EL SEVIER

Contents lists available at ScienceDirect

Research in International Business and Finance

journal homepage: www.elsevier.com/locate/ribaf



Does stock exchange consolidation improve market liquidity? A study of stock exchange acquisition in Russia



Tamara V. Teplova a,b, Victoria A. Rodina a,b,*

- ^a Department of Finance, Faculty of Economic Sciences, National Research University Higher School of Economics, Moscow, Russia
- ^b Research & Training Laboratory of Financial Markets Analysis, Faculty of Economic Sciences, National Research University Higher School of Economics, Moscow, Russia

ARTICLE INFO

Article history:
Received 25 August 2015
Received in revised form
30 November 2015
Accepted 6 January 2016
Available online 9 January 2016

JEL classification:

G1 G2 F3

Keywords:
Moscow Exchange
Exchange acquisition
Exchange consolidation
Market liquidity
Liquidity dimensions
Tick frequency

ABSTRACT

The last couple of decades have witnessed significant institutional and structural changes in financial sector within a worldwide trend toward consolidation. In the segment of organized trading stock exchanges merge and develop into large and diversified publicly traded companies. These processes are rather complicated in case of a transition economy like Russia. In December 2011 MICEX, the first largest and state-controlled stock exchange acquired RTS, the second largest and privately owned stock exchange primarily designed for foreign investors. We empirically investigate whether the acquisition resulted in improved liquidity of the Russian stock market which was one of the declared acquisition objectives. We use the Kolmogorov–Smirnov and the Wilcoxon tests to compare market-wide liquidity in several discrete periods pre and post acquisition. A deep and thorough insight into liquidity performance is ensured by assessing liquidity from limit order book data of tick frequency along three dimensions (tightness, immediacy, and elasticity).

© 2016 Elsevier B.V. All rights reserved.

1. Introduction

For the last couple of decades the financial landscape in many developed and emerging countries has been reshaped dramatically. One of the most pronounced changes is consolidation within the financial industry through mergers and acquisitions (M&A) of financial entities. Financial entities are understood in a broad term and comprise commercial and investment banks, insurance, brokerage and asset management companies, and securities exchanges. M&A activity has been featured by growing intensification to reach both cross-segment (for example, a consolidation of bank and non-bank entities) and cross-border scale.

Although M&A activity is a driving force in itself, as the impact of individual mergers and acquisitions is not confined to the companies involved but spreads across the majority of the financial industry participants through competition, there are clear exogenous driving forces for consolidation. As documented in the Group of Ten "Report on Consolidation in the Financial Sector" of 2001 the motive for consolidation is a need for cost savings and revenue enhancements against ever falling

E-mail addresses: tteplova@hse.ru (T.V. Teplova), victoriarodina@hse.ru, victoriarodina@gmail.com (V.A. Rodina).

^{*} Corresponding author at: Department of Finance, Faculty of Economic Sciences, National Research University – Higher School of Economics, Moscow, Russia.

margins. This could be achieved through improved efficiency based on economies of scale and scope. The Group of Ten's report also stipulates causes for consolidation. These are improvements in information technology, financial deregulation and liberalization, globalization of financial and real markets, and increased shareholder pressure for financial performance. Yet whether consolidation improves performance in a drastic manner remains an open question. First, there is no unambiguous consolidated empirical evidence that the scale of positive effects from economies of scale and scope and from improved managerial efficiency is well matched to the scale of consolidation. Positive effects are possibly not that large. Second, there are social costs of consolidation since large and complex financial institutions issue standardized and easily manageable financial services thus drifting further away from a customer-centric approach. Third, consolidation results in concentration and that raises concerns about potential abuses related to enjoying monopolistic market power and consequently adverse price changes.

Among M&A activity observed for the last couple of decades mergers and acquisitions of exchanges are a vivid example of consolidation within the financial industry. Exchange consolidation is viewed as a way to meet changing economic environment including an ever stiffening competition among organized trading venues and electronic communication networks (ECN). Through domestic and cross-border consolidation exchanges enhance the scope of geographical involvement. The following M&A activity could be mentioned in this respect: foundation of the Swiss Stock Exchange upon merging of stock exchanges of Geneva, Basel, and Zurich in 1995; foundation of the Columbian Stock Exchange upon merging of stock exchanges of Bogota, Medellin, and Cali in 2001; foundation of EURONEXT upon merging of the Belgian, French, Dutch and Portuguese stock exchanges in 2000–2001; foundation of OMX Exchanges upon merging of Baltic and Scandinavian exchanges in 2004–2006; acquisition of the Borsa Italiana by the London Stock Exchange in 2007; foundation of transatlantic alliances like NYSE-EURONEXT in 2006 and NASDAQ-OMX in 2008. Through cross-segment consolidation exchanges diversify a set of financial assets to offer for trading. Examples of M&A in this respect include the foundation of the Singapore Exchange upon merging of the Singapore Stock Exchange and the Singapore Currency and Futures Exchange in 1999; the merger of the Tokyo Stock Exchange (primarily a spot market) and the Osaka Securities Exchange (primarily a derivatives market) in 2013.

Commonly stated benefits of exchange consolidation are standardization of financial instruments specifications, harmonization of trading principles and mechanisms, reduction in trading costs, availability of 24-hour trading (e.g., alliances of American and Asian trading platforms). Yet exchange consolidation is associated with an open question mentioned above concerning the scale of improved performance, trade-off between social costs and enhanced efficiency and monopolistic market power. This has led to M&A failures recently. NASDAQ OMX Group in partnership with the Intercontinental Exchange has withdrawn its bid to acquire NYSE-EURONEXT after the US Department of Justice officially stated it would file an antitrust lawsuit to block the deal. The European Commission has vetoed the intention of the Deutsche Börse to acquire NYSE-EURONEXT. The London Stock Exchange has failed to acquire TMX Group after the Maple Group consortium offered a higher competing bid to prevent a foreign control over the Canadian organized trading.

Consolidation in the financial industry has entered emerging markets following the same trend in developed markets. However, there are differences. Consolidation in developed markets is a strategy of utilizing excess capacity alternative to the exit strategy while consolidation in emerging markets aims at strengthening the financial industry on the whole to face a period of instability. Consolidation in developed markets is driven by market forces while consolidation in emerging markets is guided, to a large extent, by the authorities. *This could be vividly illustrated with the case of the exchange consolidation in Russia*. The Moscow Exchange was founded in December 2011 following the outbreak of the financial crisis of 2008–2009. That could be considered one of the incentives since integration with the international financial market during crisis periods seems to be more pronounced as outlined in a study by Nikkinen et al. (2012). The Moscow Exchange was founded on the basis of the trading platform of the first largest and state-controlled securities exchange, MICEX. The foundation of the new institutional entity was an outcome of a complex, long-standing negotiation process which ended with an acquisition of the second largest and privately owned securities exchange, RTS. Done allegedly with a view to strengthening state control over the Russian financial market upon the ongoing financial crisis, the exchange consolidation nevertheless pursued a rational economic objective: to improve the quality of the Russian financial market performance within the activities of the State Project "Moscow – International Financial Center" initiated as far back as in 2009 by the Government Decree on the Action Plan on Formation of International Financial Center in the Russian Federation of 11 July 2009.

There are many ways to assess efficiency gains from M&A activity. As far as securities exchange is concerned we choose to assess the benefits of consolidation along one and utterly important projection – liquidity. A liquid market facilitates price discovery processes, provides fast counterparty match, enhances structural and informational symmetry of trading, and ensures optimal channeling of financial capital in compliance with the economic paradigm "risk – expected return". Liquidity is extremely fragile since it possesses both positive and negative network externalities. On one hand, a liquid market attracts more market participants which enhance liquidity. On the other hand, a decline in liquidity begets uncertainty and make market participants quit thus reinforcing the decline. Liquidity is predictable in the direction of a change but unpredictable in the scale of a change. Therefore liquidity is one of the key factors to consider when it comes to assessing performance of a securities exchange on the whole and the outcome of M&A activity for a securities exchange in particular.

To research into market-wide liquidity in the Russian organized trading we follow an approach similar to that of Bacidore (1997) and Barclay et al. (1999). We form market-wide samples in three discrete periods of time pre and post MICEX and RTS consolidation. To capture the multifaceted nature of liquidity we assess three liquidity dimensions (tightness, immediacy, and elasticity) through three liquidity proxies (bid-ask spread, trading volume, and variance ratio) computed from limit order

Download English Version:

https://daneshyari.com/en/article/1003071

Download Persian Version:

https://daneshyari.com/article/1003071

<u>Daneshyari.com</u>