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CASE STUDY

The Creation of TMX Group: Dramatic Change on the Canadian Stock Exchange Scene – 1999 to 2008

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This case was prepared by Amelia Young under the direction of Professor Joe Martin as the basis for class discussion rather than to illustrate either effective or ineffective handling of a managerial situation.

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# The Creation of TMX Group: Dramatic Changes on the Canadian Stock Exchange Scene – 1999 to 2008

#### **Introduction**

In June 2008, Tom Kloet was settling into his new office in The Exchange Tower and thinking about the challenges he would face as CEO of the newly-created TMX Group. Unlike previous heads of Canadian exchanges, Kloet was American. He grew up in Illinois, attended the University of Iowa and started his career with the Chicago Mercantile Exchange. From this starting point, he developed a deep specialization in derivatives markets, acquired through progressively senior roles in both the exchange and brokerage aspects of the industry. Although Kloet had worked abroad, most notably as the first CEO of the Singapore Exchange (itself created from a combination of the Stock Exchange of Singapore and the SIMEX), and the Canadian operations of Societé Generale's global brokerage unit FIMAT had reported to him, he had no direct work experience in Canada. Kloet was an outsider in other ways too; importantly, he had no ties to big Canadian banks that had enjoyed such close relationships with previous heads of major Canadian exchanges.

His new job offered many challenges. He was the head of a brand new organization. Only six months earlier, the Toronto Stock Exchange (TSX) and Montreal Stock Exchange (MX) had announced a merger. This action followed a pattern taken by many other countries in which local or regional exchanges had consolidated to create a single national exchange. (See Chronology of Events in Figure 1 on page 3.) Richard Nesbitt, the CEO at the time of the merger announcement and the driving force behind the transaction, had resigned to run a major Canadian investment bank at an inopportune time.

The merger was an important move for the TSX, which needed to get back into the rapidly-growing derivatives business after trading away that segment of the market to Montreal eight years earlier. However, the price of acquiring a successful franchise and satisfying special interest groups in Quebec had been high, and Kloet would have his work cut out for him to make the transaction accretive. First, he would need to understand his new environment, one that included dealing with the duality of Canada's history and culture. Second, he would need to to guide the organization amidst the rapidly changing stock exchange landscape, which was characterized by rapid globalization and the commoditization of key activities.

As Kloet settled into his office chair, he realized that he had more than enough issues to keep him occupied.

Note: All figures in Canadian dollars unless otherwise specified.

# **Figure 1** Chronology of Events

1997	Physical trading floor closes (first fully electronic major exchange in North America)			
1999	Realignment:			
	Vancouver, Alberta and Winnipeg exchanges become Venture			
	MX becomes the derivatives exchange for equity and fixed income securities			
	TSX becomes the senior common equity exchange			
September 1999	Stymiest becomes CEO			
April 2000	TSX demutualizes			
September 2000	Bourse de Montréal is created with the demutualization of the Montreal Exchange			
	IDA and TSX agree to create Regulation Services (RS)			
	Amsterdam, Brussels and Paris exchanges merge to form Euronext			
2001	TSE acquires CDNX and renames it TSX Venture Exchange			
December 2001	Euronext acquires Liffe (London International Financial Futures and Options Exchange)			
March 2002	RS opens for business			
November 2002	TSX IPO (first exchange to go public in North America)			
October 2003	Declares a special dividend of \$5 for each common share (payable on December 31)			
	since stock had more than doubled during the year (\$106 invested turned into \$247)			
February 2004	MX acquires 31% interest in the Boston Options Exchange (BOX)			
December 2004	Nesbitt becomes CEO			
2005	ME launches SOLA			
April 2006	NYSE IPO (via reverse takeover with Chicago-based Arca)			
July 2006	Australian Stock Exchange merges with Sydney Futures Exchange			
November 2006	MX prospectus is filed (trading commences March 2007)			
March 2007	March 2007 TSX announces its intent to launch a derivatives exchange (DEX) in March 2009			
April 2007	NYSE acquires Euronext to create the first global stock exchange			
September 2007	Alpha ATS is announced (launches in mid-2008)			
ecember 10, 2007	TSX + MX merger is announced			
January 7, 2008	Nesbitt resigns (Parkhill and Ptasznik become co-interim CEOs)			
January 2008	NYSE acquires Amex			
April 2008	AMF and Competition Bureau clear TSX + MX merger			
May 1, 2008	TSX + MX merger is completed			
June 2008	Tom Kloet is announced as new CEO			
	IDA and RS are merged to form IIROC			

#### The Role of Stock Exchanges

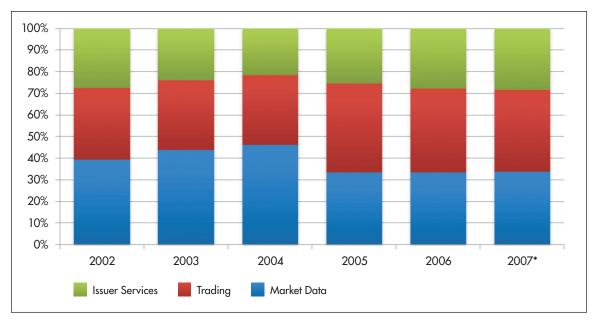
Stock exchanges are centralized markets where issuers raise capital and participants buy and sell securities. Exchanges are a central feature of many capital markets and serve as a key mechanism for transferring capital to places where it is needed and ensuring that the capital is priced efficiently. As such, exchanges play a strategically important role in the local, regional and national economy.

In fulfilling this function, exchanges typically generate revenue in three primary areas: (see Figure 2 for the relative size of each)

- 1. **Listings:** Public corporations list their securities on an exchange in order to gain ready access to capital to grow and sustain their businesses. Exchanges charge these issuers of securities listing fees for the privilege of having their shares trade. Traditionally, issuers automatically list on their local exchange. However, the listings business has become increasingly globalized and exchanges compete to attract new listings. Although listing fees do factor into the exchange selection process, other factors such as the reputation and stability of the exchange and the presence of peer companies are more important. For example, the TSX has been a leading mining exchange for many years, often listing more than half of the world's mining companies. Its solid reputation and the network of investors, bankers and lawyers that accompanies it, has created a sustainable, compelling value proposition for new mining concerns seeking to list on the TSX.
- 2. Trading: Exchanges create an environment that brings buyers and sellers together to access the best available price for the securities in which they wish to transact. This role emanates from the fact that in days past, buyers and sellers congregated on a physical trading floor at the exchange. Present-day exchanges create markets primarily through electronic trading systems. In this environment, the key success factors are reliability, rapid trade execution and transparency around bid/offer activity. The ability of buyers and sellers in a digital world to migrate across markets has created intense competition, and with it, a progression of trade pricing toward its marginal cost. While providing exchange functionality has high fixed costs, the marginal cost of an individual trade is near zero.
- 3. **Data:** The operation of trading platforms and listing services creates a wide range of data that is actively sought by numerous market participants. The packaging and analysis of this vast data repository represents a growing revenue opportunity for exchanges.

Establishing confidence in the security and efficiency of the market is a critical factor in the success of an exchange and creates a foundation for a virtuous cycle; Reputable, well-functioning markets attract investors, investors attract new listings, new listings generate more trading and the resulting liquidity enhances the efficiency of the market, thus attracting more market participants. Robust market activity creates more demand for data services. Put simply, liquidity begets liquidity and success begets success. For this reason, experts often describe exchanges as natural monopolies.

**Figure 2** TSX Revenue Mix – 2002 to 2007



<sup>\* 2007</sup> data represents 9 months to September 30

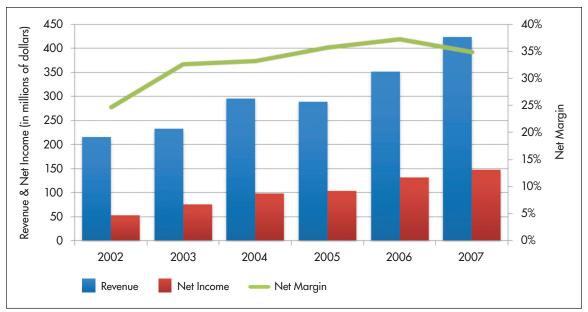
#### The Historic Role of the Toronto Stock Exchange

The Great Depression completely changed the landscape for Canada's stock exchanges. Prior to the 1929 market crash, the Montreal Exchange enjoyed its position as the major exchange in Canada. However, between 1929 and 1932 Montreal trading volumes declined by nearly 90% from over 25 million shares on an annual basis to less than 3 million. The decline was even sharper in Montreal than in New York. Although the Toronto exchange also suffered, it emerged from the debacle slightly larger than that of Montreal, something that would have been difficult to imagine in the 1920s.

In 1934 the Toronto Exchange consolidated its position when it merged with its key competitor, The Standard Stock and Mining Exchange and adopted the name Toronto Stock Exchange (TSX). By 1936 the TSX was the third largest in North America and in 1937 moved to a new facility on Bay Street, the first building in Toronto with air conditioning.

As the 20th Century progressed, the TSX went from strength to strength as Toronto took over from Montreal as the financial and commercial capital of Canada. (See revenue and profit growth in Figure 3.)

**Figure 3**TSX Revenue and Profitability – 2002 to 2007



Historically, trading occurred on the stock exchange floor with traders executing trades using manual, paper-based systems. In 1977 Toronto introduced the world's first computer-assisted electronic trading system (CATS), and in 1997 this city hosted the first fully-electronic major exchange in North America, after which its traditional trading floor was closed. By 1980, the TSX accounted for 80% of all equity trading in Canada, with a colossal annual trading volume of 3.3 billion shares worth close to \$30 billion. Three years later, it moved to its current location in the Exchange Tower.

In the mid 1990s, the Toronto Stock Exchange became the first exchange in North America to introduce decimal trading. In 1997, the TSX became the largest stock exchange in North America to choose a floorless, electronic (virtual) trading environment after its physical trading floor closed.<sup>2</sup>

#### The 1999 Realignment Agreement

In 1999, five exchanges were operating in Canada, each trading a fragmented mix of security types. These organizations were member-owned, and therefore the primary goal of these organizations was to keep trading costs low, an orientation manifested by a general lack of innovation and competitiveness in the way in which exchange affairs were run:

- Issuer services were poor, with very little marketing to attract new issuers or demonstrate value to existing ones;
- Response to data requests was slow;
- Infrastructure investments were put off in favour of offsetting commission fees for members.

As trading volumes and complexity increased, the cracks were beginning to show.

http://www.investopedia.com/articles/stocks/08/history-of-toronto-stock-exchange.asp, Aug. 9, 2013.

<sup>&</sup>lt;sup>2</sup> http://www.tmx.com/en/pdf/TMXHistory.pdf, Aug. 9, 2013.

Among the stakeholders, there was general opposition to the idea of funding the capital improvements needed to varying degrees at all five exchanges. Many also believed that if Canada did not make a bold effort to develop exchange-traded derivative products, someone else would. The development of interest rate products was particularly critical because these products play a central role in the determination of other prices used by the Bank of Canada and the banks to set interest rate policies.

A deal was struck to consolidate Vancouver, Calgary and later Winnipeg into a Vancouver-based Canadian Venture Exchange and to centralize large cap equities and derivatives trading in Toronto and Montreal, respectively. This arrangement would allow each exchange to specialize, increase liquidity and reduce costs for market participants, offering specific benefits for all parties:

- Toronto received a material boost to its trading volume, improving liquidity and increasing
  efficiency by leveraging existing infrastructure. Derivatives were not a substantial part of its
  business and index products were barely on the horizon.
- Montreal received an equalization payment to compensate for lost trading revenue, giving it
  a cash infusion that was needed to replace an aging trading system. It also became the sole
  shareholder of the Canadian Derivatives Clearing Corporation (CDCC), which would become
  an increasingly strategic asset in its efforts to develop proprietary new products.
- Focusing junior listings in one place on CDNX concentrated an ecosystem for early-stage companies that would facilitate their ability to attract investors and increase liquidity in a thinly traded market.

A reflection of the market climate at the time, with all of the stakeholders structured as not-for-profit entities, the Realignment Agreement did not have a finite term assigned to it; however, the lawyers advocated introducing some time limit, and the participants agreed to a 10-year term.

The limited understanding of derivatives by most stakeholders at the time sowed the seeds of another complication: the definition of a derivative was not entirely clear in the agreement. Even as late as 2008, TSX Group's Annual Information Form (AIF) described Montreal as "the derivatives exchange for equity and fixed income securities" while the MX 2008 proxy circular describes it as "the only standardized financial derivatives exchange in Canada." This ambiguity would become a source of conflict between the two organizations in the years ahead.

Although the realignment did yield short-term efficiencies for market participants, the agreement also had its detractors. Some believed that it sowed the seeds of regional entitlement and turf ownership. Others decried it as the product of an elite "old boys' club" intent on safeguarding individual interests, and they feared that diminished competition would reduce the incentive for each organization to innovate for the benefit of all market participants. There was evidence to support this concern, since competition between equity and futures exchanges (and their respective regulators) in the U.S. had produced important new structures, most notably Exchange Traded Funds (ETFs).

#### The Road to IPO

At the same time that Canadian exchanges were negotiating the realignment, the winds of change were blowing elsewhere. Second-tier exchanges in other parts of the world began to demutualize to become for-profit entities (Stockholm 1993, Helsinki 1995, Copenhagen 1996, Amsterdam 1997). Canada began to take notice in 1998 when Australia took its demutualization one step further and went public, listing its shares on its own exchange.

In the aftermath of the embarrassing failure of Bre-X<sup>3</sup> in 1997, it became clear that there was a huge reputational risk in a market where the key owners of the exchange directed most of its trades, financed most of the buyers and sellers, and controlled the management of the exchange. Many years later, Rowland Fleming, CEO of the TSX from 1995-1999, would write:

"The 1997 collapse of Bre-X forced all of us involved in Canadian financial markets to reacquaint ourselves with the single most important factor in successful capital markets: The reputation and integrity of an exchange is all that stands between success and investors fleeing to an alternative market with greater investor protection and transparency." <sup>4</sup>

While the idea of demutualization had emerged during the term of CEO Rowland Fleming, the job of selling this idea to the board fell to his successor, Barbara Stymiest, an industry insider and previous CFO of the investment dealer firm Nesbitt Burns. When Stymiest took over as CEO of the TSX in 1999, she quickly became convinced that in order to properly fulfill the exchange's mandate and meet the needs of all stakeholders, the exchange needed to have more of a competitive motive and to be more widely owned. This goal was accomplished and the exchange became a for-profit corporation in April 2000.

However, describing a company as a for-profit enterprise was not the same thing as acting like one. The years following demutualization marked a period of substantial cultural change in which the exchange was transformed from a sleepy, complacent cost-recovery business to a quality service organization and credible global competitor. Key initiatives included the replacement of trading systems to improve response times and reliable productivity enhancements that accompanied a new focus on operational efficiency and profitability. Some of the biggest changes came in the area of new business development. Additional services were added to enhance the value proposition for issuers. As well, relationship managers were hired to champion the value of listing, and new data products were created to provide the market with deeper insight into market liquidity.

With the transformation of its internal operations well underway, TSX management began to focus on opportunities to accelerate growth through acquisitions. In the wake of a rash of ethical and governance issues, CDNX was an obvious target and a deal was announced in March 2001. Regional interests were concerned that the merger would erode the access to capital that had made Vancouver a magnet for smaller enterprises, particularly mining companies. Consequently, the TSX made consistent efforts to reassure the market that these concerns were unfounded:

Bre-X was a Calgary based mining company that was involved in a gold mining scandal in Indonesia, one of the biggest stock scandals in Canadian history.

http://business.financialpost.com/2011/06/21/maple-bid-old-boys-club-is-back/

"The combined business will bring a unified approach to issuers, helping a company through each stage of its growth. The TSE's relationships with institutions and its international profile will immediately provide valuable exposure for Canadian venture companies." <sup>5</sup>

Strong market conditions and successful execution of the CDNX acquisition created ideal timing for TSX to go public in November 2002, making it the first North American stock exchange to do so. By 2004 management began to see the need to diversify TSX's product and service offering. A key first step was the acquisition of NGX, an electronic exchange for physical and derivative natural gas and electricity contracts. When it was announced in January 2004, the NGX deal brought to light emerging tensions arising from the realignment agreement. While the ambiguity around the definition of a derivative left the door open for the NGX transaction, bringing the deal to fruition required a special arrangement to resolve tensions with MX, including the payment of \$5 million.

The exchange had been moving from strength to strength during the initial years after the IPO. Between 2002 and 2004, revenue and net income increased at a compound annual growth rate (CAGR) of 17% and 36%, respectively, while the stock price rose 57%. In December 2004, Stymiest handed over the reins of the TSX to Richard Nesbitt, leaving him to oversee the next stage of the exchange's evolution.

#### **Changing Regulatory Context**

The successful functioning of capital markets relies on the trust and confidence of investors and industry participants. The primary job of the various provincial securities commissions is to safeguard this confidence by regulating all market participants — issuers, brokerage firms, stock exchanges and trading systems. In addition, brokerage firm business and trading conduct is also overseen by self-regulatory authorities (SROs). Historically, the primary SROs were the individual stock exchanges and the Investment Dealers Association (IDA). The regulatory activities of the exchanges consisted primarily of the following:

- Establishing disclosure requirements for listed companies: Beginning in 1958 the TSX
  required listed companies to file statements disclosing any change that might affect the price of
  its shares. This was an important part of maintaining the quality of their marketplaces and the
  confidence of investors.
- Surveillance of brokers and investors: This involved monitoring markets for manipulative trading practices and violations of marketplace trading rules (e.g. trading on non-public information, front-running, manipulating trading activity by causing others to act on false information).

However, as the exchange evolved into a for-profit corporation, a growing chorus of stakeholders believed that these oversight functions were fundamentally at odds with a profit orientation. A decision was taken to centralize regulation of the junior and senior equity exchanges nationally in a separate entity and in 2002, Market Regulation Services (RS) opened its doors. RS's mandate was to administer the exchange's market conduct and trading requirements and to monitor and enforce compliance with those requirements by the participating organizations. In 2008, RS and the IDA merged to form the

<sup>5</sup> TSE press release.

<sup>&</sup>lt;sup>6</sup> TSX IPO Final Prospectus, November 2002, p. 41.

Investment Industry Regulatory Organization of Canada (IIROC). The ability of this new SRO to have authority over the full scope of its members' activities is broadly considered to be an advantage of the Canadian capital markets structure. By contrast, every exchange in the United States oversees itself.

Although regulation of common equities was streamlined during this period, the oversight of derivatives remained highly fragmented. The MX was still responsible for the regulation of derivatives trading under the oversight of the Autorité des Marchés Financiers (AMF). As derivatives became an increasingly important part of the capital markets landscape, the potential for market manipulation grew and the fragmented regulation of cash and derivatives markets became an increasingly important issue. This was heightened by the fact that the bulk of derivatives activity did not even touch exchanges, but rather, took the form of over-the-counter (OTC) transactions between financial institutions. The highly customized nature of this market made it a key profit centre for the banks, but its opaqueness made it difficult for regulators to assess an institution's exposure. While this was not a major issue at the time, circumstances would change dramatically within a few short years.

After the 1999 realignment agreement, government and regulators (particularly in Quebec) became increasingly uncomfortable with the lack of competition in the exchange industry and took steps to reduce barriers to entry. They welcomed competition on two fronts: foreign players and Alternative Trading Systems (ATS).

#### **Foreign Entrants**

Seeking to regain the ground perceived to have been lost during the realignment, the Quebec government lobbied Nasdaq, the New York-based exchange, which specialized in technology stocks, to establish a Canadian office in Montreal. Nasdaq Canada opened for business in November 2000, and by the end of the year 142 companies were listed on the exchange. While virtually all of these were interlisted on TSX, Nasdaq's technology focus represented a significant competitive threat to the TSX during the dot-com boom. The subsequent collapse of the technology sector ensured that Nasdaq Canada never amounted to much, and the Montreal office was closed in late 2004. However, the experience taught the TSX a valuable lesson about foreign threats — and the longer-term strategic implications of the realignment agreement.

#### **Alternative Trading Systems**

On December 1, 2001, Canadian securities regulators approved the introduction of Alternate Trading Systems into the Canadian marketplace. U.S. markets had been exposed to these systems long before. However, they remained virtually unregulated. The objectives of this new regulation were to provide participant choice, improve price discovery and reduce execution costs. It would take several years before ATS would garner significant market share in Canada, and many would argue that the model was flawed in a small market. In addition to the obvious fragmentation of liquidity, ATS regulations imposed additional connection costs on market participants that offset at least partly the potential benefits of lower transaction costs. None of the players are believed to have ever been profitable.

#### The Montreal Exchange to 2006

The Montreal Stock Exchange was officially established in 1874 after 40 years of securities trading activity at the Exchange Court in Montreal. Until the 1929 stock market crash, Montreal was home to the leading exchange in Canada. After a century of operations, the MX introduced Canadian investors to the use of derivatives to manage portfolio risk; in 1976 it became the first Canadian exchange to list equity options, followed in 1982 by the establishment of the first futures market. This leadership position in derivatives was a key factor in the decision to make Montreal the only standardized derivatives exchange under the 1999 realignment agreement. The exchange demutualized in September 2000, becoming a for-profit corporation, and this structure endured until MX publicly listed its shares in March 2007.

The explosive growth and rapid globalization of derivatives trading necessitated significant technology investments. MX was determined not to suffer the same fate as the London International Financial Futures Exchange (Liffe), which had lost its Bund<sup>7</sup> business when the Germans and Swiss created Eurex, the electronic exchange. MX moved quickly to migrate all derivatives trading to an electronic platform and closed its physical trading floor in December 2001. The next generation of that electronic platform, known as SOLA, became a strategic asset that MX went on to license to Boston, London and Oslo. This capability was critical because it gave MX access to liquidity in major money centres around the world.

Although the MX demonstrated strong growth in trading volumes in the years that followed, the bulk of its activity was concentrated in two key products: BAX and CGB, interest rate futures contracts based on 3-month bankers' acceptances and 10-year Canada bonds, respectively. Both were among the most liquid futures in their respective classes. However, efforts to launch new products had met with limited success, largely because acceptable proxies had already been established by market participants in the U.S. For example, because the largest Canadian equities tended to be interlisted on NYSE or Nasdaq, options trading on Canadian equities was largely done south of the border. Similarly, while Canada was a leading energy producer, the New York Mercantile Exchange (NYMEX) had established an early lead in energy futures. MX's experience provides a valuable lesson in the power of network effects in the exchange industry: because liquidity begets liquidity, it is extraordinarily difficult to unseat an established leader.

Another factor also contributed to the muted development of the derivatives market in Canada. While basic U.S. licensing rules authorize brokers to trade derivatives, Canada requires a separate certification to do so, allowing industry professionals to be active without any derivatives knowledge. MX's 2006 annual report observed the following on this issue:

"Canadian options trading is a fraction of the levels in the U.S. and European markets. Canadian brokers and investors need information about the use of options for risk management and portfolio optimization — and the convenience of trading MX options."

Regardless of the challenges that MX faced in expanding the breadth of derivatives activity, its strong earnings growth trend continued, laying the foundation for a public listing in 2006. The shares commenced trading in March 2007.

Bunds are the German equivalent to U.S. treasury bonds.

#### Emerging Threats - 2004 to 2006

By the time Richard Nesbitt took the helm as CEO of the TSX in December 2004, the global trading landscape had changed dramatically and several new threats had emerged:

#### **Competition for Listings**

In their persistent search for the lowest cost of capital, issuers were increasingly exploring listing opportunities in multiple jurisdictions, and often they chose to interlist in multiple markets. At the end of 2008, a total of 266 Toronto issuers were interlisted. (Among these, 83 were on NYSE, 44 were on NASDAQ, 35 were on AIM, and 22 were on ASX). While only 23 Canadian issuers bypassed TSX to list solely on foreign markets, the writing was on the wall: issuers knew there were alternatives to the TSX and their expectations of the value for their listing dollar were increasing. As regional exchanges continued to merge into major national platforms, the threat represented by foreign competitors was continuing to increase. Globalization ultimately contributed to price compression. The financial impact of this trend was exacerbated by the fact that large issuers (the largest 10 issues comprised 30% of all trading activity in 2006) were the most likely to interlist.

Competitive threats were also brewing at the other end of the market cap spectrum as the Canadian National Stock Exchange (CNSX) tried to carve out a niche serving micro cap companies. Privately owned by a small group of shareholders, the mandate of CNSX was to reduce the regulatory and administrative burden for micro caps, presenting a direct threat to the TSX Venture exchange.

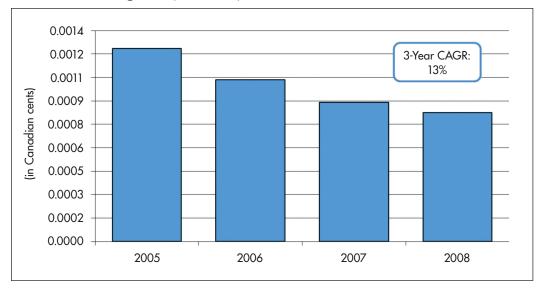
#### **Compression of Trading Fees**

Three key factors were conspiring to compress trading fees: foreign competition, high frequency trading <sup>8</sup> (HFT) and alternative trading systems (ATSs).

The ability of buyers and sellers in a digital world to migrate across markets meant that the TSX increasingly had to compete for trading activity with exchanges all over the world. The high fixed and low marginal costs of electronic trading gave players with large transaction volumes (high fixed cost coverage) a strong incentive to put pressure on smaller exchanges by reducing the unit price of trading. With so many of its key stocks interlisted in the U.S., the TSX saw that the profitability of its own trading business was under substantial threat. (See Figure 4 for average revenue per trade data.)

As of 2009, studies suggested HFT firms accounted for 60-73% of all U.S. equity trading volume, growing from relative obscurity only five years earlier.

**Figure 4**TMX Unit Trading Fees (Per Share)



The nature of trading was changing. What started out as relatively straightforward basket trading had evolved into high frequency trading (HFT). The strategies of HFT focused on executing large volumes of low value trades, aimed primarily at capitalizing on arbitrage opportunities. Low transaction fees were fundamental to the success of these strategies, and since they represented an increasing proportion of total liquidity, it was critical for exchanges to offer competitive fees to attract them.

This was easier said than done because continued technological advances were reducing barriers to entry, facilitating the establishment of entirely new marketplaces and trading mechanisms. These ATSs provided market participants with the ability to electronically trade securities outside of traditional exchanges. Examples included Liquidnet, Pure Trading, TriAct MATCH, Blockbook, Omega, Instinet and Chi-X. Most notably, in the autumn of 2007 a group of leading Canadian banks and investment dealers announced its intention to form an ATS called Alpha in order to trade TSX-listed securities. Regulators were highly supportive of this increased competition and were believed to be courting other American ATSs to come to Canada.

In order to better align with the prevailing model of other marketplaces, the TSX switched from a value-based to a volume-based fee structure in July 2006. While it was hoped that this change would attract more liquidity to the market, in the absence of such an increase, the fee change was expected to reduce trading revenue by \$7 to 10 million — a significant proportion of the \$134 million in total trading fees in 2007. Growing demand for data products stemming from the increasingly complex trading environment was also expected to further offset compressed trading fees.

#### Growth of other asset classes

Unrelated to the compression of trading fees, other asset classes were taking share from cash equities as the pool of global capital increasingly shifted toward new asset classes. The rise of structured debt products and private equity created new opportunities for issuers to access capital without listing on a public exchange. In addition, derivatives of all sorts were growing more rapidly than equities. Moreover, complexity was increasing due to the growing interplay between equities and derivatives in cross-asset class trading strategies<sup>9</sup>, making the ability to trade physicals and derivatives at the same time an increasingly valuable feature. Being solely focused on cash equities, the TSX was not exposed to these fundamental sources of industry growth.

As a result of all of these trends, two of the exchange's three lines of business were under threat. It became clear to TSX management that action was needed.

One option that was considered was entering the U.S. market. Nesbitt, and Stymiest before him, had explored the possibility of acquiring a regional exchange south of the border. An opportunity emerged in 2006 when Amex was put on the block. Although vast, the U.S. market was extremely competitive and management decided that the purchase of a regional exchange was not the right foundation for a successful U.S. entry. Moreover, TSX executives feared that an initiative to acquire Amex could lead to the unintended consequence of "poking the bear" and could motivate larger U.S. competitors like Nasdaq or NYSE to enter the Canadian market. There was strong consensus among TSX management and the board and that it was more strategically sound to focus first on shoring up their position at home.

#### The Road to Merger

The industry fundamentals made it clear by 2006 that the TSX needed to get into the derivatives business: it was a faster growing market than equities and touched most of the same customers. How to enter the market was a classic question of build vs. buy, but with nearly three years remaining on the 10-year realignment agreement, its options were limited.

Under the "build" option, the TSX could begin working to establish derivatives capabilities with a goal of being prepared to hit the ground running with a full launch in 2009. This option would allow it to start with a clean slate, unencumbered by legacy systems or political constraints. Of course, competing with MX would also likely lead to costly price and talent wars. Moreover, given that the Canadian market was highly concentrated in only two contracts, future growth would likely have to come from product innovation, an endeavour that Montreal had repeatedly shown to be challenging. TSX's greenfield entry into the derivatives business was further challenged by the need to secure clearing capabilities, an area where Montreal had an advantage because of its ownership of CDCC.

In contrast, a takeover was likely to be expensive in other ways. The high growth rates of derivatives markets translated into lofty multiples for the exchanges that traded them, indicating that MX was likely to command a hefty price. It was also politically perilous and could leave the combined organization with significant constraints around its future activities in Quebec, not to mention cultural challenges.

The Growth of High-Frequency Trading, Bank of Canada, June 2011, p. 6.

NYSE's April 2006 bid for Euronext<sup>10</sup> was another sign of the times. In addition to creating the first truly global cash equity platform, this gave NYSE its first significant exposure to derivatives in the form of Euronext's ownership of the Liffe. (See Figure 5 for a summary of major exchange mergers.)

**Figure 5**Major Exchange M&A Activity – 2006 to 2008

Date	Acquirer	Target	Price	Status
May 2006	Deutsche Boerse	Euronext	\$11.1B	Rejected by authorities due to concentration of European derivative markets.
June 2006	NYSE	Euronext	\$10.2B	Completed. First transcontinental merger, which gave NYSE futures capabilities from Liffe.
November 2006	Nasdaq	LSE	£2.7B	Rebuffed by LSE board.
May 2007	Nasdaq	OMX	\$3.7B	Completed. Enhanced Nasdaq's derivatives and technology capabilities.
September 2007	ICE	Chicago Board of Trade	\$11.7B	Beat out by CME.
September 2007	Chicago Mercantile	Chicago Board of Trade	\$11.9B	Completed. Created world's largest futures and options market.
October 2007	Nasdaq	Boston Stock Exchange	\$61M	Completed. Deal excluded Boston Options Exchange operated by MX. Gave Nasdaq clearing license.
November 2007	Nasdaq	Philadelphia Exchange	\$652M	Completed. Gave Nasdaq third largest options exchange in the U.S.
January 2008	NYSE	Amex	\$260M	Completed. Expanded options capabilities and ETF listings.

In the final analysis, a merger between the TSX and MX made too much sense to ignore. Management of the TSX ultimately decided on a two-pronged approach of initiating negotiations with MX. It used the launch of its own derivatives business as both a hedge — and a credible threat — in the event that it was needed to facilitate merger negotiations.

In March 2007, the TSX announced its intention to partner with the International Stock Exchange (ISE) to launch a derivatives exchange in March 2009, concurrent with the expiry of the realignment agreement. DEX, as it was named, was to list options, futures and options on futures based on interest rates and currencies, TSX-listed equities and a range of TSX and other indices. A few months later, TSX announced further progress on this initiative, securing exclusive use of the S&P/TSX equity indices beginning in 2009. Interestingly, in its February 2009 review of the deal,

Euronext was formed in 2000 following the merger of the Amsterdam, Brussels and Paris exchanges in response to harmonization of the EU financial markets.

the Competition Bureau would report:

"there were no meaningful business plans generated by TSX Group or ISE for the creation of DEX, indicating that the establishment of DEX was by no means assured." <sup>11</sup>

While the DEX initiative was a key pillar of the TSX's offensive strategy, it remained vulnerable to potential alliances that MX might pursue. Although Nasdaq had shuttered its Canadian offices in 2004, the memory of its past participation in the Quebec market remained. It was well known that the Quebec government had been open to a Nasdaq re-entry into the market, and the TSX feared that an alliance between MX and Nasdaq might be MX's answer to TSX's plans to enter the derivative market when the realignment agreement expired.

In the fall of 2006, TSX CEO Richard Nesbitt and MX CEO Luc Bertrand entered into initial discussions about the possibility of TSX taking a minority interest in MX above the 10% limit. These discussions stalled because Montreal was focused on its exchange listing and strategic arrangements with NYMEX. Nevertheless, Nesbitt was already convinced that the purchase of MX was an opportunity that the TSX could not afford to miss.

#### The Transaction

Formal merger discussions were attempted again in May 2007, but the mood was tense. The MX's Bertrand wanted to make a deal but key members of his board were not supportive, believing that MX was fine on its own. Several meetings took place between the CEOs and key board members from both sides and progressed to the preparation of a draft term sheet. The key terms of that proposal were an "at market" all-share merger of the companies without any premium. Discussions ultimately broke down after a few weeks, primarily due to a lack of agreement about the combined entity's governance model. No further merger discussions would occur between TSX and MX until November.

In September 2007 a U.S. exchange contacted the MX, on an unsolicited basis, about its interest in exploring a potential acquisition. Discussions continued for two weeks and were ultimately discontinued by the U.S. exchange for reasons unrelated to the merits of the proposed transaction. After the discussions were terminated, the MX board undertook a formal review of its strategic alternatives in light of the consolidating exchange industry and anticipated competition from the TSX at the expiry of the realignment agreement. Judging by the fact that MX shares were trading substantially below their IPO value, the market did not appear to believe MX's prospects were particularly bright.

After its initial attempts to enter merger discussions were rebuffed, TSX management and the board regrouped to consider alternatives that would address the concerns and priorities coming from Quebec. The TSX team made a substantive effort to offer meaningful concessions to Quebec, relying extensively on the guidance of former Quebec Finance Minister Raymond Garneau, who was a TSX director from 2003 to 2009. On November 2, 2007, the team submitted a new formal proposal, offering \$36.82 per share along with assurances that certain activities would be maintained in Montreal. These assurances became known in the transaction documents as the "business continuity covenants."

<sup>11</sup> Technical Backgrounder, Merger of TSX Group Inc. and Bourse de Montréal Inc., February 24, 2009.

In an effort to maximize value for its shareholders and for the province of Quebec, MX solicited expressions of interest from three other exchange groups. Two of the three submitted proposals for approximately \$37 per share, but offered substantially less in the way of business continuity covenants. The MX board directed management to continue discussions with the TSX on an exclusive basis, but with a view to improving price and business continuity covenants. Its key priorities were to ensure the permanence of MX's derivatives expertise and to keep the associated value-added employment in derivatives and IT that resided in Montreal.

These developments sparked significant controversy in Toronto. While most stakeholders thought the deal was necessary, many were concerned that the price was simply too high. Others also believed Toronto could succeed in building its own derivatives franchise.

Agreement between the parties was finally achieved on December 10, 2007. It was to be a cash and stock deal for a total value of \$1.3 billion, which represented a 34% premium to the pre-announcement share price. Other key terms were as follows:

- Change of the company name from TSX to TMX to reflect the inclusion of the Montreal operation
- 25% of directors had to be from Quebec
- MX and head offices, derivatives trading operations and most senior executive officers would reside in Montreal
- Luc Bertrand would assume the role of Deputy CEO
- A restriction preventing any entity from exercising control over more than 10% of the
  combined company without obtaining the prior authorization of the AMF, mirroring the
  authority the OSC had over Toronto.

Although certain head office jobs in Montreal would be preserved, the ability to consolidate certain operations in Toronto was critical to the realization of synergies between the two organizations. Foremost among these was the consolidation of data centres. These centres represented a significant expense because disaster recovery protocols for exchanges required them to run "hot hot" — essentially maintaining two sites that were fully live and ready for use at any time. Moreover, consolidating data centres was also a source of important operational benefits to the exchange's biggest customers. Huge U.S. trading clients like Susquehanna and Knight Trading Company located servers within the data centres of key exchanges to maximize speed and reliability. Consolidation would mean they would only need half as many connections, which represented an important advantage for a small market like Canada.

#### The Way Forward

In the wake of the merger announcement, TSX management and directors believed that they had helped the company achieve an important milestone. Despite the hefty premium that was offered, the market's reaction to the deal was generally positive. Moreover, the parties had also succeeded in fostering a positive working relationship between TSX stakeholders and the AMF, and they were confident the deal would be approved by the Competition Bureau.

The emerging credit crisis would have an unexpected early impact on the transaction; it was the catalyst for then-CEO Richard Nesbitt's resignation to run a major Canadian investment bank. Tom Kloet was taking the reins at what was sure to be a turbulent time. Forging relationships with multiple regulators and integrating different cultures were immediate priorities. Kloet was an American with no direct Canadian work experience, and the success of this initiative would require an understanding of the duality of Canada's history and culture.

As with any merger, it was important that management realize the projected synergies. Because the exchanges had no product overlap, the bulk of the benefit was expected to come from cost savings; the \$25 million estimated reduction in corporate, premises, data centres and other technology costs represented roughly 10% of the combined companies' expenses. While the business continuity provisions in the agreement seemed reasonable, it was possible that certain concessions could prove to be problematic. All of this would be harder to achieve in what was clearly a slowing economic climate.

#### **Questions**

- 1. Did certain conditions make the TSX and MX merger deal a foregone conclusion, and if so, what were they?
- 2. How was the value proposition of exchanges changing and evolving during the period leading up to the merger? What challenges would that pose for the new CEO?
- 3. What role did the changing structure of regulation play in the lead-up to the merger of the Toronto and Montreal exchanges?
- 4. What would Tom Kloet need to understand about working in a Canadian exchange environment that he may not have encountered elsewhere? What would he have to do to keep Luc Bertrand and the Montreal team on side in the new environment?
- 5. What types of synergies should Kloet expect to extract from the combination of TSX and MX? How would the opportunity differ from what had been available from the earlier mergers?
- 6. Would the merger enhance or hinder the ability of the combined exchange to compete on a global stage?

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