

AN ANALYSIS OF THE PROPOSED REGULATORY REFORMS FOR DERIVATIVES TRADING IN CANADA

by

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Abstract

Since the global financial crisis of 2008, policy makers have been working to develop laws that will increase the financial systems' transparency and resiliency while maintaining fairness and efficiency. At the heart of the market infrastructure reform initiatives are measures aimed squarely at the regulation of derivatives.

This paper aims to provide a high level review of some of the new Canadian legislation targeting derivatives. It examines the motivations for regulating the use of these sophisticated financial products as well as the complexity of legislating within a country whose securities laws have long been managed at the provincial level. The paper offers suggestions on the important features and direction of the law in this area.

The analysis leads to several conclusions regarding the developing legislation. Central counterparty clearing and margin requirements are important regulatory initiatives to mitigate counterparty credit risk, being the key way in which derivatives contribute to systemic risk. Central clearing, however, cannot be relied upon as the primary guard against the spread of systemic risk by derivatives markets. This responsibility should remain in the hands of vigilant regulators.

This leads to the key conclusion, being the need for effective management, at the national level, of the systemic risk created by derivatives markets. A robust national regulator would not only have access to real-time trade reporting data but would also monitor movements within defined sectors, like housing for example, to be alert to any risk accumulation within an overheated market.

In addition, the analysis concludes that the use of investor sophistication as a regulatory trigger, as currently part of the proposed market conduct rules, is a valuable delimiter of differing levels of required disclosure. The research also concludes that investor sophistication could be a valuable tool to manage the nexus of sophisticated derivatives products entering the retail economy by potentially limiting their availability based on a combination of product complexity and investor sophistication.

Lay Summary

A derivative is a contract by which parties allocate the risk of a change in the price of something, called an underlying. The underlying can be anything, from an interest rate to the price of oil. Insufficient regulation derivatives markets was a key contributor to the global financial crisis of 2008. After the crisis, leaders of the world's largest developed economies agreed to strengthen the global financial system, in part, by improving the regulation of derivatives. This paper looks at several of the new laws in Canada targeting derivatives and offers suggestions on the direction of the law in this area. In Canada, derivatives and other securities are regulated provincially. The key conclusion of the paper is that a national securities regulator should be created and charged with, among other things, managing the risks created by derivatives.

Preface

This dissertation is original, unpublished, independent work by the author, W. V. Barta.

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Dedication

For my children, Winston and Faith, who received less of my time and attention as I dedicated hour upon hour to this project. I hope to always make you proud.

Introduction

A financial system should benefit society by helping to create growth and prosperity for the population of the country in which it operates. In order to achieve this objective, the system must be well-managed and resilient to shocks in order to provide a solid foundation for sustainable economic growth and the associated prosperity.

Since the global financial crisis of 2008, policy makers have been working to develop laws that will increase transparency and resiliency while maintaining fairness and efficiency, in terms of a balance between rules and processes and their associated costs, of both time and money. This is no small task. A better governed and more transparent financial system is not only more competitive, it allows for ease of entry and exit of capital, fosters the development of products better geared to serve the needs of investors, helps maintain liquidity by adequately managing systemic risk and discouraging procyclical lending behaviour¹ and minimizing the cost of failures to taxpayers.

The 2008 crisis laid bare the cracks in the financial system. Low interest rates, abundant liquidity and performance based compensation schemes combined with rising asset prices to encourage both financial institutions and retail investors to take on more risk than they could manage in pursuit of higher returns. Inadequate regulation and supervision, insufficient disclosure and poor risk management resulted in the creation of a highly complex and opaque financial system. Within this fragile structure, institutions became overleveraged and dependant on rapid growth fueled by credit of questionable quality that was used to fund even riskier investments.²

When the bubble burst, the unprecedented shock to the global financial system had abrupt consequences for growth and employment.³ This prompted a coordinated international regulatory response. The regulatory reform agenda agreed to by G-20 leaders in 2009 called for an improved financial infrastructure with laws that could cope with large interconnected institutions and products in a way that the system could still function efficiently. Toward that end, the member countries

¹ Procyclical lending requires an increase in the capital securing a loan, based on the creditworthiness of the borrower. Therefore, in the case of a bank, for example, when an economic downturn decreases the creditworthiness of borrowers, the bank's capital requirements significantly increase. This can lead to a rapid increase in pressure on borrowers and fuel defaults. For more on this, see: Vox, "Mitigating the Procyclical Effects of Bank Capital Regulation", online: <https://voxeu.org/article/mitigating-procyclical-effects-bank-capital-regulation>

² Aditya Narain, İnci Ötoker-Robe & Ceyla Pazarbasioglu eds., Building a More Resilient Financial Sector, (International Monetary Fund, 2012) at p.2.

³ *Ibid.*

committed to: tighter regulation to reduce the spread of risk taken by individual firms; better supervision to effectively implement that regulation; and better safety nets to dampen the impact of swings and failures on the broader financial system.⁴

A combination of a lack of understanding of these sophisticated financial instruments and insufficient regulation allowed the tremendous growth of derivatives markets to contribute to a fatal underappreciation of systemic risk. At the heart of the market infrastructure reform initiatives are measures aimed squarely at the regulation of derivatives.

This paper aims to provide a high level review of some of the new Canadian legislation targeting derivatives. It examines the motivations for regulating the use of these sophisticated financial products as well as the complexity of legislating within a country whose securities laws have long been managed at a provincial level. The paper offers suggestions on the important features and direction of the law in this area.

The analysis begins with a description of the different types of derivatives and their associated markets. This leads to an explanation of how derivatives are used in their two primary functions of hedging and speculation. Toward these ends, derivatives create leverage, increase liquidity and contribute to systemic risk. Exploring how this occurs is followed by a look at how derivatives also affect the day-to-day operations of securities markets, which leads to a summary of the public policy reasons for the regulation of derivatives.

The paper then looks at the role of derivatives in the 2008 financial crisis. The interplay of the credit boom, the housing bubble, excessive securitization, poor risk management and regulatory failures are shown to have allowed enough risk to accumulate within derivatives markets to have significantly contributed to the most devastating global financial crisis in recent history. This was the genesis of regulatory reforms to derivatives legislation.

A summary of these initiatives is presented, including an overview of the key international bodies involved. This includes a brief history of the legislative developments in derivatives markets in the US, being the key national locus of systemic risk contributing to the 2008 financial crisis.

⁴ *Ibid.*

This is followed by an overview of Canadian securities regulation. A key focus of this analysis is the 2011 Securities Act Reference where, it is posited, the Supreme Court invited the creation of a cooperative national regulator charged with monitoring and mitigating systemic risk.

The emergence of Canada's cooperative capital markets regulatory system is then reviewed. This includes the development of the Capital Markets Stability Act and the subsequent Quebec Court of Appeal Reference.

Some of the major Canadian regulatory initiatives targeting derivatives are then discussed. These include central counterparty clearing, margin requirements, trade repositories and derivatives data reporting and the proposed market conduct rules.

The analysis leads to several conclusions regarding the developing legislation in the area of derivatives. Central counterparty clearing and margin requirements are important regulatory initiatives to mitigate counterparty credit risk, being the key way in which derivatives contribute to systemic risk. Central clearing, however, cannot be relied upon as the primary guard against the spread of systemic risk by derivatives markets. This responsibility should remain in the hands of vigilant regulators.

This leads to the key conclusion, being the need for effective management, at the national level, of the systemic risk created by derivatives markets. A robust national regulator would not only have access to real-time trade reporting data but would also monitor movements within defined sectors, like housing for example, to be alert to any risk accumulation within an overheated market.

In addition, the analysis concludes that the use of investor sophistication as a regulatory trigger, as currently part of the proposed market conduct rules, is a valuable delimiter of differing levels of required disclosure. The research also concludes that investor sophistication could be a valuable tool to manage the nexus of sophisticated derivatives products entering the retail economy by potentially limiting their availability based on a combination of product complexity and investor sophistication.

About Derivatives

Fundamentally, a derivative is a contractual means by which parties allocate the risk of a fluctuation in the price of an underlying reference value.⁵ The reference value can be virtually anything - an interest rate or exchange rate, an index of bonds, the interest revenue stream from securitized loans or commodity prices.⁶ The value or payoff of the derivative is 'derived' from the performance of something else, which is often called the underlying asset or just the 'underlying'. All derivatives have two parties, known as the 'buyer' and 'seller' or sometimes the 'long' and the 'short'.⁷ Derivatives almost always have a deemed life, that is, they typically expire on a specific date.

These contracts can be physically settled, as in the case of an option, such as a stock option, where a party may exercise its right to purchase a certain number of units of the underlying reference, such as shares of a company. More often however, these contracts are cash settled where the two sides, or counterparties, agree to one or a series of payments based on the price of the underlying reference at the time.⁸ The payments made on a derivative can be any combination of payments at the start of the contract, during its life and at its expiration. This exchange of payments allows the counterparties to reallocate risk. The fact that most contracts are cash settled is important because if one or both parties are using leverage to enter into the contract, as opposed to owning or being able to accept delivery of a physical underlying, the spectre of counterparty credit risk is introduced, a key contributor to systemic risk, as discussed later.

The transfer of risk can be used to mitigate risk, as a factory might seek to hedge the fluctuation of steel prices or a banker might seek to hedge fluctuations in interest rates. These contracts can also be used to speculate, or take on risk depending on the counterparties' prediction of which direction the price of an underlying value will move.

Derivatives trade in the sense that the underlying risk at the basis of any derivative instrument can be divided, repackaged and resold in a variety of forms. What the counterparties exchange isn't a

⁵ Sean J. Griffith, "Governing Systemic Risk: Toward a Governance Structure for Derivatives Clearinghouses" (2012) 61 Emory L.J. 1153.

⁶ *Ibid.*

⁷ The 'long' side of a bet takes the position that the underlying will increase in value, such as when an investor buys a stock in the hopes it will go up in price with a view to selling it later. Short selling is a term primarily used with stocks or bonds and means to borrow the asset and sell it, in hopes of buying it back at a later date at a lower price and then returning the borrowed asset to the lender.

⁸ Griffith, *supra* Note 5.

traditional financial instrument like stocks or bonds, but rather a portion of the positions (long or short) on the underlying risk.

History of Derivatives

While the controversy surrounding derivatives is relatively new, the financial instruments themselves are not. The Greek philosopher, mathematician and astronomer Thales, in varying versions of the story, is said to have purchased options on olive presses and made a fortune after predicting a bumper crop of olives around 580 BC.⁹

The first exchange for trading derivatives was the Royal Exchange in London which permitted forward contracting.¹⁰ The widely discussed Dutch tulip bulb mania of 1637 was characterized by forward contracting on bulbs of the recently introduced tulip.¹¹ Prices reached extraordinarily high levels and then suddenly collapsed. Derivatives can therefore be said to have had a hand in the first recorded speculative bubble.¹² The first futures contracts are generally traced to the Yodoya rice market in Osaka Japan around 1650.¹³ Much like today's futures, these were apparently standardized contracts.¹⁴

The Chicago Board of Trade was created in 1848 whereafter a group of grain traders created the 'to-arrive' contract which permitted farmers to lock in the price of grain and deliver it later to storage facilities, whose capacity fluctuated seasonally.¹⁵ Later in the 19th century, these contracts were standardized and the first futures clearinghouse was formed.¹⁶

Soon after the value of the US dollar was severed from the price of gold, the Chicago Mercantile Exchange (the 'CME') created the International Money Market in 1972 which allowed trading in currency futures.¹⁷ While stock options had existed for some time, the Chicago Board of Trade created the first

⁹ Joe Weisenthal, "The Story Of The First-Ever Options Trade In Recorded History", online: <http://www.businessinsider.com/the-story-of-the-first-ever-options-trade-in-recorded-history-2012-3>

¹⁰ Don M. Chance, *Essays in Derivatives: Risk-Transfer Tools and Topics Made Easy* (New Jersey: John Wiley & Sons, Inc., 2008) at 8.

¹¹ For a detailed summary of the tulip bubble, see: Focus Economics, "Tulip Mania: When Tulips Cost as Much as Houses", online: <https://www.focus-economics.com/blog/tulip-mania-dutch-market-bubble>

¹² *Ibid.*

¹³ Chance, *supra* Note 10 at p.8.

¹⁴ *Ibid.* at p.8.

¹⁵ *Ibid.* at p.8.

¹⁶ *Ibid.* at p.8.

¹⁷ *Ibid.* at p.9.

options exchange in 1973.¹⁸ In 1975, that same group created the first interest rate futures contract based on mortgage backed securities.¹⁹

Types of Derivatives

Options

An option is the right, but not the obligation, to buy or sell an underlying at a fixed price for a certain length of time, the most commonly understood form being a stock option.²⁰ Parties can use these instruments to speculate on the movement of a stock price.²¹ In addition, many companies use stock options as a tool to motivate employees or sweeten the deal for private investors.²² For example, in addition to shares at a fixed price, companies can offer investors warrants (the term commonly used for stock options offered to investors) to buy additional shares, or fractions of shares, at a higher price, providing an additional financing mechanism for the company. Both publicly traded and private companies can give key employees stock options as an incentive. If the share price never exceeds the strike price (the fixed price at which the option holder can purchase the as yet unissued shares), the employee is no worse off. However, if the company's share price rises above the strike price, the employee can buy shares at less than the market price and either keep those shares or sell them, thus profiting the amount of the difference.²³

Forward Based Instruments

A forward is the obligation, as opposed to only the right, to exchange an underlying at a set price on a fixed future date and, if physically-settled, at a specified location.²⁴ Forward based derivative instruments include forwards and futures. Fundamentally, forward and futures contracts have the same

¹⁸ *Ibid.* at p.10.

¹⁹ *Ibid.* at p.9.

²⁰ For a definition of stock options see: Investopedia, "Stock Option", online:

<https://www.investopedia.com/terms/s/stockoption.asp>

²¹ For an example of how speculators profit from stock options, see: Investopedia, "How do Speculators Profit From Options", online: <https://www.investopedia.com/ask/answers/06/speculateoptions.asp>

²² Stock options are the norm in high tech companies, see: National Center for Employee Ownership, "Employee Stock Options Fact Sheet", online: <https://www.nceo.org/articles/employee-stock-options-factsheet> and virtually every Fortune 500 company offers stock options, see: Canvas, "A Comprehensive Look at Common, Less Common and Rare Fortune 500 Company Benefits", online: <https://gocanvas.io/resources/a-comprehensive-look-at-common-less-common-and-rare-fortune-500-company-benefits>

²³ The execution of these transactions is often achieved via a short sale whereby a broker will sell the shares in advance, against the employees option contract, pay the company the strike price who will then issue the shares for delivery against sale, allowing the employee to profit the difference less trading commissions.

²⁴ Norman Menachem Feder, "Deconstructing Over-The-Counter Derivatives" (2002) Colum. Bus. L. Rev. 677.

function: both types of contracts allow people to buy or sell a specific type of asset at a specific time at a given price.

Futures are financial contracts obligating the buyer to purchase an asset or the seller to sell an asset, such as a physical commodity or a financial instrument, at a predetermined future date and price.²⁵

Futures contracts detail the quality and quantity of the underlying asset; many are standardized to facilitate trading on a futures exchange.²⁶ Some futures contracts may call for physical delivery of the asset, while others are settled in cash.²⁷

Forward contracts, on the other hand, are private agreements between two parties. For forward contracts, settlement of the contract typically occurs at the end of the contract.²⁸ Futures contracts can be marked-to-market daily, which means that daily changes are settled day by day until the end of the contract.²⁹ Furthermore, settlement for futures contracts can occur over a range of dates.³⁰ Forward contracts, on the other hand, typically only possess one settlement date.³¹

Swaps

In a typical swap contract, as the name suggests, counterparties exchange positions on the risk of the underlying asset. For example, in an interest rate swap, one party pays the other if interest rates rise and receives payments from the other if interest rates fall. A party with interest rate exposure, either through borrowing or lending, can effectively cancel out this risk by taking the opposite position in a swap. Alternatively, if a party has a view about what interest rates are likely to be in the future, they can use a swap to speculate on their prediction. In either case, the swap effectively transfers the risk of fluctuation in interest rates from one party to the other.

²⁵ Chance *supra* Note 10.

²⁶ Feder *supra* Note 24.

²⁷ *Ibid.* at p.682.

²⁸ For an explanation of futures and forwards contracts, see: Investopedia, “Explaining Forward and Futures Contracts”, online: <https://www.investopedia.com/video/play/explaining-forward-and-futures-contracts/>

²⁹ For more on futures and forwards, see: Investopedia, “Forward Contracts Versus Futures Contracts”, online: <https://www.investopedia.com/ask/answers/06/forwardsandfutures.asp>

³⁰ *Ibid.*

³¹ *Ibid.*

Credit Derivatives

Credit derivatives are a form of derivative whose value is based on the credit risk of another firm or financial instrument.³² Parties can enter into privately negotiated credit derivative agreements that explicitly transfer credit risk from one party, the 'protection buyer' to another, the 'protection seller'.³³

Credit derivatives come in a variety of forms, but the credit default swap (CDS) gained notoriety in the 2008 financial crisis.³⁴ Not only is this form of credit derivative the most commonly used standalone product employed by asset managers and traders, but it is also used extensively in structured credit products such as synthetic collateralized debt obligations³⁵ and credit-linked notes.³⁶

In a credit default swap, the protection buyer pays a fee, or 'spread', to the protection seller in exchange for the seller's commitment to offset any losses, real or hypothetical, suffered by the protection buyer in the event of a default or other credit event of another party, the 'reference entity'. In this way, credit default swaps allow parties to hedge or speculate based on the risk of default of an underlying entity or index.

Credit default swaps have been analogized to both options and swaps.³⁷ They typically have an asymmetric payoff structure, which makes them resemble options, however their price performance is more like a swap than an option.³⁸

In a typical CDS transaction, a fund may hold a large number of instruments of a particular debtor, or a portfolio of mortgages, thereby exposing it to substantial loss should the debtor default on their obligations.³⁹ In order to hedge this risk, the fund may enter into a credit default swap which transfers the risk of default to a third party protection seller in exchange for a series of fixed payments.⁴⁰ In the event of default, the protection seller must make the protection buyer whole, typically by paying the difference between the par value of the anticipated interest stream and the post-default value.⁴¹ If the

³² Mark J.P. Anson et al., "Credit Derivatives: Instruments, Assets and Pricing" (Wiley - New Jersey 2004).

³³ *Ibid.* at p.2.

³⁴ Griffith, *supra* Note 5 at p.1167.

³⁵ Anson, *supra* Note 32 at p.vii.

³⁶ A credit linked note is a form of funded credit derivative. It is structured as a security with an embedded credit default swap allowing the issuer to transfer a specific credit risk to credit investors. The issuer is not obligated to repay the debt if a specified event occurs.

³⁷ Anson, *supra* Note 32.

³⁸ Erik F. Gerding, *Law, Bubbles and Financial Regulation* (New York: Routledge, 2014).

³⁹ Griffith, *supra* Note 5 at n30.

⁴⁰ *Ibid.*

⁴¹ *Ibid.*

debtor does not default, the protection seller enjoys the stream of spread payments without having to make any payments of its own.⁴² As with other forms of derivatives, neither party need hold the underlying asset to receive payment on a credit default swap.⁴³ Similarly, the buyer of the default protection does not need to suffer any actual loss in order to be entitled to payments.⁴⁴ The payment obligation is triggered by the movements of the reference entity alone and is calculated on the basis of the difference between the par values of the reference entity's debt and the actual value received.⁴⁵

Types of Derivatives Markets

Highly standardized derivatives, such as futures and most options, trade on exchanges like the Chicago Mercantile Exchange.⁴⁶ While regulation pushes more types of derivatives contracts to be exchange traded, a significant portion⁴⁷ of derivatives trades only bilaterally, that is, on the basis of separately negotiated transactions between parties. These are referred to as over the counter or OTC derivatives.

Listed or Exchange-Traded Derivatives

Exchange traded, also known as listed, derivatives are highly standardized contracts traded on a public exchange, through a central counterparty (CCP), known as a clearing house, which becomes a counterparty to every trade.⁴⁸ Execution through an exchange not only enhances liquidity but also facilitates price discovery, allows for regulatory oversight to enhance transparency while providing anonymity to counterparties.⁴⁹ As discussed later, a major regulatory initiative to emerge from the financial crisis is a push to increase the amount of derivatives contracts that are centrally cleared.

Over-the-Counter (OTC) Derivatives

OTC derivatives are privately negotiated and traded between two parties without intermediation through an exchange (although OTC transactions may be cleared by a clearinghouse).⁵⁰ Information on

⁴² *Ibid.*

⁴³ *Ibid.*

⁴⁴ *Ibid.*

⁴⁵ *Ibid.*

⁴⁶ CME Group, online: <http://www.cmegroup.com/>

⁴⁷ At the end of December 2016, the notional amount of outstanding OTC derivatives was USD 483 trillion; these had a gross market value of USD 15 trillion. Within the OTC interest rate derivatives market, 76% of the value of the outstanding contracts was centrally cleared. 44% of outstanding CDS were centrally cleared. Source: Statistical Release – OTC Derivatives Statistics at end-December 2016. BIS Monetary and Economic Department (May 2017).

⁴⁸ Understanding Derivatives – Markets and Infrastructure, Federal Reserve Bank of Chicago (2013); online at: <https://www.chicagofed.org/publications/understanding-derivatives/index>

⁴⁹ *Ibid.*

⁵⁰ *Ibid.*

the trading of these individual contracts is held by dealers, who are either buyers or sellers of contracts.⁵¹

In these privately negotiated contracts, sellers, or dealers, and buyers, often the 'end users' of the instrument, take a position on the underlying risk either for purposes of hedging or speculation.⁵²

Because the transacting parties are effectively negotiating a new contract, either side (long or short) of the risk of the underlying reference asset may be transferred, in whole or in part, in a wide variety of ways.⁵³

The size of derivatives markets is measured by the notional amounts of the outstanding contracts.⁵⁴

This is sometimes called the notional principal amount when the underlying is a rate.⁵⁵ When a derivatives contract is physically-settled, the notional amount is the number of units of underlying to which the contract applies.⁵⁶ The outstanding notional amount is the gross par value of the (derivative) contract. This is calculated by multiplying the notional amount by the contract price per unit of underlying.⁵⁷ For example, if a physically-settled forward derivative obligates a party to deliver 100 barrels of oil at \$50 per barrel, at some point in the future, the outstanding notional amount of the contract is \$5000.⁵⁸

BIS and the International Swaps and Derivatives Association (ISDA) regularly survey global derivatives dealers and publish the results.⁵⁹ Both surveys report notional amounts outstanding, reflecting the scale and growth of activity. The notional amount of outstanding OTC derivatives at December 2016 was \$483 trillion, representing a slight decline from the first half of the year where the notional amount was \$553 trillion.⁶⁰ By comparison, this amount was close to \$700 trillion at the time of the financial crisis.⁶¹

Guarding against another global crisis requires a macro view of the market that includes observing the size and growth of the market and whether any regulation, or deregulation, may be influencing sharp

⁵¹ *Ibid.*

⁵² Griffiths *supra* Note 5 at p.1159.

⁵³ *Ibid.*

⁵⁴ Feder *supra* Note 24 at p.683.

⁵⁵ *Ibid.*

⁵⁶ *Ibid.*

⁵⁷ *Ibid.* at p.684.

⁵⁸ *Ibid.*

⁵⁹ BIS, "Semiannual OTC Derivatives Statistics", online: <https://www.bis.org/statistics/derstats.htm>

⁶⁰ BIS, "OTC derivatives statistics at end-2016", online: https://www.bis.org/publ/otc_hy1705.htm

⁶¹ *Ibid.*

swings in either direction.⁶² It has been argued that deregulation was a necessary precondition for the ballooning of sub-prime mortgages that started the shock magnification of the 2008 crash.⁶³ Specifically, within the US, the *Commodities Futures Modernization Act of 2000* (CFMA) and its removal of legal constraints around speculative trading of OTC derivatives, has been labeled as a key culprit behind the unrestrained growth and excessive leverage in this market.⁶⁴

Types of Derivatives Trading

Participants in derivatives markets are often classified as either ‘hedgers’ or ‘speculators’. Hedgers enter a derivative contract to protect against adverse changes in the values of their assets or liabilities. Specifically, hedgers enter a derivative transaction such that a fall in the value of their assets will be compensated by an increase in the value of the derivative contract. By contrast, speculators attempt to profit from anticipating changes in market prices, interest rates or other credit events by entering into a derivative contract.

Based on this definition, activities of speculators are inherently more risky and should warrant closer monitoring by financial regulators. In practice however, it is often difficult to determine the true motivations behind all such contracts.

It is also important to remember that, despite the often negative connotations around speculation, both hedging and speculation are vital features of a properly functioning financial system.⁶⁵ Hedging because it enables parties to eliminate unwanted risk, and speculation because it speeds price discovery and therefore market efficiency.⁶⁶

Hedging and speculating are not the only motivations for trading derivatives. Some firms use derivatives to obtain better financing terms.⁶⁷ For example, banks often offer more favourable financing terms to those firms that have reduced their market risks through hedging activities than to those without. Fund managers sometimes use derivatives to achieve specific asset and risk allocations within their portfolios.

⁶² Patricia A. McCoy, Andrey D. Pavlov & Susan M. Wachter, “Systemic Risk Through Securitization: The Result of Deregulation And Regulatory Failure” (May 2009) 41 Conn. L. Rev. 132.

⁶³ *Ibid.*

⁶⁴ Lynn A. Stout, “Derivatives and the Legal Origin of the 2008 Credit Crisis” (2011) Cornell Law Faculty Publications, Paper 720.

⁶⁵ Griffith *supra* Note 5.

⁶⁶ *Ibid.*

⁶⁷ *Ibid.*

Hedging is generally viewed as an economically legitimate. The post-2008 crisis analysis, however, generally heaps blame on large financial institutions using derivatives to speculate amidst rising asset prices, particularly housing prices, combined with low interest rates. In the US, through the Gramm-Leach-Bliley Act of 1999, the federal government gave explicit permission to banks to speculate on securities.⁶⁸ When such institutions are allowed to speculate, and have significant profit incentives to do so,⁶⁹ they cannot simultaneously be entrusted with sustaining and protecting the credit supply and systemic financial integrity.

This is directly relevant to legislative development on two fronts. First, it suggests that, if it were possible, regulating market participants, and/or trades, differently based on the purpose of the transactions, whether they be to hedge or to speculate, would be advantageous. Second, it highlights the importance of a national regulator with a focus on systemic risk. The historically tight rules around the permitted functions of banks and financial institutions were themselves effective at mitigating systemic risk. With the relaxing of those rules comes the need for external oversight at the national level.

Hedging

Anytime somebody expects to receive or deliver money or goods over time, there exists an inevitable risk that external events will negatively impact either the expected incoming revenue stream or the ability of a party to deliver the money or goods. Somewhat like insurance, derivatives can be used to hedge against unpredictable fluctuations and, for a price, ensure predictability.⁷⁰ For businesses with long production cycles, long term contracts, or those who need to guarantee stable cash inflows to fund major capital investments, the ability to transfer risk is essential for long term planning and operations.

Sometimes, certain undesirable risks must be taken in order to take other risks that are desired.⁷¹

Hedging helps companies align their risk with their areas of expertise. For example, transporting passengers and their baggage safely and on time is what airlines are good at; forecasting the price of oil

⁶⁸ Lawrence E. Mitchell & Arthur E. Wilmarth, eds., *The Panic of 2008*, (Northampton, MA, USA; Edward Elgar, 2010).

⁶⁹ For example, investment banks relied on bank products, particularly mortgages, to feed their highly profitable securitization business. By being intermediaries for these products, they passed the risk along to the buyers of CDOs, earning lucrative fees without taking the risk on their balance sheets. See: Anita I. Anand, "Is Systemic Risk Relevant to Securities Regulation", (Fall 2010) 60 U. Toronto L.J. 941.

⁷⁰ Chance *supra* Note 10.

⁷¹ Chance, *supra* note 10 at p.17.

is not.⁷² It therefore makes sense for airlines to hedge their fuel cost and focus their risk where their competencies lie.⁷³

In addition, firms may only want to take certain types or levels of risk at certain times.⁷⁴ They may be willing to pay to transfer that risk, thereby reducing the return on their capital, in order to adjust the amount and timing of their risk taking in certain areas to align with their overall corporate strategy and timeline. For example, political uncertainty may temporarily increase risk levels in certain markets above the established tolerance levels a firm might have. Derivatives provide an ideal hedge tool for these situations.

As a risk management tool, derivatives focus primarily on transferring two types of risk: market risk and credit risk.

Market Risk

Market risk is exposure to the possibility of changes in price, interest rate or value of a given item that will be delivered in the future.⁷⁵ A wide range of firms are exposed to market risk. A firm that consumes or agrees to deliver raw material incurs price risk. A firm that engages in international commerce incurs foreign exchange risk. A firm that borrows money on a variable rate loan incurs interest rate risk. Each of these could potentially transfer their market risk via derivatives.

A market risk derivatives contract allows one party to obtain, and another party to divest itself of, the risk of market movement during a specific term. Whenever a future payment is contemplated for an item, the possibility exists that the price contemplated will differ from the price of the item on the open market at the relevant time.

For example, a soft drink producer may enter into a long term contract to buy aluminum for its production factory, agreeing to buy a fixed amount of aluminum at a set price on the first day of every month for a year. The firm may have needed to enter into a long term contract to ensure sufficient supply based on its anticipated production schedule. It is possible that on the first day of any given month, the market price for aluminum may be below the price at which it contracted to purchase. In order to offset the price risk it was forced to assume in order to ensure a long term supply, the soft drink

⁷² *Ibid.*

⁷³ *Ibid.*

⁷⁴ *Ibid.*

⁷⁵ Feder *supra* Note 55.

producer could enter into a market derivatives contract where, in exchange for fixed payments, a counterparty would agree to compensate the soft drink producer for the price differential in the event that aluminum prices fell below its contracted purchase price during the term of the agreement.

In the above example, if the price of aluminum was above its contracted purchase price, the soft drink producer would receive no payments from its derivatives counterparty, who would benefit from whatever fixed payments were negotiated. If the price moved below the contracted price, the counterparty would have to compensate the soft drink producer for the difference, such amounts potentially exceeding the value of the fixed payments it received. Other types of market risk contracts could require compensation both ways, such that how much the price of the underlying item moves during the term of the derivatives contract would directly and oppositely affect each of the parties.

Credit Risk

When a vendor finances a purchaser's acquisition of a saleable product, or a lender loans money to a third party, they assume the credit risk of the borrower defaulting. The revolutionary aspect of credit derivatives is the way in which they effect the transfer of credit risk.⁷⁶ In contrast to conventional methods of credit risk management (such as syndication and cash or property securitizations), credit derivatives generally disaggregate the credit risk from loans and securities, thus enabling the lender to transfer the credit risk while retaining the economic benefit of the instruments.⁷⁷ This has revolutionized the way in which banks manage their loan portfolios and meet capital adequacy requirements.⁷⁸

Speculation

Derivatives evolved from a risk management tool to additionally being a risk-taking tool.⁷⁹ A speculative, or pure bet, derivatives transaction is one in which neither party has a pre-existing economic interest in the performance of whatever underlies the transaction, whether it be the market performance of a commodity, security, interest or exchange rate or the anticipated payments from a borrower.⁸⁰

⁷⁶ Paul U. Ali, "Credit Derivatives and Synthetic Securitizations: Innovation and Fragility", June 2005, 20 B.F.L.R. 293.

⁷⁷ *Ibid.*

⁷⁸ *Ibid.*

⁷⁹ Chance *supra* Note 10.

⁸⁰ Erik F. Gerding, "Credit Derivatives, Leverage, and Financial Regulation's Missing Macroeconomic Dimension" (Symposium, Spring, 2011) Berkeley Bus. L.J. 29 at p.5.

In a pure bet CDS transaction, neither party would own the interest income streams or bonds underlying the bet.⁸¹ Therefore, absent this speculative bet, neither party would suffer an economic loss in the event of default.⁸² Despite the absence of a pre-existing credit risk, parties can enter into a speculative contract, making opposite bets as to whether or not a credit event such as default will occur.

In this zero-sum game,⁸³ the credit protection buyer gambles that the debtors will default and that the payments it receives from the credit protection seller will exceed the insurance-type premium it pays. The credit protection seller makes an equal and opposite bet that the premiums it receives will outweigh its expected payout, if any, under the contract. Because neither party is hedging an actual risk, some argue that this type of credit derivative represents a form of zero-sum gambling that doesn't have a net positive social value.⁸⁴ Such transactions create needless counterparty risk⁸⁵ (discussed in more detail below) or the risk of one party, often the credit protection seller, unexpectedly defaulting on its payment obligation.⁸⁶

Counterparty Credit Risk

The risk of the underlying reference asset is not the only risk involved in derivatives contracting.⁸⁷ There is also the risk that a counterparty will fail to perform its obligations under the contract, leaving the other counterparty holding a risk that it thought it had transferred.⁸⁸ The counterparty may become insolvent and unable to perform its obligations in which case the protection purchased is unavailable precisely when it is needed most.⁸⁹ The risk of non-performance in the derivatives context is referred to as 'counterparty credit risk'.⁹⁰

⁸¹ *Ibid.*

⁸² *Ibid.*

⁸³ The gains of one party are matched by the losses of the counterparty.

⁸⁴ Lynn A. Stout, "Why the Law Hates Speculators: Regulation and Private Ordering in the Market for OTC Derivatives", 48 DUKE L. J. 701 (1999) at p.715.

⁸⁵ Gerding, *supra* Note 80 at p.38.

⁸⁶ A default under the contract may stem, for example, from the credit protection seller miscalculating the probability of default and thus mispricing the premium and resulting in significant financial losses to the protection seller.

⁸⁷ Griffith *supra* Note 5 at p.1161.

⁸⁸ *Ibid.*

⁸⁹ *Ibid.* at p.1162.

⁹⁰ *Ibid.* at p.1161.

Counterparty credit risk cannot be eliminated through hedging⁹¹ and, in fact, increases as institutions enter into more of such transactions in sequence with each other.⁹² Those financial institutions that acted as dealers in credit default swaps in the years leading up to the financial crisis accumulated so much counterparty credit risk as to increase the systemic risk that destabilized the global financial system.⁹³

How Derivatives Contribute to Systemic Risk

Derivatives transactions contribute to systemic risk generally by functioning as a node of financial interconnection, either among institutions or between institutions and the retail economy. When Lehman Brothers filed for bankruptcy on September 15th 2008, the markets' reaction was catastrophic, triggering a rapid crystallization of systemic risk. The Dow Jones index suffered its largest loss since the market panic precipitated by the terrorist attacks of September 11, 2001, plummeting more than 500 points. In what seemed like an instant, USD 11 trillion in household wealth vanished.⁹⁴

Lehman Brothers, however, was not the only firm whose imminent collapse posed significant risk to global financial stability. CitiGroup, Bear Sterns, Royal Bank of Scotland, and American Insurance Group (“AIG”)⁹⁵ were all examples of systemically important financial institutions (“SIFIs”) whose failure would have had massive and far-reaching consequences for financial markets.⁹⁶ National governments chose to intervene with bailout packages of unprecedented size to prevent these failures in order to preserve the functioning of the financial system.

Derivatives trade in the sense that the underlying risk packaged in any particular derivative instrument can be decomposed, repackaged, and resold in a variety of forms.⁹⁷ As such, they can contribute to systemic risk on both the microeconomic and macroeconomic level.⁹⁸ The increased use of leverage

⁹¹ Note that the counterparty risk for the protection seller is not parallel to that of the buyer because a default of the protection buyer means merely that the protection seller is not receiving its fixed stream of payments (the insurance-type premium it pays for protection against default of the debt it holds). Although it may have to divest its offsetting short position, if it hedged that risk, this is just a transaction cost, not a double default.

⁹² Griffith *supra* Note 5 at p.1169.

⁹³ *Ibid.*

⁹⁴ The Financial Crisis Inquiry Commission, “The Financial Crisis Inquiry Report” (January 2011) available online at: <https://www.gpo.gov/fdsys/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf>

⁹⁵ On September 29, 2017, the FSOC rescinded AIG’s designation as a SIFI.

⁹⁶ Maziar Peihani, “Systemically Important Financial Institutions (SIFIs): An Analysis of Current Regulatory Developments” (November 2013) 29 B.F.L.R. 129.

⁹⁷ Griffith *supra* Note 5.

⁹⁸ Gerding *supra* Note 80 at p.2.

facilitated by derivatives magnifies the fragility of financial institutions.⁹⁹ When financial institutions enter into complex credit derivative transactions in series, this web of interconnectedness creates the risk of a chain reaction. During the 2008 financial crisis, it was ostensibly this fear that prompted the extraordinary US federal bailout of insurance giant AIG.¹⁰⁰ AIG had underwritten hundreds of billions of dollars in credit derivatives that provided guarantees to other large financial institutions. The looming failure of AIG raised the spectre of a myriad of other financial institutions falling like dominoes.¹⁰¹

The mix of credit derivatives and leverage can also have significant macroeconomic effects.¹⁰² They can contribute to asset price bubbles, increase liquidity, or the effective monetary supply, throughout the financial system and similarly have a magnified effect on the rapid decrease of asset prices and sudden reduction of liquidity in a market downturn.¹⁰³

How Derivatives Create Leverage

The U.S. Financial Crisis Inquiry Commission (FCIC) pointed their finger squarely at OTC derivatives, in particular CDSs, as one of eight major factors that contributed to the financial crisis.¹⁰⁴ In addition, derivatives were singled out for their contribution to the opacity of the leverage used by major investment banks to make excessive risky speculative investments.¹⁰⁵ The regulation of derivatives are part of global effort to reform financial regulation. Derivatives serve a valuable function within the financial markets, both in terms of their ability to be used as hedging and speculation tools, as well as their ability to create leverage, another valuable financial tool. Analysis of how derivatives contributed to the financial crisis should inform the evolving regulation.

The FCIC report highlights uncontrolled and opaque leverage that permeated the financial system, thanks to under-regulation of derivatives, which failed to enforce sufficient transparency, capital and collateral requirements (which in turn require sufficient transparency to effectively monitor) as well as

⁹⁹ *Ibid.*

¹⁰⁰ *Ibid.*

¹⁰¹ *Ibid.*

¹⁰² *Ibid.*

¹⁰³ *Ibid.*

¹⁰⁴ Financial Crisis Report *supra* Note 94 at p. XXIV. The other factors identified include: Widespread failures in financial regulation and supervision; Failures of corporate governance and risk management at systemically important financial institutions; A combination of excessive borrowing, risky investments and lack of transparency; An ill-prepared government that provided an inconsistent response; A systemic breakdown in accountability and ethics; Collapsing mortgage lending standards and the securitization pipeline; Failures of credit-rating agencies.

¹⁰⁵ Financial Crisis Report *supra* Note 94 at p. XX.

the interconnections between firms and the associated concentration of risk.¹⁰⁶ The regulation of derivatives should therefore not seek to eliminate or even hamstring powerful hedging, speculation and leverage tools, but rather to increase the transparency of the real exposure faced by the firms that use these tools, fostering a deeper understanding of how that exposure is interconnected with other firms. The resulting objectives should be the setting of reasonable limits on that exposure, in large part based on the degree to which that exposure has the potential to spread throughout the financial system, and into the retail economy and less sophisticated investors, which can only be facilitated by sufficient transparency.

As explained above, a credit derivative involves one party (the credit protection seller) agreeing to make payments to another party (the credit protection buyer) should a credit event, often a default, occur. The seller receives a premium from the buyer in exchange for taking this risk. Leverage can enter the system by the credit protection buyer borrowing money to enter into the contract.¹⁰⁷ In addition, the seller can become leveraged with a credit derivative by only committing a portion of the funds required to cover its future obligations up front.¹⁰⁸

When credit derivatives are used to hedge loans or bonds and not just to speculate, they can increase the supply of credit to the ‘real’ economy that produces assets and services.¹⁰⁹ The long chain of transactions can connect back to consumer and commercial credit markets.¹¹⁰ This happened in the financial crisis, as some economists have speculated,¹¹¹ because credit derivatives encouraged financial institutions to seek additional risk. Instead of using derivatives to hedge and reduce their exposure to credit risk, those institutions replaced the risk they transferred with new investments and fresh risk in the form of asset back securities.¹¹² The increased demand for asset back securities then in turn increased the demand for pools of loans and other mortgages, thereby completing the circle, funnelling more credit back to consumer and commercial loan markets.¹¹³

¹⁰⁶ Financial Crisis Report *supra* Note 94.

¹⁰⁷ Gerding *supra* Note 80.

¹⁰⁸ *Ibid.*

¹⁰⁹ *Ibid.*

¹¹⁰ *Ibid* at p.8.

¹¹¹ Stijn Claessens and Laura Kodres, “The Regulatory Responses to the Global Financial Crisis: Some Uncomfortable Questions”, IMF Working Paper WP/14/46, March 2014.

¹¹² Gerding *supra* Note 80.

¹¹³ *Ibid.*

How Derivatives Increase Liquidity

Higher liquidity is generally viewed as positive because this translates into a more efficient market where prices change more rapidly in response to new information.¹¹⁴ As credit derivatives increase the leverage of financial institutions and the amount of credit that flows into loan markets, this can translate into increased liquidity, or an artificial increase in the amount of money, in financial markets.¹¹⁵

Derivatives also usually require less capital than spot markets¹¹⁶ and are therefore more liquid.¹¹⁷

Derivatives are also easier to sell short than heavy assets like gold and oil, or even publicly traded shares where there are often significant regulatory impediments.¹¹⁸ Derivatives on shares (like stock options) are generally an easier method by which to take a short position than direct short selling.¹¹⁹

Derivatives also attract other participants who use these products as a leveraged substitute for trading the underlying.¹²⁰ As well, derivatives may cut transaction costs through narrower bid-ask spreads.¹²¹ This is a result of increased participation in a market.¹²² Generally, the more traders there are in a market, the narrower the spread between the bid and the ask.¹²³ Since derivatives allow entry into the market without purchasing the underlying,¹²⁴ transaction costs (which are often based on the total cost of the trade) are reduced while simultaneously aiding price discovery¹²⁵ by increasing participation in a market. Consequently, it is thought that spot markets with derivatives have more liquidity and lower transaction costs than markets without.¹²⁶

¹¹⁴ Chance *supra* Note 14.

¹¹⁵ Gerding *supra* Note 38 at p.9.

¹¹⁶ A public financial market in which financial instruments or commodities are traded for immediate delivery. It contrasts with a futures market, in which delivery is due at a later date.

¹¹⁷ Chance *supra* Note 14 at p.16.

¹¹⁸ *Ibid.*

¹¹⁹ See *supra* Note 7. In derivatives markets, the term 'short selling' is rarely used. Participants simply take the opposite side of the contract of a party seeking protection against a price drop.

¹²⁰ Chance *supra* Note 10.

¹²¹ *Ibid.*

¹²² *Ibid.*

¹²³ Apanard (Penny) Prabha, Keith Savard and Heather Wickramarachi, "Deriving the Economic Impact of Derivatives", (March 2014), Milken Institute.

¹²⁴ Chance *supra* Note 14 at a p.16.

¹²⁵ Prabha *supra* Note 123.

¹²⁶ *Ibid.*

Shock Magnification

Leverage both magnifies potential returns on equity and losses for those who invest with borrowed money.¹²⁷ Therefore the financial damage from counterparty default is magnified to the extent that parties to a derivative contract are leveraged.¹²⁸ When both lenders, and those who provide them credit protection, are highly leveraged and globally interconnected, the effect of a sudden increase in defaults can ripple through the financial system.¹²⁹

If, for example, a substantial shock to the financial markets, such as the Lehman collapse, were to result in a sudden increase in CDS values, prompting the need for all CDS writers to post additional collateral, the terms of most standardized contracts would require that treasuries or similar instruments be posted within twenty-four hours, forcing writers to liquidate other asset classes in order to post collateral. Doing so would both lower the value of assets on the banks' balance sheets and increase volatility in the markets, creating a vicious cycle further increasing CDS values and thus requiring more collateral to be posted.

If, in turn, those same financial institutions had concentrated lending in the area of default, for example in the housing market, the spread of the shock could lead to a concurrent rapid devaluation of the assets that backed the credit as they would need to be rapidly sold to cover the collateral requirements.¹³⁰

Speculative, or pure bet derivatives can also contribute to the shock magnification effect when they are hedged by the credit protection seller either purchasing additional protection from within the market¹³¹ or the speculative credit protection buyer purchasing shares in the actual underlying income stream.

This is essence of systemic risk and the foundation for discussions regarding how derivatives should be regulated, particularly by margin and clearing requirements. The interest of credit protection buyers in protecting themselves from counterparty risk imposes the need for limitations on the leverage of credit protection sellers.¹³² Long chains of credit risk transfers may obscure the true size of this risk and result in an underestimation of the amount of leverage in play. Furthermore, the default of a major derivative

¹²⁷ Manual Utset, "Complex Financial Institutions and Systemic Risk" (2011) 45 Ga L Rev 779.

¹²⁸ Maziar Peihani, "The Global Financial Crisis of 2008: An Analysis of Contributing Trends, Policies and Failures" (March 2012) 27 B.F.L.R. 465.

¹²⁹ Gerding *supra* Note 80.

¹³⁰ *Ibid* at Part C.

¹³¹ *Ibid*.

¹³² Griffith, *supra* Note 93.

counterparty may have severe spillover effects into the broader financial markets, which is what occurred in 2008.¹³³

How Derivatives Affect the Day-to-Day Operations of Securities Markets

There are several important reasons why securities markets must be regulated and overseen. These include protection of the public from malpractices and instilling confidence and promoting stability in the system, all of which encourages savings and the efficient allocation of resources.¹³⁴ Ensuring transparency is another foundational regulatory element within securities markets. The opacity within derivatives markets, resulting in risk levels that were either hidden outright or incredibly difficult to calculate, has been widely labeled as a key contributor to the financial crisis.¹³⁵ Derivatives can also be used to reduce transparency within other securities markets.

The issue of enforcing transparency, and who derives the benefits of that transparency, is of particular importance to regulatory development within Canada because of the division of powers between the federal and provincial governments. As discussed later, the 2011 Securities Act Reference has important implications regarding the scope of jurisdiction of each level of government with respect to securities regulation. It is therefore important for law makers to understand that the benefits of increasing transparency in the operation of derivatives transactions includes both the day-to-day operations of provincial securities markets, as well as having systemic risk implications both nationally and internationally.

Secondary Market Decoupling

Share ownership generally conveys economic, voting and other rights. Share ownership can also trigger multi-directional disclosure obligations. These may include disclosure from the shareholder to the company, as in the case of shares that have transfer restrictions; disclosure from the company to the shareholder, for example the production of financial statements and other material documents; and

¹³³ Chiara Oldani, “The Risk of OTC Derivatives – Canadian Lessons for Europe and the G20”, (February 2015) CIGI Papers No.57.

¹³⁴ Development Committee of IOSCO, “The Role of Securities Commissions”, September 1990, online: www.iosco.org/library/pubdocs/pdf/IOSCOPD9.pdf

¹³⁵ In addition to the Financial Crisis Inquiry Report at *supra* Note 94, see Stout *supra* Note 64 for an argument of a change in the law was an earlier root cause.

disclosure from the shareholder to the public, for example the sale or purchase of shares by directors, officers or holders of large share blocks.¹³⁶

One of the unique features of derivatives is that they can facilitate the severing of the economic rights from the voting rights of common shares.

Market participants can use equity swaps to become empty voters by purchasing shares of the corporation and then purchasing a short equity swap for a corresponding number of underlying securities of the corporation. Through these two transactions, the market participant would become a registered shareholder of the corporation and gain the right to vote while simultaneously hedging their economic exposure. Any drop in the share price of their holdings would be offset by entitlements under the short equity swap and *vice-versa*. As a result, the interests of the market participant are no longer aligned with that of the corporation.¹³⁷ The empty voter could then conceivably use their votes to force the company to a course of action that benefits the voter but not necessarily, or not equally, the shareholders or the company.¹³⁸ As long as the cost of the downside protection against a share price drop, purchased through derivatives, was less than the economic benefits derived from being able to sway a vote, these schemes would be profitable.¹³⁹

The use of derivatives in this manner is a clear example of how increased transparency, in the form of disclosure, could improve the day-to-day operations of securities markets by providing both shareholders and companies more complete information on which to base their decisions. In addition, because empty voting and the severing of economic and voting rights associated with shares can have implications on the actions of a company's board of directors, securities regulators have an interest in transparency in these transactions for enforcement purposes.¹⁴⁰

¹³⁶ Collectively these are often referred to as 'insiders'.

¹³⁷ This concept is well fleshed out in a series of articles by Hu & Black starting with the foundational work: Henry T.C. Hu & Bernard Black, "The New Vote Buying: Empty Voting and Hidden (Morphable) Ownership" (May 2006) 79 S. Cal. L. Rev. 811.

¹³⁸ Robert E.P. Shaw, "What We Don't Know Can Hurt Us--Ontario's Regulation of Empty Voting and Hidden (Morphable) Ownership", (August 2014) 29 B.F.L.R. 517.

¹³⁹ For a detailed example of such a transaction, see: Henry T.C. Hu and Bernard Black, "Hedge Funds, Insiders, and the Decoupling of Economic and Voting Ownership: Empty Voting and Hidden (Morphable) Ownership" (2006) University of Texas School of Law and Economics Working Paper No.53 at 2.2.1.

¹⁴⁰ For a detailed example of how this can occur, see: Bernard Black, "Equity Decoupling and Empty Voting: The Telus Zero-Premium Share Swap" (October 2012) The M&A Lawyer, Volume 16, Issue 9.

Public Policy Reasons for the Regulation of Derivatives and Large Traders of Derivatives

The creative use of derivatives instruments has been one of the hallmarks of financial innovation in recent history. Prior to the financial crisis of 2008, the conventional wisdom was that growth and innovation in the financial sector unequivocally improved capital aggregation and deployment to finance productive investments and efficiently allocate risk.¹⁴¹ The global experience of the financial crisis has provided ample evidence to challenge this long-held assumption.

Dealing in derivatives by large, well-capitalized organizations, who are often the counterparty in the transaction, gives rise to public policy concerns including: the heightened potential for conflicts of interest and market manipulation, excessive concentration of market power and increased systemic risk.

Financial innovation has made it possible for numerous financial institutions that operate outside banking regulations to deal in credit and money-like financial instruments and thereby contribute to an increase in liquidity. This network of non-bank institutions, together with the securities they issue and trade has become referred to as the ‘shadow banking system’.¹⁴² These institutions have become highly integrated with the operations of, particularly, US regulated banks. Yet prior to the Dodd-Frank Act,¹⁴³ these institutions operated largely outside the type of regulations that govern US banks and other depository institutions.¹⁴⁴ Non-bank institutions traded a substantial portion of the credit derivatives that were generally accepted as being the primary culprits behind the financial collapse of 2008.¹⁴⁵ It has been suggested that the myriad of such transactions within the shadow banking system effectively obscured the true degree of leverage on which the pre-2008 financial system precariously rested.¹⁴⁶

In addition, derivatives trading and the associated consequences are not the exclusive domain of sophisticated financial institutions. Since the early 2000’s derivatives began entering the retail investment market as hedge funds sold increasingly small stakes to individual investors seeking to

¹⁴¹ Margaret M. Blair, “Financial Innovation, Leverage, Bubbles, and the Distribution of Income”, 30 Rev. Banking & Fin. L. (2010) at p.225.

¹⁴² Tobias Adrian & Hyun Song Shin, “The Shadow Banking System: Implications for Financial Regulation” (2009), Fed. Reserve Bank of NY Staff Report No.382. at p. 227.

¹⁴³ Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).

¹⁴⁴ *Ibid.*

¹⁴⁵ Prabha, *supra* Note 126.

¹⁴⁶ Blair, *supra* Note 141 at p.228.

outperform the lackluster stock markets of the day.¹⁴⁷ In this way, credit derivatives can be used to construct synthetic transactions that replicate bank loans.¹⁴⁸ This allows both banks and members of the shadow banking system, those who provide credit extension and maturity transformation¹⁴⁹ outside the regulated banking sector, to increase leverage in lending transactions and spread the potential contagion of systemic risk into the retail market.¹⁵⁰

There is therefore a strong public policy reason to regulate both non-financial institutions and the trading of derivatives as products, independent of the type of institution that trades them. In developing a regulatory framework, policy-makers need to recognize the distinct objectives and requirements of regulating the contribution of derivatives to systemic risk and their ability to reduce transparency in the day-to-day operation of securities markets. As discussed later, Canada's unique financial and securities regulatory structure may be ideally suited for effectively segmenting a regulatory approach.

Reduce Systemic Risk

There are numerous definitions of systemic risk. It has been defined as: "a risk of disruption to financial services that is caused by an impairment of all or parts of the financial system and has the potential to have serious negative consequences for the real economy."¹⁵¹ The IMF has defined systemic risk as "large losses to other financial institutions induced by the failure of a particular institution due to its interconnectedness."¹⁵²

Systemic risk is an inevitable by-product of nationally and globally interconnected financial systems. Elimination of this risk is impossible, but well thought out policies that mitigate this risk while minimizing their impact on the efficient operation of markets is imperative to avoid crises. Development of regulations targeting the spread of systemic risk will vary based on the policy-maker's conception of

¹⁴⁷ Kimberly D. Krawiec, "Foreward", *Northwestern Journal of International Law and Business* (2001) 21:565 at p.567.

¹⁴⁸ Robert C. Hockett & Saule T. Omarova, "The Finance Franchise" (2017) *Cornell Law Review* No.102.

¹⁴⁹ The practice by financial institutions of borrowing money on shorter time frames than they lend money out.

¹⁵⁰ Hockett & Omarova, *supra* Note 148.

¹⁵¹ Jaime Caruana, "Systemic Risk: how to deal with it?" (February 2010) BIS Publication online at: <https://www.bis.org/publ/othp08.htm>

¹⁵² Global Financial Stability Report, "Meeting New Challenges to Stability and Building a Safer System" (April 2010), International Monetary Fund at Chapter 2.

systemic risk. While the impact of systemic risk on the financial crisis is well researched, disagreement persists in its definition for the purpose of developing a regulatory response.¹⁵³

The debate continues as to whether a disclosure based model is sufficient to mitigate this risk or whether the macroeconomic influences which contribute to both the rise and masking of the locus of systemic risk justify macroprudential regulatory oversight.¹⁵⁴ From an even broader economic policy perspective, some may still question whether financial regulation should seek to reduce socially unproductive levels of complexity, leverage, speculation and even regulatory arbitrage or whether it should just provide sufficient information to adequately appraise risk and let market actors make their own decisions.

While the Chicago Boys¹⁵⁵ might advocate for such a free-handed approach, global regulatory thinkers appear to have taken the position that an unfettered international financial system will not, on its own, produce fair and efficient markets. Though economic realities may eventually punish excessive risk-takers motivated solely by profit, the world as a whole seems to have taken the position that firm-handed guidance is preferred over the financial bloodshed required to achieve equilibrium. Global financial actors cannot be entrusted to act rationally, an assumption on which the natural efficiency of a free market is based. This is either due to a lack of sufficiently robust tools to appraise risk, a short term profit motivation high enough to cause individuals and even institutions to disregard long term negative consequences, or some combination thereof.

This paper and its associated recommendations assumes that regulation targeted at mitigating the buildup of systemic risk is both a socially important goal and one that is necessary to maintain confidence in Canada's securities markets. Additionally, as a responsible actor in a globally interconnected financial system, Canada has agreed to regulate derivatives trading toward the goal of

¹⁵³ Andrew Nichol, "Hedging Against the Next Financial Crisis: Proposals for Managing Systemic Risk in Centrally Cleared Derivatives Transactions", 29 BFLR 169.

¹⁵⁴ This was Canada's position in defending the constitutional validity of the CMSA in the Quebec Government Securities Reference, 2017 QCCA 756. See para's 109-110. This is discussed in detail below.

¹⁵⁵ The Chicago Boys were a group of 70's era economists, the majority of whom trained at the Department of Economics at the University of Chicago under Milton Friedman. The Chicago boys spread Friedman's radical free-market policies advocating widespread deregulation and privatization to several Latin American countries, most notably Chile, under the rule of dictator Augusto Pinochet. While initially credited for a positive transformation of Chile's economy, most modern economists now hold those policies responsible for the disproportionately negative effect the Latin American debt crisis of the late 1980s had on Chile, also pointing to its fundamental incompatibility with democracy. Wikipedia, "Chicago Boys", online: https://en.wikipedia.org/wiki/Chicago_Boys

averting another financial crisis by minimizing the contribution of these complex financial contracts to systemic risk. Canada must do so in order to maintain its international reputational capital.

As the federal and provincial governments wrestle with how regulate derivatives toward this end, lawmakers must recognize that some regulations will have the dual effect of reducing the transmission of disturbances between interconnected elements of the national and international financial system as well as enhancing the daily operations of securities markets. The objective of regulating systemic risk is intertwined with that of maintaining market confidence.¹⁵⁶

Deter Price Manipulation

Trading in, or controlling the supply of, a stock or commodity is not the only way its price can be manipulated. A similar ability to influence price exists in the trading of derivatives. The price of any equity moves in tandem with its derivatives and the direction of the influence is neither consistent, nor always apparent. While a falling stock price will almost always be reflected in the price of its put and call options, heavy shorting of a stock can also push down the price.

When banks trade in derivatives, these risks expand to include the fair and efficient flow of credit in the economy.¹⁵⁷ These risks increase further when that trading includes commodities and their derivatives. When banks or financial institutions acts as traders and dealers in physical commodities or their derivatives, they assume a variety of financial and non-financial risks including operational, environmental and geopolitical risks that fundamentally alter their risk profiles.¹⁵⁸ In addition to risks inherent in their traditional business of providing financial services, these institutions become subject to a multitude of factors shaping the costs of doing business in each individual commodity market.¹⁵⁹

Large traders of commodities have been accused of artificially inflating their price to the detriment of users of these important manufacturing inputs.¹⁶⁰ In June 2011, Coca-Cola filed a complaint with the London Metal Exchange, the world's largest organized market for industrial metals, claiming that a wholly-owned subsidiary of Goldman Sachs had hoarded commercial aluminum in sufficient quantities to drive up global prices to record levels.¹⁶¹ For Coca-Cola, which uses aluminum cans to package its

¹⁵⁶ Anita I. Anand, "Is Systemic Risk Relevant to Securities Regulation", (Fall 2010) 60 U. Toronto L.J. 941.

¹⁵⁷ Saule T. Omarova, "The Merchants of Wall Street: Banking, Commerce and Commodities", (November 2013) 98 Minn. L. Rev. 265.

¹⁵⁸ *Ibid.* at p.270.

¹⁵⁹ *Ibid.*

¹⁶⁰ Prabina Rajib, "Commodity Derivatives and Risk Management", (Dehli: PHI Learning Private, 2014) at p.215.

¹⁶¹ Omarova *supra* Note 157 at p.267.

iconic soft drinks, this artificial constraint on supply meant a rise in operational costs and potential disruptions to its production process.¹⁶² Had this continued for a prolonged period, it could therefore be assumed that Coke's profits might have suffered and their share and option prices may have been effected.

Guarding against this type of use of derivatives would likely be viewed as falling within the domain of provincial regulators in their oversight of the day-to-day operations of securities markets. Increasing transparency in derivatives transactions, primarily via disclosure mechanisms, would likely both deter such practices and enhance enforcement.

The Role of Derivatives in the 2008 Financial Crisis

The global financial crisis of 2008 was one of the most destructive financial events in modern economic history.¹⁶³ The severity of the events and consequences of the crisis spurred a global overhaul of financial regulation and a complete restructuring of the regulation of derivatives markets.¹⁶⁴ Before embarking on an analysis of the merits of the proposed regulations of derivatives products and trading, an understanding of derivatives' contribution to the crisis that birthed the regulations is essential.

National financial markets no longer operate in isolation. The lowering of trade barriers through the creation of alliances such as the North American Free Trade Agreement ("NAFTA") and the EU has increased the interdependence of international economies. Facilitating higher levels of trade has brought about a globalization of financial markets to permit the free flow of capital across borders. The increasing degree of interconnectedness of financial markets expose multiple economies to the ripple effects of one financial system's failure. This is the essence of systemic risk.

Derivatives in general, and specifically over the counter financial derivatives, were widely vilified¹⁶⁵ as being among the primary culprits behind the chain of events that rapidly ground global credit markets to a virtual halt. Regulators did in fact fail to forecast that the sheer size and growth of OTC derivatives markets meant that their misuse would create a substantial concentration of risk whose impact would ripple systemically across the globe.¹⁶⁶ It is important to remember, however, that the rise of the

¹⁶² *Ibid.*

¹⁶³ Peihani *supra* Note 128 at p.465.

¹⁶⁴ *Ibid.*

¹⁶⁵ Both legislators and scholars have placed considerable blame for the 2008 crisis on OTC derivatives. See Gerding *supra* Note 80 at p.1.

¹⁶⁶ Peihani, *supra* Note 128 at p.467.

derivatives market did not happen in isolation. They were a tool whose use, and abuse, became widespread as a result of several factors. The explosion of the derivatives market was fueled by the prevailing macroeconomic trends in the early part of the decade including the US credit boom and housing bubble.¹⁶⁷ Their growth also happened in concert with other market failures including unrestrained securitization and system-wide poor risk management. And their abuse was made easier by their operation within an overall insufficiently regulated segment of the banking system.¹⁶⁸ These combined to allow for a massive concentration of risk in the opaque and under regulated sector of credit derivatives.

The US Credit Boom and Housing Bubble

Crises are often borne from the lack of discipline prevalent in boom times.¹⁶⁹ Between 1991 and 2007, a massive credit boom and the associated housing bubble completely altered the landscape of the US economy.¹⁷⁰ These twin trends simultaneously fed each other's growth as well as the explosion of credit default swaps.

A loose monetary policy and historically low interest rates allowed credit to balloon and housing prices to skyrocket while lenders increasingly engaged in credit default swaps to hedge the risk of their long term projected income streams.¹⁷¹ The Bank for International Settlements estimated that in June 2008, just before the financial crisis, the total worldwide notional value of credit default swaps had ballooned to over USD 57.4 trillion.¹⁷²

Monitoring the market as a whole, as well as price bubbles within large asset classes, particularly those which involve a large consumer component, like housing, should be incorporated into a national regulatory monitoring strategy. Watching for these trends can add a valuable component, beyond disclosure and data reporting, to warn against dangerous levels of risk concentration.

Excessive Securitization and Poor Risk Management

Securitizing is essentially pooling the rights to cash flows from various sources and then selling interests in the pool in smaller chunks to investors. Virtually any instrument with a predictable income stream

¹⁶⁷ *Ibid.* at p.492.

¹⁶⁸ *Ibid.* at p.493.

¹⁶⁹ M. Dewatripont, *et al.*, *Balancing the Banks: Global Lessons from the Financial Crisis* (Princeton: Princeton University Press, 2010) at p.14.

¹⁷⁰ Peihani, *supra* Note 163.

¹⁷¹ McCoy et al, *supra* Note 63.

¹⁷² BIS Quarterly Review, December 2010, Statistical Annex at p.121.

can be securitized. The ballooning number of mortgages fueled by low interest rates and the US credit boom were a prime target for securitization in the decade leading up to 2007.¹⁷³

Asset-backed securities are financial instruments that are created when multiple future cash streams such as mortgages or loans are aggregated into an investment vehicle that issues securities to investors. The investment vehicle uses the cash from the sale of its securities to investors to purchase the pool of loans or mortgages and then uses the cash it receives from those income streams to make scheduled payments to investors. This instrument is known as a collateralized debt obligation (CDO).

By selling their expected future income streams from their mortgages, at a discount, back into the retail market, the lenders were able to refinance themselves, accelerating their access to capital, allowing them to underwrite more mortgages or loans. More importantly, by securitizing their mortgage income streams, the banks were able to move these loans off the liabilities portion of their balance sheets and reduce the amount of capital they were required to hold against the loans.¹⁷⁴

CDOs themselves are not derivatives, they are a security. However, before the panic of the financial crisis set in, many firms hedged the risk of their CDOs using credit default swaps,¹⁷⁵ which are derivatives. This second step of securitization allowed the debt-holders not only to achieve a higher credit rating by diversifying their asset pool, it also allowed them to resell interests in the pools to investors worldwide.¹⁷⁶ This was the primary gateway by which derivatives connected to the retail investor market or 'real' economy and spread the housing risk that was borne by the lenders back to individual investors.

Credit default swaps fall squarely within the major reforms to derivatives regulations, particularly margin requirements and clearing.¹⁷⁷ Similarly, mortgage lending standards have increased since the financial crisis.¹⁷⁸ The way in which these markets move in tandem, however, is a macro trend which,

¹⁷³ Andrey D. Pavlov and Susan M. Wachter, "Systemic Risk And Market Institutions" (Summer 2009) Essays from the Weil, Gotshal & Manges Roundtable on the Future of Financial Regulation, Yale Law School, 26 Yale J. on Reg. 445.

¹⁷⁴ Peihani, *supra* Note 163.

¹⁷⁵ Gerding *supra* Note 38 at p.7.

¹⁷⁶ Griffith, *supra* Note 45 at p.6.

¹⁷⁷ See for example The Basel Committee on Banking Supervision recommendations on margin requirements for non-centrally cleared derivatives at: <https://www.bis.org/bcbs/publ/d317.htm> In addition, see the discussion below regarding mandatory clearing and the Dodd-Frank act.

¹⁷⁸ Since 2008, the Canadian federal government has made several changes to the rules for mortgages insured through the Canada Mortgage and Housing Corporation (CMHC) as well as private sector mortgage insurance providers including:

had the data been monitored by a national regulator concerned with systemic risk, might have provided advanced warning of an accumulation of risk. So, while the way in which derivatives contributed to the financial crisis provides strong support for tighter regulations at both the product and institution levels, it also supports monitoring of macroeconomic trends like the concurrent trends of an asset price bubble, securitizing and hedging.

Being alert to these market movements may expose dangers beyond the simple risk management function of OTC derivatives transactions. For example, even if margin requirements for the credit default swaps had been higher and/or they had been forced into being centrally cleared, that wouldn't have changed the fact that the quality of the loans providing the underlying projected income streams were poor and that banking regulations were insufficient. In addition, the microeconomic regulations at the margin and clearing levels would not have pointed to the rise in securitization of those income streams, and the offsetting of risk by CDOs, offering a massive financial incentive to the banks to both underrepresent their risk exposure and complete more subprime mortgage contracts. These are the type of dots that are best connected at the federal oversight level.

Regulatory Failures

The lack of regulation of derivatives trading allowed widespread use of these sophisticated financial instruments to contribute to the financial crisis by allowing financial institutions to take on massive, yet almost entirely opaque risk.¹⁷⁹ This made a true appraisal of their financial strength impossible. This opacity magnified the shock by undermining confidence in the system.¹⁸⁰ Financial institutions

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- Increasing premiums (the amount a borrower must pay) for mortgage default insurance.
 - Reducing the maximum amortization period for insured mortgages from 40 years to 25 years.
 - Requiring banks to qualify all borrowers applying for an insured mortgage at the Bank of Canada's conventional five-year fixed posted mortgage rate, an interest rate that is typically higher than what they will actually be paying.
 - Limiting the maximum gross debt service (GDS) ratio to 39 per cent and the maximum total debt service (TDS) ratio to 44 per cent.
 - Requiring a down payment of at least five per cent of the home purchase price. A further 10 per cent must be added to the down payment for the portion of the house price between \$500,000 and \$999,999. For non-owner occupied properties, a minimum down payment of at least 20 per cent is mandatory.
 - Limiting borrowing to a maximum of 80 per cent of the value of their homes when refinancing, a drop from 95 per cent.
 - Withdrawing mortgage insurance on home equity lines of credit (HELOCs).
 - Instituting a 20 per cent minimum down payment for non-owner occupied properties.

Source: 33 Canadian Bankers Association, "Changes to Canada's Mortgage Market" (October 2016) online: https://www.cba.ca/Assets/CBA/Files/Article%20Category/PDF/bkg_canadamortgagemarket_en.pdf

¹⁷⁹ Claessens and Kodres *supra* Note 111.

¹⁸⁰ Ötke-Robe and Pazarbasioglu *Supra* Note 2 at p.14.

themselves, however, should never have been relied upon, not just to present an accurate risk profile, but also to guard against systemic risk. Failure to anticipate systemic risk was a failure at the national regulatory level.¹⁸¹ Financial innovation outpaced regulation and in addition to being used as a tool to better serve customers, that innovation became a vehicle of regulatory arbitrage¹⁸² and avoidance.

There has been a global regulatory response to the financial crisis, much of which is focused on better regulating the derivatives markets and mitigating against systemic risk. In fine tuning these regulations and addressing the twin issues of risk opacity and systemic risk, lawmakers should not assume that regulating the products and the institutions that trade them is sufficient to mitigate systemic risk. Regulations must recognize the substantial financial incentives for institutions to underrepresent their risk profile and how opacity magnifies both institutional and systemic risk.

Global Regulatory Initiatives

While a complete analysis of global regulatory initiatives on derivatives is beyond the scope of this paper, the source of the international commitment to regulate derivatives, being the G20 resolution, and a brief overview of the international standard setters in the area is informative with respect to both the focus of these initiatives and whether and how they separate the objectives of investor protection and systemic risk management. As well, the United States, and in particular its housing market and associated derivatives markets, was arguably the nexus of the financial crisis.¹⁸³ In addition, the Canadian and US economies and financial markets are extensively connected.¹⁸⁴ Accordingly, a brief overview of the US securities regulatory structure as it relates to derivatives is presented.

The G20 Initiative

In September 2009, a little more than a year after the collapse of Lehman Brothers, leaders of the G20 countries met in Pittsburgh. They passed a resolution which principally sought to mitigate systemic risk in the market for OTC derivatives and to increase transparency in both pre and post trade transactions that were widely perceived as opaque.¹⁸⁵ It was this resolution that sparked the ongoing academic and

¹⁸¹ Dewatripot et al, *supra* Note 169.

¹⁸² *Ibid*.

¹⁸³ *Ibid* at p.11.

¹⁸⁴ Evan Munroe, "Comovements of the U.S. and Canadian Financial Markets" (April 2014), Columbia University, Department of Economics, online at: econ.columbia.edu/files/econ/content/munroe.pdf

¹⁸⁵ Oldani *supra* Note 133.

regulatory debate on both sides of the Atlantic about how to best overhaul and regulate the OTC derivatives market.

The leaders placed the blame for the crisis squarely on the shoulders of regulators and “banks and other financial institutions” who engaged in “reckless and irresponsible risk taking”.¹⁸⁶

Under the banner of “Strengthening the International Financial Regulatory System”, they articulated a reform package focussed on deterring excessive risk-taking practices of financial institutions. These were to include: stricter rules for risk taking, greater operational transparency and higher capital requirements.¹⁸⁷

Singling out OTC derivatives, the resolution stated: “All standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest. OTC derivative contracts should be reported to trade repositories. Non-centrally cleared contracts should be subject to higher capital requirements. We ask the FSB and its relevant members to assess regularly implementation and whether it is sufficient to improve transparency in the derivatives markets, mitigate systemic risk, and protect against market abuse.”¹⁸⁸

Because all the G20 member countries, save Canada, have national securities regulators, the leaders’ recommendations, and indeed all subsequent progress appraisals and recommendations, whether from the FSB, IMF or other international body, naturally developed and envisioned a path toward greater international financial stability being implemented at the national level of each member country. This poses a particular challenge for Canada and its unique, two-tiered, financial and securities regulatory regime.

Financial Stability Board

In April 2009, the informal group of regulators and central bank experts, that had been meeting in Basel prior to the crisis, became more formal through the establishment of the Financial Stability Board (FSB). The FSB was tasked with regularly evaluating the effectiveness of the global regulatory response to the financial crisis. The FSB now coordinates the work of national financial authorities and standard setting

¹⁸⁶ G20 Leaders Statement: The Pittsburgh Summit, September 24-25, 2009. Online at: <http://www.g20.utoronto.ca/2009/2009communique0925.html>

¹⁸⁷ *Ibid.*

¹⁸⁸ *Ibid.*

bodies at an international level. It brings together national authorities, primarily from G-20 countries, responsible for financial stability.¹⁸⁹

On August 31, 2016, the board released its second annual report on the implementation and effects of the G20 financial regulatory reforms.¹⁹⁰ The report is generally positive about the increasing resiliency of the global financial system. The organization's third annual report¹⁹¹ was released on July 3, 2017. The FSB has remained consistent in its view that a macroprudential regulator is an essential component of a country's regulatory strategy¹⁹² and that the availability of trade reporting data is a key tool in such an effort.¹⁹³ The FSB report also points out that trade reporting data not only serves the primary objectives of assessing systemic risk and providing general macroeconomic assessment, but also aids in supervising market participants and conducting market surveillance and enforcement.¹⁹⁴

The FSB has also continued to advocate for central clearing of derivatives as a key systemic risk mitigation tool. This is primarily viewed as a tool to "end too big to fail"¹⁹⁵ for banks".¹⁹⁶ The focus on CCPs as a tool to mitigate systemic risk primarily as it relates to large financial institutions, which are clearly connected to the retail market and individual investors, ignores the subtle yet important distinction between transactions and products that operate solely between these large banks and corporations and those in which the retail market participates.

To be sure, the failure of a large bank would severely impact its (potentially) millions of retail customers. It is important to remember, however, that in Canada, the Canada Deposit Insurance Corporation (CDIC), a Federal Crown Corporation, insures Canadians' deposits held at Canadian banks (and other member institutions) up to C\$100,000 in case of a bank failure. A more refined regulatory approach, therefore, would not only ensure sufficient capital reserves for transactions between these large and

¹⁸⁹ Claessens and Kodres *supra* Note 111.

¹⁹⁰ Financial Stability Board, "Implementation and Effects of the G20 Financial Regulatory Reforms", online: <http://www.fsb.org/2016/08/implementation-and-effects-of-the-g20-financial-regulatory-reforms-2/>

¹⁹¹ Financial Stability Board, "Implementation and Effects of the G20 Financial Regulatory Reforms: Third Annual Report", online: <http://www.fsb.org/2017/07/implementation-and-effects-of-the-g20-financial-regulatory-reforms-third-annual-report/>

¹⁹² *Ibid* at p.17.

¹⁹³ *Ibid* at p.22.

¹⁹⁴ *Ibid*.

¹⁹⁵ In 1984, the US Office of Comptroller of Currency named 11 banks as too big to fail. The term has since been coined to denote certain corporations, particularly financial institutions, that are so large and so interconnected that their failure would be disastrous to the greater economic system, and that they therefore must be supported by government when they face potential failure.

¹⁹⁶ Financial Stability Board *supra* Note 191 at p.21.

sophisticated parties, but would distinguish and prioritize such products based on whether the failure of one of the counterparties would result in direct financial losses to retail market participants as opposed to simply losses on the balance sheets and income statements of multi-billion dollar corporations.

IOSCO

The International Organization of Securities Commissions (IOSCO) was formed in 1983 from an inter-American regional organization of securities regulators which had been established in 1974.¹⁹⁷ IOSCO now has 217 members who together regulate over 95% of the world's securities markets.¹⁹⁸ It operates as a non-profit organization, domiciled in Spain, and is funded by members. Those members are not states, but national securities regulators and, as such, IOSCO, like many international regulatory networks, has no legal status beyond that conferred on it by the national law of the host country.¹⁹⁹

IOSCO has become the foremost international organization dedicated to the advancement of the coordination of securities regulation and enforcement. It has evolved into one of the key organizations to which international bodies, such as the G20, delegate responsibility for the development of the policies needed to strengthen and stabilize securities markets.²⁰⁰

The organization lists as its top mission objective: "to cooperate in developing, implementing and promoting adherence to internationally recognised and consistent standards of regulation, oversight and enforcement in order to protect investors, maintain fair, efficient and transparent markets, and seek to address systemic risks".²⁰¹ In addition to its goal of reinforcing its position as the key global reference point for market regulation, IOSCO lists among its priorities: research and risk identification, standard setting and developing guidance, and implementation monitoring.²⁰²

In October 2010, IOSCO established the Task Force on OTC Derivatives Regulation. The stated aim of the task force is to "coordinate the efforts of securities and futures regulators in the development of the

¹⁹⁷ IOSCO, "About IOSCO", online: http://www.iosco.org/about/?subsection=about_iosco

¹⁹⁸ *Ibid.*

¹⁹⁹ Pierre-Hugues Verdier, "Transnational Regulatory Networks and Their Limits" (2009) 34:1 Yale J Intl L 113.

²⁰⁰ Janet Austin, "The Power and Influence of IOSCO in Formulating and Enforcing Securities Regulations" (2015) 15 Asper Rev. Int'l Bus. & Trade L. 1.

²⁰¹ Resolution on IOSCO's Strategic Direction from 2016 to 2020 And On Funding the Strategic Direction from 2016 to 2020, June 2015, online at <https://www.iosco.org/library/resolutions/pdf/IOSCORES57.pdf>

²⁰² *Ibid.*

supervisory and oversight structures for the over-the-counter (OTC) derivatives markets”.²⁰³ The objective of the task force is to “develop mechanisms for encouraging consistency among IOSCO members for derivatives regulation”.²⁰⁴ IOSCO also works with the FSB on publishing guidance on key issues related to central counterparty clearing²⁰⁵ and margin requirements.²⁰⁶

IOSCO views commodities markets, and in particular their derivatives markets, as distinct enough from financial derivatives to warrant their own regulatory approach. The organization also recognizes that some major participants in these markets “legitimately operate outside the purview of financial regulation”²⁰⁷ and that such a regulatory exemption is warranted given that the transactions are insulated from the broader market. This supports the idea that derivatives ought to be regulated based on both the nature of the product and its relative contribution to systemic risk, including the sophisticated nature of the parties and whether or not the transactions cross over from institutional exposure to retail exposure.

United States

A comprehensive comparison of the individual regulatory responses by the member countries that signed the Pittsburgh resolution is beyond the scope of this paper. However, because the US economy was a key nexus of the global financial crisis and its economy is inextricably tied to Canada’s, a brief overview of that country’s derivatives regulation is informative.

In 2000, the US Congress passed the Commodity Futures Modernization Act (CFMA) to provide legal certainty for swap agreements.²⁰⁸ The CFMA explicitly prohibited the SEC and CFTC from regulating the over-the-counter (OTC) swaps markets, but provided the SEC with antifraud authority over security-based swap agreements, such as credit default swaps.²⁰⁹ However, the SEC was specifically prohibited from, among other things, imposing reporting, recordkeeping, or disclosure requirements.²¹⁰ This

²⁰³ IOSCO Forms Task Force on OTC Derivatives Regulation, online: <https://www.iosco.org/news/pdf/IOSCONEWS191.pdf>

²⁰⁴ *Ibid.*

²⁰⁵ BIS, “Recovery of financial market infrastructures – Revised report”, online: <https://www.bis.org/cpmi/publ/d162.htm>

²⁰⁶ BIS, “Margin requirements for non-centrally cleared derivatives”, online: <https://www.bis.org/bcbs/publ/d317.htm>

²⁰⁷ IOSCO Technical Committee, “Principles for the Regulation and Supervision of Commodity Derivatives Markets” (September 2011) at p.10, available online at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD358.pdf>

²⁰⁸ SEC, “Derivatives”, online: <https://www.sec.gov/spotlight/dodd-frank/derivatives.shtml>

²⁰⁹ *Ibid.*

²¹⁰ *Ibid.*

division of power was not originally seen as problematic and likely had as its impetus the perceived need to address the regulation of non-agricultural commodities.²¹¹

So, while the US has a strong national securities regulator in the SEC, the US financial regulatory system as a whole continues to be divided between several federal agencies, each with responsibility over specific financial sectors, as well as some state regulation of those sectors (i.e. depository institutions, futures and securities institutions).²¹²

In its 2015 country report on the USA, the IMF lamented the missed opportunity for regulatory consolidation.²¹³ Some reforms have, however, been made to the US regulatory infrastructure including the Dodd-Frank Act and its creation of the Financial Stability Oversight Council.

Derivatives Regulation Pre-2008

The basic structure of derivatives regulation began in the United States as an agricultural regulatory regime.²¹⁴ US Federal regulation of derivatives markets began with the Future Trading Act of 1921,²¹⁵ an act designed to help farmers wrest control of grain price setting from middlemen.²¹⁶ With the Commodity Exchange Act of 1936,²¹⁷ jurisdictional authority expanded to include speculative position limits. It was not until the 1974 Commodity Futures Trading Commission Act that regulation of derivatives was transferred to an independent agency, the CFTC. As stocks and options were regulated by the SEC, financial regulation in this area was split. This became even more apparent as derivatives began taking on more of a financial, as opposed to agricultural character.²¹⁸ The CFTC and SEC reached an accord in late 1981²¹⁹ though continued to share in regulation of the sector until the after the financial crisis.

²¹¹ Krawiec *supra* Note 147.

²¹² Andrew Godwin, Steve Kourabas, Ian Ramsay, “Financial Stability Authorities and Macroprudential Regulation” (April 2017), 32 B.F.L.R. 223.

²¹³ IMF, “United States: Financial Sector Assessment Program, Financial System Stability Assessment” (2015) IMF Country Report No 15/170.

²¹⁴ Krawiec *supra* Note 147.

²¹⁵ Future Trading Act, 42 Stat 187 (1921).

²¹⁶ Krawiec *supra* Note 147.

²¹⁷ Pub. L. No. 74-675, 49 Stat. 1491 (codified at 7 U.S.C. §§1-15 (1994)).

²¹⁸ Krawiec *supra* Note 147.

²¹⁹ On December 7, 1981, the CFTC and the Securities and Exchange Commission jointly announced a basic jurisdictional agreement on the regulatory responsibility of each agency for a variety of financial instruments, in particular stock index futures. This agreement was known as the Shad-Johnson Accord and later became part of the Commodity Exchange Act.

With regard to the legality of speculation, in the United States and the United Kingdom, derivatives used to be subject to a common-law rule known as the ‘rule against difference contracts’.²²⁰ In order for a speculative contract to be enforceable, at least one of the parties had to be using the contract to hedge against a pre-existing economic risk.²²¹ One party to the wager had to either hold title or be legally required to take title to the underlying.²²² Therefore, a CDS contract, for example, was only enforceable if one party actually owned the interest stream on which default protection was sought. Similarly, an interest rate swap would require one of the parties to be paying or receiving interest in order for the contract to be enforceable.

In response, speculators helped set up private exchanges, like the Chicago Mercantile Exchange, which required membership and enforced margin and netting requirements as well as other rules designed to enforce speculative contracts.²²³ Off-exchange however, the common law rule against deference contracts served as the primary deterrent against speculation in OTC derivatives.²²⁴

The erosion of this deterrent began with the UK passing the Financial Services Act of 1986²²⁵ which made all financial derivatives, including speculative ones, legally enforceable.²²⁶ US law took the same direction as that country implemented a series of ad hoc regulatory exemptions for particular types of financial derivatives including currency forward contracts and interest rate swaps.²²⁷ The Commodities Futures Modernization Act of 2000 made all financial derivatives legally enforceable.²²⁸

Dodd-Frank Wall Street Reform and Consumer Protection Act

On July 21, 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the “Dodd-Frank Act” or “Dodd-Frank”) was signed into law by President Obama. The regulation of OTC derivatives, commonly referred to as swaps, falls under Title VII of the Dodd-Frank Act, entitled “Wall Street Transparency and Accountability” (the “Derivatives Title”). Regulation of OTC Derivatives is broken down by the type of swap and the type of swap trading entity.

²²⁰ Lynn A. Stout, “Regulate OTC Derivatives by Deregulating Them”, *Regulation*, Vol. 32 no.3, Fall 2009.

²²¹ *Ibid.* at p.32.

²²² *Ibid.* at p.31.

²²³ *Ibid.* at p.32.

²²⁴ *Ibid.*

²²⁵ The act has since been repealed and superseded by the *Financial Services and Markets Act 2000*.

²²⁶ Stout *supra* Note 220.

²²⁷ *Ibid.*

²²⁸ Stout *supra* Note 64.

The Dodd-Frank Act divides regulatory authority over swap agreements between the CFTC and SEC (though the prudential regulators, such as the Federal Reserve Board, also have an important role in setting capital and margin requirements for swap entities that are banks).²²⁹ The SEC has regulatory authority over security-based swaps which are defined as swaps based on a single security or loan or a narrow-based group or index of securities (including any interest therein or the value thereof), or events relating to a single issuer or issuers of securities in a narrow-based security index. Security-based swaps are included within the definition of “security” under the Securities Exchange Act of 1934 and the Securities Act of 1933.²³⁰

The CFTC has primary regulatory authority over all other swaps, such as energy and agricultural swaps. The CFTC and SEC share authority over “mixed swaps,” which are security-based swaps that also have a commodity component.²³¹

The Act does not explicitly ban or limit any particular type of derivatives transaction, such as the so-called ‘naked’ credit default swaps where neither party has an interest in the revenue stream, or the leveraged products based on them, including synthetic collateralized debt obligations.²³²

The Derivatives Title also authorizes the CFTC or SEC, by rule or order, to collect information concerning the market for any swap or security-based swap, as applicable, and to issue a report with respect to any types of such instruments that it determines to be detrimental to the stability of a financial market or to participants in a financial market.²³³

Dodd-Frank also created an agency tasked specifically with overseeing systemic risk.

Financial Stability Oversight Council

Established under the Dodd-Frank Wall Street Reform and Consumer Protection Act, the Financial Stability Oversight Council (the ‘FSOC’) is “charged with identifying risks to the financial stability of the United States; promoting market discipline; and responding to emerging risks to the stability of the United States’ financial system”.²³⁴

²²⁹ SEC, *supra* note 208.

²³⁰ *Ibid.*

²³¹ *Ibid.*

²³² Robert S. Bloink, “Does the Dodd-Frank Wall Street Reform Act Rein in Credit Default Swaps? An EU Comparative Analysis”, (2010) 89 Neb. L. Rev.

²³³ Dodd-Frank § 714.

²³⁴ US Department of the Treasury, “Financial Stability Oversight Council”, online: <https://www.treasury.gov/initiatives/fsoc/Pages/home.aspx>

Section 112(a)(1) of the *Dodd-Frank Act* sets out the FSOC's general purposes as follows:

- (A) to identify risks to the financial stability of the United States that could arise from the material financial distress or failure, or ongoing activities, of large, interconnected bank holding companies or nonbank financial companies, or that could arise outside the financial services marketplace;
- (B) to promote market discipline, by eliminating expectations on the part of shareholders, creditors, and counterparties of such companies that the Government will shield them from losses in the event of failure; and
- (C) to respond to emerging threats to the stability of the United States financial system.

One of the Council's statutory mandates is "to identify risks to financial stability that could arise from the material financial distress or failure, or ongoing activities, of nonbank financial companies".²³⁵

Section 113 of the *Dodd-Frank Act* authorizes the FSOC to "determine that a nonbank financial company's material financial distress—or the nature, scope, size, scale, concentration, interconnectedness, or mix of its activities—could pose a threat to U.S. financial stability. Such companies will be subject to consolidated supervision by the Federal Reserve and enhanced prudential standards".²³⁶

Between July 2013 and October 2014, the FSOC designated four such companies as systemically important, including: AIG, General Electric Capital, Prudential Financial and MetLife.²³⁷

On September 29th, 2017, the FSOC rescinded its designation (originally issued on July 13th, 2013) of AIG as systemically important. This leaves Prudential Financial as the only remaining SIFI. In March 2016, a U.S. District Court for the District of Columbia invalidated the FSOC designation of MetLife on several grounds.²³⁸ The US government has appealed the decision but that process is now on hold pending the Trump administration defining its stance on the designation.

In its 68-page explanation of its decision, the FSOC determined that AIG had taken steps that reduced the potential effects of its distress on both its counterparties and the financial system as a whole.²³⁹ The

²³⁵ US Department of the Treasury, "Financial Stability Oversight Council - Designations", online: <https://www.treasury.gov/initiatives/fsoc/designations/Pages/default.aspx>

²³⁶ *Ibid.*

²³⁷ *Ibid.*

²³⁸ U.S. District Court Judge Rosemary M. Collyer said FSOC officials departed from their own standards and failed to consider the costs to MetLife.

²³⁹ FSOC, "Basis of the Financial Stability Oversight Council's Final Determination Regarding American International Group, Inc.", online:

decision also cited significant changes in the company including reductions in the company's outstanding debt and derivatives exposure. The FSOC also pointed out that AIG had sold certain businesses and as a result was less interconnected with other financial institutions.

With the rescission of all but one of the original SIFF designations, the US appears to be reducing its focus on entity-level regulation. From a national regulation standpoint, despite having a macroprudential regulator, the SEC, US securities laws related to derivatives still have regulatory overlap as a result of the agricultural roots and separate regulatory evolution of derivatives laws. Also of note, even though the US had an existing regulatory structure related to banks, a separate agency was created to manage systemic risk and systemically important financial institutions. Canadian regulators should therefore be aware of potential conflict between any new systemic risk management system and the regulatory scope of OSFI. Having a single national regulator to address systemic risk and SIFIs is also key to facilitating international coordination and harmonization of regulations toward the goal of deterring regulatory arbitrage.

Canada – Securities Regulation Overview

While a comprehensive review of the evolution of Canadian financial regulation over the past century is beyond the scope of this paper, it is important to note the unique evolution of this country's financial regulation. A brief review of the development of securities regulation in Canada, including the failed attempts at establishing a national securities regulator, is both informative and provides important context for recommendations on how best to regulate derivatives.

While there is some debate as to how much more resilient Canada's financial system was compared to other G-8 countries during the financial crisis,²⁴⁰ both Canada's securities and financial regulatory systems will inform how new derivatives regulation is implemented. Since the global overhaul of derivatives regulation is in direct response to the financial crisis, this review is designed to provide a more complete lens through which to evaluate proposed reforms to the laws that form part of the regulation of our financial system and its interconnectedness to the global financial system.

<https://www.treasury.gov/initiatives/fsoc/designations/Documents/Basis%20of%20Final%20Determination%20Regarding%20American%20International%20Group,%20Inc.pdf>

²⁴⁰ See: David Macdonald, "The Big Banks' Big Secret" (April 2012) Canadian Center for Policy Alternatives, available online at: <https://www.policyalternatives.ca/publications/reports/big-banks-big-secret> which argues that despite the Federal Government's official line that Canadian banks did not require extraordinary bailout measures like those of other countries, that the Canadian government did in fact facilitate billions of dollars of aid to Canadian banks and that those banks additionally took advantage of American bailout programs.

The Collapse of the Four Pillars

Prior to the 1954 Bank Act²⁴¹ that permitted banks to make residential mortgage loans, the Canadian financial system had been strictly regulated under the 'four pillars' model. Financial services were divided into four categories: banks, insurance companies, trust companies and securities dealers. Cross-ownership between 'pillars' was not permitted and, in theory, there was a separation of the primary business areas of these institutions. The business of banks originally consisted of taking deposits, issuing bank notes, and making short-term commercial loans. Insurance companies underwrote insurance, and were subject to significant restrictions on the investment of their funds. Trust companies provided executor, administration and trustee services and made mortgage loans. Securities firms underwrote the issuance of corporate debt and equity securities, and performed securities brokerage functions.²⁴²

Through a series of reforms over the next half century, the four pillars essentially collapsed, blurring much of the distinction in the core lines of business of the various institutions, while concurrent macro-economic trends fueled the rise of the derivatives market. One key event was the breakdown of the Bretton Woods system. Put in place at the end of World War II, Bretton Woods provided a system of fixed exchange rates. In August 1971, US President Richard Nixon ended the convertibility of the US dollar into gold at the fixed price of \$35/ounce, collapsing the system's central underpinning.²⁴³

As a result, international firms were suddenly exposed to substantial foreign exchange risk.²⁴⁴

Concurrently, significant volatility existed in both interest rates and commodity markets.²⁴⁵ The increasing sophistication of computing technology and advanced financial research led to the publication of the Black-Scholes option pricing model.²⁴⁶ This allowed for the design and distribution of sophisticated financial derivatives products on an unprecedented scale.²⁴⁷ Financial innovation began to

²⁴¹ Bank of Canada Act S.C. 1953-54, c. 48.

²⁴² Christopher C. Nicholls, "The Regulation of Financial Institutions: A Reflective but Selective Retrospective" (2011) 50 CBLJ 129.

²⁴³ *Ibid.* at III.

²⁴⁴ *Ibid.*

²⁴⁵ *Ibid.*

²⁴⁶ The Black-Scholes model was first published by Fischer Black and Myron Scholes in their 1973 seminal paper, "The Pricing of Options and Corporate Liabilities" (1973), 4 Bell J. Econ. Mgmt. Sci. 141. It is a mathematical model of a financial market which provides a theoretical estimate of the price of options. The formula led to a boom in options trading and provided mathematical legitimacy to the activities of the Chicago Board Options Exchange and other options markets around the world. See also R.C. Merton, "Theory of Rational Option Pricing". Robert C. Merton, who shared the Nobel Prize in Economics with Myron Scholes in 1997, was also instrumental in the development of the model.

²⁴⁷ Nicholls *supra* Note 242 at III.

outpace legislation and started to put pressure on the balance sheets of traditional depository institutions.²⁴⁸

That same period saw the pillars fall under increasing pressure from the growth of money market mutual funds and commercial paper programs eating into the revenues of traditional depository institutions.²⁴⁹ The same financial innovation that spawned the growth of derivatives markets, necessitated reforms in financial regulation in order to maintain the competitiveness of the banks.

Pressure to allow banks and other financial firms to own 100% of the shares of securities firms finally lead to Ontario amending its securities laws in 1987.²⁵⁰ Within a very short period of time, Canadian Banks acquired control of the country's largest securities dealers.²⁵¹

The end of the four pillars came in 1992 in the form of sweeping changes to the statutes governing Canada's federal financial institutions. In addition to changes in ownership rules, new self-dealing and conflict of interest provisions, these reforms removed the restrictions on cross-pillar ownership.²⁵²

OSFI

Canada has only 14 domestic banks, the six largest of which account for over 90% of the assets of the Canadian banking industry.²⁵³ Established in 1987, the Office of the Superintendent of Financial Institutions (OSFI) is the federal agency principally responsible for supervising all federally regulated financial institutions including banks and insurers, trust and loan companies, as well as private pension plans.²⁵⁴ According to Canada's Department Finance: "OSFI's role is to safeguard policyholders, depositors and pension plan members from undue loss, and to advance and administer a regulatory framework that contributes to public confidence in a competitive financial system."²⁵⁵

Banks are the dominant players in the derivatives trading area in Canada. This raises the question of whether the regulatory scheme for derivatives trading should be administered by banking or securities

²⁴⁸ *Ibid.*

²⁴⁹ *Ibid.*

²⁵⁰ O. Reg. 345/87, s. 13, amending, *inter alia*, Part XI of R.R.O. 1980, Reg. 910, made under the Securities Act, R.S.O. 1980, c. 466.

²⁵¹ Bank of Nova Scotia acquired McLeod, Young Weir (1988); Bank of Montreal acquired Nesbitt Thomson (which later merged with Burns Fry) (1987); CIBC acquired Wood Gundy (1988); The Royal Bank of Canada acquired Dominion Securities (1988); and National Bank acquired Levesque, Beaubien (1988).

²⁵² Nicholls *supra* Note 242.

²⁵³ Department of Finance – Canada, online: https://www.fin.gc.ca/toc/2002/bank_-eng.asp

²⁵⁴ OSFI website at: <http://www.osfi-bsif.gc.ca/Eng/Pages/default.aspx>

²⁵⁵ *Supra* Note 253.

regulators.²⁵⁶ From an investor's perspective, the functional differentiation between securities law and banking law may not make a practical difference. From an effectiveness standpoint however, the overall scheme of derivatives regulation should seek to avoid regulatory gaps. An example of such a gap would be the absence of a requirement to conduct a suitability analysis in conjunction with the sale of a sophisticated financial product.²⁵⁷

While a deep analysis of the operations of OSFI is beyond the scope of this paper, the organization does not appear to be suited to take on the role of a national regulator focussed on systemic risk. OSFI is focused on regulating large banks and insurers. While these organizations are large traders of derivatives, and themselves systemically important, the regulation of systemic risk extends far beyond this mandate. The organization's website specifies its limited regulatory scope in this regard: "OSFI's scope of regulation and supervision does not include consumer-related or market conduct issues, nor the investment/securities sector."²⁵⁸ In its role "analyzing financial and economic trends to identify emerging issues that could adversely affect institutions",²⁵⁹ OSFI will certainly be an important component in a larger systemic risk management strategy. Such an undertaking, however, requires data collection and analysis from securities markets as well as a deep understanding of other derivatives trading entities, including those that are not labeled as systemically important. In addition, deep product knowledge within classes of derivatives and how these intertwine with the retail market will be important for a comprehensive systemic risk management strategy.

OSFI, in conjunction with the CDIC, does however have in place an intervention system designed to "to promote awareness and enhance transparency of the framework for intervening with federally regulated deposit-taking institutions".²⁶⁰ The flexible, situation specific system,²⁶¹ is specifically aimed at banks. OSFI's intervention policy involves evaluating an institution's financial condition, including its policies and procedures, looking at its overall net risk in light of any adverse business and economic conditions.²⁶² This model could be the basis for the way in which a federal agency, charged with

²⁵⁶ Mary Condon, "A Discipline in Search of Itself? Contemporary Challenges for Securities Law in Canada" (2013 Ivan C. Rand Memorial Lecture) Forum Topic: The Impact of International Law on Canadian Law, 65 U.N.B. L.J. 341.

²⁵⁷ *Ibid.*

²⁵⁸ OSFI, "OSFI Structure and Operations", online: <http://www.osfi-bsif.gc.ca/Eng/osfi-bsif/Pages/so-sf.aspx>

²⁵⁹ *Ibid.*

²⁶⁰ OSFI, "Guide to Intervention for Federally Regulated Deposit-Taking Institutions", online: <http://www.osfi-bsif.gc.ca/Eng/fi-if/rai-eri/sp-ps/Pages/gid.aspx>

²⁶¹ See *ibid* where the system is described as not being "rigid" nor addressed "with a predetermined set of actions".

²⁶² *Ibid.*

managing systemic risk, could be empowered to intervene in a market, or even systemically important institutions, where risk accumulation is identified.

The 2011 Securities Act Reference

Canada is the only country in the G20 that does not have a national securities regulator. Despite several attempts throughout the 20th century,²⁶³ the strong powers granted the provinces in s.92 of the *Constitution Act 1867* and resistance by various provinces have consistently thwarted federal initiatives to implement either a standalone national regulator or one that works in concert with the provinces.

In 2003, the Wise Person's Committee ("WPC") recommended the enactment of a single comprehensive code for the regulation of Canadian capital markets by the federal government.²⁶⁴ Their 97 page report rejected a dual structure approach citing numerous weaknesses. These included: the inability to provide effective enforcement; inefficient allocation of resources; coordination difficulties; inconsistent priorities and investor protection; slow and fragmented policy development and excessive costs, both in terms of compliance costs for issuers and costs of duplication (related to staff and offices), all resulting in an unfair burden on emerging companies, time delays and unequal opportunities for investors. The report proposed a single set of rules with a collaborative approach that would require the federal government to consult with the provinces before amending the legislation with a threshold approval requirement of provinces whose population represented a majority of the population of Canada.

In 2006, the Crawford Panel, established by the government of Ontario, proposed that uniform regulation could be achieved by all jurisdictions, incorporating by reference, legislation enacted by one

²⁶³ For a detailed history of past attempts to establish a national securities regulator in Canada, see *supra* Note 242 where Christopher Nicholls details the following: In 1935, the Royal Commission on Price Spreads recommended the formation of an investment securities board to oversee the issuance of securities by companies incorporated under federal legislation (*Report of the Royal Commission of Price Spreads*, at pp. 41-42). In 1964, the 'Porter Commission' recommended the creation of a regulatory body based on cooperation between the federal and provincial governments to set uniform standards for securities distributed interprovincially and internationally, while permitting existing provincial regulators to continue to govern local matters including the licensing of securities dealers and the registration of issues limited within a province (*Report of the Royal Commission on Banking and Finance 1964* at p.348). In 1967, the Ontario Securities Commission proposed CANSEC, a single highly decentralized national securities regulator. In 1979, the federal Department of Consumer and Corporate Affairs proposed a national securities commission working in cooperation with the provinces. In 1994, the Premiers of the Atlantic provinces asked the federal government to establish a national securities regulator. Their proposal took the form of a memorandum of understanding between the provinces and the federal government to create the Canadian Securities Commission to apply a uniform regulatory scheme across the participating provinces.

²⁶⁴ WPC Committee to review the structure of securities regulation in Canada, "It's Time" (December 2003), ISBN 0-662-35618-7, online: www.investorvoice.ca/Research/WPC_Final_Dec03.pdf

province, via a single Act.²⁶⁵ Based on the results of a number of ‘Roundtable’ discussions with leading securities industry participants and government representatives, the panel expressed confidence in the existence of a general consensus among the majority of key securities market participants on the need for a single Canadian securities regulator.²⁶⁶ The report echoed many of the concerns of the WPC report including coordination among regulators, the inefficient allocation of resources and a fragmented regulatory structure.²⁶⁷ Emphasizing the international nature of financial markets and the need to address systemic risk, the report also highlighted concerns regarding both market and reputational risks to Canada.²⁶⁸

In 2011, the Harper government proposed a *Securities Act* (the “Act”) to the Supreme Court²⁶⁹ in the form of a reference.²⁷⁰ The drafting of that Act was largely informed²⁷¹ by the 2009 report of the Expert Panel on Securities Regulation, also known as the Hockin Panel.²⁷² That reference required the court to determine whether the Act fell within the legislative authority of Parliament.

The Government of Canada (along with the government of Ontario and several interveners) argued that the Act was a constitutional exercise of the federal government’s general power to regulate trade and commerce, pursuant to section 91(2) of the *Constitution Act, 1867*.²⁷³ Canada acknowledged that some aspects of securities regulation are within the power of a province to regulate,²⁷⁴ which include the regulation of contracts and property. Instead, Canada argued that the “the evolving national character of securities markets... brings those markets within the general trade and commerce power”²⁷⁵.²⁷⁶ Canada argued that without a national approach to the regulation of securities, the securities industry

²⁶⁵ Crawford Panel on a Single Canadian Securities Regulator, “Blueprint for a Canadian Securities Commission” (June 7, 2006), online: docs.otpp.com/Crawford_Panel_final_paper.pdf

²⁶⁶ For more information on the roundtables conducted by the Crawford Panel see: Crawford Panel on a Single Canadian Securities Regulator, “Summary Report on the Roundtable Process” (April 20, 2006) online: https://www.ppforum.ca/sites/default/files/crawford_panel_report_final_0.pdf

²⁶⁷ Crawford Panel *supra* Note 265 at p.40.

²⁶⁸ *Ibid.*

²⁶⁹ *Reference re Securities Act (Canada)*, 2011, SCC 66.

²⁷⁰ A reference asks the Court to give an advisory opinion on a particular question. In this case, the question for the Supreme Court’s consideration was whether the proposed *Securities Act* was within federal jurisdiction.

²⁷¹ *Supra* Note 269 at para. 26.

²⁷² Expert Panel on Securities Regulation, “Creating an Advantage in Global Capital Markets – Final Report and Recommendations” (January 2009) available online at: <http://www.expertpanel.ca/eng/reports/index.html>

²⁷³ *Supra* Note 269 at para. 32.

²⁷⁴ *Supra* Note 269 at para. 33.

²⁷⁵ The ‘general’ branch of the federal trade and commerce power gives the federal government the jurisdiction to legislate trade that affects the entire country, as opposed to a specific industry.

²⁷⁶ *Supra* Note 269.

might not be adequately controlled, putting the entire country's financial system at risk. The federal government, however, had to argue against decades of case law establishing that the regulation of securities was a matter of provincial jurisdiction under the province's authority over property and civil rights.²⁷⁷

The provincial governments of Alberta, Quebec, Manitoba, and New Brunswick, supported by a number of interveners, argued that the proposed Act was unconstitutional. They rejected the federal government's assertion that securities markets had evolved to become a matter of national concern under the Federal Government's trade and commerce power and instead contended that the legislation was a thinly disguised attempt to regulate the securities industry which fell squarely within the exclusive provincial authority over property and civil rights (pursuant to section 92(13) of the *Constitution Act, 1867*), which includes authority over the regulation of contracts, property, and professions.²⁷⁸

After extensive analysis covering the pith and substance of the Act, federalism and the division of powers, the court concluded that proposed Act would disrupt rather than maintain the appropriate balance between the division of federal and provincial powers²⁷⁹ by forcing the provinces to surrender their regulatory activity in the field to a federal body. The court unanimously answered the reference question in the negative.

The Constitutional Analysis - Federal vs Provincial Powers to Regulate

Where the power to regulate the securities industry falls has long been a contentious issue in Canada. Understanding how the Supreme Court views the respective powers of the federal and provincial governments is critical to guide the drafting of legislation related to derivatives. The primary impetus to regulate derivatives stems from their ability to concentrate risk by increasing leverage and then spread that contagion through the global financial system. This is clearly a matter of national concern, and in the view of the author, a risk that must be managed at a national level in order to be achieved effectively. However, a key facet of derivatives, and their use in sequence between financial institutions, which allowed financial institutions to accumulate such a large amount of risk, was their opaque nature. Adding transparency to this industry has implications for both systemic risk, a matter of national concern, and the day-to-day operation of securities markets, which fall within the jurisdiction of the provinces to regulate. In order for new Canadian legislation to endure, particularly federal

²⁷⁷ *Supra* Note 269 at para. 43-45. See *Multiple Access Ltd. v. McCutcheon*, (1982) 2 S.C.R. 161.

²⁷⁸ *Supra* Note 269 at para. 34.

²⁷⁹ *Supra* Note 269 at para. 7.

legislation, it must clearly delineate not only its intended purpose but be able to withstand a challenge that its effect does not encroach on the powers of the provinces, which history has shown, they will guard jealously.

The express question posed to the Court was whether the Proposed Act fell within Parliament's general authority to regulate trade and commerce under section 91(2) of the Constitution Act, 1867. In considering the division of powers between Parliament and the provinces, the Supreme Court noted the emergence of a flexible view of federalism "that accommodates overlapping jurisdiction and encourages intergovernmental cooperation",²⁸⁰ highlighting that, while important, cooperation and flexibility cannot override or modify the separation of powers. The Supreme Court then applied a pith and substance analysis against this backdrop of "cooperative federalism,"²⁸¹ looking at the purpose and effects of the proposed law to determine whether its "main thrust"²⁸² was within Parliament's jurisdiction over trade and commerce.

Being the only federal power invoked in the reference, the Court's analysis was confined to the general trade and commerce power. While broad on its face, the Court noted that it has been confined to matters that are "genuinely national"²⁸³ in scope and "qualitatively distinct"²⁸⁴ from those falling under provincial authority, with its essence being its national focus. According to the Court, this circumscribed scope of the general trade and commerce power is linked to another facet of federalism, being "the recognition of the diversity and autonomy of provincial governments in developing their societies within their respective spheres of jurisdiction".²⁸⁵ While the court recognized a "dominant tide"²⁸⁶ of flexible federalism, with a spirit of cooperation, the court was firm in its stance that such a trend should not erode the constitutionally designated balance of powers.²⁸⁷ The Court did not go so far as to suggest an optimal model for securities regulation, that being a question of policy and not one for the courts to decide.²⁸⁸

²⁸⁰ *Supra* Note 269 at para. 57.

²⁸¹ *Ibid* at para. 9.

²⁸² *Ibid* at para. 63.

²⁸³ *Ibid* at para 70.

²⁸⁴ *Ibid*

²⁸⁵ *Ibid* at para. 73.

²⁸⁶ *Ibid* at para. 62.

²⁸⁷ *Ibid*.

²⁸⁸ *Ibid* at para. 10.

In addition, as a result of the limited nature of the federal government's argument,²⁸⁹ the Supreme Court's opinion assessed the proposed *Act's* constitutionality based only on the second, general branch, of the trade and commerce power. The decision does not go so far as to speculate whether the proposed *Act* could be a justifiable exercise of federal government's jurisdiction under another head of power, including the first branch of the trade and commerce power (the power to regulate interprovincial and international trade), or the federal power to make laws for the 'peace, order, and good government of Canada'.

Turning next to the "pith and substance"²⁹⁰ of the proposed *Act*, the court analyzed the purpose and effect of the law in order to determine its main thrust as part of a two-step analysis, the second step being a determination of whether that main thrust fell under the head of power said to support it.²⁹¹ The court took into account a long history of Canadian jurisprudence that has generally viewed securities regulation to be a matter of property and civil rights under provincial jurisdiction. In addition, the court noted that "the follow-through effects of the proposed *Act*... (would) effectively subsume the existing provincial and territorial legislative schemes governing securities under the federal regulations scheme".²⁹²

The Court ultimately did not agree that the Federal government's attempt to comprehensively encompass the power of securities regulation was within its general authority under the trade and commerce branch.

Guidance from the Court – The Federal and Provincial Governments Must Work Together
Derivatives both contribute to systemic risk, a matter of national and international concern in today's globally interconnected financial markets, as well as affecting the day-to-day operations of securities markets, the longstanding domain of provincial securities regulators. The Supreme Court's guidance from the Securities Act Reference should inform law makers as they draft new legislation to regulate derivatives. It is important that new legislation be both effective and resistant to constitutional challenge.

While the Court did not accept Canada's argument that the securities market had evolved to the point that all aspects of its regulation had become a matter of national concern, the Court did acknowledge

²⁸⁹ *Ibid* at para. 32.

²⁹⁰ *Ibid* at para. 63.

²⁹¹ *Ibid* at para. 69.

²⁹² *Ibid* at para. 99.

that national data collection and the management of systemic risk were matters of national concern.²⁹³ The Court agreed that systemic risk may trigger the need for a national regulator empowered to impose common standards and issue orders that would have effect nationally.²⁹⁴

The Supreme Court emphasized throughout the decision that its opinion on the constitutionality of the proposed legislation does not preclude the different levels of government from working together in a cooperative manner to come to an optimal solution for the good of all Canada.²⁹⁵

The court pointed to examples of other governments that have grappled with the issue of overlapping jurisdiction regarding securities regulation.²⁹⁶ Despite not making suggestions for an appropriate arrangement, the Court cited jurisdictions such as the United States, Germany and Australia and commented that the solutions achieved in other countries “suggests that power-sharing between the central and local levels of government in this area can succeed.”²⁹⁷

The Supreme Court defined systemic risk as “risks that occasion a ‘domino effect’ whereby the risk of default by one market participant will impact the ability of others to fulfill their legal obligations, setting off a chain of negative economic consequences that pervade an entire financial system”.²⁹⁸ The Court understood that “such risks can be evasive of provincial boundaries and usual methods of control”.²⁹⁹ While the court agreed that many provisions of the proposed Act addressed this concern,³⁰⁰ the fact that other provisions of the Act not only duplicated provincial provisions, but displaced them,³⁰¹ was fatal to its constitutional validity.

Canada’s Cooperative Capital Markets Regulatory System

From the ashes of the 2011 *Securities Act* reference emerged a new joint plan between the two levels of government.

²⁹³ *Ibid* at para. 117.

²⁹⁴ *Ibid* at para. 104.

²⁹⁵ *Ibid* at paras 9 and 48.

²⁹⁶ *Ibid* at paras 48-52.

²⁹⁷ *Ibid* at para. 48.

²⁹⁸ *Ibid* at para. 103.

²⁹⁹ *Ibid*.

³⁰⁰ *Ibid*.

³⁰¹ *Ibid*. at para. 106.

Memorandum of Agreement

Between September 2013 and July 2014, the federal government and the British Columbia, New Brunswick, Ontario, Prince Edward Island and Saskatchewan governments signed a memorandum of agreement to formalize the terms and conditions of a new proposed cooperative capital markets regulatory system.³⁰² The Yukon Territory agreed to join in April 2015.

Under the proposed cooperative system, participating provincial and territorial jurisdictions would enact uniform legislation addressing all matters in respect of the regulation of capital markets within their jurisdictions. Complementary federal legislation would address criminal matters and systemic risk in national capital markets as well as data collection. Federal legislation would apply across the country, regardless of whether a jurisdiction participated in the new capital markets regime. Meanwhile, a common regulator, the Capital Markets Regulatory Authority (CMRA), would administer the provincial and federal legislation and regulations under authority delegated by the participating jurisdictions.

Capital Markets Stability Act

In the *Securities Act Reference*, the Supreme Court of Canada made it clear that the federal government had jurisdiction to regulate activities that increase or create systemic risk in Canadian financial markets. The CMSA was the federal government's response to that guidance and was intended to be the first comprehensive regime addressing systemic risk in Canada's capital markets on a national basis.

In September 2014, the minister of finance released a backgrounder setting out the key features of the cooperative system³⁰³ as well as consultation drafts³⁰⁴ of the proposed federal *Capital Markets Stability Act* (CMSA)³⁰⁵ and the proposed provincial *Capital Markets Act* (CMA), as well as commentary on the governance and legislative framework which would be headed by a board of directors reporting to a council of ministers.³⁰⁶

³⁰² Department of Finance Canada, "Archived - British Columbia, Ontario, Saskatchewan, New Brunswick and Canada Strengthen Their Commitment to the Cooperative Capital Markets Regulatory System", online: <https://www.fin.gc.ca/n14/14-119-eng.asp>

³⁰³ Department of Finance Canada, "Backgrounder: Cooperative Capital Markets Regulatory System – Memorandum of Agreement on the Cooperative Capital Markets Regulatory System and Consultation on the Cooperative Legislation", online: http://www.fin.gc.ca/n14/data/14-119_1-eng.asp

³⁰⁴ The draft of the CMSA is dated August 2014 but was released on September 8th, 2014.

³⁰⁵ Minister of Finance Canada, "Capital Markets Stability Act – Draft for Consultation", online: <http://ccmr-ocrmc.ca/wp-content/uploads/CMSA-English-revised.pdf>

³⁰⁶ Department of Finance Canada, "Commentary: The Cooperative Capital Markets Regulatory System - Governance and Legislative Framework", online: https://www.fin.gc.ca/n14/data/14-119_2-eng.asp

On May 5, 2016, the Minister of Finance published a revised consultation draft of the *Capital Markets Stability Act*, as contemplated in the *Memorandum of Agreement Regarding the Cooperative Capital Markets Regulatory System* for public comment.

A key definition in the CMSA is that of “systemic risk related to capital markets”.³⁰⁷ It delimits the scope of the CMRA’s authority generally and is defined as “...a threat to the stability of Canada’s financial system that originates in, is transmitted through or impairs capital markets and that has the potential to have a material adverse effect on the Canadian economy”.³⁰⁸ A slight modification was made to this definition, the original version of which had an expanded concept of threat that included stability “and integrity” as well as an expanded concept of “adverse effect” that did not include the “material” limiter.³⁰⁹

This constricting of the definition of systemic risk is an important step toward guarding against a constitutional challenge by more clearly limiting the act’s scope of power to matters of national and international concern.

In the August 2014 draft, a ‘derivative’ was defined as: “an option, swap, futures contract, forward contract or other financial or commodity contract or instrument whose market price, value, delivery obligations, payment obligations or settlement obligations are derived from, referenced to or based on an underlying interest, including a price, rate, index, value, variable, event, probability or thing”. In the January 2016 draft, an addition to the definition was appended which reads: “This definition does not, however, include a contract or instrument that is within a prescribed class”.

This gives the regulator the ability to exempt certain products from the definition. This appears to open the door to a hybrid regulatory approach that considers both products and institutions. This is an important modification as it provides the option to exclude classes of derivatives that contribute substantially less to systemic risk and/or do not enter the retail economy. Such a class could include commodity derivatives traded between large participants within a certain sector, like oil and gas, whose income streams are not securitized and resold.

³⁰⁷ S.3 of the both the Aug 2014 and Jan 2016 drafts. See: Cooperative Capital Markets Regulatory System, “Legislation”, online: <http://ccmr-ocrmc.ca/publications/legislation/>

³⁰⁸ This definition is from the Jan. 2016 draft. See *Ibid*.

³⁰⁹ See the Aug 2014 draft at s.3 via the link at *supra* Note 307.

Jurisdiction over Market Infrastructure Participants

The revised consultation draft significantly scaled back jurisdiction over market infrastructure participants from the prior draft. The original draft of the CMSA included provisions for designating systematically important trading facilities, clearing houses, credit rating organizations, benchmarks and capital markets intermediaries. Once designated, the Authority would then have the power to regulate the foregoing entities.³¹⁰ Stakeholders raised concerns that some of these designation provisions captured types of entities that might not be considered ‘systemically important’ under current international guidance and that their potential designation would expose them to regulations that could hinder their competitiveness if similar regulations were not applied in other jurisdictions.³¹¹ In response to these concerns, the revised draft eliminated all entity-level designation powers except for those relating to trade repositories. Instead the focus shifted to various types of products designated by the Authority as systemically important and certain practices designated by the Authority as systemically risky.³¹²

While early on in the development of the legislation, it may have appeared that an institutional-level regulatory focus was imminent, the revised draft appears to lead toward regulating products and classes of products. Large financial institutions can certainly grow to a size where their continuance as a going concern becomes important to national, or even international, financial stability. These institutions, however, can trade a wide variety of derivative products on behalf of an equally wide variety of clients, of varying size and sophistication. Regulating products and classes of derivatives, as opposed to the institutions that trade them, is a more refined regulatory approach that offers considerably more flexibility in exempting certain types of transactions or participants.

Systemically Important Benchmarks

Remaining unchanged from the original draft, a Benchmark is widely-defined as:

...a price, estimate, rate, index or value that is

- (a) determined from time to time by reference to an assessment of one or more underlying interests;
- (b) made available to the public, either free of charge or on payment; and
- (c) used for reference for any purpose, including
 - (i) determining the interest payable, or other sums that are due, under a security or a derivative,

³¹⁰ See the Aug 2014 draft at ss.18-29 via the link at *supra* Note 307.

³¹¹ Cooperative Capital Markets Regulatory System, “Commentary on the Capital Markets Stability Act”, online: <http://ccmr-ocrmc.ca/wp-content/uploads/cmsa-commentary-en.pdf> at p.5

³¹² See ss. 20-23 of the 2016 draft via the link at *supra* Note 307.

- (ii) determining the value of a security or a derivative or the price at which it may be traded, and
- (iii) measuring the performance of a security or a derivative.³¹³

Under the revised draft, the Authority may make an order designating a benchmark as systemically important if impairment to the benchmark's reliability or a loss of public confidence in its integrity or credibility could pose a systemic risk related to capital markets.³¹⁴ In satisfying this standard, the Authority must look to factors such as the number and type of persons that rely on the benchmark, the availability of substitutes for the benchmark, and whether and how the benchmark is already regulated.³¹⁵

Unlike the FSOC in the US, which focuses on entities, these benchmarks target the systemic risk arising in markets.³¹⁶ The broad definition of a benchmark, while on its face appears to be centered around derivatives and their underlyings, leaves the door open to a broader macroeconomic monitoring function. Price bubbles within asset classes, for example, could be labeled as a systemically important benchmark, thus triggering the authority for intervention.³¹⁷

Quebec Court of Appeal Reference

As discussed above, in 2011 the Supreme Court of Canada held that the then-proposed *Securities Act* to establish a national securities regulatory regime under the administration of a single national securities regulator would have been unconstitutional. Although the Supreme Court found that the proposed *Act* overreached into the provinces' constitutional powers over property and civil rights, it left open the possibility of targeted federal securities legislation addressing issues that transcend provincial boundaries, such as provisions to control systemic risk and nationwide data-collection.

Under the Cooperative System, a single regulator, the Capital Markets Regulatory Authority (CMRA), would receive delegated powers from participating jurisdictions to administer both the federal CMSA and a proposed provincial Capital Markets Act (CMA), which would be adopted by all participating provinces and territories in the Cooperative System to replace their respective current Securities Acts.

³¹³ See the 2016 draft of the CMSA at ss.18-19 via *supra* Note 307.

³¹⁴ *Ibid.*

³¹⁵ *Ibid.*

³¹⁶ Cristie Ford, "Systemic Regulation in Comparative Perspective" UBC Allard School of Law. May 3, 2016.

³¹⁷ As described in s.19, see *supra* Note 313.

The provincial government referred two questions to the Quebec Court of Appeal for advisory opinions:³¹⁸

1. Does the Constitution of Canada authorize the implementation of pan-Canadian securities regulation under the authority of a single regulator, according to the model established by the most recent publication of the “Memorandum of Agreement regarding the Cooperative Capital Markets Regulatory System”?
2. Does the most recent version of the draft of the federal “Capital Markets Stability Act” exceed the authority of the Parliament of Canada over the general branch of the trade and commerce power under subsection 91(2) of the *Constitution Act, 1867*?³¹⁹

Quebec challenged the constitutionality of the regime with a 3-pronged argument that it: exceeded parliament’s authority based on the division of powers; amounted a disguised constitutional amendment and unconstitutionally restricted the legislative sovereignty of the participating provinces.³²⁰

Canada argued that the Memorandum of Agreement (the “MOA”) that outlined the structure of the CMRA was merely a political agreement. The attorney general submitted that, as such, the decision making structure did not impact the constitutionality of the regime since the provinces would not be formally deprived of their jurisdiction to legislate in the area of securities. Furthermore, Canada pointed out that the MOA and the voting mechanisms contained therein would not be subject to judicial review.³²¹

The structure of the MOA provides for a council of ministers consisting of the federal minister of finance and the minister responsible for capital markets regulation from each participating province or territory (the “Council”). Among its other powers, the Council would be required to approve regulations proposed by the board of directors of the CMRA and any changes to the CMA. Participating provinces and territories would be bound to make any changes to the CMA that were approved by the Council.

The majority held that the Council’s power over the changes to the CMA rendered the regime unconstitutional. By requiring the participating provinces to adopt changes to the CMA that were

³¹⁸ In the Matter of the Reference of the Government of Quebec in virtue of Order in Council 642-2015 Concerning the Constitutionality of the Implementation of Pan-Canadian Securities Regulation, 2017, QCCA 756

³¹⁹ *Ibid* at para’s 2 and 4.

³²⁰ *Ibid* at para’s 47 - 49.

³²¹ *Ibid* at para. 50.

adopted by the Council, the regime would put “real limits on the parliamentary sovereignty of the participating provinces”³²² and was therefore unconstitutional.

Similarly, the majority determined that the ability of the Council to approve or reject regulations under the CMSA undermined its constitutional validity by providing provincial ministers with an effective veto over federal regulation³²³ thereby violating the principle of parliamentary sovereignty.

The court therefore answered the first question in the negative, asserting that the regime was in fact unconstitutional.

The court also answered the second question in the negative, confirming that “except with respect to its sections 76 to 79 concerning the role and powers of the Council of Ministers which, if not removed, render the act unconstitutional as a whole”.³²⁴ The CMSA therefore, standing alone, would be constitutional for the purposes of national data collection and managing systemic risk, provided the offending sections were removed.

The court found that the pith and substance of the CMSA was the federally mandated objective to manage systemic risk at a national level and protect against financial crimes.³²⁵ In further support of its conclusion, the court pointed out that the CMSA imposes upon the CMRA “the obligation to consider existing legislation prior to designating a benchmark, a product or a practice as posing a systemic risk. The goal of doing so seems to be to avoid useless overlap with provincial legislation; this offers some degree of protection against unjustified encroachments on provincial jurisdiction.”³²⁶ Applying the General Motors Test,³²⁷ the court found that the Act fell within the federal general trade and commerce power.³²⁸

³²² *Ibid* at para. 61.

³²³ *Ibid* at para. 87.

³²⁴ *Ibid* at para. 5.

³²⁵ *Ibid* at para. 116.

³²⁶ *Ibid* at para. 127.

³²⁷ *General Motors of Canada v. City National Leasing*, [1989] 1 S.C.R. 641 is the leading decision on the scope of the federal trade and commerce power under the *Constitution Act, 1867* and provides a 5-part test to help determine the validity of associated legislation.

³²⁸ *Ibid* at para. 129-135.

The case has been appealed (as of right) to the Supreme Court of Canada, which tentatively plans to hear the appeal in March 2018.³²⁹ The decision however has invited the creation of a cooperative macroprudential regulator targeting systemic risk.

The Need for Macroprudential Regulation

Effective management of systemic risk at a national level requires macroprudential regulation and governance over the major micro and macro-economic contributors to this type of risk. Despite the relative success of Canada's securities markets, the need for regulation at the national level is clear and, as discussed above, supported by the Supreme Court for the specific purpose of guarding against systemic risk. A macroprudential agency needs access to a broad spectrum of trade and market data as well as the analytical capability to quickly identify system-wide risks and determine when and how instruments should be used in response to those risks.

Regulation of systemic risk at the federal level is also necessary, because monetary policy, controlled at the federal level, can have an effect on financial stability by its effect on risk-taking.³³⁰ Low interest rates can encourage risk taking by investors in search of higher yields. Institutions may also be encouraged to increase their risk taking as a result of a loose monetary policy. Low interest rates are often associated with a rise in asset prices. Commercial banks target constant leverage ratios and investment banks target procyclical ones.³³¹ When the value of their assets increase, it has been argued that banks seek to increase their balance sheets in order to maintain their target leverage ratios, which puts further upward pressure on asset prices.³³² Even if implemented on a short-term basis, legislation with the power to target the leverage of financial institutions could dampen inflation and potentially slow price bubbles³³³ in markets that are overheating.

In addition to relating to the spread of risk through interconnected financial institutions, systemic risk also refers, more generally, to events that cause volatility in capital markets.³³⁴ A national regulator,

³²⁹ Supreme Court of Canada, "Summary", online: <http://www.scc-csc.ca/case-dossier/info/sum-som-eng.aspx?cas=37613>

³³⁰ Speech by Mr Stefan Ingves, Governor of the Sveriges Riksbank, at the Bank of Korea–Bank for International Settlements (BOK-BIS) Conference on Macroprudential Regulation and Policy, Seoul, 18 January 2011, online: https://www.bis.org/list/speeches/author_stefan+ingves/page_3.htm.

³³¹ Ibid at p.8. Also see: Claudio Borio, "Towards a Macroprudential Framework for Financial Supervision and Regulation" (February 2003) BIS Working Paper No.128 at p.14.

³³² *Ibid*.

³³³ Gerding *supra* Note 80 at p.33.

³³⁴ Anita Anand (ed.), "What's Next for Canada? Securities Regulation After the Reference" (2012) Toronto, Irwin Law.

whose function includes monitoring of both market and sector indices would help spot advanced signs of systemic risk accumulation. We cannot rely on disclosure and the risk mitigation of central counterparty clearing to guard against a buildup of systemic risk. Instead, Canada should accept the Supreme Court's "invitation to create a meaningful and ambitious systemic risk regulator".³³⁵

Central Counterparty Clearing

The creation of counterparty credit risk remains the basic way in which OTC derivatives contribute to systemic risk, and it is this aspect of systemic risk that the central clearinghouse attempts to address. In targeting derivatives for regulatory reform, law-makers have honed in on the idea of centralizing counterparty credit risk in a clearinghouse where it can ostensibly be supervised and managed. Through the creation of reserve accounts, clearinghouses aim to contain systemic risk by preventing the consequences of default from spreading.³³⁶ The "strategy of moving OTC derivatives onto an exchange or central clearing platform attempts to apply the central premise of capital markets regulation, that exchange trading of financial products facilitates enhanced disclosure and superior regulatory outcomes, to the derivatives context".³³⁷

A central counterparty interposes itself between counterparties to contracts traded in financial markets, becoming the buyer to every seller and the seller to every buyer, thereby ensuring the performance of open contracts.³³⁸ Modern central counterparty (CCP) clearing arrangements typically involve counterparty substitution by means of novation³³⁹ or an equivalent legal mechanism.

This arrangement has many advantages, such as simplifying and making more transparent the credit chains that may develop in repeated transactions among market participants. It also provides a foundation for centralized risk management (such as multilateral netting,³⁴⁰ collateralization and risk/loss mutualization³⁴¹) and data processing operations (such as trade registration and reporting) that

³³⁵ *Ibid* at p.145.

³³⁶ Griffiths *supra* Note 5 at p.2.

³³⁷ Nichol *supra* Note 153.

³³⁸ See Figure 2 – OTC Derivatives Counterparty Relationships

³³⁹ The act of replacing a party to an agreement with another party.

³⁴⁰ A process that simplifies and reduces the cost of multi-party transactions by having them summed rather than settled individually. Multilateral netting not only streamlines the settlement process, it also reduces risk by specifying that, in the event of a default or other termination event, all outstanding contracts are likewise terminated. However, because risk is shared, there may be less incentive to carefully evaluate the creditworthiness of each individual transaction.

³⁴¹ Dividing up the costs associated with risks and financial losses among several investors, businesses, organizations or people.

benefit clearing members. Disadvantages of centralized clearing include increased transaction costs (particularly for those with lower transaction volumes who benefit less from the centralized features), and the concentration of credit, liquidity, operational and legal risk in CCP.

Because the CCP becomes a principal to all trades with its clearing members, it must carry out the future performance obligations to which they initially agreed. The CCP acts on its own behalf (as principal) and for the mutual benefit of its clearing members by imposing risk management policies and establishing operational processes to support the settlement of transactions it clears. Centrally cleared OTC derivatives markets are deemed to be safer during times of adverse market conditions.

For the containment strategy to work, the clearinghouse itself must employ a successful risk management system. Much will depend on its risk modelling and what it requires from its members in terms of credit quality, margin and reserve funds and the choice of products accepted for clearing. While beyond the scope of the current research, these core issues of risk management are directly linked to clearinghouse governance.³⁴²

Canada - National Instrument 94-101

On January 19, 2017, the Canadian Securities Administrators (the “CSA”) published what was expected to be final versions of National Instrument 94-101 Mandatory Central Counterparty Clearing of Derivatives³⁴³ and its companion policy³⁴⁴ (together the “Clearing Rule”), which set the rules for mandatory clearing of certain OTC derivative transactions. This was a regulatory milestone in a multi-year process. The first draft of the legislation was published for comment in February 2015. The second draft was published a year later.

Under the Clearing Rule, certain OTC derivatives must be submitted for clearing to a recognized or exempt clearing agency. The derivatives designated under the Clearing Rule for mandatory clearing (mandatory clearable derivatives) consist of a variety of single-currency interest rate swaps and forward rate agreements that are appended to the rule.³⁴⁵

³⁴² See: Griffiths *supra* Note 5 for a discussion on the importance of clearinghouse governance.

³⁴³ Ontario Securities Commission, “National Instrument 94-101 Mandatory Central Counterparty Clearing of Derivatives”, online: http://www.osc.gov.on.ca/en/SecuritiesLaw_ni_20170406_94-101_mandatory-central-counterparty.htm

³⁴⁴ Ontario Securities Commission, “Companion Policy 94-101 Mandatory Central Counterparty Clearing of Derivatives”, online: http://www.osc.gov.on.ca/en/SecuritiesLaw_cp_20170406_94-101_mandatory-central-counterparty.htm

³⁴⁵ See Figure 2.

In terms of transacting parties, the rules apply when at least one party to a mandatory clearable derivative is a local counterparty and each party is either: a Clearing Agency participant; an affiliate of a Clearing Agency participant that has in excess of C\$1-billion notional of outstanding OTC derivatives (excluding intragroup transactions); or a local counterparty that, together with its local counterparty affiliates, has in excess of C\$500-billion notional of outstanding OTC derivatives (excluding intragroup transactions).³⁴⁶ The Clearing Rule contains exemptions for certain intragroup transactions³⁴⁷ and transactions resulting from multilateral compression.³⁴⁸ In addition, the clearing mandate does not apply to transactions with certain governmental entities.³⁴⁹

The scope of the counterparties caught by the Clearing Rule changed dramatically between the first and final drafts. Originally, any local counterparty trading a prescribed derivative was subject to the clearing rule.³⁵⁰ This wide scope was delimited by substantial end-user and intragroup exemptions.³⁵¹ Of note, the end-user exemption, in addition to being available to non-financial entities, was based, in part, on the purpose of the transaction. The exemption required at least one of the counterparties to be entering into the transaction “to hedge or mitigate a commercial risk”.³⁵² This likely would have been the source of a significant amount of debate and potential interpretative conflict with respect to separating speculative from hedging motivations. The subsequent amendment to the scope of the rule, however, made the end-user exemption irrelevant.

³⁴⁶ See s.3 at *supra* Note 344.

³⁴⁷ See s.7 at *supra* Note 344.

³⁴⁸ Portfolio compression is a risk reduction service in which two or more counterparties wholly or partially terminate some or all of the derivatives submitted by those counterparties for inclusion in the portfolio compression and replace the terminated derivatives with another derivative whose combined notional value is less than the combined notional value of the terminated derivatives. The economic value of portfolio compression is that it reduces notional outstanding by eliminating matched trades or trades that do not contribute risk to a dealer's portfolio. See: European Union Emissions Trading Scheme, “Portfolio compression requirements under EIMR”, online: <https://www.emissions-euets.com/risk-mitigation-techniques-emir/portfolio-compression-emir> for a fulsome explanation. See s.8 at *supra* Note 344 for the exemption language.

³⁴⁹ See s.6 at *supra* Note 344. The clearing requirement would not apply if one of the counterparties is the Government of Canada, the government of a province or territory, the government of a foreign jurisdiction (both sovereign and sub-sovereign), a crown corporation for which the government of the relevant jurisdiction is responsible for all or substantially all the liabilities, an entity wholly owned by one or more governments that are responsible for all or substantially all of the entity's liabilities, the Bank of Canada, a central bank of a foreign jurisdiction, the Bank for International Settlements or the International Monetary Fund.

³⁵⁰ S.a of the 2015 proposed version. See: Canadian Securities Administrators, “Notice and Request for Comment Proposed National Instrument 94-101 Mandatory Central Counterparty Clearing of Derivatives Proposed Companion Policy 94-101CP Mandatory Central Counterparty Clearing of Derivatives” online: http://www.osc.gov.on.ca/en/SecuritiesLaw_csa_20150212_94-101_roc-derivatives.htm

³⁵¹ *Ibid.*

³⁵² *Ibid.*

The scope was substantially amended in the 2016 draft. Counterparties caught under the rule were reduced to transactions where both counterparties are “participants that subscribe to the services of a regulated clearing agency for a mandatory clearable derivative, and their affiliated entities, as well as to local counterparties with a month-end gross notional amount of outstanding OTC derivatives above \$500 000 000 000”.³⁵³ Since the original end-user exemption applied only to non-financial entities, who, in the later draft were not required to clear, this exemption became redundant. The drafters indicated that this reduction in scope addressed the substantially reduced access to clearing services of market participants in OTC derivative transactions and that it may be revisited as access to these services increases.³⁵⁴

Currently, the CSA are working on a revised draft after having published comments to the proposed revision in October of 2017.³⁵⁵ Revisions involve both the scope of counterparties and the types of derivatives subject to the clearing requirement.

Appropriate Functions of a CCP

The failure of a large derivative counterparty spreads systemic risk because other institutions become unable to collect on their hedged positions precisely when they most need protection, potentially leading to further financial institution failures³⁵⁶ and a contraction of credit. Systemic risk is an appropriate target for regulatory attention because market participants are not sufficiently incentivized to control it.³⁵⁷ While central counterparty clearing is an important tool in managing systemic risk, it should not be viewed as the first line of defence. CCPs should not be viewed as having absorbed the regulatory burden of monitoring systemic risk. This responsibility should continue to sit squarely on the shoulders of regulators whose primary, active, purpose is to remain vigilant.³⁵⁸ It has also been argued

³⁵³ S.a of the 2016 draft online: http://www.osc.gov.on.ca/documents/en/Securities-Category9/csa_20160224_94-101_roc-derivatives.pdf

³⁵⁴ See Summary of Changes to the Proposed National Instrument at *Ibid*.

³⁵⁵ Canadian Securities Administrators, “Notice and Request for Comment Proposed Amendments to National Instrument 94-101 Mandatory Central Counterparty Clearing of Derivatives and Proposed Changes to Companion Policy 94-101 Mandatory Central Counterparty Clearing of Derivatives”, online:

http://www.osc.gov.on.ca/en/SecuritiesLaw_cp_20171012_94-101_mandatory-central-counterparty.htm

³⁵⁶ Sean J. Griffith, “Clearinghouse Hope or Hype? Why Mandatory Clearing May Fail to Contain Systemic Risk” (2017) HBLR Volume 3, online at: <http://www.hblr.org/2013/04/clearinghouse-hope-or-hype-why-mandatory-clearing-may-fail-to-contain-systemic-risk/>

³⁵⁷ *Ibid*.

³⁵⁸ Nichol *supra* Note 153.

that the mutualising of risk at a CCP may encourage counterparties to engage in more risky transactions than they otherwise would, thereby actually increasing total systemic risk in the market.³⁵⁹

Each counterparty to a derivatives transaction voluntarily seeks exposure to, or protection against, some type of market movement. It is important to remember, however, that the purpose of a CCP is to help ensure that counterparties are adequately prepared to absorb the risk of default, not to eliminate this risk. Parties must be able to absorb the risk of counterparty default, such that a default would not start a domino chain that would reverberate throughout the national and international finance system. It is important to distinguish this purpose from that of eliminating of risk. In the view of the author, the understanding of these risks should be ensured by a combination of size and sophistication of the parties and adequate disclosure where size and sophistication are lacking. Macroprudential oversight combined with a well-managed clearing system, can mount an effective defence against systemic risk. Widespread use of CCPs does not negate or even reduce the importance of a national regulator charged with managing systemic risk levels.

Presumably, the increased cost of clearing is offset by the reduction in counterparty risk. It appears that many of the regulatory reforms targeting derivatives are aimed at moving the sector to a lower point on the risk/return scale.³⁶⁰ It is important to bear in mind, however, the overall economic costs of such an approach. A financial system that artificially restrains risk by increasing costs, while likely to increase financial stability, is also likely to result in slower economic growth. Therefore, the regulations must make every effort to provide exceptions for those transactions that do not contribute to systemic risk, particularly those that don't cross over, either directly or via securitization, into the retail sector, to avoid being subject to the cost increases that artificially lower both risk and return. Making those fine distinctions will offer a better balance between financial stability and economic growth.

Margin Requirements

Margin requirements for derivatives transactions have been a key element of regulatory reform and widely adopted globally. While not a focus of this paper, as one of the primary thrusts of derivatives

³⁵⁹ *Ibid*, where Andrew Nichols suggests that the mutualising of systemic risk default creates a moral hazard and a lack of direct accountability for risks transferred to the CCP. Nichols goes even further to suggest that concentrating derivatives exposure in centralized entities creates significant systemic risk.

³⁶⁰ Ötke-Robe and Pazarbasioglu *supra* Note 2 at p.248.

regulatory reform, and one that has fundamentally transformed OTC derivatives markets and the way OTC derivatives are traded,³⁶¹ a brief overview of the rules is important.

Prior to the financial crisis, it has been argued that the legislative shift to self-governance under Basel II³⁶² resulted in an overall reduction in capital requirements and inefficient attention paid to systemic risk.³⁶³

In Canada, the Office of the Superintendent of Financial Institutions (“OSFI”) published Guideline E-22 Margin Requirements for Non-Centrally Cleared Derivatives on February 29, 2016, setting out final margin requirements for non-centrally cleared derivatives transactions between certain financial entities.³⁶⁴ The rules are based on the March 2015 framework jointly published by the Basel Committee on Banking Supervision and the International Organization of Securities Commissions.³⁶⁵ Margin requirements for non-cleared derivatives trades were introduced for the largest derivatives users on September 1, 2016 in the US and Japan, with the EU rules going live on February 6, 2017.³⁶⁶

The margin requirement initiative is squarely aimed at mitigating systemic risk in the financial sector and promoting the central clearing of derivatives.³⁶⁷ Before these rules came into force, market participants would make a commercial decision whether or not to exchange initial margin³⁶⁸ and variation margin.³⁶⁹ Market participants with a high credit ratings would typically negotiate non-standard collateral arrangements.³⁷⁰ The margin rules standardize a number of elements of collateral exchange including

³⁶¹ RBC Capital Markets, “Update on Canadian OTC Derivatives Market Reforms” (September 2017), online: <https://www.rbccm.com/assets/rbccm/.../2017/otc-regulatory-margin-requirements.pdf> at p.4.

³⁶² Basel II is the second of the Basel Accords, initially published in 2004, which are recommendations on banking laws and regulations issued by the Basel Committee on Banking Supervision. That accord is now superseded by Basel III published in 2010/11.

³⁶³ Janis Sarra, “Dancing the Derivative Deux Pas” (2009) UNSW LJ Volume (32)2.

³⁶⁴ OSFI, “Margin Requirements for Non-Centrally Cleared Derivatives”, online: <http://www.osfi-bsif.gc.ca/Eng/fi-if/rg-ro/gdn-ort/gl-ld/Pages/e22.aspx>

³⁶⁵ Basel Committee on Banking Supervision, “Margin requirements for non-centrally cleared derivatives”, online: <https://www.bis.org/bcbs/publ/d317.htm>

³⁶⁶ RBC *supra* Note 361.

³⁶⁷ *Ibid* at p.2.

³⁶⁸ In derivatives markets, margin has a definition that is distinct from its definition in the stock market, where margin is the use of borrowed money to purchase securities. In derivatives transactions, initial margin is collateral exchanged between parties as security against counterparty default.

³⁶⁹ The variation margin, or mark to market, is not collateral, but payments at pre-set intervals, potentially daily, to offset profits or losses and bring an equity account up to the margin level.

³⁷⁰ RBC *supra* Note 361.

requiring a two-way exchange of initial margin and variation margin regardless of the balance-sheet strength of the counterparties.³⁷¹

Trade Repositories and Derivatives Data Reporting

A trade repository is a centralized facility where OTC derivative transaction data is collected and stored electronically, providing regulators and, for some of this information, the public with a central source of transaction and position data for a given OTC derivatives market. It collects data, derived from centrally cleared or bilateral transactions as reported by parties to a transaction.

According to the Canadian Securities Administrators: “Timely access to data collected by trade repositories will enable Canadian regulators and the central bank to monitor systemic risk exposures of market participants, detect market abuse, and assist in the performance of systemic risk analysis on these markets. It will also increase transparency of the OTC derivatives market, reducing information imbalances through the public dissemination of appropriate data including aggregate data on open positions and trading volumes on a periodic basis.”³⁷²

Canadian Federal and Provincial Trade Reporting Rules

On December 6, 2012 the OTC Derivatives Committee of the Canadian Securities Administrators published for interim guidance and comment CSA Staff Consultation Paper 91-301.³⁷³ The paper set out two model provincial rules and accompanying model explanatory guidance pertaining to, firstly, trade repositories and derivatives data reporting (the “Reporting Rule”) and, secondly, the determination of products which will be treated as derivatives for purposes of the Reporting Rule (the “Scope Rule”).

The Reporting Rule and Scope Rule were drafted on the basis of the *Ontario Securities Act*³⁷⁴ which contains framework provisions for the regulation of the derivatives market,³⁷⁵ including the activities of trade repositories.³⁷⁶

³⁷¹ *Ibid.*

³⁷² Canadian Securities Administrators, “Consultation Paper 91-402 Derivatives: Trade Repositories”, online: www.osc.gov.on.ca/documents/en/.../csa_20110623_91-402_trade-repositories.pdf

³⁷³ Canadian Securities Administrators, “Staff Consultation Paper 91-301 Model Provincial Rules – Derivatives: Product Determination and Trade Repositories And Derivatives Data Reporting”, online: http://www.osc.gov.on.ca/en/SecuritiesLaw_csa_20121206_91-301_model-provincial-rules.htm

³⁷⁴ Securities Act, RSO 1990, c S.5.

³⁷⁵ *Ibid* Part XIII and XV.1.

³⁷⁶ *Ibid* at Part XIII.

The Reporting Rule reflected proposals contained in the CSA's Consultation Paper 91-402 – Derivatives: *Trade Repositories* which was released on June 23, 2011.³⁷⁷ The Reporting Rule covers two areas: (1) the requirements trade repositories must meet to be designated or recognized by provincial regulators as acceptable entities to which market participants may report their trades, and (2) the reporting obligations of derivatives market participants themselves.

Ontario, Quebec and Manitoba each published proposed harmonized rules in June 2013.³⁷⁸ The final rules in these three provinces came into force on December 31, 2013,³⁷⁹ but with staggered implementation of reporting obligations over the course of the following two years. Further amendments were proposed in November 2015.³⁸⁰

On January 22, 2016, the securities regulatory authorities in Alberta, British Columbia, New Brunswick, Newfoundland and Labrador, the Northwest Territories, Nova Scotia, Nunavut, Prince Edward Island, Saskatchewan and the Yukon (together the "Participating Jurisdictions") adopted Multilateral Instrument 91-101 *Derivatives: Product Determination* and Multilateral Instrument 96-101 *Trade Repositories and Derivatives Data Reporting*. In addition, the Participating Jurisdictions implemented Companion Policy 91-101CP *Derivatives: Product Determination* and Companion Policy 96-101CP *Trade Repositories and Derivatives Data Reporting*.³⁸¹

The main types of transactions and instruments that are excluded from the category of reportable derivatives are:³⁸²

- exchange-traded futures and options
- spot FX transactions that are intended to be physically settled within two business days

³⁷⁷ CSA *supra* Note 373.

³⁷⁸ Ontario Securities Commission, "Proposed OSC Rule 91-506 Derivatives: Product Determination and Companion Policy 91-506CP and Proposed OSC Rule 91-507 Trade Repositories and Derivatives Data Reporting and Companion Policy 91-507CP", online: http://osc.gov.on.ca/documents/en/Securities-Category9/rule_20130606_91-506_91-507_rfc-derivatives.pdf

³⁷⁹ Ontario Securities Commission, "Notice Of Ontario Securities Commission Rule 91-506 Derivatives: Product Determination, Companion Policy 91-506cp Derivatives: Product Determination, Ontario Securities Commission Rule 91-507 Trade Repositories and Derivatives Data Reporting and Companion Policy 91-507cp Trade Repositories and Derivatives Data Reporting", online: http://osc.gov.on.ca/en/SecuritiesLaw_rule_20131114_91-506_91-507_derivatives.htm

³⁸⁰ Ontario Securities Commission, "Notice of Amendments and Request for Comments", online: http://www.osc.gov.on.ca/en/SecuritiesLaw_rule_20151105_91-507_derivatives-data-reporting.htm

³⁸¹ For a breakdown of the timeline of legislative amendments and derivatives subject to the rule, see: Blakes, "Derivatives Trade Reporting Rules Introduced In Remaining Canadian Jurisdictions", online: <http://www.blakes.com/English/Resources/Bulletins/Pages/Details.aspx?BulletinID=2265>

³⁸² MI 96-101 at Part 5.

- commodity derivatives which are intended to be physically settled
- bonds, notes, deposit instruments, stock options, convertible securities and certain other instruments that are regulated as “securities”, as well as deposit instruments of federally regulated financial institutions that are outside the scope of provincial securities regulation
- compensation products linked to the share price of an issuer or its affiliate
- gaming and insurance contracts regulated under Canadian or foreign regulatory regimes

Federally, the CMSA gives the CMRA the authority to make national regulations regarding data reporting and designating trade repositories for the purpose of identifying and mitigating systemic risk.³⁸³ The same power to designate trade repositories and enact regulations to govern them is conferred on the CMRA in the draft PCMA,³⁸⁴ although it will only apply in the jurisdictions that enact it.

The Dual Benefit of Data Reporting

The development of the trade reporting regulatory structure shows a recognition that the data has value for both the provincial mandate of operating local securities markets as well as at the federal charge of monitoring potential systemic risk accumulation. While the latest draft of the regulations made revisions strengthening the confidentiality of the information provided and requiring the Authority to consider the availability of the information elsewhere,³⁸⁵ the power to compile information at the federal level remains. This is an important tool with respect to macroeconomic monitoring of systemic risk buildup. Even if the provinces remain in charge of collecting the data, access to that information as well as the associated analytical capability is needed to quickly identify system-wide risks and determine when and how instruments should be used to respond to those risks.³⁸⁶

In addition, Canada and the US are the only jurisdictions that require the public dissemination of trade data.³⁸⁷ Regulators view the public dissemination of trade data as an important tool in maintaining transparency.³⁸⁸ Disclosure to the public however is limited to the most liquid OTC derivatives products such as standard and certain credit default swap indices.³⁸⁹ It has been observed that as late as Q4

³⁸³ See Part 1 of the 2016 draft via the link at <http://ccmr-ocrmc.ca/publications/legislation/>

³⁸⁴ See s.18 of the Aug. 2014 draft of the PCMA at <http://ccmr-ocrmc.ca/publications/legislation/>

³⁸⁵ See Part 1 of the blackline version of the CMSA draft from May 5, 2016 at <http://ccmr-ocrmc.ca/publications/legislation/>

³⁸⁶ Ingves *supra* Note 330.

³⁸⁷ RBC *supra* Note 361.

³⁸⁸ Ontario Securities Commission Notice of Amendments to OSC Rule 91-507 at Part 3 online at: http://www.osc.gov.on.ca/en/SecuritiesLaw_rule_20160512_91-507_derivatives-data-reporting.htm

³⁸⁹ See MI-96-101 at Appendix C.

2017, in the US, trade data is regularly analyzed by market participants, while Canadians tend to make more limited use of publicly available trade data.³⁹⁰ This may be a result of the time 48hr time delay afforded to the Depository Trust & Clearing Corporation (DTCC) for Canadian data.³⁹¹ US trade data is disseminated in real time.³⁹²

The availability of trade reporting data for analysis appears designed to aid in identifying the type of build-up of systemic risk that occurred prior to the 2008 financial crisis. This presumes however that the most liquid and standardized derivatives transactions are likely to be the locus of any future weighting of systemic risk. It also presumes sufficient federal, or coordinated provincial, regulatory authority, or cooperation, to address such an occurrence. As a tool for hedging against, or mitigating the effects of, a crisis, trade reporting data is only useful if sufficient in its depth, adequately analyzed and acted on with sufficient regulatory muscle.

An efficient Canadian model for the use and collection of such data could involve its initial collection at the provincial level, flowing up for national analysis by a federal agency with the authority to make rules, such as temporary increases in either initial or variation margin on derivatives contracts within a certain class to cool a potentially overheated sector. While it makes sense to delay public reporting of such data, to avoid potential gaming of the Canadian market, which is much smaller than its US counterpart, such data should be available in real-time to a dedicated team of analysts at the federal level.

Moreover, exchange traded futures contracts are powerful, highly leveraged instruments which can be used by derivatives traders to hedge their positions. A build-up of hedging in a particular sector, whether via stock options or futures in other financial underlyings such as interest rates, or even market indices, such sector averages like the DJIA, could be a key future clue to risk accumulation. These transactions should not be exempt from data reporting, at least to federal analysis.

Market Conduct – NI 93-101

On April 4, 2017, the Canadian Securities Administrators published a notice and request for comment on Proposed National Instrument 93-101 Derivatives: Business Conduct, along with Proposed Companion

³⁹⁰ RBC *supra* Note 361.

³⁹¹ Canadian trade data is disseminated by DTCC and is available at: <https://pddata.dtcc.com/gtr/canada/dashboard.do>

³⁹² US trade data, also provided by DTCC, is available at: <https://pddata.dtcc.com/gtr/cftc/dashboard.do>

Policy 93-101 Derivatives: Business Conduct.³⁹³ The proposed business conduct rule sets out a regime for regulating the conduct of dealers and advisers in over-the-counter derivatives markets. According to the CSA, the proposed rule is aimed at protecting parties using over-the-counter derivatives products by requiring derivatives firms to meet certain minimum standards in relation to their business conduct towards their customers and counterparties.³⁹⁴ The rule's purpose and substance is described as being designed to "help protect investors, reduce risk, improve transparency and accountability and promote responsible business conduct"³⁹⁵ in the OTC derivatives market.

Collectively, the CSA has referred to the instrument and the companion policy as the Proposed Instrument. The CSA has summarized the Proposed Instrument, in part, as follows:

"[t]he Proposed Instrument is intended to create a uniform approach to derivatives market conduct regulation in Canada and will promote consistent protections for market participants regardless of the type of firms they deal with while also providing that persons or companies that are subject to requirements under the Proposed Instrument are subject to consistent regulation that does not result in a competitive advantage."³⁹⁶

The language used in describing the Proposed Instrument appears to position its objective within the regulatory domain of the provinces and their jurisdiction over day-to-day operations of securities markets.

The Proposed Instrument takes a layered approach to investor/customer protection.³⁹⁷ The CSA refers to derivatives dealers and advisors collectively as a "derivatives firm".³⁹⁸ A derivatives firm has certain obligations that apply in all cases when dealing with or advising a "derivatives party"³⁹⁹ regardless of the level of sophistication or financial resources of the derivatives party. These include fair dealing, conflicts of interest management, know-your-client and record keeping requirements⁴⁰⁰ as well as duties

³⁹³ BCSC, "93-101 Proposed National Instrument 93-101 Derivatives: Business Conduct Proposed Companion Policy 93-101CP Derivatives: Business Conduct", online: https://www.bsc.bc.ca/93-101_CSA_Note_and_Request_for_Comment/

³⁹⁴ Canadian Securities Administrators, "Canadian Securities Regulators Seek Input On Proposed Business Conduct Rules For Derivatives Dealers And Advisors", online: <https://www.securities-administrators.ca/aboutcsa.aspx?id=1569>

³⁹⁵ *Ibid.*

³⁹⁶ *Ibid.*

³⁹⁷ *Ibid* at p.2.

³⁹⁸ *Ibid.*

³⁹⁹ "Derivatives party" means: (a) in the case of a derivatives dealer a person for which the derivatives dealer acts or proposed to act as agent in relation to a transaction in a derivative or a person that is or is proposed to be a party to a derivative where the derivatives dealer is the counterparty; and (b) in the case of a derivatives adviser, a person to which the adviser provides or proposes to provide advice in relation to derivatives.

⁴⁰⁰ CSA *supra* Note 394 at Part 3.

imposed on “senior derivatives managers”.⁴⁰¹ Other obligations contained in the Proposed Instrument do not apply if the derivatives firm is dealing with or advising a derivatives party that is an “eligible derivatives party”.⁴⁰²

The Proposed Instrument contemplates a range of exemptions in the case of qualified derivatives end-users, as well as IIROC-member investment dealers and Canadian financial institutions that meet equivalent regulatory requirements. Recognizing that a significant proportion of OTC derivatives trading is cross-border, the Proposed Instrument includes exemptions for foreign derivatives dealers and advisers that are subject to, and comply with, comparable laws of certain foreign jurisdictions.⁴⁰³

The Proposed Instrument also prescribes requirements related to the segregation and holding of derivatives party assets, as well as the restrictions on use and investment of those assets. A derivatives firm is required to segregate derivatives party assets from its own property.⁴⁰⁴

Derivatives firms have an obligation to provide those parties deemed under the rule to be less sophisticated with more detailed information concerning their derivatives transactions, their accounts and their assets. The derivatives party must be provided with all the information that it needs to understand its relationship with the derivatives firm, the products and services the derivatives firm will provide, and any fees or other charges the derivatives party may be required to pay. The derivatives firm must also provide detailed disclosure relating to the type and characteristics of any derivatives (including associated material risks) before transacting with or on behalf of a derivatives party.⁴⁰⁵

The criteria used to distinguish between the retail market and the more sophisticated parties that use OTC derivatives products are based on indicia of sophistication and financial thresholds, with the lighter regulatory regime reserved for dealings with customers or counterparties that qualify as eligible derivatives parties. A lengthy definition of “Eligible Derivatives Party” is included in the Proposed Instrument. Part (m) of that definition includes a company with net assets greater than \$25M and Part

⁴⁰¹ In the Definitions s.31 “senior derivatives manager” means, in respect of a derivatives business unit of a derivatives firm, the individual designated by the derivatives firm as responsible for directing the derivatives activities of that unit.

⁴⁰² The definition of “eligible derivatives party” is generally consistent with similar definitions found in the existing Canadian regulatory regime in relation to OTC derivatives. For example, the definition aligns with the definition of “qualified party” in Alberta Blanket Order 91-507 *Over-the-Counter Derivatives*, and the definition of “qualified party” in British Columbia Blanket Order 91-501 *Over-the-Counter Derivatives*, and the definition of “accredited counterparty” in section 3 of the *Québec Derivatives Act*. See CSA *supra* Note 394 at p.3.

⁴⁰³ Proposed Instrument Division 2 and Division 3 – Exemptions from Specific Requirements of the Instrument

⁴⁰⁴ See Division 2, ss.25-28 at *supra* Note 394.

⁴⁰⁵ See Division 2, ss.11-17 at *supra* Note 394.

(n) exempts an individual with financial assets in excess of \$5M.⁴⁰⁶ The individual exemption is tied directly to the criteria set out in the “Accredited Investor” prospectus exemption in NI 45-106.⁴⁰⁷

Investor Sophistication as a Regulatory Trigger

The use of investor sophistication as a regulatory trigger for disclosure is an extremely important element of the proposed market conduct rule and one that will hopefully survive the final edits.

Both Canadian and United States securities law generally rejects attempts to classify investors based on real tests of sophistication or experience, and instead uses investor income as a proxy for determining investor sophistication.⁴⁰⁸ The Securities and Exchange Commission uses income thresholds as a test for investor accreditation in Regulation D of the Securities Act of 1933.⁴⁰⁹ The Commodity Futures Modernization Act of 2000 (the ‘CFMA’) follows this basic approach by defining “Eligible Contract Participant”⁴¹⁰ to include individuals with assets in excess of USD 10 million, thus assuming some level of investment sophistication among wealthy investors.

As discussed above, the financial tests as a proxy for investor sophistication used in the proposed version of 93-101 are taken from the prospectus exemptions in NI 45-106. When securities are issued, a presumption exists that a prospectus is required. NI 45-106 provides exemptions for friends and family⁴¹¹ and sophisticated investors.

As investor sophistication increases, the value of enforcing transparency as an investor protection tool, decreases. Not only do sophisticated investors generally have sufficient assets to withstand losses on their investments, they also generally have the experience and access to deep market analysis on which to base their decisions and mitigate their risk. In addition, large sophisticated investors generally demand disclosure from their counterparties as a precondition for investment. This is particularly common in the commodity derivatives markets where large producers and suppliers enter derivative transactions with each other, as well engage in currency and interest rate derivatives in order to achieve more predictable income and expense streams.⁴¹²

⁴⁰⁶ CSA *supra* Note 394.

⁴⁰⁷ BCSC, “45-106 Prospectus Exemptions [NI]”, online: [https://www.bccsc.bc.ca/45-106_\[NI\]_04012017/](https://www.bccsc.bc.ca/45-106_[NI]_04012017/)

⁴⁰⁸ Krawiec *supra* Note 147.

⁴⁰⁹ SEC Reg. D, Rule 501(a).

⁴¹⁰ CFMA s.1a(12).

⁴¹¹ NI 45-106 at s.2.5(1), see *supra* Note 407.

⁴¹² David B. Spence and Robert Prentice, “The Transformation of American Energy Markets and the Problem of Market Power” (January, 2012) 53 B.C. L. Rev. 31.

Enforcing disclosure between these parties adds little value to the efficient operation of these markets and provides little benefit in guarding against systemic risk. This is different from enforcing disclosure to a regulator monitoring overall exposure within a market or between large, interconnected institutions. History has of course shown that these large financial institutions will take excessive risks, to point of exposing themselves to insolvency, if sufficient financial motivation exists. The potential for that ill cannot be cured by disclosure, but instead must be dealt with by enforcing risk limits, for example by margin requirements.

Where disclosure between parties can most help reduce systemic risk is where an asymmetry between the sophistication of the transacting parties exists. Systemic risk, while generally conceived of in terms of the spectre of large, interconnected institutions potentially falling like dominoes, should also be viewed in terms of the nexus between large, sophisticated institutions and the less sophisticated retail market.

This should include, for example, banks who resell portions of CDOs, either based on asset backed commercial loans or residential mortgages, to retail investors. This interface with the retail economy is one where disclosure could both aid in the efficient operation of the markets and help guard against the spread of systemic risk. Taken to the next level, investor sophistication could also be used to restrict access to certain products based on the deemed complexity of the instrument or perhaps some type of rating system combining indices of risk and complexity.

Conclusions

Derivatives offer private counterparties an unprecedented degree of flexibility and freedom to achieve desired outcomes by unbundling, reassembling and trading financial risk. They offer a socially beneficial mechanism of prudent risk management and liquidity provision as well as a powerful tool for speculation. At the same time, by removing some of the traditional constraints on speculative trading, such as the need to purchase, hold or physically move underlying assets (and triggering the regulatory and disclosure obligations of ownership), derivatives have fundamentally altered the nature and dynamics of financial investment and intermediation. Increasingly complex derivatives became a key tool to increase both leverage and liquidity as well as engage in highly speculative transactions, all on the basis of opaque risk levels. This ultimately brought the global financial system to the brink of collapse. Not surprisingly, the need to update and strengthen regulatory oversight of derivatives markets has emerged as one of the key themes in post-crisis financial regulatory reform.

Historically, prudential regulation and securities regulation have operated in separate spheres within Canada, with arguably the majority of the effective regulation being at the provincial level. The financial crisis, and particularly the causes of the crisis, highlight that a complete separation between these two areas of law is no longer tenable and that stronger regulation at the federal level to mitigate systemic risk is imperative. Derivatives, whether standardized or OTC, give rise to concerns relating to both securities law, with respect to disclosure, and prudential regulation, with respect to the spread of national and international systemic risk. A legal regime in which regulators in each sphere are uncoordinated or under-empowered will be unable to anticipate and respond comprehensively to systemic risks stemming from the trading of derivatives.

The mitigation of systemic risk is the foundation of much of the post-crisis derivatives-focussed regulation. An analysis of the role of derivatives in the financial crises shows that credit derivatives in particular are of substantially greater concern in this regard⁴¹³ and accordingly, the new rules on derivatives must not paint with too broad a brush⁴¹⁴ in either treating all derivatives, or the types of institutions that trade them, equally.

Large financial institutions that enter into derivative transactions in sequence with each other have the resources and sophistication to ensure adequate disclosure but history has shown that the incentives

⁴¹³ Stout, *supra* Note 64.

⁴¹⁴ Gerding, *supra* Note 80 at p.2.

they receive to leverage their capital investments means they cannot be trusted to self-regulate with respect to risk management in this area. Regulations targeting capital requirements and disclosure for centrally cleared derivatives are therefore clearly beneficial.

While it seems a practical impossibility to regulate by the motive for entering into a derivative contract, whether it be hedging, speculation or some combination thereof, targeting derivatives as a specific product class, with exemptions based on the sophistication of the participant, is a necessary regulatory strategy.

There are strong public policy reasons, as well as support from the Supreme Court, to monitor and regulate systemic risk on a national level. Financial systems are globally interconnected. Not only is it impractical to regulate our country's financial system at the provincial level, but the degree to which transnational coordination is required to regulate financial players who structure their operations globally, for tax, efficiency and other reasons, requires international coordination of regulatory oversight.⁴¹⁵ For Canada to be a responsible and responsive global actor in the mitigation of systemic risk, both nationally and internationally, requires effective monitoring and regulatory muscle at the national level.

The overlap between different policy areas is one of the major challenges to the design of effective governance arrangements. Sharing responsibility for instruments that can be used for multiple policy objectives is further complicated in Canada by the longstanding feud between provincial and federal governments over control of securities regulation. Ensuring minimal overlap in new legislation is key to avoiding constitutional challenges.

A key nexus in managing systemic risk is where sophisticated financial products enter the retail economy. Investor sophistication as a regulatory trigger is an important tool in this regard. Disclosure should be triggered at thresholds of sophistication. While disclosure and its key benefit of transparency are valuable regulatory objectives, regulation of derivatives should not seek to eliminate or even hamstring powerful hedging, speculation and leverage tools by overly limiting the ability to seek exposure to risk. Rather, new regulation should seek to increase the transparency of the real exposure faced by the firms that use these tools.

⁴¹⁵ Janis Sarra, "Risk Management, Responsive Regulation, and Oversight of Structured Financial Product Markets" (2014) UBC L Rev 779-834.

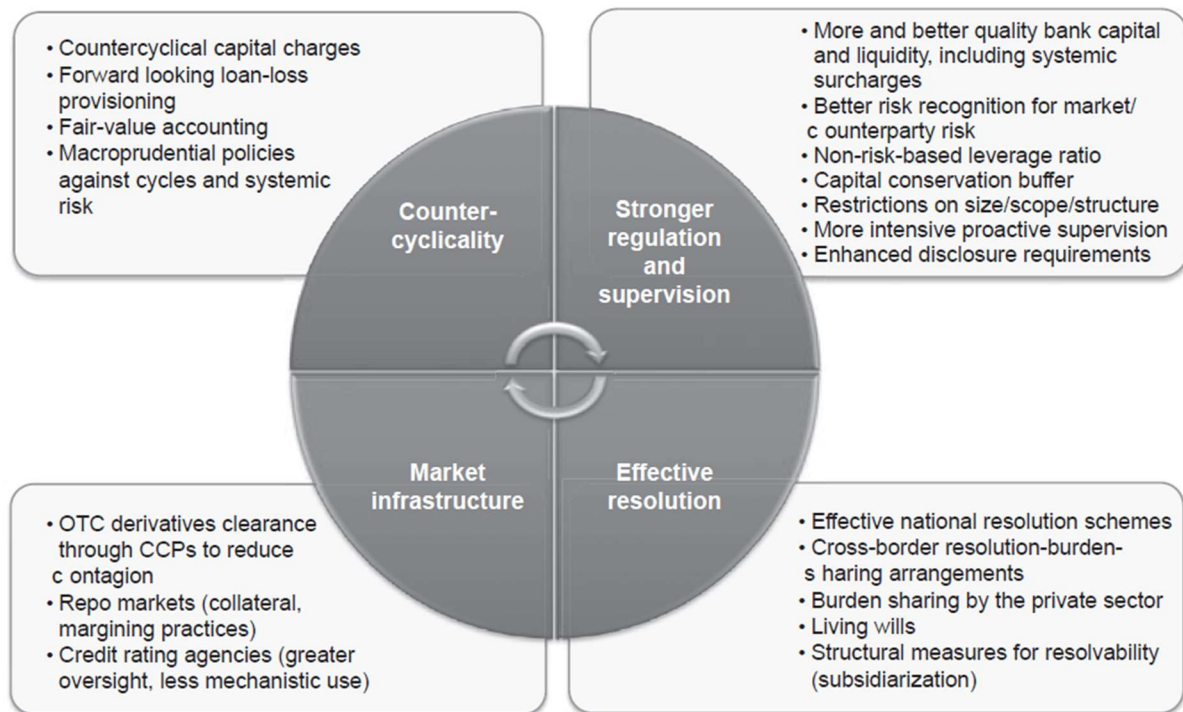
In addition, beyond trade reporting data, a national regulator needs to monitor the market as a whole, being vigilant for bubbles within sectors as early warnings of risk accumulation and a potential lack of transparency. Lack of transparency leads to underpriced risk and underpriced credit, which in turn leads to asset price inflation which in turn leads to further expansion of underpriced credit and the resulting systemic risk.⁴¹⁶

Simple rules based solutions like margin requirements and central clearing will be insufficient to guard against the next crisis. Canada needs coordinated regulation at the national and provincial levels with regulators who “participate actively and skeptically”⁴¹⁷ in both managing the day-to-day operations of securities markets and guarding against systemic risk.

⁴¹⁶ Pavlov and Wachter *supra* Note 173.

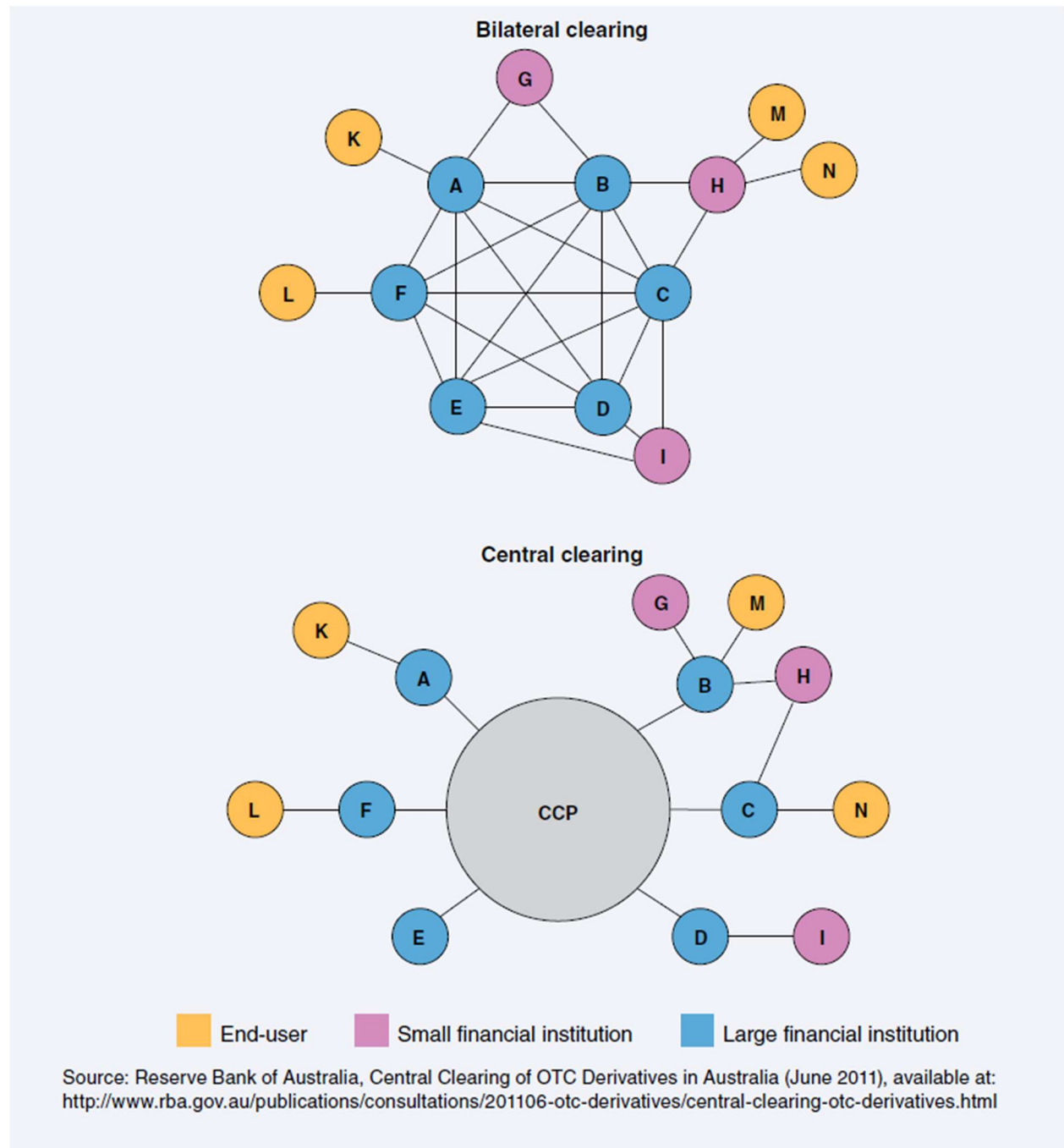
⁴¹⁷ Cristie Ford, “Principles-Based Securities Regulation in the Wake of the Global Financial Crisis” (July 2010) 55 McGill L.J. 257.

Figure 1 - Financial Reform Proposals in the Aftermath of the Global Crisis



Source: Building a More Resilient Financial Sector, editors Aditya Narain, İnci Ötöker-Robe, and Ceyla Pazarbasioglu, (2012) International Monetary Fund at p.3.

Figure 2 – OTC Derivatives Counterparty Relationships



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Appendix 1 - OTC Derivatives Listed for Mandatory Clearing under the Clearing Rule

Interest Rate Swaps

Type	Floating Index	Settlement Currency	Maturity	Settlement Currency Type	Optionality	Notional Type
Fixed-to-float	CDOR	CAD	28 days to 30 years	Single currency	No	Constant or variable
Fixed-to-float	LIBOR	USD	28 days to 50 years	Single currency	No	Constant or variable
Fixed-to-float	EURIBOR	EUR	28 days to 50 years	Single currency	No	Constant or variable
Fixed-to-float	LIBOR	GBP	28 days to 50 years	Single currency	No	Constant or variable
Basis	LIBOR	USD	28 days to 50 years	Single currency	No	Constant or variable
Basis	EURIBOR	EUR	28 days to 50 years	Single currency	No	Constant or variable
Basis	LIBOR	GBP	28 days to 50 years	Single currency	No	Constant or variable
Overnight index swap	CORRA	CAD	7 days to 2 years	Single currency	No	Constant or variable
Overnight index swap	FedFunds	USD	7 days to 3 years	Single currency	No	Constant or variable
Overnight index swap	EONIA	EUR	7 days to 3 years	Single currency	No	Constant or variable

Overnight index swap	SONIA	GBP	7 days to 3 years	Single currency	No	Constant or variable
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Forward Rate Agreements

Type	Floating Index	Settlement Currency	Maturity	Settlement Currency Type	Optionality	Notional Type
Forward rate agreement	LIBOR	USD	3 days to 3 years	Single currency	No	Constant or variable
Forward rate agreement	EURIBOR	EUR	3 days to 3 years	Single currency	No	Constant or variable
Forward rate agreement	LIBOR	GBP	3 days to 3 years	Single currency	No	Constant or variable