The Public Role in the North American Equity Market Institutions

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THE PUBLIC ROLE IN THE NORTH AMERICAN EQUITY MARKET INSTITUTIONS

By

Michael J. Szanto

A DISSERTATION

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Political Economists have increasingly studied the role of regulators in establishing and enforcing rules for the financial markets. Yet, rarely have the role of the regulators in the evolution of the exchanges themselves been studied. This dissertation utilizes historical institutionalism to investigate how critical junctures shaped the equity markets in Canada and the United States. At key points commercial banking in the United States was dominated by small community banks, while the Canadian market has always been led by a few large national banks. On the other hand, the United States has a strong Federal securities regulator, while the strongest regulator for the securities markets in Canada is the provincial administrator in Ontario. This project finds that these factors resulted in American government sponsorship of the Nasdaq and the National Market System preventing a potential monopoly of the New York Stock Exchange, while the TMX Group achieved nearly a monopoly in exchange based trading in Canada. Still, Canadian equity markets benefit from their close ties to American capital markets. This dissertation also looks specifically at the Canadian communications sector and the central role played by three publicly traded giants that are cross listed on the Toronto Stock Exchange and the New York Stock Exchange.
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Table of Contents

I. Introduction 1
II. The Rise of the Nasdaq and the National Market System 44
III. The Canadian Equity Markets 95
IV. The Canadian Communications Sector 168
V. Conclusion 218
   References 243
   Appendix 281
CHAPTER ONE: INTRODUCTION

This dissertation examines the development of equity markets in North America. Stock markets are typically viewed as pure free market institutions, when in fact many other factors particularly government policy often play a substantial role in their evolution. The early roots of the self regulation of securities exchanges date back to the efforts of traders to circumvent legislative restrictions, but by early in the Twentieth Century exchange rules came under unprecedented public scrutiny followed by the imposition of legislative control. This ultimately resulted in two very different outcomes in Canada and the United States. In Canada, a single company came to dominate exchange based trading, while in the United States the Nasdaq emerged as a high tech rival to the existing exchange giant, the New York Stock Exchange. This development did not occur out of pure chance or as a natural result of the United States having a far larger economy.

It is the thesis of this dissertation that the different outcomes were determined by two critical differences between the two countries. In Canada, commercial banking was always dominated by a few nationwide giants, while in the United States, small community banks were very entrenched by protective state and Federal law.\(^1\) The prevalence of small community banks in the United States was an artifact of the nineteenth century when many state governments depended on banking fees for much of

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their revenue. When Canada’s securities industry was deregulated as part of the Little Bang, Canada’s big banks were readily able to dominate the securities industry, whereas the American banking sector was still far more fragmented a decade later when similar reforms were undertaken in Washington. The other key difference between Canada and the United States is the American security regulator, the Securities and Exchange Commission, was far stronger than its Canadian counterparts. The central reason for the greater strength of the SEC is it is a national regulator, while the Canadian Supreme Court has not allowed for a Federal Canadian securities regulator. Further, the United States represents the largest economy effectively making the SEC the hegemonic regulator for the entire world. Compounding the weakness of the Ontario Securities Commission based in Toronto is the fact that many of the most potent tools of state power like monetary policy, trade, or even criminal prosecution are largely controlled by the Federal Government based in Ottawa. This situation is analogous to New York state securities regulators in Albany working with high level officials in the FBI or at the Treasury Department in Washington, DC. This intergovernmental interaction happens quite often, but not at the same intensity or frequency as between various US Federal agencies.

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This work utilizes historical institutionalism to understand how critical junctures shaped the evolution of the institutions and industries studied. For example, aspects of the British North America Act of 1867 intended to create a strong Canadian Federal Government often had the opposite effect, but also the subsequent decisions made by the British Privy Council and the Canadian Supreme Court left the legal precedents relegating securities laws and regulation at the provincial level.\(^5\) On the other hand, landmark decisions by the US Supreme Court upheld key New Deal Legislation including the key Federal Securities Acts. In the United States, American states responded to being blocked from minting currency by relying on banking fees from local community banks they fiercely protected, while in Canada large banks expanded nationwide without restriction.

The three cases studies conducted in this dissertation are the emergence of the Nasdaq and the National Market System in the United States, the dominant TMX Group, and the Canadian Telecommunications and Media Sector. The surprising origin of the Nasdaq is the 1938 Maloney Act, that while basically an amendment to the 1934 Securities Exchange Act allowed for the creation of the National Association of Securities Dealers (NASD). Maloney empowered the NASD to be the main administrator and regulator of the nationwide over the counter (OTC) market for equities.\(^6\) Far flung, totally decentralized, without any central exchange the OTC market was the direct precursor to the Nasdaq. The launch of the Nasdaq in 1971 as a large


\(^6\) Broderick, J. P. (1939, Jan 30). Self-Regulation over the Counter. *Barron's (1921-1942)*
nationwide electronic network for the collection and promulgation of price and trade information was done at the urging of the SEC. The National Market System was an initiative largely launched by the US Congress to link all major stock markets in the country. The SEC also deliberately fostered the development of alternative trading systems ensuring a rather competitive trading marketplace.

In Canada, on the other hand, the TMX Group was able to absorb all of the major stock exchanges as well as Canada’s main central depository for stock trading. Canada’s Little Bang deregulation of the Securities Market in 1987 was heavily inspired by the Big Bang liberalization in the United Kingdom as well as concerns of similar reforms looming in the United States. The high level of consolidation in Canada’s commercial banking sector allowed for those bank giants to quickly dominate Canada’s securities markets. The Toronto Stock Exchange acquired the newly created venture exchange out west and then merged with the rival Montreal exchange. A planned merger of equals with the London Stock Exchange was thwarted by a hostile bid made by a consortium named the Maple Group created by virtually all the major Canadian banks and domestic institutions. The deal created by the Maple Group not only involved a leveraged recapitalization of the TMX Group but also a takeover of the smaller rival Alpha Exchange and the country’s only central depository sealing the dominance of the TMX Group in exchange based trading.

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My third case study is my investigation of the evolution of Canada’s telecommunications and media sector. This choice may seem surprising, given that the Toronto Stock Exchange is far better known for its energy, mining, and commodities listings. First Canada’s communications firms represent a substantial component of Canada’s large cap S&P TXS 60 Index. Second, linking the vast land mass of Canada was one of the nation’s largest endeavors of the public and private sectors requiring major access to North American and global capital markets. During the 19th Century, the building of railroads and canals was probably the biggest tests of North American capital markets. For Canada, linking the country first with microwaves, then with satellites, followed by fiber optics was not a much smaller project. Canada built the largest microwave relay networks, beat the United States to launch its first domestic communications satellite, and then in some ways led the world in fiber optics. Yet, Bell Canada and Northern Electric (later Nortel) were both original members of the North American Bell System based in the United States. Bell Canada was the original telecommunications leader in Canada. At the same time like in most sectors of the Canadian economy, crown corporations played a far bigger role than government sponsored enterprises in the United States. Canada’s independent media played a major


role in establishing and maintaining Canada’s national identity. Protectionist laws ensured that Canada’s communications firms would remain under domestic control.

The major theoretical models utilized in this dissertation are public choice and public interest theories. Public Interest Theory assumes regulators and government officials work to optimize the public welfare, while public choice theory predicts that regulators end up working for powerful special interests. The regulatory capacity of the SEC is far greater than the Ontario Security Commission, while for the periods studied the Canadian financial sector was far more consolidated than in the United States. It would be reasonable to predict that American regulators would be considerably stronger advocates of the public interest translating into significantly greater efforts to promote competition and fairness in the securities markets. The major contribution of this work is to shed light on issues with substantial policy implications as continuing changes in technology force further changes on North American securities markets as well as on Canada’s communications sector.

From the 1990s to the first couple decades of the Twenty First Century, the New York Stock Exchange, Nasdaq, and the Toronto Stock Exchange have been three of the largest stock markets in the world. The Buttonwood Agreement founded the New York Stock Exchange in 1792 and the roots of the Toronto Stock Exchange trace back to the Nineteenth Century.¹² By the early part of the Twentieth Century the New York Stock Exchange became the dominant stock market in North America, though the Toronto Stock Exchange continues to hold its own despite Canada’s relatively small population.

Stock exchanges typically established as private trading clubs have historically been self-regulating, and much of this historic role has subsequently been codified in the securities regulations of the United States and of Canada (primarily by the Ontario provincial legislature). As a result, market forces are largely dominant in shaping securities markets. Yet, regulators in North America have played major defining roles at critical junctures.

While in the United States government regulators successfully nurtured the creation of the rival Nasdaq, Canadian regulators effectively stepped aside as Canada’s highly consolidated banking sector sponsored a near total consolidation of exchange based trading. While the Canadian Securities markets benefit from the competition from alternative trading systems, their existence is arguably the result of spillover from the the United States Securities and Exchange Commission’s deliberate efforts to foster them to promote competition. In addition to the conscious effort on the part of American regulators to encourage the growth of alternative trading systems, the SEC in conjunction with Congress has worked since the 1960s to create a national market system, whose benefits also carried over to Canada.

Not surprisingly, the Canadian stock markets have always been dominated by mining and resource companies due to the nature of Canada’s geography. What is less obvious is a very large component of Canada’s largest publicly traded firms by market capitalization are in the telecommunications and media sector, which in many ways is the most fascinating area on the Toronto Stock Exchange. This industry was shaped by crown corporations like the Canadian Broadcast Company, Canadian National Railroad, and Telesat Canada. The CBC was Canada’s first radio and television network, Canada’s
largest Railroad company helped build Canada’s long distance telegraph and telephone lines, and Telesat Canada launched satellites throughout the 1970s to help connect the massive landmass of Canada. Canada’s communications firms gained from ready access to the capital markets of both the United States and Canada, but strict share ownership and content rules defined the sector.

The goal of this dissertation is to investigate the public role in North American capital markets. I begin my analysis with the case study of the creation of the Nasdaq and the National Market System in the United States. The fairly obscure Maloney Act of 1938 allowed for the creation of the self regulatory organization, the National Association of Securities Dealers, as a result in part by lobbying from the industry. A mix of serendipity and a lot of forward thinking on the part of Congress, the SEC, and the NASD lead to the creation of the Nasdaq in 1971 and the steps that enabled it to become the role model and icon of stock exchanges globally. I continue on to investigate the role of regulators and major financial institutions in driving the evolution of the securities markets in Canada. The third case study in my dissertation is the Canadian Communications Sector viewed from an equity perspective. It is important to understand that American and Canadian securities regulations are largely based on a mandatory system of public disclosures. Consequently, the private equity markets serve as a critical rival market for firms seeking to raise capital outside of the constraints of public equity, which I will also discuss throughout this dissertation. The most important theories that

13 In this dissertation my use of the term public role refers to effect of legislators, government officials, and regulators as opposed to private agents.
can be applied to these issues are Public Choice and Public Interest. The North American capital markets remain the world’s most dynamic including often forgotten Canada.

**Transnational Regulatory Cooperation**

I originally began my research of the North American securities markets by studying regulatory convergence in the region. Political Scientists and economists have developed a number of tools and models for understanding regulatory convergence. One of the first modern integration researchers was David Mitrany. Mitrany’s goal was to find a means to develop better global governance by building international functional institutions.\(^{14}\) Federal New Deal programs in the United States like the Tennessee Valley Authority were a major source of inspiration for Mitrany.\(^{15}\) Ernst Haas adapted Mittrany’s vision by focusing in on regional integration and trying to leverage what Haas felt would be inevitable spillover effects.\(^{16}\) Karl Deutsch recognized that increasing transactions and interactions can build a sense of shared identity and “social integration.”\(^{17}\) Canada and the United States form a “pluralistic security community” because of their shared history and culture.\(^{18}\) Haas predicted his neofunctionalism


would ultimately lead to a shift in loyalty in government officials to a unified government.\(^{19}\) However, even the very ambitious NAFTA included no supranational organizations and the Canadian identity while still not unified remains very separate from the United States.

The second major theoretical model for integration studies are liberal intergovernmentalism. Stanley Hoffman was able to build a model of intergovernmentalism based on realist assumptions like the supremacy of the state unit.\(^{20}\) Moravcsik was able to adapt intergovernmentalism to the neoliberal framework devised by the neoliberal institutionalists led by scholars like Robert Keohane.\(^{21}\) Moravcsik understood domestic interests interacted with the bargaining on the state level through international institutions as demonstrated by Robert Putnam’s two level game.\(^{22}\)

Recognizing the key role of the United States in driving global governance, Robert Keohane builds upon ideas first expressed by Charles Kindleberg that have become known as hegemonic stability theory.\(^{23}\) Borrowing from the realist idea of a

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hegemon who has a dominant power position in the global system, hegemonic stability
theory argues that the hegemon establishes and enforces the rules of the system.
Keohane argues that the hegemon sponsors international institutions that protect both the
power of the hegemon but also the stability of the system even after the seemingly
inevitable decline of the decline of hegemon.\textsuperscript{24} Ikenberry identifies the critical junctures
that lead to creation of new global systems is the victory of a hegemon in war, which was
described by Robert Gilpin as “systemic change.”\textsuperscript{25}

Unlike Gilpin the neoliberal institutionalists believe in the benign hegemon who
does not require to depend on coercion alone and its ability to create a lasting
international order that can outlast the supremacy of the hegemon based on a system of
accepted rules and shared common interests.\textsuperscript{26} The stability predicted by hegemonic
stability theory come from the positive externalities created by the ruling country’s
efforts to bring order to the world. Hegemonic stability theory has played strong
influence in the academic work on regulatory convergence and cooperation in securities
regulation. The market power hypothesis predicts that market size determines the extent
of a regulator’s influence in shaping international regulations, which would historically
leave the SEC effectively as the hegemonic regulator. Drezner uses this model to argue
that the US and the EU now share in establishing global financial regulatory standards

\textsuperscript{24} Keohane, R. O. (2005). \textit{After Hegemony: Cooperation and Discord in the World
Political Economy}. Princeton University Press.

of Order after Major Wars, Princeton UP}.

because of their respective market sizes. However, American stock markets still dominate in the arena of equity, so one can expect that the SEC will continue to play an outsized global role. Furthermore, the SEC clearly dwarfs the power of the Ontario Securities Commission, which effectively serves as the dominant Canadian regulator, since Canada still has no national regulator for securities. The power of the SEC globally and even more so in Canada may also be partly understood by Bach and Newman’s idea that “regulatory capacity” determines the international strength of a domestic regulator. Posner, for example, sees the growing centralization of regulation in the form of Europeanization of regulation leading to a boost in Europe’s regulatory capacity in finance, which obviously serves as a stark contrast to Canada’s continued failure to create a single national securities regulator. We can apply Lucia Quaglia’s study of how regulators can “import” securities regulations, to understand how Canada’s provincial securities regulators successfully adapted to a large extent America’s system of securities regulation. However, the very compatible regulatory structure between the United States and Canada is also based on our shared Anglo-Saxon roots.


Norms and Identity

While neoliberal institutionalists largely rely on abstract models of bargaining based on concepts like repeated prisoner’s dilemma and game theory in general, we cannot lose sight of ideational and social factors in international institutions that include the concept of identity and legitimacy. Alexander Wendt’s classic article “Anarchy is what we make of it” really reintroduces the larger IR world do the issues of identity formation and norm creation. Neorealist and neoliberal works both largely treated issues of identity and interests as exogenous to their models completely ignoring the international processes that shape them over time. While comparativists have exhaustively studied issues of domestic legitimacy, Ian Hurd writes the most authoritative account of legitimacy in international relations.

Frank Dobbin, Beth Simmons, and Geoffrey Garrett do a very thorough job at discussing possible theories for the “diffusion of public policies” by focusing on constructivists, coercionists and free market advocates. They argue that “coercion typically involves a change in incentives to nations.” One way today’s sociologists and political scientists understand norm diffusion is a study by Ronald Burt on how physicians adopted tetracycline in the 1950s. Probably the most seminal work on norm diffusion

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diffusion in IR is Finnemore and Sikkink where they explain the process of norm diffusion beginning with “norm entrepeneurs,” followed by a “norm cascade” and then ending in “internalization.”35 They build upon the work of law scholar Cass Sunstein who researched the normative foundation of domestic laws and regulations.36 Given the large unexplainable differences in medical care practice in the United States, norm diffusion should still be studied in the medical profession! Peter Gourevitch powerfully explains how the international system influences domestic politics in the “Second Image Reversed” something understood by historians but ignored by the neorealists.37

Understanding the world of nations in normative terms begins in part with the English School scholars such as Martin Wigt and Hedley Bull.38 Leaders of major countries partly build a global order out of shared norms and laws and by doing so create a type of global society. Andrew Hurrell builds upon the English School by extending ideas of a global society to the growing IR field of regionalism.39 Given this dissertation will be a study of North American securities markets, it is important to discuss concepts of the Anglosphere. We can certainly understand the Anglosphere in the context of

regionalism. Timothy Legrand presents the Windsor Conference as an effective
illustrative example of Anglosphere transgovernmental networks.40 James C. Bennett
really explains how the cultural, legal, and language ties of the Anglosphere makes
greater integration natural.41 One example of the Anglosphere as a security community is
given by Srdjan Vucetic who points out US military coalitions come disproportionately
from the Anglosphere.42 Deutsch himself imagined the day that Canada and the United
States would transform into an amalgamated security community. In the Americas
focusing in on the Anglosphere may seem over limiting given that most countries today
are Spanish speaking and Hispanic speakers make up the largest ethnic minority in the
United States. One day Robert Pastor’s vision of a full North American Union may be
achieved that fully includes Mexico.43 However, in the nearer term the shared legal,
political, and even financial legacy that dates back all the way to colonial times makes
Canada and the United States stronger candidates for unification. This common heritage
has made London, New York, Chicago, and Toronto four of the biggest securities centers
in the world. The world’s two largest stock markets are in New York and the Chicago
Mercantile Exchange is the world’s largest derivatives exchange. The Toronto Stock

40 Legrand, T. (2012). The merry Mandarins of Windsor: Policy Transfer and
Transgovernmental Networks in the Anglosphere. *Policy studies, 33*(6), 523-540.

will Lead the Way in the Twenty-First Century.* Rowman & Littlefield.


Oxford University Press.
Exchange is one of the ten largest stock exchanges. In fact, Charles Kindleberger described the move of Canada’s financial center to Toronto as “a shift of an Anglo group of financiers from one Canadian city to another.”

A major factor in international regulatory diffusion as well as increasing interdependence is norm diffusion. There is a normative basis to international institutions that allow them to persist and strengthen. Norm diffusion is one of the most important mechanisms in creating and sustaining international institutions. Ruggie describes the overall economic order created by the United States and the allies after World War II as “Embedded Liberalism.” The most studied example of norm diffusion in the arena of securities regulation is the promulgation of insider trading restrictions around the world. Seeing that in a good year, the Ontario Securities Commission will prosecute one or two insider information cases, I have found this legal issue fairly trivial in the Canadian case.

**Transgovernmentalism**

Transgovernmentalism is a concept first introduced by Keohane and Nye. They realized that regulators often were able to collaborate together by forming informal professional networks similar to what Ernst Haas later called “Epistemic Communities.” Joseph Nye and Robert Keohane defined transgovernmentalism as “sets of direct interactions among sub-units of different governments that are not controlled or closely

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guided by the policies of the cabinets or chief executives of those governments."\(^{46}\)

Joseph Nye actually followed up this work coediting a whole volume of works focusing in on the study of the transnational and transgovernmental networks involving Canada and the United States.\(^{47}\)

Transgovernmentalism is famously revived a decade later by Ann Marie Slaughter in an essay in Foreign Affairs which she later expanded into a book.\(^{48}\)

Slaughter was ostensibly responding to an essay in the same journal by Jessica Matthews predicting a decline in the role of the state which Slaughter describes as being a “new midaevalism.”\(^{49}\) Rather than states surrendering their power to supranational organizations like the United Nations or the European Commission, policy coordination is achieved through networks of bureaucrats like the Basle Committee or the International Organization of Securities Commissioners. However, Slaughter was also expanding on various ideas that she had discussed in previous years. She refered to the tendency of courts in countries like Germany, Canada, and Israel to cite precedents established by the US Supreme Court as an example of transnational law. Slaughter argued in earlier essays that legal cooperation was enhanced to greater levels between liberal democracies due to


internal checks and balances as well greatly expanded interaction between judicial units, which one might refer to as a type of legal interdependence.50

Her work can be viewed as a corollary to the Democratic Peace Theory. Not only are liberal democracies at peace with each other, they also do law together. In Slaughter’s theory of an international legal order she explicitly builds upon the work of Bruce Russet and Michael Doyle. In her articles discussing international legal cooperation she also draws upon theories of Federalism particularly Deudney’s negarchy.51 The concept of negarchy suggests a type of interdependence and shared objectives and values like security concerns can lead to the creation of overlapping binding ties in a way another type of interdependence that still lacks the hierarchical structure of supranational institutions or to a greater extreme global government. In a world of liberal states their sovereignty according to Slaughter gets “disaggregated.” She argues that “disaggregated sovereignty” occurs in part due to transjudicial and transnational legislative dialogue.52

When institutions get reinforced by legally binding structures it is referred to as legalization.53 This type of hard law applied by administrative panels acting as a type of


international courts do not really play the sweeping role than many liberal internationalists may have hoped at the turn of the millennia. Slaughter’s investigation of transgovernmental networks is more relevant to understanding the regulatory rubric that defines transnational regulation.\footnote{Slaughter, A. M. (2002). Global Government Networks, Global Information Agencies, and Disaggregated Democracy. \textit{Michigan Journal International Law}, 24, 1041.} José Enrique Alvarez challenges Slaughter’s liberal peace law theory based on his assertions that the evidence does not in fact support her contention that liberal democracies form stronger legal relationships or are better at honoring treaty commitments.\footnote{Alvarez, J. (2001). Do Liberal States Behave Better? A Critique of Slaughter's Liberal Theory. \textit{European Journal of International Law}, 12(2), 183.} The interest by IR scholars in the declining role of the state goes back many decades. John Herz actually discussed the decline of the Westphalian nation state even if largely linked to the dark fear of total thermonuclear war.\footnote{Herz, J. H. (1957). Rise and Demise of the Territorial State. \textit{World Politics}, 9(4), 473-493.}

In recent years transgovernmentalism has become a major interest of IR and IL scholars particularly in working towards the convergence and harmonization of securities laws. For example, David Bach and Abraham Newman make the argument that there has actually been a great deal of convergence in securities regulation globally due to transgovernmental networks.\footnote{Bach, D., & Newman, A. L. (2010). Transgovernmental Networks and Domestic Policy Convergence: Evidence from insider trading regulation. \textit{International Organization}, 64(3), 505-528.} Some of the analysts take a critical view. Andrew Baker (2008) warns us that transgovernmental networks threaten to undermine democratic

\footnotesize{\textsuperscript{\textbullet}}
legitimacy and undermine broad based representation in important decisions. Geoffrey R. D. Underhill and Xiaoke Zhang make the argument that financial regulation convergence comes out of transnational networks at the expense of the power of the state as well as promotes regulatory capture.58 Other scholars take a decidedly more positive view on transgovernmental networks. Scholars like Eberlein and Newman (2008) argue that transgovernmental networks are the best solutions for solving international governance issues.59

Transgovernmentalism builds upon recent research into international legal processes. Harold Koh worked on reviving the study of “international legal process.”60 It involves “interaction, interpretation, and internalization” which is perhaps a updated version of Cass Sunstein’s norm cascade by including international courts and tribunals. Kal Raustiala argues that transgovernmental networks not only promotes regulatory convergence but is also synergistic with traditional intergovernmental cooperation.61 Kal Raustiala discusses trangovernmentalism in regard to international securities cooperation and points out that the memorandums of understanding favored by the SEC are very


consistent with informal networks of national regulators. Moreover, Tonya Putnam finds that legal extraterritoriality constitutes a very important mechanism for international regulatory harmonization. Extraterritorial enforcement of American securities laws is vital for their integrity. If the Securities and Exchange Commission and Justice Department is not able to take action against foreign individuals or enforce American rules on foreign transactions with American interests, it would be often easy to circumvent American law. On the flip side most large publicly traded companies as well as large securities offerings if not done through a carefully conducted private transaction is going to fall under the jurisdiction of the US Government. Substantial numbers of American investors or any significant effort by the firm to market the security within the United States is going to necessarily involve American law.

Newman and Posner argue that transnational soft law serves as a positive feedback that transforms both domestic preferences and politics. Mark Pollack brings it all together by arguing that the success of the New Transatlantic Agenda in “deep integration in the absence of deep institutionalization” comes from creating links at the “intergovernmental, transgovernmental and transnational levels.”

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domestic factors that determine whether a country work towards cooperation through intergovernmental, transnational, or intergovernmental cooperation. Bach is able to trace the roots of SEC’s very transgovernmental focus.66

Lily and Elliot Feldman expanded the concept of Transgovernmentalism by focusing on interactions between regulators of subgovernment units and in particular between American states and Canadian provinces. The relevance of the work of the Feldmans to this Dissertation is illustrated by the fact that regulatory cooperation between the United States and Canada is overwhelming conducted by agreements and pacts between the SEC and Canadian provincial securities regulators. Elliott and Lily Feldman apply this concept of transgovernmentalism in ways specific to the decentralized Federal nature of Canada. They add another relevant component to transgovernmentalism: “activity abroad conducted by constituent governments of a federal union.” This additional dimension of transgovernmentalism will be key to my dissertation. They follow in the work on North American transgovernmental institutions done by Holsti and Levy.67 The Feldmans note how the Canadian provinces continue to act as international actors defying “conventional concepts of sovereignty.” The premiers of Canadian provinces are even sometimes received abroad as heads of states.68


The complex interplay between Federalism in North America and international relations has also continued to be studied. Earl Fry did an important study of the role of North American states and Canadian provinces in the implementation and realization of NAFTA. Recently, political economist Marie Daumal claimed to find that Federal Systems tended to engage in greater levels of international trade. Gregory Bowman gives us the best general overview of how the Federal systems of Canada and the United States impact the regulation of trade between the two countries. Bowman points out that the involvement of Canadian provinces is particularly critical to enacting international trade agreements. He also makes the fascinating point that Montesquieu’s view that Federalism was the best way to balance local with national interests in promoting international trade heavily “deeply influenced the American founding fathers and, by extension, the founding fathers of Canada.” The shared Federal nature of the United States and Canada is a major driver for the transgovernmental ties.

One of the related concepts particularly relevant to Canada-US relations are “intermesticity.” Geoffrey Hale really expands the concept of intermesticity in his recent book. Intermesticity in large part relates transgovernmentalism to the federal systems in

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Canada and the United States. Intermesticity means the overlap in the domestic and international issues fuel the demand for transgovernmental networks.

Much of the work to apply Slaughter’s research into transgovernmentalism is specifically applied to international securities regulation by Abraham Newman and Bach. Farrell and Newman point out that state to state negotiations are decreasing in significance “as a variety of more complex forms of bargaining and adjustment between states, semi-independent regulatory authorities and private actors emerge.” Roman Goldbach studied transgovernmental networks role in international harmonization of banking standards. The best way to study integration processes is through historical institutionalism primarily because of our need to understand the processes that shape norms over time and even the effects of different time horizons for different agents and players. One of the factors behind the path dependence of institutions is institutions have increasing returns. This is a significant advantage in this dissertation’s focus on the use of historical institutionalism.

**Historical Institutionalism**

To fully capture and understand regulatory convergence and harmonization it is still necessary to properly synthesize the theories in a way only possible using methods of

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historical institutionalization. As Pierson himself recognizes a historical study of Canada reveals that the effort with Canadian Confederation in 1867 that intended to create a stronger federation preventing another North American civil war instead ended up resulting in a far weaker union in Canada than the United States. This demonstrates that not only consequences are often unintended but quite often very unexpected. To fully understand historical processes, we must study their sequencing and look for pivotal moments. In my dissertation I will heavily rely on historical institutionalism because of the path dependent nature of institutions. In other words, history very much matters.

Paul Pierson builds upon neofunctionalism to explain the development of the European Union, but using a historical institutionist approach. This approach utilizes a specialized type of process tracing to test neofunctionalist models. Pierson builds a model based on studying a sequence of related events based on a belief in path dependence. Pierson also introduces the concept of “positive feedbacks” and explains how “critical junctures” help shape changes to the global order. Keohane successfully argues that historical institutionalism best explains “institutional persistence.” Farrell and Newman call the combination of transgovernmentalism with historical institutionalism the “New Interdependence Approach.” Farrell and Newman also this

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describe this interdependence in terms of “rule overlap.” Newman explains that “because global regulation takes place within and across jurisdictional boundaries, regulatory politics cannot be isolated within one single state. Instead, regulatory politics transpire between states as well as within transnational regulatory bodies.” Within this updated model both national preferences and the evolving system itself are endogenous to a process. It seeks to elucidate the process of today’s global regulatory society. Newman in fact implicitly harkens back to the neofunctionalist arguments of changing loyalties of elites when he boldly claims that through transnational feedback “global rules can siphon away support from domestic regulations.”

The Government Role in Shaping Equity Markets

My initial research has determined that the regulatory convergence has a very minimal effect on the actual markets. The Multijurisdictional Disclosure System (MJDS) is a powerful example of how the innovative nature of market dynamics can transcend regulatory hurdles. The MJDS was created as a result of an agreement between the SEC and Canadian provincial securities regulators and was aimed at easing the ability of established Canadian firms to issue securities in the United States using the forms they had to register locally. Despite the seeming advantages of the program of reciprocity, it resulted in a minimal boost to Canadian capital raising in the United States, since

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Canadian firms already were able to tap into funds using legal mechanisms like Rule 144A and Regulation S.

The original stock exchanges were fundamentally private clubs set up by traders with their own rules and means of operation. They operated separate from the state. However, Elliot Posner researched the efforts of European Union officials to duplicate the noteworthy success of the Nasdaq in the United States as a market that supported entrepreneurship and venture capital in America. His work was a major inspiration for my investigation of the public role in the formation of the equity markets in North America. The US Government played an outsized role in the creation of the Nasdaq and cultivating the growth of new competition in equity trading and even listings by alternative trading systems. Canada’s very weak securities regulators did little to impede the consolidation of exchange trading led by Canada’s powerful banks, but did not stand in the way of the growth of American style alternative trading systems either. The Canadian Federal Government did play a major role in defining and shaping the very large communications sector however.

**Blue Sky Laws**

The Government role in North America’s securities markets began with the Blue Sky Laws, a type of state securities law first passed in Kansas in 1911. The version first passed by Kansas was merit based and involved a regulatory review of the fitness of the investment. Viewed by some as paternalistic, it was inspired by the progressive movement led by President Theodore Roosevelt. Public Choice theorists like Jonathan

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Macey and Geoffrey Miller also trace support for tougher Blue Sky Laws to local community banks who viewed investment banks and speculative investments as a competitive threat for local deposits.\textsuperscript{82} Public Choice Theory came out of the work of economist James Buchanan and was applied to American regulation by University of Chicago economist George Stigler. Joel Seligman, a top author of authoritative texts on securities law is the strongest advocate of public interest theory in explaining American securities laws.\textsuperscript{83} Seligman argues that fraud was rife before the states passed Blue Sky Laws.\textsuperscript{84} However, lobbyists for investment banks played a clear role in getting many states to pass securities laws less stringent than Kansas.\textsuperscript{85}

**The Federal Securities Laws**

The stock market crash of 1929 and the Great Depression led to strong public pressure for Washington to intervene in the financial sector including in regards to the securities markets. Hearings held on alleged abuses on Wall Street by the Senate Banking Committee came to be known as the Pecora Commission.\textsuperscript{86} During its


proceedings, presentations were made intended to illustrate alleged banker wrongdoings. One of the transgressions was purportedly organized stock pools that promoted certain firms as top investments. Paul Mahoney illustrates that the investigation by the Senate may have fundamentally misunderstood the workings of the stock market. From the Senate investigators viewpoint, a stock should not appreciate more than could be justified by the tangible balance sheet and growth in dividend payments. The effective example given by Mahoney is RCA, a stock directly tarnished during in Pecora hearings. The launch of the nation’s first radio network, NBC, and the invention of television apparently was seen to be of little value to the Senate inquisition.87

The first securities law passed by the US Congress in 1933 is generally known as establishing a system of disclosures. However, Paul Mahoney makes a powerful case, that it is actually the mandatory quiet period for newly issued securities that is more noteworthy, because it codifies the standard practice of powerful Wall Street syndicates and puts the power of the state behind it. Public Choice theorists in general argue that the law basically only codified existing best industry preferences. All of them including George Stigler challenge the conventional wisdom that investors were in the dark before this law was passed. They believe that market forces compelled stock issuers to provide quality information to prospective investors. However, Mahoney argues that by forcing upon the whole industry fairly stringent rules, it harmed the smaller weaker players and in fact played a key role in the closure of smaller regional exchanges throughout the country. The development of efficient market theory by Eugene Fama further builds

upon the argument, by saying stock markets as efficient price discovery mechanisms do not need government intervention to be fair and orderly.

The second Federal securities law is the Securities Exchange Act of 1934 which created the Securities and Exchange Commission, and sanctioned the continued self regulatory functions of the established stock exchanges as long as they registered with the SEC. It was the 1938 Maloney Act, basically an amendment to the 1934 Act, that would completely transform the stock market globally. The Maloney Act allowed for the the broker dealers comprising the over the counter stock market to organize in their own self regulatory organization that took on the name National Association of Securities Dealers. The law was passed as a result of successful lobbying by the Investment Bankers Conference who formed the nucleus of the NASD. 88 However, the widespread adoption of this new organization by the overall industry and its quasigovernmental power granted by Congress made it the primary regulator for American broker dealers and stock brokers. In 2007 the Financial Industry Regulatory Authority (FINRA) became the successor organization to the NASD after a merger between the NASD and the NYSE Regulation, the regulatory arm of the New York Stock Exchange. The creation of FINRA came as a result of the conversion of the NYSE and Nasdaq into for profit companies.

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The Creation of the Nasdaq and the National Market System

In 1961 the US Congress funded the Special Study of Securities Markets which would involve a wide ranging analysis of America’s securities markets.\(^8^9\) Seeking to promote competition and the integrity of the market, it began a process of the SEC seeking to link the securities markets nationwide and strive for greater automation and computerization of the exchanges.\(^9^0\) The SEC would come to recognize that the totally decentralized nature of the over the counter market could particularly benefit from the unfolding information technology revolution. Subsequent studies by the NASD would further support creating a computerized market for OTC stocks. In 1971 the NASD launched NASDAQ, the world’s first electronic exchange.\(^9^1\) Around the same time, the first electronic alternative trading systems, Instinet and Autex were created, which allowed institutions to trade shares directly with each other.\(^9^2\) The Securities Amendments Act of 1975 empowered the SEC to take steps to build a national market system.\(^9^3\) The steps taken in subsequent decades would lead Nasdaq to evolve into a


revolutionary world leading stock exchange and the link the overall American equity markets into a single unified marketplace that remains both dynamic and competitive.

The Canadian Equity Markets

In Chapter 3, I discuss the Canadian Equity markets. Unlike the United States, Canada has never had a Federal Securities Regulator. However, Canada also always had Federal Bank Charters resulting in a highly consolidated commercial banking sector. As a result, Canadian banking giants always had a great deal of power.94 Canada’s Little Bang reforms of the securities industry allowed these highly concentrated banking firms to buy or start broker dealers as well as investment banks leaving them as the major players on Bay Street. While banking is handled by the Federal Government, securities law is handled by 13 provincial and territorial administrators. The Canadian Securities Administrators serves as the umbrella organization for the local securities regulators in Canada. The primary self regulator for Canada’s broker dealers and exchanges is Investment Industry Regulatory Organization of Canada (IIROC) which was created as a result of the merger of The Investment Dealers Association of Canada with Market Regulatory Services in 2008. This union had a very similar effect as the merger between NASD and the NYSE Regulation in the United States, resulting in IIROC serving a function virtually identical to FINRA in the United States.

At the end of the Twentieth Century, Canada’s major financial exchanges reached an agreement for them to shift towards specialized niches. The agreement called upon all of the senior equity listings to go to Toronto and the Montreal Exchange to convert into

an exclusively derivatives exchange. A new venture exchange was created primarily through the merger of the Vancouver and Alberta stock exchanges, though The Canadian Venture Exchange (CDNX) also ultimately absorbed the Winnipeg Exchange as well. While the move of stock trading from Quebec to Ontario sparked a bit of a nationalist backlash among French Canadians, there just was not enough liquidity or market interest any more to support equity trading in Quebec. It is worth pointing out that derivatives trading is actually far more lucrative any way. An effort by the government of Quebec to host a new market sponsored by Nasdaq which unquestionably violated the spirit of the realignment agreement failed. The Toronto Stock exchange purchased a CDNX struggling from the effects of the dot com crash at the beginning of the millennium. The Toronto and Montreal exchanges both demutualized and ultimately merged creating a single powerful exchange.

The Alpha Exchange was created by Jos Schmitt with backing from Canadian banks to create a rival trading platform to the TMX Group. At around the same time American ATS leader Instinet launched a alternative trading system named Chi-X Canada and was joined by a new electronic network, Pure Trading, managed by the

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Canadian Securities Exchange.\textsuperscript{99} In an effort to expand its international reach, the management of the TMX Group agreed to a merger of equals with the London Stock Exchange.\textsuperscript{100} This move was opposed by nearly all of Canada’s major financial institutions who formed a consortium known as the Maple group to launch a rival hostile bid.\textsuperscript{101} The Maple Group’s bid amounted to a leveraged recapitalization which involves borrowing money to reduce share float, but also included a plan to absorb the rival Alpha Group and the Canadian Depository for Securities, effectively creating a vertically integrated exchange monopoly.\textsuperscript{102} Once the merger with the London Stock Exchange failed to win sufficient shareholder supporter—which was not surprising since Canada’s banks and major pensions had a nearly controlling stake—the TMX management was forced to accept the Maple Group bid. Except for a somewhat perfunctory review by the Canadian Competition Bureau, Canadian regulators played a back seat to the evolution of Canada’s exchanges since the Little Bang Reform. This is the result of large powerful banks and weak fragmented regulators for the securities industry.

Despite the near monopoly in exchange based trading in Canada, the equity marketplace remains dynamic and competitive overall. A great deal of order flow is


\textsuperscript{100} Freeman, S. (2011, Feb 10). Merger of Toronto and London Stock Market Operators a Global Game-Changer, Says Head of TSE. \textit{Prince Albert Daily Herald}

\textsuperscript{101} Cummins, C., & Dummett, B. (2011, May 16). TMX gets Counteroffer to LSE deal --- Canadian Banks, Pension Funds Form Consortium; London Exchange isn't Likely to Sweeten its Bid. \textit{The Wall Street Journal Asia}

handled by alternative trading systems owned or inspired by American firms. Jos Schmitt has formed the Aequitas NEO Exchange which has not only gained traction for trading but also won business for actual stock listings.103 The NEO Exchange uses proprietary methods to foil the more abusive practices of a high frequency trading, which may of benefit in American markets as well.104 The TSV Venture Exchange is a unique enough exchange, that it too could possibly inspire similar markets in the United States or elsewhere in the World. Part of the competitive dynamic nature of the Canadian equity marketplace is probably effectively spillover from the strong national market system in the United States sponsored by Congress and the SEC.

As is the case in the United States, Canadian private equity provides a major alternative source of financing to the public markets. Many of the largest investors in private equity are public pension funds including the Canadian Pension Plan Investment Board (CPPIB), the Ontario Teachers Pension Plan (Teachers), the Ontario Municipal Employees Retirement System (OMERS), and the Caisse de depot et placement du Quebec (Caisse).105 The two most storied Canadian firms in the world of Canadian Private Equity are Onex and Brookfield. Onex was founded by private equity pioneer Gerald W. Schwartz, a former colleague of American giant Jerome Kohlberg Jr. who


105 Tedesco, T., & Shecter, B. (2016, Oct 15). 'Masters of the Universe'; Inside the Risky Strategies that have Turned Canada's Top Pension Plans into Global Investing Powerhouses. National Post
went on to co-found American private equity pioneer Kohlberg Kravis Roberts in NYC. Before founding Onex Schwartz co-founded media giant Canwest with Izzy Asper.\textsuperscript{106} Brookfield has a more complex history. Edward and Peter Bronfman were nephews of the founder of Seagram Liquor in Montreal, but lived in Toronto becoming known as the Toronto Bronfmans. While they inherited a fairly tidy sum, they were effectively excluded from maintaining a role in Seagram. They formed Edper to manage their money and went into the business of leverage buyouts. Brascan was an early acquisition and was transformed into one of their early investment platforms.\textsuperscript{107} Brookfield was originally just their major real estate investment and management subsidiary. At one point, a very large part of the Toronto Stock Exchange was controlled by the Bronfmans, but in the 1990s they got badly over extended.\textsuperscript{108} Brookfield today is the heir to their restructured empire and remains one of the largest asset managers in Canada. In addition to private equity, it is a major owner of real estate owning iconic properties from the Diplomat Hotel in Hollywood, Florida to the entire shopping mall portfolio of the now defunct Chicago based General Growth Properties.\textsuperscript{109}

There are many venture capital firms in Canada, though none of them are particularly large. There are rarely big hits or unicorns, startups valued more than a

\textsuperscript{106} Flavelle, D. (1999, Aug 25). Onex's Gerald Schwartz: A Formidable Dealmaker ; Onex Chief Makes Bold Bid to Merge Canada's Competing Airlines Bay Street Financier has Proven Track Record. \textit{Toronto Star}

\textsuperscript{107} Edper wants to create $8B entity with merger. (1997, Apr 30). \textit{Financial Post}


\textsuperscript{109} PGA National Sold to Canadian Company. (2018, Dec 30). \textit{Palm Beach Post}
billion dollars, but overall Canada is not a superpower in venture capital. The two largest Canadian technology firms have not left investors with very happy endings. Nortel was never funded by venture capital, but rather was a creation of the North American Bell System created in the Nineteenth Century. Canadian law did not allow foreigners to own patents forcing Bell Canada to create Northern Electric as an alternative hardware provider to Western Electric, AT&T’s main supplier.\textsuperscript{110} Due to Canada’s immense size, Northern Electric became a world leader in fiber optics technology. Nortel Networks was created as a result of a transformative merger with California based Bay Networks.\textsuperscript{111} The tech bubble at the end of the 1990s led to Nortel getting terribly overextended and then crashing hard. An accounting scandal last decade ultimately was the final blow to Nortel, though some argue the total flight of investors and creditors may have been more the result of guilt by association with major cases of fraud like Worldcom and Enron.\textsuperscript{112} Blackberry’s demise ultimately came as a result of Apple’s revolutionary iPhone. In an effort to boost the outlook for domestic startups, Canada has numerous government programs on the Federal and provincial level to subsidize and support the venture capital industry.

Canadian equity markets compete with American markets for both listings and order flow. Trades for various issues that originate in Canada can often be routed across


\textsuperscript{112} Bagnall, J. (2012, May 10). How Review was Done Remains a Riddle; And the Trial May be Unable to Solve It. The Ottawa Citizen
the border to American exchanges and alternative trading systems. Very famously brothers Peter and Edward Bronfman were able to take control of Canadian Brazilian power company Brascan in large part by purchasing shares on the American Stock Exchange flouting the rules of the Toronto Stock Exchange, the firm was listed on.\textsuperscript{113} The TMX Group also aggressively competes with American exchanges for listings. Many major firms like Cameco and Bombardier are cross listed on the Toronto Stock Exchange and the New York Stock Exchange or the Nasdaq. Recently, IMAX and Lululemon chose to delist from the Toronto Stock Exchange believing that being listed on a major American exchange was sufficient for their funding and liquidity needs.\textsuperscript{114} The Toronto Stock Exchange has also established itself as one of the largest marketplaces for mining and commodity issues and aggressively competes with the Australian Stock Exchange in this sector. Additionally, the Toronto Stock Exchange has sought to become an alternative North American destination for technology firms from countries like China and Israel, and has opened up a special office in Israel as a result.\textsuperscript{115}

Crown corporations created by the Federal Parliament or the provincial legislatures play a large role in the Canadian economy. Canada’s largest railroad company, Canadian National, and its largest airline, Air Canada, were both originally Federal crown companies before they were privatized. Bombardier’s world leading

\textsuperscript{113} Davidson, J. (1979, May 01). Edper buys 3,276,400 Brascan on Amex. The Globe and Mail

\textsuperscript{114} Kiladze, T. (2015, Mar 03). Can We Call a Truce in the Trader-TMX war? The Globe and Mail

\textsuperscript{115} Q3 2017 TMX Group Ltd Earnings Call - Final. (2017, Nov 10). Fair Disclosure Wire
regional jet division, Canadair, was also a crown company it purchased. The world’s largest uranium mining firm, Cameco, was formed through the merger of two crown corporations that were also privatized. Canada’s world leading reactor technology, known as Canada Deuterium Uranium (CANDU) was also developed by Federally owned companies. SNC-Lavalin Inc. purchased this technology from Atomic Energy of Canada Limited (AECL). The world’s oldest operational reactor outside of the United States at Chalk River is still owned by AECL. As historically the only supplier of vital medical radioisotopes for North America, its planned shutdown has posed a huge challenge to clinics and hospitals throughout the United States and Canada.

The Canadian Communications Sector

While the largest sector on the Toronto Stock Exchange is mining and commodities, telecommunications and media is the most unique and interesting component. Several unique attributes helped define this sector for Canada. Canada is one of the world’s largest countries, but it is also very sparsely populated in most of its regions. In the early nineteenth century, major investments were made to create some of the world’s largest railroad lines. As a result Canadian National was created as a crown corporation, and while Canadian Pacific was private it too was heavily supported by the Federal Government. The railroad firms played a key role in first building some of the most important telegraph lines and then merged their telecommunications assets to create the telephone service provider CNCP Telecommunications. The inventor of the telephone, Graham Bell, was a Canadian resident, and as a result Bell Canada was an early member of the North America Bell Network, complete with its intertwined share ownership.
Canada’s immense size led to it becoming a world leader in telecommunications. The microwave relay networks it built in the 1950s to link her microwave, telephone, and television networks were the largest in the world. In 1969, the same year the US went to the moon, the Canadian Parliament created the crown corporation Telesat Canada to launch what would become one of the world’s largest communications satellite fleets. The Canadian Broadcast Corporation, also formed by the Canadian Parliament, was the first real radio and television network in Canada. A few of the CBC’s early affiliates were privately owned, though by and large the entire network remains almost entirely a state enterprise. One of the defining features of Canadian television was the first stations Canadians really tuned into were channels broadcasting from the south across the border. Canadians would either put up very powerful antennas to receive American programming, or in many cases became early adopters of cable services that included American networks.

Canadian laws feature very strong requirements on domestic control of both media and telecom companies as well as substantial inclusion of local content. Unlike the United States, Canada did not have strong private television networks at first. Instead, they have largely formed in recent decades even as the growth of cable television and now the internet threaten to make broadcast television obsolete. Today the three large broadcast networks in Canada are CTV, CityTV, and GlobalTV owned by communication giants Bell Canada, Rogers, Communications, and Corus.

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Entertainment. Corus is the publicly traded firm that owns the spun off media assets from leading cable firm Shaw Communications and is still controlled by the Shaw family. The largest telecommunications firms in Canada are Telus, Shaw, Rogers, and Bell Canada and they are all cross listed on both the New York Stock Exchange and the Toronto Stock Exchange. Special voting shares are often used in this sector to comply with Federal laws requiring domestic control of media and telecom companies as well as to maintain the control of founding families.

**Conclusion**

American and Canadian stock markets are based on the centuries old traditions that began in the United Kingdom. They began as private clubs that were self regulatory, and their self regulatory functions have been codified by the securities laws. Their systems of self regulation have survived their demutualization and conversion into publicly trade companies. Regulatory convergence can be understood in terms like transgovernmentalism—illustrated by organizations like the International Organization of Securities Commissions (IOSCO) or the the North American Securities Administrators Association (NASAA) or reciprocity agreements like MJDS. However, market forces define the market far more than the securities laws. The near global adoption of American styled insider information laws can be seen as a success of norm propagation or illustrative of a hegemonic regulator. Yet, in a good year the Ontario Securities Commission will prosecute one or two insider information cases demonstrating the limited relevance of some of the legal issues.

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The United States Securities and Commission played a key role in fostering the growth and development of the Nasdaq and the National Market System. Its actions prevented the domination of the securities markets by the centuries old New York Stock Exchange, and created a very high tech rival exchange. The creation of the NMS and rules promoting competition and fairness allowed for the rise of multiple alternative trading systems that largely make the markets faster, more efficient, and more equitable. Meanwhile Canada, regulators largely stood aside as the TMX Group became a monopoly in terms of exchange-based trading.

Using historical institutionalism, I analyzed how key decisions made by policymakers and regulators at critical junctures determined the evolution and development of North American Equity Markets. Most of the critical information was gleaned from secondary sources at key time periods as well as from public filings made with the Canadian and American systems for market disclosures. Key to my analysis was my understanding of the importance of sequencing, path dependence, and increasing returns to scale. Institutions once formed start to develop their own intrinsic interests and even norms, and progress in ways unexpected by their creators who typically had short time horizons. While overall the markets are driven by market forces, they are often shaped by policy choices and decisions made by governments. These critical junctures amazingly often revolve around extremely obscure laws and rules. In chapter 2, I will discuss Congress and the SEC’s role in the creation of the Nasdaq and the National Market System. Some of the key critical junctures involved in respect to these topics are the Securities Exchange Act of 1934, the Maloney Act of 1938, the 1961 SEC Special Study of the Securities Markets, and the 1971 launch of the Nasdaq. In Chapter 3, I will
discuss the Canadian private and public equity markets. Responding to global competitive pressures, the Canadian securities markets were liberalized as part of what’s known as the Little Bang led by regulatory changes enacted by the province of Ontario and the Canadian Federal Government. In chapter 4 I will analyze the government role in the communications sector from an equity perspective. Canadian ownership and control restrictions have ensured that Canadian telecommunications and media would be dominated by a few major domestic giants that are by and large cross listed on the Toronto Stock Exchange and the New York Stock Exchange. Canada’s proximity to the United States meant that the United States would always be a major source for content on Canadian television and radio. The sheer size and dimensions of the country necessitated that Canadian telecoms lead the world in cutting edge communications technology. Canadian communications firms benefitted from ready access to both Canadian and American capital markets. In my conclusion, I will briefly review my major findings and analysis.
CHAPTER TWO:

THE RISE OF THE NASDAQ AND THE NATIONAL MARKET SYSTEM

The main objective in Chapter 2 is to describe the evolution of the American securities regulatory architecture and how it led to the creation of the Nasdaq and the National Market System. It covers the emergence of the Blue Sky Laws that were adopted by all of the US States and Canadian Provinces. Then it discusses the foundational US Federal laws passed from 1933 through 1940 that were ostensibly part of President Franklin’s Roosevelt’s New Deal. These statutes formed the overall Federal regulatory structure that exists today. The 1934 Securities Exchange Act created the US Securities Exchange Commission, but also empowered the exchanges to largely self-regulate with powers codified by the statute. The Maloney Act of 1938 was an amendment to the Securities Exchange Act of 1934 that empowered the broker dealers comprising the over the counter market to form their own self regulatory organization with statutory powers equivalent to those given the the traditional stock exchanges. The organization formed as a result, the National Association of Securities Dealers, would become the most powerful self regulatory organization in the US securities industry and assume responsibility for the licensing and regulation of stock brokers imbued with quasi-governmental powers.

On September 5, 1961 Congress passed an amendment to the Securities and Exchange Act introduced by Congressman Mack responding to concerns of
a growing mania and rising market abuses by calling on the SEC to carry out the Special Study on Securities Markets to fully investigate market dynamics.\textsuperscript{119} SEC Chairman William Cary hired Milton Cohen to carry out this now famous project. The Special Study sought to find means to ensure a competitive and fair marketplace for stocks. It concluded that transparency and efficiency required exchanges to computerize and link up in what became the SEC’s vision for a US National Market System for stocks. In particular, the authors of the report recognized that the over the counter market managed by the NASD had to be thoroughly transformed. As a result, the NASD hired the management Arthur D. Little how to best transform the market leading to plans that led to the launch of the Nasdaq in 1971, the world’s first electronic stock market exchange. At nearly the same time Instinet and Autex created electronic trading networks that allowed institutions to trade with each other separate from any organized exchange or market. In 1975 Congress passes the Securities Act Amendments of 1975 calling on the SEC to work towards the creation of a national market system for the stock market.

The Nasdaq emerged in the 1980s as a major rival to the previously dominant New York Stock Exchange. The SEC primarily acted to curb actions by the New York Stock Exchange that had threatened to hinder the growth of the Nasdaq and other emerging competitors chiefly alternative trading systems. The issuance of no action letters by the SEC allowed alternative trading systems like Instinet to compete with exchanges like the New York Stock Exchange and Nasdaq without registering as exchanges under the 1934 Securities Exchange Act. In 1998 the SEC finally formalized

this policy with the issuance of Regulation ATS establishing a framework of rules for the regulation and registration of alternative trading systems. The largest changes passed by Congress in the 1990s were the National Markets Improvement Acts of 1996 which largely preempted state securities regulations particularly for stocks listed on national exchanges and Sarbanes Oxley which has effectively introduced Federal authority into areas of corporate governance, previously the exclusive purview of the states.

The Academic study of securities regulation and the government’s role in shaping market structure is largely divided between public interest and public choice theorists. The main proponent of public interest perspective is Joel Seligman also a leading author of standard textbooks on securities law. Seligman argues that rife fraud led to the states passing what have come to be known as the Blue Sky Laws. Inadequacies in the ability of the states to police what often involved the use of interstate commerce, the abuses on the New York Stock Exchange and regional stock markets, and the stock market crash of 1939 forced the US Government to step in with the securities acts passed from 1933 to 1940. Other scholars including Paul G. Mahoney and George Stigler argue that this was not in fact the case. According to these public interest theorists to a large extent regulators are captive of special interests from the industries they regulate. For example, Mahoney argues that the 1933 Securities Act, while known as a disclosure law, actually enforces a critical quiet period necessary for preserving the dominant investment bank syndicates of the day.

Yet, the policies of the US government ultimately led to the emergence of the Nasdaq as a powerful rival to the previously dominant New York Stock Exchange and the emergence of a vibrant landscape of very dynamic alternative trading systems. The
rules of the SEC more than ever enforce a national market system that provides a great deal of transparency in respect to pricing and trade data. The National Market System is also intended to protect the fairness of order executions for all stock market parties. This chapter utilizes the tools of historical institutionalism to understand how a fairly obscure act, the Maloney Act of 1938 would lead to the creation of the revolutionary Nasdaq and how the overall securities architecture competed by 1940 would ultimately allow the SEC to build the National Market System.

Blue Sky Laws

The story of the North American securities laws begins in Kansas. The very first state securities law was passed in Kansas in 1911. It sought to address the concern that many suspected investment pitches had nothing but “a piece of the Big Blue Kansas Sky” to back them up. Although the actual sponsor of that legislation, Iowa state banking commissioner Joseph N. Dolley, when actually tracked down said he had come up with the name out of the state’s bad experience with bogus rainmaking schemes supposedly intended to irrigate crops on sunny days. Ever since the securities laws passed by American states and Canadian provinces have come to be known as Blue Sky Laws.120

The leading Public Choice Theorist regarding securities laws is Paul Mahoney. Generally, the assumption is that regulators are going to respond to either a desire to maximize general public welfare or act to some extent at the behest of special interests in the finance industry. In regards to early financial regulations in the United States, there is also the impact of the agrarian and progressive lobbies. One of Mahoney’s more recent

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studies is an event history analysis of the widespread adoption of the Blue Sky Laws by the states. The traditional view was that the Blue Sky Laws were a response to rampant fraud and deceit. In this article Mahoney is able to find how ideology combines with private interests to shape the crafting and adoption of the local state securities legislation.\footnote{121} Paul Mahoney even argues that global capital controls helped restrict international exchange competition.\footnote{122}

Jonathan Macey and Geoffrey Miller noted that the small community banks had a strong interest in curbing the securities industry. They also reject the contention that early Twentieth Century securities sales were rife with fraud. Rather they trace most complaints to highly speculative investments just not panning out. For them the backers of the Blue Sky Laws were the small banks and the major opponents were large investment banks. Macey and Miller also note that Wall Street was able to circumvent these laws by making sales from out of state bypassing the jurisdiction of the regulators of an investor’s home state.\footnote{123}

The very first law adopted in Kansas had rather stringent merit based regulation; it placed oversight with the the banking commissioner giving them broad powers to restrict riskier issues while granting leniency with small banks. Joseph Seligman offers the leading historical public interest interpretation of American securities law. Seligman


notes that officials passing state regulations all referenced significant fraud as their motivation. He also noted that the states with the more stringent merit based rules blocked many new securities issues questioning their soundness. Amanda Kiefer also argues that the passage of the law was in fact inspired by progressivism and concern for general welfare.

As a progressive Republican inspired by Theodore Roosevelt, Dolley may have been largely inspired out of concern for state residents not sophisticated in issues related to business and investment. In Kansas, at least this pioneering North American legislation was likely prompted by a popular groundswell against devious swindlers committed to outright fraud. Stefania Di Trolio makes the argument that public choice theory requires us to maintain the power of regulators particularly in regards to fraud, since regulatory capture may undermine one level of government alone to adequately ferret out fraud. She highlights the ability of states to continue to fill gaps in Federal enforcement as a result of their power to prosecute fraud not having been preempted by the National Market Improvement Act later discussed in this chapter.

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The “Kansas Blue Sky Law” rapidly gained attention worldwide.\textsuperscript{127} Canadian provinces rapidly adopted versions of this new law; however, the current usage of the phrase refers to only US securities laws.\textsuperscript{128} The excitement for the law reached a point that foreign diplomats actively researched the new regulatory approach. However, the reception in the United States was somewhat mixed. The Kansas statute definitely had its backers. A Kansan whose identity has been largely lost to history, Walter a La Barr, wrote into the New York Times boasting of the law’s protective virtue and early successful prosecutions. La Barr even notes of one party fleeing all the way to Winnipeg, Canada in order to escape the wrath of the Kansas regulators.\textsuperscript{129} Wall Street and the rest of the big investment banking establishment was solidly against however.

Initially the commercial banks particularly smaller agrarian ones supported this new form of legislation. They saw the securities business as a competitive threat for savings and even feared investment houses calling themselves banks could sully the reputation of banks in general. As a result, the American Bankers Association was at least initially generally supportive of the new laws. This led to the creation of the separate the Investment Bankers Association in 1912.\textsuperscript{130} Leading legal scholar Paul G. Mahoney argues that his study of the rapid promulgation of state securities regulations


\textsuperscript{128} (1921, May 1). How Much “Blue Sky” Legislation is Required? \textit{Maclean’s Magazine}


modeled on the Kansas Blue Sky Law demonstrates that public choice theory offers a better explanation than public interest theory. He found that the passage of a securities law may have been driven by ideological movements, but the nature of those laws were defined by the special interests. States with more small banks tended to pass blue sky laws with the more stringent merit review process. Certainly, his conclusions may reflect the biases of a public choice theorist and remains contested.131

Not surprisingly, the large banks that still had significant securities business were skeptical if not hostile to this new passed legislation.132 In the Midwest, large securities houses waged unsuccessful legal battles that went all the way to the US Supreme Court to overturn state securities regulation. Ohio’s Blue Sky Law reached the nation’s highest court first in Hall v. Geiger-Jones Co. The court found that state regulation of the securities industry was within the realm of the state’s police power.133 Nowhere was the opposition to the Blue Sky Laws stronger than in New York, home of Wall Street. A 1920 editorial in Bankers’ Magazine proudly praised the state’s opposition to the Blue Sky Law warning that undue regulation will only end up hampering business, while it is “impossible by legislation to abolish ignorance or eliminate cupidity.”134 The Wall Street Journal also lamented the excesses of muckrakers and radicals in creating this legislative

excess that it saw beyond the competencies of states like Kansas. The Journal compared
the law to a spreading virus like Measles and hoped that it would soon be “but an
unpleasant memory.”\(^\text{135}\)

Yet, if you can’t beat them, you might as well join them. At the annual 1923
Investment Bankers of America conference held in St. Petersburg in 1923, the
organization called for the creation of a uniform Securities law to be adopted by all the
states of the Union. The IBA also sought a centralized organization for evaluating
securities and storing information. This forms the roots of the North American Securities
Administrators Association but also anticipates the self-regulatory power of Wall Street’s
FINRA, which has since been granted quasi-governmental powers by Washington. At
this time the IBA firmly opposed a Federal Securities Law. Finally, delegates at the 1923
conference expressed grave concern about the growing real estate bubble in Florida.\(^\text{136}\)

The giant in the Securities trade in the United States in the 1920s was the New
York Stock Exchange. This was a position the exchange had fiercely fought to maintain
over a century including through the devastating American Civil War. In order to attract
the highest quality most liquid issues, the NYSE maintained listing standards far beyond
any state Blue Sky Laws. At this time, the smaller less established riskier firms preferred
the less stringent requirements found at exchanges like the Chicago Exchange.\(^\text{137}\)


\(^{137}\) White, E. N. (2013). Competition Among The Exchanges before the SEC: Was the
roaring ’20s were the height of trading days on the Big Board, before Congress would step in and impose Federal Regulation. The United States Senate would later hold the Pecora Commission after the Great Crash during the midst of the Great Depression firmly planting today’s conventional wisdom that the 1920s New York markets were rife with manipulation. Recent work by numerous legal and finance scholars question that prevailing wisdom.¹³⁸ There is a general consensus that the New York Stock Exchange rally of the 1920s had at some point transformed itself into a bubble.¹³⁹ The economic historian Charles Kindleberg in particular saw the rapid rise followed by the crash of the exchange to fit in the pattern of classical financial bubbles.¹⁴⁰

The system created by the Blue Sky Laws left a fundamental problem that you had 48 separate securities statutes and 48 separate regulatory authorities not including the random territory here and there. Entrepreneurs, industrialists, and corporate executives would have to register with every state every time they sought to raise money through the capital markets with fairly limited exemptions. In the 1930 the Uniform Law Commission came out with the Uniform Sales of Securities Act, the first effort to standardize state regulation of the securities markets. However, few states adopted this


uniform act and little progress would be made at harmonizing state law until well after World War II and the updated 1956 version.  

**The Federal Securities Laws**

In 1932 the United States Senate Committee on Banking and Currency launched what has become known as the Pecora Investigation or the Pecora Commission. While the committee was chaired by Senator Peter Norbeck from South Dakota, the whole process has become identified with Ferdinand Pecora, the fourth attorney hired as chief counsel. Pecora was an assistant district attorney in New York. The hearings took on an absolutely theatrical quality which reached its peak with the subpoena issued to J.P. Morgan and his partners. The private bankers like Morgan were a source of particular suspicion, though strangely the subsequent federal regulations would leave private banking largely exempt from government scrutiny. Paul Mahoney finds a great deal to criticize with the Pecora hearings arguing that most of the abuses the Senators claimed to find reflected either a misunderstanding of how the markets worked or perhaps simple grandstanding.

The core Federal securities laws are Securities Act of 1933 and the Securities Exchange Act of 1934. The 1933 Act governs the primary market or the issuance of new securities. Unlike the state Blue Sky Laws which are often merit based—meaning

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reviewed by state regulators—this new regulation was largely based on mandated disclosures. The general inspiration for the US Security Act of 1933 was the English Companies Act which avoided merit based regulation by the state, since as the Lord Davey Committee explained it “would be an attempt to throw what ought to be the responsibility of the individual on the shoulders of the State, and would give a fictitious and unreal sense of security to the investor, and might also lead to grave abuses.” The Securities Exchange Act of 1934 empowers the Federal regulation over the secondary market particularly exchanges and created the Securities and Exchange Commission to oversee the application and enforcement of all Federal Securities laws. Moreover, the 1934 Act codified the self regulatory organizations that were already part of the exchanges. The exchanges would continue to still be their own primary regulator. In this act, the US Congress had created the very important Regulation D, which is the most frequently used exemption for private offerings in the United States. This meant that private sales made to limited investors could be done without filing with the Securities and Exchange Commission or the normally required disclosures. Regulation D has played a large role in inspiring similar regulation for many countries including Canada.

George Stigler delivers the harshest challenge to the American securities laws serving the public interest. Stigler’s primary criticism is his claim that the creation of Federal Securities Regulation did nothing demonstrable to enhance stock performance.

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implying that markets were already very efficient and fairly priced for investors.\textsuperscript{145} Very notably Stigler assigns particular criticism for the Report of the Special Study of the Securities Market done by a team led by attorney Milton H. Cohen. As we shall see later in the chapter, the recommendations from the Report played a key role in the formation of the Nasdaq. George Benson came to similar conclusions finding little evidence of significant fraud predating state and federal securities disclosure laws.\textsuperscript{146} Their arguments have been bolstered by the work of Eugene Fama who argues that information was adequately priced in without mandatory disclosures and the marketplace incentivizes managers to provide investors with timely quality information.\textsuperscript{147}

The Investment Act of 1940 was intended to codify the standards for the nascent mutual fund industry and boost investor confidence. Mutual funds allow retail individuals as well as institutional investors the efficient opportunity to invest in a very wide range of securities. That same year Congress passed the Investment Advisers Act requiring the registration of those who offer investment advice to individuals, institutions, and pension funds. Unlike stock brokers, investment advisors have a fiduciary responsibility to their clients meaning they are obligated to always seek out the best investments for their clients.

In the United States and Canada as well as today much of the world, there can be said to be two securities markets. One is a public one largely using exchanges and today


sometimes alternative trading systems where the bulk of trades and pricing information have to be constantly displayed to the public. The securities dealt on these public markets face the substantial disclosure requirements placed upon it by our securities laws. Then there are the transactions that are made on the private markets that are exempt from virtually all of those disclosure requirements. Zachary Gubler argues that the expansion of these private markets is not inconsistent with public choice theory.\textsuperscript{148} His central claim is that SEC regulators seek to benefit their future career prospects, by growing the exemptions available enabling major financial institutions to grow the private markets. However, Alan Palmiter points out that many institutions may be constrained from shifting money from the public to private markets.\textsuperscript{149}

Rule 506 of Regulation D offers the most often utilized safe harbor in order to offer securities as private offerings. As long as sales are primarily aimed at accredited investors and does not utilize a general solicitation, the offerings are not considered public. Rule 144 allows holders of securities purchased through private transactions to sell them if they are held for at least a year. Rule 144A allows them to sell them sooner if they are sold to qualified institutional buyers. Qualified institutional buyers are defined to be entities with over $100 million of investible assets. Gubler points out that the SEC has made it easier for companies to remain exempt from the Exchange Act that takes effect if firm has more than 500 shareholders. Most investor shares are technically held by the main US central counterparty, the Depository Trust Company or in the vernacular


of Wall Street held in “street name.” The SEC refuses to look past this and ignores the true number of beneficial owners of a firm.

Up until laws passed following the Financial Crisis of 2008, hedge fund managers were able to run private hedge funds with large number of clients utilizing limited partnerships while remaining exempt from the Investment Advisers Act. They were able to circumvent the law by having the partnership being considered a single client, rather than counting each actual investor separately. The SEC had tried to close this loophole in 2003 by issuing a rule reinterpreting the definition of a client by including all limited partners as investor, but this administrative challenge did not survive a court challenge.\textsuperscript{150}

In 2006 the Circuit Court of DC in Goldstein v. SEC found that what had come to be known as the Hedge Fund Rule violated the intent of the Investment Act of 1940.\textsuperscript{151} Phillip Goldstein, one of the founding partners of Bulldog Investors, had been the brave one to challenge the SEC in court.\textsuperscript{152} The court decision was controversial but many wondered if the new SEC chairman appointed by President Bush, Christopher Cox, would even aggressively appeal. A unanimous verdict from the Federals Appeal Court


striking down the new SEC rule ended the debate. Federal Regulations of hedge funds would have to wait until new legislation that came about as a result of the Great Recession.

In 1933 the US Congress also passed the Glass Steagall Act which separated the functions of Investment Banking from commercial banking. Senator Carter Glass appeared to be convinced that the pairing of these two businesses created inescapable conflicts of interests. A rigorous study by Randall Kroszner and Raghuram Rajan challenges this assumption. Kroszner and Rajan instead argue that public awareness was able to deter such abuses, and the law did nothing to curb the sale of poor quality securities to the public. George Benston found that in fact the universal banks were also far less risky due to their diversification. Charles Calomiris asserts that Senator Steagall was in fact beholden to small community bankers who could not compete with the large universal banks. Alexander Tabarrok instead argued that the bill stemmed from the rivalry between the Rockefeller family and the House of Morgan.

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In 1938 the US Congress passed the Maloney Act which amended the Securities Exchange Act of 1934. Amazingly, virtually few outside of the field of securities law has ever heard of this law making it appear very obscure. However, the reality is in fact entirely different. The passage of the Maloney Act in retrospect was the day the entire world had changed, except nobody actually realized it at the time. Ostensibly it was a very minor building block placed on top of the four securities laws already discussed in this chapter. As previously discussed the Exchange Act allowed bourses like the New York Stock Exchange to police themselves. Maloney now extended that power to the over the counter market allowing for the creation of the National Association of Securities Dealers (NASD). It would have been easy to seen the creation of the NASD as non-event of interest only to very dedicated accountants and attorneys or perhaps just the brokers who would fall under its regulation. The reality could not be more different.

Laws and enforcement actions related to insider information prohibitions have been particularly dynamic, controversial, and even sensational. The Federal prohibition against insider information really began with a clause contained in the 1933 Securities Act. However, it is only with Dirks v. SEC in 1984 that the Supreme Court specifies that somebody receiving insider information may be liable under insider information laws. That same year the “misappropriation theory” is first successfully used in SEC vs. Materia which assigns criminal liability for trading on information stolen from an employer. Very critically this October the US Supreme Court refused to hear the case US v. Newman where the Appeals Court ruled that the Government has to prove the trader/investor knows that one giving the information has benefited as a result. Critically a US Supreme Court decision in 1980 explicitly states that not all trading on non public
material information is banned. The enormous controversy surrounding insider
information and the reluctance of the courts to always embrace the prosecution of such
trading stems from the strong belief in efficient market theory. Efficient Market Theory
is based on the belief of markets as a price finding mechanism that aggregates the
knowledge and understanding of all of the participants.

In September 1961, Congress funded a project known as the Special Study of
Securities Markets which would be headed by Milton Cohen that would do a wide
ranging investigation of the securities markets. The Special Study would leave a roadmap
for the creation of a national market system and the creation of national electronic
networks for the transmission of pricing and trade data and stocks listed on exchanges as
well as over the counter issues. One of the major efforts emerging from this study was
for the SEC to prompt the various major exchanges and markets to introduce greater
automation and computerization of key market functions. In 1966 the Market Data
System was a computer that replaced the old convoluted human driven system for
entering trade data onto the tickertape. The NYSE deployed IBM’s new IBM's System
7010 which had replaced the vacuum tubes with transistors. IBM worked with AT&T to
create an information service accessible by telephone. The Market Data System led to

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88th Congress, No. 95.

159 Kennedy, D. (2017). The machine in the market: Computers and the infrastructure of
price at the New York Stock Exchange, 1965–1975. Social Studies of Science, 47(6),
888–917.
the automation of odd lot trading on the Big Board. At every step, the SEC was constantly pushing the New York Stock Exchange to expand automation and computerization.

On February 8, 1971 the NASD launched the National Association of Securities Dealers Automated Quotations (NASDAQ)—the world’s first electronic quotation system. Very few likely realized the powerful capitalist forces that would be unleashed by this market or its revolutionary impact. Stock markets were no longer the sleepy esoteric private clubs once studied by Max Weber. NASDAQ absorbed most of the over the counter trading and brought down the spreads for the listed shares by improving transparency and liquidity. Initially only a system for recording and promulgating transactional and pricing information, it was not long before calls were made for it to be transformed into a full out exchange. The challenge in getting the NASD to take these groundbreaking steps is the majority of the seats on its board of governors had close ties to the New York Stock Exchange. Despite the cross linked membership and lack of total independence, the NASDAQ quickly encroached on the Big Board’s turf by adding trading in listed securities in its very first year as a marketplace. The SEC managed to sidestep whether this new marketplace should be regulated as an exchange by concluding that given that the NASD was already registered under section 15A of the 1934 Act, it


was pretty much a moot point.\textsuperscript{163} By September trading on the NASDAQ had overtaken the half century old American Stock Exchange (AMEX), and had reached half the volume of the venerable New York Stock Exchange. There was no stopping the NASDAQ juggernaut. However, early challenges also appeared; numerous reports of fictional quotations appeared where brokers did not honor their prices undermining the integrity of the market.\textsuperscript{164} The early solution was to put in place a new NASD rule in place that forced market makers to honor those prices.\textsuperscript{165}

The rapidly expanding communications and computer technology of the 1970s offered this newborn stock exchange the ability to rapidly reach its new heights. The whole system had been built for the NASD had been built by a Chicago based military manufacturer named Bunker Ramo Corp. that had expanded into video display terminals for market players. After being absorbed by the Allied Corporation, Bunker’s role in revolutionizing global markets has fallen into obscurity. The genesis of the whole NASDAQ project came years before in 1964 when the SEC prompted the NASD to enlist management consulting firm Arthur D. Little for the role of overseeing the project to computerize the over the counter market (OTC).\textsuperscript{166} This was part of SEC chairman

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Manuel Cohen’s overall goal to computerize the securities markets as a whole.\textsuperscript{167}
Brokers were readily linked around the country to the NASDAQ allowing them access comparable to the specialists and brokers on the floor of the New York Stock Exchange. For some NASDAQ became the preferred platform to trade even New York Stock Exchange listed firms. \textsuperscript{168} The New York Stock Exchange and its computing vendors and servicers would rapidly respond to this rapidly evolving threat. IBM was a lead supplier to the New York Stock Exchange and the member firms.

Autex and Institutional Networks Corporation (Instinet) had already created the block automation system even before NASDAQ was formally launched and the NYSE had responded with its own Block Automation System. In 1969 Instinet was launched as a national network based in Watertown, Massachusetts which allow institutions to trade in large block trades of exchange listed stocks off the big board even while protecting their anonymity.\textsuperscript{169} The market was established for institutional investors with broker dealers and professional traders not allowed.\textsuperscript{170} The Sigma 5 computer powering this revolutionary trading network was built by world leading Scientific Data Systems, a firm just purchased by the Xerox. That same year Instinet was joined by another new firm,

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Autex, founded by Dr. Alan F. Kay. Autex provided institutional users in 1969 a messaging service that was probably the world’s first email system. Initially the SEC was concerned these new electronic networks could be vulnerable to market manipulation. The SEC responded to the emergence of these alternative trading systems with a proposed Rule 15c2-10 that would effectively regulate them as exchanges, but backed down and then with a slight of hand and issuance of no action letters allowed them to be regulated only as broker dealers under the 1934 Act. The SEC’s leniency was intended to foster competition, though naturally the NYSE argued that these new trading venues posed a threat to the integrity of the markets. The Chicago Board of Trade would test the SEC’s refusal to compel these new networks to register as exchanges in the case of Delta Trading System, but the SEC’s policy was upheld by the Seventh Circuit Appellate Court. The competition for executing block trades for institutional clients between Instinet, Autex, and the NYSE Block Automation System (BAS) rapidly accelerated. By eliminating the brokers in electronic transactions


between institutions, Instinet and Autex had created what became known as the Fourth Market.  

Soon the “third market makers” who traded in listed stocks over the counter found these networks a useful adjunct to their existing tools.

The near instant success of the young electronic market led to rapid growth. Far faster than expected the NASD started to move to take ownership of the computer network from Bunker Ramo underlying the market and to allow it execute trades. For NASDAQ’s first couple years the actual orders were still executed on the telephone. The NASDAQ quickly became a laboratory for the future world of electronic markets.

The NASD grappled with how to best maintain an orderly stock market. Changes needed to be implemented so that the market makers on the NASD could help ensure the liquidity and price stability for major listings provided by specialists on the New York Stock Exchange. Bunker Ramo was not only a major computer manufacturer, but it had created in Trumbull, Connecticut one of the country’s first server farms. The NASD had “seized upon the emerging technology of the telecommunications

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industry.”182 In 1975 the NASD reached an agreement to purchase the computer system from Bunker Ramo for approximately $10 million.183 Today Bunker Ramo is a completely forgotten firm, but its terminals and servers were part of a large national computer network that would define 21st Century stock exchanges and financial markets.

By 1971 the SEC started to look towards improving overall market structure and started to move in the direction of calling for the creation of a national market system.184 In 1975 the US Congress passed the Securities Acts Amendments that intended to help pave the way for the creation of a national market system. As required by this act the SEC formed a committee with the goal of creating one centralized stock market for the United States.185 The committee was tasked to issue a report on how to best create a national market.186 The SEC had enlisted a former AT&T executive, John Scanlon, to head up the board.187 Goldman Sachs’s Gustave Levy would oversee the influential plan put forth by the Securities Industry Association.188 Congress had also given the SEC new


187 Former AT&T Officer to Head an SEC Board. (1976, Mar 05). *Wall Street Journal*.


powers to curb anti-competitive rules on the traditional exchanges.\textsuperscript{189} It had recognized that the securities markets were a vital institution for the American economy and sought to streamline American equity markets. The vision of a truly national securities market may not have been achieved for decades to come but significant advances were made. New equipment was deployed to consolidate price data from multiple markets and display it real time and the consolidated the major clearing houses into the National Securities Clearing Corp.\textsuperscript{190} This merger initially faced serious opposition from the anti-trust division of Justice arguing the creation of a monopoly was not necessary.\textsuperscript{191} Newly created links between the exchanges bolstered competition.\textsuperscript{192} The traditional exchanges rapidly began to implement steps to link up with each other and build the infrastructure of a national market as called for by the SEC mandate.\textsuperscript{193}

One of Nasdaq’s early successes was MCI, but in MCI’s early years it struggled to meet even the Nasdaq’s lax listing requirements.\textsuperscript{194} By 1979 MCI’s various lawsuits

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\textsuperscript{194} (1977, Nov 15). MCI Communications Says its Listing Status is under NASD Study. \textit{Wall Street Journal}.
\end{footnotesize}
against AT&T, the American state protected telecommunications behemoth, had gone to
the Supreme Court three times. MCI was fighting to have the opportunity to offer its
Execunet service built on top of a national network of microwave towers compete as a
rival to AT&T’s monopolistic long distance service. In order to accomplish this MCI
needed access to the telephone exchanges controlled by the Bell Telephone System.195
MCI’s fight with AT&T was long and drawn out, but it eventually won out and emerged
as one of America’s major long distance companies. However, the journey was not an
easy one for the common shareholder and definitely not for the faint of heart. Like many
startups investors in the MCI common shares faced dilution from the issuance of
warrants, preferred stock, as well as additional offerings of common stock.196

Come the 1980s NASDAQ was still not considered an actual stock exchange even
though it effectively filled that role. Prominent companies like Apple Computer Inc., the
Pabst Brewing Company, Tampax Inc. and Tandem Computers Inc. helped bolster the
respectability of the NASDAQ that arose out of sometimes hazardous jungle of the OTC
market.197 From women hygiene products to novel personal computers that would one
day help spawn the revolutionary Macintosh Computer and iPhone, the NASDAQ really
helped finance many of the companies that would create the future. On some days, the
volume of trading would already exceed the New York Stock Exchange.


Nasdaq was rapidly growing into the vanguard of stock exchanges though in the 1980s it had not yet received the respect it deserved. While still described as the OTC market, critical changes were being implemented by the NASD with the encouragement of the SEC that continued to upgrade the NASDAQ’s ability to confront the Big Board head on. In 1982 the NASD enacted a rule requiring traders to disclose data on their recent trades for the 60 most traded issues. Later that year, NASD would include 25 more stocks. In later years the exchange would be able to automatically capture this data, though this system had been ostensibly set up initially as just a quotation system. Increasing transparency reduced the profits of the market makers while benefiting investors with more efficient markets. The risk would have been a withdrawal of market makers leading to loss of liquidity that in the end would undermine efficiency. This did not happen because the firms themselves preferred the greater exposure created by the increased disclosure, while enjoyed being freed from the constraints of the traditional exchanges.

Progress was also fueled by the desire of the SEC leadership for the eventual creation of a national market system for equities. Congress had passed legislation in 1975 calling for such a system, but only the advancement of the NASDAQ had made it possible in reality. Before the Nasdaq, members of the NASD would have to call around the country in order to compete stock trades on issues not listed on the traditional exchanges. The New York Stock Exchange had been close to being a monopoly in 1970s until faced with serious competition from the Nasdaq and the fully computerized fourth

markets led by Instinet. But at the motivation behind the push for a national market system was to prevent market fragmentation and preserve high quality markets. The Nasdaq also introduced a rival model for price discovery and market making. Whereas the New York Stock Exchange would rely on a single specialist to create markets for a stock, many issues on the NASDAQ might have 20 or more market makers.\(^{199}\)

The sky was the limit for America’s electronic exchange. By 1983 the NASD was lobbying the SEC to allow the creation of options for over the counter stocks.\(^{200}\) The Nasdaq Market List was the group of stocks meeting the highest trading, liquidity, and operating standards. It rapidly grew to rival the scope of Big Board listings. In general Nasdaq had become the favorite venue for new listings. Mobile Communications Corporation of America even chose to list its Class A shares on the Nasdaq in addition to its Class B shares.\(^{201}\) The Nasdaq would continue to be referred to as the over the counter market for the rest of the decade, but by all indications it was already a fully functioning exchange and a serious rival to the New York Stock Exchange. Yet, how did this come to pass? Why would the National Association of Securities Dealers form a market that could effectively undermine its members main source of profits? One possible answer would be that they anticipated the eventual value that the Nasdaq would one day achieve. While the New York Stock Exchange was a mutual not for profit organization, the New


\(^{201}\) (1983, Mar 28). Eight New OTC Issues Due This Week, None on Big Board or AMEX. *Wall Street Journal.*
York Stock Exchange at this time could be valued based on the market value of the seats that gave one membership. The rapid growth of trading volume certainly did a lot to expand potential business for Nasdaq market makers.

The New York Stock Exchange and the Amex started to experiment with expanded trading hours to contend with the new competition. The American Stock Exchange also actively advocated for new SEC rules to curb the rapid growth of the Nasdaq and correctly pointed out that the use of names like National Market System misleadingly implied that Nasdaq was the single market Congress had called for. One advantage Nasdaq had was it could host trading of exchange listed stocks, while the “over the counter” stocks could not trade on the traditional exchanges. This was undoubtedly unfair, because by this point as I have indicated Nasdaq was already a proper exchange, but just was not yet recognized as such by the law. For example, today’s over the counter stocks do not have this level of liquidity or institutional trading volume. It now consists of the OTC Bulletin Board administered by FINRA, the successor to NASD, and the private OTC Link LLC owned by OTC Markets Group, Inc.

Some of the concerns raised by the Amex in 1984 had very real validity, though the New York Stock Exchange, still appearing to have near monopoly power, stayed out of the war of words between Amex and Nasdaq. ²⁰²

Listing on the New York Stock Exchange continued to offer firms unrivaled respectability. In some cases like the insurance firm American International Group,

Nasdaq continued to be viewed as a stepping stone towards listing on the Big Board.\textsuperscript{203} Yet in other cases the NYSE quickly found itself at a competitive disadvantage having stringent listing requirements such as not allowing different classes of shares to have unequal voting rights.\textsuperscript{204} In the following two chapters we will see that non voting shares are a really significant issue for major Canadian firms despite the serious concerns they raise in terms of corporate governance and fairness to investors. Efforts by the NYSE to loosen rules regarding unequal share voting rights faced a backlash from key members of Congress\textsuperscript{205}.

The Chicago Board of Trade won the competition with the Chicago Mercantile Exchange to be the first to list options on Nasdaq stocks in 1985.\textsuperscript{206} General skepticism led the Chicago Board of Options Exchange (CBOT), which was still partly the owned by the CBOT, from also joining the list of suitors vying for Nasdaq based derivatives.\textsuperscript{207} The overriding context was Chicago’s Loop fight to hold its own against Wall Street in terms of the financial markets. The Midwest Stock Exchange would establish a trading link with the Toronto Stock Exchange in 1985 as well. However, Chicago’s future lied

\begin{quotation}
\textsuperscript{204} Mcmurray, Scott and Pamela Sebastian. (1984, Jul 10). BigBoard places to review the restrictions it places on listed companies, sources say. \textit{Wall Street Journal}.
\textsuperscript{205} Ingersoll, Bruce. (1985, Jun 13). Exchanges, NASD told to adopt rule for stock listing or congress will act. \textit{Wall Street Journal}.
\end{quotation}
with being the world’s capital of derivatives trading. The first Nasdaq options may have traded on the CBOT, but they were backed by the Options Clearing Corporation—the Chicago based clearing house created by the CBOE.

By mid decade the Nasdaq had high flying stocks like Apple and MCI propelling it easily in the ranks of a peer competitor to the New York Stock Exchange. Georgia became the first state to exempt Nasdaq listed stocks from its Blue Sky Laws, easing their trade within the state. Gaining that state exemption would end up becoming a battle waged in every state.208 On one side was the NASD and on the other was the Amex and typically the local state securities administrator who did not want to give up its regulatory power.209 Chicago’s Midwest Stock Exchange began the first traditional exchange to offer trading in Nasdaq listings beginning the process of leveling out the playing field.210 In 1991 the Chicago market would be joined by the Philadelphia Stock Exchange in competing with Nasdaq for trading issues listed on the electronic market.211 The New York Stock Exchange moved towards ending its one share one vote standard, with Canada’s leading newspaper warning it “could provoke a brouhaha over the erosion of shareholder rights.”212 But Nasdaq could not be stopped, with what was still referred to


as the over the counter market continuing to attract top corporate listings like Citizens Financial Group.\textsuperscript{213} Nasdaq began to become more international with the addition of a newly installed trading link with the London Stock Exchange. The LSE would also install a computerized trading system modeled after Nasdaq.\textsuperscript{214} The huge regulatory reform of the City’s financial sector under Margaret Thatcher known as the Big Bang would involve using Nasdaq technology to convert the venerable LSE into a purely electronic exchange like the Nasdaq.\textsuperscript{215} The Singapore Stock Exchange soon also established a direct connection with the Nasdaq.\textsuperscript{216} Amazingly, only the Toronto Stock Exchange and New York Stock Exchange beat the Nasdaq in terms of dollar volume in 1985.\textsuperscript{217}

Even as the Nasdaq had exploded on the global stage, the NASD as a quasi-governmental self regulatory organization was still responsible for policing the Pink Sheets whose price information was compiled by the private National Quotation Bureau long owned by Chicago based Commerce Clearing Corporation as well as trading on the OTC Bulletin Board stocks, which is still maintained by NASD successor FINRA


\textsuperscript{215} Keyes, J. (1992). The NASD Makes a Move on the Big Board. \textit{Wall Street & Technology}, 10(2), 44.

\textsuperscript{216} Priscilla, A. S. (1987, May 06). NASD will Exchange Price Quotations with Singapore on 50 Big OTC Stocks. \textit{Wall Street Journal}.

today.\textsuperscript{218} The value of the pink sheets drastically fell with the expansion of the Nasdaq into a major exchange. Yet, the NASD was a major force in automating the Pink Sheets market.\textsuperscript{219} The fact that the NASD was the primary regulator of the Pink Sheets and to a large extent a major competitor also created a conflict of interest which would have to fall upon the SEC to help mediate.\textsuperscript{220}

On Monday October 19, 1987 the Nasdaq would face its ultimate challenge as global markets took their worst plunge. And it faced it quite poorly. Most Nasdaq market makers responded to the unprecedented market volatility by fleeing their roles in providing liquidity greatly aggravating the drop in Nasdaq stocks. Brokers and market makers stopped answering their phones and often took every conceivable action to avoid having to take on any trades. Fortunately, the Nasdaq market was ultimately rescued by the almost inevitable bargain hunters.\textsuperscript{221} The initial chaos of the first two days of the plunge of the Nasdaq was reminiscent of the much later Flash Crash that afflicted the Nasdaq and the New York Stock Exchange in 2009. However, what locked up the Nasdaq was not a technological glitch or some cleverly plotted market manipulation gone awry. Nasdaq as an institution was still very new unlike the centuries old venerable New York Stock Exchange and operated quite a bit differently than any other major stock

\begin{quote}
\textsuperscript{218} News Roundup. (1963, Oct 25). Chicago Firm Agrees to Acquire Publisher Of Stock 'Pink Sheets'. \textit{Wall Street Journal}

\textsuperscript{219} Priscilla, A. S. (1987, Jun 05). NASD is Planning Automated System for 'Pink Sheets'. \textit{Wall Street Journal}


\end{quote}
exchange. When panic hit the New York Stock Exchange, the Nasdaq was beset by an institutional crisis—the financial world’s equivalent of a constitutional crisis. Using Watergate as a metaphor, we can conjecture that an institution under such legitimacy pressures will either collapse or emerge ever stronger. The Nasdaq did the latter and its impressive growth quickly resumed. Chicago would not get off so easily; the mayhem at the Midwestern derivatives exchanges were far worse.222 The Chicago Board of Options Exchange was in fact slightly younger than Nasdaq, though the other major derivatives exchanges had both been founded in the Nineteenth Century. The market turmoil almost caused the collapse of the Options Clearing Corporation requiring a bailout organized by the Federal Reserve to prevent a global crisis. The survival of all three Chicago derivatives exchanges can be partly understood by their institutional strength. The Chicago Board of Trade predates the US Civil War. Still, most market watchers believe that the 1987 NYSE crash began with programmed trading in the Chicago markets going amok. This may explain why Warren Buffett once described derivatives as “weapons of mass destruction.”

NASD's Small Order Execution System (SOES) was launched to protect small investors from the locked markets experienced during the crash.223 The SOES was created back in 1983, but new rules were implemented requiring all market makers to


participate and even more importantly stand with the system.\textsuperscript{224} Like every other system the expanded SOES would come with its own pitfalls. Professional traders would game the system created for retail investors to exploit market makers who did not update their prices fast enough.\textsuperscript{225} By the early 1990s new day traders further strained the system by learning how to rapidly influence the stock price by overwhelming the system intended for small retail investors.\textsuperscript{226}

The refusal of state regulators to offer Nasdaq listed stocks the same exemption granted to those listed on traditional exchanges, continued to confound the electronic marketplace. The state of Massachusetts effectively blocked its residents from taking part in the Apple IPO.\textsuperscript{227} State regulators like those of Canadian provinces discussed in the next chapter wanted to protect their turf, but also faced lobbying from the New York Stock Exchange and Amex. As this state by state fight continued, Nasdaq expanded its trading to London, effectively opening up a new front in its quest to lead the world’s exchanges. Nasdaq offered trading in listings found on the New York Stock Exchange, and the London Stock Exchange. This was the beginning of the Nasdaq’s goal in


creating a 24/7 global exchange.\textsuperscript{228} The challenge that faced in London was British traders were used to lower trade disclosure requirements. The significantly lighter trading volume found in London of US issues could also test the level of transparency requirements the US SEC typically demanded of Nasdaq.\textsuperscript{229} Nasdaq built two dedicated transatlantic lines and installed a computer node in London to compete with the LSE’s electronic SEAQ International market.\textsuperscript{230} Nasdaq’s ultimate goal was to create a completely global electronic market that would run 24/7, but its vision was fueled by the telecommunications revolution.\textsuperscript{231}

In the aftermath of the 1987 crash, the Nasdaq had to still contend with defections to the established marketplaces. The competition was based on two different models for running a stock exchange, with Nasdaq being the potential disrupter.\textsuperscript{232} The NASD responded in part by launching television advertising campaign which began to build what would ultimately become a powerful brand. Nasdaq had begun to form an identity separate from the wider over the counter market.\textsuperscript{233} The perception of the Nasdaq of just

\textsuperscript{228} R. E. (1989, Dec 07). NASD to Offer Big Board Stocks to Catch the Early-Bird Trader. \textit{Wall Street Journal}.


\textsuperscript{231} Widder, P. (1992, May 17). 2 Stock Markets Go Head To Head Nasdaq Has Its Eyes Set On The Next 100 Years. \textit{Chicago Tribune}.


being a newer form of the over-the-counter market made it more rife for defections. Compounding its problem were the strict rules preventing a firm from easily delisting from the NYSE or Amex.\textsuperscript{234} The Nasdaq tightened the standards for listing with the market and finalized plans for an alternative electronic market called the OTC Bulletin Board, providing a high tech alternative to the Pink Sheets.\textsuperscript{235} One of the most prominent firms to be listed on this far less stringent, laxly regulated market was Nintendo, the leading video game system manufacturer of the era. Security concerns grew over the networks that linked Nasdaq traders given its greater dependence on national computer networks that transmitted stock transactions.\textsuperscript{236} In 1991 Nasdaq hired MCI to create a backup for Nasdaq’s Trumbull Center in Rockville and to build a truly secure national network.\textsuperscript{237} MCI also replaced the original network built by AT&T and assumed total responsibility of the whole market backbone which was previously controlled by NASD who had leased lines from a number of providers.\textsuperscript{238}

Roadway Services became the first Nasdaq listed stock to get included in the Dow Transportation Index replacing Pam Am.\textsuperscript{239} However, the New York Stock Exchange

\textsuperscript{234} Sonja Steptoe. (1990, Jan 02). Nasdaq Had Fewer Defecting Companies In '89, But New Issues Showed Sharp Fall. \textit{Wall Street Journal}.


retained a near monopoly on Blue Chip stocks. The launch of the Automated Confirmation Transaction service helped bring an end to mismatched trades that still continued to plague the Nasdaq.\textsuperscript{240} American Express Co., Conner Peripherals Inc., Liz Claiborne Inc. and Nike Inc. were examples of firms that would “graduate” from the Nasdaq and list on the New York Stock Exchange. However, tech giants Microsoft, Intel, and MCI would break the mold with Microsoft and Intel still listed on the Nasdaq to this day.\textsuperscript{241}

Selectnet was created to help maintain liquidity after the 1987 stock crash. However, it gave brokers a way to actually trade against their own customers by potentially using the private network to get better prices. A more insidious method to profit at the clients’ expense was to sell “order flow.” This meant being compensated for routing the orders from retail customers to particular markets. Professional traders could exploit the lower levels of information of the general public. One of the largest consumers of this order flow was Bernard Madoff, whose brother was perhaps not coincidentally the vice chairman of the NASD. Another opportunistic if not exploitative strategy was preferencing where a firm will automatically take the other side of the trade if algorithms suggests it would be profitable for the firm.\textsuperscript{242} Nasdaq continued to be vulnerable to insidious methods of collusion and manipulation by inside players. Charles

\textsuperscript{240} Smith, Craig. (1990, Mar 01). New System Offers Quick Verification Of Nasdaq Trades. \textit{Wall Street Journal}.


Schwab, the pioneering discount retail broker, owned Nasdaq market maker Mayer & Schweitzer Inc while Paine Webber and Merrill Lynch were themselves market makers. This disincentivized them from seeking the best prices for their customers.

Scandal and controversy led to aggressive investigations launched by the Justice Department and SEC. The fact that the Nasdaq had fairly lax rules should not be a surprise for a relatively upstart market with innovative technology and procedures. In order to succeed the NASD had to not only attract and retain top listings but also maintain liquidity. Liquidity comes from a constant flow of trades particularly from institutional and professional sources. As the expression goes, nothing comes for free. In order to attract liquidity the Nasdaq had to provide traders sufficient profit, particularly given that holding positions on the Nasdaq or any market for that market leads to exposure to sufficient risk. Additionally, while Nasdaq’s high tech nature offered the potential to be more efficient and even fairer than the NYSE’s traditional floor setup, its incredible complexity would inevitably be gamed until all of the vulnerabilities were addressed. By 1994 Nasdaq was unquestionably a leading global market and now needed to address these concerns and problems in order to preserve its position. Special protections were created for small retail investors. The NASD also enlisted former Senator Warren Rudman to lead a committee of all star Wall Street experts to review the operations of the Nasdaq with the hope of finding ways to address the problems and to create a fairer market.243 Leading the campaign for a fairer Nasdaq was SEC Chairman

Arthur Levitt Jr.\textsuperscript{244} The original plan was to replace the SOES with a system named N-Prove system, but the exchange ended up sticking with SOES.\textsuperscript{245}

The Rudman Committee found major flaws in the organization of the Nasdaq Stock Market and the governance of its overseer the National Association of Securities Dealers. In retrospect how could this be a surprise? The NASD was both owner and primary regulator of the Nasdaq. What was clear was the Nasdaq would have to be restructured. The Nasdaq would have to be separated from the NASD market regulation arm and the board of the NASD had to be more representative of various market stakeholders.\textsuperscript{246} The NASD was split into two parts: the Nasdaq Stock Market Inc. and NASD Regulation. Both would still have the NASD as parent organization and all three organizations have the majority of their board seats filled people independent of the securities industry. The resulting reforms pushed by the SEC represented the most aggressive efforts by the SEC to break the “Broker’s Club.”\textsuperscript{247} Fears were raised that the diminished profits would reduce liquidity. That never came to pass, because advances in technology and the rapidly growing US economy ensured continual growth in investor


\textsuperscript{245} Major nasdaq revamping approved. (1994, Nov 22). Pantagraph.


demand for Nasdaq listings. With the radical restructuring came the first talk of transforming the exchange into a publicly traded firm.248

A series of other changes were implemented in the 1990s by the US Congress and the SEC that started to alter the nature of the US Security Markets. One of the most important acts by Congress in promoting federalization of securities is the 1996 National Securities Markets Improvement Act (NSMIA.) This Act completely preempts all state regulations on securities listed on national exchanges (chiefly the New York Stock Exchange and NASDAQ) with the exception of state fraud laws. The use by Elliott Spitzer of New York’s super liberal Martin Act on Fraud demonstrated the continued relevance and importance of state securities law in regards to the prosecution of fraud even of federally covered securities and firms. Outside of issues of alleged fraud, the NSMIA protected major companies from worrying about coping with diverse state jurisdictions. The National Market Improvement Act of 1996 was a major advancement of Federal Regulation of Securities. For the first time all stocks listed on national stock markets were now exempt from state regulation. The stocks whose regulation was preempted by this Act were named “covered securities.” Up until this point the US Congress had not outright preempted state securities laws. This move towards Federal preemption does not apply to state fraud laws. The NASAA agreed with the passage of this act as a way to facilitate a better division of labor between Federal and State regulators, while it continued its own work at greater harmonization of state security laws. State laws were no longer applicable for covered securities except in cases of

outright fraud. A flaw in the NSMIA is small businesses will still not be exempt from state registration requirements and be forced to register in every state its equity offerings are sold.249

Yet, one of the most illustrative examples of how the states continue to work with the SEC was the 2007 amendment of the Delaware Constitution to answer questions from the SEC on issues of Delaware Law. On one level this illustrates cooperative Federalism by facilitating cooperation between a federal regulatory agency and the state court system while respecting each other’s jurisdictions. On the other hand, it also illustrates competitive Federalism, since this amendment seeks to maintain Delaware’s dominant place as favorite corporate domicile. In 2013, Delaware expanded the availability of certifying questions to bankruptcy courts nationwide, reflecting the continued competitive forces arising from corporate law remaining at the state level. The Uniform Certification of Questions of Law Act is an effort by the National Conference of Commissioners on Uniform State Laws to harmonize state laws on this issue. The laws in Delaware have continued to keep ahead of this legal standard.

In 1996 the US Congress gave far greater exemptive power in implementing and enforcing the Securities Acts of 1933 and 1934 with the passage of the Securities Investment Promotion Act of 1996.250 This allowed the SEC to finally issue formal regulations and rules to manage alternative trading systems. The SEC’s goal was to

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figure out how to best integrate alternative trading systems like Instinet into the National Market System. In 1998 the SEC issued Regulation ATS required all alternative trading systems to register as either a broker dealer or as an exchange, but all of them had to be covered by a self regulatory organization. They also had to be linked to an exchange and allow members of that exchange to be able to trade on their publicly displayed orders. Under this new regulation, the ATS could form its own self regulatory organization if it chose to register as an exchange, but it would face substantial expense as a result. Alternatively, it could register with an existing self regulatory organization which would have been either part of a traditional exchange like the New York Stock Exchange or the NASD which owned NASDAQ—both competitive rivals. The new order disclosure requirements, intended to preserve the national market system, also would reduce the appeal of the trading venue for institutional clients who needed to hide their trade moves from opportunistic traders. Macey and O’hara criticized the rule’s reliance on an ATS registering as an exchange or a broker dealer arguing those categories from the 1934 Securities Exchange Act had been made obsolete or too narrow due to the technology driven evolution in trading.

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Archipelago filed in 1998 to become registered as an exchange under the new SEC rule in order to compete with the New York Stock Exchange on order flow for NYSE listed stocks.\textsuperscript{255} Island, the second largest ATS, joined Archipelago by also registering as an exchange in 1999.\textsuperscript{256}

In 1998 the Nasdaq merged with the American Stock Exchange bringing together the world’s first electronic exchange with one of the major floor trading markets. The deal represented the industry realization that the days of the floor traders were now very limited.\textsuperscript{257} This move also escalated the competition between the Nasdaq and the NYSE with Europe appearing to be the new battlefield.\textsuperscript{258} Despite all of the seeming promise, the marriage was doomed from the beginning.

By the close of the Twentieth Century, the NASD prepared the Nasdaq to become a publicly traded firm. The purpose was to monetize its success at creating one of the world’s greatest stock markets and to allow the market the flexibility it needed to expand and adapt to the changing conditions of the Twenty First Century. Publicly traded shares offered currency to potentially acquire other exchanges as well as facilitate other important strategic transactions. Being a listed firm would also allow for greater access

\textsuperscript{255} Archipelago registers with the SEC to become a national securities exchange. (1999, Aug 09). \textit{PR Newswire}.


to global capital markets to raise additional funds when necessary. Nasdaq would have a
more flexible ownership and would be disciplined by market forces rather than controlled
by a structure largely created by an obscure 1938 law. Nasdaq would also find itself at
the end of the Twentieth Century faced mounting competitive pressure from the super
high tech Electronic Communications Networks which were moving towards registering
Vulnerable To Competition. \textit{Wall Street Journal}.} The process of spinning off the Nasdaq from the NASD
began with private placements selling the bulk of the ownership to major market
participants and finally applying to register the market with the SEC as an official
exchange.\footnote{Bresiger, G. (2001). The nasdaq exchange is a few steps closer: Everyone looks to
SEC to make next move. \textit{Traders Magazine}, 1-27.} Its IPO would be delayed by the worst crash in Nasdaq history and the
shares that were already trading floundered on the bulletin board.\footnote{Tarquinio, J. A. (2002, Nov 10). \textit{Investing}. New York Times} The Nasdaq would
not be listed on the Nasdaq National Market until February 9, 2005 ending its early years
as publicly traded firm trading on the bulletin board.\footnote{NASDAQ: NASDAQ announces pricing of $155 million secondary offering of
common stock; NASDAQ to trade on national market under symbol NDAQ today. (2005, Feb 10). M2 Presswire.} The SEC would not approve the
Nasdaq as a registered exchange until 2006.

Sarbanes-Oxley(SOX) was a massive expansion of Federal involvement in the
regulation of corporate governance. The bulk of Sarbanes-Oxley continues to be
concerning securities disclosure. Very interestingly, Sarbanes-Oxley also created a


\footnote{Bresiger, G. (2001). The nasdaq exchange is a few steps closer: Everyone looks to SEC to make next move. \textit{Traders Magazine}, 1-27.}


\footnote{NASDAQ: NASDAQ announces pricing of $155 million secondary offering of common stock; NASDAQ to trade on national market under symbol NDAQ today. (2005, Feb 10). M2 Presswire.}
private not for profit corporation to oversee auditors called the Public Company Accounting Oversight Board. It is fascinating to note that PCAOB is incorporated as a local District of Columbia corporation. It is yet another example of a quasi-public regulatory agency. While funded entirely by auditor firms, the PCAOB is entirely controlled by the SEC. Yet none of its employees are classified as Government employees in any way. While ostensibly a reaction to the scandals at Enron and at Worldcom, Sarbanes-Oxley represent a continuation of the trend of total Federalization of Securities regulation and by extension even corporate governance.

It is widely known that for a company remaining private, it can avoid most Federal regulation including almost all of Sarbanes Oxley. Far more intriguingly, this effectively transfers most of the regulatory power with the states for good or for bad. To begin with this expands the power of the state the corporation has its domicile in enhancing regulatory competition while greatly reducing the role of Federal preemption. This creates a very complex reality however. State regulators can be viewed as overly intrusive in some cases by corporate executives and boards, while others may view them as stricter and more effective. The increased costs of Sarbanes-Oxley on publicly traded firms can often be seen as effecting the calculus in deciding whether or not to remain private. However, remaining private is not all the free pass from regulation that many assume it to be. Private companies can be partly or completely owned by private equity or even hedge funds, which are increasingly regulated and monitored by the SEC.

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Sarbanes Oxley represented a major expansion of Federal power over corporate issues previously relegated to the states by Congress that was delegated to the SEC.

In 2005 the SEC issued Regulation NMS in an effort to further bolster the fairness and transparency of the National Market System. This new SEC policy was intended to ensure that all customers got the best price on their orders and have them executed in a reasonable time. Robert Colby and Erik Sirri found that this new SEC initiative continued a trend in the SEC promoting competition in the securities marketplace.\(^\text{264}\)

**Conclusion**

The beginning of modern American securities laws was the passage of the Blue Sky Laws beginning in Kansas. While believers in the role of public interest in defining public policy like Joel Seligman long argued that these security laws represented valiant efforts at combatting widespread fraud, public interest scholars like George Stigler, Jonathan Macy, and Paul G. Mahoney make a convincing case that these laws in fact often served the interests of special interests. Both George Stigler and Paul Mahoney particularly single out crises as points in time when regulators are likely to implement misguided if not corrupt changes to institutions that often serve powerful special interests or at least have very unintended consequences.

The 1929 stock market crash and the subsequent economic depression served as a major political crisis representing a major critical juncture for the American securities regulatory architecture and the overall market structure. The 1933 Securities Act is known for its mandatory regime of disclosures and is widely admired for seemingly

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establishing standards for transparency for publicly traded firms. Paul Mahoney brilliantly demonstrates that in fact its mandatory quiet period for newly issued securities backed by the power of the Federal Government was in fact more noteworthy. The disclosures required by the statute simply codified the best practices of the day followed by the top investment banks of the day that satisfied the demands of the marketplace. The significance of the quiet period is the underwriting syndicates faced the challenge of having their members “jump the gun”, by marketing their securities before the agreed upon date. The 1933 Securities Act gave their silent periods the force of law. Similar arguments can be made about the other major Securities Acts passed from 1933 to 1940.

The Securities Exchange Act of 1934 created the Securities and Exchange Commission and bestowed upon it the responsibility of implementing and enforcing all of the Federal securities laws. It also reaffirmed and codified the self regulatory mechanisms of the established exchanges. The Malone Act of 1938 was an amendment to the Securities Exchange Act, which allowed the broker dealers comprising the over the counter securities market to form a self regulatory organization named the National Association of Securities Dealers (NASD) that would assume responsibility for managing and overseeing the over the counter market. Given its extensive membership of broker dealers, the NASD became the primary regulator for stock brokers and due to its governmental mandate operated with quasi-governmental power.

Unlike the self regulatory organizations overseeing traditional exchanges like the New York Stock Exchange, the NASD oversaw a marketplace dispersed throughout the United States linked almost entirely by telephone. Completing orders could require tracking down interested parties, though a company named the National Quotation
Bureau would issue quotes price information on the over the counter market on distinctive pink sheets. The totally decentralized nature of the market combined with the very lax standards for inclusion created the conditions for a very dynamic but also risky financial environment. The Maloney Act had created in the NASD a very powerful institution which would powerfully shape the interests of its members and its agents. Its governmental mandate would reinforce its tendency to seek expansion and give it the tools to ultimately aggressively compete with the ruling New York Stock Exchange.

The financial scandals of the early 1960s combined with the rise of retail interest in the markets led to growing concerns on the part of Congress leading to its funding the SEC to undertake the Special Study of the Securities Markets. This massive comprehensive study was a top down investigation of the markets. The study determined that that the exchanges needed to better utilize information technology, and called for the automation of the markets including the over the counter market. The Special Study also investigated issues regarding market fragmentation, and started to look for ways to create a national market system. With the encouragement of the SEC, the NASD worked to launch the Nasdaq, the world’s first electronic stock exchange.

The Nasdaq rapidly grew into a major exchange, even though the actual trades were generally handled on the telephone for most of its first two decades of operations. The Small-Order Execution System (SOES) was first implemented in 1984 as a mechanism for quickly executing retail orders, but was not widely used until after the 1987 Black Monday stock market crash. The SOES bandits were day traders who

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exploited vulnerabilities in the system at the expense of sluggish Nasdaq market makers. The first alternative trading systems, Instinet and Autex, were launched around the same time as the Nasdaq, and allowed institutions to trade amongst each other using proprietary electronic markets with needed anonymity. Rather than forcing these disruptive innovators to register as exchanges, the SEC for almost three decades allowed them to operate with no action letters in order to promote competition with the established exchanges.

The public choice theorists offer powerful critiques of the foundational securities and demonstrate the tendency of crises to lead to hasty new regulation that is counterproductive. They are also persuasive in demonstrating in many cases the role of regulatory capture in defining how the legislation is drafted. However, as historical institutionalists understand well special interests and even captured regulators and legislators can have very short term time horizons. Moreover, at critical points in time Congress and the SEC have also had almost undeniably more far thinking in crafting legislation and policy. At critical points the US Government deliberately embraced competition and technological innovation. Furthermore, the NASD itself was a very powerful institution that had its own agenda to promote. Elliot Posner wrote a fascinating depiction of EU policymakers largely failed efforts to create a European Nasdaq. Yet, it is easy to forget that the original American Nasdaq was not a product of the American private sector, but in many ways was heavily sponsored by the efforts of US government officials. The Investment Bankers Conference had quickly seized upon the passage of the Malone Act by forming the nucleus of the NASD, for which they had aggressively lobbied—seemingly proving regulatory capture--but its members could
never imagine the future power of this organization or its role in creating the stock market that would define 21st Century stock markets.\textsuperscript{266}

\textsuperscript{266} IBC to be Agency for Regulation of Counter Trade. (1938, Oct 05). Wall Street Journal (1923 - Current File)
CHAPTER THREE:
THE CANADIAN EQUITY MARKETS

The goal of this chapter is to determine the role of the public sector in Canada in shaping the equity markets as moderated by market forces and technological advances. Canada’s regulatory regime is relatively weak having no federal securities regulator. Canada’s financial sector is extremely consolidated. While the large centralized banking and financial giants have spared Canada any major financial crisis, it also meant the state played a limited part in the formation of market institutions. The ascendance of Toronto in trading markets began with very incidental effects of the Great Depression in the 1930s that were compounded by the flight of English speakers from Quebec in the 1970s. I will analyze the Canadian equity markets from the standpoint of both private equity and public equity using the methods of historical institutionalism.

**The Regulatory Architecture**

The Canadian Capital Markets have always been dwarfed by the neighbor to the South, the United States. Still, the Canadian financial markets have always been really impressive in their own right. For example, the Canadian stock markets recently ranked seventh in the world in terms of market capitalization and an even more impressive second in the number of listed companies.267

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The TMX Group on its own ranks eighth in the world in terms of market capitalization\textsuperscript{268}.

Before discussing the mechanics of how regulation in Canada serves to promote national objectives it is necessary to give an overview of the securities regulatory environment in Canada. In studying how Canada regulates its security markets, we need to first understand the goals of the regulations. First Canadian stakeholders seek to maintain equity markets that provide a secure source of funding for domestic corporations. Second, Canadian securities markets provide a local conduit for individuals, corporations, and institutions to invest. Third Canada needs the markets to remain globally competitive in order to serve as a vehicle to attract foreign investment. Fourth, Canada needs to protect against systemic risk where a financial crisis related to the securities market ultimately threatens the stability and security of the overall economy. Finally, Canada’s relations with the United States in particular require that financial firms in Canada do not cause undue harm to Americans. Many decades ago Toronto’s Bay Street had a not entirely unfair reputation in North America as being the home of many fraudsters and scammers\textsuperscript{269}.

Canada is the only major economy not to have a national securities regulator\textsuperscript{270}.

As discussed in earlier chapters of this dissertation, the power of American state


securities regulators had been quite substantial historically, but beginning in the 1980s the power of the Federal United States Securities Exchange Commission (SEC) had begun to dwarf the local regulators.\textsuperscript{271} The pressure in the late 1980s and early 1990s to further federalize US Securities Laws came in large part from the growing internationalization of global stock markets.\textsuperscript{272} Given that Ontario is the province with the largest economy as well as home of the dominant financial exchange, the Ontario Securities Commission plays an outsized role in the nation’s regulation.\textsuperscript{273} Within Canada the new Passport system allows a minimum amount of reciprocity that allows fairly easy cross registration across the provinces.\textsuperscript{274} The Umbrella organization for the provincial regulators is the Canadian Securities Administrators (CSA).\textsuperscript{275} Much of the day to day regulation and the oversight of the broker dealers in Canada is actually done


by the private self-regulatory organization Investment Industry Regulatory Organization
of Canada (IIROC) which is very much akin to FINRA in the United States. Like
FINRA, IIROC has quasi-governmental powers despite being private.276

The Canadian Securities Administrators has created a unified digital filing system
called the System for Electronic Document Analysis and Retrieval (SEDAR) for
registering new securities. This serves as Canada’s equivalent of the US SEC EDGAR
system.

The Ontario Securities Commission (OSC) is a crown corporation that serves as
the primary regulator for the markets in Ontario. Given that Canadian finance is centered
today in Toronto, the Toronto Stock Exchange (TSX) is the dominant equity market in
Canada, and its parent company the TMX Group is also based in Toronto, the OSC is
effectively the main government agency overseeing securities in Canada. The central
legislation for securities regulation in Ontario is known as the Securities Act. The merger
of the Montreal Stock Exchange and the Toronto Stock Exchange left Montreal as the
center of the very lucrative and complex derivatives market, which is outside of the scope
of this dissertation. While derivatives can play a vital role for business and the economy
and unfortunately at times be a very destructive force—earning the designation of
“weapons of mass destruction” from Warren Buffett—shares of stock are more directly
linked to political, social, and cultural forces of interest in this project.

Canada has 13 securities administrators representing the 10 provinces and three
territories. All of them operate off of acts modeled after the Blue Sky Laws first passed

Howe Institute Commentary, (416), COV.
by the Kansas legislator. Manitoba was the first Canadian province to pass a securities law in 1912 with the other provinces quickly following. The Manitoba Sale of Shares Act empowered the Public Utility Commission to issue licenses authorizing the sale of securities.277 At first provincial securities acts were significantly legally contested particularly since many of the corporations actually have federal rather than provincial charters. Surprisingly, as previously noted the United States does not have Federally chartered corporations; even corporations created as acts of Congress have to get their charter from either a state or the District of Columbia. While corporate law in the United States is entirely handled by the states, in Canada it is entirely a Federal competency. Ultimately, provincial securities laws in Canada stood the test of time due to the fact that the Canadian Supreme Court has routinely ruled that having either Federal securities laws or a Federal regulator is unconstitutional.

The primary umbrella organization for provincial and territorial securities administrator is the Canadian Securities Administrators. However, until fairly recently this organization has played a rather informal, limited role. Two developments have greatly expanded the role of the CSA. First, in 2003 the CSA established a permanent secretariat in Montreal. Even more significantly, 2004 the CSA launched the Securities Passport System to facilitate full reciprocity for the various decisions made by all the local securities regulators. While Ontario did not formally join this new accord refusing to cede local power, its own rules were altered to facilitate working along side this new national system effectively making Ontario a de facto party to this system. The end result

is the key hurdle for registering new securities is getting past the local regulators rather than having to struggle with 13 separate regulators. This is critical for registering national securities offerings in the time one would expect in a modern advanced economy. This system is a clear success for transgovernmentalism.

One historic difference between Canadian Securities regulations are they are more principle based rather than rule based like American regulators. However, they both are built on disclosures rather than merit based registration and regulation. The downside of America’s rule based approach is that it can leave open mammoth loopholes for the unscrupulous, while needlessly punishing the meritorious with onerous regulation that may not fit the situation. Some of the current US rules imposed on publicly traded firms come from the controversial U.S. Sarbanes-Oxley(SOX) legislation. Canadian firms cross listed on American exchanges are already required to comply with SOX giving them all the resulting benefits as well as costs from these expanded rules. The fact that small capitalization Canadian firms can be exempt from those recently applied American rules can distinguish Canadian markets, particularly the Toronto Stock Venture Exchange. Such regulatory diversity can favor a more competitive marketplace. Investors seeking the stricter rules of the SEC and US exchanges can focus in on investing through American exchanges, while those comfortable with more lax rules can also enter the Canadian markets. However, in 2002 Ontario passed certain key clauses related to executive accountability inspired by the ground breaking American legislation. All of

OSC reciprocal orders based on SEC actions serves a dual purpose. They ensure that Canada does not serve as a haven for grifters and swindlers who could use the Maple Leaf state as a platform to target neighboring Americans and to protect Canadian locally from individuals identified by the SEC as unscrupulous. Central to the licensing of securities professionals is to ensure their character and ability to act in good faith on the behalf of various types of clients. Before changes in the extradition law, Toronto was a hot bed of boiler room operations targeting Americans that were out of reach of the FBI.\footnote{Armstrong, C. (2001). \textit{Moose Pastures and Mergers: The Ontario Securities Commission and the Regulation of Share Markets in Canada, 1940-1980}. University of Toronto Press.} The challenge in amending the extradition treaty between Canada and United States was the concept of double or dual criminality. Ordinarily extradition is only allowable if the act is criminal in the location where it was committed and where the suspect is apprehended. Many American securities crimes were not explicitly addressed in Canadian law either on the Federal or the provincial level, and there was strong opposition in Canada to making an exception for criminal securities law.\footnote{Timbers, W. H., & Pollack, I. M. (1955). Extradition from Canada to the United States for Securities Fraud: Frustration of the National Policies of Both Countries. \textit{Fordham L. Rev.}, 24, 301.}

Canadian laws have often promoted protectionism in a manner consistent with public choice theory—more aimed at protecting the status quo than serving identifiable
public welfare objectives. Merrill Lynch’s acquisition of failing Royal Securities Corporation in 1969 resulted in Merrill gaining an additional seat on both the Montreal and Toronto Stock Exchanges posing a serious threat to the Canadian traders clubs that could not be left unanswered. After all in 1966, the Canadian Parliament acted to amend the Bank Act in order force Citibank to yield its control of Mercantile Bank, which Citibank had purchased in 1963.\textsuperscript{281} Notably threats of American retaliation did not stop this act of Canadian protectionism.\textsuperscript{282}

The authority of Canadian exchanges and their respective regulators is challenged by their very limited jurisdiction for transactions made in the United States. One of the most spectacular incidents of investors using American exchanges to bypass the rules of Canadian exchanges was the hostile takeover of Brascan by the Toronto Bronfmans. Brascan was a Canadian firm owning diverse ventures in Brazil. Brascan’s rejection of Edper’s buyout offer led Brascan to attempt to purchase Woolworth as a defense against the takeover. In the end the Bronfman’s were able to take control by accumulating shares on the American Stock exchange. Brascan sued arguing that Edper’s action was in effect a tender offer which would mean that the Bronfmans had violated the Williams Act of the Securities Exchange Act of 1934 including disclosure requirements. The Court of the Southern District of New York ruled in favor of the Bronfmans that their pickup of stock


at a premium did not constitute a tender offer.\textsuperscript{283} The more significant issue is that the Bronfman family had violated the rules of the Toronto Stock Exchange by acquiring a firm listed on the Toronto exchange through a foreign exchange.\textsuperscript{284} While the acquisition was targeting the firm’s cash, Brascan became the Bronfman’s most important investment vehicle evolving into today’s Brookfield, one of Canada’s largest private equity firms.

The SEC and the Canadian provincial securities regulators created the Multijurisdictional Disclosure System (MJDS) in 1991 as a system for Canadian securities to get automatically registered with the United States. The Multijurisdictional Disclosure System (MJDS) was a system agreed to by the Canadian provincial securities administrators and the US SEC allowing cross border securities transactions to be conducted following a firm’s home disclosure rules. Not only can a Canadian firm largely use Canadian forms to distribute to Americans and filed with the SEC, but there is no separate SEC review. The MJDS established a mechanism for the SEC to routinely defer to the Canadian or provincial regulator and vice versa. This reciprocity was made possible by the extensive American and Canadian securities laws.\textsuperscript{285}

One of the reasons MJDS is not utilized as frequently as many might expect is the US Regulation S exempts transactions conducted in foreign marketplaces. Recall that


a Regulation S exemption applies when the transaction and the marketing of the security is conducted entirely outside of the United States. This does not preclude a contemporaneous offering within the United States covered on other rules. Another reason that Canadian firms have not had to rely exclusively on MJDS is their preexisting ability to exploit the Rule 144A exemption. As discussed previously Rule 144A exempts sales of securities sold privately to qualified investors with investible assets more than 100 million dollars. Overall, large Canadian companies can fairly readily access American capital markets even without utilizing the benefits offered by MJDS.

Canadian-American securities regulatory cooperation is unique in a number of ways. The United States has no formal treaties signed with Canada related to securities regulation; securities law and procedure was largely left untouched by NAFTA. Yet, the level of cooperation with the the US Federal regulator, the SEC with the provincial and territorial securities administrators greatly exceeds coordination with the transnational regulatory network of global regulators largely embodied by International Organization of Securities Commissions (IOSCO). Cooperation between the United States and Canada is largely achieved by the signing of memoranda of understanding between the SEC with the provincial authority or with their umbrella organization Canadian Securities Administrators.286 Critical to the cooperation between the respective countries, is the major role administrative rule making plays in defining the law offering the

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administrative regulators to enact as well as enforce new rules without requiring the intervention or assistance of the legislatures.\textsuperscript{287}

Non voting shares are a big feature in the Canadian equity marketplace. They are issued in family run firms to preserve the control of the founders and are used to comply with protectionist measures in numerous industries that require firms to be controlled by Canadians. Yet, they are often a source of concern and not always viewed favorably in terms of corporate governance or even fairness.\textsuperscript{288} The case of Canadian Tire was particularly egregious. The founding family dominated control of the firm through their special voting shares despite owning a small minority of the firm. One of the firm’s bylaws was created to protect the non voting shareholders by converting their shares into voting shares in an event of a takeover bid. Their lawyer Rene Sorell found a loophole around this coattail clause, allowing the Billes family to get a deal to sell their shares at a substantial premium. The Ontario Securities Commission struck down this arrangement on the basis of a total lack of fairness.\textsuperscript{289} On the other hand non voting shares can insulate managers from the whims of changing shareholders and allow them to focus in on the long game. The Toronto Stock Exchange has required strong coattail protections for non voting shareholders following the attempted Canadian Tire heist.

\textbf{The Exchanges}


\textsuperscript{288} (March 6, 1987 Friday). The Muzzled Owners. \textit{The Globe and Mail} (Canada).

\textsuperscript{289} Karen Howlett; (January 14, 1987 Wednesday). Canadian Tire Ruling to Have Widespread Impact. \textit{The Globe and Mail} (Canada).
In Canada the traditional equity market is dominated by only one player. The TMX Group controls 85% of stock trading in Canada.\textsuperscript{290} The oldest stock exchange in Canada was actually the Montreal Stock Exchange, but by 1999 it had agreed to shift towards derivatives trading and then in 2007 was acquired by the Toronto Stock Exchange (now the the TMX Group) leading to the creation of a Canadian exchange giant.\textsuperscript{291} Back in 2001 the Toronto Stock Exchange had already acquired the Canadian Venture Exchange which was created in 1999 by the merger of the Vancouver Stock Exchange with the Alberta Stock Exchange and the Bourse de Montréal. Today the resulting TSX Venture Exchange based in Vancouver serves as a major feeder for the Toronto Stock Exchange and other major global exchanges.\textsuperscript{292} By offering a junior level stock listing the TMX Group can more effectively compete for American listings. The TSX Venture Exchange largely competes with the Nasdaq Capital Market and the London Stock Exchange’s Alternative Investment Market. The TSX Venture Exchange (TSV) has two tiers for listing with the second having more lenient requirements allowing for less established companies to take advantage of the public markets. The TSV is considered the world’s only publicly traded venture capital market. The goal in listing with the TSX Venture Exchange is often to “graduate” and eventually earn a place in the big leagues on the regular Toronto Stock Exchange.


Many Canadian retail customers have special accounts created for investing in American stocks separate from the ones used for domestic listings. These accounts are so common, many Canadian use cross listed firms as a cheap method for currency conversion by buying the shares on the American exchange in American dollars and selling them on the TSX Group in looneys or vice versa. This is known as Norbert’s Gambit. Norbert Schlenker was an investment advisor in British Columbia who founded his own firm, Libra Investment Management. Canadians depend on the larger American equity market to better diversify their investments. Further the integration of North American manufacturing particularly after the Auto Pact means many Canadians can only invest in their own employer by entering the American equity market.

Canada’s trading markets have become transformed by alternative trading systems (ATS) and novel ways to handle order flow. There are seven major alternative trading systems in Canada: Bloomberg Tradebook Canada, Chi-X Canada / CX2 Canada, Instinet Canada Cross (ICX), Liquidnet Canada, MATCH Now, Omega ATS, TMX Select. Chi-X Canada has been acquired by Nasdaq and is being converted to a stand alone exchange intended to compete head on with the TMX Group. One challenge for Canadian equity markets is the United States allows broker dealers to pay for order flow while that practice is banned in Canada. This leads to a competitive disadvantage and


stock market orders being rerouted through the United States.\textsuperscript{296} Gaining regulatory approval for ATS was a long struggle in Canada. When Bloomberg Tradebook and Instinet first arrived, they were only allowed to be used for transactions on foreign securities. Instinet was blocked from buying a seat on the Toronto Stock Exchange. Now that the TSE has gone entirely electronic, the distinction between exchanges and alternative trading systems has really gotten blurred.\textsuperscript{297} The Canadian Securities Administrators led by Ontario sought to bring competition to the marketplace by allowing alternative trading systems.\textsuperscript{298} The entrance of alternative trading systems in Canada has also grown concerns about market fragmentation.\textsuperscript{299} The existence of dark alternative trading systems also reduces overall market transparency.\textsuperscript{300} There are concerns alternative trading systems would skim the least informed orders increasing the costs of trades on the exchanges but some research actually suggests this is not the case.\textsuperscript{301}


\textsuperscript{297} Aroline, V. H. (1999, Jul 03). Canadian regulators move to allow ATSs. The Gazette.


Instinet, previously discussed in chapters 2 and 3, finally announced its plan to offer trading in Canadian securities in 2006. The launch of Instinet Chi-X Canada opened up the Canadian market to electronic trading networks just as Instinet had done for the United States in 1968. Instinet Senior Vice President Tal Cohen oversaw the launch of this alternative trading market in Canada. In 2008 the parent firm of the Canadian Securities Exchange beat Chi-X Canada by creating Pure Trading, the first ATS with a fully continuous auction market. Chi-X Canada, however, quickly captured large shares of the trading in major TSX listings. In 2016 Nasdaq acquired Chi-X Canada. This purchase gave Nasdaq significant access to a large chunk of Canadian equity order flow. Nasdaq went on to hire Tal Cohen to run its North American equities business.


The Venture Capital Market

In today’s markets a great deal of investing in the capital markets occurs in the private markets. For startups and early stage companies, much of the private funding take the form of venture capital. The early inspiration for Canadian private equity were major American tech success stories like Apple, Digital Equipment, and Lotus Development. Technology has once again become prominent in the Canadian Venture capital realm. Some of the players investing in Canadian venture capital world are established technology firms. The Federal Government has also established the Venture Capital Action Plan which subsidizes major Canadian Venture Capital Funds with matching funds. Overall the Federal Government is the largest investor in venture capital in the country. Meanwhile, in Ontario the provincial government has created the Ontario Venture Capital Fund (OVCF). The OVCF is a partnership of the provincial government and private companies. The Quebec Government helps fund Federal matching of venture capital funds, but has not created a separate government led fund. Montreal actually led Canada for the size of VC deals for the first quarter of 2018. The Alberta Government launched Alberta Enterprise in 2008 to support venture capital


activity in the province. One recent investment by Alberta Enterprise was in the Panache Fund for $5 million. British Columbia was an early pioneer of generous tax credit for private investments in venture capital. American venture capitalists are also always on the look out for opportunities up north. For example innovative Toronto app developer VarageSale received $34 million funding from Sequoia Capital and Lightspeed Venture Partners. VarageSale was founded by a kindergarten teacher, Tami Zuckerman. Sequoia and Lightspeed are both really top California firms who are backed by very deep pocketed investors and are very adept at successful exits for startups either with sales to major large cap companies or IPOs on major US exchanges. Last year Zuckerman sold her startup to VerticalScope, another Toronto tech firm. The challenge facing Canada in terms of American venture capital is that the big players tend to focus in on select areas in the United States, India, China, and Israel.

The venture capital market in Canada is extraordinarily similar to the United States. Certainly, there is not the scale of deals and funding rounds that are seen in places like Seattle, Silicon Valley, or Boston. Generally, the Canadian VC Market from Toronto to Montreal to Vancouver would rest heavily in the mid market category. However, even major North American financial centers like Chicago have also struggled...


to attract the type of VC activity found in the more innovative parts of the United States or the United Kingdom and Israel. Overall the Canadian market is very well saturated with VC funding, but the scarcity of unicorns, VC companies valued at a billion dollars, demonstrates that Canada is still not a super power in venture capital investments.317 The composition of exit strategies between Canadian and American firms vary somewhat with Canadian startups somewhat less likely to end in an initial public offering (IPO).318 However given the constantly changing calculus in whether staying private or going public is the better strategy, it is not clear if this is a fundamental weakness of the Canadian venture capital market. The Government of Canada has used the Federal Venture Capital Action Plan to fund Northleaf Venture Catalyst Fund, Teralys Capital Innovation Fund, Kensington Venture Fund, and HarbourVest Canada Growth Fund. HarbourVest Partners is a Boston firm making it the only American firm to manage a VC fund backed by VCAP.319

One very uniquely Canadian phenomenon is the Labour-sponsored venture capital corporations (LSVCC) which are VC funds sponsored by Labor Unions. LSVCCs are starting to have a diminished role as the favorable tax treatment is largely being phased


out in Canada.\textsuperscript{320} Some research indicated that LSVCCs were less efficient than private VC funds.\textsuperscript{321} The new government sponsored funds have the advantage of having private investment capital as well as private firms managing the funds.

One of the big focuses of Canadian venture capital is healthcare and biotechnology. Agrisoma Biosciences is one current startup in Canada that is developing genetic engineering technology for agriculture. Monteris Medical is a startup developing medical tools for the treatment of brain tumors. Clearwater Clinical develops tools for audiology and endoscopy.

Another big area for Canadian VC funds is cleantech. For example, Hortau has developed an advanced irrigation system for crops. Power Survey is a company that designs tools to make electric grids more efficient. Despite all of the government support for venture capital, Canada is really unable to escape being eclipsed by the United States in general and Silicon Valley specifically.

The largest successful Canadian startup of the past couple decades is Shopify. In 2015 it simultaneously went public on both the Toronto Stock Exchange and the New York Stock Exchange. Shopify is one of the leading firms providing ecommerce services for small businesses.

\textbf{Private Equity}

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The two most significant publicly traded private equity firms in Canada are Onex and Brookfield Asset Management. Many of the largest institutional investors in Canada are government sponsored pension funds including Ontario Municipal Employees Retirement System (OMERS), Ontario Teachers' Pension Plan Board (Teachers), Canada Pension Plan Investment Board (CPPIB), and Caisse de dépôt et placement du Québec (CDPQ) and they all run substantial private equity operations in house as well. Three of the the top ten largest private equity players in the world are Canadian: the Canada Pension Plan Investment Board; the Ontario Teachers' Pension Plan; and Caisse de depot et placement du Quebec.\footnote{Staff, T. (2017). These Investors Are Dominating Private Equity. \textit{Institutional Investor}.}

The largest Canadian institutional investor is the Canada Pension Plan Investment Board (CPPIB) which manages the Canadian Pension Plan for all provinces but Quebec. Neiman Marcus and Petco were major recipients of CPPIB capital. Another very large pension plan in Canada is Ontario Teachers' Pension Plan. The largest private equity deal in Canadian history would have been the leveraged buyout of BCE, the holding company for Bell Canada, by a group of private equity investors led by Ontario Teachers’ Pension Plan (OTPP), but the transaction was scuttled by KPMG refusing to pass it on solvency grounds. Ironically solvency tests are rarely required for LBOs, but in this case it was an effort by BCE to immunize itself from lawsuits from bondholders.\footnote{Lattman, P. (2008, Dec 11). BCE Leveraged Buyout Deal Collapses. \textit{Wall Street Journal}.} One other noteworthy acquisition of the OTPP private equity wing, Teacher’s Private Capital, was
the purchase of GNC in conjunction with Los Angeles based buyout shop Ares Management.\textsuperscript{324} Ontario also has the Ontario Municipal Employees' Retirement System (OMERS). The Caisse de Depot et Placement du Quebec oversees pensions for Quebec. In Canada Endowments are also very large investors. For example, the University of Toronto Asset Management Corporation (UTAM) was established in 2000 to manage the assets for both the University Endowment and employee pensions.\textsuperscript{325} As a result the UTAM manages roughly $10 billion.

Another major investor in the Canadian markets are the Insurance Companies. Two of the largest Canadian Insurance companies by assets are Manulife Financial and Sun Life Financial. Similar to the United States many of Canada’s insurance companies were originally established as mutual companies and in recent decades demutualized and went on to become public companies. Manulife underwent the demutualization in 1999.\textsuperscript{326} Sun Life Financial followed suit the next year.\textsuperscript{327} In both cases the policyholders were rewarded with shares in the newly formed companies as well as cash. Manulife’s acquisition of John Hancock in 2004 cemented a very strong American presence for the company. The significance of Canadian insurance companies is twofold.


They represent a very large segment of the market valuation of the Toronto Stock Exchange and they also are some of the biggest investors in equity both private and public.

**Onex**

Onex really is the private equity giant in Canada. Onex is the creation of Gerry Schwartz who worked at Bear Stearns under private equity giant Jerome Kohlberg. He also worked with Henry Kravis and George Roberts who would go on to create with Kohlberg the iconic American private equity group KKR. Schwartz co founded the Canadian media group Canwest in 1976, which will be discussed in the next chapter, and then went on to found Onex in 1984. Onex has managed to outperform KKR over the long run and amazingly today was Canada’s largest employer by virtue of its various portfolio firms until recently overtaken by Canadian grocer Loblaw. Onex has successfully captured a number of really high profile deals that have propelled the firm to the top levels of global private equity firms. One of the big deals was picking up in air catering division of American Airlines, Sky Chefs. Later Onex went on to purchase IBM’s manufacturing division, Celestica. Early last decade Onex returned to the airliner business in a big way. Scotiabank alumnus Seth Mersky came to Onex loaded with experience, ideas, and contacts. Mersky realized that the major downturn in the air travel business that followed 9/11 had fostered a substantial buying opportunity especially given major pent up demand in China and India. The opportunity Mersky found were

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airplane production plants in Kansas and Oklahoma that Boeing was ready to unload. Onex has also been a frequent participant in local Canadian private equity deals.

**OMERS**

The Ontario Municipal Employees Retirement System (OMERS) was created by a 1962 act of the Ontario Legislature to manage all of the pensions for all of the province’s government employees. In 2006 Ontario restructured OMERS handing over much of the control to the municipal governments it serves. One of the largest acquisitions for OMERS has been Alexander Mann Solutions. Another major acquisition was US liquid transportation services firm Kenan Advantage Group from Goldman Sachs and Centerbridge Partners. Back in 2010 OMERS also purchased United States Infrastructure Corporation. Omers is also a major investor in publicly traded firms including TSX 60 component firm Constellation Software. OMERS current stake in Constellation stems from private equity investments made many years before its IPO. OMERS has also been a large investor in real estate, represented by large private

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330 (May 10, 2018 Thursday). Omers Private Equity Announces Agreement to Purchase Alexander Mann Solutions. *Thomson Reuters ONE.*

331 Kirk Falconer. (June 18, 2015 Thursday). OMERS Private Equity to acquire trucking business Kenan Advantage. *peHUB.*


333 Barry Critchley. (March 09, 2000 Thursday). Constellation closes private financing: Growing software firm doesn't rule out IPO down the road. *National Post (Canada).*
equity transactions involving Canadian REITs as reflected in its $3.8 Billion dollar acquisition of Oxford Properties Group which had doubled the size of its property portfolio. Oxford Properties currently serves as the investment and management vehicle for all of the real estate holdings held by OMERS. OMERS joined with Alberta Investment Management Corp to take control of European cinema firm. OMERS purchase in partnership with UK based Apax Partners of Canadian media firm Thompson’s textbook unit helped Thompson fund its purchase Reuters. OMERS and APAX have renamed the textbook firm Cengage. The Chicago Skyway is current owned by OMERS Infrastructure, CPP Investment Board, and Ontario Teachers’ Pension Plan.

**Canada Pension Plan Investment Board**

The Canada Pension Plan Investment Board is one of the world’s largest sovereign wealth funds. The Canada Pension Plan serves as the equivalent of America’s Social Security. Today its invested assets are rapidly approaching a half of a trillion dollars and it is led by Goldman Sachs veteran Mark Machin. Canada is paying top dollar for the first foreign born leader of CPBIB that it aggressively recruited for the

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move north. Machin’s predecessor Mark Wiseman has assumed control over BlackRock’s global active equity. One of the CPPIB’s largest investment jointly made with Ares Management was Dallas based Neiman Marcus in 2013. A critical expansion of CPPIB was taking over the private equity financing arm of General Electric. To earn the best return for the Canadian taxpayers it is enlisted to serve, the pension fund seeks to invest in the technologies and products of tomorrow. Very noteworthy is its nearly single minded focus on total returns on a global portfolio means it has a limited effect on Canadian Capital Markets. The managers are not going to be very motivated to also promote local development concerns given their pay tends to be more correlated to the fund’s financial performance.

Ontario Teachers' Pension Plan Board

The Ontario Teachers' Pension Plan Board (Teachers) also ranks very high among Canadian pension funds. Before 1990 the pensions of teachers in Ontario were managed as a provincial agency. The legislature chose to spin it off as an independent private agency jointly sponsored by the provincial government and the Ontario Teachers Federation. For property investments on the west coast of the United States, Teachers has

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partnered with the Macerich Partnership. Macerich gets its name from the combination of the founders’ first names: Mace Siegel and Richard Cohen. Macerich became a publicly traded REIT on the New York Stock Exchange in 1994 and is currently a component of the US S&P 500. During summer of 2018 reports surfaced that Teachers was considering possibly taking over Macerich entirely. The private equity division of Teachers is known as Teachers Private Capital.

**Brookfield**

Brookfield’s roots began with the creation of Edpar which served as an investment vehicle effectively for the inheritance of Edward Bronfman and Peter Bronfman. Their uncle Samuel Bronfman had created the Seagram’s Liquor company, which evolved into one of Canada’s largest firms. While the portion still remained to be a tidy sum, Samuel’s difficult relations with their father led him to cut their holdings; forcing them to sell substantial shares at an unfavorable price and prohibited them from working at Seagrams. This forced them to set out on their own. While their lack of experience and youth may have initially led to mixed results, they ultimately built Brascan into one of the most dominant forces on the Toronto Stock Exchange through an intricate web of holding companies with Edpar at the center.

Edpar was able to gain control of Brascan, a Brazilian power company traded on the Toronto Stock Exchange and controlled by Canadians by buying most of the key shares on the American Exchange and the London Stock Exchange bypassing rules set by the TSE. As previously mentioned the main legal case resulting in the US had to do with

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whether they violated the Williams Act by not complying with the rules set for tender offers in the United States. This hinged upon whether their market actions could be properly construed as a tender offer. The Bronfmans were going after Brascan’s free cash, but then transformed Brascan into one of their main vehicles for private equity styled deals. Brookfield was the name of one of the real estate firms they had purchased.

By the early 1990s, the Bronfmans found themselves badly overextended and were forced to retrench. To move beyond the free wheeling days during Bronfman control, Brascan assumed the name Brookfield. Brookfield, however, has assumed the path blazed by the Bronfman Brothers as a leading investor in Canada and around the world.

Today the Brookfield family of firms offers many investment options for equity investors in Canada and the United States. The parent firm Brookfield Asset Management (BAM) is listed on the Toronto Stock Exchange, the New York Stock Exchange, and the Euronext. BAM is a component of the S&P TSX 60. Brookfield Property Partners (BPY) is a subsidiary that is structured as a limited partnership and is traded on the Nasdaq and the Toronto Stock Exchange. The advantages and disadvantages tax wise in Canada and in the United States stem from the income flowing through without paying separate corporate tax. The structure also results in no reported operating income. Brookfield Property REIT (BRP) is structured as a real estate investment trust for Americans who would benefit from the tax advantages of owning shares in a REIT. In June 2014 BPY absorbed Brookfield Office Properties, the Brookfield subsidiary focused on investing in office buildings. Brookfield Renewable Partners is the Brookfield devoted to looking for profitable investments in renewable energy and Brookfield Infrastructure Partners buys into infrastructure projects around the
world. Overall, Brookfield Asset Management is a very broad based private equity operation that opportunistically looks for good investments in all industries around the world.

Private equity firms offer more established firms another stream of funding.

**Little Bang**

In June of 1987, Canada had its Little Bang, the implementation of changes made to Ontario and Canadian Federal Law related to securities and banking law in order to liberalize the Canadian securities markets. Modeled after London’s Big Bang, it ended the separation between commercial and investment banks and opened up investment banks and brokerages to foreign investment. Competitive global forces would lead Ontario to take the early moves that would set this into motion. The SEC ended in 1975 fixed commissions for stock trading in the United States as part of the May Day Reforms (earning the SEC the pejorative of Soviet Economic Commission in the eyes of Wall Street insiders). Ontario had followed suit in 1983 enhancing the affordability and competitiveness of the Toronto Stock Exchange, but also unleashing an upheaval on Bay Street by eliminating easy profits.

Ending fixed commissions in Ontario opened the door to discount brokers in Canada just as it previously did in the United States. At around the same time the relatively newly formed US discount broker Charles Schwab, then a subsidiary of Bank

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of America, was able to get the OSC to give initial authorization to a Schwab Canada on
the condition that Canadians owned 90% of the voting shares. However, a few issues
ultimately scuttled the deal paving the way for hometown bank Toronto Dominion to lead
the way for Canada’s first discount bank. Bank of America was not satisfied to being
limited to a 10% voting interest and the Schwab business model in the United States was
not consistent with Canadian client suitability rules. Most problematic was the fact that
BOA already owned a bank in Canada, and taking ownership in another Canadian
financial institution even through a subsidiary could have conflicted with Canada’s Bank
Law. Toronto Dominion, the smallest of Canada’s Big Five Banks, recognized an
opportunity and seized upon it. TD managed to successfully lobby the Ontario Securities
Commission to allow the bank to start its own discount service named Green Line, as
long as it offered none of the features of a full service brokerage.\textsuperscript{345} The OSC’s decision
was a major test of provincial power given that the Canadian Constitution assigns the
Federal Government authority over Banks, historically separate from the provincially
regulated securities industry.\textsuperscript{346}

The UK’s Big Bang threatened Bay Street with UK investment giants getting
even bigger as they merged with British commercial banks and even now potentially
American commercial banks. Some American commercial banks moved in on the City
looking for opportunities still denied them on Wall Street by the not so venerable Glass-
Steagall Act. Making matters even worse the Federal Reserve started to open the door to

\textsuperscript{345} Horvich, S. (1984, May 30). In Canada, Discount Brokers At Banks Getting A Slow
Start. \textit{American Banker}, 149, 2.

American banks to move into the world of investment banking domestically by interpreting a section of Glass-Steagall. Lawsuits ensued, but Bay Street could see the handwriting on the wall. The flood gates in London and New York had opened, and if Ontario regulators did not soon act, Toronto would be swallowed up. Adding insult to injury Canada’s Finance Minister, Michael Wilson, announced a plan to transform Vancouver and Montreal into International Banking Centers. Ontario was ready to liberalize its securities industry with or without the cooperation of the Federal Government. When questioned about the extent of his conversations with Federal authorities, Ontario’s Financial Institutions Minister answered “about as much as took place when they decided to make Vancouver and Montreal international banking centers.”

The Little Bang was an effort at deregulation and liberalization modeled after UK’s Big Bang which allowed Canadian banks to buy or start brokerages and opened up the Brokerage industry to foreign investors. The Little Bang transformed the securities landscape, but got off to a slow start since the jurisdiction for banking remained Federal

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while the securities regulation remained the providence of the provinces. At first Ontario was the only province to reach a deal with the Federal Government on the new regulatory structure, but the initial Federal guidelines led all the provincial regulators including Ontario to rebel. The local authorities jealously held on to their power over the securities markets. Ultimately, the final arrangement involved a collaborative approach between the Office of the Superintendent of Financial Institutions and the provincial securities regulators. Quebec had actually beaten the rest of Canada by using special temporary powers to license with the consent of the Federal Government under the national banking law the Bank of Nova Scotia to enter the securities industry in the province. This apparently impetuous move by Quebec was met with the disdain from Ontario with its Minister of Financial Institutions promising: "Toronto will remain Canada's financial capital." Despite Montreal’s decades long decline as a major financial and business center, the economic competition between Ontario and Quebec continued. The Little Bang was not surprisingly credited with Canada’s ability to compete globally given that the Big Bang is credited as cementing London’s central role in global finance. BMO became the first Canadian bank to buy an investment bank when it acquired Nesbitt Thomson Deacon Inc. in 1987. Canada’s Little Bang also allowed

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Canadian financial institutions to build larger balance sheets and assemble more diverse 
lines of businesses, prompting a rapid period of Canadian financial innovation.354

**Canada Realignment Agreement**

On March 15, 1999 all the major Canadian exchanges signed a specialization 
agreement giving each marketplace its own particular role. Montreal would become 
Canada’s exclusive derivatives marketplace. Montreal’s senior stock listings were 
supposed to be shifted over to Toronto. All of the Junior listing exchanges were 
combined into the newly formed Canadian Venture Exchange (CDNX). This served to 
maintain Toronto as the major center for Canadian equity trading and Montreal for 
exchange traded derivatives. Quebequois feared the loss of equity trading in the province, 
but there were also concerns in Ontario that the derivatives market assigned to Montreal 
or the junior listings assigned to the CDNX would prove more lucrative than the senior 
equity listings. Some even thought a Canadian junior exchange could one day evolve 
into another Nasdaq.355

Both the Montreal Exchange and the Toronto Stock Exchange underwent 
demutualization in 2000 as part of a broader global movement. From the mid 1990s to 
the end of the last decade virtually all of the world’s major exchanges became for profit 
firms. Demutualization involves converting a not for profit mutual firm into a for profit 
company owned by the shareholders. Initial shares were granted to the exchange’s seat

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355 November 26, 1999 Friday). Toronto The Loser: TSE at Risk from Exchange Restructuring, Brokers Say. *National Post (Canada).*
owners and were restricted from being sold for a couple years. The TSX Group finally went public through an IPO in November 2002. Converting into a publicly traded firm for the most part tends to transform exchanges from private for members only clubs, into public, dynamic, and rapidly evolving private enterprises.

The two main exchanges that were merged to become the Canadian Venture Exchange (CDNX) were the Vancouver Stock Exchange and the Alberta Stock Exchange. Both had very checkered histories. Forbes had once infamously labeled the VSE the “scam capital of the world.” The city has often been the center of many highly speculative issues if not outright frauds. The ASE was most known for the infamous BRE-X $6 billion gold fraud. Clearly the CDNX did not come from the most auspicious origins. The Winnipeg Stock Exchange was also folded into the CDNX as well as the junior listings from the Canadian Dealer Network in Toronto and from the Montreal Stock Exchange. The absorption of the relatively tiny Winnipeg market also gave the residents of Manitoba a stake in the newly merged Canadian junior market.\(^{356}\) The creation of a single national publicly traded venture market may prove to be a very ambitious and far sighted plan on the part of Canada’s stock trading establishment at least in the long run. The ambition was to create a leading incubator perhaps even for the whole world.

Unfortunately the merger did not immediately lead to the hoped for improvements in liquidity. The dot com crash followed by the global market downturn conspired to crush any hopes the merger offered at rapidly reviving Canada’s junior equities markets.

Firms like Worldcom and Enron had introduced a great deal of cynicism on the part of investors about skeptical bets, and Vancouver and Alberta were always notorious for fraud and other abuses. An additional flaw of the market is it lacked the market makers or specialists found in markets like the New York Stock Exchange that can help ensure liquidity. Fortunately, part of the Specialization Agreement involved close collaboration between the Canadian Dealer Network, a wholly owned subsidiary of the Toronto Stock Exchange, and the CDNX. The CDNX also sought to expand its business by opening an office in Toronto, which required a lengthy approval process by the Ontario Securities Commission. A presence in Toronto was badly needed because much of the CDNX’s business still came from western Canada, since it was the amalgamation of markets from British Columbia and Alberta. It had been hoped that recruiting the chairman of the Alberta Securities Commission, Bill Hess, as president of the CDNX would offer the revamped junior listings markets renewed credibility. Instead Hess lasted only two years at the helm.\footnote{Brent Jang. (November 30, 2001 Friday). Hess Faced an Untenable Task as First CDNX President. \textit{The Globe and Mail} (Canada).} At a time when the TSX’s senior listings were dominated by tech high fliers like Nortel, Blackberry, and even Bell Canada it was only natural for the CDNX to also be heavily concentrated in technology issues. Sadly in issues related to finance like in politics, timing can be everything. The CDNX having loaded up tech firms on the eve of the dot com crash would lead to inevitable consequences. Continued price manipulation and fraud also helped doom the market at least in this incarnation. One example of that, Golf North Properties Inc., may have succeeded on its own merit over the long run, but its meteoric rise turned out to be fueled by boiler room styled tactics that
ripped off unaware buyers. In this case the malfeasance appears to have not been the work of the company itself, but the small securities firms it hired to promote its stock.\textsuperscript{358}

Blackberry board chair Jim Balsillie was able to line up the money to buy out the minority investors and take the company private, ending its misadventure with the CDNX. Golf North has managed to thrive to this day and Balsillie is the sole owner.

Once again the Government of Quebec acted to foil Ontario’s dominance in finance. The provincial regulators authorized Nasdaq to open a Canadian branch in Montreal likely violating the spirit of the Specialization Agreement. This was not an accident; Quebec Finance Minister Bernard Landry actively refused to allow the Montreal Exchange transfer its small caps to the CDNX as already agreed upon.\textsuperscript{359}

Ultimately the listings had to be transferred, regardless of the feelings of Quebec nationalists. Montreal just lacked the depth or breadth of a market for equity listings.\textsuperscript{360} If they were not moved as promised, the companies were ready to take matters into their own hands and jump ship.\textsuperscript{361} Once the deal was officially announced, it was revealed

\textsuperscript{358} Richard Blackwell. (February 13, 2001 Tuesday). Montreal Exchange To Shift Equities; Will Transfer Rump Of 130 Stocks To CDNX; Upon Approval By Quebec Regulators. \textit{The Globe and Mail} (Canada).

\textsuperscript{359} Peter Kennedy British Columbia Bureau. (November 18, 1999 Thursday). CDNX To Take Cue From Investors And Diversify BROAD BASE President William Hess Says The Canadian Venture Exchange Plans To Prosper By Acting As An Incubator For Oil And Mining Juniors, As Well As Emerging Information Technology And Biotechnology Firms. \textit{The Globe and Mail} (Canada).


\textsuperscript{361} Gibbens, Robert with files from John Schreiner and Ian McKinnon. (1999, Nov 12). Quebec's small-cap exchange faces problems, warns industry liquidity issue; ASE president says 'we'll have to live with it'. \textit{National Post}. 
that Quebec had been secretly negotiating with Nasdaq for a Montreal affiliate even before the specialization agreement was signed, which raises doubt about whether Quebec even acted in good faith.\footnote{Séguin, Rhéal. (April 28, 2000 Friday). How Quebec played the markets and won; Minister describes Montreal Nasdaq coup. \textit{The Globe and Mail} (Canada).}

The domestic political angle was an effort to please the Quebec nationalists; the hope was to upend Toronto’s growing financial dominance. The Nasdaq Canada ended up becoming another casualty of the dot com crash. Nasdaq’s growing financial losses forced it to give up on its ambitious plans for a truly global marketplace.\footnote{Marotte, Bertrand. (September 20, 2003 Saturday). Nasdaq nixes plans for separate Canadian stock exchange; Phase 2 of ‘Nasdaq North’ cancelled; Quebec-style operation envisaged for B.C.. \textit{The Globe and Mail} (Canada).}

Ultimately the Toronto Stock Exchange decided to outright acquire the CDNX by purchasing the members’ seats and integrate its operations into those of the TSX. This illustrates how an exchange can transform from a mutual company through a sale to an already demutualized exchange. The Government of Quebec may not have been pleased with this change, but the traditional rival stock markets were no longer viable. The shift of the listed equities business to Toronto was an irreversible process. The CDNX was rebranded the TSX Venture and the combination allowed unified marketing and trading functions. While the venture market has not exactly been smooth, at least the TSV is now fully backed by one of the world’s largest exchanges. The total consolidation of equity trading by the Toronto Stock Exchange also meant the Ontario Securities Commission is more than ever the primary regulator for stock trading in Canada.
The TSX Venture Exchange considers itself the world’s only public trading venture exchange. Raising capital through this market is considerably cheaper for startup management teams and founders than the traditional private venture capital market. On the other hand, absent from this setup is the guidance and help from experienced VC firms. The listing requirements for the CDNX are looser than the London Stock Exchange Alternative Investment Market and without the adult supervision provided by the Nominated Advisors (Nomads) approved by the London Stock Exchange regulators. The CDNX certainly is a Laissez-faire buyer beware environment. The benefit provided by having this market is providing an easy outlet for firms to have a publicly traded exchange for shares that can be used as currency for mergers and to incentivize employees. By listing on a major exchange, shareholders are provided with a secondary market as well as liquidity. The ultimate goal would be for listings on the TSX Venture Exchange to graduate to the regular Toronto Stock Exchange. The percentage of graduations from the TSX Venture Exchange have been impressive but the performance of the broader venture market leaves a lot to be desired. Most of the trading should be relegated to insiders with a special interest in the firms as well as in highly sophisticated traders and investors. While decades ago, the SEC worked desperately to track down boiler rooms on Bay Street in Toronto imploring their Canadian colleagues to act, the TSX Venture exchange remains a place a little bit too friendly for today’s Jordan Belforts. As recently as in 2011 the US securities and Exchange Commission had to file fraud charges against Bozidar (Bob) Vukovich previously investigated by the Vancouver police for unrelated stock manipulation and fraud. The TSX Group purchased the CDNX in 2001.
At the turn of the millennium, the Toronto Stock Exchange was beset by challenges. Technical glitches were all too common with what was already an entirely electronic exchange. Liquidity was threatened by the captive investment dealers owned by the big banks as a result of the Little Bang handling the trading in house. Competition for liquidity and order flow had already become a problem with the emergence of alternative trading systems (ATS).  

Most of today’s stock exchanges globally had begun their existence as essentially private trading clubs. Max Weber was one of the earliest to study the sociology of financial exchanges including stock markets:

*The oldest of the exchanges were gatherings on an open, occasionally enclosed, plaza. Later most, and now probably all, of these gatherings take place in great closed halls. From early on, it was naturally necessary that there be a body or instrument that could exercise a "policing" over the market. It is just the same now, for everywhere there are "commissioners" appointed who uphold the basic order of the place. In addition, however, the older market- and exchange-organizations also had a member - and the overwhelming majority of exchanges, including the German ones, still have it - whose special purpose it was to facilitate the absolutely most expeditious conclusion of business: the "broker.*

The Montreal Stock Exchange and the Toronto Stock Exchange had retained this clubby atmosphere through the end of the 1990s, though the market for the “seats” that earned membership into the exchange had by then become a hot commodity. The very

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364 Macklem, Katherine. (May 01, 2000 Monday). Nightmare on Bay Street: Systems break down, customers are fed up, new competitors are clawing at the door and there's a trading horror lurking upstairs. No wonder the Toronto Stock Exchange is going to hell. *National Post* (Canada).

first equity bourse to demutualize was the Stockholm Stock Exchange in 1993. By the 
turn of the century, Amsterdam, the Australian Exchange, Helsinki, Hong Kong, London, 
Montreal and Toronto had all demutualized. This began a nearly 20 year process of the 
vast majority of major exchanges around the world transforming from not for profit 
mutual firms into a for profit company owned by the shareholders. Initial shares in the 
Toronto Stock Exchange were granted to the exchange’s seat owners and were restricted 
from being sold for a couple years. Subsequently, the TSX Group finally went public 
through an IPO in November 2002. The Montreal Exchange did not have to raise any 
money through its listing. Between its lucrative monopoly on Canadian derivatives 
trading and its sizable stake in the Boston Options Exchange, the ME was just rolling in 
dough. Converting into a publicly traded firm for the most part tends to transform 
exchanges from private for members only clubs, into public, dynamic, and rapidly 
evolving private enterprises. At the end of 2007, the TSX and the Montreal Exchange 
entered into an agreement to merge. All approvals were gained and the process was 
completed in 2009. Canada ended last decade with one absolutely dominant exchange. 

However, the TMX Group would not be left without any rival. The Canadian 
National Stock Exchange (CNSX) was formed in 2003 to compete with the TSX for 
equity listings and trading. However, one of the strengths of the Canadian Securities 
Exchange(CSE) created in 2003 is that it allows the trading of American Cannabis firms.

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Journal, 21(2), 211-222.

367 Willis, A. (2006, Dec 02). Montreal exchange walks tightrope to IPO. The Globe and 
Mail.
While the TMX Group allows for Canadian cannabis firms to trade on both its senior and junior markets, it currently prohibits American cannabis firms, as a result of not wanting to run afoul of American Federal law.\textsuperscript{368} The largest shareholder in this upstart exchange is the Urbana Corporation.\textsuperscript{369} In 2013 the CSE obtained further financing from the Dundee Corp with Dundee CEO Ned Goodman becoming Deputy Chairman of the Exchange.\textsuperscript{370} In 2014 the exchange took the new name Canadian Securities Exchange. In 2016, the exchange created the CSE Composite Index which includes the 73 largest firms listed on the exchange.\textsuperscript{371} In 2017 the exchange launched the subset CSE25 Index representing the 25 companies with the largest market capitalizations.\textsuperscript{372} While the CSE share of market trading and listed companies is absolutely tiny compared to the dominant TMX Group it offers needed competition to the Canadian equity landscape.\textsuperscript{373}

The Canadian Securities Exchange is a newly approved exchange in Canada. In recent years it has developed a focus on cannabis related companies.\textsuperscript{374} It is very hard to


find companies listed on the CSE not in some way related to the cannabis industry. At first look Glance Technologies is a somewhat novel payment system. With a little bit more study it becomes clear this is yet another marijuana related firm. One of Glance Technologies’s main partners is Cannapay Financial Inc. However, Glance has also expanded its payment applications to one that targets Chinese consumers visiting North America.375

In 2016, the exchange created the CSE Composite Index which includes the 73 largest firms listed on the exchange.376 In 2017 the exchange launched the subset CSE25 Index representing the 25 companies with the largest market capitalizations.377 While the CSE share of market trading and listed companies is absolutely tiny compared to the dominant TMX Group it offers needed competition to the Canadian equity landscape.378 The largest shareholder in this upstart exchange is the Urbana Corporation.379

The Alpha Exchange was created in 2007 by Canadian banks to serve as an alternative trading platform to the TMX Group. Ironically, it was the CEO of the TMX Group, Tom Kloet, who would criticize Alpha’s ownership by Canadian banks as


returning "back to the days when trading venues and exchanges were owned by select participants with conflicted interests and an ability to work in concert." Kloet would ultimately find himself signing off on a merger with Alpha Group and a takeover of the whole TMX Group by a bank led consortium. With the Alpha Group, TMX would gain access to Canada’s most powerful dark pool for trading. Dark Pool markets allow institutional investors to make large trades without publicly revealing their identity or size of orders preventing traders from exploiting that information at the institution’s expense. The Alpha Exchange competed with the TMX Group for trading on stocks listed on the TSX Venture Exchange as well as the senior listings on the Toronto Stock Exchange.

Following the global phenomenon of securities exchanges undergoing demutualization, there was a wave of transnational mergers. Last decade newly privatized exchanges started to look towards mergers as a way to gain synergies and grow. It was felt that the global nature of the markets required strong international connections. One of the biggest transnational stock exchange mergers was the combination of the New York Stock Exchange with the Euronext. In order to seal the deal, the Euronext had to outbid a rival bid by the Deutsche Börse. In the same year as the NYSE joined up with the Euronext the NASDAQ combined with Nordic based OMX Group. While the NASDAQ is largely an American exchange, the OMX runs exchanges in Sweden, Denmark, Finland, Iceland and the Baltic states. Nasdaq hoped for cost


savings from realized synergies and to gain a foothold in Europe particularly in the
Nordic and Baltic region as well as in Eastern Europe.

The Maple Group

The TMX Group was almost drawn into this groundswell with what was billed as
a merger of equals with the London Stock Exchange Group. However, local Canadian
financial institutions were able to defeat this plan with a rival bid with their consortium
which they named the Maple Group. The Maple Group was successful in taking over the
TMX Group and joining it with Canada’s clearing firm for stock trading as well the main
rival exchange, the Alpha Exchange.

The rise of cross border exchange mergers would naturally lead to a move for the
Toronto Stock Exchange to tie up with another exchange internationally. After two very
large transformational transatlantic exchange mergers involving the New York Stock
Exchange and the Nasdaq the London Stock Exchange and the TMX Group seemed a
very natural fit. The merger with the London Stock Exchange Group would have been a
merger of equals. A very similar merger attempt was made around the same time
between the Australian Stock Exchange (ASX) and the Singapore Exchange (SGX). The
deal was announced on October 24, 2010. While ultimately it also failed, it helps shed
light on the overall global environment effecting the attempted merger between the LSEG
and TMX. In both cases economic nationalism may have played a key role in thwarting
the deal. The SGX deal was ultimately rejected by Australian Treasurer Wayne Swan
on April 8, 2011.

The Maple Group Acquisition Corp was formed by local Canadian financial
institutions to thwart the effort by the London Stock Exchange to take over the TSX. It
represented four of Canada’s largest banks: CIBC, NBF, Scotiabank and TD Bank. The Bank of Montreal and Royal Bank of Canada were unable to join because they were already advising for the London Stock Exchange deal.\(^{382}\) This effort was initially opposed by the exchange because the management felt that being part of a larger more global enterprise would be more beneficial for long term growth.\(^{383}\)

The Maple Group's initial bid was considered hostile, because the TMX Group's management was ostensibly committed to the merger with the London Stock Exchange Group. Given that bid was hostile, the Maple Group had to comply with TSE bylaws requiring that no one investor own more than 10% of the exchange stock. They did this by expanding to include the largest Canadian pension funds: the Caisse de Dépôt et Placement du Québec, the CPPIB, and the Ontario Teacher’s Pension Plan.\(^{384}\) The London Stock Exchange merger plan was defeated when the required 2/3 vote of shares in support was not forthcoming. The final technical element of the Maple Group deal was that the merger had to be done in as a two part transaction. Since the Maple Group was newly formed in Canada, it was not registered with the US Securities and Exchange Commission. Given the large component of American ownership, American securities laws had to be respected, which prohibited the Maple Group from making a broad securities offering under MJDS. The share component of the offering to the shareholders


\(^{384}\) King, M., Barnea, A., & Qayyum, F. (2014). *The Maple Acquisition of the TMX Group Inc.*, Richard Ivey School of Business Case Collection.
of the TMX Group would have to be issued by the TMX Group itself making it a two step merger. The deal largely left the TMX Group Management unchanged.

The British Columbia Securities Commission (BCSC) sought special assurances that the integrity of the Toronto Venture Exchange would be preserved by maintaining TMX board members with experience in venture capital. Its leverage was ultimately limited by the fact that securities commissions of Quebec and Ontario as well as the Federal Authorities had already approved the deal. The Maple acquisition of the TMX was combined with a simultaneous merger with the Canadian Depository for Securities Limited (CDS) and the Alpha Exchange, a rival alternative exchange. The TMX Group had tried to buy CDS previously but the banks had worried it would give the exchange too much pricing power. Perhaps, the fact that the banks were the sponsors of the takeover vehicle allayed the banks’ concerns over potential exchange excesses. Still to this day the CDS clears for all the stock exchanges in Canada including the Canadian Securities Exchange and the Alpha Exchange. It is the second largest central counterparty in the world.

The name of the winning bidder for the TMX Group, Maple, strongly suggested economic nationalism as a motive as was the case for the defeat of the SGX's bid for the ASX. Yet, in the case of Australia, it was the Australian regulators that defeated the bid. In fairness, suspicions that the Singapore exchange was using their own inflated stock to purchase a far larger exchange on the cheap were not without merit. What is noteworthy about the TMX case is the creation of the Maple Group was initiated by Canadian Banks and then expanded to other major domestic financial institutions. These were powerful vested interests that had a strong motive in preserving the status quo. Further their
success ensured that they would maintain a powerful role in the control of today's TMX Group.

Yet the end result of the merged NYSE Euronext is instructive. It was taken over by one of the world's largest derivatives player, Intercontinental Exchange (ICE). After all, the real money in trading today is in the derivatives business. ICE subsequently spun off the Euronext, so perhaps trans-Atlantic exchanges are not quite the boon as assumed last decade. When studying temporal progressions, we can find processes that begin with corrupt motives do not always lead to corrupt results.

Following the close of the deal to acquire the TMX Group, the Alpha Exchange, and the Canadian Depository for Securities, the revamped Alpha was re-launched as the TSX Alpha Exchange. Its goal was to ensure liquidity and protect Canadian order flow. The TMX Group successfully migrated Alpha Exchange to the TMX Quantum XA platform used on its other platforms.

Canada’s newest exchange is the Aequitas NEO Exchange. Aequitas is derived from the Latin word for fairness and neo is the Greek word for rebirth. The major shareholders of this new exchange are Barclays, BCE (Bell Canada), CI Investments, IGM Financial, OMERS, and RBC Dominion Securities. The Neo Exchange is built

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on the software platform MillenniumIT owned by the London Stock Exchange Group.\textsuperscript{388} MillenniumIT was a Sri Lankan firm that the LSEG had acquired back in 2009.\textsuperscript{389} The NEO Exchange uses its own proprietary methods to foil the abuses of high frequency trading by creating speed bumps and has implemented a designated market maker program to provide listed companies guaranteed liquidity. The goal is to level the playing field between investors and predatory high frequency traders.\textsuperscript{390} The TMX Group has responded with its own plan for implementing speed bumps, but the Aequitas NEO Exchange claims that the changes being enacted at the TMX actually favor the high frequency traders at everyone else’s expense.\textsuperscript{391} By being registered as a securities exchange NEO was able to quickly gain the listings for a number of major exchange traded funds. NEO’s first dual listed stock was Nobilis Health Corp. Nobilis had previously delisted from the TSX and was traded exclusively on the NYSE. Now it is traded on both the TSX and the NYSE, allowing Canadian investors the opportunity to buy shares of the firm on a local market. Like the CSE, the NEO Exchange is also very open to American Cannabis companies despite the current ambiguity with American law.

Taking on the TMX Group’s near monopoly of exchange based trading can be an uphill struggle in some ways reminiscent of Nasdaq’s early struggle with the Amex and


\textsuperscript{389} (October 20, 2009 Tuesday). MillenniumIT acquired by London Stock Exchange. Daily Mirror (Sri Lanka).


the NYSE, but without the backing of the powerful regulators found in the United States. Aequitas had filed a complaint with Canada’s Competition Bureau over the onerous terms for receiving TMX trading data.\(^{392}\) Canada lacks the national market system that Congress and the SEC worked to build allowing all exchanges to operate on a level playing field.\(^{393}\) The Canadian Securities Administrators has responded by issuing rules to promote greater fairness in the distribution of exchange data and is based on the principles of the American National Market System as created by Congress and implemented by the SEC.\(^{394}\) The co-founder of Aequitas, Jos Schmitt was also the founder of the Alpha Exchange, which was absorbed by the Maple Group and is now wholly owned and controlled by the TMX Group under the name the TSX Alpha Exchange. RBC, one of the only major Canadian financial institutions not to back the Maple Group acquisition of the TMX Group, enlisted Schmitt to create the Aequitas Neo Group.\(^{395}\)

While the restructured TMX Group is more than ever the dominant player in securities trading in Canada, the two still independent Canadian stock exchanges, the Canadian Securities Exchange and the Neo Exchange, offer the potential for additional


\(^{393}\) Aequitas aims to break the virtual canadian market data monopoly. (2015, Dec 08). Business Wire.


competition and innovation. Moreover, a great deal of the trading volume is handled by alternative trading systems within Canada, outside of traditional exchanges. Today Canada retains a very vibrant dynamic equity trading market. In some ways no other country offers the opportunities for very small companies to list. Numerous American companies have listed on the TMX TSX Venture market in Vancouver, because their only alternative would be to trade on the over the counter market in the United States.

The TMX Group is not remaining stagnant either. One of the highest priorities for the TMX Group is to expand globally. While now being a vertically integrated exchange is believed to offer many opportunities to expand services to Canadian investors and traders, the TMX Group does not want to be a purely local regional player. One major area is gaining more Israeli listings. In order to better attract Israeli firms, the TMX Group has offered an office in Israel led by Yossi Boker. The TMX Group continues to organize large roadshows in Israel. The aggressive push in Israel is motivated by the TMX’s Group’s interest in building its technology related listings, while it offers to Israeli firms ready access to American capital markets through the MJDS system and easier listing requirements for the TSX Venture Exchange than on the Nasdaq. The other major target for expansion for the TMX Group is to expand data and analytics offerings through its Datalinx division. The Toronto Stock Exchange

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launched its Datalinx division in 2002.\textsuperscript{399} In 2007 Datalinx was expanded to include trading data from Instinet's Chi-X Canada ATS.\textsuperscript{400} Data and analytics has become a major profit center for exchanges and financial information companies globally. The recent acquisition of Trayport from the Intercontinental Exchange is an attempt to build up the TMX Group data and analytics services in the energy trading arena.

**Overview of Select Companies and Sectors**

In this section I will briefly discuss certain areas of the Canadian stock market in order to more fully understand the functioning of the Canadian equity markets. I have chosen to leave my analysis of Canada’s media and telecommunications sectors for an in depth analysis in Chapter 5. Canada’s largest component of its economy is resource based including mining and energy. The Toronto Stock Exchange vies with the Australian Stock Exchange as the world’s primary place to list mining and energy issues from all over the world. The largest mining firms are Teck Resources, Rio Tinto Alcan, Vale Canada, First Quantum Minerals, and Cameco.\textsuperscript{401} Canada is often best known for its hydrocarbons and petrochemicals. However, it is also one of the world’s main sources of uranium, the main element that fuels the global nuclear industry. In fact, Canada based Cameco is the world’s largest publicly traded uranium producer. Generally, I have largely chosen to not discuss Canada’s energy and mining firms in this project. While they certainly represent a large component of listings on the Toronto Stock Exchange,


\textsuperscript{400} TSX datalinx(R) to distribute chi-X canada(TM) market data. (2007, Dec 21). *Canada NewsWire*.

energy and mining companies do not really relate to the issues investigated or discussed here. Further, Canada is too often viewed as just a large commodities depot, when its economy is in reality so much more.

The S&P/TSX 60 is the most widely used index of Canadian large cap companies. Generally they are the companies with the largest market valuations though adjustments are made to keep the industries balanced. Another reason it doesn’t always include all of Canada’s largest companies is inclusion is based on free float rather than just total market valuation. The largest Canadian company by market cap is Alimentation Couche-Tard, a colossal international operator of convenience stores. Amazingly, the company is relatively new and began as a single convenience store in Laval, Quebec in 1980. Alimentation is one of the greatest Canadian rags to riches stories. The company founder, Alain Bouchard, expanded in 1985 by purchasing eleven existing Couche-Tard stores. The company is listed on the Toronto Stock Exchange having previously been listed on the Montreal Stock Exchange before that exchange was converted into a purely derivative exchange. Very interestingly, this company is not cross listed on any non Canadian exchange. The share structure of the firm remains controversial because Bouchard and his four sons effectively control this company through a special class of shares with greater voting rights. However, many other family founded firms long kept this power from Disney to Ford to the Bancroft’s Dow Jones before they sold to News Corp.

Alimentation Couche-Tard’s presence in America began with the purchase of Circle K in 2003 for $804 million. Alimentation Couche-Tard Inc’s largest American purchase of San Antonio based CST Brands was completed in 2017 for $4.4 billion. The CST stores have been rebranded as Circle K. This acquisition made the company the largest owner of convenience stores in North America. Circle K convenience stores are still smaller in number than the leader in the United States, but Couche-Tard leads in North America overall.

Cameco is the largest publicly traded uranium producer. The largest investor in Cameco is Toronto based investment manager Beutel, Goodman & Company Ltd. The second largest holder of Cameco stock is Quebec public pension manager Caisse De Depot Et Placement Du Quebec. Cameco was the result of the merger of two Crown corporations in 1988. Cameco had its IPO on the Toronto Stock Exchange in 1991 and is now also listed on the New York Stock Exchange. Cameco has uranium mines in Kintyre and Yeelirrie, Australia. The Kintyre Uranium deposit was originally discovered by a mining company now owned by Rio Tinto. It was bought by a joint venture between Cameco and Mitsubishi. Cameco acquired the Yeelirrie uranium project from BHP Billiton in 2012. Due to a six year slump in uranium prices, Cameco is considering closing its mines in the United States which are rather small.

Despite never having developed nuclear weapons, Canada is a power in terms of nuclear technology due to being a leading designer and manufacturer of nuclear reactors. The first nuclear reactor built outside of the United States was built in Chalk River, Ontario in 1945. Today the largest producer of radioisotopes in North America is Ontario Power Generation, a crown corporation entirely owned by the provincial
government. Hopefully, that will one day be the only type of nuclear power anyone needs to be concerned with. The military significance of Canada’s uranium reserves is mixed, because Canadian law prohibits its sale for military use leaving the US military potentially reliant on existing military stockpiles. The US Military relies on domestic stockpiles of highly enriched uranium built up decades ago to build nuclear warheads and power nuclear fueled warships. While Canada is a vital supplier of uranium for the United States, domestic American politics has challenged relationship. The U.S. Commerce Department has opened up an investigation of US uranium imports threatening to expand the Trump Administration’s trade war to uranium. 403 Then there are right wing conspiracy theories that the sale of Canada based Uranium One to Rosatom was actually a plot by former Secretary of State Hillary Clinton to give Russia North American uranium—a fictional story likely promulgated by the Russians themselves. Incidentally, the Russians have enough plutonium to make 20,000 more nuclear warheads if they ever get tired of only having a slightly larger more diverse nuclear arsenal than the United States.

Other than Cameco, the other major publicly traded firm involved in Canada’s nuclear industry is SNC-Lavalin which bought CANDU from the crown corporation Atomic Energy of Canada. Candu reactors, a uniquely Canadian technology, are specially supported by Cameco. CANDU reactors generally operate on unenriched uranium unlike most reactors that require low enriched uranium but the design allows for many alternative fuels including plutonium and thorium due to its use of heavy water.

CANDU reactors are particularly resilient to meltdowns but their production of plutonium and tritium necessary for advanced thermonuclear warheads also raises weapons proliferation concerns. Canada may no longer lead the world in nuclear technology generally, but it is still the world’s largest producer of uranium which powers the entire nuclear industry. China is a major customer of Canadian built reactors.404

Canadian companies are very commonly cross listed particularly on American exchanges. There are numerous advantages to cross listing for Canadian firms. Firms listed on American exchanges gain access to greater liquidity and a far wider group of investors. Exchanges like the New York Stock Exchange provide greater credibility but also exposure. Trading on major American exchanges can actually build branding with Americans for Canadian firms that either have significant business in the United States, or at least may want to expand south at some point in the future. This poses certain challenges and threats to the TMX Group. As previously stated listings in the United States can allow alternative trading systems to engage in trading or routing practices prohibited in Canada by the exchange, the relevant self regulatory organization, or the provincial securities administrator. Potentially more seriously the TMX Group could lose substantial liquidity if trading heavily shifts to a major American exchange. Occasionally, Canadian firms may also be listed on the London Stock Exchange and the Australian Exchange. This reflects Canada’s position in the Anglosphere and the Australian Stock Exchange’s position as a major competitor to the TMX Group in mining and energy firms. Canada’s close cultural, linguistic, and economic ties to the United

States is both a blessing and a curse for the TMX Group. The Toronto Stock Exchange basically teeters between existing as merely a regional exchange and functioning as a major global exchange. There has always been the potential for the TMX Group to one day even become a peer competitor with the New York Stock Exchange and the Nasdaq.

Most of Canada’s major banks including Toronto Dominion, Royal Bank of Canada (RBC), and Bank of Montreal (BMO) are cross listed on the TMX and the NYSE. Commodities firms like Cameco and Potash are cross listed on the TMX and the NYSE. I will also discuss in this chapter the global car parts manufacturer Magna also traded on the Toronto Stock Exchange and the New York Stock Exchange. Magna illustrates the effects of the Canada United States Auto Pact and the resulting manufacturing economic cluster in Ontario. Agnico is listed on both the New York Stock Exchange and Toronto Stock Exchange. It is a major producer of Silver, Nickel, Cobalt, as well as gold. Its name is the combination of the symbols representing the chemical elements of Silver, Nickel, and cobalt.

Both of Canada’s largest railroad companies are cross listed on both the Toronto Stock Exchange and New York Stock Exchange. While Canadian National was a crown corporation until it was privatized, Canadian Pacific was granted a private corporate charter shortly after the British North America Act created the modern state of Canada. As we will see in the next chapter, Canadian National also played a major role along with Bell Canada in building out Canada’s telecommunications infrastructure. While both Canadian National and Canadian Pacific are today important components of the S&P TSX 60, they have taken on a very North American character through mergers and acquisitions. The core to the current business of both Canadian National and Canadian
Pacific are intermodal terminals that fully exploit the container revolution. These combine continental railroad networks with both major trucking and shipping lines.\textsuperscript{405} As will be discussed in the next chapter, Canadian National and Canadian Pacific played a major role in creating Canada’s telecommunications infrastructure. Like other North American railroad companies, both heavily utilized telegraphs to maintain business operations. Between the vital role telegraphs played in operations and the useful placement of railroad track, CN and CP became major players in the telegraph industry. They jointly formed CNCP Telecommunications (Canadian National-Canadian Pacific Telecommunications) which became one of Canada’s largest long distance telephone companies.

Canadian National was a Crown Corporation that was privatized in 1995. Canadian National was originally formed after World War I after the Federal government salvaged the company from the lines of a series of bankrupt company. The move to take it public came in large part as a response to railroad deregulation in the United States. In 1999 a proposed merger with the Burlington Northern Santa Fe Corp. was thwarted by the US Surface Transportation Board. No major merger of US railroads has occurred since.

Vancouver is Canada’s busiest container ports. It relies heavily on Canadian National to deliver cargo to the rest of Canada as well as major US cities like Chicago. Consequently, much of the Federal Government’s investment in the port infrastructure is

geared towards improvement in improvement in track facilities in partnership with Canadian National and Canadian Pacific.\textsuperscript{406}

Canadian National is Canada’s largest railroad. Its largest investor is Microsoft’s founder Bill Gates through his Cascade Investments vehicle. Bill Gates stake in CN was approaching Canada’s limit of 15\% for foreign stakes in domestic railroad companies until last year the Canadian Parliament raised the limit to 25\%.\textsuperscript{407} In 1997 Canadian National Railroad augmented its American presence by replacing its Chicago intermodal terminal with a far larger one.\textsuperscript{408} CN’s purchase of Illinois Central in 1998 greatly expanded the firm’s reach into the United States.\textsuperscript{409} CN’s presence in the Midwest was further expanded by its subsequent 1998 purchase of the Illinois Central Corporation.

The Illinois Central Railroad traced its history to the first US Federal land grant for a railroad completed back in the 1850s. In 2001 CN made another major Midwestern purchase, the Wisconsin Central Limited, a railroad previously spun off from Canadian Pacific.

By 2007 Canadian National faced an increasing traffic jam in Chicago, its largest transportation hub in the United States.\textsuperscript{410} To bypass the Chicago metropolitan area CN


purchased the railway subsidiary of US Steel, who’s lines ring the urban area.\textsuperscript{411} CN had previously tried to reroute some of its freight over lines owned by Omaha based Union Pacific.\textsuperscript{412} Some of this traffic started to interfere with traffic in Chicago suburbs including Franklin Park.\textsuperscript{413} Canadian National’s new routes in Chicago’s northwestern suburbs posed challenges for municipal regional transit authority Metra, resulting in the agency raising its concerns with the Federal Surface Transportation Board.\textsuperscript{414} CN’s history in Chicago dated back to 1924 when it actually launched passenger service.\textsuperscript{415} By 1927 the Canadian government was purchasing stock in Midwestern railroad firms to ensure access to strategically located region.\textsuperscript{416}

Via Rail Canada was created as the passenger subsidiary of Canadian National and then spun off as its own crown corporation. Canadian Pacific’s passenger lines were also transferred over to be owned by Via Rail in 1978.\textsuperscript{417} Canada’s major airline Air Canada was also still a crown corporation. One avenue for privatizing crown

\textsuperscript{411} Miller, J. P. (2007, Sep 27). Canadian National To Buy EJ&E; $300 Million Deal Eases Urban Routes. \textit{Chicago Tribune}.
\textsuperscript{412} Schmeltzer, J. (2004, Nov 27). Diverting Rail Freight Around City May Be Just The 1st Move. \textit{Chicago Tribune}.
\textsuperscript{413} Lan To Unsnarl Chicago Rail Hits Snag In Suburbs (2008). Washington, D.C.: NPR.
\textsuperscript{415} C. & N. W. Canada Through Service. (1924, Feb 29). \textit{Wall Street Journal}
corporations is the Canada Development Corp. which precludes share ownership by foreigners.\textsuperscript{418} By 1985 the Federal Government sought to privatize both Air Canada and Canadian National. Brian Mulroney had come into office inspired by Margaret Thatcher and Ronald Reagan to privatize the Canadian Governments sprawling investments represented by crown corporations as well as equity investments in major firms through the Canadian Development Corporation.\textsuperscript{419}

Canadian Pacific was incorporated shortly after Canadian Confederation. It was awarded a corporate charter by the Canadian Parliament in 1880. It was a venture heavily subsidized by the Federal Government intended to help link Canada with the newly admitted province of British Columbia. The company was intended to help thwart Yankee incursions into Canada’s Pacific region. Ironically, Canadian Pacific has in recent years sought mergers with major American railroad companies. An aggressive investment by Bill Ackman’s Pershing Square Capital Management in 2011 is widely credited as the impetus for a major restructuring of the firm that drastically boosted efficiency and profitability of the firm.\textsuperscript{420} While Canadian National and Canadian Pacific are two of the most important listings on the Toronto Stock Exchange, today they are both very much North American transportation giants.


Another noteworthy cross listed Canadian firm is Bausch. Bausch was actually founded as International Chemical and Nuclear Corporation in California by a Yugoslavian immigrant Milan Panic. Panic was a champion Yugoslavian cyclist who defected to the United States in 1956. Its blockbuster drug was hepatitis treatment Ribavirin. In July 1992 Panic became Prime Minister of Serbia. The firm’s financial transactions always appeared enigmatic and the firm would be caught up in Balkan politics. ICN struggled to regain a plant in Serbia that had been seized by forces under the control of Serbian strongman Milosevic. Galenika Pharmaceuticals, formerly a Yugoslavian state owned business, had always been an acquisition made under very unusual if not suspect means. After getting elected as prime minister of Serbia, Galenika got hit by US sanctions aimed at Serbian President Milosevic. Sexual harassment scandals in 2002 played a role in ending his leadership of ICN Pharmaceuticals. In one case, not only did he engage in a pattern of sexually harassing the firm’s director of employee relations, Debra Levy, he fired her only after fathering her child. He settled that case for $3.5 million. With mounting accusations from numerous women, serious concerns from the SEC about financial and reporting


422 ICN Seeking To Reclaim Yugoslavia Plant; Pharmaceuticals: Firm Reportedly Will Invest up to $50 Million in Factory Taken Over by Milosevic. (2000, Oct 10). *Los Angeles Times*

irregularities, and a floundering share price, it should be no surprise shareholders were beginning to panic.424

After the founder of the company was ousted, it was renamed Valeant Pharmaceuticals. A merger with Canadian pharmaceutical firm Biovail allowed Valeant to gain the more favorable tax structure up north.425 The merger created a large Canadian pharmaceutical giant, while leaving Valeant CEO Michael Pearson in place to head the amalgamation.426 Biovail came with its own baggage having been subject to many regulatory actions and investigations by the Ontarios Securities Commission and the United States Securities and Exchange Commission.427 Biovail’s founder, Eugene Melnyk, was an Ukrainian immigrant who lives a flashy lifestyle quite reminiscent of Milan Panic. Melnyk owns National Hockey League team the Ottawa Senators and waged a campaign to block Blackberry co-CEO Jim Balsillie’s efforts to obtain his own NHL franchise in Canada.428 In 2007 Melnyk stepped down from leadership of the firm


and reached a settlement with the Ontario Securities Commission. Melnyk later had to pay over a million dollars worth of fines the United States Securities and Exchange Commission and was faced five year bans from senior leadership positions in publicly traded firms by both the Ontario Securities and Exchange Commission and the SEC. Biovail was also targeted by a false information campaign led by Stephen Cohen’s S.A.C. Capital in order to manipulate the stock in favor of the fund’s short positions.

This year once again the firm has taken a new name, Bausch, after one of its most successful American pharma acquisitions. The name Valeant was dropped after scandals over abusive and exploitative price rises. Valeant’s nearly $9 billion dollar highly leveraged deal to take over Bausch and Lomb was fueled by historically low interest rates. Bausch and Lomb is very famous for its leading contact lenses lines, but its acquisitions of advanced medical optics had made it a leader in refractive and cataract surgery. AMO’s acquisition of VISX and Intralase brought the market leaders for excimer and femtosecond lasers into the AMO fold. Bausch had been taken private by Warburg Pinchus in 2007.

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Canada’s largest manufacturer Magna International is also cross listed on both the Toronto Stock Exchange and the New York Stock Exchange. Austrian immigrant Frank Stronach established Multimatic in 1957 as a tool and die company. A contract with General Motors in 1960 gave the firm its start in the auto industry. The United States Canada Auto Pact of 1965 opened up the US Car Industry to Canadian manufacturers and in 1969 the firm merged with publicly traded Magna. In 1981 Magna focuses its operations on car production. Magna is part of an auto manufacturing ecosystem that we find in Ontario as a result of the North American Auto Pact to a far greater extent than the telecommunications hardware center that revolved around Nortel at its height, which will be discussed in the next chapter.

**Oleg Deripaska**

In 2007 the now notorious Russian oligarch Oleg Deripaska took a controlling stake in Magna in a transaction known as Project Pearl. Deripaska was able to gain control using Stronach’s super voting shares. Stronach’s collusion with Deripaska’s ambitious goal of becoming a dominant force in the global auto market was intended to allow the eccentric founder to better monetize his control of the firm. This illustrates the danger with this capital structure popular in Canada. If you don’t want Oleg Deripaska or worse Putin himself taking over your country’s major firms, encouraging good corporate governance practices might be a good idea. That year Magna unsuccessfully launched a bid backed by Toronto based private equity firm Onex Corp.

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and New York Based Blackstone Group to take over Chrysler. Deripaska hoped to use Magna’s technology to create a world class Russian car giant. The financial crisis led to Oleg Deripaska having to surrender his stake in the firm back to founder Stronach. Oleg Deripaska has recently become famous in the United States as convicted felon Paul Manafort’s main financial backer. As Magna rapidly expanded during the past couple decades, the firm’s corporate governance was viewed very unfavorably by investors since Stronach’s special shares retained all control of the firm for him for which he richly exploited. In 2010 it ultimately cost $870 million to buy out Stronach’s controlling stake in Magna.435

**Business Overview**

Today Magna has four divisions: Body Exteriors & Structures, Power & Vision, Seating Systems, and Complete Vehicles. With his purchase of Steyr, Stronach had gone back to his Austrian roots in order to expand into building entire cars.436 Magna often places its car parts plants adjacent to factories where the cars are assembled by Magna customers. Magna’s complete vehicles division will actually produce an entire car in house. Already the Magna Steyr division in Austria is the world’s largest contract auto manufacturer in the world. It continues to produce key models for Mercedes, BMW, and Toyota. With a view to the future Magna has partnered with Beijing Automotive Industry Holding Co to create a new electric car joint venture.437


Another major cross listed Canadian manufacturer is Bombardier. Another of the largest market cap companies in Canada is Bombardier. Bombardier reflects the truly global challenges faced both by Canadian manufacturing and by Canadian equity markets. Historically Bombardier was a snowmobile manufacturer, but its purchase of government owned airplane manufacturer Canadair in 1986 left it also a major player in aerospace. Bombardier was able to transform the Canadian Government’s money losing investment in regional jets into a global leader in the segment. Stiff competition from Brazil’s Embraer has resulted in an effectual duopoly in regional jets. The C Series was the most ambitious project for Bombardier, but it quickly ran into financial trouble. The Canadian Government ended up bailing out the endeavor after a billion dollar investment from Quebec proved inadequate to keep the company afloat. Ultimately it would be Airbus that saved the C Series by funding the plane as a new joint venture with Airbus the majority owner. The marriage between Airbus and Bombardier was cemented by the threat of trade tariffs on the part of the United State. Embraer responded by cementing a new partnership with Boeing. Over the past 20 years Bombardier has also heavily invested in the production of modern trains resulting in the company becoming a major supplier to rapid transit systems around the world. Bombardier’s regional jet segment in particular is a powerful example of how a Canadian Crown corporation can be privatized and become a global leader. The C Series which directly challenged the domination of the jumbo jet category by Boeing and Airbus was a step to far even with bailouts by Quebec and the Canadian Federal Government.

Restaurant Brands is the result of the merger of iconic Canadian donut and coffee chain Tim Hortons with Miami based Burger King. The majority shareholder 3G Capital is the private equity firm that originally purchased Burger King in a LBO transaction. Warren Buffet’s Bershire Hathaway helped finance the merger and also maintains a significant stake in the combined company. Critics described this deal as a tax inversion intended to save paying money owed on capital gains in the United States by fleeing to more favorable tax laws in Canada. The deal bought together an American fast food giant with an iconic Canadian brand. The power of the combination and the tax advantage is reflected by Buffett previously passing up on acquiring Burger King. Canada’s Onex had bought BK’s distribution service division back in 1992. UK Liquor giant Diageo picked up Burger King in 2001. Diageo’s investment went bad resulting in it having to offload BK to a group of private equity groups led by Texas Pacific Group. Once the fast food chain and the markets recovered the buyout group was able to recoup much of their money through a successful IPO in 2006. Burger King

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was picked up by Brazilian American private equity firm 3G Capital, in a deal that became one of the most successful LBO in recent years.\textsuperscript{444}

Recently some Canadian firms have bypassed Canadian exchanges to list only on an American bourse demonstrating that the TMX will have to fight to keep its position in Canadian listings, while at the same time trying to boost international issues as well. One such company women’s yoga apparel chain Lululemon chose to delist. To a large extent Lululemon’s action appeared to be aimed at reducing costs with the firm claiming that the TMX Group offered insufficient liquidity to make its Toronto listing worthwhile, when it was also listed on the Nasdaq.\textsuperscript{445} Lululemon was viewed by many to be outside of the TMX Group’s perceived strengths in banking, mining, and energy. I would actually argue that the TSX Group has a scarcity of financial listings due to the highly concentrated nature of Canadian banking and finance, while the media and telecom sector is a surprisingly large component of the TSX exchange business in terms of market valuation and trading volume. At the same time, the firm also announced that its CEO Christine Day was also leaving, leaving the firm at a time of turmoil that clouds any analysis of its decision to abandon the TSX market or its immediate effects.\textsuperscript{446}


and the requirements and hurdles to obtain a listing on a major America exchange are typically going to be even more stringent than the Toronto Stock Exchange. Many firms are not going to find the additional costs of a domestic listing that burdensome.

**Conclusion**

I have found that in Canada, the public sector overall has played a rather limited role in shaping the larger equity markets. The lack of a national securities regulator combined with a central bank with very little authority beyond managing monetary power results in a very weak state capacity in managing equity markets. The dominant securities regulator is the Ontario Securities Commission, but it functions in the shadow of the US regulator, the Securities and Exchange Commission—the hegemonic regulator for North American and to a lesser extent the entire world.

In the area of venture capital and private equity, the state plays more of a role—largely as an actual investor. Various funds have been created by the Federal Government and provincial governments to sponsor and invest in startups making government a major player in Venture Capital. Canada has failed to become a major center for venture capital like is found in tech hotbeds like California or Israel. The North American Auto Pact has created a major cluster for auto related firms, many of them subsidiaries of American car companies. Similarly at Nortel’s height, there was also a fairly built up ecosystem in telecommunications equipment. Canada’s largest car parts manufacturer is Magna is a major player in the car industry, and has become international in reach through acquisitions.

In the world of private equity, pension funds sponsored by the Federal and the provincial governments are major global players. The largest Canadian player in private
equity is the Canada Pension Plan Investment Board, which is responsible for managing the money for the Canadian Pension Plan. Other major Government sponsored pension funds are Ontario Municipal Employees Retirement System, and the Ontario Teachers' Pension Plan Board. In 2007 the Alberta Legislature created the province’s Alberta Investment Management Corporation to manage Alberta’s sovereign wealth fund. I have also extensively researched the two largest publicly traded players in private equity in Canada: Onex and Brookfield. Their status as public companies gave me ready access to a great deal of information to research.

Historically the two largest stock exchanges in Canada were in Toronto and Montreal. During the Great Depression, the Toronto Exchange began to overtake Montreal for rather incidental reasons. The rise of the secessionist movement in Quebec during the 1970s caused the flight of English speakers to Toronto from Montreal further undermining Montreal’s past function as a financial center. Canada’s finance sector functions as part of the British Commonwealth or the wider Anglosphere putting the French speaking Montreal at a serious disadvantage in the world of finance. The stock market realignment agreement led to the Montreal Exchange transforming into a pure derivatives exchange, and Toronto becoming the only major exchange for senior listings. Out west three feeder exchanges were merged to create one unified venture exchange which the Toronto Stock Exchange purchased shortly afterwards. Both the Toronto Stock Exchange and the Montreal Stock Exchanges demutualized, went public, and then merged during a global movement of exchange consolidation leading to the creation of the TMX Group. The burst of transnational exchange mergers last decade led to a proposed merger between the London Stock Exchange Group and the TMX Group.
While the management of the TMX Group agreed to the deal, Canada’s dominant financial institutions opposed the move by forming the Maple Group to offer a rival hostile bid. The merger with the LSEG was abandoned after the agreement failed to get sufficient shareholder support leading the TMX Group to accept the Maple’s Group terms. The deal was effectively structured as a leveraged recapitalization in the sense that it took on debt to reduce outstanding shares. The Maple Group also acquired the rival newly created Alpha Exchange as well as the Canadian Depository for Securities, the central counterparty for equity trading in Canada—creating an integrated trading marketplace. The transaction was completed in two states, since the Maple Group was too new to issue its own stock that could be registered with the United States Securities and Exchange Commission under MJDS.

Today the TMX Group is challenged by two smaller rival exchanges: the Canadian Securities Exchange and the Aequitas NEO Exchange. The Neo Exchange, while small, is backed by some major financial institutions. A very high concentration of listings for the CSE are cannabis related. A greater source of competition for the TMX Group are new alternative trading systems often backed by major American and European firms. While in the United States the US Congress and the Securities and Exchange Commission played a major role in creating and promoting the Nasdaq as a rival exchange to the previously dominant New York Stock Exchange, the role of regulators in Canada was extremely limited in the evolution of the exchanges. The result in Canada was the creation of one large dominant exchange. Since the Nineteenth Century Canadian bank charters were always central resulting in Canada always having very few large commercial banks. The Little Bang deregulation led by Ontario with the
support of the Federal Government allowed for these banking giants to create a really
dominant role in the securities and investment marketplace. The name Maple Group
implies the motivation for defeating the merger with the London Stock Exchange may
have been patriotic, but it also served to protect the interests of Canadian banks and other
major domestic financial institutions. The competition offered by alternative trading
systems appeared to have emerged from market trends emanating from the United States.
The vision of the US Congress and Securities and Exchange Commission beginning in
the 1960s in promoting a high tech competitive and efficient national market system had
a direct impact on the nature of the securities markets in Canada. One of the main
challenges for Canadian financial markets is not to lose stock listings or order flow to
American exchanges or American alternative trading systems. The decision by Imax and
Luluemon to delist from the Toronto Stock Exchange highlight this competitive threat.

Crown corporations have played a very large role in the Canadian economy.
Cameco, the world’s largest uranium mining firm was formed by a merger of two
Canadian crown corporations. Canadian National Railroad and Air Canada are two of
Canada’s largest transportation companies which were both crown corporations that were
privatized and subsequently went public. Bombardier built its world leading regional jet
division with the purchase of state owned Canadair. For the past couple decades the
global regional jet market has been a duopoly shared by Bombardier and Brazil’s
Embraer. The creation of Bombardier’s C Series directly challenged Boeing and
Airbus’s dominance in jumbo jets for the critical narrow body medium range jetliner
market. Between market miscalculations and protectionist opposition from the United
States, bailouts by the Canadian and Quebec governments could not save the project, and the C Series had to be sold to Airbus.

Many of Canada’s publicly traded companies have taken on a very North American character. While Canadian National Railroad was long a crown corporation, CN like Canadian Pacific today are largely undistinguishable from their American cousins. Notably Canadian National and Canadian Pacific jointly created one of Canada’s largest telecommunications companies. Both Canadian National and Canadian Pacific are jointly listed on the Toronto Stock Exchange and the New York Stock Exchange. Quebec based Alimentation Couche-Tard Inc. is one of the world’s largest owners of convenience store. Couche-Tarde is the second largest player in the American market behind 7-Eleven, with its stores primarily branded Circle K. Circle K was an American chain Couche-Tarde purchased that had originated from El Paso, Texas. The merger of Burger King and Tim Hortons combined two iconic brands from Canada and the United States while exploiting Canada’s favorable tax environment by way of a tax inversion. Today Bausch is the largest pharmaceutical company in Canada’s large cap S&P TXS 60 index. It was formed over decades from numerous Canadian and American firms, many of which had quite colorful histories. The publicly traded companies I have discussed in this chapter reflect the nature of the publicly traded firms listed on the Toronto Stock Exchange. In chapter 5, I will discuss the really colorful telecommunications and media sector, which represents a sizable part of the Toronto Stock Exchange. This sector was heavily shaped by the Canadian Federal Government, but also driven by Canada’s immense size, its proximity to the United States, and the rapid advances in technology over the past century.
CHAPTER FOUR: 
THE CANADIAN COMMUNICATIONS SECTOR

In this chapter I will analyze Canada’s telecommunications and media sector. To do this I will focus on six publicly traded firms: Telus, BCE, Rogers Communications, Shaw Communications, Blackberry and Thompson Reuters. Being public means that their government mandated securities filings on Canada’s SEDAR and the United States EDGAR systems give me a wealth of primary sources to study. All five of them are components of the S&P TSX 60 Index and are dual listed on both the Toronto Stock Exchange and the New York Stock Exchange. Rogers, BCE, and Telus are also known as the “Big Three” in the cellular segment in Canada. In this chapter I will also include a discussion of the scandal plagued Hollinger International and the now defunct Nortel Networks. Unfortunately, Canada has never been short of her scandals or frauds. Most of these companies illustrate Canada’s ties to the US, Australia, and the UK which supports my contention that the Anglosphere represents a major theme in the Canadian securities markets. Further, both BCE and Rogers Communications were founded by the families of individuals who were key early innovators in the closely connected areas of telegraphs, radios, and telephones. While the Anglosphere overall remains vital in high technology, one may wonder if the cocooning of technology in areas like Boston and Silicon Valley may have very adverse future consequences for the Toronto Stock Exchange and the wider Canadian economy. On the other hand, what makes Canadian Telecom and Media Sectors unique in the Canadian Economy are that they are highly protected from foreign competition. Two other other defining features are Canada’s
immense size and its proximity to the United States. Linking Canada’s cities for telephone, radio, and television required building a microwave relay system that was rivaled only by the United States and being an absolute leading in building a fleet of commercial communications satellites in the 1970s. Most Canadians were also within range of American television stations or at least close to it. Thus while Canadian regulations helped maintain a very independent local media from film to TV to news, it was never isolated from the larger American media. This independent Canadian media is under greater challenge than ever before from online streaming services like Netflix and YouTube as well as social networking sites like Facebook and Instagram.

Canada’s telecom sector is entirely dominated by four giants that I cover in this chapter: BCE (Bell Canada), Telus, Rogers Communications, and Shaw Communications. Currently Canada’s media world is also heavily concentrated among three leaders: Bell Media, Rogers Media, and Corus Entertainment (spun off from Shaw Communications but still controlled by Shaw family). I also spend some time discussing key firms that helped shape these media giants. The bulk of the stations and programming for today’s Corus Entertainment comes from media assets built up by Israel Asper’s Canfield. I trace the roots of the three major private broadcast networks in Canada: CTV (Bell Media), CityTV (Rogers Media), and GlobalTV (Rogers). I also discuss the history of Chum Limited due to its role in the launch of the CityTV Network and most of Bell Media’s cable specialty channels. Chum Limited is also significant in launching the careers of many of the key figures in Canada’s telecom and media world like Moses Znaimer. I discuss Cantel, Canada’s first cellphone carrier, whose founder
went on to create Sirius Satellite radio in the United States after selling to Rogers. I also segue into how America’s satellite radio wars last decade played out in Canada.

Canada’s telecommunication infrastructure has always been world leading and pioneering. The inventor of the telephone Alexander Graham himself lived most of his life in Canada. As one of the largest countries in the world, but also sparsely populated, Canada was one of the big adopters of Microwave towers to link the nation’s telephone, radio, and television networks together.\textsuperscript{453} This revolutionary technology transmitted audio, video, and data nearly instantaneously.\textsuperscript{454} Canada’s microwave links were the longest ever created due to Canada’s immense size and the vast distances separating her Pacific cities from her Eastern and Central cities. These 1950s highways of data and information were every bit as critical to the unity of the Canadian nation state as the buildup of nineteenth century railroads.\textsuperscript{455} The greatest innovation in telephony in Canada since was the development of the Cellular networks, largely built over the 1990s and 2000s. These networks were fully built up by three very large and wealthy telecom giants: BCE(Bell Canada), Telus, and Rogers Communications. Telesat Canada was chartered as a crown corporation by the Canadian parliament in 1969 creating one of the world’s largest fleets of communications satellites.


\textsuperscript{454} Bonneville, S. (1957). The Trans-Canadian Microwave System. \textit{Electrical Engineering}, 76(11), 967.

Canada’s media and telecommunications landscape is very much the product of historical circumstances and very powerful personalities. A lot of it probably would seem incomprehensible from an American standpoint without historical context. Its rich history and strongly expressed path dependence almost demands to be told in any discussion or analysis of these sectors. My goal here is to be able to discover and explain the historical forces that shaped today’s Canadian telecom/media giants that clearly flourished in large part due to very strong governmental protectionism. Canadian mergers and corporate restructurings can be extraordinarily convoluted. I hope to include enough of the key events (critical junctures) and players to capture most of the dynamics and the essence of the media marketplace without being unnecessarily confusing or excessively detailed. This balancing effort is what has motivated my selection of developments which admittedly is certain to have been imperfect. Throughout the entire world we are living in a time of great change in telecommunications that Canada is not immune from. Nonetheless, I have no doubt that Canada’s media marketplace as it is today is worth studying. We can never escape path dependence. For example, in the United States, despite the power of social networking, CNN, Fox News, and MSNBC—which is built upon the news division of one of the original big 3 American TV networks—continue to serve as a powerful force in American society. Even if Canadian media is ultimately eclipsed by their neighbors to the South, we can learn a great deal from this historical example that will help shed light on future media developments in the internet age. This dissertation reflects my determination to investigate how publicly traded Canadian corporations shaped various significant industries within the confines of Canadian law and regulation. Political scientists and political economists have heavily
studied parliaments as well as policies and regulations including tariffs, taxes, and exchange rates. Too rarely have they studied the stock markets which themselves are key decision-making institutions in their own rights on par with historic parliaments and assemblies. Stock exchanges have come a long way since the private clubs studied by Max Weber. I also included in this chapter a discussion of Nortel Networks and Blackberry, which for a while were high flying tech stars, but whose success was unfortunately quite short lived.

**BCE**

Bell Canada had almost effectively become Canada’s only telephone company. While Alexander Bell, the primary inventor of the telephone, had been born in Scotland, he largely lived in Canada. Consequently, it should be no surprise that Bell Canada was one of the original members of the Bell Network led by AT&T. Despite its early lead, Bell Canada’s dominance in the Canadian telephone market was solidified by the pure ruthlessness of its president Charles Fleetford Sise. Due to import restrictions, Northern Electronic was founded to make the equipment for Bell Canada. Anti-trust cases in the United States would ultimately force AT&T to divest from Bell Canada and Northern Electric. However, at the turn of the Twentieth Century it was actually local Canadian municipalities who led the fight against Bell Canada and the overall North American Bell system.¹⁴⁶

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The BCE holding company was created by Bell Canada in 1983 in order to allow for its diversification strategy. As a telephone company Bell faced substantial regulation; having a holding company would allow unrelated divisions not be effected by these restrictions. At the time of the restructuring Bell still owned a majority stake in Northern Telecom, which was the second largest telephone equipment manufacturer in North America.\(^{457}\) The mid 1980s were a time of many very aggressive acquisitions by BCE as well as some dramatic bidding wars with the Reichmans. Bell Canada took a major stake in natural gas company Transcanada as well as taking over Canada’s largest real estate firm, Daon Development. Daon Development was renamed BCE Development Corp and was effectively transformed into a subsidiary of BCE.\(^{458}\) Subsequently BCE Development purchased the substantial American real estate holdings of Canadian firm Oxford Development Group.\(^{459}\) The assets purchased from Oxford included office and real estate properties in Minneapolis, Chicago, Denver, St. Paul and Phoenix doubling the size of BCE Development Corp.\(^{460}\)

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By 1990 BCE had stepped away from its moves toward becoming a large conglomerate leading to sales of big stakes in Transcanada and Encor.\textsuperscript{461} By the beginning of 1990 BCE’s real estate endeavor had turned bad. Peter and Edward Bronfman’s Carena Development Corp assumed control over the portfolio.\textsuperscript{462} This was the foundation of today’s Brookfield Properties, one of the largest real estate firms in North America. As previously discussed Carena was part of the Bronfmans’ intricate web of interlocking corporations that one point controlled a huge part of the Canadian Economy. Brookfield Properties’s parent firm, Brookfield Asset Management is the direct successor to the old Bronfman Private Equity Empire. The current structure and business model of BCE basically took form since the late 1990s. The CEO of BCE in 1998 Jean Monty understood the potential synergies of content and delivery. However, his acquisition of Teleglobe proved problematic and BCE was forced to spin it off a couple years later.

Michael Sabia took over BCE in 2002 with the mission of consolidating and refocusing BCE’s core telecommunications assets. Under Sabia’s leadership he repurchased Ameritech’s share of Bell Canada.\textsuperscript{463} One of his first divestitures of non core assets was the sale of the directory business to Kohlberg Kravis Roberts & Co. and


\textsuperscript{462} Goad, G. P. (1990, Jan 26). BCE Posts Loss of $77.5 Million for 4th Quarter. \textit{Wall Street Journal}.

the Ontario Teachers' Pension Plan. In 2006, BCE completed last decade’s round of divestitures of stakes in Bell Globemedia including the CTV network it acquired in 2000 to The Woodbridge Company Limited, Ontario Teachers' Pension Plan and Torstar Corporation. Woodbridge is the holding firm of the Thomson family and Torstar is the publisher of the Toronto Star. Torstar gained a stake in its rival newspaper, the Globe and the Mail, as well as a position in television broadcasting. This sale also resulted in Woodbridge raising its stake in Bell Globemedia to 40%. The Thomson Family had maintained a smaller stake when they had sold the Globe and the Mail to Bell in 2000. Sabia also moved to transform Bell Canada into an income trust, but changes to the Canadian tax code ended the favorable status of income trusts.

In 2008 a buyout group led by the Ontario Teachers' Pension Plan reached a deal with the BCE management to take BCE private for $35 Billion in what would have been the largest private equity transaction in history. Teachers had won an aggressive bidding war for Bell Canada fought against a group consisting of Canada Pension Plan Investment Board, Caisse de dépôt et placement du Québec, and Kohlberg Kravis Roberts & Co. In addition to Teachers equity financing was also provided by


467 Stewart, Sinclair And Jacquie Mcnish. (April 18, 2007 Wednesday). How Teachers raised the stakes for BCE. The Globe and Mail (Canada).
Providence Equity Partners, Madison Dearborn Partners and Merrill Lynch Global Private Equity.\textsuperscript{468} In many ways the deal was really the brain child of Providence Equity Partners founder Jonathan Nelson, but of course Canadian law required the majority stake to be held by Canadian owners necessitating his partnership with Teachers.\textsuperscript{469} The financing was provided by Citigroup Inc., Deutsche Bank, Royal Bank of Scotland and Toronto-Dominion Bank.\textsuperscript{470} Once a deal had been achieved, members of the winning syndicate boasted of the relatively small portion of the deal financed by debt. US buyout firm Kohlberg Kravis Roberts & Co and Texas Pacific Group had just completely a significantly more leveraged takeover of TXU Corp. Due to the fact that Teachers’ takeover of BCE ultimately failed the TXU buyout remains the largest in history. Despite the lower level of leverage, Fitch responded to the deal’s announcement by downgrading BCE’s debt based on concerns about the adequacy of the firm’s cash flow to support the debt.\textsuperscript{471} What ultimately killed what almost turned out to be the largest private equity deal in history was the condition placed into the agreement that the accounting firm KPMG would have to grant the deal a positive solvency report. Bell Canada hired Price Waterhouse Coopers to issue its own solvency report in a last ditch

\textsuperscript{468} Investor Group Led By Teachers' Private Capital and Providence Equity Partners Enter into Final Agreement with BCE. (2008, Jul 04). PR Newswire.


effort to save the deal.\textsuperscript{472} Ironically solvency tests are rarely required for leveraged buyouts, but in this case it was an effort by BCE to immunize itself from lawsuits from bondholders.\textsuperscript{473} Usually it would be the buyers who seek such an opinion. Central to the collapse of the deal was the escalating global financial meltdown. Bell Canada hoped to use the rival PWC opinion to persuade KPMG to change its ruling. Of course, the acquiring consortium that had agreed to acquire BCE could have certainly accepted a change in terms and accepted the PWC opinion over the KPMG ruling, but the growing financial crisis had given the buyers cold feet as well. At this point it was difficult to look past concerns about BCE’s pension gap. Teachers had achieved a number of objectives as an existing major shareholder in BCE including successfully changed the company management without the deal’s completion.\textsuperscript{474} A lawsuit filed by the bondholders was heard by the Canadian Supreme Court attempting to kill the deal. While the deal fell apart anyway, the unanimous decision of the court rejecting the right of bondholders to unilaterally torpedo takeovers set a vital precedent for Canadian Corporate Law.\textsuperscript{475} The excellent financial track record of BCE profits and positive BCE

\textsuperscript{472} Bell Canada Makes Effort To Save Buyout; The telecom hires PricewaterhouseCoopers to review its financials, to avoid an estimated $50 billion deal from falling through. (2008). \textit{InformationWeek}, Dec 9, 2008.


\textsuperscript{475} Beltrame, J. (2008, Jun 21). BCE Clears Supreme Court Hurdle; Justices Unblock $52B Deal by Unanimously Overturning Quebec Court Of Appeal Decision. \textit{Waterloo Region Record}.
stock appreciation strongly suggest this would have ended up by far the most lucrative LBO deal in history.

**Nortel Networks**

Northern Electric was originally founded to work around Canadian patent laws and import restrictions. It became Bell Canada’s equivalent to AT&T’s Western Electric. Northern Electric’s products also included televisions, but by the early 1970s began to focus on telephone infrastructure. In 1971 Northern Electric and Bell Canada merged their research labs to create Bell-Northern Research as a local version of Bell Laboratories in the United States. In 1976 the firm changed its name to Northern Telecom. Fortunately, AT&T continued to promote Northern Telecom’s equipment to affiliated Bell operating companies. To understand how devastating Northern Telecom’s ultimate collapse and failure would be to Canada’s high tech scene one would only need to read the lead sentence in a 1985 article in the Globe and the Mail about the firm’s tripartite corporate structure and future competition with AT&T and other firms: “the big question about Canada's only world-class technology company has been whether it had the marketing savvy to match its technical prowess.”

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479 Lawrence Surtees; GAM. (November 29, 1985 Friday). Northern Telecom Goes South ...and East and West. *The Globe and Mail* (Canada).
ever become a major technology giant in high tech was Blackberry. Northern Telecom’s
cousin in the United States, Western Electric, faced its own challenges as the US courts
broke up the North American Bell System Colossus ruled by AT&T. Northern Telecom
would aggressively market its digital and cellular telecommunications infrastructure
equipment to American companies in the 1980s including making key inroads into
Southern Florida. Washington Post’s Florida Cellular Telephone Co. became one of the
first firms to use technology from Northern Telecom in Florida back in 1985. Cellular
One’s early network of microwave towers connected to Bell South’s network through a
Northern Telecom digital switch in Fort Lauderdale.480

It would be no exaggeration to say that the Bell System monopoly vaguely
resembled a Communist country’s corporate structures given its heavily centrally planned
nature.481 Yet, Bell Laboratories in the United States and the entire Bell System
including Bell Canada was continuously the source of a great deal of innovation and
advancement. As previously mentioned Bell Canada took part in the building of the
microwave towers that linked Canada’s telephone, radio, and television networks
nationwide. In the United States Bell Laboratories developed the transistor to replace the
vacuum tubes in telephone switching equipment. Today the transistor is the building
block of all modern electronics. Canada was a major source of innovation also because
of its huge size and difficult geography. While microwaves were used to link Canadian
Broadcasting Corporation stations in the 1930s, the first microwave relay for telephones

480 McNair, J. (1987, March 30). Cellular Phone Company Talks Up Competition rates
Compared light Users heavy Users. Sun-Sentinel, p. 10

in the world was used to link Prince Edward Island with Nova Scotia in 1948. The microwave radio network created by the Trans-Canada Telephone System in 1958 was the longest in the world. By the early 1980s Northern Telecom was one of the leaders in regards to fiber optics and digital switching equipment. The result was Ottawa briefly became a mini silicon valley spawning many smaller high tech companies like Mitel which had its IPO on the New York Stock Exchange in 1981. All of these smaller tech firms fed off the tech ecosystem fed by Bell Northern Research. Mitel's ultimate decline came from its inability to develop products as lucrative as its old PBX which was based on increasingly obsolete technologies in our digital world. Mitel has taken on a lot of different forms and incarnations since its heydays in the mid 1980s including a disastrous IPO on the NASDAQ in 2010. Nortel beating out AT&T for a joint venture in China for telecom equipment in 1995 helped establish Nortel as an international player. Still Nortel ended the 1980s well behind the recently privatized former French state owned firm Alcatel and former corporate aunt AT&T. In the formerly incestuous


relationships of the old North American Bell System, it’s hard to know whether aunt, grandmother, or mother is the best analogy for the past AT&T relationship to Nortel (formerly Northern Electric and Northern-Bell Labs).

Corning and Siemens purchased some of Northern Telecom’s optical network manufacturing assets in 1994. This deal allowed Corning to capture the Canadian market for fiber optics while at the same bolstering its production capacity worldwide. But Northern Electric was far from done as a major networking infrastructure firm. In 1998 in an all stock deal of nearly $18 Billion Northern Electric bought Bay Networks, a major silicon valley area rival to networking giant Cisco. This came at a time of a number of similar mergers worldwide and reflected an understanding of the growing convergence of telephony and internet technologies. The Northern Telecom merger with Bay Networks represented a major turning point for telephone infrastructure firms that still shapes our world today. Following this blockbuster tech merger, the firm assumed the new name Nortel to convey its broadened focus in networking. A couple years later Nortel picke up Internet hardware firm Alteon in another all stock deal almost as

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Nortel CEO John Roth saw the key to Nortel’s future as significant acquisitions similar to those that helped grow rival Cisco. In doing so he had launched a take no prisoner war with Cisco and Lucent (formerly Bell Laboratories and Western Electric).

In many ways the dot com bubble mirrored the subprime housing bubble of the next decade. Increasingly speculative deals were being made with accelerating zeal based on little more than faith that the good times were never going to end. It brings to mind that Kansas Blue Sky law that inspired all of the securities acts in Canada and the United States was based on the fear that some scams were built on nothing but thin air. Nortel aggressively marketed its stocks to vulnerable employees as well as the public, even as it entered into highly dilutive deals buying firms of questionable long term value. Nortel extended vendor financing to many shaky bets exposing itself to substantial credit risk once the tech bubble burst. One of the mistakes made by Nortel were aggressive acquisitions sacrificing the great potential of cheaper organic growth from what had already been one of North America’s most innovative firms.

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Amazingly the management had effectively dismantled Bell-Northern Research. The possibly more fateful mistake was to hire investigators from American law firm WilmerHale in 2004, who quickly accused Nortel of accounting fraud. Rather than exposing malfeasance on the part of Nortel executives, many see WilmerHale as effectively killing the storied firm with false accusations. To this day they have not been able to back up allegations leveled at the firm at a critical point. In the midst of the Great Recession Nortel declared bankruptcy and had its assets liquidated. Nortel’s upstart American rival Ciena won the auction for its core unit. Buying Nortel contributed no small measure to Ciena’s stellar performance last year.

At its heyday Nortel led the world in the vital fiber optic networking market that links today’s world. The dot com boom lifted Nortel shares to such a lofty level, at its height Nortel shares represented a full third of the value of the Toronto Stock Exchange. The dot com bust left Nortel as the largest bankruptcy in Canadian history. Efforts to restructure and revive Nortel as an ongoing concern failed, leaving this storied Canadian tech giant the ignominious fate of being liquidated at rock bottom prices. The drastic


decline of Blackberry, another Canadian dot com high flier, has left the Canadian high tech landscape rather barren.

**Telus**

Alberta Government Telephones (AGT) was the incumbent telephone company and owned by the province. AGT was headquartered in the building now named ATB Place, long Alberta’s tallest building. AGT had been transformed from part of the provincial department of public works into a crown corporation in 1958 allowing it to raise its own money through financial markets. In 1990 the province chose to privatize by means of what became the largest IPO in Canadian history underwritten by a group led by Royal Bank of Canada. Residents of Alberta had the first opportunity to buy the newly issued shares and could obtain them at subsidized prices. Alberta had prepared for the privatization by creating a new holding company named Telus to own the phone assets. Telus was already Canada’s third largest telecommunications firm. By 1992 Telus had North America’s first completely digital phone network.

EdTel was the incumbent telecommunications provider in the city of Edmonton and was owned by the municipality. It was founded in 1904 after the city had purchased the privately held Edmonton and District and Telephone Company from Alex Taylor. The city of Edmonton long refused to merge their phone service with the one provided by the provincial government. By 1916 the city government of Edmonton was fighting with the province of Alberta over phone toll sharing. By the early 1970s the province-local

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dispute escalated into outright war. The city set about to purchase its own long distance equipment and attempted to join the Trans-Canada Telephone System but was effectively blocked by Albert Government Telephones. 1984 was the year the conflict reached a crescendo beginning with a city media campaign attacking the provincial utility company. The city was ready to finally buy equipment to launch their rival long distance equipment, but the province reacted with threats of lawsuits. At 12:07 AM on Valentine’s Day in 1984 city employees reprogrammed their computers to block the province’s long distance billing and set up their own billing. Three days later the provincial government shut down direct dial service in Edmonton. In the end Edmonton prevailed with a favorable settlement. According to the Canadian political scientist James Lightbody this was an extraordinary local grassroots campaign victory over the “constitutional omni-competence of provincial power.”503

Edtel was an early adopter of fiber optics.504 On the other hand, Edtel was criticized by Shaw Cable in its early days for restricting access to the telephone poles and underground ducts for the cable firm.505 By Spring of 1994 the city had hired Nesbitt Thomson Inc. and Goldman, Sachs & Co as advisors on possibly selling the phone company by means of an IPO. By summer Telus had begun efforts to acquire the


municipal phone company despite initially being rebuffed.506 On November 22, 1994 the City of Edmonton authorized the sale of Edmonton Telephone Corp. to Telus.507

Telus subsequently merged with BCTel, the dominant carrier in British Columbia in 1999. While also a regional monopoly, BCTel was always private with American telecom GTE as its largest shareholder since one of GTE’s American precursors had funded BCTel’s telephone network back in 1927. GTE’s ownership stakes in Canadian telecomm were unique, due to its ownership positions preexisting later Canadian restrictions on foreign holdings in domestic telecomm companies. This grandfather clause did not extend to cable television however to the delight of rival Rogers Communications.508 BC Telecom developed leverage by agreeing to take part in the Federal Beacon Project to create a national fiber optic network to power a Canadian Information Highway.509 The Canadian Federal Cabinet carved out a new exemption for BC Telecom to allow them to create a cable service, despite GTE’s foreign controlling


508 Robert Williamson. (June 24, 1995 Saturday). BC Tel Fights Foreign Ownership Move Control by U.S. Parent Could Block Phone Company's Cable-TV Play under Rules Being Considered by Ottawa. The Globe and Mail (Canada).

stake. Federal judge Marc Nadon ultimately ruled that the Broadcasting Act allowed the cabinet discretion to grant BC Telecom the right to start a new cable service.

Merger talks between BCTel and Telus accelerated in October of 1998 at about the same time BCTel parent firm was engaged with merger talks of its own with Bell South. The back story to this merger was a much larger fight between BCTel and Bell Canada. BCTel had rebelled against Stentor, the Bell Canada led national long distance association. Telus had unsuccessfully tried to merge with AT&T Canada Long Distance Services Co prompting Bell Canada to respond by starting its own national network which could potentially entice customers out west as well. The merger between BCTel and Telus reduced GTE’s stake in the firm to 26.7%, but it also solidified Telus as one of Canada’s major telecom firms. Bell Atlantic’s acquisition of GTE meant that Telus’s American partner had become a much larger giant in the United States, Verizon. Bell South and GTE had picked the name Verizon by combining the latin word for truth, veritas, with horizon. Verizon kept its stake in Telus until 2004 helping cement a very


513 Surtees, Lawrence. (October 21, 1998 Wednesday). BC Telecom-Telus deal 'a big game of leapfrog' TELEPHONE TAG When Bell Canada tried to move in on George Petty's Alberta turf, he trumped the eastern giant by forging a merger with his corporate neighbour in B.C. The Globe and Mail (Canada).

powerful business relationship between Telus and Verizon. Their partnership led to shared technology and cooperation on service, but did not stop Telus from later joining BCE to vehemently fight prospects of a separate Verizon cellphone service in Canada in 2013. By 1999 Telus was challenging BCE by building out a nationwide fiber optic network.

Telus has spent over a billion dollars just to wire Edmonton with new high speed fiberoptics in hopes of transforming it into the “first, significant urban gigabit society in Canada.” A great deal of the capital expenditure undertaken by Telus is dedicated to building out its own fiber optic network to support its backhaul for a small cell structure. While offering immediate enhancements to performance today, the small cell structure is going to be critical in implementing a rapid transformation to 5G. Much of the Telus infrastructure for 5G is being built out by China based Huawei. This is going to likely raise increasing security concerns as Western national security experts grow concerned that Huawei could provide a conduit for Chinese Intelligence or even military operations. Russia’s attacks on the 2016 American elections make these concerns ever more real to politicians and even corporate leaders throughout the West. The 5G cellular technology with its ultra fast speeds and virtually non existent latency promises to offer the world

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515 Simon Avery and Andrew Willis. (December 1, 2004 Wednesday). Verizon reveals plan to sell $2.3-billion Telus stake in offering; Stock issue is expected by end of week. The Globe and Mail (Canada).


517 (June 19, 2015 Friday). $1 billion fibre optic investment will make Edmonton Canada's 'first gigabit society,' Telus Corp says. Postmedia Breaking News.
virtual and augmented reality applications, remote medical surgery and self driving vehicles.

Telus Health is the division largely responsible for providing healthcare providers and first responders access to digital records and access to advanced communications facilities. Telus Healthcare has formed a partnership with British startup Babylon Health to offer patients the virtual care of physicians over very large distances. The huge size of Canada provides a unique arena to really exploit Babylon’s potential. Babylon combines creating virtual patient visits with physicians with state of the art artificial intelligence to help facilitate developing diagnoses and treatment plans.

The main aspiration of Telus Health is to utilize connectivity to transform healthcare. Home Health monitoring allows physicians to remotely monitor their patients every day, when the patients are home. On the flip side Telus also provides patients a personal health record, allowing the patient the ability to follow and take charge of their own health care. The online record tool and a healthcare professional portal for the physician is built on software developed and provided by Get Real Health. Built upon this is the Telus Health Space which allows hospitals and clinics to seamlessly share and access patient records. Health Space utilizes Microsoft HealthVault software which was originally launched in the United States and United Kingdom. Other Telus Health products completely digitalizes every other part of the healthcare administration virtually eliminating paper. Telus healthcare is partly built upon its purchase of Emergis.

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Rogers Communications

Rogers Communications was a cutting edge firm from the beginning. Founded by Ted Rogers, its roots begin with Toronto’s first private television station. Rogers’s father had been an early North American pioneer in radio technology who had invented the first radio that could operate with the alternating current that homes are wired with. Rogers shifted into the nascent cable industry in 1967. By 1970 Wall Street and Bay Street started to recognize the huge potential of the Cable industry, then often referred to as community antennae (CATV). The industry was created a bit on the backs of the phone companies. While it sought to bypass or compliment the lines built of microwave relays and intercity coaxial cables, cable firms would require leasing access to telephone poles. The lawsuit between Rogers and Bell Aliant in 2006 proves the telephone pole battles are not yet over. He followed his 1979 acquisition of Canadian Cablesystems with an IPO on the Toronto Stock Exchange. In the mid 1990s Rogers launched the first cable modem service in North America. Rogers entered into the cellular business by acquiring Cantel in 1986. A partnership with AT&T gave Rogers Wireless access to critical cellular technology in the 1990s. Rogers also led North America in the introduction of Blackberry, a portable device created by Canadian tech star Research in Motion.

Cantel was founded by David Margolese who would later go on to found Sirius satellite radio in the United States after a failed attempt at starting a new Israeli cellular

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provider. David Margolese founded Canadian Telecom in 1978 at the age of 20. Canadian Telecom was originally a very successful paging firm, but Margolese realized the potential future for cellphones. He persuaded Ted Rogers to help found and finance Cantel, Canada’s first cellphone service, with him. Ultimately, Margolese sold his stake to Rogers and Cantel became Rogers Mobility. Margolese moved to Israel and attempted to create Teletec, a much needed new competitor in Israel’s heavily used cellphone networks. Even after enlisting both AT&T and Sprint for his project, Margolese still couldn’t get a license in Israel to get his project off the ground.

**Sirius XM Canada**

After failing at launching an Israeli carrier, Margolese went on to create Sirius Satellite Radio in the United States. His objective was to beam pay radio programming to the customers on the ground primarily in cars. In order to cover the United States, Sirius chose to create a constellation of satellites with one always directly above the United States. In order to accomplish this, Sirius adopted the highly elliptical Molniya orbits first utilized for Soviet spy satellites. The unusual orbit led to an unusual problem. Their high velocity led to their signals having a Doppler effect that put an additional challenge for the chips created to process the signal. The result was that the only other firm in the US licensed to broadcast satellite radio, XM Radio, constantly ran

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ahead in receiver technology even after having a later start. XM Satellite Radio had chosen to simply park its satellites in a geostationary orbit at the equator, meaning relative to our planet the satellites don’t move, which eliminates any potential for a Doppler effect. The challenge was their position far south of any of XM’s territory meant that many obstacles from buildings to mountains would easily block the signal even though these were the most powerful commercial communication satellites ever launched. XM’s solution was to simply install 1000 repeaters throughout the United States. What began as a disadvantage actually was in some ways a plus because it even allowed for substituting in local program, a feature always opposed by local radio terrestrial radio stations.

Like with all media and telecom firms, Sirius and XM had to sponsor local affiliates, both of which ultimately got listed on the Toronto Stock Exchange. Sirius Canada was a partnership of Sirius, the Canadian Broadcast Corporation, and Slaight Communications. The launch of Sirius Canada initially without the most notorious personality of the American service, Howard Stern, triggered a major backlash for fans. The problem was that Howard Stern had already been banned by the Canadian Broadcast Standards Council for offensive comments made previously. The uproar against Howard Stern’s controversial remarks was greatly aggravated by several attacks against French. Unlike in the United States, the Canadian Radio-television and Telecommunications Commission (CRTC) felt satellite radio was largely bound by the

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same standards and regulations as regular radio. Ultimately, Sirius and the CRTC relented, and Howard Stern was made available to Canadian subscribers. Howard Stern has once again found himself a regular news item in North America, this time, for a former regular on his Sirius Radio show, Donald J. Trump.

XM Radio Canada was founded by John Bitove Jr. as Canadian Satellite Radio Holdings Inc. (CSR Holdings). A $11 million dollar investment by Bitove had grown into a half a billion dollar company by the time of CSR’s IPO. John Bitove was a big figure in Canadian business having started the Toronto Raptors, Canada’s first and only NBA basketball franchise. His father was a major operator of restaurants in Canada as well as a major advocate for Macedonian issues having formed the first World Macedonian Congress. The launch of XM Canada brought Navtraffic to Canada utilizing the XM signal to provide vehicle in dashboard systems the ability to display local weather and traffic data. The service was originally a joint venture of XM and Navteq, a Chicago based digital mapping service. Despite all of Howard Stern hype for Sirius, in the United States XM Satellite radio seemed to have all the advantages. Sirius receivers were costlier requiring more expensive subsidies increasing the firm’s cash burn. XM had stronger relationships with General Motors and Honda than the relationships that Sirius had with Ford and other car firms. XM successfully brought to market fully portable satellite radios, a feat Sirius could not match. Yet the selection of celebrity CEO Mel Karmazin as CEO of Sirius seemed to turn everything around for Sirius. Karmazin successfully engineered a merger of equals between Sirius and XM.

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The merger of the two American satellite radio giants left their Canadian affiliates in a quandary. This situation created all kinds of conflicts and challenges for two rival Canadian firms required to heavily coordinate with one firm for all programming and for the most part the entire infrastructure. As a result, in 2011, after gaining the key Canadian regulatory approvals XM Canada and Sirius Canada merged into one satellite firm. Coordination between Sirius Canada and Sirius XM in the United States began to fray even after the Canadian firms completed their merger. Naturally Sirius XM sought to just absorb it, but Canadian law prevents foreigners from taking a controlling stake in telecom and media firms. Sirius XM partnered with Slaight Communications and private equity firm Obelysk Media to take Sirius Canada private. While Sirius XM gained a 70% stake in the firm, many of the shares it received came without voting power allowing Sirius Canada to remain under the control of Canadians as required by law.\footnote{Janjua, U. (2017). Sirius XM canada completes 'recapitalization go-private transaction'. SNL Kagan Media & Communications Report.}

**Rogers Media**

Rogers Media represents one of Canada’s largest media companies. Its flagship magazine is Maclean’s, but it includes 7 other magazines as well. Ted Rogers 1994 purchase of the parent company of Maclean’s in 1994 was his attempt at creating a Canadian equivalent of Time Warner or Murdoch Corp.\footnote{Konrad Yakabuski, T. S. (1994, Mar 09). With The Purchase Of Maclean Hunter Ltd., Ted Rogers Becomes. Toronto Star.} Rogers owns CityTV, one of Canada’s main television networks. The anchor station of CityTV is City-DT in Toronto. CityTV only really formed into a national network at the end of last decade. Before the network was formed City-DT was one of the leading producers of local programming in ...
North America. Also famous for the airing of soft core, it helped inspire the cult classic horror sci fi Canadian film Videodrome. In 2011 Rogers also launched CityNews Channel which offers 24 hour coverage of Toronto news which combines the news resources of CityTV’s newsroom with Macleans. One of Rogers’ major Canadian Cable networks is FX, an affiliate of the American cable station of the same name. One of Rogers most lucrative networks is Sportsnet.

**Bell Media**

Bell Media is BCE’s division for television, radio, magazines, and newspapers. In 2010 BCE bought back stakes from Woodbridge, Torstar, and Teachers' in Bell Media, resulting in it becoming a wholly owned subsidiary. In order to better compete with Netflix, BCE offers the streaming service Crave nationwide. Crave traces its roots to an early Canadian pay per view system. However, today it is also a streaming service accessible on the internet through any service provider and it has apps for every major smartphone platform. Rogers Communications and Shaw Communications had launched a rival service in 2014 named Shomi, but it had failed to gain any real traction in the Canadian marketplace and was canceled in 2016.\(^{529}\) Despite this Canadian attempts to fight American video streaming services, Netflix and Amazon Prime remain the favorites. Yet, Crave positively distinguishes itself by retaining a larger amount of domestic Canadian content.

**CTV**

The flagship TV network of Bell Media is CTV. Founded in 1961, CTV currently has 22 affiliate stations. The most interesting affiliate to ever belong to the network was Jamestown, New York based WNYP-TV. This was the first TV station ever owned by Bud Paxson. The stations record was pretty close to dismal. In order to save on the costs of having a direct connection WNYP would pick up CTV broadcasts off the air from Toronto, but was on occasion known to sometimes transmit the wrong station. Ultimately, the network affiliation was doomed by a lawsuit from local American network affiliates based on CTV’s programming being heavily comprised of US Network shows distributed in the United States exclusively to those network affiliates. Bud Paxson would go on to co-found Home Shopping Network and establish Paxson Communications. Ultimately Paxson Communications was taken over by NBC and Citadel, but later acquired by vulture investor Black Diamond Capital Management.

The core content for CTV primetime are hit American series largely from the networks but also including Cable hits like the *Sopranos*. Toronto based flagship CFTO-DT is known for its especially strong local news programming. Its sister cable network CP24 covers local news all day and night. CP24 had actually originally been part of the Citytv network, but the CRTC had forced Bell Media to sell the Citytv stations

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after it acquired Chum Limited. One daytime CTV show is the *Social* which is modeled after the American show the View on ABC. The *Social* is produced in house and filmed in front of a live audience at Bell Media headquarters. *Question Period* is aired on Sunday mornings and is one of Canada’s oldest shows having premiered back in 1967. It was hosted by iconic Canadian broadcast journalist Bruce Phillips. *Question Period* did not appear on air for a decade as CTV stations began to broadcast a rival show produced by Canadian programming service Baton Broadcasting System (BBS). BBS would ultimately buy the CTV Network and replace Sunday Edition back with *Question Period*.

CTV also airs reality show *The Amazing Race Canada*. Contestants fly as part of 2 member teams to various parts of the world and have to locate various clues and complete various challenges in order to complete the race. The Canadian crime series *Cardinal* is in its third season on CTV and is produced by eOne Entertainment, a publicly listed Canadian entertainment company listed on the London Stock Exchange. eOne joined the FTSE 250 Index on September 2013. *Motive* is a police drama that was briefly picked up by ABC in the United States and then carried by USA Network on American cable. The *Indian Detective* is an example of a Canadian broadcast TV show simultaneously made available to the wider Netflix audience globally. The comedy

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532 McDowell, A. (2008, Mar 22). Making the Most of a Merger; The Television Industry is Small, and Perhaps None Know This Better than Those Amicably Sharing the Crowded Citytv/CP24 Newsroom. *National Post*.

533 Fox, B. (2014, Dec 18). The Man Who Truly Understood Canadians; Phillips Helped Shape Political Discourse in This Nation For Decades. *Calgary Herald*

was partly produced by Frank Spotnitz, the original show runner from Amazon Prime’s award winning *The Man in the High Castle*. A number of CTV affiliates were originally affiliated with the Canadian Broadcasting Corporation. CTV 2 affiliates CJDC-TV in Dawson Creek and CFTK-TV in Terrace were both CBC affiliates owned by the Astral Media. They both disaffiliated from the CBC last year a few years after Astral was purchased by Bell Media.

Bell Media’s main sports network is The Sport Network (TSN) with 20% of the ownership held by ESPN. TSN was originally started by Labatt Brewing Company. Complementing TSN’s national network (TSN2) and the four regional networks is the Canadian version of ESPN Classic also with a 20% ESPN minority stake. Sports remains a powerful revenue driver for Bell Canada. Sunday night football and Thursday night football are simulcast on TSN and CTV. TSN also broadcasts many of the Major League games aired on ESPN on Monday, Wednesday, and Sunday Nights. BCE and Rogers co-own NBA TV Canada and Canada’s only professional basketball team, the Toronto Raptors, through their joint ownership of Maple Leaf Sports & Entertainment (MLSE). Raptors games are split between TSN and Sportsnet.

**Chum Limited**

Many of the Bell Media’s current assets came from the acquisition of Chum limited for around $1.7 Billion in 2006. As a condition of its approval of the deal, the Canadian Radio-television and Telecommunications Commission required Bell Media to

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sell the CityTV Network to Rogers. Many of the Canadians who had built the Chum Limited empire were very colorful characters. Chum’s last CEO was Jay Switzer, the man who had created Much Music, Canada’s music video station. He had grown up into the Canadian television business. His parents Israel and Phyllis Switzer along with Moses Znaimer had founded CITY-TV in Toronto. Israel Switzer, Phyllis Switzer, and Moses Znaimer founded CITY-TV in Toronto. Born in Tajikistan to Jewish refugees fleeing the Nazis, Znaimer’s family made it to Montreal. Znaimer had worked as an analyst at a venture capital firm. From the beginning it was a total struggle to keep the station afloat. On Friday nights they would air soft core porn movies. Ultimately, even this was not enough and they had to sell to Chum Limited. Znaimer would become the creative force behind Chum’s Cable specialty channels.

The founder of Chum was Allan Waters and his family retained control of the firm. Waters’ death in 2005 put his company into play. A fight between his 3 children was pivotal in leading to the sale to Bell Media. Waters began his broadcast career with by purchasing CHUM AM in Toronto which he switched to a 24 hour top 50 format popular in the United States. Subsequently in 1963 he launched CHUM FM originally with a format originally devoted to classical music, but within a few years it had switched to a very modern hip format consistent with the edginess that would define the company for its rest of time as an independent firm. In 1967 Waters listed Chum Limited on the Toronto Stock Exchange.
**Shaw Communications**

Shaw Communications was a cable company originally founded JR Shaw in 1966 as a subsidiary of his father’s oilfield services company Shawcorp. Shawcorp originally was a construction firm in Southwestern Ontario which eventually found the oil pipeline business very lucrative. The Shaw family’s original business, Robert Shaw’s Hantsport Brickyard is actually older than the state of Canada.\(^{537}\) Shawcor’s pipe coating division, originally named Bredero Shaw, is today the largest in the world and is a vital supplier to the world’s offshore oil rigs. Halliburton owned a stake in Bredero Shaw until Shawcor purchased it in 2002 for $200 million (U.S.) Halliburton had obtained this stake when it purchased Dresser Industries in 1998 with a $7.7 Billion dollar deal. In 2013 Shawcor eliminated the dual class share structure and the last Shaw family members of the board, Ms. Virginia L. Shaw and Mr. Leslie W. J. Hutchison, retired. This leaves Shaw Communications and its spinoff Corus Entertainment as the two main companies the Shaw Family still control. JR recognized the fairly sparsely populated province of Alberta desperately needed cable and acted accordingly. When JR split up responsibilities of the company with his brother Les Shaw, Les took over the pipeline business and JR took over the cable division. Unlike ShawCorp, Shaw Communications still has a dual-class share structure giving the family greatly disproportionate control. The Shaw family retains ownership of the bulk of the class A shares, while the bulk of

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shares in circulation are the non-voting class B shares.\textsuperscript{538} Shaw Cable was the first Canadian firm to bring digital cable to homes.\textsuperscript{539}

**Corus Communications**

Shaw Communications spun off its media and broadcasting division to form Corus Entertainment in 1999, but it is still controlled by Shaw Cable and the Shaw family. Like with Shaw Communications the family held on to the bulk of the voting class A shares. Corus’s WTN is a cable network entirely geared towards women. In 2009 Shaw had acquired SexTV the Channel and converted it into W movies also geared towards a woman audience. These two cable channels are roughly equivalent to Lifetime and Lifetime Movies in the United States. Corus owns the Global TV Network, Canada’s second most watched network. Before Shomi, Shaw Cable and Corus did make some noteworthy efforts to gain a presence on movies on demand. In fact, the very first movie on demand service in Canada, Movie Central Express, was launched in 2002.

Most of Corus’s assets originally consisted of wide assortment of radio stations and many of its cable specialty stations had a focus on children’s programming. At the time of its initial public offering on the Toronto Stock Exchange it owned Viewer’s Choice, Superchannel, and Movie Max.\textsuperscript{540} Corus also owned Video on Demand in

\textsuperscript{538} Reorganization of Shaw Family Holdings in Shaw Communications Inc. (2015, Nov 04). *News Bites – Telecommunications*.


partnership with Alliance Atlantis. Corus was able to organically grow its cable offerings and was helped by Canadian regulations that required all cable and satellite operators to carry all stations designated as category one by the Canadian Radio-television and Telecommunications Commission. Corus Entertainment more than doubled from its acquisition of Shaw Media, which had been come from Shaw’s acquisition of Israel Asper’s Canfield.

In 2010 Corus Communications moved into its new Toronto headquarters which consist of a huge office building named Corus Quay that sits on a 2.5 acre site and was financed by the City of Toronto to revitalize the Toronto waterfront. This beautiful state of the art building looks far more like something you would find in Silicon Valley than the more conservative office buildings you would expect in one of North America’s largest financial cities.

The broadcasting assets of Canwest were sold to Shaw Communications in 2010 to create today’s Shaw Media division. In 2016 Corus Communications acquired the Shaw Media Division gaining control of a number of radio and TV stations which came from Canwest. This was a mammoth $2.65 billion acquisition funded by taking on significant debt on the the part of Corus Entertainment. The deal gave Shaw Communications the money it needed to acquire Wind Mobile, potentially allowing for

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the creation of a fourth major cellular phone service provider in Canada. This allowed for a consolidation of TV and cable networks as well as content creation allowing Corus to rival Bell Media and Rogers Media in scale and scope. As a result, the Global Network came under the Corus Entertainment umbrella and became a stronger challenge to leading Canadian network CTV.\footnote{Krashinsky, S., & Robertson, G. (2010, May 04). Shaw Shakes Up TV Sector With Canwest Deal. \textit{The Globe and Mail}.}

**Freedom Mobile**

Shaw’s 2016 acquisition of Wind Mobile represented the beginning of Shaw challenging Canada’s dominant three cellular providers. Shaw’s nascent mobile service is named Freedom Mobile. Freedom already has gained a sizable market share and its prospects are bolstered by the Federal Government’s repeatedly desired goal of having a viable fourth service provider for mobile telephony. Canadians pay more than residents of most other developed countries for their cell service. Ironically, the United States now only has four cellular carriers, and almost lost one when AT&T attempted to purchase T-Mobile but was stopped by the US Government.

**Conrad Black**

Hollinger was Conrad Black’s Canada based newspaper empire. At its height Hollinger was the third biggest newspaper company in the World. Conrad Black had inherited much of his wealth from his father, George Montegu Black II., who ran the family brewery company built up by George Montegu Black Sr., the grandfather. George Black Jr. created Ravelston Corporation with his business partner John McDougald as
holding company for their stakes in Argus Corp. George Black’s stake stemmed from the sale of his brewing company to Canadian Breweries, a division of Argus. After George Black’s death, Conrad Black was able to persuade under questionable circumstances McDougald’s widow and sister living in retirement homes in Florida to sell their stakes, granting Conrad Black control of Ravelson and through it Argus Corp. At the time of George Black’s death, Argus was one of Canada’s most important conglomerates. Even in Black’s early days as head of Ravelson, he was caught in controversial and possibly unethical practices.

Over time he shifted out of his industrial holdings and set about to build a newspaper giant using the defunct mining division of Argus, Hollinger, as the main holding company. One of the divisions of Argus was Standard Broadcasting which was originally the radio firm created by Edward Rogers, Sr., the father of the founder of Rogers Communications. Black Sold Standard Broadcasting to Slaight Communications which it largely sold of to Astral Media. Black’s purchase of the London Telegraph in 1986 was his first major acquisition overseas. In 1991 Hollinger took control of the Jerusalem Post, Israel’s largest English language paper that was originally named the Palestine Post since it predated Israel’s independence from the United Kingdom. Black’s


takeover of the Jerusalem Post led to an exodus of editors and authors as a result of a perception of editorial meddling from the new Canadian parent firm, Hollinger.\textsuperscript{549}

Conrad Black also took control of the Sydney Morning Herald and other Australian newspapers with local media mogul Kerry Packer and future Prime Minister Malcolm Turnbull in 1992. The establishment of Hollinger International as an American subsidiary and its listing on the New York Stock Exchange may have proven key to Black’s downfall. It would ultimately be cases pursued by the US Securities and Exchange Commission and led by the US Attorney’s Office for the Northern District of Illinois that would lead to his imprisonment and end his business career. However, the US Government firmly established that Black and his business partner were guilty of brazen fraud indirectly robbing shareholders of money that was rightfully theirs.

\textbf{Canwest}

Canwest has its roots from North Dakota station KCND purchased by Israel Asper in 1974. Asper was a lawyer and politician in Manitoba who had earned his law degree at the University of Manitoba.\textsuperscript{550} KCND had actually gotten its license from the US Federal Communications Commission in 1960. While operating out of North Dakota, its primary audience was in Manitoba. KCND was located in the US town of Pembina which had a population of only 625. Not surprisingly, KCND had trouble maintaining its relationship with US networks ABC and NBC given its limited American audience. However, KCND was still able to maintain solid advertising revenue by maintaining


offices in Winnepeg. KCND’s Canada focused business was modeled after KVOS in the state of Vancouver that aimed its programming at Vancouver. Today KVOS utilizes HDTV technology to even broadcasts Canadian Punjabi station Sur Sagar on one sub-channel that provides unique programming for Canada’s Sikh community. KVOS was established by David Mintz who would later help Canwest Global TV gain access to America’s hottest network shows and ultimately became the president of Global TV.\textsuperscript{551} Canada’s income tax law was amended to end the deductibility of advertisements taken out on US tv stations and regulators made other changes disadvantaging US network sales in Canada. The Western Manitoba Broadcasters and Communications Winnipeg Co-Op competed with Israel Asper to purchase KCND from the McClendon Corporation and gain a Winnipeg broadcast license from Canada’s Canadian Radio-Television and Telecommunications Commission (CRTC). Asper ultimately won the contest to gain control of KCND. Asper’s first Canadian TV station was aptly named CKND and the old KCND transmitters would spend their last day active simulcasting this new Canadian TV station.\textsuperscript{552} CKND gave new life to this now established station, but also jumpstarted Asper’s TV and media career.\textsuperscript{553} Izzy Asper formally launched Canwest in 1977 in partnership with Gerald Schwartz who later launched Onex, one of Canada’s largest

\textsuperscript{553} Asper may be preparing for national TV network. (1987, Sep 09). \textit{The Ottawa Citizen}. 
private equity firms.\textsuperscript{554} In 1991, Asper took Canwest public with an IPO on the Toronto Stock Exchange.\textsuperscript{555}

In the late 1980s Izzy Asper began to expand overseas. In 1992 Canwest acquired Australia’s Network Ten from the Northern Star Holdings which had been forced into receivership. Canwest first invested in New Zealand’s TV3 after the station had been put into receivership after a difficult recession. Despite Canwest’s small stake the agreement also involved Canwest assuming management of the New Zealand station. In 1997 Canwest purchased another 48% of TV3 from Australian bank Westpac. That same year Canwest launched Ireland’s first private national network also then named TV3. Today TV3 is controlled by Richard Branson’s Virgin Group and is named Virgin Media One.\textsuperscript{556} Canwest in conjunction with Goldman Sachs private equity wing GS Capital Partners purchased Alliance Atlantis, a big Canadian TV and movie studio which produced the hit TV series CSI Las Vegas in 2007.\textsuperscript{557} Alliance also owned major Canadian specialty channels like \textit{Showcase} but also was the major Canadian partner of many local versions of cable channels like BBC Canada, Discovery Health Canada, Food Network Canada, and National Geographic Canada. Alliance was Canada’s largest film


and television producer. In 1999 Canwest purchased Hollinger’s Canadian newspapers. In the process Canwest ended up taking on significant debt that would prove fatal to firm’s future solvency.

The financial crisis followed by the Great Recession proved too much for Canwest to endure. One early sign of trouble for Canwest was in November of 2008 it was forced to write down by a billion dollars its broadcast television assets.\footnote{Robertson, G. (2008, Nov 15). The new reality TV: Value erosion. \textit{The Globe and Mail}.} The growing recession in Canada combined with the secular decline of the TV network business resulted in declining advertising revenue. While the American networks also were struggling at this time, the decline in Canadian television networks was probably worse than their American neighbors, since they were always the weaker siblings in English North America to the Big Three US Networks. Amazingly, Rupert Murdoch had managed to propel the Fox TV Network into the ranks of major US networks just before the decline of US networks began to accelerate last decade.

Goldentree Asset Management gained control of Canwest’s print assets by picking up its distressed debt during the restructuring process and transformed the firm into Postmedia which has remained one of Canada’s giants in newspapers and magazines to this day.\footnote{Slater, J. (2010, Jun 10). How U.S. Investors Won a Canadian Paper Chase. \textit{The Globe and Mail}} Goldman Sachs played a key role in the deal for Canwest’s tv assets stemming from their previous ownership stake in the 13 cable networks Canwest had jointly purchased with Goldman from Alliance Atlantis Communications. The amount of money American private equity firms have managed to draw out of these traditional
Canadian news sources has been a source of great controversy. Postmedia owns many newspapers throughout Canada but it is led by its flagship National Post newspaper. Its flagship newspaper is the Toronto Sun but also includes Sun branded newspapers in Calgary, Edmonton, Ottawa and Winnipeg. Sun Media also included many community and local papers throughout the country. Postmedia relisted its stock on the Toronto Stock Exchange, but in an unusual manner. First this listing did not involve an IPO where newly issued shares are sold to the public and second special non Canadian shares were issued to key sponsoring American hedge funds including Goldentree to protect Postmedia’s preferential tax status as a Canadian publisher. In 2017 Toronto based private equity firm Torstar purchased many of Sun Media’s local and community newspapers.

**Global TV**

The vision for Global TV came from Ken Soble, the head of Niagara Television. Niagara’s first station CHCH came only after a big fight with the Canadian Broadcasting Corporation to even allow a rival TV station in Hamilton, so the compromise was that it would be privately owned and operated but function as a CBC affiliate. The CBC sought to preserve its government monopoly in part by coopting private broadcasters and other media firms. In exchange private stations got easy access to free domestic

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programming. CHCH became Canada’s first English independent channel in 1961 after breaking ties with the CBC.

In 1966 Soble devised a plan to launch his own satellite in order to quickly link affiliates of a new network named NTV. Unfortunately, he died of a heart attack that year leaving his wife Frances Soble to run the firm. In 1968, NTV submitted an official application for a third Canadian Network. However, in 1969 the Canadian Parliament passed a law creating the Crown Corporation Telesat Canada which would go on to launch a whole fleet of satellites that would fully cover Canada from coast to coast. This left Soble’s plan economically unviable. Al Bruner, one of the architects of the proposed network, got fired in 1969. Bruner formed a new investment team and created Global TV. His application to create a new Canadian TV network was approved in 1970 and it started with a brand new station named CKGN-TV. While his more ambitious satellite plans were foiled by Parliament, he succeeded in launching his network, and is considered one of the leaders in Canada’s use of satellites for television networks. Last decade Canwest gradually consolidated its control of Global TV. In 2010 Shaw

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acquired Canwest’s broadcast assets including Global TV. Today Global News produces both national and local news programming. Last year Shaw Communications started to redirect money previously allocated for local cable stations in Vancouver and Edmonton to Global News for its local programming.

**Telesat Canada**

Canada led the world in communications satellites and was even the very first to have deployed a domestic communications satellite. In 1969 the Canadian Parliament acted to create Telesat as a crown corporation, but one in which private Canadians would be able to invest in along with the government. An earlier plan would have been led by the Trans-Canada Telephone System, the main long distance service for Canada’s telephone companies, as well as Canada’s two main railroad companies. Telesat Canada led the world in launching satellites to link Canada’s telephone and TV networks. Blasted from the Kennedy Space Center on NASA Delta rockets, Canada established itself as one of the great commercial space powers. The first satellite, Anik named with the Eskimo word for “brother”, provided coverage to northern parts of Canada previously with only spotty radio and TV access. RCA quickly signed up to use two of the channels on Anik, because Canada had beaten the United States by a couple

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years with its launch of communications satellites. Another early prospective customer of Telesat was American Satellite Corporation, the subsidiary of Fairchild Industries that would become in the 1970s the leading provider of satellites linking American television channels. The American Satellite Corporation would also get the contract for transmitting the Wall Street Journal nationwide. Telesat’s ambitious satellite construction and launch schedule placed it in a strong position to remain a major technological leader into the 1980s. However, the FCC also ordered RCA to switch its satellite service outside of Alaska to Western Union due to a new US-Canadian agreement not to compete for each other’s domestic service.

Telesat Canada was sold by the Federal Government to Alouette Telecommunications Ltd in 1992. Minority shareholder Canadian Pacific unsuccessfully sued to block the deal due to its ownership stake with Canadian National in rival phone company Unitel (formerly named CNCP). Alouette was a consortium of companies which included BCE, satellite manufacturer Spar Aerospace Ltd., Canadian

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Pacific, and the Ontario Northland Transportation Commission. The consortium was named after the Alouette 1, the first satellite manufactured in Canada, which was launched in 1962. Its mission was to study the ionosphere, but the satellite also provided Canadians an immense source of national pride. The launching of the Alouette 1 made Canada the third country to launch its own satellite beating the British who had used American made satellites for their first couple space missions. In 1998 BCE took full control of Alouette, transforming it into a wholly owned BCE subsidy. BCE shifted away from a diversified strategy and sought to focus on core businesses. In 2007 Canada's Public Sector Pension Investment Board (PSP) and Boston based Loral Space acquired Telesat from BCE for $3.42 Billion. The PSP manages the pension assets for members of Canada’s public service, armed services and the Royal Canadian Mounted Police. The deal left Loral with nearly two thirds of the ownership but slightly less than one third of the voting shares in order to comply with domestic control requirements. This has foiled Loral’s goal to unload the Canadian satellite firm, despite representing most of Telesat’s revenue. Loral had previously sold many orbiting satellites to Telesat in 2004 following Loral’s bankruptcy, many of them purchased from AT&T’s Skynet division. Today Telesat is the world’s third largest operator of commercial communications satellites. Since CPPIB still controls Telesat, Loral is threatening to sue Public Sector Pension Investment Board (PSP) in order to be allowed to sell its majority stake.


Blackberry

Research in Motion was initially started in 1984 by two Canadian engineers, Mike Lazaridis and Douglas Fergin, both graduates of Canadian universities. RIM’s humble roots began in an office above a Waterloo bagel store. One of their early products was Budgie which served as a LED sign to keep General Motors assembly line workers on track. Their DigiSynch film post production proved very popular with major Hollywood studios and it became an industry standard. The product began with a project developing a digital film counter for the the National Film Board of Canada. This project transformed Research in Motion into a major technology firm.577 Research in Motion had its IPO on the Toronto Stock Exchange on October 28th, 1997 followed by its listing on Nasdaq in 1999.578

Probably the very first wireless data network was at the University of Hawaii. Alohanet was built on radio transmitters, because linking the campuses on various islands by undersea cables were too expensive at that time.579 The first real commercial player in wireless data networks was Illinois based Motorola, whose products evolved into the best selling pagers. It was Sweden’s Erickson who started to really develop wireless data technology. Their first venture was created for first responders including ambulances in collaboration with the national telephone company Televerket. Interestingly, creating networks for fire, police, and paramedics remains a major priority in telecomm even


more so after 9/11. However, RIM ultimately came to be known for their two way paging system like the RIM 900 Interactive Pager. RIM’s early products relied on the Ericsson’s Mobitex wireless network built for Rogers Communications.\textsuperscript{580} Ted Rogers realized early the revolutionary potential of highly interactive advanced mobile messaging devices.\textsuperscript{581} Rogers was a very early backer and investor in Research in Motion’s early products. The company developed the industry’s best keyboard and rebranded their communicators as Blackberries inspired by their distinctive appearance which was said to resemble the oxidant rich fruit. The success of Research in Motion’s marketing and the huge appeal of the product in Corporate America led to extremely successful capital raising on both the Toronto Stock Exchange and on Nasdaq. Blackberry’s demise came from a number of fundamental flaws to the system. The rapid evolution of mobile communications and internet largely left Blackberry’s proprietary network obsolete and unnecessary. The earlier decline of Motorola almost foreshadowed the fall of Blackberry. In today’s world of highly clustered tech ecosystems, it is hard for geographically isolated tech firms to thrive over extended periods of time. Several spectacular system failures helped illustrate that Blackberry’s proprietary network only left corporations with one additional potential vulnerability for critical communications. The launch of the Apple iPhone was the death knell for Blackberry. However, Blackberry’s decline was also accelerated by poor execution and fumbled new product releases. Like with Nortel Networks, Blackberry raised hopes that Canada could one day


\textsuperscript{581} McNish, J. & Silcoff, S. (2015). \textit{Losing the signal: The untold story behind the extraordinary rise and spectacular fall of Blackberry.}
become a major tech powerhouse like Silicon Valley or Israel. However, their respective crashes from the height of spectacular glory only illustrated how Canada’s lack of depth and resilience in high tech has largely doomed the country as a very peripheral player in the high tech arena. Unlike Nortel Networks, Blackberry is still very much hanging in there. Last year Blackberry transferred its listing from Nasdaq Global Market to the New York Stock Exchange. Blackberry continues to be listed on the Toronto Stock Exchange and remains included in the very important S&P TSX 60.

**Conclusion**

The tightly linked industries of telecommunications and media and entertainment are among the most protected by Canadian regulators. This has accomplished two objectives for Canadians. First, it has led to very strong and powerful private telecommunications giants in Canada. Second, it has amazingly succeeded to preserve a unique Canadian character to Canadian programming and movies, without which the Canadian national identity may have been that much weaker. The regulatory and market scheme in these areas appear to have achieved the best of all worlds. The four largest telecommunications companies are all cross listed on both the Toronto Stock Exchange and the New York Stock Exchange. This gives them access to the unrivaled global capital accessible from the American markets, while allowing Canadians ready access to investing in these local giants. While protectionism has preserved the domestic ownership of these firms, Canada has also successfully retained access to all the top technology available from the United States and the rest of the World. Likewise, in

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respect to movies and TV shows, Canada has benefited from having its own uniqueness and diversity without missing out on world leading American entertainment. Despite the successful role of regulators in preventing Canadian telecom and media from being gobbled up by the giant to the south, like elsewhere in this dissertation I have found that the key drivers of change and progress are market driven rather than state sponsored.
CHAPTER FIVE:
CONCLUSION

This Chapter will entail a brief review of the analysis and findings of the dissertation followed by an analysis of the policy implications. While Public Choice theorists can explain many elements of US Securities Laws, the SEC still succeeded in fostering a very competitive and dynamic market architecture that included the rise of the Nasdaq as well as alternative trading systems. In contrast the very weak securities regulators in Canada combined with the very powerful domestic banks led to highly consolidated exchange based trading dominated by the TMX Group, though equity trading in Canada remains to some extent competitive due to the spread of American styled alternative trading systems up north. The Canadian Federal Government played a large role in the formation of the telecommunications and media sector, though it was also shaped by market forces, Canada’s proximity to the United States, and the country’s immense size and challenging topography. This chapter will now offer me the opportunity to summarize findings and identify their current relevance.

In this dissertation I began by researching the development of state and Federal securities laws in the United States. I studied how both public interest and public choice theories explain the development and passage of the key legislation. Public Choice does an excellent job of explaining many of the intricacies of the initial securities legislation passed beginning with the Securities Act of 1933. As Paul G. Mahoney explains, the

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quiet period was an effective codification of a key strategy utilized by large Wall Street investment bank syndicates. The Maloney Act of 1938 can also be explained by Public Choice Theory in that in nearly instantly granted quasi-governmental power to the organization it allowed to be created, the National Association of Securities Dealers (NASD). The NASD was formed by the very same firms that had pushed for the passage of Maloney. Yet over the subsequent decades much of what the SEC would later come to promote appears intended to serve the public interests of transparency, integrity, liquidity, and competition in the public equity markets. The decentralized power behind the NASD consisted of thousands of voting member broker dealers. The powerful role of the SEC to support the needs of diverse market participants, the evolving interests of the NASD, combined with rapidly improving computer and communications technology led the NASD to launch the Nasdaq, the world’s first electronic securities market, and to build it into a global model for this century. At the same time the US Congress and the SEC worked to construct a national market system linking all stock exchanges and markets while fostering the growth of computerized alternative trading systems that would eventually come to compete with the exchanges as peer competitors not just in the United States, but in Canada as well. The SEC was able to promote the


Nasdaq, challenge the potentially overwhelming dominance of the New York Stock Exchange, while also opening up the public equity markets to the alternative trading systems. The acquisition of Archipelago Holdings by the New York Stock Exchange and Instinet by Nasdaq in 2005 reflects the convergence of alternative trading systems with stock exchanges. The purchase of the Kansas alternative trading system operator Bats by the world leading options market, the Chicago Board of Options Exchange, has created a powerful third big player in US equity markets.

Beginning with the Great Depression, the Toronto Stock Exchange began to overtake the Montreal Stock Exchange as the primary public market for equity in Canada. While in the United States the US Congress was able to enact a Federal system of securities regulation interpreted and enforced by the SEC, the Canadian Supreme Court never allowed for the Canadian Federal Government to create a national securities regulator. The relegation of securities regulation to the provincial administrators is one of the reasons that Canadian regulators are weaker than their American counterparts. On the other hand, due to the fact that banking law was always entirely a Federal competency in Canada and interprovincial banking was never restricted

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or limited, Canada’s banking sector was always highly consolidated and dominated by a few very powerful banks. Canada’s Little Bang deregulation of the securities industry led by the Federal Government and the Ontario provincial government also allowed these commercial banking giants to evolve into universal banks that also dominated the securities markets.  

Powerful dominant banks and weak regulators led to strong consolidation in Canadian exchange based trading unlike in the United States, where you ended up with two very strong exchanges, the Nasdaq and the New York Stock Exchange. The Exchange Realignment Agreement resulted in the Toronto absorbing all senior stock trading, Montreal being converted into an exclusively derivatives market, and Vancouver and the Alberta stock exchanges merging to form a new unified venture exchange which the Toronto Stock Exchange ultimately acquired. Despite the misgivings of French Canadians, Quebec was not short changed, since derivatives trading is actually more lucrative. Still, this agreement effectively ended competition between the exchanges. In fairness, market consolidation could be argued to be necessary for Toronto to compete with major financial centers like Chicago, New York, and London. Following their

592 Hartt, S. H. (2005). From a Bang to a Whimper—Twenty Years of Lost Momentum in Financial Institutions. POLICY, 73.


demutualization the Toronto Stock Exchange and the Montreal Exchange merged creating the now dominant TMX Group.

The growing global nature of stock markets led to a proposed merger of equals between the London Stock Exchange and the Toronto Stock Exchange. Opposition to this deal was led by major domestic financial institutions who formed the Maple Consortium to offer a rival hostile takeover deal.\textsuperscript{597} The success of Maple led to the Canadian banks and major financial institutions growing their control and influence over the TMX Group. Further by acquiring the smaller rival Alpha Exchange and the Canadian Depository for Securities in the same transaction they strengthened the horizontal monopoly represented by the TMX Group while also at the same time creating an element of vertical integration as well.\textsuperscript{598} While there are rival exchanges today in Canada, they are relatively small particularly in terms of actual listings if not in also in trading. However, the rise of alternative trading systems throughout North American and indeed the whole world, means that equity trading overall in Canada is still fairly competitive.

Crown corporations created by both provincial governments and the Federal Government have played a very large role in the development of the Canadian economy. As part of the 1980s liberal market reforms many of them were privatized including Air Canada, Canadian National Railways, or Potash. Other publicly traded firms including

\textsuperscript{597} Sorensen, Chris. (2011). Don't Bank on it: The Toughest Critics of the TSX's Merger Plans are also Bay Street's Biggest Players.(MARKETS)(Toronto Stock Exchange). Maclean's, 124(13), 42.

Cameco, Bombardier, and Telus were either partly formed from crown corporations or include many major subsidiaries that were purchased from crown corporations. Major publically owned or sponsored pension funds in Canada represent major investors in public and private equity markets not just domestically but around the world. Both provinces and the Federal Government have numerous programs to sponsor, promote, and even help fund venture capital, but Canada has never really been particularly strong in VC. Perhaps, the TSX Venture Exchange offers an opportunity to help address this weakness, given that it bills itself as the world’s only publicly traded venture market.

The Telecommunications and Media Sector of Canadian publicly traded corporations is the most fascinating component of the Toronto Stock Exchange. Canadian television was shaped early on by the United States. In the earliest days of television, American television was at first the only option for Canadians. Canadian access was helped by the fact that American broadcasters often were within reach of Canadian cities or at least their outskirts. Often times it only took specialized antennas to pick up American television programming. Piping in American network programming was a very early feature of Canada’s pioneering cable companies including Rogers and Shaw Communications. In a handful of cases American stations adopted selling advertisements to their Canadian viewers as their main business model, though the Canadian Federal Government eventually responded by ending tax write offs for advertising bought on American stations. Canadian media icon Israel Asper actually got

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599 Tomesco, F. (2007, Jun 29). Canada Pension Funds Turn to Private Equity INVESTING MARKETPLACE by Bloomberg. *International Herald Tribune*
his career start in television and media by purchasing KCND in the tiny town of Pembina, North Dakota, and moving it across the border to Winnipeg and renaming it to CKND. 600

The Canadian Broadcasting Corporation was originally the only television and radio network in Canada, though it occasionally was broadcast on privately owned stations that at times were free to include their own programming. Canada currently has three major private TV networks: CTV, CityTV, and Global TV. The three networks were built by powerful outsized, colorful personalities including Israel Asper, David Mintz, Moses Znaimer, and Allan Waters, but are all currently owned by three of the largest Canadian telecommunications companies: Bell Canada, Rogers Communications, and Corus Entertainment (the spun of media division of Shaw Communications.) 601 The pioneers of Canada’s major cable firms were also relentless and indefatigable in their vision and perseverance. JR Shaw would build off of his family’s oil services and construction firm ShawCor to create one of Canada’s major cable firms. While the father of the the founder of Rogers Communications, Ted Roger, was one of the pioneers of radio, Ted Rogers would also be famous for using junk bonds sponsored by the now defunct Drexel Burnham in the United States to finance his empire as well as his various brushes with insolvency. 602 Rogers Mobile was a cellphone company originally founded by David Margolese, who would go on to launch Sirius Satellite Radio in the United


States. In this dissertation I primarily focused on how the satellite wars in the United States between Sirius and XM Satellite Radio played out in Canada through their Canadian affiliate companies. Local ownership and control rules resulted in two domestic satellite radio affiliates that would follow their American corporate parents in merging and ultimately being taken over by Sirius XM.

One of the defining elements of Canadian Telecom and Media firms are the Federal laws that largely restrict control to domestic individuals and firms. The result is that the major firms including Shaw Communications, Corus Entertainment, Rogers Communications, and Bell Canada have remained independent but also are highly profitable. Shaw, Rogers, and Bell Canada are all cross listed on both the Toronto Stock Exchange and the New York Stock Exchange also reflecting their easy access to American capital markets. Corus, the spun off media division of Shaw Communications, is listed on the TSE but not any American exchange, and remains controlled by the Shaw family. Bell Canada is noteworthy as having been the only major telecom firm in the North American Bell System outside of the United States until the 1980s when the

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system was effectively dismantled. A failed effort to take Bell Canada private last decade would have been the largest leveraged buyout in world history had the transaction been completed successfully. In the end the deal was largely killed off by the Global Financial Crisis.

Another characteristic of Canada’s communications sector was the colossal requirements of linking such a vast country. At first Canada’s two large railroad firms, Canadian National and Canadian Pacific, played a key role. The national long distance network TransCanada Telephone System was primarily controlled by Bell Canada, which almost became a monopolistic phone company for the whole country. Linking Canada for telephone, radio, and television initially involved building the world’s largest microwave relay networks, then the creation of a national satellite company, and finally the utilization of the world’s most advanced fiber optic networking technology. Telesat Canada was created by an act of Canadian Parliament in 1969, was privatized in the 1980s, and remains one of the largest satellite communication companies in the world.

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Stock markets began centuries ago as unregulated private trading clubs that sometimes actually operated independent of any legal authority. Their rise as major financial intermediaries in the Twentieth Century began to attract a great deal of attention from government authorities. Certainly laws had been previously passed. The Barnard’s Act of 1734 in England outlawed forward sales of stock, though the self regulating members of the London Stock Exchange regularly flouted this rule.\textsuperscript{612} Similarly, the New York stockjobbing statute of 1792 effectively barred the core business of stock traders leading to the creation of the early New York Stock Exchange formed by the famous Buttonwood Agreement of 1792.\textsuperscript{613} Self regulation on markets like New York and London emerged out of the need to preserve legally unenforceable agreements. Members who were found to violate exchange rules faced potential expulsion, a penalty still used in today’s securities industry. The highly restrictive British Bubble Act of 1720 in response to the South Sea Bubble illustrates Paul Mahoney’s observance that new law or regulation created after a crisis can often be counterproductive.\textsuperscript{614} However, the UK’s Joint Stock Companies Act of 1844 introduces a system of government compulsory disclosures. As discussed in chapter 2, these disclosures took their current modern form with the passage of the Companies Act of 1900.\textsuperscript{615}


The beginning of the modern electronic trading version of the stock market is often traced to the day Nasdaq came live on February 8, 1971 as a nationwide quotation network powered by Bunker Ramo’s servers in Trumbull Connecticut.\textsuperscript{616} While often seen as the ultimate capitalist institution, the NASD was in large part the result of the guidance from the SEC to the NASD a decade earlier to automate the widely dispersed over the counter market.\textsuperscript{617} While the power of the industry through Financial Industry Regulatory Authority (FINRA), the successor organization to the NASD, to self regulate and FINRA’s quasi-governmental power remains controversial, the NASD’s great success in creating NASDAQ is underappreciated. As the world’s most powerful securities regulator, the SEC was able to shepherd America’s securities markets through decades of great technological change and innovation as well as numerous challenges and opportunities. Canada benefits from its close proximity to the United States and strong connections to American capital markets. While strong banks and weak securities regulators led to a very high degree of consolidation in exchange based trading in Canada, Canadians still benefit from the competition provided by American styled alternative trading systems.

\textbf{Policy Implications}

At this point, I am going to analyze the policy implications of my findings. As previously discussed a conscious effort led by the SEC culminated in the rise of the Nasdaq, the National Market System, and alternative trading systems. Are there now


\textsuperscript{617} By Richard E Blodgett. (1964, Dec 02). Informing Investors. \textit{Wall Street Journal}
new ways for the SEC and FINRA, the successor organization to the NASD, to continue to foster market innovation and expansion? In Canada, the big five dominant banks led to the TMX Group becoming the overwhelming stock exchange in the country. Is it possible for the TMX Group and rival Canadian exchanges to continue to play a major role in the North American and global equity marketplace? In chapter 4, I traced the evolution of Canada’s communications sector. Are Canada’s telecom giants well positioned to exploit emerging technologies? Can Canada maintain its distinctive national media?

The Maloney Act of 1938 succeeded in creating the NASD to oversee the over the counter stock market. The launch of the NASDAQ as an electronic marketplace in 1971 created what would come to be known as the exchange most symbolizing the Twenty First Century. Ultimately automation on both the Nasdaq and even the more traditional New York Stock Exchange would replace the market’s reliance on direct human interaction, but for many decades the OTC market revolved around the telephone. Its success proved that a stock market did not require a centralized exchange floor in order to succeed. By nurturing alternative trading systems, the SEC further bolstered competition in equity trading. This resulted in the New York Stock Exchange merging with one of the largest alternative trading systems, Archipelago, and the country’s leading equity options exchange, the Chicago Board of Options Exchange, purchasing another major ATS, BATS. The purchase of BATS by the CBOE has led to the creation of third stock market giant in the United States.\(^{618}\)

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With three major stock markets in the United States plus numerous alternative trading systems, it leaves us to ask what is the next step in stock trading and how can the SEC and FINRA promote it? One possible step would be to bolster alternatives to traditional methods of going public and listing on exchanges. The major investment banks and stock exchanges are extremely profitable firms. Reducing their role could potentially bolster competition and efficiency, but regulators need to tread very cautiously. Beginning with the Blue Sky Laws and the 1933 Securities Act, American state and Federal governments understood the importance of protecting the transparency, integrity, and fairness of markets.

One mechanism to reduce the cost of initial public offerings is for firms to issue a direct listing. A very prominent example of a direct listing was the online music service Spotify.619 Instead of the elaborate and complex process involving numerous investment banks that generate very lucrative fees for the underwriters, a firm is able to list on a major public exchange using existing shares from current equity holders. Beyond saving on costly fees, a direct listing means no required lockups where stakeholders are banned from making stock sales. On the other hand, the inability to issue new shares means no new money will be raised as part of the listing process. The prospects for more direct listings has been bolstered by the growth in private markets. The downside to private markets are they are far less regulated, and state and Federal laws intended to open them up to more Americans do not necessarily always guarantee access for all retail investors.

The other major disadvantage to direct listings is the lack of bank sponsorship may undermine the stability of the stock. Traditionally, the underwriters stand prepared to buy shares in the event of unexpected weakness. The short selling of the stock by the underwriters is an exception to the national ban on short selling. In the event of unexpected strength, the underwriters will buy additional shares from the issuer. This is the so called greenshoe option allows the issuer to raise even more money in the cases of particularly popular new listings. The investment bank sponsors of traditional initial public offerings have also lined up critical institutional investors long before the stock’s public debut. Despite the disadvantages of direct listings, Slack appears to be heading to follow Spotify’s example for its planned listing.620

There are also a couple new exchanges that now offer primary listings. BATS, originally founded as an alternative trading system and now owned by the Chicago Board of Options Exchange, has succeeded in attracting a number of listings for exchange traded funds. In 2016, the iShares MSCI Eurozone ETF shifted its primary listing from the New York Stock Exchange to BATS.621 Startup exchange IEX led by Brad Katsuyama has made an aggressive push to gain listings from firms from the Nasdaq and the New York Stock Exchange, but none have made the switch as of yet. One of the largest investors in IEX, Steve Wynn, had offered hope Wynn Resorts would list with the

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621 BATS ETF Marketplace Welcomes Three New iShares ETFs. (2016, Jan 07). *Business Wire*
upstart exchange, but his downfall ensured the firm would stick with the Nasdaq.\textsuperscript{622}

Some of the largest brokers including Morgan Stanley, Fidelity and E*Trade have formed a new exchange named Members Exchange that is expected to launch in 2020.\textsuperscript{623}

Increasingly the private equity market competes directly with America’s public equity markets. The challenge then comes from the lack of liquid secondary markets. Several online marketplaces have formed allowing trades to be made by accredited investors. Sharepost was one of the earliest such sites and was formed in 2009. Equidate is a new site for private companies and acts more like a traditional stock market. EquityZen works by selling allotments for private parties at prearranged prices. The most powerful secondary market for private equity was SecondMarket founded by Barry Silbert.\textsuperscript{624} It eventually was expanded to deal in a wide array of privately traded securities and was acquired by Nasdaq in 2015.\textsuperscript{625} Yet it is entirely geared towards large institutional investors, leaving small retail investors completely out in the cold.

One major alternative for major American exchanges is what is left of the old over the counter stock market. The OTC Markets Group operates three markets and has

\textsuperscript{622} Osipovich, A. (2017, Oct 26). Startup Exchange Cleared to Take on NYSE, Nasdaq For Stock Listings; IEX Gets Regulatory Approval To Being Listing Companies; About a Half Dozen Companies Expected to Switch. \textit{Wall Street Journal}.

\textsuperscript{623} Osipovich, A. (2019, Jan 07). Wall Street Firms Plan New Exchange to Challenge NYSE, Nasdaq; Morgan Stanley, Fidelity and Citadel Securities Among Backers of New 'Members Exchange'. \textit{Wall Street Journal}.


\textsuperscript{625} NASDAQ unit acquires private company liquidity specialist SecondMarket. (2015, Oct 27). \textit{M & A Navigator}. 
CEO R. Cromwell Coulson as its largest investor. Fittingly the OTC Markets Group trades on one of the markets it operates. The firm is nearly a century old and was originally named the National Quotation Bureau. The overall market it managed was long known as the Pink Sheets after the color of the book of stock quotations it would print and distribute nationally. The other major over the counter market in operation today in the United States is the OTC Bulletin Board which is run by FINRA, the successor organization to the NASD. This is a legacy of the NASD’s original historic role in overseeing the over the counter market, but has lost many listings to the privately owned OTC Markets Group. The NASD’s dominant role in the creation of the NASDAQ proves that these markets could grow to challenge the NYSE and the Nasdaq one day. There are some similarities between the OTC Markets Group and the TSX Venture Exchange, except the Venture Exchange in Canada is backed by the nation’s stock market giant and listed stocks are backed by multiple layers of institutional support.

Crowdfunding in the United States has potentially unleashed the ultimate revolution in fundraising in the United States. This innovation emerged from an unexpected source, Kickstarter—a site designed as a way to charitably contribute to artistic and creative ventures. Numerous charitable sites have built on this model of giving including for instance Charidy run by members of the Lubavitch movement.

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Recognizing the potential for the capital markets particularly in the venture capital space, numerous states sought to liberalize securities laws allowing for every day Americans to take part in funding startups through crowdfunding. The first such state exemption came from the Invest Georgia Exemption passed by the state legislature in 2011. However, numerous states passed laws inspired by the crowdfunding movement from 2014 to 2015 including Florida and Illinois that applied to fundraising campaigns conducted entirely on an intrastate basis. The Jumpstart Our Business Startups Act (JOBS Act) was passed by the US Congress in 2012, but it was not until 2015 that the SEC issued the rules for interstate crowdfunding allowed for by this legislation. Thus, the states beat the Federal Government in first allowing crowdfunding. While restricted to small amounts of money, it is conceivable that one day crowdfunding type operations will be utilized for very large capital raising even from the public. This would require Americans to find safe alternatives to traditional exchange listings to weed out highly speculative or worse fraudulent issues. This is not at all unimaginable given that shares of Facebook were heavily traded on the Sharepost site long before its IPO.629 The most obvious rival to an American exchange would be for it to emerge from the over the counter market as the Nasdaq once did. However, as Mark Twain is reputed to have once said: “History doesn’t repeat, but it rhymes.” The American Exchange of the future is likely to be built around crowdfunding, and the SEC, FINRA, or even the Securities Industry or Financial Markets Association (SIFMA) can play leading roles.

629 Quinn, J. (2010, Jul 31). Facebook 'Postpones' Float Until 2012 to Allow Growth. *The Daily Telegraph*
Canadian Securities Markets have proven that they do not always have to stay in America’s shadow. The Toronto Stock Exchange was the first major exchange in North America to convert entirely to electronic trading. In fact, the first plan to start computerizing the TSE dates back to the 1950s. The attempt to take Bell Canada private would have been the largest LBO deal in world history had it not been foiled by the Global Economic Crisis. Canada has the potential to serve as a major incubator for North American stock exchanges. One of the most innovative exchanges, the Alpha Exchange, is now owned by the dominant TMX Group. However, the Alpha Exchange was independently started by top Canadian financial institutions and led by financial entrepreneur Jos Schmitt before being acquired by the Maple Group. Beyond just finding new ways to optimize exchange based trading, it sought to find ways to boost Canada’s crowdfunding, building an institutionalized pre-IPO capital market, and boost Canada’s marketplace for tech firms.\textsuperscript{630} The relaunch of the Alpha Exchange by the TMX Group with the Quantum X A trading engine allowed it to remain a cutting edge marketplace, while reducing the effect of high frequency trading and banned pay for order flow practices.\textsuperscript{631}

The other innovative exchange owned by the Canada’s dominant TMX Group is the TSX Venture Exchange. Originally founded by the 1999 Realignment Agreement that led to the merger of small exchanges on the Pacific Coast to create a market devoted to junior listings. The TSX Venture Exchange considers itself the world’s only publicly

\textsuperscript{630} Enabling Canada's Technology Future. (2012, Jun 14). \textit{Canada NewsWire}

traded venture capital exchange. However, the AIM market owned by the London Stock Exchange offers a powerful rival for junior listings around the world. The Nasdaq Small Cap market and the OTCBB Exchange also compete with the TSX Venture Exchange to a limited extent, but neither can offer a comparable environment for startups. Despite challenges faced by the TSX Venture Exchange over the past couple decades of its short life, it has inspired talk of creating a similar venture exchange in the United States. While the TSX Exchange offers a competitive venue for even the largest energy and mining issues attracting interest even from the likes of Saudi Arabia’s colossal Aramco, the TSX Venture Exchange is increasingly marketing its listing service to small American firms as well as tech firms based in India, China and Israel. For American firms a listing on the Venture Exchange cans serve as an alternative to far costlier capital provided by traditional venture capital firms. One noteworthy example is Frankly, a mobile messaging firm, which chose to list on the TSX-V. The Venture Exchange offers the potential for firms to eventually graduate to the main Toronto Stock Exchange if they successfully grow. The hiring of Israeli tech insider Yossi Boker to run the office in Israel offers the TMX Group a unique opportunity to tap into the venture capital market of a country that prides itself as the Startup Nation. Given the large Israeli presence on the Nasdaq and the New York Stock Exchange, it is not a large stretch to imagine attracting many very promising spectacular Israeli firms to the TSX Venture Exchange that are not ready yet for the Nasdaq.

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The Canadian Securities Exchange (CSE) represents one of the few completely independent exchanges in Canada. Founded in 2003, the CSE represented the first new stock exchange in Canada in many decades. In recent years, it has come to be known as the number one destination for cannabis stocks, but it accomplished this in part by welcoming American cannabis firms the TMX Group shunned in order to not run afoul of American Federal law. The catch is the highly anticipated legalization of marijuana in the United States would end this niche for the CSE. If this expected outcome does not transpire, the American cannabis firms listed on the CSE are likely to all fail anyway making this not seem like a very sustainable strategy for a Canadian stock exchange. Still the CSE provides an important alternative listing service in a country dominated by the TMX Group at least for listings. The hope of the CSE’s main investor, Ned Goodman, is to for his exchange to become a Canadian version of the Nasdaq. Also the parent company of the Canadian Securities Exchange, CNSX Markets launched Pure Trading as one of Canada’s alternative trading systems for trading issues listed on the TSX and the TSX-V. In 2013, this off exchange trading was incorporated into the main CSE platform allowing for one system for all equity trading.

The Aequitas NEO Exchange is another market created by financial entrepreneur Jos Schmitt. Launched in 2015, it was backed by Canadian giants OMERS Capital Markets, Barclays, and Royal Bank of Canada from the very beginning. The NEO Exchange has rapidly become a major platform for the listing of Canadian ETFs. In 2016 BlackRock Asset Management Canada moved 12 of its listings from the Toronto Stock Exchange to the NEO Exchange. This paralleled BlackRock’s move in the United States to shift some listings from the New York Stock Exchange to the Nasdaq and to CBOE
Global Markets. The NEO Exchange has not been offered the kind of support from Canadian regulators that American exchanges received against anti-competitive policies from the once dominant New York Stock Exchange. However, Canada’s major banks and other major financial institutions have been quick to sponsor the NEO Exchange recognizing the value of diversification in terms of competition and innovation. The NEO Exchange has pioneered new methods to counter predatory effects of high frequency trading as well as unique methods of maintaining market liquidity.

The collapse of the deal to merge the London Stock Exchange with the TMX Group does not preclude further roles for foreign financial exchanges in Canada. One emerging foreign player in Canada is Nasdaq. In 2015, Nasdaq acquired Canadian ATS Chi-X Canada and in 2017 it began the process of transforming its Canadian trading platform into a full out exchange potentially opening the door to listings. Nasdaq Canada may turn out to be the largest direct threat to the listing and trade business of the TMX Group. One cannot rule out Nasdaq Canada merging with the NEO Exchange in order to better challenge the TMX Group. This is not Nasdaq’s first move into Canada. At the turn of the century, the government of Quebec had sponsored Nasdaq’s efforts to establish an exchange in Montreal. Perhaps it was a type of buyer’s remorse for Quebec having seen its senior equity listings from the Montreal Exchange shifted to Toronto as part of the 1999 Realignment Agreement, but the endeavor never succeeded. A sign of the times is today’s Nasdaq Canada is firmly based in Toronto representing Ontario’s central role in Canadian finance.

It is worth considering whether the defeat of the London Stock Exchange deal by the Maple Group may have been a loss for the Canadian Equity markets and the
Canadian economy as a whole. Had the merger been successful, the amalgamation would have rivaled the New York Stock Exchange and Nasdaq in size. The risk to Canada is it could have led to a hollowing out of their stock market with trading in larger issues being shifted to London. This fear would be particularly strong among Canadians who saw the Auto Pact with the United States leading to car sector being largely taken over by American corporate giants with the notable exception of Canada based Magna. Today the Toronto Stock Exchange remains one of the ten largest in terms of the market capitalization of its listed firms only slightly behind the London Stock Exchange. Bay Street could turn out to be a very appealing target for the expansion of the London Stock Exchange in the near future. On the other hand, an alternative combination between the London Stock Exchange and the TMX Group’s main rival, the Australian Stock Exchange, might allow the LSE better compete against the TMX Group for mining and energy stocks.

Toronto offers an English speaking city in the same time zone as New York City with a legal system highly compatible with British and American law. Beyond being one of the most politically stable countries in the world, Toronto offers the type of legal diversity that the United States now lacks in terms of securities and in some ways even corporate law. As Roberta Romano points out both companies and the public can gain from competition between various legal authorities. Why then relegate all of one’s securities business to the total oversight of the SEC, when Toronto and the Ontario Securities Commission is only a short plane flight away? Further, while the US economy is far more powerful than the Canadian economy, they are not always entirely correlated
offering the potential for risk mitigation. It is not completely far fetched to wonder if one day Bay Street may become the new Wall Street.

Of all the sectors traded on the Toronto Stock Exchange it is my opinion that the Telecommunications and Media Sector is by far the most interesting. Canada’s Communications giants consistently rank among the TSE’s most lucrative listed companies. In terms of maintaining a truly independent media and by extension an independent national identity, the prospects look rather grim. The earliest days of Canadian television began with Canadians purchasing receivers to watch early American stations followed by the early versions of cable television to extend the range of stations broadcasting from the United States. The Canadian Government responded with the launch of public television stations by the Canadian Broadcasting Corporation, modeled after the BBC. Today, Canada has three major private national networks backed by major domestic telecom giants. The rise of American streaming giant Netflix threatens to completely disrupt Canadian media. Bell Canada’s Crave streaming service has been a reasonable success, though rival Shomi founded by Rogers Communications has been shut down. Certainly Canada remains a major producer of movies and TV shows for North America earning Toronto the nickname of Hollywood North. Yet, the totally open nature of the Internet, means that Canadians are likely to increasingly rely on American streaming services as American media giants like Disney, CBS, Google, and Comcast bolster their online video services.

The greatest challenge facing Canadian telecommunications giants today is successfully implementing new 5G technologies across the country. 5G technologies are expected to completely transform many aspects of life facilitating futuristic
technologies like driverless cars, augmented and virtual reality. As always, Canada’s immense geography offers unique challenges. Fortunately, the fiber optic technology from last century is largely adequate for the backbone of new 5G cellular networks. The largest investments have to be made in the cell towers that create the smaller cells necessary for the next generation of cellular networking. Canada’s telecom giants ready access to American capital markets should easily ensure funds are available to invest in this cutting edge technology. Canada could also if necessary open itself to direct investment by American and other firms in its telecom infrastructure if necessary.

Canada still may have an opportunity to lead in future cellular technologies. A collateral casualty of Nortel’s reckless expansion during the Dot Com Bubble was the gutting of Bell-Northern Research. This represented a missed opportunity to build Bell-Northern into a technology incubator on par with the old American Bell Labs. It’s true that AT&T rarely profited from the numerous innovations that emerged out of Bell Labs, but that was in large part due to the constant threat of anti-trust action from the US Justice Department. Many of the transformative technologies of the Twentieth Century came out of the old Bell Labs. As one of the physically largest and most prosperous countries, Canada could transform itself into a leading laboratory for telecommunications technology. This is an effort that could engage the Federal, provincial and local governments, as well as the private sector. The risk could be that 5G proves to be so good, that further improvements turn out to have greatly diminishing returns. Technological innovation can follow very unpredictable paths.

The growth of computer and telecommunications technology has radically altered the nature of North American Stock Exchanges. The rapid growth of the over the
counter stock market overseen by the NASD in the United States demonstrated that stock markets could function without a centralized exchange floor long before the launch of a nationwide computer network in 1971 to support it. The rise of crowdfunding and the growth of the private equity market could lead to new types of platforms that eventually challenge the central role of stock exchanges. The Toronto Stock Exchange remains one of the largest equity exchanges in the world, but there may be an opportunity for Bay Street to more directly challenge Wall Street.
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APPENDIX

KEY EVENTS IN THE HISTORY OF NORTH AMERICAN STOCK MARKETS

1571 Original London Stock Exchange formed

1720 Bubble Act in England enacted

1789 US Constitution took effect

1792 Buttonwood Agreement signed establishing original New York Stock Exchange

1862 First British Companies Act passed

1867 British North America Act ratified creating modern day Canada

1911 First Blue Sky Law Passed in Kansas

1912 Manitoba passes the Sales of Shares Act

1928 Ontario passes the Security Frauds Prevention Act

1929 The London Stock Exchange plunges followed by a more severe crash on the NYSE

1932 The Pecora Commission is convened by the Senate Banking and Currency Committee

1933 The first Federal Securities Act is passed

1934 The Securities Exchange Act is passed creating the Securities and Exchange Commission
1938 The Maloney Act is passed amending the Exchange Act to allow for the NASD to be created

1940 Investment Company and Investment Advisers Acts are passed

1949 Canadian Supreme Court replaces the British Privy Council as the Court of last resort

1958 Plan floated to merge major Canadian Exchanges to create first electronic exchange in NA

1961 Congress passes a bill funding the Special Study of Securities Markets by SEC

1967 The NASD retains Arthur D. Little to determine the feasibility of a nationwide network

1969 Instinet and Autex are launched as the world’s first alternative trading systems.

1971 The NASD hires Chicago based Bunker Ramo to build a nationwide quotation network

1975 The SEC orders US exchanges to abolish fixed commissions

1978 The Intermarket Trading System was launched to link all of the US stock Exchanges

1979 Peter and Edward Bronfman succeed in hostile takeover of Brascan buying shares on Amex

1980 The State of Massachusetts prohibits its residents from investing in Apple IPO on Nasdaq

1982 Canada’s major provincial securities administrators end fixed commissions
1984 The Small Order Execution System (SOES) was created to automate retail orders on Nasdaq.

1985 The TSE establishes electronic links with Amex and Midwestern Stock Exchanges.

1986 UK has its Big Bang Deregulation of the Securities Markets.

1987 Canada’s Little Bang ends the separation of Commercial Banking and Securities.

1987 US stock markets crash leading to Nasdaq market makers refusing to pick up phones.

1989 The Rise of SOES bandits who learned to exploit the SOES system.

1990 The Federal Reserve increases exceptions to ban on securities underwriting for banks.

1994 Riegle-Neal Law passed allowing banks to expand freely across American states.

1996 National Securities Markets Improvement Act is passed.

1997 The Toronto Stock Exchange becomes first traditional NA exchange to go all electronic.

1999 Canada’s major stock exchanges sign Realignment Agreement.

1999 Glass-Steagall repealed by the Financial Services Modernization Act.

2000 The Toronto Stock Exchange demutualizes.

2001 The Toronto Stock Exchange purchases the Canadian Venture Exchange.

2006 Archipelago merges with NYSE.
2006 The Nasdaq registers officially as US stock exchange

2007 The NASD and the NYSE Regulation merge to form FINRA

2007 The Alpha Group is launched in Ontario led by Jos Schmitt

2008 The Toronto Stock Exchange merges with the Montreal Exchange creating TMX Group

2011 The London Stock Exchange and the TMX Group plan merger of equals

2011 The Alpha Group registers as an exchange

2012 TMX Group defeats LSE offer assuming control of TMX Group, Alpha Exchange and CDS

2013 Jos Schmitt leads newly created Aequitas NEO Exchange