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RISK MANAGEMENT, RESPONSIVE REGULATION, AND OVERSIGHT OF STRUCTURED FINANCIAL PRODUCT MARKETS

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I. INTRODUCTION

Globally, regulators, supervisory authorities, and governments are grappling with what have now been identified as systemic risk factors that contributed to the recent global financial crisis. Internationally, the Basel Committee on Banking Supervision and other organizations are developing standards to identify and address systemic risk, suggesting that the extent of regulation or exemption from it can serve as a mechanism by which risk is transferred within the financial system. The Cross-border Bank Resolution Group of the Basel Committee has developed ten recommendations as a result of its stock-taking of lessons learned from the financial crisis.[1] The Financial Stability Board (FSB), an organization of national financial authorities and international standard-setting bodies, has developed a policy framework for reducing the moral hazard of systemically important financial institutions and for reforming derivatives markets.[2] These initiatives are mirrored by similar initiatives in international organizations, national and regional governments, and a myriad of other regulatory and non-regulatory agencies.

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1 Basel Committee on Banking Supervision, *Report and Recommendations of the Cross-Border Bank Resolution Group* (March 2010), online: Bank for International Settlements <http://www.bis.org> [Basel Committee, *Cross-Border*] at 22–43.

2 FSB, *Reducing the Moral Hazard Posed by Systemically Important Financial Institutions* (20 October 2010), online: <http://www.financialstabilityboard.org>.

The recommendations being developed by government-sponsored international organizations point to three critically important aspects of today's financial markets. First, they are highly globalized, which means that regulation solely by individual states is no longer a sufficient response to the conditions that created the crisis. Financial market players span hundreds of borders, and organize their structures globally for a variety of efficiency, tax-related, liability-related, and other reasons. The interconnectedness of both financial structures and financial products creates tremendous challenges for considering the scope and limits of regulatory oversight. Second, at best, the suggestions generated by these international organizations need to be broad brush strokes, as they operate in a global system in which the type and intensity of regulatory oversight varies considerably. While a need for global standards has been identified, the likelihood of global convergence towards one set of specific standards is slim. Third, there are very diverse regulatory spaces for oversight of financial markets, including state regulators, self-regulatory organizations, and coalitions of business or financial interests that actively pursue their objectives in an array of regulatory spheres. The complexity of the issues, and the regulatory structures that respond to them, pose significant challenges. It is evident that many of the initiatives to date have not addressed the need for a broad-based, participatory public policy debate on the normative objectives that new regulatory requirements seek to achieve.

The issues raised by this significant upheaval in the financial system will be the subject of analysis for years to come. On the occasion of John Braithwaite's Fasken Visiting Scholar Lecture and workshop on responsive regulation at the University of British Columbia in 2010, this paper explores a very specific issue among the many raised in respect of regulatory oversight of systemic risk in financial markets. Specifically, it analyses Braithwaite's pyramidal approach to regulatory processes, to assess whether it offers helpful suggestions for the current effort to determine new regulatory standards for the structured financial products market. Derivatives, collateralized debt obligations, and similar products have been viewed as major contributors to the financial meltdown that commenced in 2008. The paper suggests that Braithwaite's model of responsive regulation may have some application, particularly in engaging local citizens in a collaborative policy discussion regarding regulatory oversight. Essentially, Braithwaite advocates a highly dialogic and responsive process in which market participants engage with regulators

to structure solutions to market problems and create a support structure promoting continuous improvement. He suggests that regulators should not rush to law enforcement solutions before engaging with stakeholders to develop a range of policy responses. However, the effectiveness of Braithwaite's approach is limited by the global nature of these challenges, the intractable nature of private organizations on the global stage in their efforts to resist regulatory change, and profound power imbalances and information asymmetries that would need to be addressed to make such processes more accountable.

Part II of the paper sets out the challenge for oversight of structured financial products markets, including the market conditions in respect of such products that contributed to the global financial crisis and the lacuna in regulatory oversight. Part III analyzes the contribution of responsive regulation theory to issues raised by current market conditions. Part IV then suggests that regulatory strategies must address the problems arising out of the crisis, including the moral hazards and the governance issues. Part V assesses the potential contribution of responsive regulation. One issue is that responsive regulation takes time, and there are specific normative principles that could be immediately implemented, as placeholders, to temper the most serious negative distributive harms to market participants. Such principles would guide regulatory responses in the financial services sector and help avoid regulatory capture, if the discourse about regulatory oversight that is an essential aspect of responsive regulation is truly to be meaningful. While the potential exists for more responsive regulation, it is vulnerable to hearing only from the regulated, given the classic problem of organized versus unorganized constituencies and the constraints on their capacity to acquire knowledge, disseminate their views, and influence regulatory change.

II. THE CHALLENGE

Financial services assist the functioning of market economies: they can help manage risk, they intermediate credit transactions, and they transform the maturities of assets and liabilities to create liquidity in the market. However, liquidity and solvency issues in financial services can severely impact national and regional economies. Although there is some international consensus on several factors that contributed to the financial crisis, such as inadequate capital adequacy requirements, opaque disclosure requirements in respect of

structured financial products, and failure to appreciate systemic risk, there is considerable normative disagreement regarding the need for regulatory intervention as a forward-looking remedy—in particular, regarding the scope of regulatory oversight that may be needed for structured financial products.[3] These products include both derivatives and securitization.

A. Derivatives

Derivatives have an important role in managing the risk of direct investment, but their original objective of risk diversification has been overtaken by a vast speculative market. The rapid introduction of new, complex products created systemic risks to financial markets, and, in turn, to real economies—without the monitoring and discipline that occurs for securities markets or traditional commercial lending activity. The lack of transparency of these products meant that counterparty risk was not well understood or appropriately priced. As Andrew Haldane, Executive Director of Financial Stability for the Bank of England, infamously stated, "an investor in a [CDO squared, a particularly complex type of collateralized debt obligation] would need to read in excess of 1 billion pages to understand fully the ingredients."[4] The commodification of risk and creation of complex interlocking products resulted

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3 See e.g. US, The President's Working Group on Financial Markets, *Policy Statement on Financial Market Developments* (March 2008), online: Department of the Treasury <http://www.treasury.gov>; Financial Stability Forum, *Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience* (7 April 2008), online: <http://www.financialstabilityboard.org>; International Monetary Fund, *The Recent Financial Turmoil—Initial Assessment, Policy Lessons, and Implications for Fund Surveillance* (9 April 2008), online: <http://www.imf.org>; Counterparty Risk Management Policy Group III, *Containing Systemic Risk: The Road to Reform* (6 August 2008), online: <http://www.crmpolicygroup.org>; G-20 Study Group, *Report on Global Credit Market Disruptions* (19 November 2008), online: <http://www.g20.org>; Senior Supervisors Group, *Observations on Risk Management Practices during the Recent Market Turbulence* (6 March 2008), online: Federal Reserve Bank of New York <http://www.newyorkfed.org>.

4 Andrew G Haldane, "Rethinking the Financial Network" (Speech delivered at the Financial Student Association, Amsterdam, April 2009), online: Bank of England <http://www.bankofengland.co.uk> at 17.

in a financial system increasingly interconnected, operating on a global scale, but concentrated in a few key financial hubs such as London and New York, with little sense of the risks to the overall system.

The shocks in 2008–2009 were a number of years in the making. Globally, credit derivatives exposures by ratings had been shifting downward, with many moving from AAA to below investment grade in the previous five years.[5] Banks' market share of derivatives declined as hedge funds increasingly took a greater share of both the buy side and sell side of the market.[6] As margins squeezed at the upper end of the credit curve, hedge funds shifted to more speculative investment grades and unrated exposures to maintain returns. The nature of traditional banking also shifted with these changes in the market. Banks increased their leverage, increased their use of securitization, and increased the writing of "deep out-of-the-money options", each increasing risk in the system that was not recognized at the time.[7] Together, these changes altered the credit derivatives market significantly, without any jurisdiction seriously assessing the public policy implications.[8]

The very notion of credit derivatives was the design of a financial product that allowed banks and other financial institutions to manage risk.[9] There are

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5 See Elizabeth Murphy, Janis Sarra & Michael Creber, "Credit Derivatives in Canadian Insolvency Proceedings, 'The Devil will be in the Details'" in Janis P Sarra, ed, *Annual Review of Insolvency Law, 2006* (Toronto: Carswell, 2007) 187.

6 Ross Barrett & John Ewan, *BBA Credit Derivatives Report, 2006* (London: British Bankers Association, 2006) at 6. In 2000, banks accounted 81% of the buy side and 63% of the sell side of market share, that number dropping to 59% and 44% respectively by 2006. Hedge funds went from 3% of the market on the buy side in 2000 to 28% market share in 2006. As a seller, their market share grew from 5% to 32% in the same period.

7 Mark Carney, "The Economic Consequences of the Reforms" (Bundesbank Lecture 2010, delivered to Deutsche Bundesbank, 14 September 2010), online: Bank for International Settlements <http://www.bis.org>, noting that by "borrowing in short-term wholesale markets to fund asset growth, banks became more dependent on continuous access to liquidity" in both the money markets and capital markets.

8 See Janis Sarra, "Credit Derivatives Market Design, Creating Fairness and Sustainability" (Network for Sustainable Financial Markets, December 2008), online: Social Science Research Network <http://ssrn.com>.

9 See Murphy, Sarra & Creber, *supra* note 5.

numerous kinds of credit derivatives, such as credit default swaps,[10] collateralized debt obligations (CDOs), full and index trades, and credit-linked notes. Credit derivatives are classified as either single-name credit derivatives, targeted on the credit worthiness of a single reference entity, or multi-name (basket) products that hedge the risk of clustered defaults in a portfolio.[11] A credit derivative can be a privately negotiated agreement that explicitly shifts credit risk from one party to the other, or it can be collateralized and housed within a special-purpose vehicle that resells debt contracts in various tranches at differing prices, quality, and risk.[12] CDO can be cash flow based, whereby the vehicle issues its own financial instruments to finance purchase of debts of different corporate entities, ensuring a fixed flow of loan repayments that are used to pay investors in the various tranches. Alternatively, a CDO can be synthetic, whereby the entity does not directly purchase debts but rather enters into credit default swaps with a third party, creating synthetic exposure to the debt of a number of corporate entities.[13] The diverse nature of these products made it difficult for both regulators and market participants to understand the myriad of products and their complex terms and conditions.

As a risk management tool, credit derivatives were designed as a means of diversifying lending risk by covering exposures where there have been credit events of the underlying reference entities.[14] However, as products proliferated in number and complexity, they increased the risk of losses for less-sophisticated investors, creating negative incentives for particular counter-

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10 Sarra, *supra* note 8 at 2. The most common credit derivative, a credit default swap (CDS), is a credit derivative contract in which one party, the "protection buyer", pays a sum of money periodically to the "protection seller", usually referable to the amount of protection provided by the contract. The protection seller's obligation to pay arises on the occurrence of a credit event. The reference entity is not a party to the credit default swap. The protection buyer that is a creditor of the reference entity hedges the risk of default by that entity, and takes on the risk of default by the protection seller. The protection seller acquires the default risk of the reference entity.

11 Murphy, Sarra & Creber, *supra* note 5.

12 Sarra, *supra* note 8 at 4.

13 US, Financial Crisis Inquiry Commission, *Financial Crisis Inquiry Report* (Washington, DC: US Government Printing Office, January 2011) at 142–44.

14 Sarra, *supra* note 8.

parties to these transactions. The original objective of banks managing the risk of direct investment under lending portfolios was overtaken by a speculative market for buying and selling derivatives in multiples of the value of the underlying reference assets or entities, resulting in a significant trading market involving a greater number of market participants.[15] The risks arose in part because of the expansion to markets involving asset-backed commercial paper, residential mortgages, and other products where some of the underlying assets had been inappropriately valued or rated and thus risk mispriced. These risks also arose when derivatives became part of the "originate and distribute" model of lending.

When traditional incentives to assess the quality of loans were weakened, the contagion risk associated with structured financial products was very high. In the search for short-term returns, products became associated with poor quality US subprime mortgages, and belated realization of the degeneration of quality by credit rating agencies resulted in ratings downgrades. Investors began to shun the products and the contagion effect led to a failure of confidence; for example, the sub-prime crisis spread to the asset-backed commercial paper market. The rapid spread to other products resulted in risks to the financial health of counterparties to all these transactions, and in particular, to banks in many jurisdictions, eventually creating a more general credit crisis.

The mechanism by which the contagion spread was as follows. Downgrading ratings meant that the value of the derivative dropped, resulting in a concomitant drop in the value of the assets on the financial institution's books. In turn, the financial institution was required to raise additional capital. However, raising capital by selling assets was more difficult because no one was certain about the current price for the assets, since the downgrades called into question previous valuations. If the financial institution tried to raise capital through borrowing, uncertain valuation of the assets it was offering as security for the loan made obtaining a reasonable rate of interest more and more difficult. Finally, in some markets, such as the market for asset-backed commercial notes, all trading ceased due to the inability of market participants to put any value on the underlying assets. To the extent that fi-

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[15] *Ibid.*

nancial institutions had sold credit protection, they faced calls to put up additional collateral to support the credit protection contracts because of growing doubts about the valuation of collateral previously pledged as security, or doubts about the ability of financial institutions to honour the contract.

The lack of understanding of the systemic risk associated with structured financial products may speak to a deeper set of problems associated with regulatory oversight. The framework of regulatory policy-making means that regulators are dependent on market participants to identify hazards and craft policy responses. Yet the narrow scope of participants in these initiatives meant that the understanding of products and their risk was informed by those market players that had the most to gain from exemptions to regulatory oversight, from the opacity of the products, and assurances that the risks were only to sophisticated counterparties. Although one identified problem has been the issue of attracting and retaining skilled financial services regulators as a counterbalance to the pressures by market participants for exemptions from oversight, there may be a more deeply embedded cognitive set of issues, in that the narrow community of interests engaged in the regulatory discussion fostered an inability to perceive and respond to the systemic risks.

B. The Asset-Backed Commercial Paper Market

The asset-backed commercial paper (ABCP) market in Canada principally involved short-term commercial paper, with terms usually ranging from 30 to 90 days, typically with a low-interest yield that was slightly better than that available through other short-term paper from a government or bank; the balance was made up of commercial paper that was extendible for up to 364 days and longer-term floating rate notes.[16] The capital that was used to purchase an ABCP note was converted into a portfolio of financial assets or other asset interests, to be held, directly or through subsidiary trusts, by the trustees of conduits.[17] The types of assets and asset interests acquired to support ABCP notes in Canada were generally medium- to long-term assets

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[16] Janis Sarra, "Restructuring of the Asset-Backed Commercial Paper Market in Canada" [Sarra, "Restructuring"] in Janis P Sarra, ed, *Annual Review of Insolvency Law 2008* (Toronto: Carswell, 2009) 315 at 315–54.

[17] *Ibid* at 316–17.

such as residential mortgages, credit card receivables, auto loans, cash collateralized debt obligations, and derivative investments such as credit default swaps. The market was dependent on the liquidity of the ABCP. Due to the nature of the assets backing the ABCP, the cash flow they generated did not match the cash flow required to repay maturing ABCP. Prior to mid-August 2007, this timing mismatch was not problematic because many investors chose to roll or reinvest their existing ABCP at maturity, not requiring repayment.[18] Moreover, new ABCP was being sold continually, which generated funds to repay maturing ABCP where investors required payment. As long as investors were rolling their ABCP or buying new ABCP to replace maturing notes, the ABCP market was stable.

There was a lack of transparency in the ABCP market in respect of the mix of assets that backed the ABCP. The ABCP had often been issued and sold before the assets were acquired, and then frequently resold, so that purchasers were unaware of precisely the nature of, and risk associated with, the assets backing their investment.[19] A number of the assets were complex structured financial products, and confidentiality requirements in respect of the terms of some underlying contracts created a real opacity in the products. When the US sub-prime crisis was in full swing, although only five per cent of the Canadian ABCP market was invested in sub-prime mortgages, there was a contagion effect in the market. As the defaults on US sub-prime mortgages rapidly rose, investors in Canadian ABCP lost confidence in the market, worrying that sub-prime mortgages or other over-valued assets were backing their paper.[20] The lack of transparency regarding the pool of assets backing the ABCP exacerbated the lack of confidence. As ABCP became due, investors stopped purchasing ABCP and existing noteholders ceased rolling over their maturing notes. By August 2007, seven trusts could not repay their noteholders the amounts due on $32 billion of ABCP, and the market was at risk of complete collapse.[21] Although most of the value of the

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18 *Ibid* at 319.

19 *Ibid* at 318.

20 *Ibid.*

21 *Ibid* at 319. At a meeting of major market participants, a number of asset providers, liquidity providers, noteholders, and other financial industry representatives, agreed to a

third-party ABCP was held by approximately one hundred institutional investors and corporations, it became evident during the restructuring proceedings that there were more than two thousand retail investors holding ABCP, many of whom were retirees who had been led to believe that the ABCP was a stable and relatively low-risk investment.[22]

C. SECURITIZATION

Banks had shifted their traditional lending practices to employ securitization in most asset-backed lending. Securitization was ostensibly aimed at reducing credit risk by diversifying funding and freeing up funds to lend back into the market. However, in many instances, banks did not transfer risks fully and were left holding large quantities of leveraged super-senior tranches of structured products.[23] Banks and other financial institutions became heavily reliant on the liquidity of markets that had few rules and little regulatory oversight. Regulators erroneously assumed that the securitization process led to greater risk-spreading between institutions and across borders.[24]

A negative feature of securitization is that economic risk is held by tranches of debt. Once fees are extracted by the originator of the loan, much of the risk is passed along. Further opacity is created by the syndication of debt, in which more than 200 banks, hedge funds, and other lenders may hold a portion of the debt in a syndicated loan, with that debt hedged through further securitization or purchase of credit default swaps.

The rating instruments in respect of securitized tranches were also outdated; and investors relied too much on credit ratings and failed to take ac-

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standstill agreement in which major market participants agreed to freeze $32 billion in third-party ABCP on 13 August 2007, pending a strategy to address the liquidity crisis.

22 *Ibid* at 322. Ernst & Young, hired as advisors to the Pan-Canadian Investor Committee for Third-Party Structured Asset-Backed Commercial Paper, undertook a media campaign to locate ABCP investors, asking them to confirm their holdings; created a public website and telephone information line for investors seeking information; set up physical and virtual data rooms to provide information concerning the legal and financial structures of the conduits and each series of ABCP.

23 Carney, *supra* note 7 at 3.

24 Julia Black & Robert Baldwin, "Really Responsive Risk-Based Regulation" (2010) 32:2 Law & Pol'y 181 at 206.

count of the liquidity risk and lack of transparency regarding the investments. For example, banks would sell tranches of sub-prime mortgages, bundled across hundreds of thousands of sub-prime mortgages, in up to twelve tranches with the riskiest still being rated above investment grade. The highest ratings reflected the credit rating agencies' assessment that any calls would never reach the higher tranches, rather than any assessment of the actual quality of the debt. Investors were willing to invest because they held a large coupon and thought that the chance of nation-wide failure of the mortgage markets was slim.

D. Capital Adequacy

Capital adequacy requirements are also linked to the challenges posed for regulatory oversight of structured financial products. Banks are highly interconnected, through the over-the-counter (OTC) derivatives market, foreign exchange market, and inter-bank transactions, creating substantial counterparty risk that only became apparent with the collapse of Lehman Brothers and other financial institutions. The risk profile of banks can alter quickly from market developments even without affirmative action on the part of the bank. A bank's holdings of financial assets include both debt and equity securities, as well as hybrid products; the securitization of debt allows a bank to liquidate its long-term debt arrangements, such as commercial and residential mortgages, and shift the value to new assets with a much higher risk profile. These structures directly impacted the need for banks to maintain adequate capital standards. There was a lack of understanding of the relationship between structured financial products, capital adequacy, and the larger economy.

A number of products in the market shifted away from banks with their prudential obligations, to other institutions and market players. A number of the traditional functions of banks shifted to hedge funds, mortgage intermediaries and brokers, structured investment vehicles, and market intermediaries, collectively referred to as the "shadow banking system". The shadow banking system was not subject to the same capital adequacy requirements as traditional commercial banks, yet their market share of financial services

products was as significant as that held by the banks at the time of the global financial crisis.[25]

The Basel Committee has now recognized that the capital adequacy requirements for commercial banks were insufficient, because Basel II left too much decision making in the hands of the financial institutions, on the premise that financial institutions would make decisions that ensured the safety and soundness of the system overall. Basel II also encouraged procyclical tendencies that permitted excessive leveraging and failed to account for both specific and systemic risks. The Basel Committee has concluded that the assumption that institutions were too big or too interconnected to fail introduced additional risk and a greater likelihood of cross-border contagion.[26]

The combination of inadequate capital, the lack of oversight of derivatives, and securitization contributed to the financial crisis. However, the crisis in the financial markets had an impact far beyond those markets. Globally, $2 trillion US dollars of economic output was lost in the G7 countries. The collapse of financial institutions placed people's homes, pensions, and economic security at risk. The injection of public funds into the financial system in the EU alone amounted to twenty-five per cent of the European Union's Gross Domestic Product (GDP). In Canada, there were no bank failures because of a stronger financial regulatory framework, but there were contagion effects of international failures. Canada suffered a loss of 400 thousand jobs.[27] Its $32 billion asset-backed commercial paper market collapsed, there was a substantial decrease in trade, and a large increase in business bankruptcy.[28] The Bank of Canada has forecasted that, as a result of the crisis, the cumulative foregone economic output from 2009 to 2012 will be nine per cent of

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25 Michael Barr, *Ending "Too Big to Fail"*, Testimony before the Subcommittee on Financial Institutions and Consumer Credit, Committee on Financial Services, US House of Representatives (14 June 2011), online: Brookings Institution <http://brookings.edu>.

26 Basel Committee on Banking Supervision, "The Basel Committee's Response to the Financial Crisis: Report to the G20" (October 2010).

27 Carney, *supra* note 7 at 2.

28 Sarra, "Restructuring", *supra* note 16 at 321; Office of the Superintendent of Bankruptcy Canada, *Insolvency Statistics in Canada—July 2009*, online: Industry Canada <http://www.ic.gc.ca>.

the GDP of Canada.[29] The size and scope of losses globally distinguishes the 2008–2009 global financial crisis from previous financial crises, necessitating a globally coordinated response.

III. RESPONSIVE REGULATION

The myriad of proposals for reform are the product of negotiation among multiple jurisdictions in fora such as the World Bank, the Basel Committee, the FSB, and the G20. While the issues are clearly on the public policy agenda, the range of remedies may be limited by the narrow scope of people at the discussion table. Additionally, while there is broad consensus now that financial markets have a strong impact on the real economy, a fact that was not widely recognized previously, the solutions are being fashioned by financial market experts with remarkably little input from those persons in the real economy affected by long-term framework decisions. The narrow parameters of the discussion may mean that the problems underlying the crash will have been tinkered with, but not really addressed. Aside from the normative choices that need to be made, there are important considerations regarding the nature of the regulatory process itself, and the ability of market participants and ordinary citizens to have their voices included in the range of interests being considered as financial market regulation moves forward.

Responsive regulation theorists offer one approach that aspires to widen the range of participants in the regulatory debate and to offer a more dynamic, dialogic, and collaborative framework for discerning the scope of required regulation and putting it into practice. Regulation is to be responsive and compliance-building, as opposed to moving immediately to sanctions.

A. Braithwaite's Contribution

Professor John Braithwaite has been in the forefront of conceptualizing responsive regulation and considering its application across diverse areas of law; his ideas have evolved over the past two decades. Braithwaite observes that states have become preoccupied with the regulation part of governance, yet non-state regulation has grown even more rapidly, moving into an era of

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[29] Carney, *supra* note 7 at 3.

regulatory capitalism in which corporations have also been transformed into networks.[30] He suggests that the state has become both an object and a subject of regulation, and that "finance capital holds sway over states", its influence exercised through capital movements, but also through lobbying global institutions that have more direct control over a specific sphere of state activity, creating severe accountability problems.[31] For Braithwaite, "the social responsibility of regulators must be not simply to impose controls, but to activate and draw on the conscience and the talents of those they seek to regulate".[32] Braithwaite suggests that the logical structure for regulatory capitalism would see everyone become a guardian of everyone else, with communities of dialogue recursively accountable to each other, exposing abuses of power to community disapproval. Braithwaite draws on organisational psychology research to suggest that deliberation in groups improves the inductive quality of decision-making, ensuring useful perspectives are not neglected, and cultivates offers to take responsibility for sorting out problems, in turn setting up an accountability framework.[33]

Braithwaite's dual pyramidal structure of regulation suggests that stakeholders need to engage in, and exhaust, a pyramid of support prior to accessing the pyramid of sanctions.[34] The notion is that at the base of the pyramid, there is broader room for engagement, education, information sharing and negotiation. The support pyramid allows expansion of the strengths of some players to cover others' weaknesses, with Braithwaite suggesting that profes-

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30 John Braithwaite, *Regulatory Capitalism: How it Works, Ideas for Making it Work Better* (Cheltenham: Edward Elgar, 2008) at 3 [Braithwaite, *Regulatory Capitalism*].

31 *Ibid* at 25; John Braithwaite, "Accountability and Governance under the New Regulatory State" (1999) 58:1 Australian Journal of Public Administration 90 [Braithwaite, "Accountability"].

32 *Ibid* at 4, 8. Braithwaite suggests that corporate governance shapes the daily lives of most citizens more than state governance, using the example of triple bottom line accounting, where "green markets" are mediated by the interventions of private and non-governmental organization regulators.

33 John Braithwaite, "The Essence of Responsive Regulation" (2011) 44:3 UBC L Rev 475 [Braithwaite, "Essence"]; John Braithwaite, "The New Regulatory State and the Transformation of Criminology" (2000) 40:2 British Journal of Criminology 222 at 233.

34 Braithwaite, *Regulatory Capitalism, supra* note 30 at 78, 154.

sionals such as lawyers and accountants serve as private regulators in lobbying efforts in their own right, and that they also serve as a mediating force for clients they represent who may have fewer incentives to engage in the support pyramid. When it becomes necessary to access the pyramid of sanctions, attitude to compliance is important.[35] Moving from the base of the pyramid up to more onerous compliance responses, Braithwaite advocates counselling, notice, voluntary undertakings, enforcement, and at the extreme, loss of license or other approval to operate. Braithwaite suggests that regulated entities, regulators, and other interested parties move up and down several pyramids of decision, incentives, and action at any given point or on particular issues.

Braithwaite emphasizes the importance of regulation to be responsive to individual context and the environment in which business operates, and regulators need to be responsive to the moves that regulated businesses make.[36] He advocates nine broad principles for regulatory engagement. First, think in context, without imposing preconceived theories; regulation may be privatization of functions or socialization. Second, the regulator should listen actively, structuring the dialogue to give voice to multiple stakeholders. He suggests that persons and parties regulated, rather than the regulator, should make argument for change. The regulator's role is to raise regulatory concerns, understand resistance and adapt standards, Braithwaite observing that where regulation undermines confidence of market players, it reduces the motivation to fix problems. The third principle is to engage those who resist with fairness, showing respect by construing their resistance as an opportunity to improve regulatory design.[37] Fourth, he advocates praise for those who show improvement, which supports innovation and nurtures mo-

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35 *Ibid*. Actors are characterized, from the base of the pyramid, as "leading citizens" engaged in capacity development, rationale actors making determination base on economic utility, and incompetent or irrational actors; they range from fully compliant, up through the pyramid to able but not willing and then seriously disengaged.

36 Braithwaite, "Essence", *supra* note 33 at 510, in which Braithwaite suggests that if the top of the pyramid is not accessible, "lopped off" as he calls it, the paradox is that the lower levels leave the "top" as the more combative stages and thus may be less effective.

37 *Ibid* at 20, relying on Valerie Braithwaite, "Games of Engagement: Postures within the Regulatory Community" (1995) 17:3 Law & Pol'y 225.

tivation to continuously improve.[38] Fifth, the regulator should signal that it prefers to achieve outcomes by support and education. Braithwaite suggests that the regulator should signal, but not threaten, a range of sanctions to which it can escalate; signalling that the ultimate sanctions are formidable and used where necessary, but only as a last resort.[39] Regulators should engage a wider network of partners, such as securities regulators networking with one another to place pressure on the firm.[40] Eighth, regulators should elicit active responsibility for making outcomes better in the future, holding actors responsible for past actions where active responsibility fails.[41] The ninth principle is evaluating how well and at what cost outcomes are achieved, communicating lessons learned. Where monitoring reveals significant improvement, no one invests in what Christine Parker refers to as the "second loop of learning" by spreading news of this outcome across an organization.[42]

Braithwaite suggests that regulators should not rush to law enforcement solutions before considering a range of approaches to support capacity building.[43] He suggests the most common reason in business regulation for failure of restorative justice and deterrence is that non-compliance is not about a lack of goodwill or rational calculation to cheat, but rather, management's lack of competence to comply. Hence dialogue before sanction, with Braithwaite believing that the fundamental resource of responsive regulation is the belief of citizens in the inexorability of escalation if problems are not fixed.[44] Punishment can simultaneously increase deterrence and defiance and

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38 Braithwaite, "Essence", *supra* note 33 at 21.

39 *Ibid* at 2.

40 *Ibid* at 26. See also Peter Drahos, "Intellectual Property and Pharmaceutical Markets: A Nodal Governance Approach" (2004) 77:2 Temp L Rev 401.

41 Braithwaite, "Essence", *supra* note 33 at 28, citing Mark Bovens, *The Quest for Responsibility: Accountability and Citizenship in Complex Organizations* (Cambridge: Cambridge University Press, 1998).

42 Christine Parker, *The Open Corporation: Effective Self-Regulation and Democracy* (Cambridge: Cambridge University Press, 2002).

43 Braithwaite, *Regulatory Capitalism, supra* note 30 at 5.

44 *Ibid* at 12.

thus one must deploy a range of regulatory tools.[45] Responsive regulation creates a presumption that less interventionist remedies at the base of the pyramids are normally the best place to start.[46] Responsive regulation, in his view, discovers low-cost ways to achieve regulatory outcomes and continuous improvement in achieving better outcomes.[47]

Overall, Braithwaite's ideas reflect the need to be contextual and dynamic, involve active engagement, structure the dialogue such that it gives voice to the regulatee, construe resistance as an opportunity to improve regulatory design, signal that the ultimate sanctions are formidable but used only where necessary, and engage in evaluative processes. The enforcement offered by the pyramid of sanctions provides the regulatory "big stick" operating in the background to bring parties to the regulatory design table and keep them there.

B. Black and Baldwin's "Really Responsive" Regulation

Another approach to responsive regulation is advocated by Julia Black and Robert Baldwin, who have developed an analysis of risk-based regulation in financial services regulatory oversight. They suggest that regulators should regulate in a way that is responsive to five elements: regulated firms' behaviour, attitude, and culture; regulation's institutional environments; interactions of regulatory controls; regulatory performance; and change. They observe that ideally, risk-based regulation offers an evidence-based means of targeting the use of resources and prioritizing attention to the highest risks, in accordance with a transparent, systematic, and defensible framework.[48]

Black and Baldwin suggest that risk-based frameworks require regulators to begin by identifying the risks they are seeking to manage, as they need to select which rules to enforce given their limited resources.[49] Risk-based

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45 *Ibid* at 24. See also Ian Ayres & John Braithwaite, *Responsive Regulation: Transcending the Deregulation Debate* (Oxford: Oxford University Press, 1992) at 19–53.

46 *Ibid* at 14.

47 *Ibid* at 22.

48 Black & Baldwin, *supra* note 24.

49 *Ibid* at 184.

frameworks involve an assessment of the hazard and likelihood of it occurring, under both the inherent risks arising from the nature of the business activities and management and control risks, including the compliance record.[50] Black and Baldwin argue that in some scenarios, there will be high numbers of incidents from which data on their probabilities of occurrence in different situations can be assessed, but in other circumstances, the regulators will be dealing with low-frequency events from which reliable probabilistic calculations cannot easily be drawn.[51] They note that while regulators assign scores to activities, any broad categories or even a more granular rating can often operate as shorthand for more complex underlying judgments, and may conceal hesitancies and qualifications in the confident exposition of the number itself.[52] Black and Baldwin suggest that where regulators are regulating situations of "uncertainty" rather than "risk", then, by definition, there is no comparable set of data available on past incidences from which probabilities can be derived or against which regulatory strategies can be correlated.[53]

Black and Baldwin observe that command- and sanction-based instruments operate on very different understandings than do educative or economic incentive systems of control, suggesting that there can be dissonance between these tools, where imposing sanctions on a deterrent basis may undermine a concurrent strategy to "educate and persuade". Thus, the really responsive regulator must manage tool and strategy interactions.[54] Black and Baldwin argue that risk scoring should take account of attitudinal matters, that attitudes and their impacts on the risk framework may vary across regulatory tasks, and that astute regulators will be clear about the degree to which any particular regulatory task can be guided by a risk-scoring system.[55] They also argue that regulatory design and operations should reflect the way regu-

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50 *Ibid.*

51 *Ibid.* The Ontario Securities Commission operates on the same premise regarding probabilities and magnitude .

52 *Ibid.*

53 *Ibid* at 201.

54 *Ibid* at 186, citing Neil Gunningham, Peter Grabosky & Darren Sinclair, Smart Regulation: Designing Environmental Policy (Oxford: Clarendon Press, 1998).

55 Black & Baldwin, *supra* note 24 at 193.

latory challenges vary across the core tasks regulators have to carry out, including detecting noncompliant behaviour, responding to that behaviour by developing tools and strategies, enforcing those tools on the ground, assessing their success or failure, and modifying them accordingly.[56]

Also difficult is that risk-based regulation involves delegation of many regulatory functions to the firms being regulated, focusing attention on the quality of a firm's internal controls and the notion of "meta-regulation".[57] Black and Baldwin argue that delivery on firm undertakings is extremely difficult, because there is often considerable dissonance between the regulators' and the firms' understanding of risk priorities. There is also dissonance on the issue of whether to err on the side of over-intervention (assuming that certain firms pose risks when they do not) or of under-intervention (assuming that firms do not pose risks when they do), and whether regulators may pay too little attention to the potentially huge cumulative effect of particular types of compliance failures across firms.[58]

C. Application to Structured Financial Products Markets

Braithwaite's urging to think in context and listen actively is an important observation about regulatory design. However, assumptions about relationship of market participants may limit the framework's application to financial products markets. The context of structured financial markets is one of a rapidly moving, largely unregulated market, where powerful economic interests make decisions that have a significant financial and economic impact.

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56 *Ibid* at 187. Black & Baldwin argue that the UK government's "light touch" regulatory philosophy shaped regulatory interactions and understandings about the appropriateness of regulatory demands, the degree to which domestic regulators placed faith in controls by other national regulators to control globally interconnected markets, and the extent to which domestic regulators considered themselves constrained by regulatory competition within the international institutional environment.

57 *Ibid* at 199, citing John Braithwaite, "Meta-Risk Management and Responsive Regulation for Tax System Integrity" (2003) 25:1 Law & Pol'y 1. See also John Braithwaite & Peter Drahos, *Global Business Regulation* (Cambridge, England: Cambridge University Press, 2000); Parker, *supra* note 42.

58 Black & Baldwin, *supra* note 24 at 203.

There are enormous challenges to structuring the dialogue such that it gives voice to multiple stakeholders. Braithwaite's model is built on the relational aspects of business relationships, in that stakeholders have repeat interactions. Relationship and reputation bring and keep regulated entities and other players at the engagement table.

1. THE PROBLEM OF EXIT

The nature of structured financial products and the parties developing and selling them is not easily conducive to incentivizing compliance. First, there is the "safe haven" problem—the problem of easy exit for parties, beyond the reach of national regulators. The very nature of derivatives and securitization strategies is such that economic risk is reduced or shed completely by numerous significant market players.

Braithwaite's pyramid of sanctions may work for parties who have sunk costs or illiquid assets, but the nature of structured financial products allows originators to convert to liquid assets immediately. Securitization of debt through CDO and other derivatives creates incentives for the originating lender not to be duly diligent in its lending decisions, as it can offload the risk to the purchasers of various tranches of the debt.[59] There are few incentives for the originating lender to exact protective covenants or undertake monitoring on an ongoing basis, given that the risk of default is borne by other parties.[60] Over multiple similar transactions, these disincentives can cause a market crisis. The financial institution or product seller has little or no remaining "skin in the game". That risk is bundled and sold in multiple tranches, pegged at particular levels of risk and price, but the originator of the credit decision is frequently long gone. The originating lenders skim off the fees, but other actors in the system are dependent on the liquidity of the products themselves; once confidence is shaken, the assets become illiquid, and are hard to value or realize.

While Braithwaite suggests that the regulated parties should make the argument for change, he is optimistic about the willingness of market partici-

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[59] Subprime mortgage lending in the US and the consequent crisis is an example of this agency problem.

[60] Sarra, *supra* note 8 at 7.

pants to agree to specific goals and mechanisms regarding regulatory oversight, and then to comply. This suggestion fails to recognize the safe haven problem, where market participants can easily move to jurisdictions with considerably less regulatory oversight. It also does not address the incentive effects created by the uncoupling of legal and economic interest through derivative products. One driver for participation is parties' interest in preserving their own economic advantage, yet for market participants that are fully hedged, there is no economic risk remaining and thus little or no incentive to engage in participatory processes regarding regulatory design. Black and Baldwin's analysis would suggest that regulators need to be clear about their regulatory objectives, taking account of firm behaviour and culture, and then be dynamic and responsive in the dialogue of how best to achieve those goals. Given the problem of easy exit, the normative choices about the scope of regulatory oversight should be made by a broader spectrum of stakeholders than those parties that would be directly regulated, as their commitment to the process is suspect.

IV. REGULATORY STRATEGIES MUST ADDRESS IDENTIFIED PROBLEMS

The interplay of structured financial products and real economic activity, the regulatory gaps, and the failure to grasp the complexity of specific product risk and systemic risk have all become apparent to regulators and market participants. The challenge now is to discern a regulatory structure that addresses the most pressing issues raised by the financial failures, but that creates a regulatory and market framework that allows continual adaptation to market exigencies and allows any oversight to be responsive to new issues as they arise. Responsive regulation suggests that regulatory design must first identify what is acceptable and unacceptable behaviour, and then respond to it by developing tools and strategies that can then be enforced, assessed, and modified accordingly.[61] Arguably, it must also be sensitive to the behavioural incentives and norms that drove the pre-crisis structured financial products market.

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[61] Robert Baldwin & Julia Black, "Really Responsive Regulation" (2008) 71:1 Mod L Rev 59. See also Julia Black, *Rules and Regulators* (Oxford: Clarendon Press, 1997).

A. Moral Hazard—Agency Issues and Negative Externalities

Notwithstanding the recent financial shocks and a dip in the credit default swap (CDS) market in 2008, the CDS market is thriving, operating largely on a "business as usual" basis. The Bank for International Settlements reports that the total notional amount of OTC derivatives contracts outstanding was US$614.7 trillion as of December 2009; the gross market value, the cost of replacing all existing contracts, was US$22 trillion. CDS continue to be written on a broad range of assets and entities; for example, there are now CDS being issued on the failure of Greek bonds and other sovereign debt. Morgan Stanley recently reported that the US is returning to a period of "covenant light" transactions in 2010. The resilience of the speculative market, in the wake of other sectors of the economy having not yet recovered, speaks to the complexity of the regulatory reform project and the ability of sophisticated market players to influence the reform agenda.

The classic financial paradigm is that stakeholders with an economic interest in financial products have the greatest interest in monitoring the integrity of the system. However, the existence of credit derivatives has complicated this premise by affecting motivations of various stakeholders. Risk is exacerbated by the principal-agency problems generated by the disconnection between legal interest and economic interest arising from credit derivatives. Traditionally, a creditor's interest in a debtor company was to receive return of its capital plus interest and fees, often premised on encouraging an ongoing credit relationship with the business enterprise. The introduction of CDS in many instances created a misalignment between the creditor's and debtor company's interests. A creditor can lend an amount to a debtor company and then purchase CDS many times the value of the underlying reference asset or entity.[62] Thus the creditor has an incentive to have the debtor company fail, triggering a credit event in which the value to the creditor from settlement of the CDS is greater than repayment of the loan. Some of the previous willingness by lenders to not enforce covenants for a limited period in order to allow a debtor time to recover from any default or devise a busi-

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[62] Sarra, *supra* note 8 at 7.

ness plan may be less likely now that the lender is not only fully hedged, but over-hedged.

The changes to the structured financial products market also created negative externalities. Historically, there were positive externalities associated with commercial bank lending.[63] Banks assisted in correcting governance problems of firms, facilitated by their superior access to information under loan covenants, and through direct intervention with corporate officers or by exiting the relationship.[64] The bank's screening and monitoring activities benefited numerous stakeholders with an interest in the firm; the decision to lend signalled to potential and existing stakeholders the quality of the borrower; the imposition of fixed obligations under the loan agreement helped to prevent managerial slack; security rights constrained the ability of managers to liquidate non-cash assets or unilaterally sell more debt; and loan covenants prohibited specific types of behaviour.

With derivatives, the disconnection between economic interest and residual control rights creates a moral hazard, in that originating lenders are less willing to expend the time and resources to undertake due diligence in credit arrangements, since the risk was passed on through derivatives.[65] The originate-and-distribute model of lending resulted in the lowering of underwriting standards. Hence the signalling to the market that occurred with the decision to lend was no longer reliable as a measure of the debtor firm's value. Second, as a result of the purchase and sale of credit derivatives, parties have frequently given up the negotiation of terms and conditions, including monitoring, restrictive covenants, and default control rights in loan agreements, because they knew that they would offset their own risk through other structured financial products. Hence, that prior positive externality was lost as senior creditors no longer undertook monitoring and strategic intervention. When firms begin to slide into financial distress, corporate stakeholders no longer share a common goal of maximizing firm value and constraining

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63 Externalities occur when an economic activity causes an external benefit or cost to third-party stakeholders that were not directly involved in the transaction.

64 George G Triantis & Ronald J Daniels, "The Role of Debt in Interactive Corporate Governance" (1995) 83:4 Cal L Rev 1073.

65 Sarra, *supra* note 8 at 9.

managerial slack, because the originating lender has hedged its risk through its derivatives, and multiple subsequent counterparties have done the same. Stakeholders that could previously rely on the governance role of banks can no longer do so, yet given the diverse nature of their interests, information asymmetries, and collective action problems, they are unlikely to be able to fill this governance gap.[66] Multiplied many times through complex derivative transactions, the new negative externalities created more systemic risks across the market.

Another moral hazard can be the "lender of last resort" legislation that provides funds when banks fail. While there were clearly social benefits in preventing the collapse of the banking system, such legislation creates the moral hazard that banks will undertake riskier activities if they know that their shareholders will benefit from any upside value generated and taxpayers will bear consequences of downside risk. Existing methodologies used by banks did not adequately capture the risks of securitized products, and absent appropriate incentives to develop new methods, the agency issues persist.

Notwithstanding the considerable moral hazards identified, the notion of human responsibility or accountability has been remarkably absent in the current public policy debate, save the rare instances where an individual's fraud was made evident by the freezing of markets. Entire markets were affected, yet the discourse has largely been one of "everyone erred and thus no one is responsible", implying that the better strategy is to develop systems to mitigate risk going forward, rather than trying to understand which aspects of human agency contributed significantly to the crisis. In many cases, there have been express releases from personal and professional liability as part of the package to remedy the worst effects.[67]

Regulatory reform of oversight must acknowledge diverse interests, with different economic incentives both within firms and between market players. The moral hazard issues engage what Canadian securities regulators have called risk-based oversight, where the degree of monitoring and enforcement relates to assessment of the seriousness of potential violations and the prob-

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66 *Ibid.*

67 Sarra, *supra* note 8.

ability of occurrence.[68] The degree to which these issues are the subject of effective regulatory action also depends on the values and culture of particular jurisdictions and norms regarding compliance, which may not easily translate across borders when considering regulatory oversight of products that are international in nature. Absent a regulatory strategy that recognizes the economic incentives, a combination of dialogic and compliance strategies will not be particularly effective. The challenge is made more complex by the constant shifting of stakeholders, resulting in less relational reputation for participants to protect. The educative and relational aspects of the responsive regulation framework do not really offer answers to these challenges.

The moral hazards can be addressed in part by ensuring that the regulatory framework going forward imposes the costs of any future failures on financial institutions or intermediaries themselves. Staged intervention, such as occurs with the Office of the Superintendent of Financial Institutions (OSFI) in Canada, would help ensure that financial institutions are addressing their agency issues, as they are warned to take steps to remedy liquidity and solvency issues long before they become a crisis.[69] The framework must involve a comprehensive assessment of the risks arising from the nature of the structured financial products, management and control risks, and the likelihood of the conduct occurring. Such staged regulatory invention can make use of the stages of the Braithwaite pyramid, but the timeliness with which the intervention takes place must take account of the prudential nature of financial services, the complex nature of their structured financial products, and the serious consequences of not moving to intervention in a timely manner. A serious question exists about the relationship between the timeframes needed for a full exploration of the responsive regulation model, and the need for timely, effective intervention.

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[68] For a discussion, see Mary G Condon, Anita I Anand & Janis P Sarra, *Securities Law in Canada: Cases and Commentary,* 2nd ed (Toronto: Edmond Montgomery, 2010).

[69] For a discussion of the OSFI intervention program, see Janis Sarra & Gordon Dunning, "Assuring the Future: Reform of the Insolvency Framework for Insurance Companies and other Financial Institutions under the Canadian *Winding-up and Restructuring Act*" in Janis P Sarra, ed, *Annual Review of Insolvency Law 2010* (Toronto: Carswell, 2011).

B. Corporate Governance and the Link to Normative Prescriptions for Oversight of Financial Products

The Basel Committee on Banking Supervision suggests that bank corporate governance involves the manner in which the business and affairs of banks are governed by their boards of directors and senior management, which affects how they: "set corporate objectives; operate the bank's business on a day-to-day basis; meet the obligation of accountability to their shareholders and take into account the interests of other recognised stakeholders [including supervisors, governments, and depositors]; align corporate activities and behaviour with the expectation that banks will operate in a safe and sound manner, and in compliance with applicable laws and regulations; and protect the interests of depositors."[70]

Governance failures can directly impact regulatory reform in respect of financial products markets. The reports generated in the first two years of the financial crisis did not mention the corporate governance of banks. It was not until the Larosière Report of the EU High-Level Group on Financial Supervision concluded that banks' corporate governance was one of the most important failures in the crisis that some attention has been directed towards those persons with oversight of the financial institutions that engaged in proliferation of the products.[71] The Larosière Report found that boards of directors failed to understand the nature or scale of the risks of structured financial products; there was a lack of effective control mechanisms that contributed significantly to excessive risk taking, and the polycentric nature of financial regulation created a gap in oversight of bank corporate governance.[72]

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[70] Basel Committee on Banking Supervision, "Enhancing Corporate Governance for Banking Organisations" (February 2006), online: Bank for International Settlements <http://www.bis.org> at 4 [footnote omitted] [Basel Committee, "Enhancing"].

[71] Jacques de Larosière, "The High-Level Group on Financial Supervision in the EU" (25 February 2009), online: European Commission <http://ec.europa.eu>.

[72] *Ibid.* See also David Walker, "A review of corporate governance in UK banks and other financial industry entities: Final recommendations" (26 November 2009), online: <http://webarchive.nationalarchives.gov.uk>. The independent review of corporate governance in the UK banking industry by the UK Government found that there were serious deficiencies in governance, prudential oversight and financial regulation in the period before the crisis. See also Nestor Advisors, "Banks Boards and the Financial Crisis" (22

Corporate governance of banks and other financial institutions differs from the governance of corporations in manufacturing or other direct economic markets because of the prudential nature of bank regulation, the different nature of stakeholders with investments at risk, and the existence of deposit insurance.[73] The safety and soundness of the financial system are important public policy goals. Banks' liquidity-producing function is based on maturity mismatches, but depends on continued access to liquidity from deposits, turnover of commercial paper, and inter-bank lending.[74] Banks' core business is to accept a mismatch in the term structure of its assets and its liabilities.[75] Peter Mülbert has observed that banks are compensated for accepting a maturity mismatch by a premium charged to creditors—a bank's creditors have to pay a higher interest rate than the bank pays for its refinancing; hence, a bank's profit increases directly in proportion with the volume of lending to creditors.[76] Banks depend on continuous access to liquidity in the

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May 2009); Renee Adams, "Governance and the Financial Crisis" (4 May 2009) [unpublished, archived at European Corporate Governance Institute, Finance working paper No 248/2009], online: Social Science Research Network <http://papers.ssrn.com>; Financial Services Authority, "Consultation Paper 10/3: Effective Corporate Governance" (January 2010), online: <http://www.fsa.gov.uk>.

73 See Sarra & Dunning, *supra* note 69; Basel Committee, "Enhancing", *supra* note 70; Banca d'Italia, "Supervisory Provisions Concerning Banks' Organization and Corporate Governance" (4 March 2008), online: <http://www.bancaditalia.it>; International Finance Corporation, *Corporate Governance: Financial Institutions*, online: <http://www.ifc.org>; Luc Laeven & Ross Levine, "Bank Governance, Regulation, and Risk Taking" (2009) 93:2 Journal of Financial Economics 259; Pablo de Andres & Eleuterio Vallelado Gonzalez, "Corporate Governance in Banking: The Role of the Board of Directors" (2008) 32:12 Journal of Banking & Finance 2570.

74 Liquidity's function is to enable financial transactions between short and long term maturity.

75 Basel Committee, "Enhancing", *supra* note 70.

76 Peter O Mülbert, "Corporate Governance of Banks after the Financial Crisis—Theory, Evidence, Reforms" (April 2010) European Corporate Governance Institute: Law Working Paper No 130/2009, online: Social Science Research Network <http://www.ssrn.com> at 10. The upper bound for an increase in lending is derived from the marginal cost of a bank's refinancing (given that an increase of the bank's leverage will increase its probability of default, and depositors as well as other debtholders will demand a higher

form of deposits, short-term funding on the inter-bank market, and funding on secured financing markets.[77] However, the transformation of maturity mismatches poses some risks, mitigated both by deposit insurance and by central banks as lenders of last resort who provide funds to illiquid banks that have a liquidity problem but are not insolvent. In order to better protect depositors and policyholders, regulation should ensure greater prudential behaviour pertaining to banks' liquidity risk and its management.[78] These prudential norms are important because leverage in banks has different implications than for corporations.

Complexity of structured financial products created opaque balance sheets and the inability to appropriate assess and price risks associated with derivative products; as a result, directors were unable to monitor risk adequately. There were implications for investors, but also for directors in decision-making and in creating compensation incentives. Directors and officers are often not in control of the bank's risk profile because derivatives held by banks can be very sensitive to exogenous factors that increase risks without decisions to do so by directors. Banks are heavily dependent on confidence of depositors and creditors, and if a tipping point is reached, they will be subject to runs on the bank. Leverage, complexity, and sensitivity to exogenous risk factors exacerbate vulnerability.

Globally, the banking industry has wide variance in capital and governance structures, which means differing risk appetite and incentives to monitor management. Different governance structures also means different accountability mechanisms and different normative views of the degree to which deposit holders and other investors should be protected. The pre-crisis rules on adequate internal controls, risk management and audit functions did not prevent excessive risk taking by financial institutions. Post-crisis standards should be developed to encourage appropriate risk taking and a culture

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risk premium as compensation for the higher risk of insolvency), and from minimum capital requirements provided for by prudential regulation.

77 *Ibid*.

78 *Ibid* at 10; Basel Committee on Banking Supervision, "Principles for Sound Liquidity Risk Management and Supervision" (June 2008), online: Bank for International Settlements <http://www.bis.org> [Basel, "Principles"].

of compliance, recognizing that the need to shift risk management strategies is a continual process and not one that is static. Detailed rules are insufficient to remedy the problems that arose in the past two years, and responsive regulation may offer an approach that engages a wider audience to debate the full range of compliance incentives and sanctions that may be required.

Under the guiding norm of bank regulation, prudential regulation and obligation, the goals and functions of financial institution corporate governance are to act in best interests of beneficiaries: depositors, life insurance policy holders, deposit insurance funds, creditors, and investors. A prudential approach should place limits on leverage and require reasonable liquidity, which means that the current uses of derivatives need to be adjusted by corporate boards to protect depositors, maintain confidence in the financial system, and deal with the agency problems. There should also be authority in regulators to remove the directors and senior management of a failing financial institution and to hold decision makers to account where they have failed to act prudentially. Regulators must have sufficient expertise and resources to govern resolution of distressed banks.

Bank corporate governance should take account of both stakeholders and the stability of the financial system, due to the systemic nature of bank activities. Governance must be responsive to conflicting interests of stakeholders, either by direct representation of broad interests on the corporate board or through regulatory imperative. Incentives must change and financial reward must be separated from excessive risk. Financial institutions must be able to demonstrate to the regulator that they have sufficient knowledge and control of their risk profile. Directors and officers should understand the bank's use of complex financial products and structures.[79] Globally, the majority of bank boards are comprised of inside directors or cross-sector appointments, not independent directors. Arguably, there need to be incentives to ensure that directors acquire financial skills and the capacity for an independent second look at decisions regarding structured financial products, creating an appropriate balance of independence and skills of directors, and enhanced board diversity. There is also a need to reduce conflicts of interest within the

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[79] Basel Committee, "Enhancing", *supra* note 70.

complex structure of global financial institutions and interactions, such as professionals advising on investments while managing investment funds.

The Basel principles for governance include: directors that are qualified, with specialized skills; strategic oversight objectives and values; setting and enforcing clear lines of responsibility throughout organizations; sound internal audit controls; and understanding banks' operational structure and complexity of structure or products. However, principles do not equal change. There must be appropriate incentives for directors and officers to pursue banks' best interests. Questions that could be answered by a responsive regulatory process include: should there be minimum length of board meetings and limits on number of directorships conditioning the availability of a due diligence defence on time spent on director duties? Directors must be willing and able to ensure the risk management framework and risk appetites of the financial institution are appropriate. Should there be financial literacy qualifications? Director elections by non-shareholders? Board and director performance appraisal should be linked to risk management and assessment as well as profitability.

One policy question is whether directors and officers should have a direct fiduciary obligation to deposit holders—a duty to act in their best interests, with a duty of care to beneficiaries. Such a standard would make decisions in respect of structured financial products subject to a higher degree of due diligence. The requirement to take account of interests would be one mechanism to encourage the adoption of less risky strategies and increase the quality of banks' long-term risk management strategy. However, this raises the question of why corporate law should intervene over and above the standards for acceptable risk-taking established by prudential regulation. One reason is to create incentives for management and directors to be more prudent. Another is to overcome shortcomings in regulatory resources and ability—but this may impair the financial activity necessary for liquidity function; for example, the credit crisis that followed the financial crisis.

Any regulatory change must better understand risk in particular circumstances, including identifying risks of structured financial products, understanding inappropriate risk concentration, shifting risk stress tests from a focus on past events to identifying new risks and potential outcomes and adjustments, and ensuring a continuous understanding of a firm's risk position compared with risk appetite. Creating a regulatory framework that rec-

ognizes these complexities is incredibly challenging. Responsive regulation theorists may offer a framework for this approach. Black and Baldwin observe that risk assessments need to couple their micro level, firm-specific analyses of risk with an analysis of risks arising across the financial system as a whole, understanding that regulatory processes and outcomes are shaped by the institutional environments of both regulatee and regulator.[80]

More authority should be accorded to the risk management function within financial institutions to counterbalance risk-takers, including direct access to the board to allow timely review, evaluation, and action to refine strategies. There should be a predictive mechanism for discerning and addressing the evolving risks of structured financial products, and timely communication to the board rather than letting directors and officers take false comfort in regulatory capital ratios.

As lenders of last resort, central banks' provision of liquidity during liquidity crises or downturns should be closely tied to the efficacy of a firm's internal liquidity risk management decision-making processes. Generally, supervisory authorities must be able to assure themselves that banks have risk management systems that are conceptually sound and implemented with integrity.[81] The debate regarding the extent to which there should be regulatory intervention to control systemic risk is a rigorous debate between industry participants and regulators, with only a nascent understanding or discussion about the broader public policy implications.

Finally, much of the above discussion involves the governance of banks. An equally complex question is how to engage with the shadow banking sector, in all its complex business forms, in a meaningful debate about the need for, and potential scope of, regulatory oversight. Given the extent to which these market participants are implicated in the structured financial products market, a regulatory process is somewhat urgently needed. Yet unlike international committees of banking supervisors or securities regulators, many of these entities want to avoid regulation and have actively politically lobbied

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80 Black & Baldwin, *supra* note 24 at 194, citing W Richard Scott, *Institutions and Organizations. Foundations for Organizational Science*, 2d ed (Thousand Oaks, CA: Sage, 2001).

81 Basel, "Principles", *supra* note 78 at 7.

for such an outcome in the US, UK and other financial centres. Hence there are real challenges for advancing the regulatory debate.

C. Responsible Regulation Takes Time and Resources

The aspirational goals of Braithwaite's model are compelling, but the problems identified above make the realization of a responsive regulatory framework particularly challenging. Moreover, responsible regulation takes substantial time and resources, which necessarily requires a willingness to reallocate resources to effect such a change. This pessimistic view is not to suggest that there is no merit in trying; it merely tries to be realistic about the speed with which change is likely to be accomplished, if at all.

There is an important question regarding the transparency of the crisis resolution process and degree of citizen engagement to date. Responsive regulation suggests that the regulator should listen actively, structuring the dialogue to give voice to multiple stakeholders. Yet there is a need to reconceptualize the notion of "stakeholders" in a dynamic exchange regarding remedies and preventive strategies to the harms caused by the financial crisis, which may in turn require meaningful support of the capacity building of different perspectives to allow truly broad citizen engagement. Direct regulation of financial services markets engages relatively few market players. Yet the broad-based and systemic impact of regulatory decisions affects many sectors of stakeholders, who are implicated in the markets because of their retirement savings, their jobs, and self-directed savings and investment portfolios. The global financial crisis demonstrated that they are truly stakeholders in that citizens are affected by outcomes.

Responsible regulation takes time; one question is what we do in the interim? Arguably, we need to deal with both the ongoing effects of the financial crisis and the very real effects wearing away at our society, while allowing for the possibility of a long-term regulatory process that does engage regulatees and broader stakeholder interests in a meaningful dialogic exchange.

There are costs associated with regulatory reform, and assessments of effective outcomes must measure the beneficial outcomes against the costs of implementation. There may be direct or indirect costs to the financial services sector or national and global economies. Truly broad citizen engagement also requires a willingness to dedicate resources to allow organizations that could represent consumers of structured financial products, deposit

holders, and others affected by regulatory decisions to access relevant information, to develop the skills to analyse the regulatory and market challenges, and then to participate in the regulatory discussion in a meaningful way. If one is serious about a relational approach to regulation, it requires dedicated resources to acquire the knowledge, make informed decisions, and offer cogent advice, not just from the regulator's perspective, but from that of investors of all sizes and sophistication. The assumption that regulators were protecting market participants is no longer valid, and the challenges for oversight going forward may well be better addressed by ensuring that a much broader community of interests is engaged in the regulatory reform decision process.

How could broader engagement be accomplished? There is a myriad of ways. Community groups and NGOs are very experienced in capacity building on limited resources and could be tapped for advice or directly engaged to assist with a massive capacity-building initiative. Investor groups, financial counselling organizations, financial advisors and brokers, community centres, unions, and community advocacy groups could be approached to help design the process and encourage participation of their members in a dialogic process. Policy makers could ensure that there are educational documents that contain plain-language analyses of the structural and functional problems associated with the crisis and the range of potential options. Once information is in a form that is more readily ascertainable and opportunities for debate and discussion are created, individuals in the markets or affected by market changes would have some of the basic tools to deliberate options. Over time, those tools could be enhanced, as stakeholder engagement increased and the appetite for involvement and capacity for analysing financial information grew.

Even if the small investor/citizen part of the market could be sufficiently empowered to become a participant in a responsive regulatory process, there is the equally challenging problem of bringing the other players to the discussion table. The issues discussed above illustrate that there are powerful and complex interests at play in financial markets: commercial banks, investment banks, hedge funds, brokers, derivatives traders, syndicated loan members, indenture debt holders, and a host of other participants that have different priorities, time horizons, motivations, and risk appetites, and are driven by different considerations in terms of engagement in a particular country or

community. Braithwaite's model can accommodate diverse interests, but it assumes a financial or other interest by participants such that they will engage in the process. Given the ease of exit, uncoupling of economic interest, and intractability of complex but entrenched interests discussed above, there is a serious question of how to draw them into the regulatory discussion. Aside from the threat of regulation that would seriously curtail their activities (a hollow threat as long as there are markets to easily migrate to), it is difficult to imagine other drivers or incentives. Commercial banks and similarly situated financial institutions may differ in that, at least traditionally, they have had an interest in the economic sustainability of the communities in which they operate. But, arguably, it is the other market players, those have had historically avoided regulatory oversight, that most need to be drawn into a regulatory discussion.

If the preconditions for participation could be addressed, then Braithwaite's nine principles for regulatory engagement might well have some application to policy decisions regarding regulatory oversight of financial products and the markets in which they operate. Given that many individuals were profoundly affected by the financial crisis, their perceptions of the problems and the solutions may differ considerably from regulators or sophisticated market participants. While the dollar value of harms they experienced may be less than larger market participants, the harm relative to their personal wealth was substantially greater; and their views on how to remedy the harm or protect from future harms are highly relevant. If responsive regulation is to be truly deployed, regulators and other market participants would have to demonstrate willingness to hear and debate these issues, and regulators would have to be prepared to value and respond to the concerns raised. The regulator could try to engage those that resist in regulatory change that might better protect small market participants, using truly counterbalancing views to improve regulatory design. Moreover, for the process to be truly responsive, regulators would have to be willing to account for regulatory choices made, as well as those rejected, including creating public fora to communicate those choices back to community participants. It would also require a demonstrated willingness to revisit issues where compelling arguments are made questioning regulatory choices, or where outcomes do not align with the express objectives of change.

Clearly, such a participatory model would be a significant challenge and a considerable shift from the narrow consultative processes that occur now. However, a start needs to be made somewhere, and first designed processes could lead to improvements in the future. They could be facilitated by the broad access we currently have through electronic communication platforms. In Canada, when there was a restructuring process for the asset-backed commercial paper market, a series of electronic public meetings and conference calls were convened by Purdy Crawford, QC, the lead mediator in the process, to communicate the issues and choices to the two thousand individual investors harmed by the collapse of the market.[82] There was significant participation by individuals, and a willingness by Crawford and his advisors to listen and try to respond to their concerns.

V. AGREEMENT ON BROAD NORMATIVE PRINCIPLES

Short-term action could be facilitated by agreeing on several broad normative principles, which themselves could subsequently form part of a broad-based public policy discussion. One might critique the idea of starting with broad normative principles, when the precise notion underlying responsive regulation is to have such choices organically develop through the dialogic process. However, starting with the *status quo* as the baseline norms is to start with the very norms that caused the financial crisis and resultant harms. It would create unfairness at the outset of the dialogic process, exacerbating the already extant problems of information and resource asymmetries and collective action challenges. To suggest that no normative choices be made at the outset, pending capacity building and broader stakeholder debate, is to continue the current trajectory of the speculative market, exacerbating resource imbalance and distributive consequences of current regulatory policies. Any starting principles could be viewed as placeholders until new norms are developed, as well as providing a baseline for the public policy discussion. Agreement on starting principles may also reduce potential regulatory capture as the responsive process moves forward. The longer-term normative content could be worked out in the course of engagement between regulators and stakeholders. These starting principles could include the following:

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[82] Sarra, "Restructuring", *supra* note 16.

A. Prohibit Multiple-Value Credit Default Swaps

The first principle would be that credit default swaps should be a risk management product and not a speculative product. This norm is drawn directly from the discussion above regarding the harms caused by the speculative aspects of the market to both smaller retail investors and, more generally, to communities from the collapse of economic activity as a result of the financial crisis. Regulators could prohibit multiple-value credit default swaps, making swaps like insurance, which requires an insurable interest. In order to be able to insure, a party must be able to suffer a loss than can be accounted for; it cannot issue multiple insurance contracts on the same economic interest. By prohibiting the ability to purchase CDS and equity swaps in multiples of the value of underlying assets, the incentive to cause failures in order to "game" or reap rewards from default would be reduced. This change would bring back the important monitoring function of debt, offering incentives to investors to assess and monitor credit-worthiness. It would allow going concern restructuring of insolvent businesses to take place as the parties at the table would have an increased interest in the longer-term wellbeing of the entity.

B. Bring Derivatives Under Supervision and Regulatory Oversight

This norm arises directly in response to a principal cause of the financial crisis, on which there is now broad consensus among governments worldwide: specifically, the failure to regulate derivatives activity. Lack of regulatory oversight of derivatives meant that regulators were not aware that the build-up of large counterparty exposures between particular market participants was not appropriately risk-managed. There was serious "contagion risk arising from the web of interconnectedness of market participants created by bilateral clearing of OTC derivatives products, and the limited transparency of overall counterparty credit risk exposures".[83]

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[83] FSB, *Implementing OTC Derivatives Market Reforms* (25 October 2010), online: <http://www.financialstabilityboard.org> at 19.

There was little or no oversight of structured financial products because they were viewed as part of the exempt market in securities, which ignored both spread of products to less sophisticated players and the contagion effect of cascading swaps. If the first normative principle above is adopted to immediately temper the most egregiously harmful aspects of the derivatives market, one could then utilize a responsive regulatory process to determine longer-term measures. Those measures might include prohibition of entities necessary to financial stability or the economy from engaging in the "casino" activities in the speculative market. Or, if not a prohibition, it may instead consider potential regulatory oversight of the "gambling" with other people's money.

Financial institutions and persons that create or recommend derivatives products should meet due diligence standards in examining and disclosing material adverse risk in the products being sold in the public market. There should be meaningful remedies for purchasers in the event of those individuals recommending products failing to meet due diligence and disclosure obligations. Financial institutions that recommend derivatives products must train employees responsible for distributing risk products to understand and communicate the risk involved and understand conflicts of interest. New products must be certified as transparent before being sold. Regulatory oversight would monitor and, where necessary, implement sanctions against failure to comply with the due diligence standard.

Arguably, there should be international standards for core financial market infrastructures, including payment systems, securities settlement systems, and central counterparties, to ensure resilience under stressed conditions.[84] One can see the initial regulatory policy responses. The G20 has agreed that all standardized OTC derivatives contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties; they should also be reported to trade repositories.[85] The International Organization of Securities Commissions (IOSCO) has issued high-level global standards that recognize the need for regulators to be con-

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[84] FSB, *supra* note 2 at 8.

[85] G20 leaders have agreed that all standardized derivatives contracts should be cleared through central counterparties by the end of 2012: *ibid*.

scious of systemic risk and their role in relation to it, given that the extent of regulation or exemption there can serve as a mechanism by which risk is transferred within the financial system.[86] It advocates regulatory processes to monitor, mitigate, and appropriately manage such risks, having particular regard to investor protection, market integrity, transparency, and the proper conduct of business within markets as contributing factors to reducing systemic risk.[87]

The recent introduction of the first central counterparty clearing platforms (CCP) is aimed at increasing transparency for derivatives market participants and offering a means of imposing risk controls, such as robust margin requirements, to hinder the accumulation of large and uncollateralized CDS positions.[88] The existence of sufficiently capitalized CCPs mean that counterparties do not have to rely on their capacity to settle the swap when a credit event occurs. The risk is shifted to the CCP, but it has controlled this risk through capital adequacy and other requirements for parties to be eligible to clear on the CCP. The UK financial authorities have observed that "greater use of CCP clearing can aid market liquidity and efficiency, be a mo-

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86 IOSCO, Media Release, "Objectives and Principles of Securities Regulation" (June 2010), online: <http://www.iosco.org>. IOSCO's mission statement has been amended to include identifying, addressing, and reducing systemic risks, and strengthening its role in the international financial community by developing, implementing, and promoting adherence to consistent standards of regulation.

87 *Ibid* at principles 19, 20, 22. Entities that offer investors analytical or evaluative services should be subject to oversight and regulation appropriate to the impact their activities have on the market or the degree to which the regulatory system relies on them. Added to IOSCO's pre-crisis principles for auditors and other information service providers, the new principles call for auditors to be subject to adequate levels of oversight and to be independent of the issuing entity that they audit. Credit rating agencies should also be subject to adequate levels of oversight, with the regulatory system ensuing that credit rating agencies whose ratings are used for regulatory purposes are subject to registration and ongoing supervision. See IOSCO, "Final Update: 35th Annual Conference of the International Organization of Securities Commissions" (10 June 2010), online: <http://www.iosco.org>. IOSCO noted that some practices implicated in the financial crisis fell under existing IOSCO regulatory principles, even if those principles had not previously been applied to a particular category of products.

88 US Department of the Treasury, Press Release, "Regulatory Reform Over-The-Counter (OTC) Derivatives" (13 May 2009), online: <http://www.treasury.gov>.

tivating force behind contract standardisation, and reduce systemic risk."[89] The Bank of Canada has suggested that properly risk-proof CCP act as firewalls against the propagation of default shocks across major market participants.[90] The benefit of clearing through a CCP is that the CCP multilaterally nets and therefore reduces counterparty risk, and it provides for mutualization of the loss beyond the contributions of the defaulting member via default and guarantee funds.[91] Risk is managed centrally and the prior interconnectedness of market participants in bilateral transactions is reduced and may be better managed.[92] "Increased standardization of contractual terms and operational processes should lead to greater liquidity and greater availability of reliable pricing data for such products, and thus a greater likelihood that a CCP can effectively risk manage them".[93] As of 2010, $25 trillion US total notional outstanding credit default swaps were being traded on CCP.[94]

CCPs do not, however, address any of the incentives that were driving the market at the time of the failure, and, arguably, they continue to support the speculative aspects of the market by facilitating the transactions. While CCPs do address some important aspects of systemic risk, their entry into the market may have short-circuited a broader normative public policy discussion about the need for a speculative market on top of the risk management benefits of the market, as well as discussion about the ability of financial products markets to seriously undermine real economic activity.

CCPs do not yet address non-financial derivatives participants, nor are they aimed at any normative determination of the risks associated with par-

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89 UK, Financial Services Authority & HM Treasury, *Reforming OTC Derivative Markets: A UK Perspective* (December 2009), online: FSA <www.fsa.gov.uk> at 11.

90 CCPs are now available to financial institutions to allow for purchase and sale of derivatives and fluidity of settlements. The introduction of CCPs will reduce settlement risk for financial institutions. The premise is that there are adequate capital adequacy requirements in place to hedge against counterparty failure and that access to the CCP is based on a measure of experience and sophistication.

91 FSB, *supra* note 83 at 35.

92 *Ibid* at 35.

93 *Ibid* at 4.

94 *Ibid* at 24.

ticular products or the downstream harms that may occur from particular products being in the marketplace.[95]

To date there is little regulatory oversight of CCP, approvals largely taking the form of exemptions from particular market requirements as opposed to active oversight to reduce systemic risk. There continues to be a serious lack of transparency in respect of the products in the market, their settlement, and any risks posed. To date, regulators have only limited access and limited authority to obtain information from CCP, arguably posing new kinds of systemic risks. Globally, regulators are working to try to agree on data reporting from CCP, but to date there are few requirements and no harmonization. The FSB has reported that the difficulties in obtaining useful and comparable central clearing data are a serious impediment to understanding the overall state of the OTC derivatives markets and setting central clearing targets. Because of the challenges presented by currently available data, and because the determination of which products can be standardized and risk-managed by a CCP requires knowledge of market conditions and product risk and liquidity characteristics, market participant cooperation will be vital for authorities in determining where increasing standardization and central clearing is feasible.[96] Here again, the responsive regulation approach may offer some insights in how to get parties to the regulatory discussion table.

The FSB has suggested that "authorities should work with market participants to increase standardization of OTC derivatives products' contractual terms", and that "in setting priorities for increased standardization of contractual terms, authorities should consider the systemic relevance of particular types of OTC derivatives products, including by assessing factors such

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[95] Financial Services Authority & HM Treasury, *supra* note 89. The UK Treasury and the FSA have proposed measures to address systemic shortcomings in OTC derivative markets, including greater standardization of OTC derivatives contracts to enhance the efficiency of operational processes, facilitating the increased use CCP clearing and trading on organised trading platforms, and supporting greater comparability of trade information. IOSCO and the Basel committees are discussing revision of existing standards, and the European Commission (EC) is considering a Clearing Directive as a tool to mitigate any risk.

[96] FSB, *supra* note 82 at 24.

as volumes and exposures".[97] G20 leaders have agreed that non-centrally cleared contracts should be subject to higher capital requirements.[98]

Mandatory clearing requirements will capture only standardized OTC derivatives and non-centrally cleared contracts continue to be subject to bilateral counterparty risk management. Most OTC derivatives continue to be risk-managed on a bilateral basis between counterparties, and the FSB observes that even with implementation of mandatory clearing and capital requirements, a portion of the OTC derivatives markets will remain bilaterally risk-managed.[99] Counterparty credit risk arising from OTC derivatives transactions could be reduced by due diligence prior to establishing the relationship, setting and monitoring credit line limits, and creating mitigation measures including bilateral netting, collateralisation, and portfolio reconciliation.[100]

One additional risk-controlling strategy could be that regulators set a price for participation in the market, by taxing credit derivatives on a per transaction basis—placing a small amount on each transaction in a central trust fund in the domestic jurisdiction in which the credit derivative is being purchased, with that fund available to counterparties that had been unfairly harmed by failure to disclose or other misconduct by market participants. If the funds were insufficient to cover harms, the financial services industry could be subject to a risk levy, just as occurs in numerous jurisdictions for pension deficiency coverage. Such a fund could reduce risk by having compensatory funds available, placing the cost of compensation with the market participants causing the harm, and by creating a mechanism through which counterparties are required to account for their excessive risk-taking activities.

These regulatory initiatives are important and should reduce some counterparty risk and systemic risk. However, the limited scope of participants crafting these changes raises a more fundamental policy question that has not

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97 *Ibid* at 3.

98 *Ibid*. The FSB has recommended that authorities should set strengthened bilateral counterparty risk management requirements for non-centrally cleared derivatives.

99 *Ibid* at 47.

100 *Ibid*.

been addressed in these regulatory initiatives, which is the social utility of derivatives versus their harm. There has been no debate regarding whether there should be limits or a ban placed on the speculative market, as opposed to products' risk management function. There has been no discussion on whether financial institution access should be restricted, based on their prudential nature. Responsive regulatory methods, if provided with the appropriate resources, could be used to engage stakeholders in these more fundamental policy questions.

C. Require Some Retention of Economic Interest in Securitization Transactions

Many governments, banking organizations, and supervisory authorities have now acknowledged that uncontrolled securitization can create specific and systemic risks to financial and capital markets; hence, a working norm could be to require entities and parties that are securitizing debt to retain some economic interest in the initial transaction. The Basel Committee has observed that successful management of market and credit risk often relies on liquid markets to hedge risks and unwind positions.[101] "Securitization transforms credit risk into market risk by pooling loans and issuing tradable claims against the pool; it relies on the liquidity of primary markets for placing asset-backed securities."[102]

There are considerable problems in associating market and credit risk too closely with the intended use or holding period of an investment. The Basel Committee has observed that the trading portfolio of banks is often treated as being primarily subject to market risk even though unexpected defaults may occur—for example, in a traded bond portfolio—suggesting, however, that this is a misconception.[103] It suggests that "an underestimation of the credit risk embodied in structured products resulted in large writedowns by

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[101] Basel Committee on Banking Supervision, "Working Paper No. 16: Findings on the Interaction of Market and Credit Risk" (May 2009), online: Bank for International Settlements <http://www.bis.org> at 6 [Basel Committee, "Findings"].

[102] *Ibid* at 2.

[103] *Ibid* at 8.

financial institutions during the crisis."[104] Securitization is fundamentally different from traditional bank lending because banks, after having originated the loans, hold them only for a short time before the loans are sold, or before the associated risks of the loans are sliced into tranches and then sold. Currently, those engaged in securitization can shed the entire amount of debt immediately, creating a number of agency issues and negative externalities. Requiring lenders to retain a portion of the economic interest would rekindle the positive externalities associated with the governance role of debt.

When structured appropriately, securitization allows a bank to manage credit and other risks of its loan portfolio and allows it to focus on financial intermediation activities, such as borrower screening and monitoring.[105] Arguably, these are valuable functions. Yet incentive problems at various stages of the securitization process can lead to severe mispricing. As the Basel Committee has pointed out, "if securitisation markets become illiquid, banks can be exposed to heightened risk from exposures to both credit risk (defaults), for example as loans can no longer be securitised, and to market risk from changes in the mark-to-market value of the securitised assets."[106] The Committee also notes that "an important element in aligning the incentives between underwriters and investors is that banks retain a sufficiently strong economic interest in the securitised assets they sell, retaining some exposure to securitisation cash flows whose payoffs are especially sensitive to how well the bank performs its origination, monitoring and servicing activities."[107] On the buy side, investors in securitization instruments need to have a better understanding of the associated risks.

The complexity of certain securitization structures obscured the links between the performance of the underlying assets and the price of the instruments. For example, the price of CDO tranches is sensitive to factors such as

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104 *Ibid*.

105 *Ibid* at 19.

106 *Ibid* at 20, also finding that "in addition, when risk-sharing markets become illiquid, the signals from prices can become distorted or even disappear, rendering risk measurement especially challenging."

107 *Ibid* at 20.

"forward-looking perceptions of credit default correlations."[108] The Basel Committee has observed that for more complex structures such as re-securitizations and synthetic transactions, this sensitivity is even more severe, making such products very difficult to price.[109] It observes that valuation and risk measurement of structured finance instruments is subject to high levels of model uncertainty, which should be explicitly incorporated in the analysis of the risk associated with these positions.[110]

A requirement that a proportion of the exposure be left on the originating lender's balance sheet, or that a seasoning period be required before the debt can be sold, could address some of the immediate agency issues associated with the speculative market. However, "skin in the game" must be set at a sufficiently high level that the amount does not merely become the entrance price for continuing the same kinds of conduct. A responsive regulatory approach could assist in determining what the appropriate level of retained interest should be, to generate a culture of greater attention to systemic risk. Another agency issue that is beyond the scope of this paper are "the risks created through the conflicts of interest in activities of credit rating agencies and a more fundamental question of whether credit ratings are the appropriate vehicle to control risk".[111]

D. Linking Capital Adequacy Standards and Remuneration to Responsibility

Here again, the norm is drawn from results of extensive studies by the FSB, Basel Committee, and the G-20, examining capital adequacy and its role in the failure of large financial institutions, as well as the role that remuneration incentives played in encouraging directors and officers to shirk their governance and oversight responsibilities.

In September 2010, the Group of Governors and Heads of Supervision (the oversight body of the Basel Committee on Banking Supervision)

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[108] *Ibid*.

[109] *Ibid*.

[110] *Ibid* at 21.

[111] *Ibid* at 21.

announced a substantial strengthening of existing capital requirements: "Basel III". The reform will increase the minimum common equity requirement from 2% to 4.5%, and banks will be required to hold a capital conservation buffer of 2.5% to withstand future periods of stress, bringing the total common equity requirements to 7%.[112] Banks whose capital falls within the buffer zone will face restrictions on paying dividends and discretionary bonuses, so the rule sets an effective floor of 7%.[113] The buffer serves as a means for banks to take corrective action when they experience liquidity or solvency risks, allowing the banks to absorb the losses without triggering a financial failure.

A countercyclical capital buffer "will be implemented according to national circumstances . . . to achieve the broader macroprudential goal of protecting the banking sector from periods of excess aggregate credit growth."[114] This buffer "will only be in effect when there is excess credit growth that is resulting in a system wide build up of risk."[115] The objective is "to ensure that banks maintain a buffer of capital that can be used to absorb losses during periods of financial and economic stress"; in turn aimed at sound supervision and bank governance. The Basel Committee anticipates the changes will address the collective action problems that "prevented some banks from curtailing distributions such as discretionary bonuses and high dividends, even in the face of deteriorating capital positions".[116]

The new standards are aimed at improving the resilience and long term sustainability of banks. They are a risk reduction measure, not only in that

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[112] Basel Committee on Banking Supervision, Press Release, "Group of Governors and Heads of Supervision announces higher global minimum capital standards" (12 September 2010), online: <http://www.bis.org> [Basel Committee, "Standards"]; Brooke Masters, "Basel rewrites capital rules for banks", *Financial Times* (12 September 2010), online: <http://www.ft.com>.

[113] *Ibid* (to be fully implemented in 2019).

[114] Basel Committee, "Standards", *supra* note 112. The countercyclical buffer will be "within a range of 0%–2.5% of common equity or other fully loss absorbing capital".

[115] *Ibid*.

[116] *Ibid*. "While banks are allowed to draw on the buffer during such periods of stress, the closer their regulatory capital ratios approach the minimum requirement, the greater the constraints on earnings distributions."

they will ensure more capital for future downturns, but because they are aimed in part at shifting the conduct of decision makers. One goal is to curtail conduct such as high remuneration and dividends by placing greater responsibility on decision makers at the front end of the decision process regarding financial management and capital sufficient to weather a crisis. Regulators want to prevent the most egregious effects of any future financial crisis and smooth out both financial and resultant economic cycles. Regulators also want to ensure that the costs of further crises are borne by directors, officers, and equity investors. The linkage to structured financial products is that decisions may be made more with a view to risk management than for speculative gain.

The new Basel III standards for capital adequacy are modest at best. The initially proposed standards were cut by half because of pressure from banks in some jurisdictions that they would never be able to comply with the standards.[117] Arguably, there is still not a sufficient link to responsibility of decision makers, such that the incentives have not been sufficiently realigned.

Responsive regulatory processes could be engaged to evaluate changes and determine the need to strengthen particular aspects. Effectiveness and intensity of supervision needs to be strengthened for entities engaged in offering structured financial products, especially systemically important institutions. The recent initiatives are only a beginning of what is needed. The Basel Committee on Banking Supervision has acknowledged that current capital framework for market risk does not capture some key risks that arose in the financial crisis.[118] As lenders of last resort, central banks' provision of liquidity during liquidity crises or downturns should be closely tied to the efficacy of a firm's internal liquidity risk management decision-making processes. Generally, supervisory authorities must be able to assure themselves that banks have sufficient capitalization and market risk management systems that are conceptually sound and implemented with integ-

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[117] See Masters, *supra* note 111.

[118] Basel Committee on Banking Supervision, "Revisions to the Basel II market risk framework" (February 2011), online: Bank for International Settlements <http://www.bis.org>.

rity.[119] The debate regarding the extent to which there should be regulatory intervention to control systemic risk is a rigorous debate between industry participants and regulators, with only a nascent discussion regarding the broader public policy implications.

Arguably, regulators are currently engaging those market participants that resist with fairness, as Braithwaite advocates. It seems that states have accommodated banks by backing off of capital adequacy requirements to allow banks a lowest common denominator in terms of the levels of capital adequacy that they are prepared to try to move towards. The transition period is highly accommodating of financial institutions. In terms of some emerging eastern European and other nations, the thresholds are not likely to be met and some international lending institutions are already preparing to accommodate these expected failures to comply in their international central bank lending decisions. Evaluating how well and at what cost any outcomes are achieved should be an important aspect of the recent initiatives.

1. Remuneration

Arguably, remuneration schemes within banks should be changed to link remuneration with the long-term health of financial institutions. Remuneration systems should focus on target staff whose activities can have a material impact on the risk exposure of the financial institution. The tension between short-term returns and long-term sustainability of financial systems has been compounded by compensation practices that rewarded high fees for short-term profit. Thus, there is a need to implement remuneration schemes that counteract incentives at all levels for short-term returns to potential detriment of sustainability. Compensation should reduce incentives to take excessive risk. For employees in risk and compliance functions, remuneration should be linked to achieving those goals. Board and officer assessments should be tied to management of risk in addition to profitability.

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[119] *Ibid* at 9.

2. Reducing Moral Hazard

A number of distressed banks were rescued by the infusion of public funds, both common equity and other forms of Tier 1 capital during the financial crisis. This bailing out of banks "had the effect of supporting depositors, but also the investors in regulatory capital instruments".[120] Consequently, Tier 2 capital instruments, comprised primarily of subordinated debt,[121] did not absorb losses incurred by several banking corporate groups that would have failed had the public support not been available.

One potential strategy to reduce moral hazard is to implement contingent capital features into preferred shares and subordinated debt issued by financial institutions. The Basel Committee has recently issued a consultation document proposing a mechanism to

> enhance the entry criteria of regulatory capital to ensure that all regulatory capital instruments issued by banks are capable of absorbing losses in the event that a bank is unable to support itself in the private market.[122]

It has observed that numerous public sector injections of capital and other public support during the crisis had the "indirect consequence of ensuring that in many instances equity investors and other capital instruments issued by banks that have been bailed out did not suffer any losses".[123] Its proposal is to require a system of contingent capital, on the premise that injection of capital that is needed to avoid the failure of a bank should not protect investors from absorbing the loss that they would have incurred had governments not intervened. Contingent capital is a security that converts to capital when a financial institution is in financial distress, essentially "converting debt to equity rather than needing to rely on the state to bail the institution out". It could be a required feature of future issue of subordinated securities

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120 Basel Committee on Banking Supervision, "Consultative Document: Proposal to ensure the loss absorbency of regulatory capital at the point of non-viability" (August 2010), online: Bank for International Settlements <http://www.bis.org> [Basel, "Proposal"] at 1.

121 *Ibid*, and in some cases non-common Tier 1 instruments.

122 *Ibid*.

123 *Ibid* at 3.

or debt, creating a type of "bail-in" mechanism. The Basel proposal is aimed at ensuring that all regulatory capital instruments would be able to absorb losses in the event that a bank cannot find liquidity in the private market, including situations when the state steps in to recapitalize and rescue a bank. The Basel Committee notes that

> gone-concern loss absorbency would continue to work through subordination in liquidation for failed banks when the authorities allow them to enter liquidation. However, if the authorities choose to rescue a bank, then the proposal would give the regulatory authorities the option to require regulatory capital instruments, other than common shares, to be written off or converted into common shares.[124]

In other words, the Committee proposes to redefine "gone concern" to include the point where a public bail-out would be necessary, instead of just insolvency and liquidation, ensuring that equity investors, and in some instances subordinated debt, would absorb the losses before taxpayers would have to. Such a mechanism could help address the moral hazard issues by incenting managers and shareholders to act more prudently to avoid the diminution or loss of their equity holdings. It should reduce excessive risk-taking.

E. Require Greater Transparency of Disclosure

There must be transparency, so that risk can be properly assessed and appropriately priced, as well as effective remedies, so that those unfairly harmed have meaningful recourse. Disclosure is a broadly accepted norm in securities markets and there is no reason why the same degree of transparency regarding material information and material risk cannot be also required in respect of derivatives and other structured financial products.

Information asymmetries in the OTC market could be reduced through disclosure requirements that are targeted and measured against potential outcomes. The underlying principle is that there must be sufficient disclosure of material information to allow market participants to make informed

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[124] *Ibid* at 4.

choices about credit derivative investment.[125] Protection buyers could be required to disclose, at the time of purchase, any material adverse risk in the reference entity that they are aware of. Protection sellers could be required to disclose any material adverse risk to their financial health at the time of the sale and/or renewal of a derivative contract. Publicly traded companies could be required to disclose the effect of credit derivatives on their risk exposure, including how their credit risk has affected valuation of derivative liabilities and any resulting gain or loss included in earnings statements, and any known information on how counterparty credit risk may have affected their valuation of, or ability to collect on, derivative assets.[126]

Financial institutions and other parties that create new tranches of derivatives should disclose underlying material risks to the derivatives to counterparties; and counterparties and retail investors purchasing derivatives should have enforceable remedies for the failure of these entities and individuals to disclose material adverse risks at the point of sale of the derivatives.[127] Credit rating and other entities that recommend investment in derivatives should meet a due diligence standard in examining and disclosing material adverse risk in the derivative products being sold in the public market.

The protocol mechanisms developed by the financial products industry facilitates industry-wide net settlement of CDS referencing an insolvent entity.[128] However, these innovations address only one aspect of the settlement process. There continues to be a lack of transparency as to who is bearing the ultimate costs of the deficiencies in value when all the CDS settlements are completed. The dealer firms tend to have less net exposure as they frequently buy protection to offset the risk of the protection they have sold. The same

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125 Sarra, *supra* note 8.

126 *Ibid*. Some jurisdictions have recently amended their securities law to require such disclosures by publicly trading companies. Materiality in this respect could be based on a standard of whether the facts in respect of the adverse risk reasonably would be expected to have a significant effect on the protection seller's valuation or pricing of the derivative.

127 *Ibid* at 11.

128 *Ibid* at 15. The recent Lehman Brothers Holdings' auction illustrated that the market can price the value of CDS and allow cash settlement for counterparties to CDS trades. More than 350 organizations adhered to the 2008 Lehman CDS Protocol, which provided a settlement procedure for approximately US$6 billion of net CDS exposures.

may not be the case for end purchasers. A transparency requirement would be a first step in engaging in a meaningful public policy discussion regarding further reform of regulatory oversight.

F. Strengthen Frameworks to Deal With the Failure of Cross-Border Financial Groups or Conglomerates

There is no framework for the resolution of cross-border financial groups or conglomerates operating in more than one market segment.[129] Cross-border resolution is complicated by the potential effect of foreign operations, and willingness and ability to bear a share of the burden. "Existing legal and regulatory arrangements are not generally designed to resolve problems in a financial group operating through multiple, separate legal entities."[130] Reform of national insolvency bank resolution schemes could address failing systemically significant financial institutions. There is a need for mechanisms to facilitate capital and liability restructuring as well as liquidation. There is a tension between international efforts to harmonize regulation in global financial markets for global firms with the real effects of bank failure on national systems. Responses to bank failures need to be timely and effective, and in most cases will fall to national regulators and national solutions; thus any regulatory innovation must be responsive to these tensions. As Bank of England governor Mervyn King has observed, "global banks are global in life, but national in death".[131]

The Basel Committee has observed that prudential measures will not limit the potential for increased moral hazard without instituting a viable resolution process for financial institutions. Contingency planning is important for cross-border financial institution financial distress, including cross-border cooperation and information sharing. It advocates strengthening risk

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[129] For example, in both banking and insurance services.

[130] Basel Committee, *Cross-Border*, *supra* note 1 at 4.

[131] Cited in Steve Schifferes, "Can banking regulation go global?", *BBC News* (18 March 2009), online: <http://news.bbc.co.uk>.

mitigation mechanisms that reduce systemic risk and enhancing resiliency of critical financial functions during a crisis.[132]

There is need to improve cross-border resolution capacity. Global banks have substantial operations across multiple jurisdictions and thousands of legal entities. In the absence of a global resolution regime, effective regimes are needed not only at the national level, but also strong capacity for such regimes to co-ordinate across borders.[133] Regulatory authority should include powers that facilitate "going concern" capital and liability restructuring as well as "gone concern" restructuring and wind-down measures, with establishment of a temporary bridge bank to take over and continue operating certain essential functions. Statutory powers enabling the resolution authority to bail-in senior debt holders would expand the options for going concern resolution. Such authority should extend to authority over the shadow banking sector, which contributed to the crisis.[134] What does responsive regulation contribute to these regulatory initiatives? It could draw together skills and expertise in banking, insolvency workout and deposit holders or life insurance policyholders to create a dialogic process regarding systems design that is responsive to the challenges identified. Creation of a stronger framework to address cross-border financial group and conglomerate failure could mean fewer financial institution failures and thus a substantial reduction in harm to individuals in the future.

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131 Basel, "Proposal", supra note 120. While a discussion of its initiatives is beyond the scope of this paper, its recommendation regarding structured financial products is of note. The Basel Committee endorses risk mitigation techniques such as enforceable netting agreements, collateralization, greater standardization of derivatives contracts, clearing and settlement through regulated CCP, and transparency reporting through trade repositories. Basel III is aimed at providing a "macroprudential overlay" to better deal with systemic risk, including reducing systemic risk by reducing procyclicality, i.e., the financial system's tendency to amplify the ups and downs of the real economy, and by taking account of the inter-linkages and common exposures among financial institutions.

133 Mario Draghi, "Next steps on the road to financial stability", *Financial Times* (17 September 2010) 9.

134 *Ibid.*

1. Special Measures for Systemically Important Financial Institutions

The Chair of the Financial Stability Board, Mario Draghi, has suggested that the effectiveness and intensity of supervision needs to be strengthened for systemically important institutions in particular, given the wider damage their failure would cause. A key source of the risk transmission is the network of major institutions' exposures to each other; particularly OTC derivatives markets.[135] Draghi has observed that systemically important institutions will operate with correct incentives only if an effective resolution framework is in place; yet many countries lack these powers, the tools and operational capacity.

The FSB has developed a policy framework for reducing the moral hazard of systemically important financial institutions (SIFI), whose failure, because of their size, complexity and systemic interconnectedness, can cause significant disruption to the wider financial system and economic activity.[136] The framework calls for improvements to resolution regimes to ensure that any financial institution distress can be resolved without disruptions to the financial system and without taxpayer support. SIFIs should be required to have additional loss absorption capacity beyond the Basel III standards to reflect the greater risks that these institutions pose to the global financial system.[137] The FSB suggests that depending on national circumstances, this greater capacity could be drawn from a menu of viable alternatives and could be achieved by a combination of a capital surcharge, a quantitative requirement for contingent capital instruments, and a share of debt instruments or other liabilities represented by "bail-in" type claims, which are capable of bearing loss at the point of non-viability, thus enabling creditor recapitalization and recovery while maintaining vital business functions.[138]

The FSB advocates that jurisdictions should provide resolution authorities with the capacity to cooperate and to share information across borders. It

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135 *Ibid.*

136 FSB, *supra* note 2 at 1.

137 *Ibid* at 2.

138 *Ibid* at 3.

recommends that they review and, where appropriate, eliminate those provisions in national laws that hamper fair cross-border resolution, such as depositor priority rules that give preferential treatment to domestic depositors over those of foreign branches, or that trigger automatic action in the domestic jurisdiction as a result of official intervention.[139] The FSB also recommends more intensive supervisory oversight for financial institutions that may pose systemic risk and more robust standards for core financial infrastructure to reduce contagion risks from the failure of individual institutions.[140] Resolution authorities should be obliged to seek cooperation with foreign resolution authorities and should have the capacity to cooperate.[141] National laws should be amended to reduce barriers to cross-border resolution and to allow home authorities with oversight of SIFIs to take into account the effects on host countries.

The recommendations are aimed at improving the authorities' ability to resolve such institutions in an orderly manner, without exposing taxpayers to loss, while maintaining continuity of their vital economic functions. The proposal will necessitate changes to resolution regimes and tools at national levels, to enable resolution authorities to coordinate in cross-border resolution.[142]

G. Responsive Regulation is Meaningless Absent the Resources, Expertise and Willingness to Enforce Standards That Are Established

As pointed out in the discussion above, responsive regulation can play a role in developing a more effective oversight and regulation process once broad normative starting principles are in place. However, implementing an effective responsive regulation scheme for financial institutions and structured financial products requires a significant investment in capacity-building by

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139 *Ibid* at 4.

140 *Ibid* at 2. It also calls for peer review by an FSB Peer Review Council of the effectiveness and consistency of national policy measures for G-SIFI, by the end of 2012.

141 *Ibid* at 5.

142 *Ibid* at 1.

regulators and the development of stakeholder organizations representative of constituencies that are not as well organized in the financial industry.

A normative principle should be that considerably more resources will be dedicated to building expertise and capacity among regulatory authorities, specifically to gain skills to appropriately understand and respond effectively to new structured financial products and other market developments. The regulatory process is highly dynamic and very complex given its multiple fora and stakeholders, and the continuing rapid development of products and market strategies. Resources are required to answer the most basic questions regarding which aspects of the market even need regulation, and then what the oversight and enforcement framework should look like, given all of the issues raised above. Absent a very serious commitment to that regulatory capacity-building, any change will be modest at best, and foreshadow further crises at worst. Increased resources would still leave room for the appropriate prioritizing of enforcement strategies based on assessments of risk and the impact of particular conduct on individual parties and systems. Numerous reports of regulatory failure noted the lack of expertise, resources, and continuity of regulatory and supervisory staff, as well as conflicts of interest, which together resulted in a failure to appropriately monitor and, where necessary, intervene.

VI. CONCLUSION

Financial markets are deeply interconnected. Even in jurisdictions such as Canada that weathered the worst of the financial crisis relatively well, there was a considerable contagion effect. A framework that addresses some of the worst features and incentives of the structured financial products market would go some measure toward ensuring that future crises are prevented or tempered in their effects. Responsive regulation is particularly a challenge where the relational and reputational aspects are more transient. Regulatory spaces in the financial and capital markets are highly diverse; state, SROs, international stakeholder organizations, international principles and national regulation; and the contractual nature of derivatives and influence of powerful private interests such as the ISDA and new CCP, pose a complex challenge for regulatory design that is truly responsive. If responsive regulation is to be an effective tool, it needs a set of basic normative principles that serve as starting principles, drawn from the problems identified from the myriad of

studies of the global financial crisis. The need to establish such norms is immediate and a process to reach them essential to any longer-term responsive regulatory process.

Responsive regulation offers an optimistic vision of citizen engagement in regulatory standard setting, which encompasses notions of both participatory collaboration through public interest and industry groups, and implementation of restorative justice as a mechanism at the broad end of the pyramid as the mechanism for transformation. In this respect, it offers a new departure from more traditional policy-oriented examination of regulatory issues as it provides the forum for engagement and insights from diverse perspectives, all of whom are directly and seriously affected by the regulatory choices that will need to be made in the months and years to come.