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Agenda

Advancing economics in business

Securities trading and post-trading in the EU: what impact has competition had?

Securities trading and post-trading in Europe have been subject to significant changes in recent years. Drawing on an Oxera study for the European Commission, which involved an extensive survey of market participants in 18 financial centres in Europe, this article considers the impact of some of these changes on the prices and costs of these services

The provision of securities trading and post-trading services has been subject to significant change in recent years. Traditionally, each national market has had its own monopoly securities trading, clearing and settlement systems, often by construct of law. Over the past 10–15 years, however, capital markets and equity trading have become increasingly international, with market players providing trading and post-trading services across borders, which has led to several cross-border mergers and alliances.

This process has gained momentum in recent years, with the European Commission and the industry working together to remove technical, legal and other barriers to cross-border post-trading, and to facilitate the introduction of competition by introducing an industry code of conduct for infrastructure providers.[1] New players have since entered the markets, strengthening competition and increasing choice for investors, investment managers and brokers.

The study conducted by Oxera on behalf of the European Commission examined for the first time the impact of recent changes in the industry on the costs of trading and post-trading services over the period 2006–09. It also analysed a large set of new data collected by Oxera from a survey of market participants operating in the trading and post-trading value chain in 18 financial centres in Europe. All major infrastructure providers (consisting of trading platforms, central counterparties—CCPs, and central securities depositories—CSDs), including new entrants, participated in this survey, as well as many intermediaries (consisting of custodians, brokers and fund managers). Transactions in both equities and fixed-income securities were analysed. This *Agenda* article focuses mainly on transactions in equities.

Trading and post-trading—a complex business?

The 'simple' operation of investors buying and selling or holding securities is underpinned by complex structures and transaction flows (see the box below). It requires specialised services, typically categorised as trading (offered by brokers and trading platforms) and post-trading (consisting of a range of services such as central counterparty clearing, clearing and settlement, and custody and safekeeping—offered by infrastructure providers and custodians).

What is trading and post-trading?

There are numerous ways in which investors can access a particular market to undertake a transaction or hold the security domiciled in a particular financial centre. This complexity of processes presents a significant challenge to measuring what is actually happening in the marketplace. A methodology was developed by Oxera in a previous study for the Commission to address this challenge, allowing for the measurement of prices and volumes over time on a consistent basis. This is illustrated in the box below.[2]

Prices and costs are coming down . . .

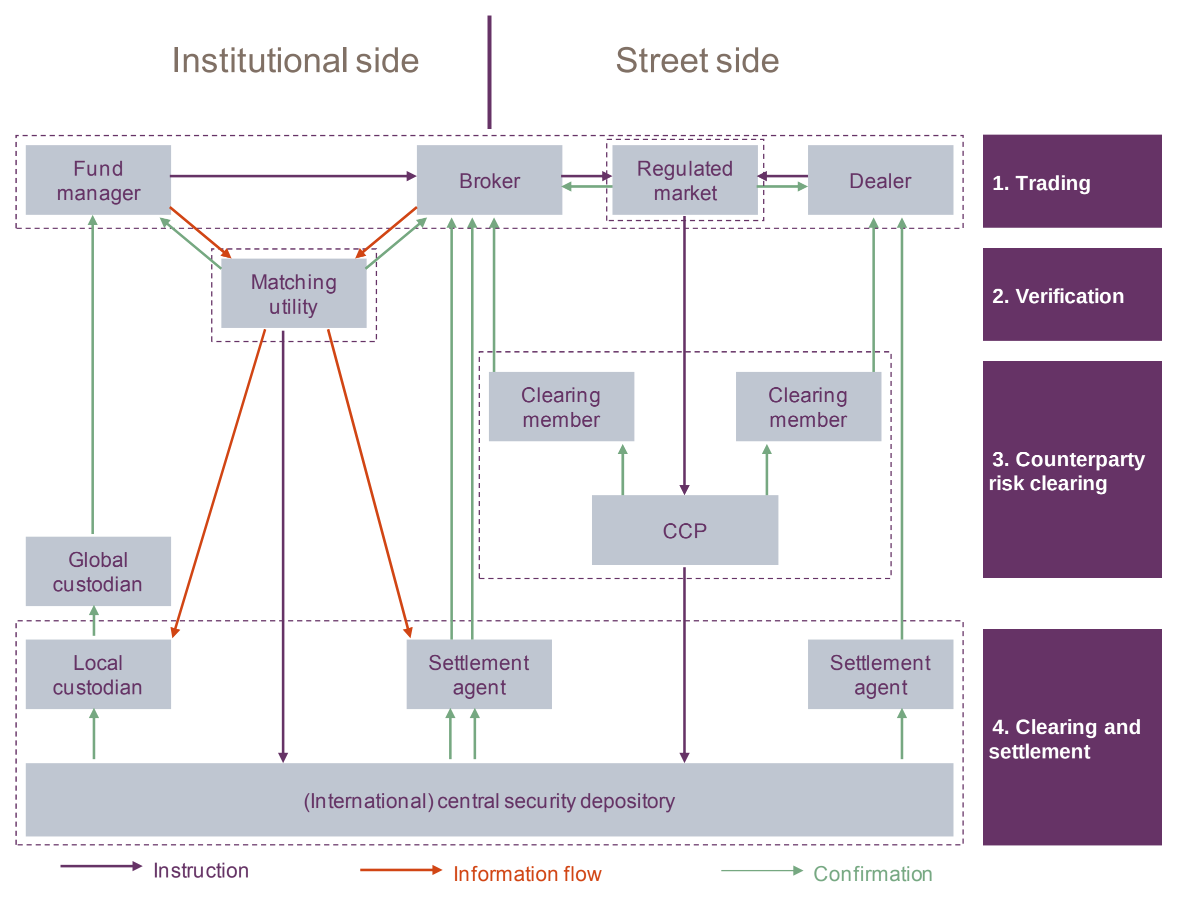
In the past few years, various infrastructure providers have reduced their prices in response to new players entering the market. The analysis shows that, in almost all financial centres, this has resulted in a significant reduction in the costs of using trading platforms, with some financial centres indicating reductions of around 80% (expressed in terms of cost per transaction) over the period 2006–09 (see Figure 1 below).

There has also been a general decrease in the costs of using infrastructures for post-trading services. For

This article is based on Oxera (2011), 'Monitoring Prices, Costs and Volumes of Trading and Post-trading Services', report prepared for European Commission, DG Internal Market and Services, May. Available at www.oxera.com.

Stylised illustration of the value chain for trading and post-trading transactions

The figure below is a stylised illustration of the value chain for the provision of trading and post-trading services for equities. For any given trade order from investors, there are typically two transactions: one on the institutional side, in which the broker completes the transaction with the investor, and one on the street side, in which the broker executes the trade via a trading platform (or other trading channels). The transaction starts with the trade order from the fund manager (acting on behalf of the investor), and the broker then executes it on the street side, and on the institutional side with the fund manager.



Note: This illustration combines a centralised matching utility on the institutional side with a regulated market with a CCP on the street side. As such, this diagram shows the interaction of the transactions on the institutional side and the street side, and does not capture all the possible value chains.
Source: SWIFT and Oxera.

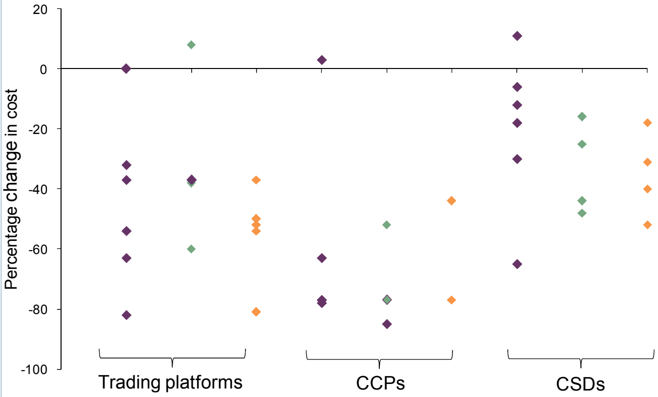
CCPs, cost changes ranged from +3% to –85% (for equities), with an average reduction across all financial centres of 73%. For CSDs, clearing and settlement costs have also declined, with an average reduction across all financial centres of 25% for equities and 35% for fixed-income securities from 2006 to 2009.

This reduction in the costs of using infrastructure providers reflects some significant price reductions made in recent years, and is arguably what would be expected as competition increases (partly as a result of the policy initiatives aimed at strengthening competition). In those financial centres where the costs of using infrastructure providers increased, this was not necessarily due to changes in the pricing schedule—it may have been due to changes in the profile of users (eg, fewer transactions resulting in lower, volume-related discounts).

. . or are they going up?

Although the cost per transaction on trading platforms has fallen in all financial centres, the costs expressed in terms of the value of trading have increased in some financial centres, including France, Germany, Italy and Spain. This may reflect a trend in the brokerage sector towards smaller transactions, which in turn is the result of brokers splitting orders into more transactions, with the aim of reducing the market impact (ie, the effect that the transaction might have—a transaction might move the market price upwards when buying, or downwards when selling). This trend is also reflected in the increase in the use of transaction methods such as

Figure 1 Change in the costs per transaction of using trading platforms (equities), CCPs (equities) and CSDs (equities and fixed-income securities), 2006–09



Note: For trading platforms, the cost per on-book trading transaction is shown; for CCPs, the cost per central counterparty clearing transaction is shown; and for CSDs, the cost per clearing and settlement transaction is shown. Changes in the costs of account provision and asset servicing (offered by CSDs) are not presented here, and range from –34% to +52%. The different colours denote the financial centre classifications: major (purple), secondary (green), and other (orange).
Source: Oxera (2011), op. cit.

programme and algorithmic trading. (In major financial centres, for example, this rose from 30% of all transactions in 2006 to 51% in 2009). As a result, one trade order (as seen from the fund manager's perspective) today requires more trading and post-trading transactions than it did in 2006. This potentially increases investors' costs per value of trade, since trading and clearing and settlement services tend to be charged on a per-transaction basis.

The average trade size of a transaction in equities on a trading platform fell from approximately €25,000 in 2006 to around €10,000 in 2009.[3] The average transaction size between 2006 and 2009 fell by between 22% and 80% in each financial centre.

On the one hand, therefore, the costs per trade of using trading platforms have fallen (as a result of lower prices and the application of volume discounts); on the other hand, they have risen (as a result of an increase in the number of transactions needed to complete a particular value of transaction required by the fund manager). In some financial centres, the net result of this is a decrease in costs per value transacted, and in other centres it is an increase.

In relation to trading services, although most trading platforms charge on the basis of the number of transactions, some (also) charge according to the value of the transaction. Furthermore, brokerage firms generally charge for their trade execution services on the basis of the value of the transaction.

For central counterparty clearing, and clearing and settlement services, however, CCPs and CSDs (and custodians) tend to charge only on the basis of the number of transactions (although there are exceptions, such as the CSD in Greece, which charges on the basis of the value of transactions).

Irrespective of how users are charged for trading and post-trading services, from an investor point of view it is useful to measure the costs both per transaction and per value of transaction. Estimating the cost per value of transaction provides an effective cost estimate in relation to the value of trading, and allows a comparison of costs across the value chain.

Measuring the costs of using CCPs and CSDs in terms of the value of the transaction (at the trading level) shows a trend similar to that observed for trading platforms: although the cost per transaction has fallen, the cost per value of trade has increased due to smaller average transaction sizes in some financial centres. An increase in netting efficiency can compensate for the increase in the number of CSD transactions as a result of the lower average transaction size at the trading platform level—it means that fewer CSD transactions per value of trading would be required. However, data from the survey indicates that the increases in netting efficiency over the 2006–09 period have been relatively limited in most financial centres.

Measured as a proportion of the value of transactions in equities, around 78% of the trading and post-trading costs that relate to infrastructures (trading platforms, CCPs and CSDs) is accounted for by trading platforms, 18% by CCPs, and 4% by CSDs. (This includes the CSD clearing and settlement costs, but does not include the CSD account provision and asset servicing costs, since these services are charged for in relation to the value of securities held rather than the value of securities traded.)

The costs of using intermediaries are coming down

The question is how these changes in costs have affected the fees charged by intermediaries (custodians and brokers) to end-users (fund managers and institutional and retail investors).

Analysis of data from custodians suggests that, on average across all financial centres, prices for clearing and settlement fell by 22%.

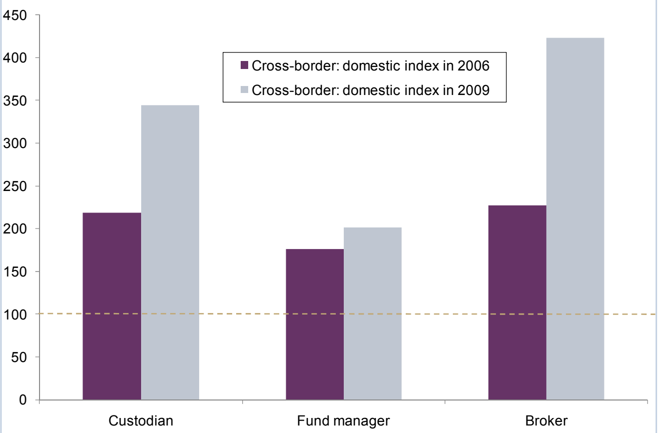
Although brokers will have benefited from reductions in the costs (expressed in terms of cost per transaction) of using infrastructure providers and custodians in most financial centres, costs expressed as a proportion of the value of transactions may have increased in some financial centres as a result of the trend towards smaller transactions. Despite this, brokers have managed to lower their commission rates (expressed as a proportion of the value of transactions). Data from institutional brokers indicates that the average commission rate (for equities domiciled in all 18 financial centres covered by the study) fell by 21%, from around 9 basis points (bp) in 2006 to 7bp in 2009. This is confirmed by data from fund managers that suggests that commission rates fell by around 25%. These averages mask a significant variation in reductions across financial centres. Furthermore, part of the reduction in commission rates might be due to unbundling of services—for example, non-execution services such as research no longer being paid for through the trade execution commission rate.

Like institutional investors, retail investors have benefited from reductions in brokerage commission rates. Commission rates charged by retail brokers fell by around 35% between 2006 and 2009. (For retail investors in major financial centres, they fell from around 29bp in 2006 to 19bp in 2009, and in secondary and other financial centres from 46bp in 2006 to 30bp in 2009.)

Cross-border transactions

The analysis indicates that trading and post-trading services can still be more expensive when purchased for cross-border transactions. In relation to custodian services there is no evidence that the difference in costs between domestic and cross-border transactions has reduced—indeed, there are indications that it may have increased (in percentage terms) over time. This suggests that, although the overall costs of custodian services have fallen, the costs of domestic transactions have come down more than the costs of cross-border transactions. Figure 2 presents the ratio of the costs of clearing and settling cross-border securities (equities and fixed income) to the costs for domestic securities

Figure 2 The costs of cross-border clearing and settlement (index)



Source: Oxera (2011), op. cit.

based on customer profile data from custodians. The ratio varies across types of client and types of service: in 2009, brokers found cross-border clearing and settlement services most expensive relative to domestic services, while for custody and safekeeping, other custodians experienced the largest cross-border to domestic ratio, at approximately 250 (not presented in Figure 2).

Data on the costs of CSD services shows a different pattern. The difference between the costs of clearing and settlement for domestic and cross-border transactions has fallen by 36%, and for account provision and asset servicing by 12%. Most CCPs provided data on the costs for domestic securities only. Where data was provided, the costs of central counterparty clearing services for domestic and cross-border securities were very similar, and this relationship remained stable over the period 2006–09.

On the basis of fund manager data, trading services purchased from brokers are generally more expensive when purchased for cross-border securities, but the difference in costs between domestic and cross-border transactions has become smaller over time. Interestingly, the cost of trading cross-border securities varies across fund managers, with some finding domestic services more expensive.

The differences between the costs of securities in different domiciles can be attributed to a number of factors:

- cross-border barriers;
- economies of scale;
- variation in the types of service available/provided;
- variation in the costs of trading and post-trading services across financial centres.

There are specific legal and technical barriers that make cross-border trading more costly than domestic trading, which the European Commission and the industry have been working to remove.

Outlook: convergence of domestic and cross-border transaction costs?

Economies of scale are significant in this sector, as reflected in the widespread practice of volume discounts. This means that using a broker or custodian that is not located in the domicile of the security is generally more expensive than using a local or global broker/custodian, because the former will typically have much lower transaction volumes than the latter.

The analysis also shows that the costs of trading and post-trading services in some financial centres are higher than in others, although the differences have become smaller over time. This is reflected in data from brokers, which indicates that the cost of trading varies per domicile of equity. For example, all institutional brokerage firms in the sample charge, on average, around 7bp for trading in equities domiciled in one of the financial centres covered by the study, but more for trading in equities domiciled in some of the smaller financial centres, such as Poland and the Czech Republic (where the trading costs are around 23bp), and Greece (where the cost is approximately 13bp).

The variation in costs across financial centres explains some of the higher costs of cross-border transactions. If the investor is located in a 'cheap' financial centre and trades in an 'expensive' one, this will result in the costs of cross-border transactions being higher than those of domestic transactions. Such variation in costs might be partly explained by differences in the services offered. For example, in some financial centres, trade execution is offered in a bundle with other services such as research, while in other financial centres it is not, or it is but to a lesser extent. In some cases, it might also be due to economies of scale at the level of the financial centre, which would explain why trading and post-trading is more expensive in some smaller financial centres.

The combined effect of these two factors (economies of scale and variation in costs across financial centres) is interesting. The pattern that emerges is that the domestic transactions of investors domiciled in a major financial centre will tend to be of high volume and will be undertaken in a relatively cheap market, while their cross-border transactions are likely to be of relatively low volume in each financial centre, especially for secondary and other financial centres. While investors in secondary and other financial centres are trading domestically in relatively 'expensive' centres, their main cross-border transactions are likely to be concentrated in relatively 'cheap' major financial centres.

Even after removing all barriers to cross-border transactions, some differences in costs between domestic and cross-border transactions may remain, therefore, simply as a result of economies of scale, and smaller volumes of cross-border transactions than domestic transactions. The latter is due to home bias in investments. Although this bias has been diminishing over time, the data suggests that investors continue to allocate a disproportionately large part of their investment portfolios (30–60% for institutional investors) to domestic securities. How long will it take for investors to change their attitude and go pan-European?

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[1] Federation of European Securities Exchanges, European Association of Central Counterparty Clearing Houses, and European Central Securities Depositories Association (2006), 'European Code of Conduct for Clearing and Settlement', November; and European Commission (2006), 'Clearing and Settlement: Commissioner McCreevy Welcomes Industry's New Code of Conduct', press release IP/06/1517, November.
[2] Oxera (2007), 'Methodology for Monitoring Prices, Costs and Volumes of Trading and Post-trading Activities', report prepared for European Commission, DG Internal Market and Services.
[3] Based on data from the Federation of European Securities Exchanges.

If you have any questions regarding the issues raised in this article, please contact the editor, Dr Gunnar Niels: tel +44 (0) 1865 253 000 or email g_niels@oxera.com

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