

An Anatomy of Stock Exchange Mergers with a Case Study of the LSE-TMX Merger

Patrick Philips
Royal Bank of Canada

Alex Faseruk
Memorial University of Newfoundland

Ian Glew
Memorial University of Newfoundland

This study reviews the literature surrounding the economic and strategic financial implications of stock exchange mergers. It examines these tenets in a case study of the failed merger negotiations between the London Stock Exchange (LSE) and the TMX Group. The LSE, as the fourth largest stock exchange in the world, is one of the oldest and most prestigious stock exchanges. It has evolved from a coffee house in its beginnings to a cyber cafe today. The TMX Group holds extensive assets in Canada including its crown jewels, the Toronto Stock Exchange (TSX) (the seventh largest exchange in the world), the TSX Venture Exchange and the Montreal Exchange. Had the merger been successful the merged exchange would have been the third largest exchange with a market presence, products and centers of excellence across many national boundaries.

INTRODUCTION

As recently as two decades ago, stock exchanges mergers were not common, but in the current economic climate, these unions are quickly becoming a global phenomenon. Companies seeking to enlarge their market presence benefit from listing on a domestic exchange and in a foreign market(s) through arrangements that cross international borders. In 2006, a frenzy was witnessed in mergers and acquisitions in various exchanges. The Chicago Mercantile Exchange acquired CBOT Holdings Inc. for \$11.1 billion. NYSE Group paid \$10.2 billion for Euronext NV and also purchased Archipelago Holdings for \$2.6 billion in order to enable entry into electronic trading. Lastly, NASDAQ bought a 15% stake in the LSE.

The following year also proved to be very active. In 2007, NASDAQ continued its acquisition activity from the previous year by purchasing Sweden's OMX AB for \$4.1 billion. OMX bought Dubai International Financial Centre for \$3.4 billion. NYMEX Holdings was acquired by CME Group for \$7.56 billion while NYSE paid \$460 million for 20% of India's Stock Exchange. With the slowing of economic growth in the recession of 2008 so did the merger and acquisition activity in financial exchanges. Bovespa Holding SA, which administers Brazil's Sao Paulo Stock Exchange, merged with Brazil's main derivatives market BM&F in a \$10.3 billion transaction. The only other merger activity of significant note

was Singapore Exchange's failed bid to acquire ASX Ltd., which controls the Australian stock market, at a proposed acquisition price of \$8.3 billion. The latter deal was rejected in the target's domicile, citing national interest.

In order to provide a context for stock exchange mergers, this paper examines the underlying reasons for mergers of financial institutions including an overview of the benefits and challenges posed in the merger process. Stock exchanges are unique business entities as often there is one dominant exchange per country. The main exchange enjoys a large market share, is very lucrative, and readily conforms to the regulatory requirements of the host nation. In order to grow, geographical expansion beyond the host's national borders is a common goal. Liquidity, growth and cost impact are discussed as the most salient benefits to encourage expansion. To connect the theory with actual exchange mergers that have taken place, this study reviews some of the more recent international stock exchange mergers.

The final sections focus on the events surrounding the acquisition of the Toronto Stock Exchange group (TMX). The merits and weakness of the then proposed TMX-London Stock Exchange (LSE) merger are presented, as well as the details of the initially hostile bid to acquire the TMX by the Maple Acquisition Group (Maple). This chronology is an important element of this case study. Due to the significance of both the LSE and TMX in world financial markets, the merger/acquisition decision had a significant impact on the future of global trading. Eventually, the LSE bid was rejected and the Maple bid accepted.

STOCK EXCHANGE MERGERS: LITERATURE REVIEW

Definition of Stock Exchanges

In order to understand the anatomy of a stock exchange merger, it is beneficial to examine an overview of the composition of a stock exchange. According to Kokkoris and Olivares-Caminal (2007) a stock exchange is a regulated capital market in which equity and debt instruments are issued and traded in primary and secondary markets. The exchange might also be viewed as a market, a firm or a broker-dealer.

As a market, an exchange has several responsibilities according to Di Noia (1998:11). The exchange must:

- Provide facilities for which the purchasers and sellers can execute trades.
- On a continuous basis, provide information related to the price in the form of buy and sell quotations.
- Participate in price discovery through its trading procedures and rules.
- Decide whether to have a formal market-maker structure or be a single price auction.
- Centralize trading for execution reasons.
- Demonstrate the creation of liquidity through the entry of quotations on a regular basis so that purchasers and sellers can execute their orders on a consistent basis.

The view of a stock exchange from a firm's perspective is characterized in terms of the production of a good, which in this case is the trading of securities. This trading can include the formation of prices, as well as the standardization of the goods being exchanged (Kokkoris and Olivares-Caminal, 2007). For a stock exchange, the production cycle consists of the listing, trading and settlement (Di Noia, 1998). Further, the firm's view holds the exchange responsible for satisfying all interested parties, such as intermediaries, issuers and investors. In many cases the exchanges' customers can also be the owners of the listed firms. In such a situation the price of stock exchange products (i.e. trading fees) impact shareholder value and the exchange's profitability. The third view of an exchange is that of a broker-dealer. In this case, the exchange acts as an intermediary among other intermediaries for purposes of assembling the trading orders and executing them (Kokkoris and Olivares-Caminal, 2007).

In addition, stock exchanges are responsible for developing and enforcing the criteria which listed companies must follow, while maintaining an efficient and transparent operation. Regulation is a

necessary aspect of a stock exchange that provides confidence to investors. As a regulatory body, Kokkoris and Olivares-Caminal (2007:465) contend that a stock exchange must:

- Provide clarity among various objectives.
- Operate independently and be responsible for its actions.
- Have the resources necessary to complete the assigned tasks.
- Have the ability to enforce its power when necessary while having appropriate rules in place.
- Be conscious of costs.
- Develop a structure that is representative of the industry it is regulating.

REASONS FOR MERGERS OF STOCK EXCHANGES

Mergers and acquisitions are not new, can be quite common, and tend to occur in cycles. While there is often no single motivation to explain merger and acquisition behavior by firms, the more salient reasons would include: economy of scale; economy of scope; increased revenue or market share; cross-selling; cost reduction including taxation; geographical or other diversification; resource transfer; vertical integration (upstream or downstream); horizontal integration; employee or social capital acquisition; and absorption of similar businesses to reduce competition. These motivations all revolve around the realization of some synergy that would justify the purchase. Alternatively, mergers may result from less noble intentions related to the principal-agent concerns, such as managerial hubris, empire-building, and management compensation following successful mergers.

Past merger and acquisition activity in businesses occurred in cycles or waves. Harford (2005) and Rhodes-Kropf, Robinson, and Viswanathan (2005) provide some explanation towards causes of this pattern of activity. Lamoreaux (1985) outlined the first wave of merger activity that occurred in the United States in the so-called Great Merger Movement 1895-1904, when small firms with little market share consolidated with similar firms to form large, powerful institutions that dominated their markets. Companies formed during that time, such as DuPont, US Steel and General Electric were able to maintain dominance for long time periods. Others, such as International Paper and American Chicle, saw erosion in their market share. The six waves of merger and acquisition activity that have taken place are [adapted in part from (Weston, Chung and Hoag, 1990)]:

- 1895 – 1904 First Wave Horizontal mergers
- 1916 – 1929 Second Wave Vertical mergers
- 1965 – 1969 Third Wave Diversified conglomerate mergers
- 1981 – 1989 Fourth Wave Congeneric mergers; hostile takeovers; Corporate Raiding
- 1992 – 2000 Fifth Wave Cross-border mergers
- 2003 – 2008 Sixth Wave Shareholder Activism, Private Equity, LBO

Stock exchange mergers incorporate elements from several of these waves. For example, two exchanges coming together can readily become larger through being involved in the same business (horizontal merger-first wave), but can also improve the product mix by being involved in option trading with different technologies and platforms (vertical merger-second wave) and additionally, can cut across international boundaries (fifth wave). When stock exchanges merge, Kothari (2008) argues that the benefits can be significant for the exchanges, the listed companies, and the investors.

Benefits to the Stock Exchange

For the exchanges being merged, there are opportunities to take advantage of the synergies that may be created. For instance, the transition by stock exchanges to electronic trading systems represents one of the greatest opportunities to reduce costs for individual exchanges and these savings are potentially greater when two exchanges merge. As trading volumes increase, there has also been a tendency for those exchanges to increase their investment in new technologies that have the ability to satisfy the demands of sophisticated investors. Although the cost to implement such technology into trading systems can be substantial as trades increase, the marginal cost per trade is reduced as argued by Aggarwal and Dahiya

(2008). An example of this type of savings was the streamlining of operations that occurred when the NYSE merged with Euronext in 2006. The total savings were reported to be \$375 million. This benefit was accomplished by integrating three cash trading systems and three derivatives systems into single global cash and derivatives platforms. As well, 10 data centers were reduced to four and the four existing networks were reduced to one. These cost savings and synergies are outlined in length by Aggarwal and Dahiya (2006).

An exchange merger also allows the opportunity for a greater number of financial instruments to be offered through one entity. In the case of the NYSE-Euronext merger, the NYSE was able to add a derivatives platform to its existing breadth of products, thereby improving its product mix. In the past, the Securities Exchange Commission (SEC) had been opposed to exchanges offering the trading of both equities and derivatives as it represented an unfair advantage from an informational perspective. This opposition limited the growth opportunities for exchanges as documented by Kothari (2008).

In effect, the stock exchanges had one of two focuses when deciding to merge. In the first case, the exchanges focused their attention on benefiting from economies of scale through the amalgamation of diverse geographic markets. Kokkoris and Olivares-Caminal (2007) argue that exchanges can otherwise direct their attention to offering a diverse set of products to customers through the combination of different functions, such as the offering of equities and derivatives.

Benefits to the Listed Firms

For listed companies, Chemmanur, He & Fulghieri (2008) outline how the impact of a merger can be advantageous. The decision for a company to list on an international exchange in addition to its domestic exchange is based on the desire to reduce the cost of raising capital. These costs include the direct costs of listing fees, as well as the indirect costs related to compliance with international regulation. Dual listing can also result in attracting more cost-conscious investors seeking greater transparency. It can be argued that the information available to investors would be more reliable and exact under a dual listing framework, since the more stringent stock exchange would provide investors higher quality information.

Liquidity is important for firms aiming to control their cost of capital. Where the trading volumes are high, a particular stock becomes easier to sell with a reduced bid-ask spread. This also assists those investors who desire to sell their stock quickly and efficiently. In analyzing three U.S. regional exchange mergers, Nielsson (2009) shows that bid-ask spreads were reduced reflecting greater liquidity. This article identifies several reasons why firms may benefit. Liquidity increases with the number of potential investors. A deeper market may mitigate the impact of large, individual trades on future price movements. Enhanced liquidity reduces information and non-monetary transaction costs (i.e. cost reduction related to combining of trading systems). Direct costs can also be reduced which may entice investors to increase their trading activity (Nielsson, 2009). Liquidity can be viewed as the ability of the market to execute orders in a timely manner without having noteworthy impacts on prices as argued by Kokkoris and Olivares-Caminal (2007). Thus, liquidity is improved as the market uncertainty is diminished, allowing investors to trade more actively.

Nielsson (2009) further relates the impact of liquidity to various firm characteristics, such as foreign exposure, firm size and listing location. The primary measure of liquidity chosen as the response variable is turnover (the number of shares traded in a firm compared to the volume of outstanding shares). Nielsson advises that for those firms with high visibility (foreign sales or assets) outside the domestic market, there is a greater chance that foreign investors will invest in that firm. Thus, for those firms with foreign exposure, this turnover measure will increase. For those firms who do not have visibility in foreign markets, a case can be made that turnover is relatively higher due to the likely reduction in transaction costs and a relatively higher degree of trading volume when compared to pre-merger activity.

In considering firm size, Nielsson (2009) hypothesized that turnover will increase to a greater degree for larger firms for several reasons. One reason is due to the familiarity that investors have with larger firms which may entice them to invest in those firms rather than smaller companies. As well, investors tend to have more qualified information on larger cap companies due to the greater amount of coverage

by analysts. Larger firms would not be impacted by the visibility gained by smaller firms, since influential investors primarily trade in the largest firms.

From a listing location perspective, Nielsson (2009) postulated that turnover should increase for those firms that were originally small and more highly regulated. With size, it is expected that the market with the highest potential for growing its investor base will be rewarded with the greatest increase in liquidity. Those markets, with previous restrictive regulations, have the potential for a greater increase in trading volume as restrictions are removed.

Benefits to the Investor

For investors the greatest benefit to having stock exchanges merge is the opportunity to trade different financial instruments in different geographic markets with lower transaction costs. Merged exchanges that operate fewer trading platforms can simplify trading and provide a better economic outcome. As discussed previously, increased liquidity results in transparent pricing and efficiency. Similar to the listing companies, investors also benefit from having a broader selection of financial instruments, allowing greater risk reduction through effective diversification (Kothari, 2008).

HISTORICAL OVERVIEW OF STOCK EXCHANGE MERGERS

Impact of Demutualization

Although stock exchanges began to exhibit increased trading volume and market awareness as a result of security market deregulation in the Big Bang era of the mid-late 1980s, the merger of stock exchanges in recent decades has been largely due to the demutualization of individual exchanges. The trend to becoming a publicly listed exchange has resulted in almost 70% of the world's total stock market capitalization being listed on public exchanges. Until recently the majority of exchanges were not-for-profit organizations owned by members.

One of the major factors that led to the shift to demutualization has been the conflict that has resulted between existing owners of 'mutual' exchanges. As the financial world became more sophisticated and complex, issues began to arise regarding governance and decision-making. The shift to investor-owned, profit-driven exchanges has led to more efficient governance structures that strive for quicker decision making (Aggarwal and Dahiya, 2006). Demutualized exchanges have demonstrated increased liquidity in their own stock. The change improves profit motives of the affected exchanges which can result in increased marketing focus to attract new trade orders (Nielsson, 2009). As exchanges have become publicly listed, the emphasis shifted towards providing cash flow as dividends to their shareholders. In addition, with the increasing globalization and the need for exchanges to be competitive with electronic platforms, there has been pressure for exchanges to increase their foreign presence. As discussed in the following sections, mergers can relieve this pressure and allow the exchanges to take advantage of reduced costs and increased symmetries (Kokkoris and Olivares-Caminal, 2007).

The post-listing performance of demutualized major exchanges has been noteworthy. Of the twenty exchange listings that were measured, only four had a negative first-day return. The median return was 17.3%, while some exchanges had returns that surpassed 50%. The impact is also shown in seat prices. Following the announcement of the planned merger between the NYSE and Archipelago in 2005, NYSE seats traded at \$2.4 million. This represented an increase in value of \$0.6 million in less than a week. Prices increased yet again to \$4 million when the merger actually occurred (Aggarwal and Dahiya, 2006).

Stock Exchange Mergers of the Past

Table 1 lists recent stock exchange mergers. It is evident in this listing that since 1999, stock exchange mergers have been significant in terms of the quantity of mergers and the size of those exchanges involved. Due to the short tenure following the mergers, it is difficult to determine if these were successful ventures in the longer term. Minimal information has been published on the extent of the cost savings for the exchanges and the impact on the listed companies. Moreover, the problems

identifying these effects would be exacerbated by the recession of 2008 and successive rounds of quantitative easing that followed.

**TABLE 1
HISTORIC STOCK EXCHANGE MERGERS**

Date	Acquirer	Target
1999	Canadian Venture Exchange (CDNX)	Vancouver Stock Exchange Alberta Stock Exchange
2000	Canadian Venture Exchange (CDNX)	Winnipeg Stock Exchange
2000	Euronext	Paris Stock Exchange Amsterdam Stock Exchange Brussels Stock Exchange
2000	Hong Kong Exchanges & Clearing	Stock Exchange of Hong Kong Hong Kong Futures Exchange Hong Kong Securities Clearing Company
2001	Toronto Stock Exchange (TMX)	Canadian Venture Exchange (CDNX)
2002	Euronext	LIFFE
2002	Euronext	Portuguese Exchange
2003	OMX	Helsinki Exchange
2004	Toronto Stock Exchange (TMX)	Natural Gas Exchange
2004	OMX	Copenhagen Exchange
2004	Nasdaq	BRUT ECN
2005	NYSE	Archipelago
2005	Nasdaq	Instinet
2006	NYSE	Euronext
2007	London Stock Exchange	Borsa Italiana
2007	Toronto Stock Exchange	Montreal Stock Exchange
2008	NYSE Euronext	American Stock Exchange
2008	CME Group	Nymex

Source: Aggarwal & Dahiya, 2006; Chemmanur, He & Fulghieri, 2008; Goh, 2011

The list demonstrates that exchanges tend to acquire other exchanges, which is consistent with the mandate for independent regulation, but this may be changing. In the case of the TMX, which is the focus of this study, a consortium of leading Canadian banks, as well as other entities in the syndicate, was in competition with the LSE to merge/acquire with this major Canadian exchange.

A REVIEW OF THE LSE-TMX MERGER

The economic performance of the Canadian financial marketplace during and after the most recent recession was thought to be superior to several other nations around the world. The banking system alone provided confidence for both domestic and global investors. As such, the TMX had become an attractive target and the LSE was a most willing suitor for a potential union of exchange operations.

The LSE was originally opened as The Royal Exchange by Elizabeth I in 1571 and was based on the model of the Antwerp Exchange. Eventually it merged with stockbrokers who conducted trades in Jonathan's Coffee-House. It adopted the current name, the London Stock Exchange, during the

Napoleonic Wars in 1801. It has grown from very few issues to the fourth largest stock exchange in the world.

The Toronto Stock Exchange (TSX, formerly TSE) is the largest stock exchange in Canada and the seventh largest in the world. It was founded in 1852 and adopted its current name in 1861. The TMX group owned not only the TSX, but, as a result of acquisitions, also owned the Montreal Exchange (derivatives trading) and the TSX Venture Exchange (formerly the Vancouver and Alberta Stock Exchanges, which specialized in small cap and resource-based shares, particularly junior mining shares).

Prior to the merger negotiations, the TMX did not operate its own trade clearinghouse operations, as they were overseen by the Canadian Depository for Securities Limited (CDSL). This organization and its subsidiaries also handled various ancillary reporting functions for the exchange, including online reporting of news releases, annual reports, descriptions of material changes for the issuers, and tax documentation. The securities of the TSX and TSX Venture Exchange could be bought and sold through an alternative electronic exchange in Canada known as the Alpha Trading System (ATS). ATS was owned and operated by the Alpha Group, which was established in 2007 as a nine member banking partnership. Aside from the investment banking group representing the LSE, members of this partnership organized to form Maple with others in the financial industry.

In fall 2010, the shareholders of the TMX were presented with two options: a friendly merger with the LSE or a competing hostile acquisition bid from Maple. Both alternatives appeared to have merit, while each exhibited glaring weaknesses from the rivals' perspectives. The remaining sections of this paper review the proposals from both parties and discuss the pros and cons of each.

LSE-TMX Proposal Details

The LSE-TMX combination was reported as a friendly 'merger of equals'. The offer was for TMX shareholders to receive 2.9963 shares of the newly merged exchange for every TMX common share held. Following the merger, shareholders of the LSE would have owned 55% of the merged entity with shareholders of the TMX retaining 45%. In addition, a special dividend was to be declared in order to improve the attractiveness of the proposal. TMX shareholders would have received a dividend of C\$4.00 per TMX share while LSE shareholders received 84.1 pence per LSE share. The value of this dividend was C\$660.3 million. Changes to the dividend policy included a progressive dividend if earnings and cash flow permitted (London Stock Exchange, 2011 & Toronto Stock Exchange 1, 2011).

TMX-LSE Merger Benefits

Increasing the presence of both exchanges globally represented one of the major benefits of the proposed merger. With joint headquarters in Toronto and London, Centers of Excellence in Vancouver, Calgary, Montreal, Milan and Colombo, and Business Centres in Chicago, Boston, Houston, Rome, Beijing, Tokyo and Hong Kong, the merged entity would have afforded a presence in several of the major global financial markets. As a standalone exchange the TMX is not well diversified with 94% of its business mix derived from North America. The combined exchange would have seen 38% in North America, 32% in the UK and 16% in Italy. The larger global representation would have aided in the reduction of costs and the creation of revenue synergies, while also achieving greater liquidity.

The merger would have provided a complementary product mix. The TMX lacked product solutions in issuer services for global and large cap companies, trading and post-trade services for cash, fixed income, and clearing, as well as information services related to index-products. Conversely, the LSE was mostly lacking in the areas of derivatives and energy within trading and post-trade services. The combined entity would have allowed for many of the deficiencies in product solutions to be reduced. It was the goal of the merged exchange to become a fully integrated, multi-geographical entity. The synergies created from increased product offerings were estimated to be about C\$161 million over the five years following the merger. These would be achieved through the targeting of foreign listings, cross-marketing to complementary customers, and the utilization of existing expertise and technology.

The financial synergies were measured in terms of impact on earnings before interest, tax, and depreciation/amortization (EBITDA). Based on the 2012 projections calculated in 2011, EBITDA was

estimated for the TMX as a standalone at C\$420 million. The LSE was estimated at C\$638 million to produce a combined EBITDA of C\$1,057 million. The combined entity EBITDA would increase to C\$1,207 million when the cost synergies (C\$56 million) and revenue synergies (C\$94 million) were considered. To ensure that future growth would have been attainable, the addition of new debt in the merger was to be minimized. The merger exchange would have a net debt to EBITDA of 0.7 times, corresponding to a low leverage position.

In addition to these benefits, the following advantages to Canada were communicated by the TMX-LSE group (Toronto Stock Exchange 2, 2011):

- Regulation of the exchanges and issues will remain unchanged.
- The new exchange will form a large Canadian representation at the executive and director levels of the board.
- Improves the ability to attract foreign issuers while enhancing the awareness of Canadian capital markets.
- For Canadian companies the merger has the potential to provide additional access to funds.

TMX-LSE Merger Weaknesses

A major weakness of the TMX-LSE proposal was that it was primarily a share transfer without the benefit of a significant cash flow to the shareholders. From a Canadian shareholder perspective, the merger was not equal. They would retain 45% ownership in the new entity versus 55% for LSE shareholders. This may not have been perceived by TMX shareholders as an attractive ownership stake even though the merged exchange would have improved its profitability position through cost reductions and revenue increases.

The Maple group also advised that the TMX-LSE proposal was void of a growth strategy. Whereas Maple had devised plans to combine the TMX with the Alpha Group and CDSL, the TMX-LSE growth plans were limited in creating synergies within the two exchanges.

From a governance and regulatory perspective, challenges would have been encountered. Although the TMX-LSE proposal provided details on the new governance structure and the benefits to Canada, there was a risk that Canadian directors could have been relieved of their duties following the merger. The merger proposal outlined that there were no intended changes to the regulation of the exchanges, but this was somewhat uncertain since one merged exchange would report to more than one regulatory authority.

There was also the lingering question whether the merged stock exchange would have improved liquidity and attracted new listings as contended in the proposed merger agreement. The TMX had a large concentration of mining and energy security issuers and although the exchange was relatively small in global ranking, it was very familiar in these industries and their dedicated clientele. According to the Maple group, liquidity would not improve. Maple compared the current merger proposal to the Euronext merger where there was no apparent improvement in stock liquidity for small or medium-sized listed companies nor was there any evidence that the merger attracted new listings. The Maple group predicted no benefit for companies through cross-listing on foreign exchanges. The NYSE-Euronext merger had resulted in only 12 companies becoming cross-listed.

With regards to synergies it was expected that costs would have been reduced and additional revenue generated but growth of 9% is uncertain especially when compared to previous mergers. The uniting of the NYSE with Euronext and the NASDAQ with OMX resulted in 3-4% growth in revenue due to new synergies (Maple Group 1, 2011).

MAPLE ACQUISITION OF THE TMX

Proposal Details

Following a presentation of several proposals, Maple offered to acquire a minimum of 70% and a maximum of 80% of TMX shares at a price of \$50 per share. Under a proposal of 70% cash, current shareholders would retain ownership at 41.7% while an 80% cash offer would result in shareholder

ownership at 27.8%. Total cash proceeds to TMX shareholders would exceed \$2.5 billion. Maple would maintain the current TMX dividend policy, paying an annual dividend of \$1.60 per share. In addition to this cash and dividend offer, Maple planned to combine the TMX with the Alpha Group and CDSL to increase operating efficiencies. (Maple Group 2, 2011)

Maple Acquisition Benefits

The large cash component of the Maple offer was highly attractive to current shareholders and no similar provision was included in TMX-LSE merger proposal. Each TMX shareholder would receive one common share of Maple for each TMX share, so a large percentage of TMX ownership was retained and investors were afforded the opportunity to benefit from future transactions. The potential acquisition of the Alpha Group and CDSL were expected to provide substantial synergy and future growth.

The offer provided the security of maintaining the 'status quo' in addition to continued equity ownership. The historical cash flow of the TMX, which on average over the three years preceding the merger activity had been approximately \$224 million, would easily support the annual dividend of \$1.60 per share. Equal to the existing dividend of the standalone TMX, the payout commitment provided reassurance to shareholders. The consortium of Canadian capital market participants comprising Maple also reduced risk for shareholders, since they were large Canadian financial corporations and represented a significant percentage of the trading volume on the TMX.

From a governance and regulation perspective, the acquisition moved forward with a Canadian footprint. The governance structure resulted in half of the Maple board being independent individuals with expertise in derivatives. One quarter of the representatives would be from Quebec and at least 25% of the board had expertise in or associated with the Canadian public venture market. At least one director was to be associated with Canadian independent investment dealing. The proposal maintained a Canadian regulated publicly-traded holding company while limiting ownership by any one shareholder to 10% (Maple Group 1, 2011).

Maple Acquisition Weaknesses

Among the challenges with Maple's offer was the uncertainty around future transactions that were to create synergistic benefits. At the time, it was unknown if Alpha Group and CDSL would unite with the TMX and, if so, what the reliable amount of costs savings and revenue generation would be. This union was not without regulatory and governance considerations.

There was no geographical increase in coverage within the strategy, so benefits from improved liquidity and diversification were absent. A merger with the LSE would help enhance the TMX product mix but in the case of the Maple bid, innovation would be necessary to expand the market.

Although the proposed investment from the Maple consortium was significant, the offer would have an impact on the leverage of the merged exchange and future plans to grow the TMX. Borrowing was necessary to pay shareholders and, as such, leverage was expected to be 2.9 times EBITDA. Capital was to be raised through both equity and debt issuance. Of the \$2.6 billion required for purchase of the TMX shares and necessary fees and expenses, approximately \$1.62 million would be raised through equity from Maple investors with the remaining funds in debt through the following facilities: \$150 million senior revolving credit; \$1,100 million senior term credit; \$324 million non-revolving bridge loan; and \$310 million delayed draw term (Maple Group 1, 2011).

In summary, the TMX-LSE friendly merger proposal would have provided a geographic, cross-border, horizontal expansion with lower risk through diversification and provided synergy largely through economies of scale. The trade clearing and information services that were incorporated in that proposal were incidental expenses from the LSE perspective, whereas access to the energy and mining firms listed on the TMX provided opportunities in a previously untapped market. Pitted against that bid was an acquisition which benefits were largely due to vertical integration of the domestic trading system, by insiders seeking its improvement. Clearing activities and information services previously provided at arm's-length by CDSL would have been incorporated in the merged entity. The Alpha electronic trading system would provide an efficient front-end to facilitate trading and its customers were involved in the

Maple consortium. This combination would reduce competition in a market that was still realizing gains from incorporating the domestic venture exchange and the derivative securities business.

CONCLUSION

On June 29, 2012, the LSE-TMX terminated the merger plans when it appeared that the merger would not be approved by the required two-thirds majority of the TMX shareholders. The TMX board then communicated its support of the Maple bid. Maple Group's deal was approved by the federal and provincial regulatory authorities, including the Ontario Securities Commission, on July 11, 2012. On July 31, 2012, Maple Group announced that it had won control of the TMX as 91% of the shares were tendered for its takeover offer. TMX had become an attractive exchange on the global stage. This is primarily due to its product offerings, governance structure, regulatory framework as well as strength the Canadian economy during the 2009 recession and its quick recovery vis a vis both the United States and the European Union. Subsequently, the acquisitions of CDSL and Alpha Group were completed to seal the package and lock in synergies.

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