Benchmarking ASX’s post-trading services

Cash equity markets

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Overview

- High-level results
- Methodology
- Detailed results
- Service comparison
- Revenue analysis
Typical costs
Total trading and post-trading fees and the relationship to size of the market (value of trades)
Typical costs
Post-trading fees and the relationship to size of the market (value of trades)

Note: Costs in basis points (bp).
Typical costs—enlarged
Post-trading services and the relationship to size of the market (value of trades)

Note: Costs in bp.
Typical costs—enlarged
Post-trading services and the relationship to size of the market (number of trades)

Note: Costs in bp.
Methodology

• comparison of the costs of post-trading services provided by FMIs in 14 different-sized financial centres

• ‘user-profile’ approach
  • seven user profiles: 4 institutional and 3 retail
  • represent a diverse range of investors and intermediaries active in the Australian cash equity market
    • objective is comparisons between FMIs, not between user profiles
  • informed by ASX aggregate and participant-level data and discussions with local brokers
  • reviewed by Business Committee

• cross-checks
  • sensitivity analysis and ‘local’ user profiles applied where relevant
  • service comparison
  • financial metrics
## Investor and intermediary profiles (I)

<table>
<thead>
<tr>
<th>Investors</th>
<th>Small hedge fund manager</th>
<th>Large hedge fund manager</th>
<th>Small long-only fund manager</th>
<th>Large long-only fund manager</th>
<th>Frequent retail investor</th>
<th>Infrequent retail investor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of equities under management (AU$m)</td>
<td>30</td>
<td>300</td>
<td>200</td>
<td>10,000</td>
<td>0.10</td>
<td>0.25</td>
</tr>
<tr>
<td>Total value traded per year (AU$m)</td>
<td>60</td>
<td>600</td>
<td>350</td>
<td>6,000</td>
<td>0.5</td>
<td>0.045</td>
</tr>
<tr>
<td>Average order size (AU$m)</td>
<td>0.06</td>
<td>0.40</td>
<td>0.07</td>
<td>0.40</td>
<td>0.005</td>
<td>0.015</td>
</tr>
<tr>
<td>Average number of stock traded per year</td>
<td>1,000</td>
<td>1,500</td>
<td>5,000</td>
<td>15,000</td>
<td>100</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intermediaries</th>
<th>Institutional: small</th>
<th>Institutional: mid</th>
<th>Institutional: large</th>
<th>Retail: online</th>
<th>Retail: advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average number of transactions per day</td>
<td>12,000</td>
<td>59,000</td>
<td>126,000</td>
<td>20,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Average trade size (AU$)</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>7,000</td>
</tr>
<tr>
<td>Average value of custodian account (CSD level—total) (AU$m)</td>
<td>1,000</td>
<td>12,000</td>
<td>52,000</td>
<td>20,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Average number of settlement instructions per day</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>500</td>
</tr>
</tbody>
</table>
**Investor and intermediary profiles (II)**

<table>
<thead>
<tr>
<th>Profiles</th>
<th>Profile 1</th>
<th>Profile 2</th>
<th>Profile 3</th>
<th>Profile 4</th>
<th>Profile 5</th>
<th>Profile 6</th>
<th>Profile 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investor type</td>
<td>Small hedge fund manager</td>
<td>Large hedge fund manager</td>
<td>Small long-only fund manager</td>
<td>Large long-only fund manager</td>
<td>Frequent retail</td>
<td>Infrequent retail</td>
<td>Infrequent retail</td>
</tr>
<tr>
<td>Intermediary type</td>
<td>Institutional: small</td>
<td>Institutional: mid</td>
<td>Institutional: mid</td>
<td>Institutional: large</td>
<td>Retail: online</td>
<td>Retail: advice</td>
<td>Retail: online</td>
</tr>
<tr>
<td>Estimated annual post-trading cost at ASX (A$)</td>
<td>3,300</td>
<td>17,200</td>
<td>16,400</td>
<td>168,400</td>
<td>100</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Revenues from ASX’s clearing and settlement services in the cash equity market totalled A$42m and A$40m in FY2013.
Detailed results (I)
Overview

• in most financial centres, retail investors pay more (in bp) for their post-trading services (and trading services) than institutional investors

• there are some differences in the relative position of ASX across the user profiles:
  • for institutional investors, ASX is clustered around the midpoint
  • for frequent retail investors, ASX is towards the higher end
  • for infrequent retail investors, ASX is towards the lower end
Profile analysis: post-trading fees
Institutional investors (chart truncated at 2bp)

Note: Fees in bp.
Profile analysis: post-trading fees
Retail investors (chart truncated at 5bp)

Note: Fees in bp.
Detailed results (II)
CCP and CSD fees disaggregated

- where comparisons can be made separately for clearing and settlement services, *clearing* fees in Australia are at the high end of its peer group
- owing to bundling, disaggregated analysis is possible for CCPs and CSDs in 9 financial centres only
- the cost of using ASX’s post-trading services is lower than in 4 of the 5 excluded financial centres (Hong Kong, Singapore, Brazil and Spain)
- taking into account the differences in the default waterfalls moves ASX nearer to the middle of the peer group
Profile analysis: CCP–CSD costs
Institutional investors

Profile 4: large long-only fund manager using large intermediaries
Profile 3: small long-only fund manager using medium-sized intermediaries
Profile 2: large hedge fund using medium-sized intermediaries
Profile 1: small hedge fund using small intermediaries

Note: Costs in bp.
Profile analysis: CCP–CSD costs
Retail investors

Note: Costs in bp.

- Profile 5: frequent retail investor using an online retail broker
- Profile 6: infrequent retail investor using a retail advice broker
- Profile 7: infrequent retail investor using an online retail broker
Profile analysis: CCP fees
Institutional profiles

Note: Fees in bp.
Profile analysis: CCP fees
Retail profiles

Note: Fees in bp.
Profile analysis: CSD fees
Institutional profiles

Note: Fees in bp.
Profile analysis: CSD fees
Retail profiles

Note: Fees in bp.
Service comparison (I)

• identified a number of potential differences, not all have a material impact on users’ costs:

• existence of CCP
  • none in Spain

• timing of novation
  • Canada novates late on, so less risk protection

• margining and treatment of client collateral
  • international standards for margining suggest similar requirements across CCPs
  • differences in interest payments likely to be small
Service comparison (II)

- netting efficiency
  - netting efficiency at the market level is driven predominately by *customer* characteristics
- type of accounts at the CSD
  - direct settlement to end-investor can increase costs at the CSD relative to omnibus CSDs, if the omnibus CSD nets institutional transactions
- funding of default waterfall
Service comparison (III)
Funding the default waterfall

• ASX takes on the risk of funding the default fund

  • in other CCPs this typically is funded directly by clients, who then take on this risk

• represents a shift of costs from clients to ASX: what is the value to clients of this change?

  • reflecting the risk of contributions made to the default fund, the cost is estimated as the average cost of debt for Australian clearing participants

    • proxied by the cost of A-rated commercial paper

  • results in approximately 0.04–0.07bp of ‘savings’ to clients

• a conservative estimate
Profile analysis: CCP fees with default fund adjustment

Institutional profiles

Note: Fees in bp.
Profile analysis: CCP fees with default fund adjustment

Retail profiles

Note: Fees in bp.
User profiles and customers’ actual experience

Summary

• the cost estimates for ASX are consistent with fees paid by ASX’s actual customers
User profiles and customers’ actual experience
Clearing fees

Legend
- profiles
- actual customers

Average clearing fee (0.238bp)
User profiles and customers’ actual experience
Settlement fees

Average settlement fee (0.20bp)
Conclusions

• given the size of the market, ASX’s prices are in line with its peer group
  • at the post-trading level and at the combined trading and post-trading level
• tariff structure differences cause differing results for different user profiles
  • ASX is generally close to/within its peer group
• disaggregation by service produces more variation
  • CCP services—at the higher end of the group; CSD services—at the lower end of the group
• service comparison suggests the contribution to the default waterfall by ASX Clear provides more risk protection than other CCPs
  • results in a cost saving of ~0.04–0.07bp to clients, and would move ASX closer to the middle of the peer group