions that address counterparty and liquidity, but is unlikely to result in provisions that address informational and regulatory transparency and systemic risk. From that point of view, regulatory competition should be thought of as an important driver of the functional scope and, ultimately, effectiveness of regulatory contracts.

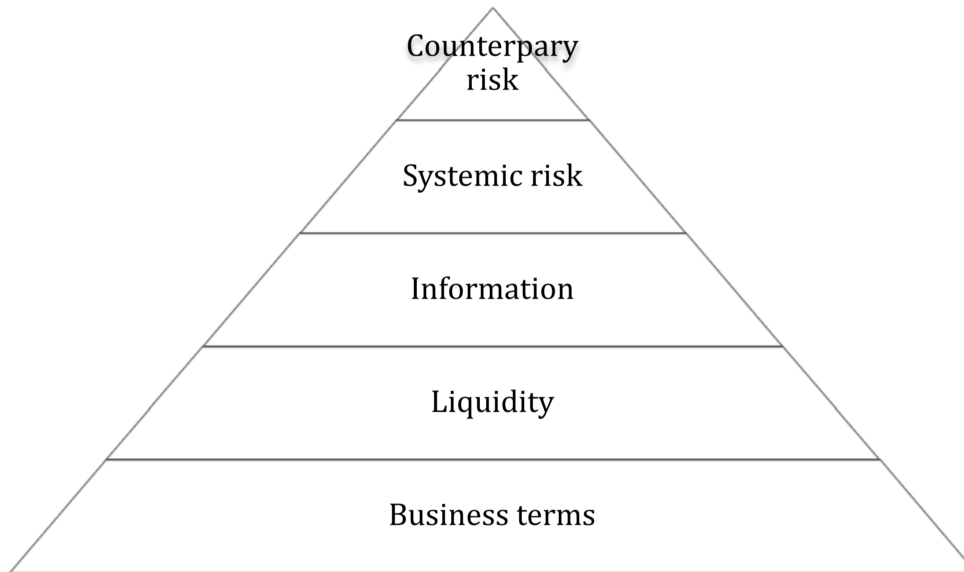
The role of regulatory competition seems to be particularly important in terms of setting the parameters of competition between markets and alternative market structures. This is true for both regulatory competition between loan markets and bond markets and OTC derivatives markets and exchange-traded derivatives. To the extent that these markets can, in certain case, be considered as substitues for each other, it will oftentimes be public regulatory interventions that will determine flows of liquidity.

5.3.2. Enforcement

5.3.2.1. Extra-legal

Both pricing penalties and restrictions on de facto market access are important ways in which enforcement is performed on a delegated, extra-legal basis.[23] Alteration of a number of provisions under each set of documents has been said to likely increase the price. This has been the case for the settlement provisions under each of the LSTA, LMA and ISDA documentation. In some cases alteration of those or other provision may lead to restrictions on de factor market access. Here, whenever a market participant suggests trading on terms that are different, the counterparty may simply refuse engage in the transaction. Overall, this suggests that that the provisions relating to counterparty risk are most likely to be mandatory. This can also be said of provisions relating to systemic risk. Information and liquidity related provisions are much more likely to be default. The graphic below illustrates the degree of freedom parties have with regard to definition of their contract relative to the problem that a given provision of the regulatory contract addresses.

[23] Compare Sections 2.4.2.1 (for the LSTA), 3.4.2.1 (for the LMA) and 4.4.2.1 (for ISDA).



5.3.2.2. Legal

In each case courts play a role in delegated enforcement, but enforcement through courts is not the preferred method. This is not only because of the time it takes, the cost, but also the uncertainty. Enforceability of termination provisions in loan contracts in the UK and in derivatives contracts in both the UK and the US is a good example of how legal structure may both enable and constrain mitigation of counterparty risk. LSTA's successful efforts to seek exemptions from the NY Statue of Frauds, and ISDA's success to amend bankruptcy law in many jurisdictions are good examples. These are example of cases with these contracts come in conflict with mandatory rules, which is particularly problematic in the case of bankruptcy law. Ultimately, the courts' willingness to act as reliable enforcers and defer to the standards seems to be a function of what the contracts do. While in some cases, especially in the US, the courts are likely to dismiss it quite easily. there seems to greater appreciation and recognition of their important commercial in English courts.

From that point of view, it should not be surprising that some elements are being internalized through various private non-judicial means of enforcement. This is, to some extent true of the pricing panels, in the case of each of the LSTA, LMA and ISDA, and in particular in the case of ISDA arbitration. Establishment of specialized arbitration courts, like P.R.I.M.E. for derivatives suggests that this is likely to be the preferred mechanism, but unlikely to work for all markets. The cost of specialized arbitration is quite high, and it may simply be not worthwhile for certain types of disputes.

5.4. Regulatory effectiveness

Measurement of efficiency and safety of markets is hard. Measurement of the impact of regulation on efficiency and safety is even harder. Measuring the impact of regulatory contracts as a type of regualtion is particulary hard largely because there are currently very few reliable indicators of their effectiveness. Further, there are many factors that affect efficiency of the markets - the nature of assets, actors involved, jurisdiction, market conditions etc. Overall, however, what comparative analysis of effectiveness suggests is that regulatory contracts are small, but important piece helping make the loan and derivatives markets more efficient and safe.

5.4.1. Counterparty risk

Settlement times are good indicators of reduction of counterparty risk in loan markets.[24] Settlement times are lower in the US than in Europe. We attributed this

[24] See Sections 2.5.3. (for the LSTA) and 3.5.3. (for the LMA).

to a more fragmented jurisdictional landscape. However, overall longitudinally, there seems to have been a real improvement in settlement in loan markets. This helps reduce counterparty risk and the potential third party effects of trades that do not settle. Similarly, in the realm of derivatives markets, levels of outstanding confirmations suggest that ISDA's regulatory contracts contribute to reduction of counterparty risk.[25]

5.4.2. Liquidity

Liquidity is notoriously difficult to measure, and identification of market structure factors that affect liquidity is very difficult. Volume of trades is one, highly imperfect, especially in the case of OTC markets measures of liquidity. In each of the case studies contractual documentation has been said to contribute to liquidity.[26] While this is generally associated with standardization, a distinction should be made between default standardization for trade rules and mandatory standardization for description of the assets.

5.4.3. Information

Borrowers in the US have to disclose more information and traders have more discretion as to how to use that information. This can be attributed in part to LSTA's documentation, including the guidelines. This is not necessarily the case in Europe, where borrowers (and lenders) are more likely to restrict information flows and also impose restrictions on how information can be used. Currently, there is little data to suggest how effective ISDA's embrace of greater informational transparency

[25] See Section 4.5.3. (for ISDA).
[26] See Sections 2.5.2 (for the LSTA), 3.5.2 (for the LMA) and 4.5.2 (for ISDA).

has been in derivatives markets. There is evidence to suggest that it has adverse effect on liquidity.[27]

5.4.4. Systemic risk

Measurement of effectiveness of regulation on reduction of systemic risk is very difficult, largely because of the rare nature of events against which the regulation is supposed to protect. Of course the near failure of AIG and the failure of Lehman brothers were such events, allowing us to make certain conclusions as effectiveness, to the extent that such measure have been introduced. The clearest evidence is in the realm of derivatives, which overall suggest effectiveness of close-out netting and termination provisions more generally.

5.5. Summary

In this Chapter we sought to examine how the differences in structure (in particular with regard to governance and regulatory competition) that have been identified in the case studies bore on definition of the function and ultimately effectiveness of regulatory contracts. We have found the scope of the regulatory function and ultimately effectiveness are driven primarily through governance of the organization and regulatory competition. While the governance structure embraced by the organizations is likely to result in functional measures aimed at addressing counterparty risk and liquidity, both information and systemic risk are likely require regulatory competition. This is because the interests of various market participants tend to be more conflicted when it comes to these two dimensions. We

[27] See Section 4.5.1.

noted that this kind of move is only likely to result from political decisions, which also require some degree of coordination and are therefore likely to be taken at a global level. We also noted one of the principal weaknesses in terms of enforcement – reliance on courts, who oftentimes fail to recognize the regulatory function. In the next Chapter we will discuss the legal implication of our findings for regulatory and contract theory.

Chapter 6

Regulatory contracts in regulatory and contract theory

6.1. Regulatory contracts: a normative approach

We have thus far outlined the conceptual model of regulation through contract and used the model to account for structural features of OTC loan and derivatives markets. The principal utility of the model is in enabling market participants and decision makers to develop an easily understood interpretation of the markets by enhancing their understanding, facilitating exchange of details between stakeholders, providing a point of reference for regulators to extract market specifications and finally, document the markets for future reference.[1] Still there remains a question concerning the added value of the model and its empirical validation in terms of contribution to theory with the view to outline normative approaches to regulatory contracts.

Let us consider regulatory theory first. Regulatory theory (as it applies to private regulation in financial markets) rests on the assumption (derived from economic theory) that there exists a link between governance features of regulatory organizations, in particular exchanges, and their effectiveness. Specifically, for profit exchanges are considered to be performing their regulatory function more effectively as they seek to maximize the profit made by the organization rather than cater to the interest of a group of members, which exchanges organized as nonprofits tend to do. However, empirical studies of exchanges do not necessarily

[1] *Compare* Kung & Solvberg, „Activity modeling and behavior modeling" (1986), supra note 28 (Chapter 1).

lend support to a strong correlation between for profit structures and effectiveness.[2] Given the variety of possible governance arrangements within each category, governance features and their impact on effectiveness have to be examined on a case by cases basis and public regulatory approaches, in particular with regard to regulatory competition, have to be adjusted accordingly. This is in line with the findings of our study, which highlights the link between certain governance features, regulatory competition and effectiveness. This also suggests that the discussion that revolves around the organizational model can offer important insights into the discussion that more recently emerged, and is likely to continue, with regard to the contractual model, especially as we develop a better understanding how the model works, what are the links between organizations, contracts and regulation and what are the conditions for the effectiveness of the contractual model.

The added value of the contractual model and its empirical validation extend beyond regulatory theory. While normative approaches to the organizational model are confined to the organization, normative approaches to the contractual model also have to take into account the contract itself. Indeed, the principal difference between the two models lies in the fact that, while the organizational model of regulation links standardization with membership, and therefore internalizes enforcement, in the case of the contractual model enforcement is delegated to courts who apply contract (and bankruptcy) law. This suggests a special role of courts in the regulatory chain and makes a case for regulatory contract law. In the discussion

[2] *See* LEE, WHAT IS AN EXCHANGE, supra note 15 (Chapter 1) 8 and passim (1999) („to understand the behavior of an exchange, it is insufficient to think of it merely as a black box . . . it is necessary to analyse who has what power at an exchange, how and why they obtain it, and how and why they exercise it.").

that follows we will outline the basic principles that can be applied in the legal analysis of regultory contracts. When making their decisions courts have to be mindful of their characteristics, and in particular be able to distinguish between custom, boilerplate and regulatory contracts.

6.2. Organizational dimension

6.2.1. The organizational model in theory

6.2.1.1. Nonprofits

The theoretical foundation of the organizational model is founded on the economic premise that agents commonly form various coalitions and interest groups to coordinate market participation.[3] The coordinating efforts oftentimes take the legal form of nonprofit organization. The principal economic feature of a nonprofit is that it cannot distribute profits outside of the organization. Nonprofits may nevertheless remain beneficial from the point of view of agents given that they fill a gap created through, what Henry Hansmann called, contract failure.[4] Nonprofits, by this theory, are likely to be set up whenever it may be difficult to asses the cost associated with production of certain goods or services and market contracting may fail to materialize. Non-profits, by this measure, help to minimize cost for all 'patrons' or 'stakeholders' who may be affected by a particular transaction or set of transactions.

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[3] Daniel F. Spulber, *Solving the Circular Conundrum: Communication and Coordination in Internet Markets*, 104 Nw. U. L. Rev. 2, 538, 561 (2010).

[4] Hansmann, *The Role of Nonprofit Enterprise* (1980), supra note 25 (Chapter 1) at 838 ("[O]occasionally, due either to the circumstances under which the product is purchased and consumed or to the nature of the product itself, consumers may be incapable of accurately evaluating the goods promised or delivered. As a consequence, they will find it difficult to locate the best bargain in the first place or to enforce their bargain once made.").

Market rules are a good example. Markets cannot function without rules, but setting of the rules is costly.[5] Some (potential) consumers (or users) of market rules may be willing to bear that cost, but there is likely to be some variation in terms of what a particular group of consumers is willing to pay. Consumers are who are likely to use it more often, may be willing to pay more. The consumer willing to pay more may be willing to cross-subsidize the consumer willing to pay less.

The incentive of the willing to pay more consumers may be further boosted through second order benefits that can be derived from such cross-subsidizing activity. These second order benefits extend beyond the immediate benefits associated from consumption of the good and include such considerations as reputation and, especially in the context of market rules, ability to influence outcomes.[6]

In these cases consumers may want to set up nonprofit organization to maximize their individual consumption benefits. This can be guaranteed through mutualization, i.e. by making sure that those who are the source of income for an organization also control the organization by retaining the influence over the scale of their individual consumption benefits. This is typically achieved through member-led control of the executive bodies of the organization, including the board of directors.

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[5] As Mitchel Abolafia noted in his study of market making activities, "[m]arkets are not spontaneously generated by the exchange activity of buyers and sellers. Rather, skilled actors produce institutional arrangements: the rules, roles and relationships that market exchange possible. The institutions define the market, rather than the reverse." MITCHEL Y. ABOLAFIA, MAKING MARKETS: OPPORTUNISM AND RESTRAINT ON WALL STREET 9 (2001).

[6] Frank Partnoy, *Second-Order Benefits from Standards*, 48 B.C.L. Rev. 169 (2007) ("firms might use standards (1) to exploit informational asymmetries, (2) to profit from regulatory entitlements, [or] (3) to create ambiguities that enable them to extract gains that otherwise would be captured by public entities.").

6.2.1.2. For-profits (firms)

The economic incentives to set up a firm are quite different. Firms have objectives which, in principle, do not coincide with consumption benefits of their members or, more appropriately, owners.[7] Rather, the goal of the firm is to maximize profit and redistribute it to shareholders. Thus, a firm can be distinguished from a nonprofit organization by having a separate, autonomous set of interests. As Spulber notes,

> "With separation, the firm's owners are affected by the firm's decisions only through the impact of the firm's profit on their income. The firm's owners make decisions by choosing the most preferred consumption bundle given their income. As a result the firm's owners unanimously prefer that the firm maximize profits."[8]
>
> And further,
>
> "[p]rofit maximization by the firm yields decisions that differ from those of consumer organizations. Firms and consumer organizations generally choose different prices, outputs, product quality, investment levels, employment levels, and technologies. The differences in the choices made by firms and by consumer organizations determine the economic impact of the firm."[9]

6.2.2. The organizational model in practice

6.2.2.1. The New York Stock Exchange

Evolution of the organizational model seems to follow the basic economic logic outlined above. Historically, most exchanges in the United States have been

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[7] Compare SPULBER, THE THEORY OF THE FIRM (2009), supra note 58 (Chapter 1).
[8] For alternative accounts of the theory of the firm, *see* Bengt R. Holmstrom & Jean Tirole, "The Theory of the Firm", in RICHARD SCHMALENSEE AND ROBERT WILLIG (EDS.), HANDBOOK OF INDUSTRIAL ORGANIZATION, vol. 1, 61-133 (2014).
[9] SPULBER, THE THEORY OF THE FIRM (2009), supra note 58 (Chapter 1) at 67.

organized as non-profits under state laws. They were owned by their members (brokers, who were also active traders), who benefited primarily through low access fees. Members could also choose the governing bodies of the exchanges, and thereby retain control over what kinds of assets were being traded and under what rules. While this seemed to have worked for over a century, exchanges have been at the center of the manipulative and speculative activity that led to the Wall Street Crash of 1929. In response the Securities Exchange Act of 1934 sought to ensure that stock exchanges were no longer run as "private clubs to be conducted only in accordance with the interests of their members," but as "public utilities" or "public institutions which the public is invited to use for the purchase and sale of securities listed thereon."[10] The SEC had been created to oversee them.

Around that time, the Conway Committee had been appointed to revisit the governance of the exchange that was at the center of the turmoil – the New York Stock Exchange (NYSE). The findings of the investigation followed with a set of recommendations, including "a more representative composition of the board, limits on consecutive service and the creation of a full time paid president and professional staff."[11] As Karmel notes, further changes were made in 1949-1950 and in 1972 as a result of the Martin Report. As she notes "[t]hese changes occurred in the context of uncertainty about the immunity of stock exchanges from the antitrust

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[10] H. Rep. 1383, 73d Cong., 2d Sess. p. 15 (1934).
[11] SEC, REPORT OF THE SPECIAL STUDY OF SECURITIES MARKET, H.R. Doc. No. 95, 88th Cong., 1st Sess. pt. 4, at 502 (1963)(describing the Conway Committee)(quoted in Roberta S. Karmel, *Turning Seats Into Shares: Cause and Implications of Demutualization of Stock and Futures Exchange*, 53 Hastings L. J. 367 (2001-2002).

laws, pressures to unfix commission rates and the financial and operational back office crisis of the securities industry."[12]

The 1975 Act that followed redefined the relationship between the SEC and exchanges, further limiting their autonomy. However, the NYSE remained a mutualized organization for a long time. In the years to come it made efforts to expand its membership and diversify composition of the board. It was only its merger with Euronext in 2006 that brought about transformation of the corporate form of the NYSE

6.2.2.2. National Association of Securities Dealers

The regulatory scrutiny that the NYSE became subject to after the 1929 crash did not extend to OTC markets. As Smith et al note: "[t]he original Act did not cover securities trading done OTC. It was recognized that OTC activity warranted regulation, and there were a number of non-registered industry associations formed to promote professional standards in this arena, most notably the Investment Bankers Conference."[13] It was only the Maloney Act of 1938, which amended Section 15A to the Exchange Act. Section 15A allowed for establishment of "national securities associations" that would serve as SROs. The National Association of Securities Dealers, Inc., ("NASD") incorporated in 1939 and drawn largely from the Investment Bankers Conference, was in the same year registered as such a securities association.[14]

In the early days NASD was simply a system of quotations provided by the OTC securities dealers. These quotations, collected and disseminated by the by the

[12] Id.
[13] Jeffrey W. Smith, James P. Selway III and D. Timothy McCormic, The Nasdaq Stock Market: Historical Background and Current Operation, NASD Working Paper 98-01.
[14] Id.

National Quotation Bureau, were the prices at which retail firms could by from dealers.[15] In the late 1960 this model was replaced with an electronic system – NASDAQ – paving the way to further transformation of the former dealer association into a fully fledged exchange. "In the NASDAQ system orders were automatically routed to market makers whose quotes were currently at the inside."[16] Locked-in trades were forwarded to the National Securities Clearing Corporation (NSCC) for clearing.[17] At settlement, the NSCC forwards to the DTC information allowing it to move securities between the custodial securities accounts of DTC participants.

Since much of order execution in contemporary trading systems is automated the single area where opportunism can be most profound is in quote dissemination – the original business of the NASD. In the 1990s a series of papers suggested that NASDAQ market-makers engaged in market-wide collusion related to quotes. [18] The investigation of the Department of Justice and the SEC confirmed these allegations.

The NASD was completely reorganized in 1996 in the aftermath of the investigation. The 1996 NASD reorganization resulted in the creation of a parent holding company and two operating subsidiaries—Nasdaq and NASD Regulation, Inc. (NASDR). All three boards are constituency boards that are required to have a majority of non-industry members. NASD governance is again in a state of flux because of a restructuring that will result in the sale of 78% of Nasdaq to issuers

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[15] Dealers, like today, had their own prices at which they sold securities to each other.
[16] Smith et al., supra note 13.
[17] The NSCC is jointly owned by the NASD, NYSE and Amex.
[18] *See* 45 J. FIN. ECON. 1 (1997) (Symposium on market microstructure: Focus on Nasdaq).

and NASD members and lead to the registration of Nasdaq as a stock exchange with the SEC.

6.2.2.3. Implications for the contractual model

The historical evolution of the organizational model appears to confirm that there exists a link between nonprofits and an increased likelihood of collusion and/or inefficiencies. Unsurprisingly, the trend of demutualization of exchanges has been welcomed by many scholars of financial regulation. As Gadinis and Jackson note, "[a]s a result of demutualization, the orientation of the exchange operation changes from catering to the interests of its members to catering to the interests of its shareholders." [19] In other words, stock exchanges have become for-profit corporations, and "while exchanges were traditionally accused of harboring a 'clubby' perspective in terms of protecting the interests of their members, they are now oriented toward maximizing profits for their shareholders."[20]

However, we have to be cautions when celebrating demutualization as the preferred governance form for regulatory organizations. While the legal form is an important driver of regulatory outcomes, the difference between the two legal forms should not be exaggerated. As Lee notes,

> "Although nonprofit exchanges are not allowed to distribute any profits they earn, they can effect a similar result by lowering the fees they charge members for the various services they offer, or by offering rebates to their members. While the payment of a dividend by a for profit exchange will primarily benefit the large owners of the exchange, however, the reduction of fees or the payment of rebates will primarily benefit the larger users of

[19] Stavros Gadinis and Howell E. Jackson, *Markets as Regulators*, 80 Southern California Law Review (2007)
[20] Id.

> the exchange's services. The important of this distinction depends critically on whether the two groups congruent or not."[21]

The effectiveness of a particular form of governance of regulatory organizations is to great extent linked to the identity of the parties and the interests their represents or, in other words, the political economy of regulation. [22] In evaluating regulatory structures we need to look beyond legal form, and even beyond the working of the boards of the organizations into more discreet governance features that also speak to the political economy underpinning regulatory choices. As Lee notes in the context of exchanges,

> "The fact that an exchange's board is standardly granted the constitutional authority to decide a wide range of issues is often taken as evidence to confirm that the board plays a critical role in the exchange's governance. A rather different perception of the board's role is also, however, possible. The growing complexity and value of the services provided by exchanges has meant that only the most political of issues are now being referred to the governance of large exchanges, and the management of exchanges are therefore de factor gaining more power at the expense of the board."[23]

Similarly Middelton,

> "Most of the date indicated that boards do not formulate policy but rather ratify policy that is presented to them by staff. The executive committee in concert with top management may be the only place within the board structure where policy is designed. Certain situations (such as organizational transformations) may increase the likelihood that boards

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[21] Id. at 12.
[22] *Compare* Tony Porter, "The Significance of Changes in Private-Sector Associational Activity in Global Finance for the Problem of Inclusion and Exclusion", *in* PETER MOOSLECHNER (ED.), THE POLITICAL ECONOMY OF FINANCIAL MARKET REGULATION (2005).
[23] Id. at 21.

> enact policy, but as a rule they do not. Instead, they are used more or less effectively for external linking functions."[24]

The role of committees in the context trade associations seems to be of particular importance. The committees are the venues through which interests are voiced (even though not always recognized). Our study finds that their composition varies not only across organizations, but also within organization across committees. Further, there do not seem to exist established procedures governing the decision making process within the committees. This results in underrepresentation of certain interests and may result in restrictions on the definition of the functional scope of the regulatory contracts. Public regulation should be responsive to thes governance features of private regulatory orgazniations.[25] "The very behavior of an industry or the firms therein should channel the regulatory strategy to greater or lesser degrees of government intervention."[26] Some lesson from the evolution of the organizational model can be helpful also in this regard.

In their compelling examination of the regulatory responses to stock exchanges demutualization around the world Stavros Gadinis and Howell E. Jackson identify three such responses. In the first one, the 'Government-led Model' (France, Germany, and Japan) central governments enjoy direct channels of influence over securities markets regulation. These jurisdictions reacted to stock exchange demutualization by enhancing the efficiency of government supervision: they

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[24] Melissa Middleton, "Nonprofit boards of directors: Beyond the governance function", in W. W.POWELL (ED.), THE NONPROFIT SECTOR: A RESEARCH HANDBOOK (1987) (quoted in Lee, What is an exchange, supra note 15 (Chapter 1) at 21.)

[25] See IAN AYERS & JOHN BRAITHWAITE ,RESPONSIVE REGULATION: TRANSCENDING THE DEREGULATION DEBATE (1992)(suggesting that regulation should be responsive to industry structure in that different structures will be conducive to different degrees and forms of regulation).

[26] LEE, WHAT IS AN EXCHANGE, *supra* note 15 (Chapter 1) at 190-91.

reshuffled the organization of their administrative agencies and increased their already strong regulatory powers. The second model, referred to as the 'Flexibility Model' (the United Kingdom, Hong Kong, and Australia) relies more heavily on market participants and grants them significant leeway in regulating many aspects of their activity. "Administrative agencies in these jurisdictions maintain a regulatory philosophy of cooperation with market participants, and typically issue guidance rather than mandatory rules."[27] Finally, in the 'Cooperation Model' (the United States and Canada), the regulatory powers of stock exchanges extend over most issues, but are exercised under close supervision by government agencies. "Instead of substantially limiting self-regulation, governments in the Cooperation Model developed mechanisms to insulate stock exchange regulatory activity from the operation of the markets. Thus, under government influence, stock exchanges segregated their regulatory functions in a separate, independently-run subsidiary."[28]

While the Government led model would entail complete overhaul of the contractual model, the Flexibility and Cooperation models seem to be well suited for the contractual model. However, their implementation would require recognition, both by the organizations themselves, as well as public regulators, of the regulatory function of the contractual model. The role of public regulators would be particularly important in the context of overseeing regulatory competition among markets structures, to the extent that alternative market structures (OTC and exchanges) offer viable trading opportunities for a particular type of asset. Beyond that public regulators have the responsibility for helping maintain efficient and safe

[27] Gadinis & Jackson, supra note …
[28] Id.

OTC markets organized around regulatory contracts, which are an important component of deep, diverse and evolving global financial markets.

6.2. Contractual dimension

While the discussion of the organizational dimension is an important aspect of the normative approach to regulatory contracts, there is also the contractual aspect.[29] This is to say that the form it takes is that of a contract and that it is governed by contract law. As a results, the contractual model is bound to give regulatees more flexibility, but also expose them to greater uncertainty with regard to economic outcomes. This puts contract law, and specifically courts that apply it, in a rather unusual position; they become part of a regulatory chain. It is unusual in that their role goes beyond resolution of a dispute between two parties and extends to providing checks on a regulatory regime. While courts obviously do that with respect to the law, doing that with respect to regulatory contracts is, arguably, a novel task.

To be clear not all disputes involving these contracts are disputes about regulation. In fact most disputes are disputes that do not go to the heart of the regulatory provisions. Rather, they are disputes about pricing or other business terms. However, there may also be disputes about regulation, which will have to resolved with reference to contract law. Because of the power it may potentially endow to these forms, it has to be acutely aware of its nature and political ramifications.[30] Specifically, it cannot insulate the analysis from the political economy that is shaping them. The political economy that is shaping them seems to

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[29] The organizational mode also has a 'contractual' aspect in the sense the it has rules, but they are enforced not through contract law, but rather as a matter of corporate law.
[30] Morris R. Cohen, The BasisofContract,46 HARV. L. REv. 553, 553-54 (1933).

be quite different from the political economy shaping custom or even boilerplate.[31] This requires both a good understanding of the political economy of the contractual model, the function contract law performs with regard to the contractual model and ideas about how the two can be reconciled. In fact contract law the principal realm within which the battle takes place.[32] While some suggest removal of disputes pertaining to these contracts from the system altogether, this is highly problematic precisely from that point of view.[33]

The analysis that follows is based on the premise that contract law performs three essential functions with regard to regulatory contracts: it enforces them, it legitimizes them and interprets them.[34] How to approach these issues of enforceability, legitimacy and interpretation in of regulatory contracts? We explore these normative questions by applying English and New York law[35] to a set of fact patterns that have either arisen or are likely to arise in the context of regulatory contracts and which may have an impact on effectiveness of regulatory contracts.

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[31] *Compare* Jonathan Ercanbrack, *The Transformation of Islamic Law in Global Financial Markets*, 124 (2015)("This particular type of legal transformation indicates that classical debates concerning freedom of contract, in particular the permissibility of creating novel contractual types is completely irrelevant as IFL [Islamic Financial Law – MB] is the product of globalized finance and no longer the prerogative of jurists.")

[32] Peer Zumbansen, The law of society: governance through contract, 14 Indiana Journal of Global Legal Studies 191 (2007).

[33] JEFFREY GOLDEN AND CAROLYN LAMM (EDS.), INTERNATIONAL FINANCIAL DISPUTES: ARBITRATION AND MEDIATION (2015).

[34] *See* Alan Schwarz, *Is Contract Law Necessary?* (Max Weber Programme – Lecture Series 2010/04) (identifying these as the functions performed by contract law). Professor Schwartz adopts a fairly restrictive perspective on the function of contract law. I agree. However, I submit, this has to be accompanied by a broad outlook and appreciation of the different functions performed by contracts.

[35] When I talk about New York I talk about the rulings of the courts of the State of New York, legislation of the State of New York as well as some persuasive New York authorities, such as the New York Uniform Commercial Code. Where there is no rule I resort to the majority rule in the United States by citing persuasive authority concerning the issue from another jurisdictions within the United States.

6.2.2. Formation

Let us first consider a situation, in which the regulatory contract is not properly executed or incorporated. This may be the case, for example, when the transaction has been entered into over the phone and only evidenced in a written or electronic confirmation. How can judges take regulatory contract into account in such a case? In the discussion that follows I will suggest that there exist, both under New York and English law, two distinct possibilities: (i) express terms to be incorporated and (ii) preliminary agreements.

6.2.2.1 Express terms to be incorporated

Both New York and English law allow for incorporation by reference subject to two general conditions – notice and consideration. Notice requires that the parties have to be aware of the terms are incorporated. They have to be, in other words, aware that some terms other than those embodied in the executed writing will form part of the transaction and aware of what those terms are. [36] Courts do not typically make a strong distinction between types of terms that are being incorporated.[37] Their analysis is fairly formal and does not, as a general matter, incorporate contextual

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[36] For New York see e.g. Chiacchia v. Nat'l Westminster Bank USA, 507 N.Y.S.2d 888, 889–90 (App. Div. 1986) ("The doctrine of incorporation by reference requires that the paper to be incorporated into a written instrument by reference, must be so referred to and described in the instrument that the paper may be identified beyond all reasonable doubt." (citing *In re* Bd. of Comm'rs of Wash. Park, 52 N.Y. 131, 134 (1873))). For a discussion of some of the problem *see* Royce de R. Barondes, *Side Letters, Incorporation by Reference and Construction of Contractual Relationships Memorialized in Multiple Writings*, 64 BAYL. L. REV. 651 (2012). For English law see in Trebor Bassett Holdings & another v ADT Fire and Security [2011] EWHC 193 (TCC) ("Notice within a contractual document identifying and relying on standard terms is sufficient to permit incorporation of those terms… the fact that [Trebor's] terms and conditions were not enclosed with the purchase order does not prevent their incorporation into the contract between the parties.").

[37] One exception is particularly onerous conditions. See *id.* (". . . further, given that none of [Trebor's] terms and conditions were unduly onerous, they did not require specific or particular notice . . . ").

considerations. In particular it is not necessary that the terms be commonly used.[38] However, in the context of regulatory contracts, some contextualization may be in place. [39] First, courts should take into account the relative importance a given contract or provision in the regulatory context. They can safely assume that market participants would, or should, be aware of the contracts and provisions, which are fundamental to the efficient and safe operation of the markets (i.e. the mandatory provisions). Second, membership in the organizations ought to be interpreted as prima facie evidence of awareness of the terms of the regulatory contract.[40] In relation to this, the ability to access regulatory contracts easily should be a further, third, consideration in deciding what kind of notice, if any should be required for regulatory contracts and/or provisions.

Both New York and English law also require that consideration be given for each of the contracts.[41] This is to say that both will only enforce promises, which have been given in exchange for other promises, i.e. when the deal has been a product of a 'bargain'.[42] While a number of common law jurisdictions requirement

[38] Circle Freight International Limited v Medaset Gulf Exports Limited [1988] 2 Lloyds Rep 427 ("It is not necessary to the incorporation of trading terms into a contract that they are conditions in common form or usual terms in a relevant business. It is sufficient if adequate notice is given in identifying and relying upon the conditions and they are available on request. Other considerations apply if the conditions or any of them are particularly onerous or unusual.").

[39] The most striking example of that discussed in the case studies is the widely recognized rule that, to the extent that parties have entered into individual transactions, but have not yet executed a Master Agreement, the pre-printed form will still govern their relationship.

[40] To a certain extent this is somethnig they are doing already. For example in Highland II (discussed in Chapter 2) one of the reasons why the court conluded that there had been no contract on the terms of the LSTA STC is that it was not BofA's trading desk that was inovled in the transaction, and it cannot be presumed that as such the parties new LSTA docsuments.

[41] RESTATEMENT SECOND §33(2) (for New York law); GOODE at 73-74 (for English law).

[42] RESTATEMENT §75. In the US the First Restatement of Contracts defined consideration in terms of bargain. The Restatement Second did the same and added a definition. Something is said to be bargained for "if it is sought by the promisor in exchange for his promise and is given by the promise

of consideration has been relaxed[43], in particular when the transaction has been evidenced with writing[44], the doctrine can still bring about not only conceptual, but also practical difficulties. This is true principally in situations where the contract had been conducted orally and the regulatory contract is to be executed only some time later. If the regulatory contract was executed only after deals have been made orally, courts may not interpret the consideration for the regulatory and the oral contract as being the same one, because the consideration for the already executed contracts would be "past consideration" with regard to the regulatory contract. Such past consideration, action already taken before a promise is made cannot be a consideration for the promise. This is true under both New York and English law. [45]

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in exchange for that promise." Restatement Second §71. As Farnsworth notes: "The Uniform Commercial Code has no comparable provision." §2.2 (in footnote 6). As some commentators point out this requirement has shifted the concern of judges away from the substance of the exchange. FARNSWORTH, CONTRACTS §2.2. Their sole inquiry now was into the process by which the parties had arrived at that exchange – was it the product of a "bargain"? Id. For the expression of that requirement in English law see Currie v. Misa (1875) L.R. 9 Q.B. 55, at p. 56 ("a valuable consideration, in the sense of the law, may consist in some right, interest, profit or benefit accruing to the one party, or some forbearance, detriment, loss, or responsibility given, suffered, or undertaken by the other"). In English legal doctrine see e.g. ATIYAH, ESSAYS ON CONTRACT (1986), ch. 8. *See also* Goode at 73-74.

[43] *See* FARNSWORTH §§ 2,5-2.10. For the discussion of what will not amount to valid consideration in England *see* ANSON at 92-107.

[44] ANSON at 76. *See also* GUNTHER TREITEL, THE LAW OF CONTRACT 120 (1983).

> "At common law it was often said that a contract by deed was executed by being 'signed, sealed and delivered'. The position is now largely governed by section 1 of the Law of Property (Miscellaneous Provisions) Act 1989. To be a deed an instrument must make it 'clear on its face that it is intended to be a deed by the person making it, or as the case may be, by the parties to it'."

In England if an agreement is contained in a deed it becomes enforceable by virtue of the formality of the deed.

In New York N.Y. PEP. LAW § 38 : NY Code - Section 38: Transfers or charges without consideration.

[45] New York has enacted a statue under which "a written and signed promise shall not be denied effect as a valid contractual obligation on the ground that consideration for the promise is past or executed, if the consideration is expressed in the writing and is proved to have been given or performed and would be a valid consideration but for the time when it was given or performed." N.Y. Gen. Oblig. L. §5-1105.

As Paul Harding notes, as a matter of practice this is often dealt with in New York by dating the Agreement and its Schedule as of the trade date of the first trade between the parties even if the Agreement is not signed until some months later.[46] In this way all transactions are covered from the trade date of the first of them. This is based on US practice where the words "as of" mean "with effect from" a specified date. As he further observes: "this is contrary to best English practice where it is normal to date an agreement on the day it is signed."[47] Under English law a contract cannot be created retrospectively through backdating and if it is, it runs the risk of it being considered a forgery. In other words, under English law backdating may not only fail to satisfy the requirement of consideration, but it could be in fact considered a defense to contract formation for either party.

Thus a rigid application of the doctrine of consideration could be regarded as an obstacle to enforcement of regulatory contracts in situations where they have not been properly executed. That is because within that narrow reading it would not have been considered as the product of an actual bargain. This 'bargain' theory of exchange serves, as Professors Robert Scott and Jody Kraus suggest, as a default rule, which tells courts what promises to enforce. "By enforcing promises made in bargain contexts, and refusing to enforce promises made in non-bargain contexts, the doctrines of consideration [and promissory estoppel] enforce only those promises made by promisors who are likely to have intended their promises to be legally enforceable."[48]

[46] HARDING, MASTERING, supra note 19 (Chapter 4).
[47] Id.
[48] ROBERT SCOTT AND JODY KRAUS, CONTRACT LAW AND THEORY 184 (2007).

A broader interpretation of the doctrine, however, advocated by Scott and Kraus, suggests that for a contractual promise to be enforceable it does not have to be the result of an actual bargain.

> "If the promisee could have bargained for the promise, whether or not she did in fact, the promise is more likely to be enforced. If the promisee could not easily have bargained for the promise, because soliciting a promise would have been inappropriate given the social context, the promise is less likely to be enforced."[49]

Here again, a contextual analysis may be warranted. Under this theory, the notion of 'social context' is the key in determining whether 'soliciting a promise' in the form of a regulatory contract would have been appropriate *in that context*. The relevant context here is, of course, market participation and commitment to following of rules that have been designed with the view to make those markets efficient and safe.

6.2.2.2 Preliminary agreement

While early accounts suggested that parties were deemed to enter into such agreement for reasons of 'haste, reluctance or unforseeability'[50], more recently accounts perceive of preliminary agreements as a much more deliberate, sophisticated commercial strategy. Professors Scott and Schwartz defined preliminary agreements as "agreements between two commercial parties through which they agree to attempt a transaction and also agree on the nature of their respective contributions, but neither the transaction nor what the parties are to do

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[49] *Id.* The chief justification for this is that it maximizes beneficial reliance. Of course this will only be the case, if "the increase in beneficial reliance that enforcement makes possible offsets the decrease in promising occasioned by legally enforcing such promises." *Id.* At 185. This is an empirical question that has to be answered on a case-by-case basis.
[50] E. ALLAN FARNSWORTH, CONTRACTS (Third Edition, 1999) §3.27.

is prescribed, and neither may be written down."[51] They developed a model showing that parties "create preliminary agreements rather than complete contracts when their project can take a number of forms and the parties are unsure which form will maximize profits." [52] Albert Choi suggested that, especially in complex, multi-stage deals the purpose of the preliminary agreement is to address complexity and set a distinct stage for expert agents, rather than to protect specific investments under an incomplete contract.[53] Ronald J. Gilson, Charles F. Sabel and Robert E. Scott have further elaborated these arguments in the context of contracts for innovation.[54]

These important contributions highlight the important *economic function* that preliminary understandings perform, notwithstanding the fact that oftentimes they contravene the principle of assent on which contract law is based. To the extent that parties make undertaking and incur investments in anticipation of entering into the transaction, it does not seem unjust to hold them accountable for some of the costs incurred by their counterparty. This justification has been used by a number of scholars to move the doctrine from the assent to a non-retraction principle.[55]

By analogy, in the realm of finance, oftentimes the confirmation will simply state a commitment to execute a master agreement or standard terms. The parties should not be free to retract from it. The justification here is not only, as in the case

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[51] Robert E. Scott & Alan Schwartz, *Precontractual Liability and Preliminary Agreements*, 120 HARV. L. REV. 3, 662 (2007).
[52] *Id.*
[53] *See e.g*. Albert Choi, Multi-Stage Contracting in Complex Transactions (working paper, 2014, on file with author).
[54] Ronald J. Gilson, Charles F. Sabel & Robert E. Scott, *Contracting For Innovation: Vertical Disintegration And Interfirm Collaboration*, 109 COL. L. REV. 3, 431 (2009).
[55] Omri Ben-Shahar, *Contracts without Consent: Exploring a New Basis for Contractual Liability*, 152 UNIV. PENN. L. REV. 1829 (2004).

of commercial contracts, in providing the economic incentives to undertake viable projects, but also providing market actors with the incentive to act consistently with the regulatory frameworks designed address particular problems that may exist in the market.

A survey of English and New York contract law suggest that this alternative is more likely to apply in the New York context. In the UK preliminary agreements are not enforceable.[56] For a long time a similar rule has prevailed in the US.[57] However more recently in several jurisdictions, including New York, the emerging legal rule requires parties to such preliminary agreements to bargain in good faith over open terms. [58] Should the promisor - the party who prefers to exit - fail to bargain in good faith, that party will be liable for the promisee's reliance expenditures.[59]

Application of this rule to breach of regulatory contract would, in effect mean, a penalty for violating rules of the market. The rule would dictate that the parties be bound by mandatory rules, and negotiate in good faith the default ones. Enforcement of regulatory contracts as preliminary agreements offers a viable alternative in situations where a court does not find that the regulatory contract had been properly incorporated.

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[56] *See* Paula Giliker, *A Role for Tort in Pre-Contractual Negotiations? An Examination of English, French, and Canadian Law*, 52 INT'L & COMP. L.Q. 969 (2003).

[57] *See e.g.* Malaker Corp. Stockholders Protective Committee v. First Jersey Nat'l Bank, 163 N.J. Super. 463, 395 A.2d 222 (App. Div. 1978); McMath v. Ford Motor Co., 77 Mich. App. 721, 259 N.W.2d 140 (1977).

[58] A preliminary agreement with open terms is not necessarily nugatory. Teachers Ins. & Annuity Ass'n v. Tribune Co., 670 F.Supp. 491, 498 (S.D.N.Y.1987) (stating that such an agreement "binds both sides to their ultimate contractual objective in recognition that contract has been reached, despite the anticipation of further formalities"). However, if such open terms were essential or material, the contract would seemingly fail for indefiniteness. F & K Supply, Inc., v. Willowbrook Dev. Co., 288 A.D.2d 713, 714 (N.Y.App.Div.2001). See also Ashland Mgmt. Inc. v. Janien, 624 N.E.2d 1007 (N.Y.1993) (finding no error in lower court's determination that failure to negotiate "breached an implied covenant of good faith and fair dealing").

[59] Id.

6.2.3. Legitimacy

Even if, from a contract law perspective, regulatory contracts can be enforced there is the question if they should be? There are three broad categories of issues that may bear on its legitimacy: status-related, behavior-related and substantive.[60] We will discuss them in turn as applied to regulatory contracts. We are interested in the question whether these issues may lead to invalidation of a regulatory contract. We can envisage that only in rare cases will the regulatory contract be invalidated. Rather, it is likely that commercial transactions under the regulatory contract will be invalidated and this will put into question the rules found in the regulatory contracts. However, it may be worthwhile to explore the interplay between these combination and what effect they may have on regulatory outcomes.

6.2.3.1. Status

The status dimension focuses on the characteristics of the party involved, such as incapacity or immaturity. Rules may be found invalid if one of the parties lacked the capacity to contract. Of course, the capacity to contract under general contract law primarily concern 'immaturity.' [61] It has been said to be a concept of reduced practical significance in the English law of contracts.[62] However, as Deakin notes,

> "the limited and diminishing practical significance of the concept of capacity in modern contract law should not, however, be confused with the issues of its structural significance within contract doctrine.

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[60] I derive this useful classification from FARNSWORTH. *Id.* § 4.1.Leff also distinguished between procedural and substantive. Arthur A. Leff, *Unconscionability and the Code: The Emperor's New Clause*, 115 U. PA. L. REV. 485 (1967).
[61] FARNSWORTH, CONTRACTS §§ 4.2-4.8. As he notes "only in extreme instances is one's power regarded as impaired because of an inability to participate meaningfully in a bargaining process." 4.2. For English law see G. H. Treitel (Edwin Peel (ed.)), Law of Contract, Chapter 12 (2007).
[62] MCKENDRICK, CONTRACT LAW 788 (2003).

> Indeed, there is a case for saying that it is still at the core of what is mean by a contractual obligation."[63]

Indeed, it is unlikely that court will invalidate a regulatory contract if it does not specify clearly who can access the market and this leads to effect for those parties that are unfair. However, a court may invalidate a number of transactions, which will jeopardize markets and will prompt changes in market access rules in the regulatory contract.[64] Regulatory contracts ought to be more explicit about market access.[65]

6.2.3.2. Behavior

The perspective of behavior focuses on how the parties acted during the bargaining process. Classic examples are the rules that allow party to avoid the contract on the ground that the party as been induced to make the contract by misrepresentation or duress.[66] Here, again, the regulatory contract is unlikely to be invalidated, but individual transactions yes. In fact, the regulatory contract may help mitigation potential fraud claims.[67] If these cases show a pattern of problems, this should indicate that there is a problem with the regulatory contract. Regulators may seek to

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[63] SIMON DEAKIN AND ALAIN SUPIOT (EDS), CAPACITAS: CONTRACT LAW AND THE INSTITUTIONAL PRECONDITIONS OF A MARKET ECONOMY 6 (2009).

[64] For example, in Haugesund Kommune & Anor v. Depfa ACS Bank, [2010] EWCA Civ 579 (May 27) the judges interpreted the Norwegian law as meaning that the entities did not have the substantive capacity to enter into this transaction. They then held that this loan transaction was void because in order to have a valid contract under English law the party must have the capacity to enter into it. See http://www.canadianstructuredfinancelaw.com/2010/06/articles/derivatives/its-complicated-capacity-contracts-and-conflict-of-laws/.

[65] A common example is public entities in derivative markets. The ISDA MA did not provide for special rules for these entities. Some of them have acquired losses. As a result the MA now has a special access regime for public entities.

[66] *Id.* §§ 4.9-4.20.

[67] "CCM asserts that JP Morgan induced CCM to enter into the Transactions by allegedly misrepresenting "the potentially ruinous risks" of the Transactions. CCM's claims, however, are precluded by the unambiguous terms of the ISDA Agreemnt." JP Morgan Chase Bank, N.A., v. Controladora Commercial Mexicana S.A.B. DE C.V., No. 603215/08 (March 16. 2010).

address the problem through explicit provisions in the contract (for example, the ISDA MA now incorporates a regime, which requires dealers to disclose valuation methodologies to its clients etc.).

6.2.3.3. Substantive

Substantive analysis focuses on the material economic impact of a provision, in contrast with both status and behavior analysis, which focus on the process with which it has been agreed on.[68] In the United States substantive-unfairness analysis is approached through the concept of unconsionability. Its doctrinal formulation is to be found in UCC 2-302 reads:

> "If the court as a matter of law finds the contract or any clause of the contract to have been unconscionable at the time it was made the court may refuse to enforce the contract, or it may so limit the application of any unconscionable clause as to avoid any unconscionable result."
>
> In the words of the comments to the Code:
>
> "This section is intended to enable courts to police explicitly against the contracts or clauses which they find to be unconscionable. In the past such policing has been accomplished by adverse construction of language, by manipulation of the rules of offer and acceptance or by determinations that the clause is contrary to public policy or the dominant purpose of the contract."[69]
>
> New York's UCC defines unconsionability in substantially same terms.[70]

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[68]As Douglas G. Baird suggest, in the context of boilerplate it is not the procedural (lack of meaningful bargaining), but the substantive abuses that are important. Douglas G. Baird, *The Boilerplate Puzzle*, *in* BEN-SHAHAR, BOILERPLATE *supra* note … at 131-142.
[69] UCC 2-302 cmt. 1.
[70] Paul Bennett Marrow who analyzed New York case law on the point of unconsionability usefully identified three threshold rules leading to a conclusion that a covenant is actually unconscionable when it is one-sided ("its effect is profoundly discriminatory to one of the contracting parties),

As Goode notes there is no general principle of English law that enables a court to refute enforcement of a contract solely on the ground that its terms are unfair.[71] "English law appears to lack a general concept of unconscionability of the kind that has been developed in other jurisdictions through case law and specific statutory provisions such as the American Uniform Commercial Code …"[72] Over time some exceptions have been created for transactions concluded with consumers.[73]

The single most important features of the substantive-unfairness analysis as applied to regulatory contracts is that, in contrast with other type of contracts, including other types of boilerplate, the analysis is related to how do the rules affect market outcomes irrespective of the identity of the parties and not unfairness issues that may arise as between the parties. This, of course, is a very difficult determination to be made and courts, in particular because it is likely to industry-specific and requires in-depth knowledge of the industry and its institutional underpinnings.

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oppressive ("contains language that attempts to sanction abusiveness, arbitrariness or the imposition of a needlessly burdensome condition") and likely to result in unfair surprise ("contains language the real meaning of which is intentionally obscured from one of the parties"). Paul Bennett Marrow, Contractual Unconscionability: Identifying and Understanding Its Potential Elements at 19.

[71] For more general accounts *see* HUGH COLLINS, LAW OF CONTRACT, ch. 13; Boris Kozolchyk, *Fairness in Anglo and Latin American Jurisprudence*, 2 BOS. COL. INT'L & COMP. L. REV. 219 (1979).

[72] *Id.* at 105. Prausnitz maked that point decades earlier („the great amount of freedom of contract which the English people enjoy as 'paramount public policy' may account for the fact that the political aspect of this term has not hitherto worked out in an oppressive way. Apart from this general reflection, it may also be the reason why in the Courts of this country the question has never arisen whether conditions in standardized contracts are against public policy on the ground that the undertaking issuing the conditions holds a legal or at least a *de facto* monopoly." *Id.* at 105.

[73] E.g. the Unfair Contract Terms Act 1977 and the Unfair Terms in Consumer Contracts Regulation. European law had a major impact here. "Although equity will not normally intervene to protect a contracting party against the consequences of his or her own folly, some protection is offered to poor and ignorant person who are overreached in the absence of independent advice." ANSON at 287.

How to approach these difficult questions? Here again, context is important.[74] Specifically, the role of the organization, its governance features, the degree of incorporation of third party interest and regulatory competition, are all factors that can serve as proxy of market outcomes.

Another dimension of substantive analysis concerns interplay, and in particular conflicts between rules of regulatory contracts and the law. The concern may be that by "making uniform a particular term that term effectively becomes a hard one, at least to the extent that users of the contract decline to renegotiate it."[75] This – at least according to some – "seems especially problematic for terms that go to essentially legal or regulatory, rather than business, questions." In this sense, the legal self-regulation of standardized contracts can – as Mark Patterson warns - usurp the roles of the legislature and courts.[76] Simon Whittaker has also made this point in the European context, suggesting that such modifications of the law could be viewed in Europe as unfair contract terms:

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[74] *But see* Alan Schwartz & Robert Scott, *Contract Theory and the Limits of Contract Law*, 113 YALE L. J. 541 (2003) ("the bad things that firms do commonly entail imposing costs on third parties, such as creating environmental harms or erecting barriers to entry. These behaviors – the creation of negative externalities – are regulated by the environmental and antitrust laws. An analysis of contract law as such therefore can assume the absence of externalities." *Id.* at 5. In an often-cited paper on the search for spillovers, Zvi Griliches, applied econometrician of Harvard University, concluded that spillovers were often very important, but were very hard to quantify. Zvi Griliches, *The Search for R&D Spillovers*, 94 (5) SCAND. J. ECON. 29-47 (1992). In a report for the British Government G M Peter Swann took on the challenge arguing that a distinction need to be made between: (a) the ability to track down where the spillovers are accruing; and (b) the ability to contrive a contractual arrangement to internalize these spillovers. G M Peter Swann, "The Economics of Measurement", Report for NMS Review (1999) available at http://www.bis.gov.uk/files/file9676.pdf (last accessed on September 25, 2012). It can be envisaged that if (b) is empirically correct it is also a sufficient condition for contract theory/contract theorist to contemplate incorporating externalities.

[75] Mark Patterson, *Standardization of Standard-Form Contracts: Competition and Contract Implications*, 52 (2) WILLIAM & MARRY L. REV., 327 (2010)

[76] Id.

> "Now, it could be said that any European standard terms could simply not worry too much about these differences but could instead set a standard position in the contract, reflecting or not reflecting the default positions in national laws. But how would this work? Where the applicable law does not itself take a default position on the issue in question, then, in principle, the term would be given effect, but where the applicable law does take a default position, then the term's effect would immediately run into difficulty. Unless its substance were identical to the default rule, it would look like a contractual exclusion or modification of the law and, therefore, be potentially vulnerable under national laws governing unfair contract terms or other mandatory rules."[77]

Mark Patterson concludes by saying that "whether such alterations in default contract rules would be viewed in the United States as unfair, or unconscionable, is not clear, but alteration of mandatory rules certainly seems problematic, particularly when contracting parties may not be aware of the rules."[78] Alteration of mandatory de jure rules may be a cause for determination of unconsionability.

6.2.4. Construction/interpretation

6.2.4.1. Construction

The issue of contractual construction concerns the role of courts in identifying legally binding meaning of contracts. This should be distinguished from interpretation, which looks at the meaning assigned to the contract by the parties.[79]

6.2.4.1.1. Custom

The search for legally binding meaning sometimes prompts courts, as well as counsel, to rely on constructing certain provisions of regulatory contracts as terms

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[77] Simon Whittaker, *On the Development of European Standard Contract Terms*, *in* HUGH COLLINS (ED.), STANDARD CONTRACT TERMS IN EUROPE: A BASIS FOR AND A CHALLENGE TO EUROPEAN CONTRACT LAW 150 (2008) (quoted in Patterson, *supra* note 10 (Chapter 1)).

[78] Patterson, *Standardization*, supra note 74.

[79] As far as we know it was Arthur Corbin who drew the distinction between construction and interpretation. Construction determines the legally binding meaning. It encompasses both what is the source and what it means. Interpretation seeks to find the parties' meaning. ARTHUR L. CORBIN, CORBIN ON CONTRACTS (1960).

implied from custom or usage.[80] This is presumably because both New York[81] and English law[82] commonly recognize custom or usage as a helping with construction of the contract. English law insists that the usage by adopted either as an expressed or implied term of the contract, whereas in New York this is not necessarily the case.[83] The threshold for recognition is generally quite high and calls for consistency, reasonableness, notoriety and conformity with mandatory law.[84] It is rare for any custom to display these qualities. To give just one example, the Uniform Commercial Code in the United States is said to be deeply rooted in the commercial practices of the business community, but the actually empirical basis of that claims

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[80] The two are used interchangeably. Terms can be also implied from express terms of the contract. See Gardner v. Coutts & Co [1967] 3 All ER 1064 (the court will imply a term where its inference from the language of the contract is such that it can be said to be too obvious to need stating). The can be also implied when they are necessary to give effect to the contract. The Moorcock (1889) 14 PD 64, per Bowen LH at 68 and Sothern Foundries (1926) LTd v. Shirlaw [1940] AC 701 (the court will imply a term where it is necessary to give business efficacy to the contract). As noted by commentators "[t]he court is slow to imply a term on this ground and it is not sufficient that the court considers that such a term would be reasonable." (citations omitted) Goode, id. at 96.

[81] Berlinghof v. Long Island Fiber Exchange, Inc. 993 N.Y.S.2d 643 at 11 (2014) ("Where ambiguities exist in contractual language and/or in discerning the intent of the parties to such agreement, extrinsic evidence may include the course of dealing between the parties and third persons, as well as the custom prevailing in the trade that is the subject of the contract…"). See also N.Y. UCC. LAW § 1—201 ("Agreement" means the bargain of the parties in fact as found in their language or by implication from other circumstances including course of dealing or usage of trade or course of performance as provided in this Act").

[82] Attorney General of Belize v Belize Telecom Ltd [2009] UKPC 10, [2009] 2 All ER 1127 at 16.

[83] This is to say that in England custom and usage do not have independent normative force. See Goode at 97, FN 156 (referring to Humfrey v Dale and Morgan). In New York a term it is not admissible if it is inconsistent with the contract, which is a lower threshold. See e.g. Pink v. American Surety Co. of New York, 283 N.Y. 290, 296.

[84] See e.g. North and South Trust Co v Berkley [1971] 1 All ER 980 and Kum v Wah Tat Bank Ltd [1971] 1 Lloyd's Rep 439 (to be effective, such custom or usage must not be contrary to the law, and must be reasonable). See also Humfrey v Dale and Morgan (1857) 7 E & B 266, affirmed (1858) EB & E 1004 (custom and usage has to be generally known or know to the party against whom it is invoked, and consistent with the express terms and general tenor of the contract). *See* GOODE ON COMMERCIAL LAW (Edited and fully revised by Ewan McKendrick) at 14 (2009).

have been put to question.[85] This stands in strong contrast with regulatory contracts, which have a very strong empirical basis. Furthermore, formal contract helps to reduce the costs of determining what the practice is. Thus rather than relying on custom courts should seek to incorporate the contract as expressed terms, rather than custom.

6.2.4.1.2. Choice of law

The second important consideration insofar as construction is concerned is choice of law. This is because of the role law plays in filling gaps in incomplete contracts and because its role in enforcement of certain provisions. It is sometimes suggested that unlike in the context of company or tax law, contract law is not well suited for regulatory competition.[86] Vonagauer cites a number of surveys, which seem to suggest that choice of law is driven for all kinds of purposes, many times fairy simple, default (like preference of home jurisdictions). Whereas this may be true of certain contracts, it is not true of regulatory contracts. Contract laws (even fairly similar ones like New York and England) do differ, and application of a law that is not well suited to a regulatory contract may lead to results undesirable from a regulatory point of view, given that Effectiveness of the regime is largely based on giving effect to that choice.[87]

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[85] See e.g. Lisa Bernstein*, The Questionable Empirical Basis of Article 2's Incorporation Strategy: A Preliminary Study*, 66 U. CHI. L. REV. 710, 740–42 (1999) (for an overiview of the literature

[86] *See* Stefan Vogenauer, *Regulatory Competition Through Choice of Contract Law and Choice of Forum in Europe: Theory and Evidence*, *in* HORST EIDENMULLER (ED.), REGULATORY COMPETITION IN CONTRACT LAW AND DISPUTE RESOLUTION (2013) at 227 and passim. Vogenauer argues that contract law lacks these features on both the demand and supply side. On the demand side that is because, allegedly, there is no homogeneity of preferences and lack of information. On the supply side the change is costly and the benefits do not necessarily offset the costs.

[87] This observation is further strengthened by the fact that these organizations have a strong presence in those jurisdictions and it is most likely that they will follow and monitor all relevant developments. Even though New York and England might have been 'natural' choices for regulatory

Both New York and English law generally give broad discretion as to choice of law. In the EU the Rome I Regulation permits different parts of the contract to be subject to the law of a different country, and this could theoretically be an example of this principle of severability. But would courts be able to recognize that in the absence of an explicit choice of law clause? Giuditta Cordero-Moss argues that it is unlikely that the mere drafting style, legal technique and language of a contract as such are not sufficient bases for a tacit choice of law or as a circumstance showing close connection capable of prevailing over other connecting factor. [88] We respectfully submit that courts should be able to identify regulatory contracts through the analysis outlined above and apply the mandatory choice of law, unless it is contrary to their public policies.[89]

6.2.4.2. Interpretation

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contracts in finance, give the historical established position of these jurisdictions within this realm (including statutory requirements, competence of courts), it may not be so obvious in other contexts. As far I know, the most comprehensive survey of that type has been performed in the late 1990s by two London law firms for a company in the area of trade finance. Its methodology as well as findings could be used a blue print for future market design efforts. Its critical features include identification of a population of jurisdictions and relevant rules. In the next step a cost-benefit analysis is performed. Bolero, International Legal Feasibility Report prepared by Allen & Overy and Richards Butler (Second Edition, November 1997, Updated August and December 1999) (on file with author courtesy Mr Paul Mallon).

[88] GIUDITTA CORDERO-MOSS (ED.), BOILERPLATE CLAUSES, INTERNATIONAL COMMERCIAL CONTRACTS AND THE APPLICABLE LAW 43 (2011).

[89] *But see* Merrill Lynch Capital Services, Inc. v. Prairie Pride, Inc. (S.D.N.Y., 2011), where the court applied the standard for challenging forum selection clauses under New York law. It stated that where a party seeks to challenge a forum selection clause, the district court must analyze: (1) whether the clause was reasonably communicated to the party resisting enforcement; (2) whether the clause is mandatory or permissive; (3) whether the claims and parties involved in the suit are subject to the forum selection clause; and (4) whether the resisting party has made a sufficiently strong showing that "enforcement would be unreasonable or unjust, or that the clause was invalid for such reasons as fraud or overreaching." The court held that given the fact that PP was not handed in the ISDA MA form it would be inappropriate to enforce the clause.

The central question in the context of interpretation is whether contract law should interpret contract in accordance with the subjective intent of the parties or according to the objective meaning of the words of the agreement? [90] And what these meanings are? It is suggested in the literature that the answer to that question may depend on the contracting environment. Specifically, if the parties are not sophisticated courts may want to engage in a contextualize analysis, which also takes into account the will of the parties. If they are sophisticated it should be more textualist and formal.

Alan Schwartz and Robert Scott have developed this argument in detail. The core of their theory is that, insofar as sophisticated parties are concerned "contract law should restrict itself to the pursuit of efficiency alone."[91] In terms of the implications of this theory for interpretation they suggest, "textualist interpretation should be the default theory". At the same time they acknowledge that "a textualist theory of interpretation . . . will not suit all parties all of the time. Therefore, courts should use narrow evidentiary bases when interpreting agreements between firms, but also should comply with party requests to broaden the base that is applicable to them."[92]

Stephen Choi and Mitu Gulati further nuanced the above theory. They argue that contracts between firms/sophisticated parties should be further divided into

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[90] As a general matter both New York and English contract law pay greater attention to the objective meaning of the contract and not the subjective intention of the parties. In England, Investors Compensation Scheme Ltd v West Bromwhich Building Society [1998] 1 WLR 896 at 912-913. *See* Goode at 100. *See also* K. LEWISON, THE INTERPRETATION OF CONTRACTS (2007) and G. MCMEEL, THE CONSTRUCTION OF CONTRACTS (2007). In the past Prausnitz had made that observation. "Perhaps the most striking difference between English and Continental law is the English law of evidence, which precludes the judge from using 'extrinsic' sources of information. No similar rules form part of any Continental law." At 120. The latter is more common in civil law countries.
[91] Schwartz & Scott, *Contract Theory*, supra note 73 at 544.
[92] Id. at 545.

two sub-categories: standardized (or in their choice of language 'boilerplate') and non-standardized or non-boilerplate.[93] Deferring to parties' intention, they posit may be suitable for the later category. The problem with applying that approach to boilerplate contracts, such as ISDA's contractual models is that many boilerplate contracts are not representations of the specific intent of the parties to the transaction. Rather "[t]hey are more like incantations, where the parties, by invoking the boilerplate language, avail themselves of the historical reasons for the survival of these terms in generations of contracts."[94] Accordingly, when the court defers to an understanding of a particular provision suggested by one party, "[t]he chance for court error in interpreting boilerplate is . . . high." [95]

Choi and Gulati argued that "deference to the intentions of the specific parties before a court is especially inappropriate where there are third party

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[93] Choi & Gulati, Contract as Statue, supra note …
[94] Id.
[95] Boardman argues that in the context of boilerplate construction ought to be applied . . .

> "Construing boilerplate rather than interpreting it is sensible. First, given that only one party—the drafter—may have read the language before signing, or even before litigation, a court is unlikely to find an actual joint meaning. Second, boilerplate clauses seem to make up a disproportionate percentage of those clauses courts are unwilling to enforce, even if, or perhaps because, their meaning is clear. This is of course one of the main paths by which construction will diverge from interpretation. Third, similar or identical boilerplate language may have already been interpreted by the court at hand or by other courts. In other words, the legal meaning of boilerplate—its construction—may already be known, making any foray into its subjective interpretation less desirable. Moreover, the accumulative process by which boilerplate comes to be boilerplate, discussed in detail below, often leads to language a layman will not understand. At this point, many courts will lose all interest in the project of interpretation, if defined as seeking the meaning the parties ascribe to the language. And who can blame them? The nondrafter either will have ascribed no meaning to the inchoate language or will have been misled or confused by it. Given that a court cannot simply refuse to address the case in the absence of meaningful interpretation, it is left with construction. Once it is accepted that boilerplate is not necessarily the will of the parties …" Michelle E. Boardman, *Contra Proferentem: The Allure of Ambiguous Boilerplate,* 104 MICH. L. REV. 5, 1105-1127 ("Boilerplate": Foundations of Market Contracts Symposium, Mar., 2006).

effects." In the context of contracts on which they focused [derivatives and sovereign debt contracts – MB], an interpretation of the contract language can impact the contracts for a multitude of other parties who all have essentially the same boilerplate language in their contracts. Accordingly, "[d]deferring to the intentions of the parties to the dispute may produce problems where these parties do not represent the interests of the others in the market who have no say in the current litigation." Choi and Gulati thus in essence expressed a concern for 'systemic' effects of interpretation of boilerplate. These effects can be particularly problematic when regulatory contracts are interpreted.

Thus Choi and Gulati refer to these contracts as quasi-statues. And indeed, this term is properly indicative of their regulatory functions. It is essential that judges and decision makers more generally recognize that these contracts have a special role and that by interpreting judges effectively alter the design and regulatory properties of particular markets. Courts should be very conscious when interpreting them with regard to the intention of the parties. They have a meaning that goes beyond the intention of the parties. That meaning is regulatory in nature.

6.4. Summary

This Chapter outlined the contribution of the contractual model of regulation and its empirical validation to regulatory and contract theory. In terms of regulatory theory, the model and its empirical validation are aligned with the theory and empirical findings related to the organizational model of regulation. This is true in particular with regard to recognition of the role of the political economy of governance on regulatory impacts. Beyond the formal distinction between nonprofits and firms, a wider set of governance features is deemed to affect regulatory impacts. This includes in particular membership base, committee structure, management and other features of the governance structure. These

features vary not only across organizations but also within organization (for example, with certain committees being more inclusive than others) and regulators have to be responsive to those idiosyncratic features. They also have to be responsive in terms of shaping regulatory competition, both between private regulators and public regulators, but also among private regulators. Financial markets require a good balance of OTC and exchange market activity and regulatory responses have to be mindful of that.

The contractual dimension poses a challenge to contract theory. It puts contract law, and specifically courts that apply it, in a rather unusual position; they become part of a regulatory chain. It is unusual in that they role goes beyond resolution of a dispute between two parties and extends to a system of checks on regulatory regimes. While they are used to doing it with respect to the law, doing this with respect to regulatory contracts is a new task, even though it can be understood to draw on that task, except for it requires attention to what is a regulatory contract. This calls for a greater recognition of contextual analysis in term of formation and legitimacy, but a fairly formal application of rules of interpretation.

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