

IN THE SUPREME COURT OF CANADA

IN THE MATTER OF Section 53 of the *Supreme Court Act*, R.S.C. 1985, c. S-26;

AND IN THE MATTER OF a Reference by the Governor in Council concerning the proposed Canadian *Securities Act*, as set out in Order in Council P.C. 2010-667, dated May 26, 2010

CANADA'S PROPOSED RECORD**VOLUME 1****EXPERT REPORTS**

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3.	Affidavit of Stephen White sworn May 21, 2010

The Impact of Innovation and Evolution on the Regulation of Capital Markets

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Frank Milne is the Bank of Montreal Professor of Economics and Finance in the Economics Department of Queen's University with a joint appointment in the Queen's School of Business. Before joining Queen's University in 1991, he was a Reader in Economics at the Australian National University in Canberra. During his career, he has been a visitor at Stanford University, University of Chicago, Carnegie-Mellon University, New York University, London Business School, Paris University, The University of Mannheim, University of Heidelberg and many other universities around the world.

Professor Milne has taught a number of graduate courses in the Queen's Economics Department including Finance and Asset Pricing Theory, Financial Derivatives, Financial Risk Management, Corporate Finance, and Modern Banking and Financial Institution Theory. In recent years he has run PhD workshops on a number of current topics, including Financial Stability Models, Liquidity Models, and The Theory of Herding.

Since 2001 Milne has been an annual visitor to the Bank of England, discussing financial stability with senior members of the financial stability section of the Bank. In 2005, he was invited by the Bank of England to teach an intensive risk management course to members of the financial stability section.

From September 2008 until June 2009, Milne was a Special Advisor to the Bank of Canada. During this time he advised the Bank on the 2007 financial crisis, and led a workshop for researchers on recent theoretical models in financial stability.

For many years Milne has acted as a consultant on financial and economic policy matters for various Federal government departments in Australia and Canada.

Milne is an Associate Editor of *Mathematical Finance*, a founding member of the Bachelier Society and an Associate Editor of *Annals of Finance*. He has published extensively in leading international economics and finance journals, and has published a monograph titled *Finance Theory and Asset Pricing Theory* (Oxford University Press, 1995 and 2003). He was co-editor with Edwin Neave of *Current Directions in Financial Regulation* (The John Deutsch Policy Forum Series: Queen's University, 2005).

Milne's current research projects include Canadian banking stability and public policy, financial liquidity modelling, credit modelling, strategic asset pricing and security market manipulation.

Milne is a graduate of Monash University and the Australian National University.

The Impact of Innovation and Evolution on the Regulation of Capital Markets

1. Introduction

1.1. This paper provides an account of the evolution of Canadian securities markets¹ with an emphasis on four main types of securities: equities, bonds, derivatives² and traded credit securities. This paper discusses credit securities as a separate class because their widespread use is a more recent innovation and the issuance and trading of such securities played a key role in the 2007 financial crisis. The paper explores the evolution of each major market, explaining the common forces driving innovation and evolution that in turn drive an increasingly complex and integrated set of securities markets. Securities regulation, to be effective, must adjust to this evolution and innovation.

1.2. The account provided in this paper supports the following key conclusions:

- Most Canadians are investors in securities markets, either directly (that is, through purchasing individual stocks or bonds) or indirectly (investing in pools of investments through mutual funds, pension funds and other investment products).
- National securities markets are linked and operate on the international level.

¹ This paper focuses on the markets for those assets conventionally referred to as “securities”, such as shares in corporations, interests in partnerships, bonds and derivatives. This paper does not express any views on the types of instruments that are, or should be, included in the definition of “security” for regulatory purposes. The term “securities markets” refers to the markets that exist to allow investors to buy and sell securities, and will, for economy of expression, include the markets for derivatives. In this paper, the term “capital market” refers to the universe of all investment products, whether or not those products are securities. The term “financial markets” as used in this paper refers to the broadest concept of financial activity, including insurance and banking.

² A derivative is, in the simplest terms, a financial contract with a payoff to the holder that is determined by (“derived” from) the future value of an underlying asset. Derivative securities are explained in Part 8 below.

- Securities markets have always evolved quickly, and typically more quickly than the regulation of those markets can adapt.
- There has been an increase in the sophistication and complexity of the instruments traded in primary and secondary securities markets.
- The lines between traditional categories of financial activity – such as banking, insurance and capital markets – are blurring and becoming less meaningful to market participants.
- Similarly, the traditional distinctions between classes of instruments – such as equity and debt and credit – have blurred, as in the case of securitization.³
- Crises have illustrated the deficiencies in many areas of securities regulation in the face of this evolution and increasing complexity, including reliance on the notion that the activity of “sophisticated” investors requires less regulatory oversight.
- Banking, insurance, securities and other financial market regulation must be better coordinated to be effective as traditional boundaries between these activities deteriorate.
- Given the international and interconnected nature of financial markets, international cooperation is necessary to regulate effectively, particularly because of the risk that one country’s problems quickly will be shared by others.

³ Securitization is a central concept in the 2007 financial crisis, and is explained in detail in paragraph 9.5 and Section 10 of this paper. Briefly, securitization is the process whereby loans originated by banks or other financial institutions are packaged and sold in securities markets (thereby “securitizing” the debt).

1.3. This paper provides detailed accounts of two events in securities markets that illustrate these developments. First, the 2007 international financial crisis, which developed out of the credit and real estate boom in the U.S., U.K, and other countries in the early part of the decade. This event should be seen as a case study in the role of financial innovation promoting over-enthusiastic use of new financial securities, speculation, lack of prudence, and fraudulent and corrupt practices of various forms. The 2007 financial crisis also has an important international aspect. Specifically, while real estate and other security returns were based on the value of assets in different parts of the U.S., these same assets, through various packaging processes, were traded and held by investors around the world.

1.4. Second, the Canadian Asset-Backed Commercial Paper (“ABCP”) crisis is a case study in risky financial innovation. The causes and symptoms of the Canadian ABCP crisis were very similar to the U.S. and U.K. experiences, so serious lessons should be drawn from this Canadian case.

1.5. As a general observation, securities regulation goes through cycles. In a boom, investors may not be aware of financial malpractice and incompetence that is masked by rising market prices. When a crash results in serious and widespread losses, malpractice and abuses become apparent as defaults and bankruptcy proceedings reveal the inner workings of firms, trades, violated contracts, etc. Some problems may have occurred due to inadequate regulatory statutes or enforcement; other problems may be the unwitting by-products of innovations that have unintended consequences; others may have resulted where clever innovations introduced by promoters, exploiting narrow interpretations of the law, disguised risks or liabilities to the detriment of investors. This is by no means an exhaustive list of the problems that appear after a

financial crisis, but what they have in common is the ability to highlight shortcomings in a regulatory regime.

2. An Overview of Securities and Securities Markets

2.1. Individuals preserve and seek to accumulate wealth by buying and selling various classes of assets. They hold cash, deposits in banks, shares in companies, pension funds associated with their employment, houses, cars, artwork, and many other types of assets.⁴ This paper focuses narrowly on those assets conventionally referred to as “securities”, such as shares in corporations, interests in partnerships, debt instruments like bonds, and financial derivatives. The stock of such securities at the end of 2009 in Canada stood at approximately \$4.1 trillion, up from \$2.4 trillion in 2000.⁵

2.2. Securities markets have two basic functions in the process of channelling savings to investments: to allow demanders of investment capital (“issuers”) to receive investment capital from suppliers of capital (“investors”) in exchange for a security, and to allow investors to trade securities with other investors.

2.3. The first function is performed through the “primary” market, in which issuers interact directly or indirectly with investors. For example, corporations issue shares or debt instruments to investors in the primary market. Governments issue debt instruments like savings bonds to investors in the primary market. Often, an intermediary like an investment bank stands between the issuer and the investor (that is, the issuer sells to the investment bank, which in turn sells to

⁴ The table in Appendix 1 provides details on Canada’s national balance sheet in respect of financial and non-financial assets and liabilities. [Attach Appendix 1 from Finance Paper]

⁵ Statistics Canada, *National Balance Sheet Accounts*. Catalogue no. 13-022-XWE (Vol. 2, No. 4, Fourth quarter 2009).

the investor.) The major foci of regulation in the primary market are the timeliness and completeness of information disclosure by the issuer, and the integrity of the process through which intermediaries sell such securities to investors.

2.4. The second function is performed through the “secondary” market. Secondary markets are of two basic types. The first type of secondary market is an organized public market that investors may access and that provides transparent public information about prices and trading activity. Stock exchanges, like the Toronto Stock Exchange, are a familiar example where securities are traded at prices that the public can access through various media. The second type of secondary market is an “over-the-counter” (“OTC”) market, which is an informal market where investors trade securities less frequently (such as companies whose shares are traded infrequently), or where a small number of large and “sophisticated” (in terms of internal investment knowledge and/or access to expert investment advice) investors trade among themselves in a less formal and less transparent process.

2.5. The major focus of regulation in the secondary market is the integrity of the trading process, and the integrity of the advice that intermediaries provide to investors. Both public and OTC markets are subject to oversight and regulation. Regulation in the OTC market is generally less intensive, as regulators rely to a greater extent on a form of self-regulation in which sophisticated investors enter into repeated trades with each other, so that any sharp practices, or attempts to defraud other traders, induce retaliatory action in future dealings. This method of self-regulation is far from perfect, but it does create some discipline in these OTC markets that is not possible in public markets where transactions are largely anonymous.

2.6. There is a continuum of sophistication in financial markets: at one extreme there are large international investment banks and institutional investors, and at the other extreme are unsophisticated retail investors, relying on investment advice (should they choose to use it), their wits and publicly available information to make investment decisions. This latter unsophisticated group often invests by delegating their investment decisions to investment advisors (to a greater or lesser extent, depending on the type of account), or to pension or mutual funds, which employ professionals and complex trading strategies. Table 1 provides an overview of the wide range of participants in modern securities markets.

Table 1: Overview of Securities Market Participants

Issuers Business Corporations Financial Corporations Federal Government Provincial Governments Municipal Governments Public Institutions (universities, schools, hospitals) Non-profit Organizations	Investors Individuals Business Corporations Financial Corporations Institutional Investors: - Mutual Funds - Pension Funds - Insurance Companies - Venture Capital
Market Intermediaries/Facilitators Investment Dealers Investment Advisors Asset Managers Portfolio Managers and Investment Counsel Mutual Fund Dealers	Market Infrastructure Exchanges and Alternative Trading Systems Clearing and Settlement Depository Payments

2.7. Securities markets have displayed a long history of innovation. Among the financial instruments traded in securities markets, some (such as stocks and bonds) have long histories, being traded since the sixteenth century (or even earlier), whereas others are more recent innovations (such as many types of financial derivatives).⁶

⁶ For an excellent summary of the history and evolution of the myriad types of securities and their markets, see Allen and Gale (1994) chapter 2.

2.8. The pace of this evolution has increased dramatically since the late 1960s. There has been a large increase in the various types of derivative and related securities. Important innovations in the theory, pricing and hedging⁷ of such securities allow traders to use complex formulae to estimate prices and reduce risks by bundling related securities. The rapid increase in the application of technology to trading complicated securities by gathering and analysing large data sets in order to implement intricate trading strategies implies a degree of sophistication unheard of four decades ago.

2.9. Securities markets have also displayed a long history of recurring crises, increasingly tied to these and other forces discussed in this paper. In his canonical work *Manias, Panics and Crashes*, Charles Kindleberger argued that “the immense scope of the financial crashes in the last thirty years reflects in part that there are many more countries in the international financial economy and in part that data collection is more comprehensive. Despite the lack of perfect comparability across different time periods, the conclusion is unmistakable that financial failure has been more extensive and pervasive in the last thirty years than in any previous period.”⁸ Although the most recent edition of Kindleberger’s book was published in 2005, he accurately predicted one of the principal contributing factors to the 2007 crisis: “the cycle of manias and panics results from the pro-cyclical changes in the supply of credit; the credit supply increases relatively rapidly in good times, and then when economic growth slackens, the rate of growth of credit has often declined sharply.”⁹

⁷ A hedge is a position established in one market that seeks to reduce risk by offsetting exposure to price fluctuations in another market.

⁸ Kindleberger (2005), p. 7.

⁹ Kindleberger (2005), p. 12.

3. National and International Financial Markets

3.1. The Canadian economy depends on open free movement of capital in open markets.

Another dimension in the growing sophistication of securities markets is the rise of national and international capital markets. This section of the paper outlines the growth of Canada's national securities markets, and reliance on capital flows in international markets.

3.2. In the first part of the twentieth century, most countries had public or OTC markets in major cities where investors traded the securities of local or very large national issuers. The reason for this "home bias" was the challenge investors faced in obtaining information concerning more distant issuers and in transacting on distant markets. But since the second half of the twentieth century, computerization, cheap communication of large amounts of data, and the availability of sophisticated analysis and qualitative information have allowed investors and firms to trade nationally and internationally. As national and international primary and secondary markets have developed, intermediaries and financial institutions have grown in size and sophistication, requiring international presence in major centres. Trading venues requiring physical presence have largely vanished, being replaced by electronic systems where investors and traders can be located anywhere and yet trade through communications networks. Local securities markets have shrunk in relative size and, in many cases, disappeared, as the large national markets have attracted firms, investors and trading.

3.3. A quick survey of issuers listed on the Toronto Stock Exchange ("TSX") and TSX Venture Exchange ("TSXV") suggests that majority of the public capital markets activity by Canadian firms is increasingly being carried out on a trans-provincial and transnational basis. For example, there were approximately 50 newly-listed issuers on the TSX in the preceding 12

months (excluding exchange-traded funds), and all except three of these issuers were reporting issuers in multiple jurisdictions¹⁰ (the three exceptions were international resource-based issuers that opted to report in one jurisdiction in Canada).

3.4. The group of securities covered by the S&P/TSX Composite Index, comprising over 200 constituents, covers approximately 95% of the market capitalization of Canada's equity market.¹¹ The S&P/TSX 60 comprises the 60 largest securities on the TSX (in terms of market capitalization) and accounts for over 70% of the market capitalization of Canada's equity markets.¹² It can be safely assumed that most, if not all, of the constituents of the two indices carry out their capital market activities on a trans-provincial basis.

3.5. The general remarks above are supported by empirical evidence provided by the Wise Persons' Committee (2003) and the more recent observations by Nicholls (2006) and the Crawford Panel (2008):

- The bulk of the capital market activity by Canadian firms is inter-provincial and international: a May 2002 survey reported that two-thirds of the approximately 7,600 reporting issuers in Canada were reporting issuers in more than one jurisdiction, and 31% of the issuers listed on the TSX and TSXV were reporting issuers in all ten provincial jurisdictions¹³ A survey of 298 prospectuses of public offerings by small- and medium-sized enterprises ("SMEs") between 2002 and 2006 revealed that only seven firms raised capital primarily in their home province, despite the small size of

¹⁰ The listing of new issuers and initial public offerings on www.tmx.com from April 1, 2009 to March 31, 2010 was verified against the SEDAR database of regulatory filings.

¹¹ Index information sheet available on www.standardandpoors.com.

¹² Ibid.

¹³ Wise Persons Committee (2003), p. 5.

these SME offerings and the traditional claim that such issuers primarily raise capital locally. One-quarter of the SME issuers in the sample raised capital in 10 or more provincial and territorial jurisdictions.¹⁴

- The vast majority of the 1,956 mutual funds offered for sale in Canada at the end of 2009 were offered for sale in all provinces and held by investors across the country.¹⁵

3.6. Registered firms operating in the securities market in Canada generally operate on a trans-provincial, if not national basis. There are more than 3000 active firms registered under the National Registration Database; of these, approximately 80% are registered in more than one provincial or territorial jurisdiction.¹⁶

3.7. International capital flows have also increased. Financial markets in the post-Second World War era were constrained by currency and banking controls that had been imposed by the financial stresses of the Great Depression and the Second World War. From the late 1960s onwards there were increasing reforms to allow international capital flows.

3.8. Table 2 shows that 2009 ended with an all-time high level of foreign investment by Canadian investors of \$109.4 billion. Foreign investment in Canadian securities continued to increase as well, with debt instruments attracting the bulk of the inflow of funds.

Table 2: Foreign and Canadian portfolio investment (millions of dollars)¹⁷

	Foreign investment in Canadian	Canadian investment in foreign
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¹⁴ Crawford Panel (2008), p. 13.

¹⁵ Wise Persons Committee (2003), p. 5.

¹⁶ Data hand collected from <http://www.securities-administrators.ca/nrs/nrsearch.aspx?id=850>.

¹⁷ Statistics Canada, *Canada's International Transaction in Securities* (Catalogue no. 67-001-X. Vol. 57, No. 4, Fourth quarter 2009).

	securities			securities		
	Bonds	Stock	Money Market Instruments	Bonds	Stocks	Money Market Instruments
2005	3,481	9,133	522	-29,488	-21,878	NA
2006	16,863	10,814	3,711	-43,761	-28,107	NA
2007	11,548	-41,994	-1,143	-28,902	-30,946	NA
2008	15,179	2,746	11,132	16,354	-7,914	NA
2009	82,500	26,202	665	9,030	-15,850	NA

3.9. A significant number of Canadian-based issuers raise equity capital outside of Canada. At the end of 2008, there were 193 issuers inter-listed on a U.S. exchange, including most of the 60 largest issuers listed on the TSX. At last count, both U.S. trading value and trading volume of inter-listed Canadian-based issuers accounted for more than half of the total traded amount for such issuers.¹⁸

3.10. Cross-border flows and holdings in other countries have also increased substantially. For example, in 2005 12 % of U.S. equities, 25% of U.S. corporate bonds and 44% of U.S. Treasury securities were foreign owned. In 1975 the percentages were 4%, 1% and 20% respectively.

3.11. To give an indication of the growth of financial markets and their composition, we make some observations based on reports from McKinsey & Company:¹⁹

- The size of global capital markets (in which McKinsey & Company includes the total of market values of equity markets, private and public debt securities, and bank deposits, representing the capital that is intermediated through the securities and banking system in all economies) has grown dramatically over the last three decades.

¹⁸ *Toronto Stock Exchange Review* – February 2010.

¹⁹ These observations and data are taken directly from reports by McKinsey and Company (2005), pp. 38-9 and McKinsey and Company (2008), pp. 8-13. Calculations are in terms of constant U.S. dollars, and reflect exchange rate changes and inflation.

In 1980, this value was \$12 trillion; by 1993 it had risen to \$53 trillion and by 2003 to \$118 trillion. By 2007, just before the crisis, this value was \$196 trillion. This growth since 1980 has easily outpaced the growth in world Gross Domestic Product (“GDP”).²⁰

- The composition of these markets has changed over this period. Private debt securities are now the largest asset class, growing faster than equity securities and bank deposits.
- Until the 2007 crisis, government debt had been the smallest component of these markets and had grown the most slowly since 1993. Since the 2007 crisis there has been a rapid increase in government debt as many governments have intervened to support their financial systems and economies.
- There is considerable variation across countries depending on their stage of development, government debt issuance, etc. For example, during the late 1990s and up until the 2007 crisis, Canadian federal debt shrank as the federal government ran surpluses. Over the same period, the U.S. federal government ran up debt to fund deficits resulting from the war in Iraq, increased expenditure on national security and political reluctance to raise taxes to pay for this increased spending.

3.12. We can draw some lessons from these observations. First, the growth in the size of the markets aggregated by McKinsey & Company has come primarily from the growth of private

²⁰ GDP is the measure of a country's overall economic output, calculated as the market value of all final goods and services made within the borders of a country in a year.

debt. This has been reflected in the changing composition of these markets, as savers moved away from bank deposits toward other forms of debt, particularly securitized²¹ debt.

3.13. Another aspect of the growth of international finance has been the entry of foreign banks and securities dealers into domestic financial markets. To service cross border flows, international banks²² have set up operations in major financial centres. This has allowed them to tap domestic savings and lending; and offer domestic savers and lenders foreign opportunities for borrowing and lending in an increasing array of financial securities.

3.14. The ordinary investor has become less important in securities markets as individual investors increasingly invest through collective investment schemes like pension funds, mutual funds, hedge funds and other investment vehicles. As we observed earlier, such collective investment vehicles hold diversified portfolios of domestic and international equity and debt securities. While the individual investor therefore gains the advantage of greater diversification, he or she is also exposed to international financial shocks. It was this mechanism that transmitted the contagion of the 2007 crisis around the world.

4. Financial Markets, Modern Finance Theory and Financial Innovation

4.1. This section outlines the interaction of finance theory, securities markets and the regulation of securities markets. Advances in finance theory have been translated into increasingly complex financial instruments, creating challenges for securities and other financial services regulators, as well as for the systems of private ordering (contracts and conventions) that

²¹ Securitization is explained in Paragraph 10.2 below.

²² I will blur the distinction between a securities dealer (e.g. Goldman Sachs until recently) and the more traditional commercial banks (e.g. Bank of Montreal). Many large commercial banks operate security dealer operations; and since the crisis, large U.S. dealers have become banks.

apply in financial markets. Some of these advances have created the potential for “regulatory arbitrage”, in which financial actors structure instruments and transactions to avoid regulatory regimes they consider unduly onerous or invasive and to fall under the jurisdiction of regimes they consider more accommodating. As a result, coordination among financial services regulators in banking, insurance and securities, nationally and internationally, has never been more important.

4.2. Finance theory has interacted profoundly with securities markets. In many disciplines, theory develops as an attempt to systematize existing empirical observations. In the more sophisticated scientific disciplines, theory may speculate about regularities, suggesting novel empirical exploration.²³ But in modern finance theory, theory and human behaviour have interacted in a complex manner over the last forty years. New securities have been introduced, traded, priced and hedged, according to novel financial and mathematical models. In turn, new investment ideas developed by market professionals have stimulated research into methods to price and hedge these new instruments. This interaction has had a profound impact on the evolution of financial markets and institutions, as new markets and institutions have developed rapidly, while older markets and institutions have been partially replaced and/or contracted in relative terms.²⁴

4.3. Some of these innovations have brought benefits to investors by facilitating diversification, and therefore the reduction of investment risk, across regions and markets. But as with any new innovation there have been unintended and unwelcome side effects.

²³ Einstein's Theory of Relativity is a classic example of this type of speculative theory.

²⁴ See MacKenzie (2008) for a detailed discussion of this argument.

4.4. Any discussion of securities markets, trading and regulation cannot avoid understanding the complexities and potential traps that lie in investment decision-making by investors. An investor may suffer losses due to bad luck, poor analysis by the investor, incompetence on the part of the issuer, or the investor may be the victim of a complex security designed by a clever issuer to disguise the true risks inherent in the investment.

4.5. These innovations have also created new challenges for financial and securities regulation. Older definitions, boundaries and distinctions have become blurred or made obsolete. Regulatory schemes that were developed in the context of regional and traditional capital markets have been strained to the limit by international trading in new and complex securities that transcend traditional markets. Regulatory regimes based on traditional dividing lines between banking, securities and insurance have also been strained, to the extent such dividing lines were meaningful: the federal banks have historically played an active role in the capital markets, and investment dealers owned by the banks dominate the securities market.

4.6. The mutual fund industry is highly concentrated, with the top 10 firms accounting for 77% of total industry assets (as shown in Table 3). The five largest banks are significant players in the industry. Bank-sponsored funds represented 41% of total industry assets in January 2010.

Table 3: Mutual Fund Net Assets – January 2010 (\$000,000s)²⁵

Company	Assets
RBC	\$99,602
IGM Financial Inc	\$97,717
TD Asset Management	\$54,439
CIBC Asset Management	\$44,756
Fidelity Investment Canada ULC	\$42,597
BMO financial Group	\$34,331
Invesco Trimark Ltd	\$28,549

²⁵ IFIC, Mutual Fund AUM and Net Sales by Primary Investment Management Role (January 2010)

Dynamic Funds	\$24,587
AGF Investment Inc.	\$21,897
Scotia Securities	\$21,845
Industry Total	\$584,579

4.7. Traditional banking practices in Canada and abroad changed dramatically in the last two decades. These practices evolved from a simple process where loans were (largely) funded by deposits, to the securitization process, in which loans originated by banks or other financial institutions are packaged and sold in securities markets (thereby “securitizing” the debt). Similarly, in traditional banking, loans were held and serviced by the bank that issued the loan. Government oversight and deposit insurance schemes were designed to create stability in the banking system and reduce the risk and impact of bank mismanagement or fraud. The securitization of their loans allowed banks to package house, car and other loans together and then sell these packages of loans to investors as securities. This innovation was said to allow banks to sell credit risks (that they used to hold on their books) to other investors seeking to diversify their own credit risks.

4.8. As we will see in more detail below, this system had a series of dangerous flaws. The first flaw was that banks were able to engage in regulatory arbitrage and avoid banking regulators by transferring traditional bank credit risks to securities markets. Securities regulators did not have the regulatory competence or resources to deal adequately with these financial instruments. Given the embedded complexity of these products, many supposedly “sophisticated” investors in securities markets did not, in fact, understand the risks involved in holding these securities. Finally, any valuation of these types of securities requires a careful analysis of their future cash flows and risks, making valuation analysis complex and problematic even for highly skilled professionals.

4.9. The fundamental idea underlying modern finance theory is that the value of any traded asset is the expected stream of future cash flows, which in turn requires the analyst to make assumptions about future risks. In trying to estimate a future, risky cash flow, professionals can break up these future risks into different packages or “factors”. For example, one factor is the general risk that the future cash flows of a business will change as the economy grows or declines. Others would include movements in the Canadian/U.S. exchange rate and changes in general credit conditions. The value of an existing security can therefore be determined by the sum of the values of these various factors.²⁶

4.10. This approach to risk also makes it possible to create new securities by putting together the factors in different arrangements or packages, working out the price of the new, synthetic security as the value of the constituent factors in the package. There are endless permutations that can be invented to construct “synthetic” securities in this fashion. As we will see below, financial innovation exploited this approach to construct new securities and new markets, leading ultimately to the rapid expansion in the market for credit risks – and then to the 2007 crisis.

5. The Impact of Financial Market Evolution on Regulatory Structure

5.1. Since the creation of the Securities and Exchange Commission in the U.S. in the 1930s, and the formation of banking and insurance regulators, other countries have copied this tripartite regulatory structure (separate regulators for securities, banking and insurance), varying the details but not the overall thrust of the ideas.²⁷ Since the onset of the 2007 crisis, the analysis of

²⁶ This is a greatly simplified explanation of a complex theory; but it cuts to the intuitive heart of the argument. See Milne (2003) for a detailed analysis.

²⁷ See Davies and Green (2008) pp. 3-6.

its causes and the recognition of the fundamental changes described above have led to calls for more fundamental reforms.

5.2. The divide between banking, credit and securities markets have blurred to such an extent that those responsible for prudential regulation (ensuring the safety of depositors' funds by limiting risk-taking by banks and promoting the stability of the financial system as a whole) have been unable to regulate banking activities fully, internationally and to a lesser extent in Canada. Securities regulators have also faced challenges. Certain schemes permitted sophisticated investors to purchase complex credit securities under exemptions from prospectus requirements, even though many of these supposedly sophisticated investors were unable to understand the risks involved. Again, regulators had authority to deal with only parts of the puzzle and regulatory bodies within and between countries lacked sufficient coordination to avoid growing risks in the system. Most countries have suffered various degrees of financial regulatory failure, stemming from similar regulatory systems, and widespread international financial trading and intermediation. As a consequence, there have been serious discussions for international coordination of national regulatory reform.

6. Equity Markets and the Evolution of Stock Exchanges

6.1. This section explores the history of stock exchanges, explaining their role, and the forces driving their evolution. The evolution of Canadian stock markets, and the consolidation of Canadian stock exchanges since 1999, are examples of more general international trends towards national and international (as opposed to local) markets facilitated by advances in technology.

A Brief History of Stock Exchanges

6.2. Stock exchanges date from the sixteenth century. Their role was simple: they provided an organized secondary market for existing shareholders to trade shares in joint stock companies and an organization to facilitate primary market issuances by new or existing companies. As company size increased with the demand for capital in the industrial age, the modern corporation required resources beyond the financial capacities of families and associates. The informal trading mechanisms provided by early stock exchanges were no longer efficient in the face of the resulting decentralization of equity holdings and the increasing demand by shareholders for a secondary market.

6.3. In the nineteenth and early twentieth centuries, formal stock exchanges were opened in many cities around the world. They catered to local investors who wished to trade in the shares of local companies. Although corruption and fraud were always present, local knowledge was an important factor to help mitigate more blatant examples of fraud in the operation of local exchanges. Shareholders were wary of ventures that were geographically or culturally distant. As time progressed, many of these local exchanges went into decline or were merged with larger regional exchanges that provided more effective trading possibilities, higher trading volume and greater liquidity. This process of aggregation and centralization continued through the twentieth century. Faster and cheaper communication networks allowed regional exchanges to compete more effectively and to eliminate smaller exchanges; national exchanges in turn replaced regional exchanges as economies of scale assumed increasing importance. By the end of the last century, technological advances made the physical presence of traders on the trading floor obsolete.

6.4. To complement the technological changes in trading mechanisms, investors have gravitated increasingly to investing in various forms of mutual funds, pension funds, hedge funds and other investment vehicles. The benefits to investors from indirect share holdings derive from low-cost diversification of risks and the possibility of higher average returns after transaction costs: a small investor who tries to diversify across a portfolio of stocks will incur substantial fixed transaction costs to obtain sufficient diversification. The emergence of vehicles such as mutual funds and exchange-traded funds has meant that the small investor can obtain even greater diversification with very low transaction costs.

Factors Leading to the Rise of National and International Stock Exchanges

6.5. From the discussion above, we can see the driving forces for the growth of national and international securities markets. The drivers are largely economies of scale in computer trading platforms, cheap electronic sources of data and information, and the rise of professional investment funds for retail investors and pensioners. These funds have offered international diversification for investors. The forces driving these developments have been aided by reforms in taxation and regulations that have removed impediments to international trading and holding of shares. Many members of public and private pension funds are unaware of where their funds are invested. For example, at the end of December 2009, the Canadian Pension Plan Investment Board held \$17.9 billion in Canadian equities, \$45 billion in foreign developed market equities and \$6.6 billion in foreign emerging markets equities.²⁸ This is by no means an isolated example, but indicative of the internationalization of security markets and asset holdings.

²⁸ CPPIB, *Financial Highlights for the Year Ended March 31*, available at: http://www.cppib.ca/Results/Financial_Highlights/default.html.

6.6. Canadian securities markets have followed the international trends we outlined above as economic forces that were at work elsewhere were also active in Canada. The reason was twofold: first, Canadian financial institutions that bought, sold and held securities were dealing mainly in the national and international markets. In turn, international investors traded Canadian securities to obtain diversification, making Canadian securities markets part of global capital markets. Second, financial innovation was at work domestically within Canada in producing increasingly sophisticated trading, institutional methods and structures. There was increasing direct and indirect participation by Canadians in national and international securities markets.

Canadian Stock Exchanges: National and International Integration

6.7. Canadian stock exchanges recognized that specialization was the most effective response to international competition. Prior to March 1999, there were four stock exchanges in Canada and an equity OTC market. By far the largest was the TSX, followed by the smaller Montreal Exchange, and then the far smaller regional Vancouver and Alberta Stock Exchanges. In 1999, negotiations among these markets resulted in a reorganization in which the TSX became the national stock exchange for the largest capitalization securities, the Montreal Exchange became the national market for derivatives and a new national junior stock exchange (CDNX) became the national market for smaller capitalization securities. The TSX acquired CDNX in 2001, later renaming it the TSX Venture Exchange, and with the 2008 merger of the Montreal Exchange and the TSX Group to form the TMX Group, all three of these national markets (senior equities, junior equities and derivatives) are now consolidated in the TMX Group.^{29 30}

²⁹ In addition to the markets operated by the TMX Group, the Canadian National Stock Exchange is a national stock exchange for very small issuers, and various non-exchange trading venues called "Alternative Trading Systems" provide electronic trading markets for securities listed on the TSX and TSX Venture Exchange.

6.8. Canadian exchanges are internationally integrated. The TMX Group holds an equity interest in the London Stock Exchange's equity derivatives business. The Montreal Exchange holds an ownership stake in the Boston Options Exchange and is responsible for the market operations and technological development of that U.S. exchange. In 2006, the Montreal Exchange and the Chicago Climate Exchange created the Montreal Climate Exchange, a market for contracts on pollutant and greenhouse gas emissions. In 2007, the Intercontinental Commodity Exchange ("ICE"), based in New York, acquired the Winnipeg Commodity Exchange and rebranded it ICE Futures Canada. In 2008, ICE and the Natural Gas Exchange ("NGX"), a wholly-owned subsidiary of the TMX Group, entered into an operational alliance in which ICE provides technology services to NGX and NGX provides clearing services to ICE for certain products traded on ICE.

7. Government Bond, Corporate Bond and Money Markets

7.1. In this section we discuss bonds. The 2007 crisis has emphasized the crucial role of debt securities, both private and public, in financial markets. The major risk associated with a bond is the risk that the issuer will default in the payment of principal and interest. However, issuers may misrepresent, and investors may fail to understand, the default risk associated with such debt.

7.2. A bond is a formalized transferable loan: it has a fixed life with a final (face value) payment, and often intermediate "coupon" payments. The risks – and returns – associated with different types of bonds depend in large part on the issuer of the bond. Government bonds raise

³⁰ According to data compiled by the World Federation of Exchanges, at the end of 2009 the TMX Group was the third largest stock exchange in North America, and the fifth largest stock exchange in the world, by market capitalization. World Federation of Exchanges, Year-to-Date Monthly Statistics, Domestic Market Capitalization (USD), available at: <http://www.world-exchanges.org/statistics/ytd-monthly>.

far fewer regulatory concerns in respect of disclosure and prudential regulation than corporate bonds because they bear less default risk and less potential for fraud. Corporate bonds and borrowing introduce risk relating to default, rating bonds for default and related concerns.

7.3. As Table 4 illustrates, the major classes of instruments traded in the bond market include Government of Canada bonds, corporate bonds and asset-backed securities, and other domestic bonds (issued by provincial or municipal governments or other public institutions). A significant proportion of these instruments are already subject to varying degrees of federal jurisdiction, either because the federal government issues the instrument or because the issuer is federally incorporated (under the Canadian Business Corporations Act (CBCA) or federal financial institution (FI) statutes).

Table 4: Outstanding Bonds Denominated in Canadian Dollars (\$ billions)³¹

	2005	2009
Government of Canada bonds	275.8	355.8
Corporate bonds	253.5	300.5
Other domestic bonds	313.9	375.2
Total	843.2	1,031.5

7.4. Governments at the federal, provincial and municipal levels issue bonds to finance budget deficits or to finance large projects. Because governments are the issuers, and the majority of the principal amount of government bonds are held by sophisticated institutional investors (although government bonds may be and are held by individual investors), the bond market in Canada and other jurisdictions is lightly regulated. Occasionally a government will encounter fiscal difficulties, issuing increasing amounts of government bonds to finance escalating deficits. In extreme cases, this borrowing can become untenable and the government

³¹ Bank of Canada, Banking and Financial Statistics. March 2010, Table K8 Bonds Outstanding: Government of Canada, provincial, municipal, corporate and other bonds.

may default on its bonds, or use monetary policy to inflate the value of the currency in which its debt is denominated and therefore reduce the debt relative to other currencies. The current uncertainty over the government debt in Greece, Spain, Ireland, Italy and Portugal is an example of this type of “sovereign risk”. Bonds issued by these governments will have a risk premium in terms of higher interest rates to compensate holders for possible default risk.³²

7.5. In Canada, major financial institutions, utilities and larger industrial companies are the major issuers of corporate bonds. Corporate bonds are issued as a source of debt financing by corporations, which may have also borrowed from banks so that their bonds are just one source of debt owed by the company, thereby increasing default risk. Because a corporation can go bankrupt, a bond issued by a Canadian corporation that has the same maturity, coupon payments and face value as a Canadian government bond will trade at a discount compared to the government bond. Corporate bonds have traditionally traded in illiquid OTC markets and are typically held to maturity by sophisticated institutional investors.

7.6. Because the causes and consequences of default are complex, corporate bondholders are wary of fraud and mismanagement. To aid bondholders in assessing default risks, credit rating agencies have sold rating services for many decades that assist investors in comparing the default risk of different bonds. Although rating agencies have a useful role in helping to monitor default risks, they came under heavy criticism in the 2007 crisis. We will discuss this issue in more detail below.

7.7. Government and corporate borrowing for terms shorter than one year are denoted “money market” instruments. These financial instruments may have maturities as short as overnight. The

³² In the 1990s Canadian government bonds traded at a discount (i.e. the interest rate was higher) compared to U.S. government bonds, reflecting high Canadian debt and the threat of Quebec separation.

primary and secondary markets for money market instruments are the very active wholesale OTC market. Traditionally, most money market instruments were issued by governments and corporate borrowers, and were held by sophisticated institutional investors. In the last decade, however, another short-term financial instrument market has grown rapidly: ABCP. We will discuss this market in more detail below, because it played a central role in the 2007 crisis.

8. Derivatives on Traded Securities

8.1. One of the first applications of the risk factor approach to constructing and pricing securities (described in Part 4 above) was the introduction in the mid-1970s of the celebrated Black-Scholes-Merton derivative model for valuing stock options. An option is a security whose payoff is a function of the price of another underlying instrument at some time in the future, with a fixed expiry date. A basic example is a call option on a stock that pays off an increasing amount the higher the underlying stock's price is above a threshold (exercise) price. The issuer of the call option (writer) charges an amount to buyers of the option to cover the possibility of a payout. If the underlying stock's price does not reach the exercise price before the option expires, the option is worthless; but if the underlying stock's price is above the exercise price, the writer must pay the holder the contracted amount. Other stock options have more complex payoffs than the simple call, limited only by the ingenuity of the designer.

8.2. The key to pricing and trading these options is to treat them as a risk factor portfolio.³³ If the design is appropriate, the issuer can replicate the option payoff with a degree of accuracy, and hedge the option payoff by taking positions in the market for the underlying instrument to exactly offset this risk. The issuer seeks to protect itself by hedging the factor risks so that its net

³³ The theory is generally more complicated than holding a static portfolio. Sometimes it requires rebalancing of the risk factors over time so that the synthetic portfolio mimics the option's payoff.

payout at expiry is minimized. Indeed, in perfectly liquid markets, the price of the option would be equal to the cost of this bundle of risks. Because markets are not perfect, and the risk factor technology only an approximation, the issuer must make a judgment about how much residual risk it is carrying when issuing the option. The issuing price should reflect those risks.

Competent risk management is designed to control the risk of this type of trading activity.

8.3. An additional risk that the holder of an option must consider is that the issuer may default before the time of expiry. As a result, the holder is exposed to the risk of the option payoff *and* the default risk of the issuer. In the older and more common class of stock options that are traded on exchanges, this risk is largely eliminated by collateral to secure the issuer's obligations, so that the holder is insulated from default by the writer. But more complex derivatives, so-called "exotics", are traded bilaterally on OTC markets and the agents must negotiate terms to deal with counterparty risk (i.e. the risk that the issuer will default before payment).

8.4. From the middle of the 1970s there has been a rapid rise in trading in derivatives based on other instruments or indices (securities, exchange rates, interest rates, stock indices, etc.). There are legitimate reasons why an individual or company may wish to hold a derivative. For example, an oil refinery may wish to reduce the risk on a foreign contract that exposes it to foreign exchange and oil price movements. This can be accomplished by buying fairly simple derivatives from banks that write such contracts to insulate the oil refinery from the foreign exchange and oil price risks. Prudent trading in these basic risks is an effective insurance market that should allow risks to be diversified to the benefit of all.

8.5. But there are other reasons for holding or writing derivatives. An obvious motive is to aid speculation. A simple example of this motive is where a firm or individual predicts that a company's share price will increase in the near future. Rather than buying the shares, they can buy a call option. This is equivalent to buying shares, funded by borrowing. The option strategy offers the benefit of a large capital gain if the share price rises, and no losses (other than the price of the option) if the share falls below the fixed exercise price. Other reasons for buying or writing options are to avoid regulatory constraints or to shift income over time or tax domains to the benefit of companies and individuals.

8.6. In Canada, derivatives exchange markets are regulated both by provincial securities authorities and by the Montreal Exchange's own by-laws (as a self-regulatory organization). In contrast, while many participants in the OTC markets are regulated, OTC derivative markets are not for the most part.

9. Credit Markets

9.1. In the 1980s there was demand for risk factor models that explained the structure and evolution of the yield curve (the relationship between yield to maturities and the respective maturity dates of fixed-income securities) of government interest rates. One of the by-products of this innovation was that it created machinery for writing, pricing and hedging interest rate derivatives. Another major benefit of this innovation allowed companies to insure against interest rate movements. Of course, the other motives for investors holding derivatives, including speculation, avoiding tax and regulatory arbitrage, were playing in the background.

9.2. The models, as applied to government interest rates, assumed that governments of developed economies were immune to default (sovereign) risk. But there is an obvious incentive

to use the risk factor approach to include default risk in explaining the prices of corporate bonds. Thus, corporate bonds of a particular credit rating are usually priced lower than comparable bonds of the same duration in a higher-rated credit class. The more risky the corporate bond, the lower the price.

9.3. But as we progress over time, we can see from the data that the yield curve for government bonds moves around. The graph may bounce up and down and/or exhibit subtle twists as short and long rates move (semi-) independently. The yield curve for a particular corporate risk class will mimic the government yield curve movements, but with interest higher rates because of the greater risk of default. If the economy deteriorates, default risks increase and the corporate yield curve for any class can exhibit additional upward movement as the market anticipates increasing probability and severity of default for any corporate security.

9.4. Using the risk factor approach one can evaluate corporate bond risks according to government interest rate risk factors, and default risk factors. Using the risk factor logic it is possible to price, hedge and replicate the payoff of a derivative written on a corporate bond. Indeed, this technique (in principle) allows one to isolate default risk on any company and price this risk. As the 1990s and the 21st century progressed, this technique was implemented in the rapidly growing market for the trading of credit instruments.

9.5. Utilizing the risk factor approach, other possibilities appeared. Instead of commercial banks gathering deposits, and then lending the funds for house mortgages, car loans, commercial real estate, etc., financiers envisioned a parallel market for credit. The idea was that loans arranged through mortgage brokers, banks and other financial institutions could then be packaged into portfolios. Using the risk factor framework, one could break up the returns on the

portfolio into slices (“tranches”) that mimicked corporate bonds returns with differing investment characteristics. The funding for these loans was obtained by a sequence of short-term sales of claims to the various tranches. Large investment banks claimed that “securitizing” loans in this manner enabled financial markets to replace the traditional lending model in which a bank held a commercial loan over its term. It was claimed that this new system of replacing “old banking models” with new markets for securitized loans was a great innovation that diversified credit risks.

9.6. The new “shadow banking” system grew rapidly in the last decade. In June of 2004, of the US\$9.9 trillion of mortgages outstanding in the U.S., US\$5.3 trillion were securitized.³⁴ Furthermore, many of the holders of these securities were outside the U.S. in Europe, U.K., China, Japan, Canada and elsewhere. This international aspect of the shadow banking system mirrored a more general trend in the rapid internationalization of security markets.

10. Case Study: The 2007 Financial Crisis

10.1. There have been numerous books and reports on various aspects of the 2007 crisis.³⁵ Here we will concentrate on the bare bones of the securitization process and what went wrong. This process was at the heart of the crisis. Essentially it promised a new system for bringing together savers and borrowers, avoiding the (allegedly) more costly “old fashioned” system where bank deposits funded bank lending.

³⁴ McKinsey & Company (2005), p. 50.

³⁵ Here is a small sample of this huge literature. See the early papers by Milne (2008) and Hellwig (2008). A careful analysis of various aspects of the crisis is contained in Acharya and Richardson (2009). The recent, readable book by Posen (2010) is accurate, insightful and written for the layperson.

10.2. The basic story behind securitization is straightforward.³⁶ Assume that in 2005 someone wished to buy a house in California. They could approach a mortgage broker who would arrange a loan. This loan would be passed down a chain of intermediaries (each extracting fees) to a securitizer who would include the loan in a portfolio of real estate loans. The idea of the portfolio was that it would diversify risks across regions and degrees of mortgage risk, relying on past data indicating regional falls in housing prices, but not a national decline. Thus by pooling national mortgages, holders of the pool would be insulated from real estate risks, as regions with house price increases would offset regions with house price decreases. This is a simple application of the risk factor argument.

10.3. This theory was, however, flawed at several levels. First, taking a longer view of house price data revealed that the U.S. did experience nation-wide declines in house prices. The portfolio of loans was thus far more risky than many holders were led to believe. Second, the portfolio had been split into tranches that resembled corporate debt structures. The safest was rated AAA (by rating agencies), down through increasingly risky tranches to the most risky, that would have greatly reduced returns as house prices fell. Indeed the most risky tranche could return zero if house prices fell enough. Furthermore, given the structure of the tranches, severe house price declines would result in normally “safe” tranches returning zero. Third, the chain of delegation from the mortgage originator to the eventual holder revealed poor incentives and weak risk management controls. There were too many examples of corrupt mortgage originators passing on extremely risky loans that were vulnerable to default even with small house price declines. Mortgagees often had few assets and low incomes (the so-called subprime category) so

³⁶ The discussion will focus mainly on the U.S. system. Other countries had variants of the system, but the general principles are the same. We will discuss the Canadian Asset Backed Paper problem in section 9.

that defaults followed swiftly as house prices began to decline in 2006. Fourth, there were many allegations that security dealers and banks misrepresented the risks inherent in the various tranches. Many investors were told that the AAA tranches were as safe as government securities. The issue has become whether the dealers and banks believed their own models and claims, or were there instances where the dealers were more aware of the risks and acted fraudulently. Fifth, there have been many allegations that the rating agencies were either incompetent or complicit in fraudulently rating securities to be far less risky than prudent analysis would have revealed.

10.4. The crisis struck in mid-2007 as investors balked at buying short-term securities based on the increasingly risky tranches. Complex mathematical valuation models that appeared to be accurate in the benign period up to 2006 provided wildly inaccurate predictions as national house prices declined. As the crisis gathered speed, investors fled to safe government securities and government guaranteed deposits. Banks tried to recycle deposits into loans, but found themselves exposed to defaults on the risky securities that they retained on their books. Prudent bank risk managers and bank regulators tightened credit conditions. Given the high level of borrowing in the U.S. economy, this credit contraction led to further defaults, and reductions in consumer expenditure in a classic economic contraction. As economic activity declined, this in turn led to falling asset prices and defaults. A major Wall Street investment dealer, Bear Sterns, was heavily exposed to risky credit securities. Its financial difficulties escalated until it failed and in March 2008 was sold for a small fraction of its prior market value. In September 2008, Fannie Mae and Freddie Mac, the semi-government mortgage lenders, failed and became U.S. government instrumentalities. Lehman Brothers failed soon after, precipitating a financial panic. AIG, a very large international insurance company, issued credit insurance against default

(another example of the use of credit derivatives) and became insolvent in September 2008.

After massive government intervention, entities that were parties to AIG's transactions (other large Wall Street and international banks) were subsidized by the U.S. government to avoid a chain of heavy losses and bankruptcies.

10.5. The system of securitization of loans was also undertaken by some commercial banks. Competing with the securitized system promoted by the dealer banks, they began funding loans using short-term financing, and then selling those same loans through securitized vehicles. This change in borrowing practices caused a relative decline in deposits of total assets in the financial system, and a rapid increase in securitized assets. As we will see below, this form of funding was very risky if the short-term investors became nervous. Rather than facing a run by depositors, the banks faced the same mechanism at work in the short-term money markets funding their loans.

10.6. The crisis may have appeared to have originated in the U.S., but the root of the problem was the securitized credit system, coupled with inadequate risk management practices, that encouraged reckless lending around the world. Although there were national variations, the basic system of short-term securities funding long-term (illiquid) risky assets was fundamental to all the national securitized systems.³⁷ What is more, the national securitized systems were closely linked through international trading of risky credit instruments.

10.7. The failure of the British bank Northern Rock in September 2007 illustrated the inherent problems with the securitized system of banking.³⁸ The public saw television images of a run on Northern Rock with depositors lining up in the street, but the real problems with Northern Rock

³⁷ See Bank of England, *Financial Stability Report* (2009) pp. 16-18.

³⁸ See Shin (2009) for a careful discussion of this episode.

had occurred earlier. Northern Rock was not a typical British Mortgage bank: only 23% of its funds were raised from deposits – the rest came from short-term borrowing, securitized notes and longer-term borrowing. The true crisis for Northern Rock occurred when the short-term funding market disappeared in August 2007. The real issue was that Northern Rock creditors (mainly other large institutions) constrained credit as the financial crisis hit. This hoarding of credit appeared as a symptom in the short-term money markets. The failure of Northern Rock stemmed from the fact that its business model was flawed. It assumed that short term borrowing markets would remain liquid, even in a panic. Thus its illiquid long-term assets (mortgages) were funded by short-term borrowing that was only available in normal times, but would become a difficult source for funding in a credit crisis when this form of liquidity dried up.

10.8. One could object that traditional bank run phenomenon only occurs with bank depositors. Why is there a problem with short term borrowing by banks? It has been well established in banking circles that bank runs can occur when there is a panic over a shortage of ready funds. There are many historical episodes when runs have occurred. But the most common cases of runs occur when there are questions surrounding the solvency of the bank. A well-established method for dealing with these disruptive episodes is to have a government-sponsored deposit insurance scheme to insure depositors up to some fixed amount. Insured depositors should have no reason to stage a run on the bank. But the liquidity and solvency risks that are inherent in banking are thereby partially transferred to the government through such insurance schemes, as well as possible bailouts in banking crises. Thus, the prudential regulator must be vigilant as a contingent lender to monitor the banks' lending practices. Conversely, by securitizing the sources of funding, the banking liquidity problem did not vanish, but reappeared in the securitized credit system. What was worse, many dealer banks lay outside the prudential banking

system and were under the supervision of securities regulators, some of whom failed to understand the risks that were inherent in the shadow banking system.

10.9. One of the purported benefits of the internationalization of credit was that it spread credit risks widely, obtaining benefits from diversification. This argument was only partially correct, because large parcels of these risks were held by dealer banks, mutual funds and pension funds. The U.S. losses appeared in the portfolios of international financial institutions. Some institutions had been prudent and their losses were manageable, but others had been rash and suffered heavy losses. As credit contracted internationally, real economies contracted and credit losses mounted in many countries. Faced with insolvent banks, central banks and governments instituted emergency lending procedures at great financial cost. This saga is far from over.

11. Case Study: The Canadian Non-Bank ABCP Crisis

11.1. To provide working capital, Crown corporations, municipalities and publicly-listed corporations frequently issue short-term³⁹ unsecured promissory notes. Such notes are referred to as “commercial paper”. Because the notes are unsecured, repayment depends solely on the creditworthiness of the issuer. Asset-backed commercial paper applies the securitization concept described above to this instrument: ABCP is an unsecured debt obligation, typically with a maturity of 30 to 180 days, issued by issuers that hold underlying assets (such as credit card receivables, car leases and loans, and residential mortgages) as collateral security for the repayment of the ABCP. The repayment of ABCP issued depends primarily on the stream of income from the underlying asset portfolio and the issuer’s ability to issue new ABCP to fund repayment of maturing ABCP. ABCP issuers also arranged for “liquidity support” that would

³⁹ Commercial paper has a term to maturity of not more than 12 months, and usually averages 30 days.

provide them with funds in the event that the issuer was unable to fund the redemption of outstanding ABCP for reasons other than credit risk or the performance of the underlying portfolio.

11.2. ABCP issued by entities affiliated with the banks that created the underlying assets (the loans or mortgages, for example), is referred to as “bank-sponsored” ABCP. ABCP issued by issuers not associated with a bank (“non-bank” ABCP) did not have access to such traditional underlying assets, and so turned to credit derivatives as the “assets” underlying their ABCP.

11.3. As the international money markets and securitization process began to break down in August 2007, the Canadian non-bank ABCP market, worth approximately \$32 billion, was frozen: the conduits, or trusts, issuing the securitized paper were not able to roll over their short-term loans.⁴⁰ Although the Canadian non-bank ABCP crisis was very similar to what had happened in the U.S., there were some subtle differences induced by Canadian regulation and other considerations. We will concentrate on the main features of the Canadian ABCP system.

11.4. The Canadian non-bank ABCP market had the following characteristics:

- The sponsors of the conduits (or trusts) were foreign banks and Canadian companies.
- Unlike the U.S. conduits that were sponsored by major banks, the Canadian conduits relied on a liquidity provision from other financial institutions.
- The liquidity provision was a guarantee that if the conduit were not able to issue short-term debt due to “general market disruption”, then the liquidity provider would

⁴⁰ This section draws upon the analysis in Chant (2008) and IROC (2008). What follows is a brief summary of some of the main issues discussed in those reports. The reader is directed to those reports for detailed discussions of the structure of the ABCP market and regulatory issues arising from the crisis.

buy the debt. The Canadian “general market disruption” clause turned out to be too vague, however, and allowed liquidity providers to avoid providing liquidity in the crisis.

- The Canadian liquidity clause was controversial as it differed from U.S. clauses – so-called “global style” lines for liquidity support. Both the major U.S. rating agencies (Moody’s, and Standard and Poor’s) were critical in 2001 and 2002 of the Canadian liquidity clause and refused to rate the product. They argued that the clause was ambiguous and could allow liquidity providers to avoid buying the paper. The Canadian rating agency, Dominion Bond Rating Service (DBRS) continued to rate the conduits until 2007.⁴¹
- The sale of the short term paper issued by the conduits was exempt from prospectus requirements under provincial securities legislation because the purchasers were “sophisticated” investors.
- There have been allegations and evidence that some sellers of the ABCP paper misled investors into thinking that the risks were negligible. Some small investors were e-mailed marketing advertisements for these investments.⁴² But even large investors seemed to believe the risks to be negligible. For example the Caisse de depot et Placement de Quebec (the Quebec public pension fund) held \$13.2 billion of this paper⁴³ and suffered heavy losses.

⁴¹ See IIROC (2008) Section 4 for a full discussion.

⁴² See Chant (2008) p.22.

⁴³ See Chant (2008) Appendix B for a disclosed list of investors.

- Canadian banks had also sponsored conduits, but had used “implicit recourse” provisions to provide liquidity in times of disruption. This provision followed U.S. practice and allowed the Canadian banks, when short-term debt market froze, to bring the conduits onto their balance sheets. As the Canadian banks were well capitalized, they were able to avoid the collapse that faced the non-bank conduits.

11.5. The collapse of the Canadian non-bank ABCP market revealed weaknesses in the Canadian regulatory structure. Apart from the Canadian liquidity support clause discussed above, which was unique to Canada, there appears to have been strong economic incentives for Canada to mimic the U.S. ABCP market. The first reason was that large U.S. banks, senior Federal Reserve officials and U.S. politicians in key policy committees in Washington were all proclaiming that securitized credit was the new, efficient way to operate a credit system, although there were official dissenting voices.⁴⁴ The second reason was that large U.S. banks (e.g. Bear Sterns, Lehman Brothers, Goldman Sachs) and insurance companies (e.g. AIG) found the securitized credit market very lucrative – at least in the short run, before the flaws and huge losses became apparent. Third, the financial media, and many finance academics and professionals supported the new system. Critics were dismissed. This climate fostered overconfidence in the financial industry and regulators. Fourth, given the overconfidence and the dogma that securitized markets were the new wave of innovation overwhelming “old banking methods”, U.S. regulators were only too willing to impose very limited, or ineffective, regulation on the new credit markets. In the U.K., the Financial Services Authority regulator referred to this as “light touch” regulation.⁴⁵ Finally, the industry saw opportunities to evade prudential

⁴⁴ For a discussion and quotes see Pozen (2010) Ch. 1 and p.80.

⁴⁵ Critics have referred sarcastically to this approach as “soft touch” regulation. Other critics have accused U.S. and U.K. regulators of being captured by the finance industry.

bank regulation, the more unscrupulous using free market rhetoric as a screen for fraud and various practices that pushed the law to the boundaries. Thus, one of the incentives to securitize credit was to avoid prudential regulation imposed on conventional banking. The rhetoric in the financial industry and media asserted that this regulation was an impediment to an efficient market: regulatory avoidance was more efficient and brought societal benefits. This argument was more assertion than proof.

11.6. The Canadian experience largely mimicked the U.S. The main differences were: first, the Canadian banks were slower and more circumspect in securitizing credit. Some have characterized this as prudent behaviour; while others have described it as the outcome of a conservative Canadian banking sector. Second, because Canadian prudential regulation was more conservative and under a single federal regulator,⁴⁶ the Canadian banks were far better capitalized than the U.S. dealer banks (e.g. Bear Sterns, Lehman Brothers), who were under the supervision of the SEC, and other highly leveraged U.S. banks supervised by the FDIC (the U.S. Federal Deposit and Insurance Corporation). The better-capitalized Canadian banks were able to provide liquidity support for their own ABCP issuers. But the Canadian non-bank ABCP shadow banking system lay outside the Canadian prudential regulator's control, where issuers were granted prospectus exemptions by provincial securities regulators.⁴⁷ Clearly there was a gap in regulatory oversight.

11.7. For these reasons, it has been argued that Canadian banks experienced far less of a problem than the large U.S. dealer banks. But the Canadian non-bank ABCP market failed at the same time as the U.S. credit market/shadow banking system collapsed in the summer of 2007.

⁴⁶ OSFI - the Office of the Superintendent of Financial Institutions.

⁴⁷ See Chant (2008), p. 25.

Indeed, the Canadian non-bank ABCP market was more unstable than the U.S. system because of its ambiguous implicit recourse clause. Contrary to some popular assertions, Canada did not avoid the securitization debacle: it occurred in the Canadian non-bank ABCP market, and largely for the same reasons as the U.S. and U.K. credit crises.

12. Conclusion

12.1. We have attempted to outline the evolution of securities markets in Canada and other major countries. The basic messages are that in the last three decades:

- Securities markets are no longer local or regional, but operate on the national and international level.
- Most Canadians are investors in securities markets, either directly or indirectly through mutual funds, pension funds and other investment products.
- There has been an increase in the sophistication and complexity of the instruments traded in primary and secondary securities markets.
- The traditional distinctions between classes of instruments – such as equity and debt and credit – have blurred, as in the case of securitization.
- Crises have illustrated the deficiencies in many areas of securities regulation in the face of this increasing complexity, including reliance on the notion that markets populated by “sophisticated” investors require less regulatory oversight.
- The interaction of banking, insurance, securities and other financial market regulation must be better coordinated to be effective.

- There is an undeniable need for international cooperation to develop a coordinated regulatory approach given the international nature of financial markets and the resulting potential for international contagion.

Bibliography

- Acharya, V. and M. Richardson (eds.) (2009), *Restoring Financial Stability: How to Repair a Failed System* (Wiley).
- Allen, F. and D. Gale (1994), *Financial Innovation and Risk Sharing* (MIT Press)
- Bank of England (2009), *Financial Stability Report*, Issue No. 26, December 2009.
- Chant, J. (2008), "The ABCP Crisis in Canada: The Implications for the Regulation of Financial Markets" (research study prepared for the Expert Panel on Securities Regulation).
- Crawford Panel (2008), *One Year On: Seeing the Way Forward*.
- Davies, H. and D. Green (2008), *Global Financial Regulation* (Polity Press).
- Elton, E., M. Gruber, S. Brown and W. Goetzmann, (2009), *Modern Portfolio Theory and Investment Analysis*, 8th Edition (Wiley).
- Hellwig, M. (2008), "Systemic Risk in the Financial Sector: An Analysis of the Subprime-Mortgage Financial Crisis" (Max Planck Institute for Research on Collective Goods, Preprint).
- IIROC (2008), *Regulatory Study, Review and Recommendations concerning the Manufacture and Distribution by IIROC Member Firms of Third-Party Asset-Backed Commercial Paper in Canada* (Investment Industry Regulatory Organization of Canada).
- Kindleberger, C. and Aliber R. (2005), *Manias Panics and Crashes* (Wiley).
- Mackenzie, D. (2008), *An Engine, Not a Camera: How Financial Models Shape Markets* (MIT Press).
- McKinsey & Company (2005), "\$118 Trillion and Counting: Taking Stock of the World's Capital Markets" (McKinsey Global Institute, February).
- McKinsey & Company (2008), "Mapping Global Capital Markets: Fifth Annual Report" (McKinsey Global Institute, October).
- Milne, F. (2003), *Asset Pricing and Finance Theory*, 2d ed. (Oxford University Press).
- Milne, F. (2008), *Anatomy of the Credit Crisis: The Role of Faulty Risk Management Systems*, C.D. Howe Institute, Commentary No.269 (July).
- Nicholls, C. (2008), "The Characteristics of Canada's Capital Markets and the Illustrative Case of Canada's Legislative Regulatory Response to *Sarbanes-Oxley*" (Task Force to Modernize Securities Legislation in Canada).

Posen, R. (2010), *Too Big to Save: How to Fix the U.S. Financial System* (Wiley).

Shin, H.S. (2009), "Reflections on Northern Rock: The Bank Run that Heralded the Global Financial Crisis", *Journal of Economic Perspectives*, Vol. 23, No. 1, Winter, 2009, pp. 101-119.

Wise Persons Committee (2003), *It's Time: Wise Persons Committee to Review the Structure of Securities Regulation in Canada*.

Zingales, L. (2009), "The Future of Securities Regulation", *Journal of Accounting Research*, Vol. 47, No.2, May 2009, pp. 391-425.

Appendix 1 – National Balance Sheet⁴⁸

National balance sheet accounts table 35			
Market value, millions of dollars	2007	2008	2009
1 Total assets	18,190,275	18,604,618	19,567,208
2 Non-financial assets	5,663,316	5,976,420	6,038,672
3 Residential structures	1,589,239	1,663,195	1,700,400
4 Non-residential structures	1,311,897	1,420,814	1,413,314
5 Machinery and equipment	443,560	448,022	436,384
6 Consumer durables	398,226	399,969	408,299
7 Inventories	229,155	246,667	233,522
8 Land	1,691,239	1,797,753	1,846,753
9 Net financial assets	-20,625	53,922	-69,710
10 Total financial assets	12,526,959	12,628,198	13,528,536
11 Official reserves	40,593	51,364	56,011
12 Canadian currency and deposits	1,254,465	1,370,418	1,392,982
13 Foreign currency and deposits	180,424	209,540	211,929
14 Consumer credit	345,571	374,505	408,750
15 Loans	499,164	551,256	537,307
16 Mortgages	946,442	1,037,781	1,105,993
17 Short-term paper	358,935	404,027	338,866
18 Bonds	1,184,608	1,327,370	1,476,261
19 Of which: savings bonds	18,206	15,919	15,586
20 Foreign investments	764,519	631,317	681,997
21 Shares	2,513,142	1,884,376	2,268,729
22 Corporate claims	1,511,665	1,826,072	1,873,941
23 Government claims	222,216	281,645	347,054
24 Life insurance and pensions	1,467,567	1,348,649	1,468,054
25 Trade accounts receivable	276,500	291,145	285,439
26 Other assets	961,148	1,038,733	1,075,223
27 Liabilities and net worth	18,190,275	18,604,618	19,567,208
28 Liabilities	12,547,584	12,574,276	13,598,246
29 Canadian currency and deposits	1,275,007	1,395,486	1,418,883
30 Foreign currency and deposits	170,648	186,845	161,472
31 Consumer credit	345,571	374,505	408,750
32 Loans	497,555	531,375	512,335
33 Mortgages	946,908	1,038,293	1,106,480
34 Short-term paper	379,597	436,784	370,542
35 Bonds	1,577,953	1,787,910	1,993,007
36 Of which: savings bonds	18,206	15,919	15,586
37 Foreign investments
38 Shares	3,841,696	3,213,069	3,766,299
39 Corporate claims	602,585	682,414	724,868
40 Government claims	222,216	281,645	347,054
41 Life insurance and pensions	1,467,567	1,348,649	1,468,054
42 Trade accounts payable	278,683	292,726	284,965
43 Other liabilities	941,598	1,004,575	1,035,537
44 Net worth	5,642,691	6,030,342	5,968,962

⁴⁸ Statistics Canada. National Balance Sheet Accounts, Fourth Quarter 2009.

NATIONAL SECURITIES REGULATOR REPORT

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May 20, 2010

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PART I. INTRODUCTION

1. I have been retained by the federal government to provide a report on the public policy implications of moving, as the federal government proposes, to a National Securities Regulator that would in whole, or in part, displace the 13 provincial and territorial securities regulation regimes that have hitherto obtained in Canada.
2. I am a University Professor at the University of Toronto and hold the Chair in Law and Economics at the University of Toronto Faculty of Law. I was awarded the Owen Prize in 1989 by the Foundation for Legal Research for my book, *The Common Law of Restraint of Trade*. I am also the author (*inter alia*) of *The Limits of Freedom of Contract*, co-author (with Robert Howse) of *The Regulation of International Trade* (3rd edition), and co-author (with Ralph Winter, Edward Iacobucci and Paul Collins) of *The Law and Economics of Canadian Competition Policy* (which was awarded the Douglas Purvis Prize for contributions to Canadian economic policy in 2003). I am the co-author (with Ron Daniels) of the book, *Rule of Law Reform and Development: Charting the Fragile Path of Progress* (Edward Elgar, 2008). In 1999, I received an Honorary Doctorate in Laws from McGill University and was awarded the Canada Council Molson Prize in the Humanities and Social Sciences. In the same year I was elected an Honorary Foreign Fellow of the American Academy of Arts and Sciences. In 2002, I was elected President of the American Law and Economics Association (the only non-American academic to hold this position). In 2003, I received an Honorary Doctorate in Law from the Law Society of Upper Canada and in 2007 I was the recipient of the Ontario Attorney General's Mundell Medal for contributions to Law and Letters. I have consulted widely

over the course of my academic career to federal and provincial governments on an extensive range of public policy issues, principally in the field of economic regulation. I am attaching my full curriculum vitae hereto.

3. The perspective I bring to bear on the public policy issues raised in this constitutional reference is that of an international trade lawyer-economist. I have taught the upper year seminar in The Regulation of International Trade at the University of Toronto Law School for the past 25 years and as a Visiting Professor at Yale Law School, NYU Law School, the University of Virginia Law School, and Tsinghua Law School in Beijing. I am the co-author (with Robert Howse) of a leading international treatise on international trade law, *The Regulation of International Trade*, 3rd ed. (Routledge, 2005), now in the course of being revised for a fourth edition. I have also published widely in academic journals on international trade issues.
4. Drawing on my expertise in international trade law, I have also researched and written widely on internal barriers to trade within the Canadian economy. In this respect, I was an author, co-editor and the Research Director of a major study for the Ontario Economic Council in 1983 (M.J. Trebilcock, J.R.S. Prichard, T.J. Courchene, J. Whalley, *Federalism and the Canadian Economic Union*, University of Toronto Press, 1983) which explored in considerable detail both theoretical and empirical dimensions of internal barriers to trade within the Canadian Economic Union. I subsequently edited (with Daniel Schwanen) a collection of essays on the Canadian Agreement on Internal Trade (the AIT) that came into force in 1995 (Michael J. Trebilcock and Daniel

Schwainen, eds., *Getting There: An Assessment of the Agreement on Internal Trade*, C.D. Howe Institute, Toronto, 1995) and contributed a major overview essay (with Rambod Behboodi) on the AIT to this volume. Subsequently, I published a major paper (with Tanya Lee), "Economic Mobility and Constitutional Reform," (1987) 37 *University of Toronto Law Journal*, and subsequently an extensive paper, "The Supreme Court and Strengthening the Conditions for Effective Competition on the Canadian Economy," (2001) 80 *Canadian Bar Review* 542, as part of a symposium issue celebrating the 125th anniversary of the Supreme Court of Canada. In this paper, I devote considerable attention to issues relating to the Canadian Economic Union and impediments to the full realization thereof (pages 550-586).

5. I have had the benefit of reading closely four extensive reviews on the implications for securities market regulation of decentralized versus centralized regulation thereof: *It's Time: Wise Person's Committee to Review the Structure of Securities Regulation in Canada* (December 2003); *Blueprint for a Canadian Securities Commission, Final Paper. Crawford Panel on a Single Canadian Securities Regulator* (June 2006); *Crawford Panel on a Single Canadian Securities Regulator: One Year On: Seeing the Way Forward* (June 2008); and the *Expert Panel on Securities Regulation* (the Hockin Panel), *Creating an Advantage in Global Capital Markets* (January 2009), and many extensive research papers that accompanied these reviews, along with surrounding academic literature. I have also had the benefit of being able to draw on the report (filed herein) of Professor Frank Milne, Department of Economics, Queen's University, an acknowledged international expert in corporate finance theory.

6. In this report, I discuss in Part II the choices available to policy-makers in regulating securities markets and in pursuit of the desirable goal of economic integration. In Part III, I situate within this framework some basic models of securities regulation and review empirical evidence bearing on the central tendencies of each regime as it is likely to function in practice. Part IV offers a brief conclusion.
7. In summary, I conclude that both theory and evidence points to the increasingly national and international nature of Canadian securities markets, as well as increasing functional interdependencies between stock, bond, insurance, and financial derivative markets. In this context, jurisdictional externalities from a decentralized system of provincial securities regulation are pervasive and lead to dysfunctional, costly and inefficient regulatory regimes. Only a single national regulator (as in almost all other jurisdictions) is likely to have the capacity to oversee effectively the functioning and evolution of such markets and to establish effective and essential forms of cooperation with other domestic and international capital market regulators.

PART II. AN ECONOMIC INTEGRATION FRAMEWORK FOR EVALUATING CHOICE OF SECURITIES REGULATION REGIME

8. In my opinion, an economic integration perspective on the public policy implications of the issues before the Court provides a helpful framework for evaluating the issues at stake by identifying the conditions under which centralization or decentralization of regulatory functions is likely to enhance social welfare. In considering institutional arrangements to promote regional economic integration, it is useful to think of an integration continuum.

9. First, there are free trade areas (like NAFTA), where two or more countries agree to remove border restrictions on goods amongst themselves, but each reserves the right to maintain whatever external trade policy (e.g., tariffs) it wishes with respect to non-member countries. Second, there are customs unions where, in addition to removing border restrictions on trade and goods among member countries, member countries also agree to harmonize their external trade policies *vis-à-vis* non-member countries. Third, there are common markets or economic unions (like the European Union), where, in addition to removing border restrictions on trade in goods among member countries and harmonizing external trade policy, free movement of services, capital and people, as well as perhaps a common monetary policy and currency, might be contemplated. Fourth, there are federalist structures, like the U.S., Canada, Australia, and Germany, where economic units form a single state, with the central government being vested with dominant jurisdiction over economic functions, but with some agreed division of economic powers between the central and sub-national levels of government, with constitutional or other arrangements designed to guarantee internal free movement of goods, services, capital, and people, and minimization of internal barriers to trade. Finally, there are unitary states where, over a given geographic region, one government, to all intents and purposes (with some exceptions for local governments) possesses exclusive jurisdiction over all significant economic functions, so that problems of inter-governmental coordination of economic policies within the geographic area are largely eliminated.¹

¹ See Trebilcock and Howse, *The Regulation of International Trade*, 3rd edition (Routledge, 2005) pages 29 and 30.

10. Canada's federal structure in many respects resembles an economic union, constitutionally enshrined to some extent in the division of powers between the federal government and the provincial governments in sections 91 and 92 of the *Constitution Act*, and in section 121 which provides that: "All Articles of Growth, Produce, or Manufactured goods of any one of the Provinces shall, from and after the union, be admitted free into each of the other Provinces." It is beyond the scope of this report to explore the efficacy of existing constitutional guarantees of effective economic integration within Canada's economic union.²
11. It is notable in this respect that concerns have periodically arisen over the limited extent of economic integration within Canada's economic union, the balkanized nature of many thin, internal markets within Canada, the perception that other economic unions (for example, the EU) have more aggressively promoted internal economic integration, and the perception that expanding international trade and investment liberalization, multilaterally and regionally, increasingly threatened the competitiveness of sub-optimally scaled Canadian businesses. These concerns prompted the federal government in reform deliberations leading up to the patriation of the constitution by the *Constitution Act* in 1982 to propose an alternative strengthened reformulation of Section 121, which had hitherto been interpreted, for the most part, as only constraining the ability of provinces to impose internal tariffs on interprovincial movement of goods.³ These

² These issues are explored at some length in my paper, "The Supreme Court and Strengthening the Conditions for Effective Competition in the Canadian Economy," *op. cit.*

³ Jean Chretien, *Securing the Canadian Economic Union and the Constitution* (Ottawa: 1980). These proposals are in turn influenced by two widely cited studies by Professor Edward Safarian, *Canadian Federalism and Economic Integration* (Ottawa: 1974) and Safarian, *Ten Markets or One? Regional Barriers to Economic Activity in Canada* (Toronto: Ontario Economic Council, 1980).

proposals met with strong resistance from most of the provinces and were largely abandoned except for a guarantee of personal mobility and the right to gain a livelihood anywhere in Canada, which was added to the *Constitution Act* by virtue of Section 6 of the *Charter of Rights and Freedoms*.

12. Somewhat similar proposals were advanced by the federal government in reform debates leading up to the Charlottetown Accord of 1992, but were similarly abandoned in the final version of the Accord, which was, of course, defeated by referendum in late 1992. However, the Accord contemplated a subsequent set of political negotiations between the federal government and the provinces on internal barriers to trade, which survived the referendum and led to the negotiation of the Canadian Agreement on Internal Trade (AIT), which came into force in 1995.⁴ The AIT covers government procurement practices, investment, labour mobility, consumer-related measures and standards, agricultural and food products, alcoholic beverages, natural resources processing, energy, communications, transportation, and environmental protection. The provisions of each of these chapters of the Agreement can be conceived of as lying on a continuum between requiring negative integration (i.e., the reduction in explicit or discriminatory barriers to inter-provincial trade, e.g., discriminatory government procurement policies) and requiring pro-active positive integration (i.e., the harmonization of divergent regulatory standards, e.g., trucking and consumer product standards). The concepts of negative and positive integration are sufficiently important to warrant further elaboration.

⁴ The AIT is reviewed in detail in Trebilcock and Schwanen, *op.cit.* and in my paper, "The Supreme Court and Strengthening the Conditions for Effective Competition in the Canadian Economy," *op.cit.* at 571-586.

13. Under a “negative integration” approach, the emphasis is placed on prohibiting or constraining measures adopted by one party that discriminate against another party (typically for protectionist reasons), requiring that such measures be modified or withdrawn. That is to say, a negative integration approach tells parties *what they may not do* and has been the traditional focus of most international trade treaties. A prominent example of this approach is the National Treatment obligation in the GATT (Article III), which prohibits member states from adopting internal laws or measures that treat foreign producers less favourably than domestic producers of like products (subject only to legally valid border measures such as tariffs or quotas). In contrast, a more ambitious approach to economic integration would emphasize, in addition to negative integration, “positive integration” where parties agree on a series of positive steps that they commit themselves to taking to reduce or remove impediments to the free movement of goods, services, persons, and capital (*what they must do*). Typically, a “positive integration” approach focuses on removing or reducing regulatory divergences that create multiple compliance or transaction costs, creating barriers to entry for parties (especially smaller parties) from one jurisdiction seeking to undertake economic activities in another.
14. The most prominent example of a strategy of positive integration is the European Union. Following the removal of border measures, such as tariffs, quantitative restrictions, and measures equivalent to tariffs or quantitative restrictions pursuant to the Treaty of Rome of 1957, the *Single European Act*, 1986, and a series of directives and regulations thereunder committed member states to mutual recognition or harmonization of a vast range of domestic regulatory measures pertaining to goods, services, persons, and capital

with a view to creating a single European market by 1992. The strategy rested on the existence of strong pan-European central institutions, in particular the EU Commission and the Council of Ministers of the European Community. These European institutions are empowered to enact regulations, directives and decisions that are legally binding on member states. EU legislation may require the adoption of minimum standards, mutual recognition, or harmonization of laws in many areas. Non-compliance with these measures can be challenged in domestic courts and in the European Court of Justice, both by governments and by private parties. Substantial progress toward the goal of a single European market is widely attributed to these special institutional arrangements, to the adoption of qualified majority voting rules, which has reduced holdout problems by dissenting member states, and to the adoption of a default principle of mutual recognition in the absence of agreement on minimum or harmonized standards. The Court of Justice has been one of the most important forces in the development of the single market in Europe. It has extended the reach and enhanced the power of EU institutions and laws and championed the single market even when the institutions and the membership of the EU have seemed unwilling or unprepared to carry through with the process of integration.

15. It is easy to transpose these concepts of negative and positive integration to the context of the Canadian Economic Union. Suppose, to take an extreme case, all trade between the provinces was prohibited, e.g., by import bans, so that economic entities in Ontario could not export automobiles to Alberta and Saskatchewan, and could not import oil and gas from Alberta or wheat from Saskatchewan. In this state of autarchy, Saskatchewan and Alberta would have to manufacture their own automobiles (setting aside international

trade), while Ontario would have to produce its own oil, gas, and wheat (or substitutes therefor) (again, setting aside international trade). Obviously, defying the principle of comparative advantage so radically would render the country immeasurably poorer. Similarly, in a large federation like the U.S., Michigan specializes in producing automobiles (*inter alia*), Florida citrus fruit and tourism, Texas oil and beef, and California wine and high technology products. If each state of the U.S. were to have attempted to become self-sufficient in these and all its other needs, the U.S. would today be immeasurably poorer. While these examples focus on prohibitions or restrictions on inter-provincial trade in goods, similar arguments can be made for inter-provincial trade in services, inter-provincial movement of people, and inter-provincial movement of capital – the four economic freedoms enshrined in the EU Constitution. For example, if capital movements from one province to another were blockaded in a similar fashion to import bans on goods in the above examples, capital would be prevented from moving to its most highly valued (productive) uses.

16. With respect to positive integration, the problem is not primarily discrimination against out-of-province interests (typically for reasons of local protectionism), but the multiple compliance costs associated with divergent regulations, standards, and enforcement procedures from one jurisdiction to another, potentially raising transaction costs substantially for firms (especially smaller firms) seeking to operate across jurisdictional boundaries and to realize the economies of scale that this may permit. This has been the major focus of efforts at economic integration within the EU.

17. While these arguments for economic integration bear mostly on issues of economic welfare (i.e., raising per capita incomes by enhancing productivity), they are also complemented by political conceptions of citizenship whereby the ability of Canadians to function freely in various economic capacities from coast-to-coast is an important defining feature of Canadian identity.⁵
18. However, following Thomas Courchene (in Trebilcock, Prichard, Courchene and Whalley, *op.cit.*), I do not regard federalism as a degenerate case of economic union, nor (as I have argued in an international trade context) do I regard more harmonization of regulations, standards, etc., as always better than less.⁶ Positive integration may involve difficult trade-offs between the benefit of greater economic integration, on the one hand, and the ability of every jurisdiction to adopt non-protectionist domestic policies that reflect the distinctive policy preferences of its citizens, on the other. Nor do I assume that provincially-induced barriers to full economic integration are likely to be in all or most cases more serious than federally-induced distortions – indeed, the evidence that we reviewed in our 1983 study suggested that, at that time, federal policies (e.g., regionally-focused federal tariffs, the National Energy Policy, regionally differentiated unemployment insurance benefits, regional development subsidies) may have had more deleterious impacts on full economic integration of the Canadian Economic Union

⁵ See Robert Howse, "Searching for Plan A: National Unity and the Chretien Government's New Federalism," in Harvey Lazar (ed.), *Non-Constitutional Renewal* (Kingston: Institute of Inter-Governmental Relations, 1998) at 313-317.

⁶ See Michael Trebilcock, "Trade Liberalization, Regulatory Diversity, and Political Sovereignty," in John Kirton and Peter Hajnal (eds.), *Sustainability, Civil Society and International Governance* (Ashgate Publishing Limited, 2006); Michael Trebilcock and Robert Howse, "A Cautious view of International Harmonization," in G. Galeotti, P. Salmon, and R. Wintrobe (eds.), *Competition and Structure: The Political Economy of Collective Decisions* (Cambridge University Press, 2000).

(unimpeded movement of goods, services, capital and people) than provincial policies, although acknowledging that in principle the federal government is accountable to all voters across the nation who are both positively and negatively affected by its policies (unlike provincial governments).

19. From a political economy perspective, there are compelling arguments for decentralization of economic (and other policy-making) powers in many contexts. The political economy literature on federalism stresses several related advantages to decentralization of various policy-making powers and functions. First, if there are heterogeneous political preferences within a country with respect to various economic and social policies, a division of powers within a federation makes it more likely that a national minority may become a provincial majority and hence be able secure for themselves a set of public policies that better match their individual and collective preferences and hence enhance social welfare. In a related, less static, vein, it is also argued that decentralization often permits or encourages a socially productive dynamic of jurisdictional competition, where jurisdictions can offer packages of public policies that will attract individuals, firms, and investors from other jurisdictions that favour this package of policies, while at the same time putting competitive pressure on jurisdictions of origin to adapt their own policies to better satisfy the preferences of their citizens and minimize the costs of exit. Decentralization may also permit and encourage more sources of policy experimentation and innovation and mitigate the risk of major systemic (nation-

wide) policy errors that may be associated with national policy-making – the genesis of Medicare in Saskatchewan is a prominent Canadian example.⁷

20. However, a political economy perspective on the choice between centralization and decentralization would also emphasize that once a regulatory regime has become entrenched at one level of government, it is likely to be politically difficult to dislodge as bureaucratic careers become invested in the regime, professional networks develop that are specific to that regime, and, where it generates net revenues (e.g., from filing fees), governments may lose revenues, hence creating a form of path dependency, however inappropriate the choice of jurisdiction may have been rendered by supervening changes in the external environment.
21. With the concepts of negative and positive integration squarely in focus, it is possible to identify, at least conceptually, provincial policies that are presumptively welfare-reducing nationally from both narrowly economic and broader political economy perspectives. Here the concept of jurisdictional externalities is of central importance. Where provinces adopt policies that are *de jure* or *de facto* discriminatory towards firms or individuals from out-of-province but otherwise similarly situated to firms or individuals within a province, a province externalizes some of the costs of its policies onto these “outsiders”, reducing their welfare and undermining their ability to realize their own policy

⁷ See essays by Prichard and Courchene in Trebilcock, Prichard, Courchene and Whalley, *op.cit.*; Albert Breton and Anthony Scott, *The Design of Federations* (Montreal: Institute for Research on Public Policy, 1980); Kenneth Norrie, Richard Simeon, and Mark Krasnick, *Federalism and Economic Union in Canada*, Macdonald Royal Commission Research Study no. 59, 1986; and Sujit Choudhry, “Citizenship and Federations: Some Preliminary Reflections” in Calypso Nicolaidis and Robert Howse (eds.), *The Federal Vision: Legitimacy and Levels of Governance in the US and the EU* (Oxford: Oxford University Press, 2001) 377 at 396-401.

preferences. This is most dramatically the case with a prohibitive tariff or an import prohibition, as in the example in paragraph 15 above. However, barriers to trade include both tariff and non-tariff barriers to trade. Non-tariff barriers are often as or more important than formal trade barriers.

22. It is useful here to contemplate a range of examples of jurisdictional externalities. For example, if a province is home to a factory that pollutes rivers that run downstream into other provinces, it may well have incentives to ignore or discount these negative environmental externalities sustained in other jurisdictions. Similarly, where a province is home to a mail-order firm or a telemarketer or an internet goods or service provider, which mainly sells its goods or services to citizens in other provinces, it may be inclined to ignore or discount negative effects associated with consumer fraud, misrepresentation, or other consumer abuses sustained by citizens in the latter provinces. Similarly, a province that is home to a firm or cartel that has a monopoly nation-wide on the provision of a particular good or service where most of its customers are located in other provinces, may be inclined to ignore or discount the negative externalities from the exercise of market power that are sustained in these other jurisdictions. Again, a province with idiosyncratic regulatory requirements may be inclined to ignore their potential impact as barriers to entry on out-of-province economic actors seeking to do business in that province.
23. It may be true that the provinces whose citizens are negatively affected in most of the foregoing examples in principle have constitutional jurisdiction to address these adverse

effects, but their capacity to do so effectively may be extremely limited if relevant information, personnel, and assets are mostly located in the home jurisdiction. Moreover, if each of the 13 provinces and territories continues to insist on asserting jurisdiction over the negative effects or externalities of policies adopted by other provinces, firms seeking to operate across the Canadian Economic Union are, in many contexts, likely to face multiple compliance costs because of divergent regulations or requirements. In the EU, with the enactment of the *Single European Act, 1986*, the adoption of more relaxed majority voting rules among member states and the proactive pro-integration role played by the European Court of Justice were critical to the success of subsequent positive integration initiatives. The only alternative to this form of inter-jurisdictional coordination, at least in a Canadian context, is national regulation.

24. It might, of course, be argued that some form of inter-provincial cooperation could be negotiated between or among the affected provinces, but it is not clear what bargaining leverage provinces suffering the deleterious effects possess in these circumstances, other than some form of reciprocal retaliation or, worse, some form of "race to the bottom" where all provinces choose to ignore jurisdictional externalities. This problem of inter-provincial cooperation or coordination is likely to be compounded the more provinces that are affected. For example, in some of the examples cited in paragraph 22 above, if the firm in the home province is operating across the nation in all provincial markets, in principle some form of coordination would need to be agreed amongst all 13 provinces and territories to avoid these kinds of beggar-thy-neighbour effects, as exemplified to an important extent by the evolution of the AIT. However, these coordination efforts are

likely to be bedevilled by increasingly severe collective action problems the larger the number of affected provinces whose agreement is required to address these jurisdictional externalities in a coordinated fashion. Again, the experience with the AIT is instructive – only in 2008 – 13 years after the Agreement came into effect – was agreement reached amongst the provinces and the federal government on mutual recognition of professional and vocational qualifications. A principle of decision-making by consensus or unanimity means that “hold-out” provinces can credibly threaten to undermine efforts at coordinated responses to inter-jurisdictional externalities.

PART III. APPLICATION OF AN INTERNATIONAL ECONOMIC INTEGRATION FRAMEWORK TO THE REGULATION OF CANADIAN SECURITIES MARKETS

A. The Objectives of Securities Regulation

25. It is widely accepted that the 1965 Kimber Report, which led to the enactment of the *Ontario Securities Act* in 1966, effectively launched the modern securities era in Canada. The Report set twin goals for securities regulation: promoting efficient capital markets (and confidence in such markets) and investor protection.⁸ Both these objectives are set out in provincial and territorial securities legislation. Efficient capital markets are designed to minimize the costs of raising capital. Investor protection is primarily designed to protect unsophisticated and vulnerable investors and to foster confidence in capital markets. While investor protection measures may increase the costs of raising capital, to the extent that they increase confidence in the integrity of capital markets, they

⁸ See Eric Kirzner, “Ideal Attributes of a Marketplace,” Research Paper, Allen Task Force, June 22, 2006.

may increase the demand for securities and thus offset the increased costs of raising capital.⁹ There is obviously an optimal balance or a trade-off to be struck between these two objectives:¹⁰ for example, to the extent that an over-emphasis on investor protection leads to excessively stringent prudential regulation of public offerings, the small retail investors that the regulation is designed to protect may be harmed by a narrowing of the range of instruments open to them as issuers choose not to raise external capital, or to shift their activity to exempt offerings to institutional investors or to off-shore offerings to avoid that regulation.¹¹ Conversely, an over-emphasis on minimizing the cost of raising capital may lead to inadequate protection of vulnerable investors. I assume throughout this report that both of these objectives are valid and that a well-functioning securities regulation regime would seek to strike an appropriate balance between them.

26. Partly as a result of the 2007 global financial crisis, a further policy objective for securities regulation has begun to emerge: monitoring systemic risk, by which I mean risks that occasion a “domino effect” whereby the risk of default by one market participant will impact the ability of others to fulfil their legal obligations, setting off a chain of negative economic consequences that pervade an entire financial system¹².

⁹ A number of recent economic studies have shown empirically that the cost of equity is higher in countries where investors are afforded less protection against the risk of losses due to wrongdoing. See, e.g. Jonathan Witmer, “The Cost of Equity in Canada,” Bank of Canada Working Paper 2008; Luzi Hale and Christian Leuz, “International Differences in the Cost of Equity Capital: Do Legal Institutions and Securities Regulation Matter?” (2006) *Journal of Accounting Research* 485.

¹⁰ See Five Year Review Committee, *Final Report: Reviewing the Securities Act (Ontario)*, March 21, 2003, chapter 5 (Objectives).

¹¹ Douglas Harris, *White Paper: A Symposium on Canadian Securities Regulation: Harmonization or Nationalization?* October 2002.

¹² See Steven L. Schwarcz, “Systemic Risk,” Duke Law School Legal Studies Paper No. 163; *Georgetown Law Journal*, Vol. 97, no 1, 2008. Available at SSRN: <http://ssrn.com/abstract=1008326>.

27. While systemic risks were once thought to be largely confined to the commercial banking sector, the global financial crisis has severely affected all financial markets.¹³ The crisis highlighted the interdependence of financial markets, an interdependence characterized by the expansion of Canadian banks into securities markets through the acquisition of independent investment dealers or the establishment of their own brokerage and securities operations, creation of collateralized debt obligations and credit default swaps, and the rapid growth of a “shadow banking” sector described by Professor Milne. As Professor Milne points out in his report in this Reference, regulatory schemes that were introduced to deal with regional and traditional stock and bond markets have been strained to the limit by international markets trading new and complex securities that transcend traditional stock, bond, and money markets. He also notes that traditional banking practices changed dramatically in the last two decades, from a simple process whose loans were (largely) funded by deposits, to one where, increasingly, loans originated by banks or other financial institutions were packaged and sold in securities markets through the process of securitization.
28. It is noteworthy for present purposes that various bodies – domestic and international – have endorsed the relevance of systemic risk to securities regulatory mandates and structures. First, the Hockin Panel strongly recommended that Canadian securities regulation adopt systemic risk as one of its core objectives. Second, the International Organization of Securities Commissions (IOSCO), comprising 109 securities regulators world-wide that together regulate 90% of the world’s securities markets, since 1998 has identified the monitoring of systemic risk as one of the three basic policy objectives of

¹³ See Luigi Zingales, “The Future of Securities Regulation,” (2009) *J. of Accounting Research* 391.

securities regulation (along with investor protection and promoting efficient capital markets). Third, in its April 2, 2009 Declaration on Strengthening the Financial System, the G-20 nations agreed to reform their respective regulatory systems to monitor and mitigate systemic risk. The Joint Forum of the Basel Committee on Banking Supervision, the International Organization of Securities Commissions (IOSCO), and the International Association of Insurance Supervisors (IAIS) in a recent report elaborates in detail on regulatory gaps and inconsistencies between different sectors of the financial system that encourage regulatory arbitrage across these sectors by market participants.¹⁴

29. There is a consensus that systemic risk pervades all financial markets, not only the banking sector.¹⁵ There is, however, less consensus at this juncture on the precise role that securities regulators should play in addressing systemic risk.¹⁶ Among proposals being debated in various jurisdictions and legislative fora are: heightened transparency with regards to credit derivatives and securitized products, regulation of hedge funds, reform of the rules relating to private distributions of securities, establishing a clearing house for over-the-counter derivatives, addressing conflicts of interest that may compromise the objectivity of credit rating agencies, and amending the rules relating short selling.¹⁷ Certain jurisdictions outside of Canada, including the U.S. and the EU, are

¹⁴ Joint Forum, "Review of Differentiated Nature and Scope of Financial Regulation: Key Issues and Recommendations," January 2010.

¹⁵ Robert Pozen, *Too Big to Save* (John Wiley and Sons, 2009); Simon Johnston and James Kwak, *13 Bankers: The Wall Street Takeover and the Next Financial Meltdown* (New York: Pantheon, 2010); Joseph E Stiglitz, "Free Fall: America, Free Markets, and the Sinking of the World Economy" (New York: Norton and Company, 2010).

¹⁶ See, for example, Andrew W. Lo, "Regulatory Reform in the Wake of the Financial Crisis of 2007-2008" (2009) available at <http://ssrn.com/abstract=1398207>; Jennifer A. Elliott et al, "Credit Derivatives: Systemic Risks and Policy Options? IMF Working Paper No. 09/254 (November 2009) available at ssrn.com/sol3/papers.cfm?abstract_id=1512259.

¹⁷ See, for example, "Bill to Promote the Financial Stability of the United States" currently being debated in the U.S. Senate [U.S. Bill]; United Kingdom Financial Services Authority, "Implementing aspects of the Financial Services

also considering the establishment of a council of financial regulators to respond to risks in the financial system, on which securities regulators would participate.¹⁸ In short, few people would deny that securities regulators have a significant role to play in the reform process; the debate now focuses on which substantive reforms are appropriate. A fragmented securities regulatory regime at the national level does not facilitate and indeed undermines the development of a comprehensive approach to monitoring and mitigating systemic risk.

30. To the extent that securities markets are prone to systemic risks, and that securities regulation is able to address these risks, these risks are the strongest examples of jurisdictional externalities and underline a need for national, if not international regulation, and enhanced cooperation amongst domestic and international regulators of the various segments of domestic and international capital markets. The 2007 financial crisis originating in the U.S. sub-prime mortgages market and then cascading across financial markets around the world underscores the extent of these jurisdictional externalities.

Act 2010” available at http://www.fsa.gov.uk/pubs/cp/cp10_11.pdf; European Commission, “Proposal for a Directive of the European Parliament and of the Council on Alternative Investment Fund Managers...” available at http://ec.europa.eu/internal_market/investment/docs/alternative_investments/fund_managers_proposal_en.pdf

¹⁸ See, for example, U.S. Bill, *ibid.* and EU Commission, *Proposal for a Regulation of the European Parliament and of the Council on Community macro prudential oversight of the financial system and establishing a European Systemic Risk Board*, COM (2009) 499 (final).

B. An Economic Integration Continuum for Securities Regulation: From Local to National to International

31. I now review some basic models of securities regulation in Canada with a view to identifying their attributes within the economic integration framework set out in Part II of this report, and then reviewing evidence of the empirical significance or magnitude of these attributes.

i. Complete Provincial Autonomy

32. This scenario assumes that capital markets are purely local, i.e., intra-provincial, in the sense that capital is raised locally for projects undertaken locally and any secondary trading in the securities in question also occurs locally. The activities of intermediaries would also be purely intra-provincial, in that their clientele and those with whom they interact would be confined to residents of the same province. In this scenario, there is a strong case for complete provincial autonomy in regulating local securities markets. There are no jurisdictional externalities. To the extent there are distinctive features of regional economies, these can be accommodated in the particular securities regulation adopted. To the extent that there are differences in preferences as to the trade-off between investor protection and minimizing the costs of raising capital, these would be a matter for local collective choices. To the extent that any province wants to innovate or experiment with new regulatory policies, it would be free to do so.

33. However, as the Wise Persons Committee states in its report, while it may have been the case that early in the history of securities regulation in Canada – the late 19th and early 20th century – Canadian businesses seeking to raise capital were primarily located in the

same region as the investors who bought or traded in their securities, these days are long gone. Thus, jurisdictional externalities are pervasive. Professor Milne's report provides extensive data that illustrate the national and indeed international character of Canadian securities markets today.

34. As Professor Milne notes in his report in these proceedings, the driving forces for the growth of national and international securities markets are largely economies of scale in computer-trading platforms; cheap electronic sources of data and information; and the rise of professional investment vehicles for retail investors and pensioners, which vehicles have offered international diversification for investors. He notes, by way of example, that in January 2010, the Canadian Pension Plan Investment Board held \$17.9 billion in Canadian equities; \$45 billion in foreign developed market equities; and \$6.6 billion in foreign developing market equities.
35. The national (if not international) character of securities markets also applies to small and medium-sized enterprises (SMEs), which play a more important role in the Canadian economy than in the U.S. and some other industrialized economies. Compared with the U.S., Canada has a much heavier concentration of firms at the small end of the scale and relatively few firms at the upper end. Professor Milne cites a 2007 study by the Canadian Bankers Association which examined the prospectuses of 298 SMEs that raised capital through public offerings between 2002 and 2006. Despite the small size of the offerings (the median offering size was \$6 million and the size of nearly two-thirds of the offerings was less than \$10 million), only seven firms raised capital in their home province alone, discounting almost completely the claim that SMEs primarily raise capital locally. This

claim is almost an empty box today, and when secondary trading in securities is taken into account may literally be empty. At the other extreme, one quarter of the sample raised capital in ten or more jurisdictions. The vast majority of issuers raised small amounts of capital in more than one jurisdiction, but restricted themselves to a few provinces and territories. Most raised capital in two to four jurisdictions.¹⁹

36. A study by Poonam Puri for the Wise Persons Committee found that micro-cap issuers (market capitalization less than \$5 million) represent 52 percent of all issuers listed on either the Toronto Stock Exchange or the TSX Venture Exchange. Small-cap issuers (market capitalization of \$5 to \$75 million) represent 30 percent of all issuers listed on either exchange. These numbers suggest that fewer than 20 percent of issuers are neither micro nor small-cap companies. Puri also analyzes stock exchange data for evidence of regional specialization in capital market activities and finds some concentration of oil and gas issuers in Alberta, mining and technology in BC, mining, technology, financial services, communications and media, and life sciences in Ontario, and communications and media, and life sciences in Quebec. Alberta, BC, and Ontario each host a significant percentage of small cap issuers and BC a significant percentage of micro-cap issuers. Despite this evidence of regional specialization, Puri points out considerable regional overlaps across these categories, notes the fact that investors are often not located in the province that is host to the issuer, and that issuers that are regionally based still often

¹⁹ *Op.cit.* at 13.

choose to raise capital nationally. She also was able to identify very few regionally distinctive regulatory innovations.²⁰

37. These numbers dramatically underscore the fact that Canadian capital markets are overwhelmingly national and international in scope, so that autonomous provincial regulation almost never corresponds to the scope of capital market activities of the firms being regulated.
38. The increasingly national and indeed international character of capital markets has been further reflected in Canada by a radical restructuring and continuing evolution of stock exchanges. Prior to 1999, there were five principal equity markets in Canada: the Vancouver Stock Exchange (VSE), the Alberta Stock Exchange (ASE), the Toronto Stock Exchange (TSE), the Montreal Stock Exchange (ME) and the Canadian Dealing Network (CDN). The VSE and ASE concentrated on smaller and more speculative issuers than the TSE, and had a strong regional representation of issues. In 1995, the VSE accounted for three percent of the total value traded of listed equities and the ASE accounted for one percent.²¹ The ME ranked second to the TSE in Canada, accounting for fifteen percent of total value traded²² and concentrating on large Quebec issuers and large issuers from the rest of Canada interlisted on the TSE.²³ CDN was an over-the-counter market quoting the smallest issuers.

²⁰ Poonam Puri, "Local and Regional Interests in the Debate on Optimal Securities Regulatory Structure," Research Study for the Wise Persons' Committee, October 7, 2003.

²¹ Toronto Stock Exchange Special Committee, Market Fragmentation: Responding to the Challenges 55 (1997) [hereinafter Market Fragmentation].

²² *Id.*

²³ In 1995, the ME had the greatest number of TSE interlisted securities (591), followed by the VSE (286) and the ASE (95). *Id.* at 57.

39. Pursuant to a Memorandum of Agreement dated as of March 15, 1999, each of the VSE, the ASE, the TSE (on its own behalf and on behalf of its subsidiary CDN) and the ME agreed to carry out a restructuring of the role each played in the Canadian market. Under the agreed restructuring, the TSE would assume responsibility for providing trading facilities and services for all “senior securities” (defined as securities, other than exchange-traded derivative products, that qualified for listing on the TSE), the Canadian Venture Exchange (CDNX) – a new combined CDN, VSE and ASE (and eventually the Winnipeg Stock Exchange (WSE)²⁴) – agreed to be responsible for “junior securities” (defined as securities other than exchange-traded derivatives or senior securities), and the ME agreed to be responsible for exchange-traded derivative products. Securities quoted on CDN would be transferred to CDNX, as would non-derivative securities listed on the ME that did not qualify for listing on the TSE.
40. Prior to the restructuring, each of the VSE, the ASE, the WSE, the TSE and the ME maintained separate administrative operations dedicated to monitoring and regulating trading on the separate exchanges, many of which featured interlisted securities (especially as between the TSE and the ME). Consolidating trading in three exchanges thereby permitted the elimination of overlapping or at least duplicative activity among the exchanges, which was expected to generate economies of scale in the exchanges’ administrative operations. Assigning a specific market niche to each of the exchanges permitted exchange staff to develop specialized expertise in those sectors. Consolidating

²⁴ The Winnipeg Stock Exchange announced on October 12, 2000 that it had reached an agreement to consolidate its operations with CDNX (Press Release, WSE and CDNX Reach Agreement (October 12, 2000)) and the operations were combined on November 24, 2000.

listing of interlisted securities on a single exchange also consolidated trading volumes and therefore was intended to increase the liquidity of the market for those securities.

41. In 2001, the TSE acquired CDNX, renaming it "TSX Venture Exchange" (TSXV) in 2002. Finally, the TSE and ME merged in 2007 to form TMX Group Inc., thereby completing the consolidation of the exchanges that existed prior to 1999.
42. The national nature of the securities markets also extends to the self-regulatory organizations that oversee securities markets participants, e.g., the Investment Industry Regulatory Organization of Canada (the organization formed in 2008 from the merger of the Investment Dealers Association and Market Regulation Services Inc.), and the Mutual Fund Dealers Association of Canada, both of which operate on a national basis.

ii. *Uncoordinated Multi-jurisdictional Responses to Jurisdictional Externalities*

43. This scenario contemplates that all jurisdictions where corporate issuers, intermediaries, and investors are located can legitimately assert jurisdiction over those aspects of capital markets that affect interests within their jurisdiction. Hence, for example, if a corporate public offering issuer wishes to issue securities in multiple jurisdictions and permit secondary trading in all these jurisdictions, then each jurisdiction would have a legitimate claim to review and approve the initial public offering, regulate intermediaries such as investment dealers and brokers dealing in the securities in question within their jurisdiction, and regulate secondary market trading including continuous disclosure and insider trading requirements. At the limit, in a Canadian context, this would mean that

for a national public offering, all 13 provinces and territories could claim a legitimate jurisdictional interest in regulating the offering and subsequent trading in the securities in question.

44. Such a regime is likely to perform relatively poorly on both the conventional objectives of securities regulation: it is unlikely to minimize the cost of raising capital if 13 regulatory agencies have to be financed and issuers and intermediaries face multiple compliance costs in meeting the distinctive requirements of 13 different jurisdictions, or alternatively forsake access to capital markets in some of these jurisdictions on account of the incremental costs involved relative to the size of these markets. Issuers will face the choice of complying with the strictest regulation in any province, which may result in excessive regulation, or of avoiding capital markets in a province. Neither outcome is desirable. In addition, delays in securing approvals from multiple regulators are likely to entail significant opportunity costs for issuers and investors as market “windows” open and close before these approvals have been obtained.²⁵ This regime is also likely to perform relatively poorly with respect to the investor protection objective of securities regulation in that effective enforcement often will entail negotiating access to information, personnel, assets and compulsory investigative and enforcement procedures in other jurisdictions. Alternatively, many jurisdictions may end up duplicating investigative and enforcement efforts in pursuing a common course of misconduct. Finally, economies of scale and specialization in formulating and enforcing securities laws are likely to be sacrificed as many decentralized jurisdictions engage in similar regulatory functions.

²⁵ See Anita Anand and Peter Klein, “Inefficiency and Path Dependency in Canada’s Securities Regulatory System: Towards a Reform Agenda,” (2005) 42 *Canadian Business L.J.* 41.

45. On the other hand, it might be argued that this model encourages the development of sectoral expertise, which may reflect the nature of local economies, and responsiveness more generally to distinctive local and regional issues, as well as leaving open broad scope for regulatory innovation. It might also be argued that enforcement of securities laws may in some cases be enhanced by a strong local regulatory presence to receive investor complaints, conduct investigations, and react quickly to infractions, as well as to draw on local knowledge of capital market participants in the jurisdiction. But none of these arguments address the multiple compliance costs entailed in uncoordinated multi-jurisdictional regulation.
46. This model prevailed in Canada until 1999, prior to the development of the Mutual Reliance Review System (MRRS). While I have not attempted to quantify the scale or impact of multiple compliance costs that market participants faced under this system,²⁶ the Crawford Panel, in its *One Year On* report, noted the particular burdens on SMEs of multiple compliance costs, referring again to the Canadian Bankers Association Study in 2007, which reviewed almost 300 SMEs that raised capital between 2002 and 2006 (a period in which the MRRS was in place), finding that for any particular offering size, for example \$3 million, expenses increase as the number of jurisdictions in which the offering is made go up. The proportion of capital raised that is consumed by regulation-generated expenses is four times higher for small offerings (\$1 million) than it is for larger offerings (\$10 million). Should a firm conduct an offering in 13 jurisdictions rather than only one, its regulation-related expenses would likely at least double. A firm

²⁶ For an attempt at quantifying some of these costs, see Charles River Associates, "Securities Enforcement in Canada: The Effect of Multiple Regulators," Research Study for the Wise Persons' Committee, October 21, 2003.

raising \$1 million in all 13 jurisdictions would see regulation-related expenses consume over 15 percent of the amount of capital raised. In similar vein, the Crawford Committee noted a 2006 study by the Certified General Accountants Association of Canada, which found that 60 percent of small and medium-sized firms consider securities regulation the most unreasonable regulatory burden they face (followed by 22 percent that consider tax regulation the most unreasonable).

47. Apart from the multiple compliance costs faced by issuers, multiple registration requirements for registrants (e.g., investment dealers and mutual fund managers) have also been found to be a source of significant incremental costs and inefficiencies.²⁷

48. The Crawford Panel, in its *One Year On* report, also underscored the enforcement deficiencies in both the uncoordinated multi-jurisdictional model and the MRRS system. They noted the submission by the Ontario Securities Commission which succinctly stated: “Effective enforcement is our biggest challenge.” Former Supreme Court of Canada Justice Peter Cory and former Dean of Osgoode Hall Law School, Marilyn Pilkington, in a study of critical issues in enforcement for the Allen Task Force²⁸ found that many high profile cases have not been prosecuted, insider trading is often undeterred, some prosecutions are unfair (because of “piling on” by multiple regulators for the same course of alleged misconduct), regulators delay in acting to prevent investor losses, investigations are not managed effectively, and securities commissions as both regulator and adjudicator have the appearance of bias. Police, prosecutorial services and courts

²⁷ Anand and Klein, *op.cit.*

²⁸ Peter Cory and Marilyn Pilkington, “Critical Issues in Enforcement,” Research Study for the Allen Task Force to Modernize Securities Legislation in Canada, September 2006.

often lack specialized knowledge of capital markets, protracted delays afflict court proceedings, and penalties are inadequate and inappropriate. Cory and Pilkington note that “the complexity and duplication over securities enforcement in Canada undermines confidence that enforcement is effective and that those responsible for it are accountable... The enforcement orders of regulators are territorially limited, creating the possibility that a wrong-doer can avoid their application by moving to another Canadian jurisdiction. Moreover, resources for enforcement vary significantly from one jurisdiction to another. The total resources are spread thin and the costs of coordination further dilute the effective use of those resources.”²⁹ Another study for the Wise Persons Committee found that enforcement resources differ across commissions in Canada and enforcement budgets bear no discernible relationship with jurisdiction size whether measured on a *per capita* or GDP basis, and that compared to the U.S., Canadian commissions devote a smaller percentage of their total budget to enforcement whether measured on a *per capita* or GDP basis.³⁰

49. Poonam Puri, in a study for the Hockin Panel,³¹ notes academic studies that show that Canada has a higher cost of capital than other countries, after accounting for risks:³²

“The Allen Report labeled this the “Canada Discount”, meaning that Canadian companies

²⁹ *Op.cit.* at 195, 196.

³⁰ Charles River Associates, *op.cit.*

³¹ Poonam Puri, “A Model for Common Enforcement in Canada: The Canadian Capital Markets Enforcement Agency and the Canadian Securities Hearing Tribunal,” (2008).

³² See Luzi Hail and Christian Leuz, “International Differences in the Cost of Equity Capital: Do Legal Institutions and Securities Regulation Matter?” (2006) *Journal of Accounting Research*, 44:3, 485, where the authors observed that the cost of equity capital is 25 basis points higher in Canada than in the United States; see also Michael R. King and Dan Segal, “Valuation of Canadian vs. U.S. Listed Equity: Is There a Discount?” (2003) Bank of Canada Working Paper 2003-6 (March 2003) which came to the conclusion that Canadian public companies are valued significantly lower than those in the United States while attempting to control for a number of variables; see also Task force to Modernize Securities Legislation in Canada, *Canada Steps Up Final Report* (2006) (Toronto: Task Force) online: www.tfmsl.ca at 24 (“Allen Report”).

generally pay more for financing costs for capital than U.S. companies. Part of this discount can reasonably be attributed to our fragmented system of regulation as well as concerns about enforcement effectiveness. The literature shows that strong enforcement of securities laws reduces the costs of capital, and in turn increases liquidity in the capital markets.”³³

50. Canadian financial markets were shaken in mid-August 2007, when approximately \$32 billion of non-bank, or third party, sponsored asset-backed commercial paper (ABCP) was frozen by the inability of the conduits to roll over their maturing notes. The crisis illustrates the complex institutional interdependencies that exist in today’s global capital markets. While the immediate trigger of the crisis was the U.S. sub-prime crisis, the role of financial institutions in providing off-balance sheet liquidity commitments, the role of unregulated credit rating agencies in rating the instruments in order to qualify for a prospectus exemption, the availability of prospectus exemptions under provincial securities legislation, and the role and responsibilities of investment dealers in selling these instruments to their clients underline the complex regulatory challenges that such developments in financial markets pose (as Professor Milne explores in much more detail in his report in these proceedings, illustrating the rapid growth in the sophistication and complexity of the instruments traded in primary and secondary securities markets today). While the creation of a national securities regulator would by no means have been a guarantee against the occurrence of this crisis (as evident from recent experience in the U.S. and the U.K.), it is difficult to believe that provincial securities regulators in jurisdictions with smaller capital markets would possess the necessary resources or

³³ See, for example, U. Bhattacharya, “Enforcement and its Impact on cost of Equity and Liquidity of the Market” in Volume VI of the Allen Report, *op.cit.*

expertise to meet these kinds of challenges individually, while coordinating the actions of multiple regulators obviously entails significant transaction costs and delays. Thus, the existence of a national securities regulator with an adequate mandate and resources is a necessary but not sufficient condition for dealing with systemic risks such as exemplified in this crisis.

iii. "Check-the-Box" Issuer Choice of Single Regulator

51. It is helpful to think of two kinds of regulatory competition over securities regulation: weak and strong competition. Weak competition could arise under the previous model of uncoordinated multi-jurisdictional responses to jurisdictional externalities. In this scenario, there are inter-provincial spillovers in capital markets. That is, issuers may reside in one province and investors in others. Each province has its own regulator and it chooses to regulate all securities activities that have a significant effect in its jurisdiction. Competition between provinces to attract capital market activity in this scenario may exist, but is severely attenuated. Under these conditions, the regulator chooses whom to regulate on the basis of capital market activity in the province. If a regulator offers sub-optimal regulation, issuers and/or investors may choose not to deal with that regulator, but to do so may require costly sacrifice. An issuer, for example, would have to forgo selling securities in a particular province in order to assure itself of avoiding regulation from that province. An investor, even more strongly, might have to move to a different province to avoid local regulation it deems undesirable. While the threat by financial market actors of moving financing activity elsewhere may offer some encouragement to regulators to offer attractive regulation, the threat is weakened by the costs that avoiding such regulation entails. Regulatory competition is thus weak under the previous model.

52. An alternative would be to adopt a strong form of regulatory competition. Several academic commentators have proposed a kind of “check the box” regime where corporate issuers choose the governing regulatory jurisdiction, and other jurisdictions simply defer to this jurisdiction in regulating all aspects of primary and secondary markets in the securities in question.³⁴ This approach finds analogies in corporate law in Canada and the U.S. where firms can choose their jurisdiction of incorporation, and other jurisdictions for the most part defer to the corporate law of the place of incorporation in regulating the internal affairs of corporations thereafter. Such a scenario encourages competition between jurisdictions in that issuers and investors can jointly avoid sub-optimal regulation not by making costly decisions (not selling to some investors; moving to a different province), but by costlessly (or at least at very low cost) choosing the regulator that offers the preferred regulatory approach. Provinces would thus face incentives to adapt their regulatory regimes in order to avoid the costs of losing capital market activities to other provinces.
53. The advantages of such issuer choice are that, from an efficiency perspective, the two parties to a contract have incentives to choose contractual terms that maximize joint gains. If primary or secondary market activity is seen as contractual in nature, then it follows that the parties (including the issuers themselves) have the incentives to choose optimal regulation.

³⁴ See Roberta Romano, “Empowering Investors: A Market Approach to Securities Regulation,” (1998) 107 *Yale L. J.* 2359; Paul Mahoney, “The Exchange as Regulator,” (1997) 83 *Virginia L. Rev.* 1453; Stephen Choi and Andrew Guzman, “Portable Reciprocity: Re-thinking the International Reach of Securities Regulation,” (1998) 71 *Southern California Law Rev.* 903. For a summary these issues, see Douglas Harris, “White Paper on Canadian Securities Regulation: Harmonization or Nationalization,” October 2002, Appendix.

54. However, the advantages of this form of regulatory competition tend to rest with efficiency and not investor protection. Regulatory competition may work well if investors have the knowledge and sophistication to assess the relative impacts of different jurisdictions' securities regulation regimes on their interests, but if this assumption were well-grounded, it is difficult to justify the investor protection dimension of much of modern securities regulation. More specifically, critics of the regulatory competition model argue that regulators will face incentives to appeal to managers' interests in order to attract issuers (and related economic activities) to their jurisdiction, which raises concerns in contexts where managers' interests diverge from shareholders' interests, given that an issuer's decision regarding which regulatory jurisdiction it chooses is likely to be made by that of the issuer's managers.
55. Moreover, regulatory competition is only desirable if there are minimal externalities resulting from the contracts between issuers and investors. For example, Easterbrook and Fischel identify a potential divergence between private and social viewpoints on optimal disclosure policies.³⁵ Issuers (and their investors) may prefer not to disclose competitively sensitive information out of self-interest (competitors may benefit from this information) even though from a social perspective, the additional information would be optimally disclosed. Some commentators have relied on this potential for externalities to reject the basis for issuer choice on efficiency grounds.³⁶

³⁵ Frank Easterbrook and Daniel Fischel, "Mandatory disclosure and the Protection of Investors," (1984) 70 *Virginia Law Review* 669.

³⁶ See, e.g., Merritt Fox, "The Issuer Choice Debate," (2001) 2 *Theoretical Inquiries in Law* 563.

56. Beyond objections already noted to this model, other objections rest on empirical evidence from the Canadian corporate law context. While some commentators have suggested that there is jurisdictional competition in Canada to attract incorporations and could be more,³⁷ others are sceptical of the empirical significance of this alleged phenomenon, pointing out, *inter alia*, the close similarity of all Canadian corporate law statutes and the apparent lack of jurisdictional competition in seeking to differentiate them.³⁸ Of course, competition could well result in homogeneity, so the similarities do not in themselves reject the competition hypothesis.
57. Given the importance of investor protection as a rationale for existing securities laws, and given that there does not appear to be significant stakeholder support for this form of the regulatory competition model in Canada, I do not view it as a realistic policy option in the current Canadian context.

iv. A Common Clearing House: Qualified Mutual Recognition

58. In 1999, Canadian securities regulators developed the MRRS, permitting one regulator to rely on the analysis and review of another regulator to whom it would be free to provide comments. The applicant would receive comments and a decision from only one regulator on behalf of itself and all other regulators. However, this common clearing house regime has limitations. First, it does not alleviate the necessity of market

³⁷ Ronald J. Daniels, "Should Provinces Compete? The Case for a Competitive Corporate Law Market," (1991) 36 *McGill Law Journal* 130.

³⁸ See, e.g., Douglas Cumming and Jeffery MacIntosh, "The Role of Interjurisdictional Competition in Shaping Canadian Corporate Law," (2000) 20 *International Review of Law and Economics* 141.

participants paying fees in each jurisdiction in which the market participant is active.

Second, a regulator can opt out of the system at any time and deal with market participants directly. Third, because securities laws are not uniform in each jurisdiction, market participants must often obtain advice on applicable legal requirements in each jurisdiction. Finally, the common clearing house system does little to alleviate the enforcement problems posed by the uncoordinated multi-jurisdictional model noted above.

v. *A Passport System: Harmonized Standards*

59. A common clearing house regime could be expanded into a more comprehensive “passport system” which could entail delegation of virtually all regulatory functions to a primary regulator determined on the basis of the capital market participants’ head office location, place of incorporation, or other criteria. A full passport system is predicated on a high degree of substantive securities regulation harmonization in that provinces are unlikely to agree to delegate their regulatory functions to a primary regulator if major divergences exist between the laws in place in the jurisdiction of the primary regulator and those in the delegating provinces, or their interpretation or enforcement. This system was proposed in a 2004 Memorandum of Understanding signed by provincial ministers and has been significantly updated and expanded since that time (with the important exception that Ontario has not endorsed the passport system).
60. A further institution that has facilitated harmonization of securities law across jurisdictions is the Canadian Securities Administrators (CSA) which is a forum

comprising representatives from Canada's provincial and territorial regulatory authorities to improve regulation of Canadian capital markets. The CSA specifically seeks to promote the substantive harmonization of provincial securities laws upon which the passport system is predicated.

61. While a passport system, at least in its most ambitious form, has the potential for substantially mitigating multiple compliance costs that issuers and other market participants confront in a uncoordinated multi-jurisdictional regulatory system, it has some significant limitations: first, because it depends on a consensus form of decision-making with respect to substantive harmonization of provincial securities laws, the process of harmonization is likely to be protracted and to be characterized by compromises that may not reflect first-best policy options, especially given the ability of provinces to threaten or in fact to exit at any time, rendering the system unstable. While many provincial securities laws are harmonized (disclosure, prospectus offerings and insider trading), some are not (enforcement, derivatives,³⁹ exempt market⁴⁰) and interpretation and enforcement of substantively harmonized laws are susceptible to variation from province to province,⁴¹ and give rise to the need for an overseeing authority to monitor the quality of the decision-making processes and outcomes of the participating provinces, as well as the need for a mechanism to address any shortcomings

³⁹ As the Expert Panel Report noted, the regulation of exchange-traded derivatives is subject to a multiplicity of approaches by the various commissions across Canada.

⁴⁰ Prospectus and Registration Exemptions, O.S.C. NI 45-106 (2009) 32 O.S.C.B. (Supp-3). Although a National Instrument exists, giving the appearance of uniformity across jurisdictions with regards to exemptions, individual jurisdictions have within the instrument adopted specific exemptions while others have not. See for example the offering memorandum exemption and the friends and family exemption which are not uniformly adopted across Canadian jurisdictions.

⁴¹ Mary Condon, "The Use of Public Interest Enforcement Orders by Securities Regulators in Canada," Research Study for the Wise Persons' Committee October 24, 2003.

that are discovered. However, the governing documents of the current passport system lack any process for ensuring that provinces maintain equivalent standards as a basis to qualify as principal regulators. Second, a passport system does not significantly resolve inter-jurisdictional enforcement problems described above and may indeed create incentives for issuers to place issues in jurisdictions with fewest enforcement resources, given that the system does not prescribe levels of enforcement resources across jurisdictions. Third, such a system still requires that fees be paid to all jurisdictions in which a market participant is active, which presumably in aggregate are likely to be higher than under a single regulator if one assumes any economies of scale in formulation, investigation, and enforcement of securities laws. Fourth, it does not promote full transparency and accountability for decisions reached through the process of negotiated inter-provincial harmonization of substantive laws. Fifth, it does not provide Canada with a single voice at international fora, such as IOSCO, given the increasing importance of international co-ordination of capital market regulation (exemplified in the 2007 global financial crisis),⁴² or facilitate coordination with other Canadian financial sector regulators, such as the Bank of Canada and the Office of the Superintendent of Financial Institutions (OSFI), both of which operate nationally. As Professor Milne demonstrates in his report, banking, insurance, securities and other financial market regulation must be better coordinated on a national level to be effective as sharp boundaries between these activities have begun to dissolve. Given the international and interconnected nature of financial markets, international cooperation is also necessary to regulate effectively, particularly because of the risk of international contagion. Finally,

⁴² See James Cox and Edward Greene, "Financial Regulation in a Global Marketplace: Report of the Duke Capital Markets Roundtable," (2007) 18 *Duke J. of Comparative and International Law* 239 at 245-248.

the predicates of an effective passport system (extensive harmonization of provincial securities laws) fundamentally undermine the case sometimes made for substantial provincial autonomy in securities regulation, such as responsiveness to distinctive local and regional issues, and regulatory experimentation and innovation. If an agreed goal of modern securities regulation is a “single window” concept of regulation, then the most direct means of achieving this goal is through the creation of a national regulator (as all other members of IOSCO have done), rather than incurring the disadvantages of attempting to co-ordinate the activities of multiple regulators.

62. The experience in the EU with attempts to develop a full passport system is also instructive. After three decades of efforts based on the principle of mutual recognition and minimum harmonized standards, progress remains slow, partly because of the unanimity principle prevailing until the enactment of the *Single European Act 1986*, and the ability of EU institutions to develop rapid and flexible responses to rapidly changing capital market conditions has been seriously compromised.⁴³ As the 2007 global financial crisis has underscored, the ability to respond quickly and innovatively to factors destabilizing capital markets and exacerbating volatility is an important quality of effective regulatory regimes in the contemporary global economy.

vi. A Single National Securities Regulator: Full Economic Integration

63. The advantages of a single national securities regulator, at least in its most ambitious form, are several. First, market participants would face one set of compliance costs, not

⁴³ See Karel Lannoo and Mattias Levin, *Securities Market Regulation in the EU: The Relation Between the Community and Member States*, Research Study for the Wise Person’s Committee, September 8, 2003.

potentially 13. Second, a single regulator is likely to be able to achieve economies of scale and specialization not achievable by provincial regulators in jurisdictions with smaller capital markets. Third, the inter-jurisdictional enforcement problems noted with various models identified above would be substantially eliminated, and enforcement of securities laws strengthened and streamlined in one centralized body which, where appropriate, would be able to utilize federal criminal law jurisdiction to advance enforcement objectives. Fourth, a national securities regulator, operating under a supra-majority decision rule in its governance body (but not unanimity), will in all likelihood be more flexible and expeditious in developing new policies to meet emerging challenges in capital markets (e.g., relative to the CSA). Fifth, while full economic integration risks over-riding distinctive provincial policy preferences, a regionally representative governance structure for a national regulator, along with regional offices, is likely substantially to mitigate this risk. Sixth, transparency and accountability are likely to be enhanced by a single federal institution accountable to the Minister of Finance and Parliament for its functioning (i.e. unlike the CSA). Seventh, any concern that conferring regulatory exclusivity on a national regulator will create a regulatory monopoly that may be inefficient and unresponsive to the needs of Canadian capital markets is largely belied by the global nature of capital markets today where issuers and investors can readily list or invest in other jurisdictions competing for a larger share of global capital market activity.⁴⁴ Finally, a national securities regulator would provide Canada with a single voice at international fora and would facilitate coordination with other Canadian financial sector regulators.

⁴⁴ See Steven Davidoff, "Paradigm Shift: Federal Securities Regulation in the New Millenium," (2008) 2 *Brooklyn J. of Corporate Finance and Commercial Law* 339 at 345-347.

64. Of the 109 current members of IOSCO, only Canada lacks a national securities regulator. The Australian experience is instructive in this respect. After decades of state-level regulation, widespread capital market abuses in the 1980s leading to widespread corporate and financial institution failures (“cowboy capitalism”), which revealed the deficiencies of highly variable state-level regulation and enforcement and weak inter-jurisdictional co-ordination, Australia moved progressively to federalize securities regulation, culminating in the current federal regulatory regime adopted in 2001 which created the Australian Securities and Investment Commission. In the view of most informed observers, the performance of this regime, since its adoption in 2001, has been significantly superior to the pre-existing system of state-level regulation, measured in terms of size and growth of capital markets, including the growth of regional capital markets (such as the Western Australian mining industry).⁴⁵
65. Apart from eliminating incremental compliance costs that are caused by multiple provincial regulators, and strengthening and streamlining enforcement of securities laws, a single national securities regulator would enhance the ability of securities regulators to coordinate their activities with other entities that are assuming increased prominence in the wake of the financial crisis and with our enhanced understanding of systemic risk, such as OSFI and the Bank of Canada.
66. IOSCO’s current policy development agenda underscores the increasing importance of an effective national presence in these fora. This agenda includes the development and

⁴⁵ See Ralph Simmonds and Ray da Silva Rosa, “The Impact of Federalizing Securities Regulation in Australia: A View from the Periphery,” Research Study for the Wise Persons’ Committee, October 6, 2003.

oversight of international accounting and auditing standards, the oversight of credit rating agencies, the regulation of derivatives, hedge funds, short selling, and the monitoring of systemic risk. At present, Canada is represented on IOSCO by Ontario and Quebec, with British Columbia and Alberta accorded observer status. This diffuse representation on IOSCO presumably requires federal, provincial and inter-provincial coordination of positions on policy development on emerging issues in global financial markets, and risks replicating the protracted and convoluted nature of decision-making by consensus as reflected in the time required by the CSA to develop any multilateral policy initiatives. Canadian capital markets account for less than four percent of global capital markets and must compete with other jurisdictions for capital, rendering policy development in the securities regulation field in these international fora of increasing salience to Canada and underscoring the importance of Canada possessing the institutional capacity to play an effective role in these fora.⁴⁶ Both issuers and investors now enjoy many options for raising or investing capital beyond Canada. An internationally competitive securities regulatory regime led by a single body with a coherent set of policy priorities and the ability to respond quickly and flexibly to emerging global financial market challenges is likely to be increasingly important in ensuring the continuing economic health of Canadian financial markets.

67. One might reasonably ask whether it is not possible to have the best of both worlds: a national regulator, complemented by province-level regulation. In many respects, this is the U.S. model, following the creation of the federal Securities and Exchange

⁴⁶ See Eric Pan, "Structural Reform of Financial Regulation in Canada," Research Paper prepared for the Hockin Panel, 2008.

Commission in 1933 after purely state-level regulation was judged a failure in the course of massive corporate and financial institution failures during the Great Depression, but with the retention of state-level securities regulation, albeit subject to substantial pre-emption for most filing requirements by virtue of the *National Securities Markets Improvement Act* of 1996 with respect to “covered” securities (securities listed on NYSE, Amex and NASDAQ). The result of this process of policy evolution is largely to confine state regulatory functions to the regulation of local intermediaries, while usefully complementing the federal government’s general enforcement activities.⁴⁷ Complicating the U.S. model is the existence of no less than seven federal regulators with different responsibilities in the regulation of financial services markets; the profusion of weakly coordinated federal regulators has been a much criticized feature of the U.S. regime. It is not clear how easily this U.S. model could be transposed to the Canadian context, or how desirable it would be even if it could. Moreover, in Canadian debates over the advantages of centralization versus decentralization in securities regulation, no significant constituency or commentators appears to have espoused this option.

PART IV. CONCLUSION

68. After decades of inconclusive debates over the optimal institutional structure for securities regulation in Canada – endless commissions, panels, task forces, and academic commentaries⁴⁸ – there is much to be said for the axiom that “the proof of the pudding is

⁴⁷ See Joel Seligman, “The United States Federal-State Model of Securities Regulation,” Research Study for the Wise Persons’ Committee, September 2003. For a detailed description of the scope of the federal pre-emption, see <http://www.wdfr.org/fi/securities/regexemp/nsmia.htm>.

⁴⁸ For an overview of the pre-Wise Persons’ Committee history of these reform efforts, see Douglas Harris, “White Paper on Canadian Securities Regulation: Harmonization or Nationalization?” October 2002, pp. 5-47.

in the eating.” The option recommended by all expert task forces and panels that have examined the issue in Canada is a single, national regulator.

AFFIDAVIT OF STEPHEN WHITE

I, Stephen White, of the City of Ottawa, in the Province of Ontario, **SWEAR THAT:**

1. I have been a Member of the Royal Canadian Mounted Police (RCMP) since 1986. I currently hold the rank of Assistant Commissioner. In 2008 I was appointed the Director General in charge of Financial Crime and responsible for Commercial Crimes, Proceeds of Crime and the Integrated Market Enforcement Teams (IMETs). Prior to that, I was the Director of the Integrated Market Enforcement Branch, the Director of the Proceeds of Crime Branch, the Director of INTERPOL Ottawa, the Director of the International Operations Branch, and an International Liaison officer for five years.
2. The RCMP is the Canadian national police service and an agency of Public Safety Canada. The RCMP is unique in the world since it is a national, federal, provincial and municipal policing body. We provide a total federal policing service to all Canadians and policing services under contract to the three territories, eight provinces (except Ontario and Quebec), more than 190 municipalities, 184 Aboriginal communities and three international airports. What this means in respect of the investigation of criminal securities fraud is that the RCMP would be the primary investigative agency in all three territories and 8 of 10 provinces, but

that investigations are additionally conducted by police forces of local jurisdiction. There is significant cooperation between the RCMP, the provincial and municipal police forces.

3. The RCMP has a long history in conducting securities fraud investigations, and our response to conducting these investigations has evolved as securities frauds have become more complex over time. In 1967, the RCMP undertook to establish securities fraud squads. These were envisioned as specialized police sections intended to focus on securities fraud criminal investigations - the RCMP's first formal response to securities fraud.
4. During the genesis of these new securities fraud sections, and in an effort to leverage benefits of economies of scale, in late 1967 the RCMP merged the securities fraud squads with its already-existing units that focused on fraudulent bankruptcies to form what was then known as the RCMP's "Commercial Fraud Sections". As the role of the RCMP in investigating other white collar crimes (i.e. corruption, counterfeit, etc.) evolved, additional mandates were also built into these sections. The historical "Commercial Fraud Sections" still exist today in form of the RCMP's Commercial Crime Sections. The Commercial Crime Sections continue to conduct securities fraud investigations.
5. In 2003, the federal government announced a coordinated national approach to Strengthen the investigation and prosecution of serious Criminal code corporate fraud and market illegality. The budget for 2003 stated the following:

This budget announces a coordinated national enforcement approach to strengthen the investigation and prosecution of the most serious corporate

frauds and market illegalities. These kinds of offences are often interprovincial and international in nature, thus requiring specialized resources in order to investigate and prosecute them effectively. This budget provides up to \$30 million a year for this new national enforcement effort. To strengthen investigations, integrated teams of investigators, forensic accountants and lawyers will be established in the key financial centres across Canada. These teams will focus on the most serious cases of corporate fraud and market illegality, and will work closely with securities regulators and provincial and local police. The teams will be jointly managed.

6. The 2003 Budget allocated resources for the creation of the RCMP led Integrated Market Enforcement Teams (IMETs), in Canada's major financial centres - Vancouver, Calgary, Toronto and Montreal.
7. The IMET investigative pool may be comprised of:
 - RCMP investigators,
 - Public Prosecution Service of Canada legal advisors,
 - securities regulators,
 - representatives of other federal enforcement agencies,
 - law enforcement agencies of local jurisdiction,
 - forensic accountants, and
 - various support staff.

8. The IMETs are mandated to investigate serious Criminal Code capital markets fraud offences that are of regional or national significance and threaten investor confidence or economic stability in Canada;
9. In my experience, the essential nature of capital markets crimes and related crimes is transnational. This transnational nature is inevitable because many corporations issue securities in multiple countries. The highly integrated nature of the Canadian and U.S. stock markets, in particular, is readily apparent to us in our investigations. The integrated nature of these markets has a direct impact on the investigations that ensue, since the targets of investigation and the victims of crime may be spread across several jurisdictions.
10. Cross-border crimes always present unique challenges to law enforcement, and securities crimes are no different. Sophisticated criminals will seek to profit from the barriers between countries and institutions to facilitate and disguise their crime and the fruits of those crimes. Perpetrators may not reside in the jurisdictions in which transactions occur and through which money and property flows. These international considerations add to the already complex enforcement environment within which the securities investigation exists in Canada.
11. Given the international scope and complexity of capital markets investigations, international requests for information are commonly used to obtain evidence from foreign partner agencies to further investigations and prosecutions. Generally speaking, assistance in gathering evidence internationally for these

investigations takes one of three forms: 1) Mutual Legal Assistance Treaty (MLAT) requests; 2) non-treaty requests; or, 3) through police-to-police cooperation.

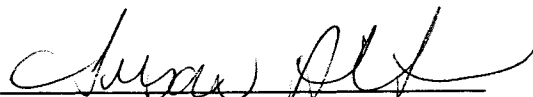
12. Outgoing MLAT and non-treaty requests must follow a formal process. Both types of requests are submitted to the International Assistance Group (IAG) of the Department of Justice for their review and coordination.
13. Sgt. Richard Bergman has conducted a review of current and ongoing investigations underway in the IMET units to determine the extent of the formal international interdependence exhibited in the present day IMET program. There are presently 17 IMET Project investigations underway across the country. Sgt. Bergman's review has demonstrated that 7 of the 17 projects have required a formal international request for assistance, whether by way of a Mutual Legal Assistance Treaty (MLAT) request or Non-Treaty Rogatory request for assistance. Sergeant Bergman has reviewed the 7 projects that feature a request for assistance and has advised me that there are 13 individual international requests for assistance within those projects.
14. Furthermore, police-to-police cooperation is an informal means of obtaining information from international police agencies. This type of evidence gathering is frequently used in the course of investigations and it is generally less structured than MLAT and non-treaty requests. The cooperation between the RCMP and the U.S. Federal Bureau of Investigation is a prime example. When we take into

account this police-to-police information sharing, 14 of the 17 projects have documented international components.

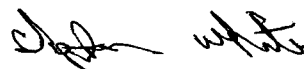
15. All aspects of capital markets investigations tend to have international considerations. When we take into account the physical location of potential victims, potential suspects, markets, market intermediaries (ex. stock brokers), or trading/bank accounts, I am confident in stating that a capital markets investigation in which international considerations are not present are the exception to what we would expect to see.
16. It is generally accepted by experienced investigators within the RCMP that the investigation of securities fraud is more complex than it was even 20 years ago. The fraudulent schemes are more intricate, and they strain resources by demanding greater specialized expertise, longer investigations and more investigators investigating in more jurisdictions. Securities crime may well go hand -in-hand with money laundering and other crimes, which require great diligence to unravel.
17. To give a recent and well-publicized example, the RCMP's Calgary Commercial Crime Section recently completed an investigation which led to the arrest of 4 individuals alleged to have run a "Ponzi" scheme (a scheme in which initial investors are paid from money invested by subsequent investors rather than profits from investments.) Half of the investors in the allegedly fraudulent scheme were Albertans, the other half from other provinces and the U.S. RCMP investigators examined banking records from a number of different countries in

conducting the investigation. The case is still before the courts, so the allegations are unproven.

SWORN before me at the City of
Ottawa in the Province of
Ontario on May 21th, 2010



Commissioner for Taking Affidavits
(or as the case may be)



STEPHEN WHITE