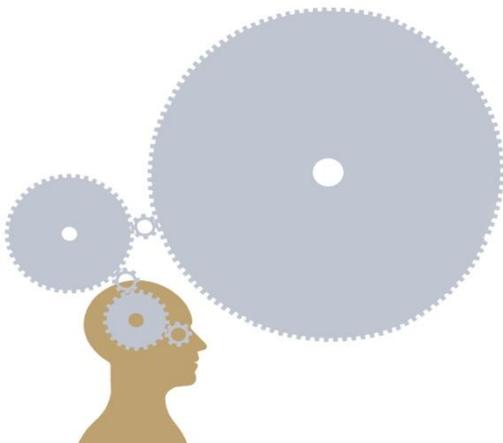


Introducing competition in trading and post-trading in Brazil—regulatory options

Meeting with stakeholders

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Context

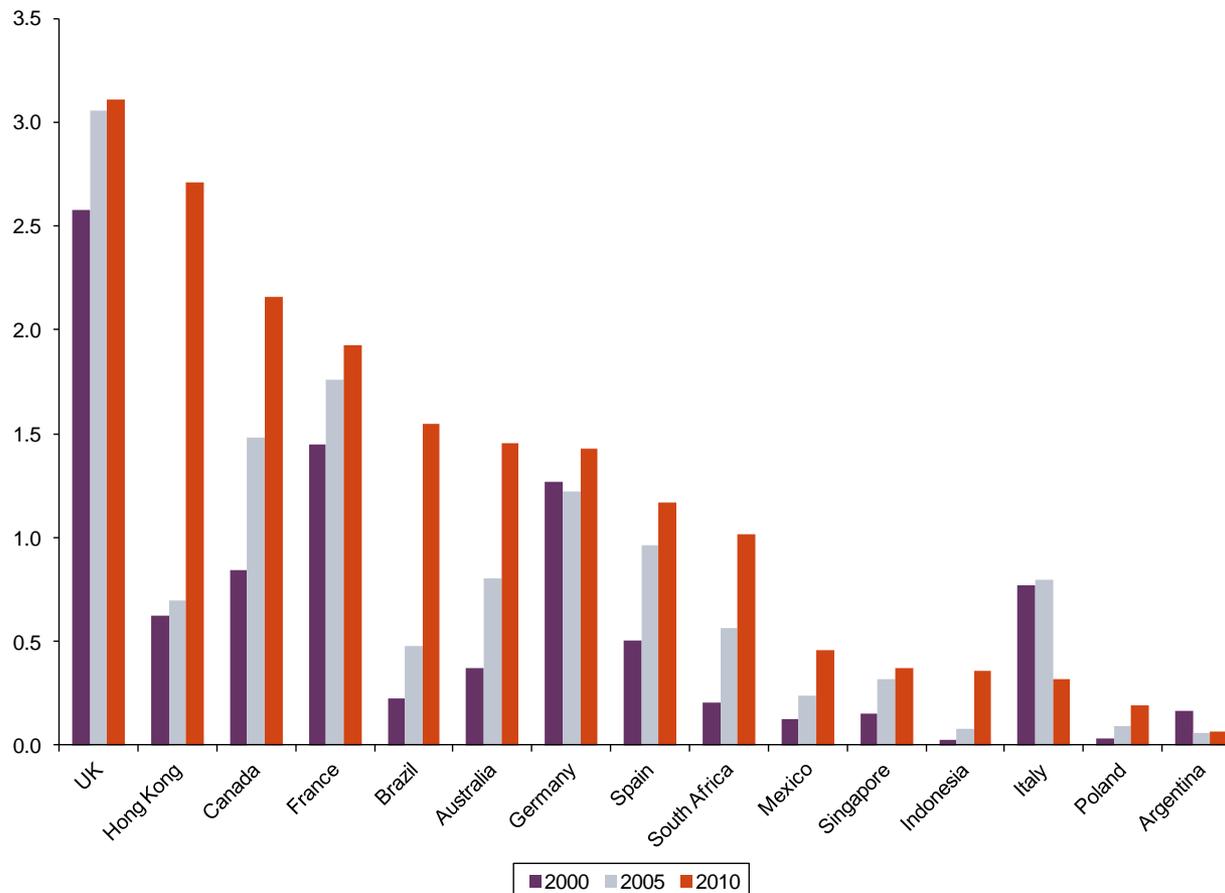
- study represents Oxera's independent conclusions and analysis
- objective of the study is to understand the potential costs and benefits of introducing more competition into the trading and post-trading markets in Brazil
- there is little available evidence; the Oxera report is designed to inform the debate on this important issue of competition, by undertaking a number of *new* empirical analyses:
 - price comparisons with other countries
 - cost and benefits of different forms of potential entry
 - analyses from the end-user perspective, but also from that of various players in the value chain
 - what the merits are of different regulatory options available

Some important questions

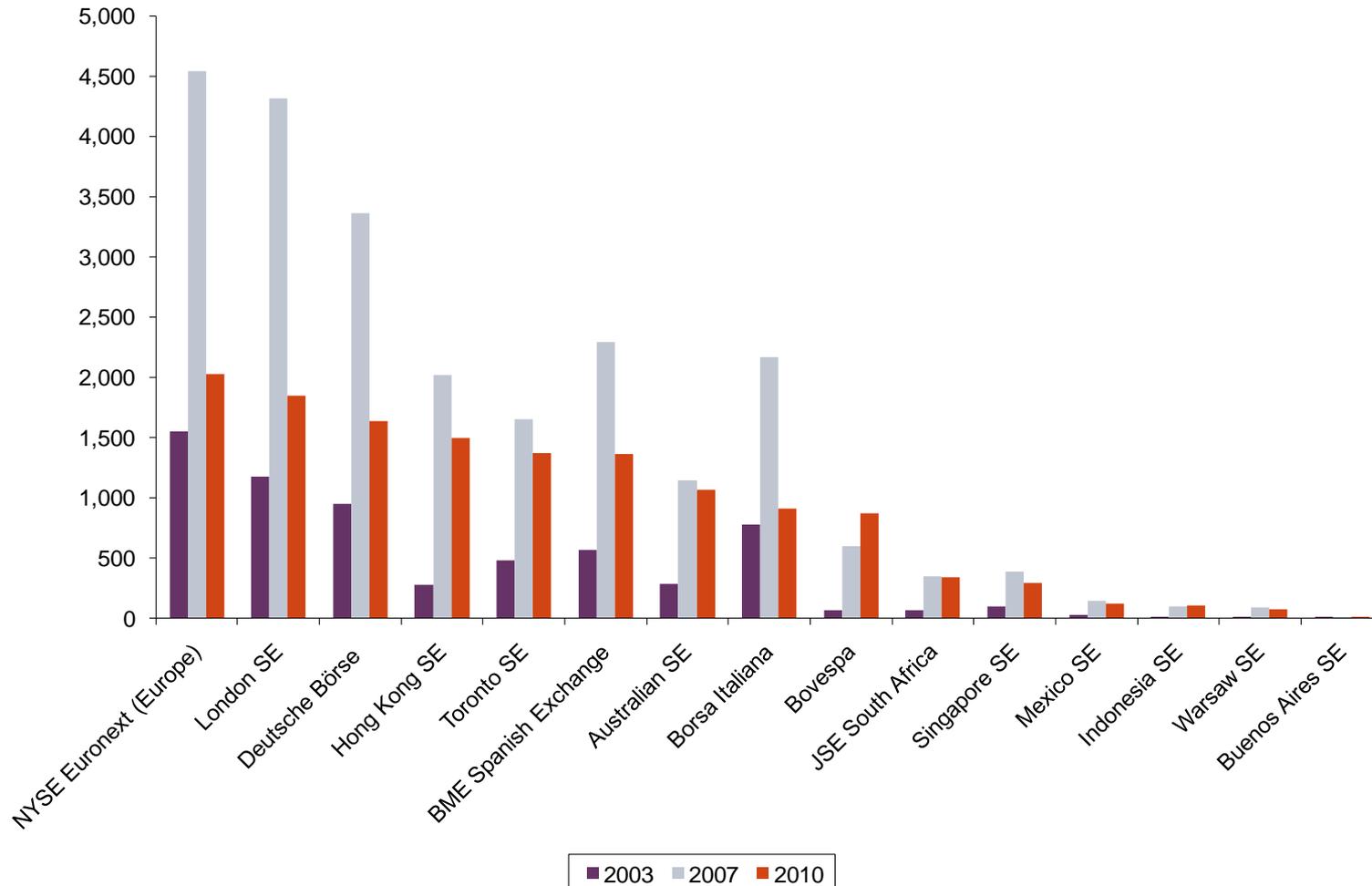
- what are the characteristics of the Brazilian equity market, in terms of current size, potential growth, regulation (transparency and market stability), etc?
- who are the main providers of services, and how concentrated is the market?
- is there scope for more than one provider of trading and post-trading services, and is this economically viable?
- how do the charges for trading and post-trading services for equities in Brazil compare with those in other financial centres?
- in the absence of alternative trading and post-trading providers, what options are available to a regulator to ensure long-term efficiency of the market?
- if entry takes place, what options are available to the regulator to ensure that competition is beneficial to end-users, without affecting market stability and transparency?

Market capitalisation has increased

Domestic market capitalisation by country
(USD trillion, current prices)



Value of share trading (USD billion, May 2011 prices)



Source: World Federation of Exchanges, London Stock Exchange data, Borsa Italiana data, and Oxera analysis.

Methodology for price comparison

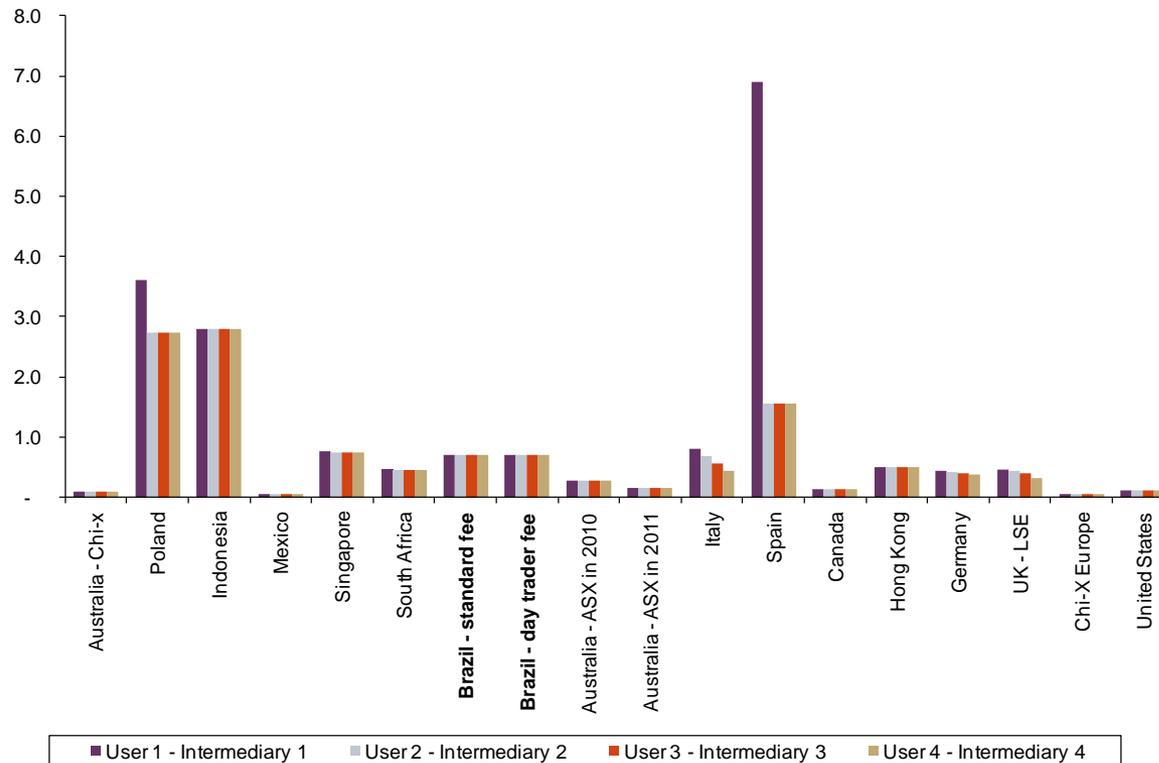
- user profile analysis
 - profiles for retail and institutional investors, and small and large brokers
 - informed by actual data on investors and brokers in Brazil
- main elements of the analysis:
 - analysis of costs of using infrastructure providers
 - additionally: analysis of costs to end-investors
 - broad range of comparators
 - sensitivity analysis undertaken
 - Rosenblatt analysis (commissioned by BM&FBovespa) reviewed

Main messages from the price comparison

- **for institutional investors, trading fees** in Brazil are similar to trading fees in financial centres such as Italy, Spain and Singapore, but somewhat higher than in other financial centres, such as the USA, UK, Canada and Australia
- **for institutional investors, post-trading fees** in Brazil appear to be higher than post-trading fees in the other financial centres we have looked at
- conclusions hold even if an adjustment is made for differences in services provided and costs to end-investors are analysed
 - exception: fees to retail investors in Brazil are in line with fees in other financial centres
- Rosenblatt analysis, commissioned by Bovespa, is conceptually consistent with Oxera's analysis but overestimates custodian charges in foreign financial centre
- one would expect fees for institutional investors to come down if the Brazilian market continues to grow

Cost of trading services

Cost of trading services (basis points)



The chart presents the variation in trading costs according to the user profile

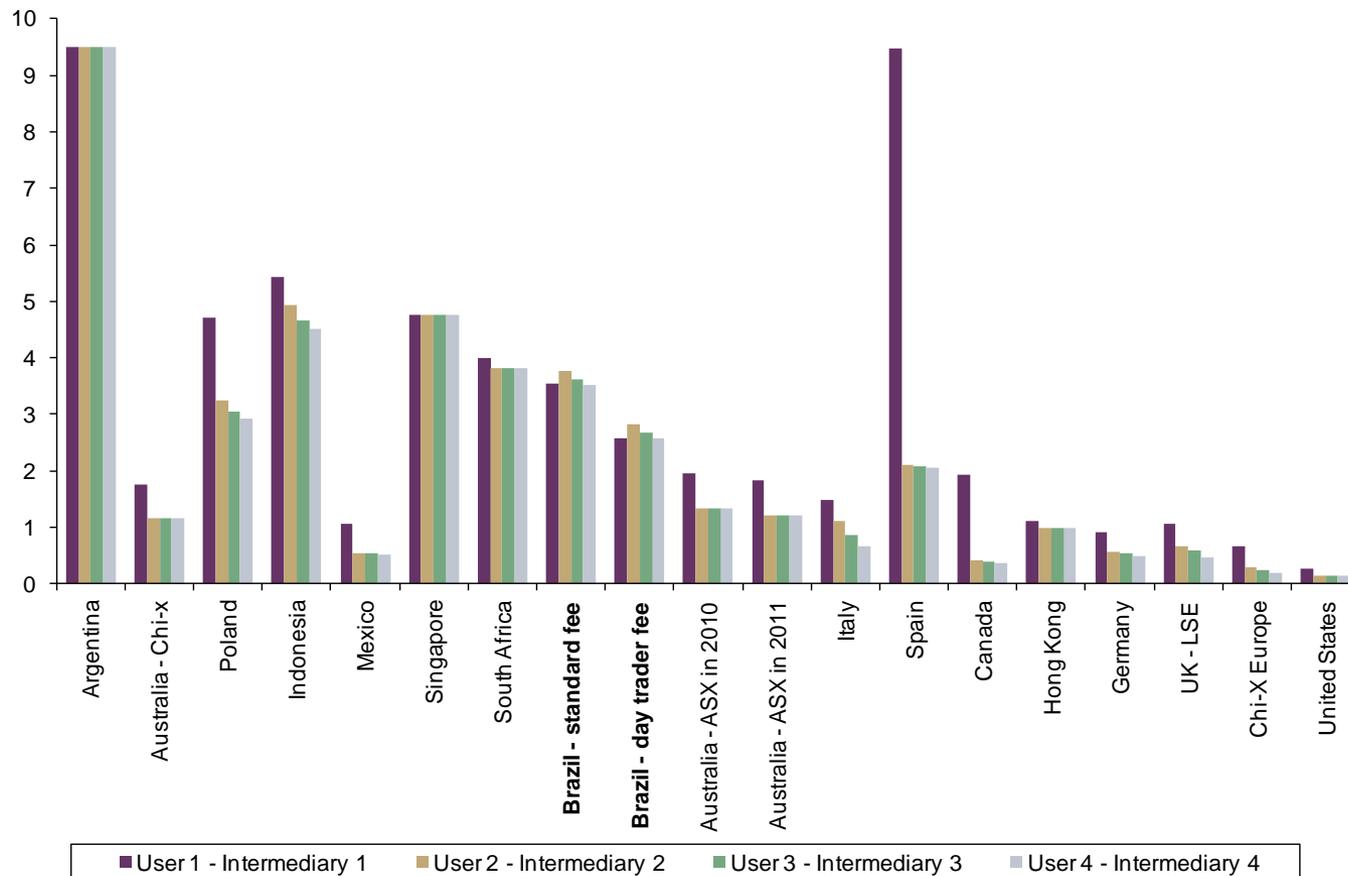
The stock exchanges appear to fall within one of three groups:

- those with fees in excess of 1.5bp
- those with fees between 0.4bp and 1.5bp
- those with fees below 0.4bp

BM&FBovespa falls into the middle group

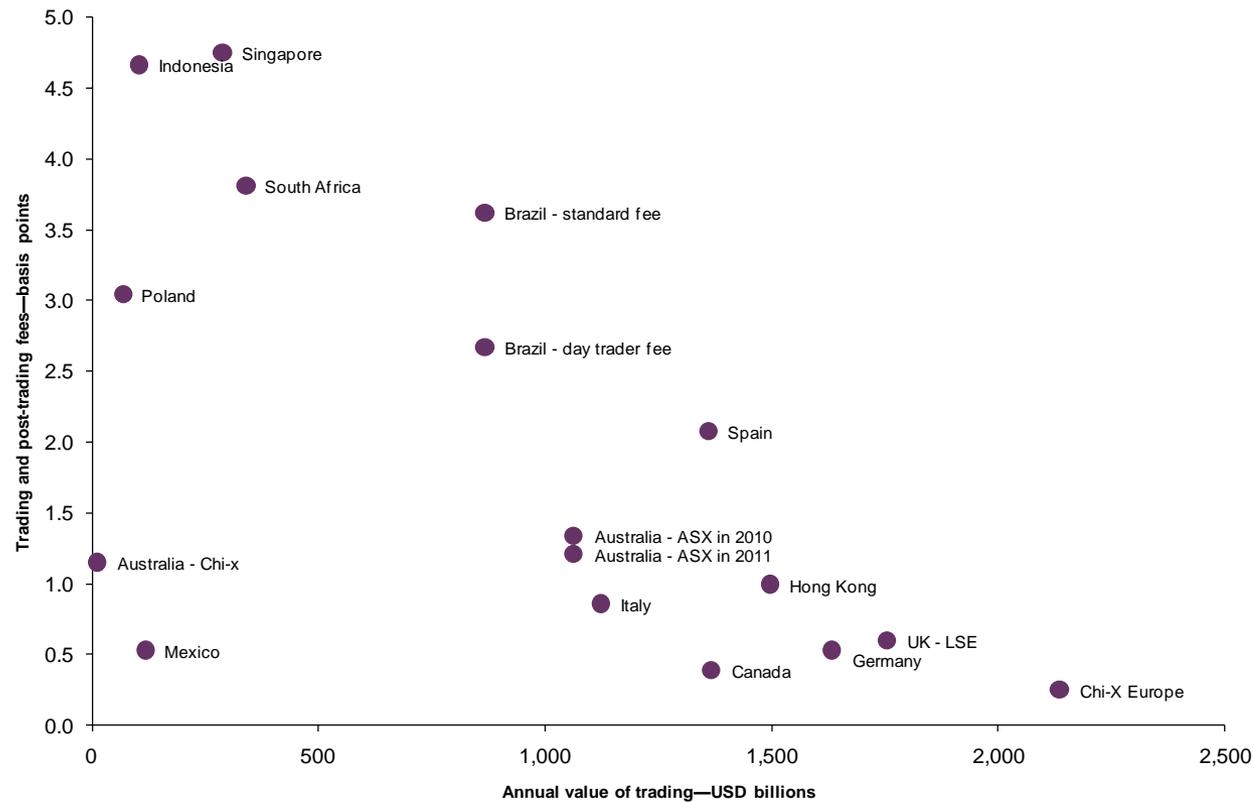
Cost of trading and post-trading services

Cost of trading and post-trading services (basis points)



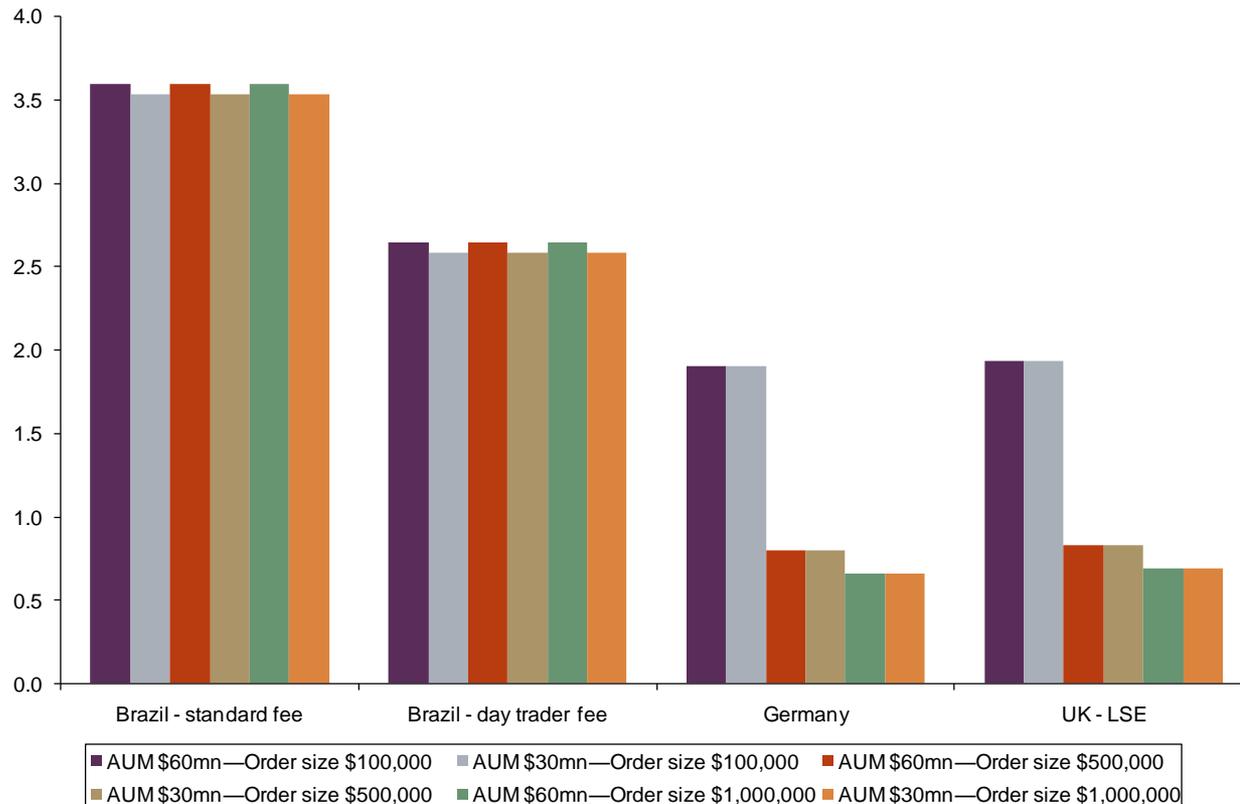
Cost of trading and post-trading services

Relationship between the cost of trading and post-trading and the value of trading—institutional investors using large intermediaries



Cost of trading and post-trading services including custodians

Cost of trading and post-trading services including custodians (basis points)



Cost of trading to end-investors

- retail investors
 - brokerage fees in Brazil are similar to those in the UK
 - fees cover both trading and settlement
- institutional investors
 - brokerage fees in Brazil (including Bovespa's fees) are higher than for example in the UK

Review of Rosenblatt analysis

- commissioned by BM&FBovespa
- compares Brazil with one financial centre (Frankfurt) and concludes that costs are very similar
- however, analysis is unlikely to be robust
 - significantly overestimates custodian charges in Germany (for both settlement and custody)
- discussed with Rosenblatt and BM&FBovespa
- Oxera's analysis is based on a large sample of custodians
 - study prepared for the European Commission

Framework for CBA

- two market outcomes:
 - trading platform entering, with access to incumbent CCP
 - trading platform and CCP entering
- impact on the **demand** side
 - reduction in trading and post-trading fees
 - additional costs to brokers
 - changes in trading volume
- impact on the **supply** side
 - changes in revenues for infrastructure providers
 - changes in costs for infrastructure providers
- impact on the **wider economy**
 - cost of regulation
 - impact on the cost of capital
 - impact on market stability

Some of the main parameters

- market share of new entrant (between 5% and 15%)
- entrant's trading fee (between 0.45bps and 0.1bps)
- entrant's clearing fees (between 0.6bps and 0.2bps)
- BM&FBovespa's response in terms of trading fees (between 0.6bps and 0.2bps—ie, between 15% and 60% reduction)
- BM&FBovespa's response in terms of clearing fees – day trader (between 0.75bps and 0.25bps)
- number of brokers that will connect to both trading platforms (between 24 and 44)
- BM&FBovespa's access fee for CCP services (current fee)
- unbundling of services by BM&FBovespa
- increased cost of regulation USD10m (without BSM offset)

Brokers' costs

- costs are likely to vary by broker
- not all existing brokers will incur additional costs
 - consolidation in the market for brokers
- capital expenditure will be recovered over a number of years
- in case of access to a new CCP, increase in back-office may be significant
- in conservative scenario of fee reductions (ie, limited reduction in fee reduction), total costs may outweigh benefits
- experience in Europe suggests that brokers' costs can increase, but overall end-investors are still better off

Main messages of the cost/benefit analysis

- scenario of trading platform entrant
 - at current trading volumes and conservative assumptions (ie, small fee reductions and low market share of entrant), costs and benefits are finely balanced
 - as the market grows, potential benefits are likely to increase
- scenario of trading platform and CCP entrant
 - at current volumes and conservative assumptions, benefits are potentially more substantial
 - but also more risks and challenges

Suggestions for a way forward

- the Brazilian model of equity markets is characterised by high transparency and market stability
- in terms of efficiency of the market, our analysis suggests:
 - a) prices appear to be somewhat high relative to the current scale;
 - b) there are barriers to entry (economies of scale, network effects etc.); and
 - c) currently, market practice is for intermediaries to pass infrastructure costs straight through to end-users
- to create a contestable market, a three-pronged approach is proposed:
 1. price monitoring and benchmarking by incumbent
 2. consideration should be given to the need for access to the new multi-asset class CCP
 3. develop market supervision and regulation

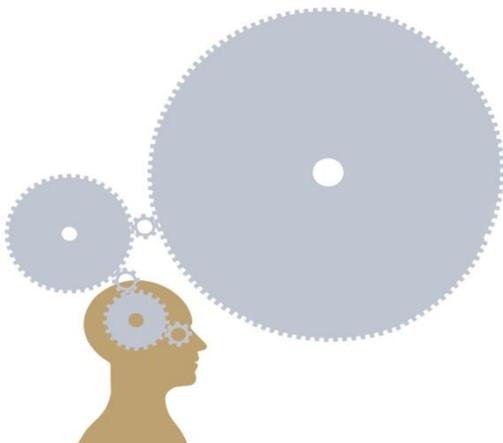
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