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Agenda

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Is ESMA becoming a price regulator?

MiFID II, the updated rule book for European financial markets, will require trading platforms to make pre- and post-trade market data available on a 'reasonable commercial basis'. The European Commission has invited the European Securities and Markets Authority (ESMA) to advise on what this means. With some fund management and brokerage firms arguing that current prices for market data services are high and should be regulated, will ESMA decide to become a price regulator?

The past ten years have seen significant changes in European capital markets. Where once only one, or possibly two, exchanges offered trading in a particular equity, for most heavily traded European equities multiple trading platforms now compete for transactions, as a result of the implementation of the first Markets in Financial Instruments Directive (MiFID I). One effect of introducing competition has been the fragmentation of trading data of particular stocks across a number of venues, as there is now no longer a single trading venue. This, together with the creation of new trading strategies (such as algorithmic and high-frequency trading), has generated demand for faster access to more detailed market data services covering a wider selection of trading venues.

A number of entities are involved in the provision of market data services to end-users, often tailoring the services to users' needs. Typically, exchanges and other trading platforms act as wholesalers, with market data vendors and/or independent software vendors acting as retailers and often providing additional services alongside access to the underlying data. The charges levied by originators of the market data (i.e. the trading venues) are estimated to account for 8–15% of the total costs incurred by end-customers (i.e. brokers and investors) in actually using it—IT infrastructure has been estimated to account for 10–16%, and the services provided by the data vendors themselves have been estimated to account for the remaining 65–80%.[1]

However, notwithstanding that the fees for the use of the data are a relatively small proportion of the total costs of market data usage, there is a perception in Europe that the fees charged by trading platforms are high. This has resulted in a requirement of the new MiFID II for trading platforms to make pre- and post-trade market data available on a 'reasonable commercial basis'. The task now facing ESMA is to define what reasonable commercial basis means.
This article first considers the economics of providing market data services and the current level of prices, before providing an economics perspective on proposals considered within ESMA's consultation paper.[2]

Joint products and costs

The production and distribution of exchange market data is part of a larger industry value chain that includes the trading of financial instruments. The objective of the trading system is to provide an efficient mechanism to transfer the ownership of equities (or other financial instruments) from one party to another—i.e. trade execution services. For this to take place, market participants require access to the market data that is produced from the operation of the relevant trading platforms.

From an economics perspective, market data and trade execution are joint products, as it is not possible to provide transaction services without generating market data.

As the production of one product simultaneously involves the production of the other product, this means that (at least part of) the production costs cannot be separated—i.e. they are joint costs. It also means that the reasonableness, or otherwise, of the recovery of costs by a trading platform cannot be assessed effectively by the independent analysis of either market data or trade execution services. With joint products, the production costs of the outputs cannot be separated.

The joint-product nature of market data and trade execution services, and the presence of joint costs, have also been acknowledged by ESMA in its consultation paper.[3]

Are prices high?

It has been argued that the prices for market data services are high in Europe compared with the prices in the USA.[4] However, such arguments tend to be based on simple comparisons of the per-user licence fees for specific market data services (e.g. a consolidated view of best bids and offers) and do not take into account the substantial difference in scale between European and US markets, or the relevance of such data products in each market. Where economies of scale are present, prices facing users would be expected to be higher in the market with smaller scale. Typical US trading fees are in the order of 0.1bp, while in Europe they are closer to 0.4–0.5bp.[5] Given the joint costs between trading and market data, similar economies of scale would be expected if the number of users of market data services varied in a similar way to the value of trading, which they do.[6]

In view of the diversity of market data services provided by trading platforms, and the fixed-cost nature of their operation, a more relevant metric is total revenues for market data services. The total revenues across five European exchanges (Borsa Italiana, Deutsche Börse, Euronext, London Stock Exchange and SIX Swiss Exchange) is around €250m—only 25% more than the revenues generated by Nasdaq OMX's US market data services on its own.[7] This would also suggest that, at an aggregate level, market participants are unlikely to spend more on market data services in Europe than in the USA.

Another useful metric is the proportion of revenues generated from the joint products of market data and trade execution from market data services. Table 1 shows that, despite the differences in regulation of market data prices and the scale of the markets, there is not much variation between US and European exchanges in the *proportion* of total revenue generated from market data services.

Although unit prices for market data services are higher in Europe, as they are for trading services, this mainly reflects differences in scale rather than some radically different way in which the total joint costs of trading and market data are recovered from users.

A case for regulating prices?

The comparability of market data fees between Europe and the USA (once economies of scale are taken into account)—the benchmark referred to by those arguing for price regulation—would suggest that there is no case for regulating market data prices in Europe. Notwithstanding this, price regulation could be justified if there were sufficient evidence that the current pattern of cost recovery by trading venues was leading to negative outcomes for either end-investors or those wishing to raise finance in the capital markets. Such an impact could occur if, for example, the current pattern of cost recovery were leading to a material loss of liquidity, or a poor allocation of capital in the economy.

A detailed analysis undertaken by Oxera shows that the cost to institutional investors of trading platform market data services[8] is relatively small:[9] on an annual basis, trading platform market data fees are likely to account for less than 2% of the total costs of trading and holding securities incurred by institutional investors. This is typically equivalent to less than 0.02% of assets under management.[10] The significance of trading platform market data fees for retail investors in Europe is even smaller, as many European trading platforms offer market data to retail investors for licence fees of €1 a month, or free of charge. In addition, for many purposes, retail investors are happy to wait 15 minutes after the trade has occurred to receive the data, at which point most trading platforms make the data available free of any licence fees.[11]

The implication of trading platform market data fees accounting for only a small proportion of end-investors' total costs is that changes in such fees would not be expected to have a significant effect on the overall level of trading, and would therefore also not be expected to result in a significant change in the allocation of capital in the economy.

Changing the prices for trading platform market data services may have some more detailed effects. For example, shifting the recovery of the joint costs of operating a trading venue from market data services to trade execution services would increase the costs to those that trade more frequently and use market data services less intensively. In addition, at the margin, the consumption of trading services and market data services may adjust in response to a material shift in the cost recovery of trading venues.
If these more detailed responses to a change in the cost

Table 1 Relationship between market data services revenue and trade execution services revenue (2012)

Trading platform	Market data revenues as a proportion of total revenues (i.e. market data and trade execution revenues)
Deutsche Börse	35%
Nasdaq OMX—OMX market	28%
Euronext	20%
SIX Swiss Exchange	19%
Nasdaq OMX—Nasdaq market	23–29%
NYSE	14%

Note: For an explanation of the data, see Oxera (2014), 'Pricing of market data services: an economic analysis', February, p. 18.

Source: For Deutsche Börse, Euronext, and SIX Swiss Exchange, market data revenues and trade execution revenues were provided directly by the exchange and verified against annual reports. Data for Nasdaq OMX was sourced from annual reports.

recovery of trading venues lead to a significant improvement in overall economic welfare, there would be a case to consider using regulation to deliver this optimal cost-recovery pattern. However, the costs of regulation would also need to be taken into account. The likely impact of extreme changes in this pattern of cost recovery (which would identify the limits of potential impacts) is set out in the Oxera (2014) report.[12] The conclusion is that, even in extreme scenarios of recovering all costs through trade execution fees or market data services fees, there is no evidence that the increased/lower efficiency and volume of trading would be particularly detrimental to end-investors or those raising capital. The case for incurring the costs of regulation (which investors or taxpayers would ultimately pay) would therefore appear to be weak.

Reasonable commercial basis

The above analysis fails to find a justification for regulating the prices of market data services. Nonetheless, MiFID II and the accompanying Markets in Financial Instruments Regulation (MiFIR) have been approved and require trading platforms to ensure that they set their prices on a reasonable commercial basis—but what does this constitute?

In its consultation paper, ESMA discusses options for the interpretation of a 'reasonable commercial basis'. Acknowledging that market data and trade execution services are joint products and that it is appropriate for venues to be able to recover some of the joint costs from market data services, ESMA rules out setting a ceiling on prices at average variable costs, or average avoidable costs, which would not allow for this. Furthermore, it rejects the proposal to mandate that market data be provided free of charge, since 'requiring data to be published for free is clearly not a "reasonable commercial basis".'[13] In addition, ESMA has generally ruled out detailed quantitative price caps (i.e. specifying the costs for particular market data services). Not only would there be practical challenges in calibrating such price caps, but ESMA also accepts that 'regulator-imposed prices would not be commercial.'[14]

Instead, ESMA is consulting on three options.

- Imposing transparency requirements and defining general principles against which venues and their customers could judge the reasonableness of data prices.
- Limiting the share of an exchange's revenues that can be raised from market data services.
- Imposing an (approximate) maximum price, based on a long-run incremental cost plus (LRIC+) control (where LRIC refers to the costs that could be avoided if market data services were not provided, and the plus (+) refers to a share of the joint costs). This would differ from the quantitative price caps that ESMA has already ruled out, in that the total price (revenue) that trading venues generate from cash equity market data services would be regulated, rather than the price of particular market data services.

One of the technical challenges that ESMA identifies with applying a LRIC+ control is defining the maximum share of joint costs that can appropriately be recovered from market data services.[15]

What is a reasonable commercial price? The boundaries of a 'fair price', and those that can be expected to be reasonably common in competitive markets, relate to a lower boundary set at the incremental cost (recovery of less than this might indicate predatory pricing where a firm is dominant), and an upper boundary that is the stand-alone cost (recovery above this might indicate excessive profitability).[16]

To define these boundaries for market data services, one needs to identify the following types of cost across the joint products:

- incremental costs associated with producing market data;
- joint costs associated with the provision of trade execution and market data services;
- the incremental costs of providing trade execution services.

The upper bound—the stand-alone costs of market data services—refers to the sum of the first two costs, or the total costs minus the third cost (the incremental costs of providing trade execution costs).

There is no specific quantification of the incremental costs associated with the provision of trade execution—the costs to be excluded—but these can be expected to be low, given that the core functions of recording bids, offers, cancellations and trades are common. Activities such as market surveillance might be thought to be incremental to trading, but even here (as market surveillance will improve the quality of the market data services) these types of cost may be common. Based on the assumption (which is likely to be conservative) that the incremental costs of trading are 25% of the total costs, this would suggest that the upper boundary of acceptable cost recovery under competition law would be much higher (75% of the total) than is generally currently observed in the European (and US) markets.[17]

Concluding remarks

The main options being considered by ESMA (the revenue share ratio and LRIC+) are essentially forms of price regulation. Price regulation is a tool that may be attractive to politicians, as it gives the impression that the perceived problem is being addressed head on. No beating around the bush—you simply lower those prices that you think are too high.

However, among regulators, price regulation would typically be considered only if the issue identified had resulted in substantial harm to consumers, and other regulatory methods were insufficient to address the problem. The disadvantages of price regulation are well understood. It can result in distortions and unintended consequences, and would normally require ongoing supervision and a lot of analysis (e.g. cost modelling) in order for both the regulator and regulatees to get it right.

To avoid all of this in the case of market data services, the framework for a lower and upper bound of prices as discussed in this article seems a pragmatic solution.

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[1] Atradia (2010), 'The cost of access to real time pre & post-trade order book data in Europe', August, p. 21.

[2] See ESMA (2014), 'Consultation Paper MiFID II/MiFIR', ESMA/2014/549, 22 May.

[3] When discussing market data services, ESMA refers to 'joint costs' and 'costs that are shared with other services or that were common to the entire undertaking'. See ESMA (2014), 'Consultation Paper MiFID II/MiFIR', ESMA/2014/549, 22 May, p. 225, para. 20.

[4] European Commission (2010), 'Public consultation: review of the Markets in Financial Instruments Directive (MiFID)', 8 December.

[5] Oxera (2012), 'What would be the costs and benefits of changing the competitive structure of the market for trading and post-trading services in Brazil?', June, Figure 4.3.

[6] Oxera (2014), 'Pricing of market data services: an economic analysis', February, Table 5.1.

[7] Oxera (2014), 'Reasonable commercial terms of market data services: response to ESMA consultation', 4 February.

[8] Services considered are fund management; trade execution provided by brokerage firms and trading platforms; market impact costs experienced by funds; clearing provided by clearing firms and CCPs; and custody provided by custodians and CSDs.

[9] See Oxera (2014), 'Pricing of market data services: an economic analysis', February.

[10] This cost is based on a fund with a turnover ratio of 50%—i.e. a fund in which 50% of the assets held are changed each year, such that the value of assets under management is the same as the value of trading each year.

[11] The precise relationship between market data fees charged by trading platforms and the total costs incurred in making a transaction will vary depending on the investment style (and other factors) adopted by the end-investor or fund manager.

[12] Oxera (2014), 'Pricing of market data services: an economic analysis', February.

[13] Oxera (2014), 'Pricing of market data services: an economic analysis', February, p. 220, para. 10.

[14] Oxera (2014), 'Pricing of market data services: an economic analysis', February, p. 220, para. 10.

[15] A revenue share cap, also being considered by ESMA, can deliver a similar outcome to LRIC+, since both come down to determining the appropriate maximum proportion of joint costs that can be recovered from market data services.

[16] Oxera (2003), 'Assessing profitability in competition policy analysis', Economic Discussion Paper 6, report prepared for the Office of Fair Trading, July.

[17] This upper boundary is above the prices currently being charged by the major trading venues in Europe, where such data is available, and, given the pattern of prices for trading services and market data services, is likely to be above the revenue shares for those trading venues where a revenue split is unavailable.