A New Episode in the Stock Exchange Mergers Saga: Intercontinental Exchange (ICE)/New York Stock Exchange (NYSE)

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Stock markets across the globe have been the subject of merger discussions following pressure to cut costs and become more competitive. Institutional changes were common in stock exchanges in Europe in the last two decades. There were: (1) several mergers and acquisitions; and, (2) changes in the ownership structures, trading systems, number of quoted companies, as well as extension of trading hours. Stock exchanges have merged with derivative exchanges (e.g. Euronext and Liffe), stock exchanges have merged with settlement operators (e.g. Deutsche Börse and Clearstream). Mergers that focus on combining different geographic markets, aim at exploiting economies of scale in trading. Mergers that combine different product activities, aim at providing a more complete range of financial services to customers.[1]

Regulatory amendments coming into force over the next two years will make tens of trillions worth of derivatives go through clearing houses. Exchanges that can clear over-the-counter ("OTC") derivatives alongside listed products are expected to be the biggest winners. That puts ICE squarely on a collision course with US behemoth CME Group, which controls the vast majority of the US futures market, and is already a major OTC clearer. In Europe, ICE already competes with Deutsche Börse's Eurex Clearing in credit derivatives clearing. The possible future addition of an OTC interest rates clearing business in time to complement Liffe's interest rate futures franchise could bring it into competition with both Eurex Clearing and LCH.Clearnet. Offering Liffe a ready-made clearing house could also rejuvenate its franchise and give it greater control over product development, at a time when upstart rivals are looking to build products that compete with its core interest rate futures.

The ICE/NYSE combination comes after ICE and Nasdaq OMX Group Inc. had proposed in April 2011 to buy NYSE Euronext for roughly $11 billion. However, that deal fell apart after the US Department of Justice had warned it would reject the deal on antitrust grounds. Combining Nasdaq and the NYSE would have brought together the top two US stock exchanges, leading to a virtual monopoly in US stock listings and dominance in trading US cash equities and options. A rival bid by German exchange operator Deutsche Börse to acquire NYSE Euronext was also blocked by the EU Commission. The combined ICE-NYSE Euronext will now be the third-largest exchange group globally, behind world No. 1 Hong Kong Exchanges and Clearing, and No. 2 CME Group.

The Parties

ICE is an operator of futures exchanges, OTC derivatives trading platforms, and futures and derivatives clearing houses in the US, Canada and Europe. ICE, via ICE Clear Europe, provides clearing services for European Credit Default Swaps. NYSE Euronext ("NYX") is an operator of derivatives and securities exchanges in the US and Europe. It has four main businesses: (i) cash listing services; (ii) cash trading services; (iii) derivatives trading and

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[1] Kokkoris I., and Olivares-Caminal R., "Lessons from the Recent Stock Exchange Merger Activity", 2008 4(3), Journal of Competition Law and Economics, pp. 837-869.

clearing services; and (iv) information services and technology solutions. In Europe, NYX owns Liffe, which operates a London-based derivatives exchange, together with derivatives exchanges in Amsterdam, Brussels, Lisbon and Paris (referred to collectively as "Liffe").

Activities of the Parties

The activities of ICE and NYX overlap in the provision of trading and clearing services for certain exchange-traded derivatives ("ETDs") and in the provision of bond trading services. The Commission also examined a vertical relationship between ICE derivatives clearing services and NYX derivatives trading services and between ICE's front-end execution technology services and connectivity to NYX platforms.

Exchanges may trade in equity derivatives, equity index derivatives, capital market or long-term interest rate derivatives, money market or short interest rate derivatives, commodity derivatives, and currency derivatives. An argument can be made that the abovementioned types of derivatives constitute separate product markets. Each type of derivatives has different characteristics, and is used to achieve a different investment outcome. Derivatives exchanges may trade products in all these areas.[2]

Liquidity for each product tends to be concentrated on one exchange. Exchanges tend not to compete directly with each other, but may impose a competitive constraint through the threat of launching a trading service for a specific derivative contract in direct competition with an existing exchange.

Commission's Analysis of the Derivatives Markets

In the ICE/NYSE merger the EU Commission defined a market for derivatives trading and clearing. In relation to exchange-traded derivatives the Commission noted, similar to the Deutsche Börse/NYSE Euronext[3] merger that the relevant product market comprises trading and clearing together. For the derivative contracts, trading and clearing services are provided to customers on a bundled basis and therefore should be considered together as one single product. In Deutsche Börse / NYSE Euronext the Commission considered that a separate market could exist for the provision of clearing services for third party platforms, including OTC platforms.

In the ICE/NYSE merger the Commission concluded that US equity index options, and US equity index futures and options on futures, do not belong to the same market. It left open, however, whether options and futures are part of the same market. In addition, the Commission argued that the transaction could give rise to overlaps in trading and clearing of certain soft and agricultural commodity exchange-traded derivatives ("ETDs"), foreign exchange ETDs and US equity index ETDs. The Commission further argued that commodity derivative markets, just as derivative markets more generally, are characterised by strong

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[2] Kokkoris I., and Olivares-Caminal R., "Regulation of Stock Exchanges in the Recent Wake of Mergers", 2007 22(8), Journal of International Banking Law and Regulation, pp. 469-474.
[3] Case COMP/M.6166 Deutsche Börse/NYSE Euronext.

network effects, so that liquidity tends to concentrate in one contract, which has become popular and the market benchmark for a specific product.

Financial exchange networks exhibit such indirect network externalities. Externalities arise in the act of exchanging assets or goods. They may also arise in the array of vertically related services that compose a financial transaction including the services of a broker, of bringing the offer to the floor, matching the offer, etc.[4] The act of exchanging goods or assets brings together a trader who is willing to sell with a trader who is willing to buy. Therefore, a stock exchange brings together the two complementary types of 'willingness'. The availability of both types of 'willingness' is critical for the exchange to occur.[5] A positive size externality is that the increasing size of an exchange market increases the expected utility of all participants. Thus, the benefit to an individual increases with the number of others on the system. This is sometimes called a 'network externality', because each new user confers a benefit on all other users. In trading terms, it is referred to as the liquidity effect.[6] Thus, higher liquidity increases traders' utility.

Stock exchanges can thus be seen as networks where the more traders enter the market the more market uncertainty is diminished. The greater the network size, the greater the liquidity of the market is and the more efficient price discovery is. Liquidity plays a crucial role in financial exchange markets. Without the availability of counter-offers, markets cease to exist and they are replaced by individualized bilateral contracts. Thus, high liquidity expands the set of potential counter-offers and enhances the probability of a favorable match.[7] Liquidity measures the ability to timely execute a buy or sell order. It is also a measure of price resiliency, i.e. investors' ability to trade without inducing unfavorable movements in the price of securities. Liquidity allows investors to minimize trading friction and benefits corporate issuers, meanwhile, by enhancing stock value and providing a ready market for additional stock.

The Commission found that in respect of each of the commodity classes in which they are present, ICE's and NYX's contracts represent distinct benchmarks. These contracts present specifications, which reflect the characteristics of different physical underlying products. The Commission focused on the effect the merger would have on agricultural and soft commodity derivatives, as well as on US equity derivatives, but its investigation found no competition concerns. In particular, the Commission added that in the asset classes of commodity derivatives concerned by the transaction, the parties' activities do not overlap. The Commission also examined minor overlaps of the activities of the two companies in the fields of agricultural ETDs (barley, corn and milling wheat), foreign exchange derivatives and bond trading. The Commission concluded that no competition concerns would arise in

[4] Kokkoris I., and Olivares-Caminal R., "Competition and Regulation Aspects in Cross-Border Stock Exchange Mergers", 2007 29 (2), University of Pennsylvania Journal of International Law, pp. 455-526.

[5] Economides N. (1996), '*Economics of Networks*', International Journal of Industrial Organization vol. 14, no. 2, p. 7.

[6] Domowitz I. (1995), '*Electronic Derivatives Exchanges: Implicit Mergers Network Externalities, and Standardization*', The Quarterly Review of Economics and Finance, Vol. 35, No. 4, pp. 163-175. At p. 165.

[7] Economides N. (1994), '*How to enhance market liquidity?*' in *Global Equity Markets*, R. Schwartz (ed.), Irwin Professional, New York, 1995. At p. 2.

view of the limited presence of NYX and ICE in these markets and/or the existence of other strong players.

Finally, as regards the vertical relationship between trading and clearing of derivatives, the Commission did not identify any competition concerns arising from the proposed acquisition. The Commission did not identify any vertical competition concerns also with respect to the provision of exchange connectivity services and front-end trade execution services. The Commission therefore concluded that the transaction would not raise competition concerns.

To summarize, the Commission found that for a number of products the parties' activities did not overlap. Regarding the geographic market definition, the Commission left the exact scope of the geographic market open since the transaction did not give rise to serious doubts under any possible market definition. The Commission concluded that the proposed transaction did not give rise to serious doubts as to its compatibility with the internal market as a result of a loss of actual competition as regards soft and agricultural commodity derivatives, US equity index derivatives, and foreign exchange derivatives. The Commission assessed potential competition and argued that the analysis of the parties' past behavior and strategic internal documents concerning the asset classes relevant in the case at hand do not reveal attempts to enter each other's markets, nor that ICE and NYX consider each other as a potential competitive threat able to shift liquidity to a greater extent than other exchanges.

The Importance of OTC Trading

A significant number of derivatives trades are completed off-exchange ("OTC"). OTC trading of derivatives is more intense than OTC trading of equity.[8] OTC provides a customized service, including less regulation than applicable to on-exchange trading, private negotiations, as well as discretion in the price. In particular, negotiations for on-exchange trading are transparent, whereas they are private in OTC trading; on-exchange trading is a regulated market where trades are standardized and are cleared/netted. OTC trading involves unregulated markets, where standardization as well as clearing/netting is limited. In addition, traders may also have access to a wider pool of liquidity on exchange, including customers whose credit standing precludes them from using OTC trading.[9]

OTC and certain types of on-exchange derivatives tend to be complementary, since OTC occurs in complex transactions that cannot be completed on-exchange. For certain types of derivatives (e.g. when the underlying asset is equity), OTC plays a less significant role, compared to derivatives having other underlying assets. Criteria that investors take into account in choosing between on-exchange and OTC trading, include *inter alia*, the risk that

[8] This is also confirmed by Competition Commission report titled '*Deutsche Börse AG, Euronext NV and London Stock Exchange plc, A report on the proposed acquisition of London Stock Exchange plc by Deutsche Börse AG or Euronext NV*,' dated November 2005 ('Competition Commission Report'), paragraph 2.4.

[9] Kokkoris I., and Olivares-Caminal R., "Competition and Regulation Aspects in Cross-Border Stock Exchange Mergers", 2007 29 (2), University of Pennsylvania Journal of International Law, pp. 455-526.

investors want to hedge against, the availability of a suitable on-exchange traded product, the size of the trade, the customization of the trade needed, the anonymity as well the desired impact on the price of the instrument and the costs involved in the trade.

In ICE/NYSE, the Commission concluded that the question whether ETDs and OTC derivatives are part of the same market can be left open as the competitive assessment would be the same, given the very limited relevance of OTC derivatives in the asset classes concerned in the case at hand.

Commission's Analysis of Other Markets

The Commission further analyzed bond trading and technology services but found no concerns arising from the merger. Bonds are issued by credit institutions, governments or companies and serve as long-term credit financing for the issuer. Bonds can be classified in different forms, namely, interest rate bonds (floating rate bonds, fixed rate bonds, zero coupon bonds), government issued bonds (government/federal bonds, Eurobonds, emerging market bonds), private issued bonds (corporate bonds, collateralized mortgage bonds, Tier 1 bonds), etc. Other types of bonds include foreign currency bonds, convertible bonds etc. In Europe, the bond market is dominated by government bonds and bonds issued by financial intermediaries. In the US, the proportion of bonds issued by the non-financial corporate sector is much larger. In addition, municipal bonds and agency bonds are major components of this market.[10] The Commission found no competition concerns in bond trading, given that no affected market would arise under any possible definition.

Information technology services relate to the development and provision software for electronic trading as well as for clearing and settlement. OMX[11] states that is the world's largest provider of technology solutions for securities trading, with a customer base that currently encompasses more than 60 exchanges, clearing organizations and central securities depositories in more than 50 countries.[12] The Commission concluded that the ICE/NYSE transaction did not give rise to serious doubts as to its compatibility with the internal market as a result of vertical foreclosure effects in relation to front-end trade execution technology services.

Conclusion

The Commission's investigation confirmed that the proposed transaction would not raise competition concerns as NYSE and ICE are not direct competitors in the markets concerned and would continue to face competition from a number of other competitors. The acquisition gives ICE control of London-based Liffe, Europe's second-largest derivatives market, and will help it compete with US rival CME Group.

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[10] CEPR, '*European Corporate Bond Markets: transparency, liquidity, efficiency*', p. 1. See also '*European Government Bond Markets: transparency, liquidity, efficiency*', May 2006. www.cepr.org.

[11] OMX owns exchanges in the Nordic and Baltic region, and develops and provides technology and services to companies in the securities industry around the globe (see http://www.omxgroup.com/omxcorp/ for further details).

[12] Annual Report 2005. http://www.omxgroup.com/digitalAssets/937_OMX_2005_ENG_web.pdf. Page 21.