Future of Securities Services

Introduction – Phil Brown, Clearstream & Chair of ISSA

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Future of Securities Services

Part 1

Archie Stebbings Partner - Olivier Wyman
Archie Stebbings
Partner, Market Infrastructure

Working with our key clients across capital markets on strategic, risk and operational priorities

AIMS FOR TODAY

1. Provide a summary of core messages from our joint report
2. Touch on some of the key drivers impacting the industry
3. Outline the key proposals stemming from our report
Oliver Wyman partnered with ISSA member institutions to co-author a white-paper on the future of securities services

Summary of key messages from the Future of Securities Services Whitepaper

- **Past decade has seen stable revenues** driven by rising AUC, but **declining profit margins**, in part due to ongoing fee compression

- **Looking forward**, we expect
  - **Continued top-line pressure** creating difficulties to deliver shareholder returns and ringfence resources for growth investment
  - **Significant growth opportunities** for firms that can afford to invest / partner in the right areas
  - **Geopolitical uncertainties** that put a global industry at risk of becoming regionalized

- We expect that the **drivers of change with the largest impact** on the industry fit within 2 broader categories
  - **Changing investor behaviour**
  - **Technology disruption and technology enabled competition**

- Depending on the business model, scale and geographical footprint, we believe **four strategic considerations will be critical** for players in the Securities Services industry
  1. **Relieve cost pressure** to the core
  2. **Double-down on new growth paths**
  3. **Fend-off industry disruption**
  4. **Future-proof operating models** based on C19 lessons learned
Summary forces shaping the future of capital markets
## Market Value Deep Dive: Value has migrated to exchanges and financial data companies

Market Cap / Revenue multiples with global bank spread, $BN 2020

<table>
<thead>
<tr>
<th>Averages</th>
<th>Global banks IB &amp; Markets¹</th>
<th>Diversified exchanges²</th>
<th>Financial Data &amp; Tech Providers²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues ($BN)</td>
<td>16</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Revenue growth ('14-'19)</td>
<td>-2%</td>
<td>7%</td>
<td>12%</td>
</tr>
<tr>
<td>Market cap ($BN)</td>
<td>42</td>
<td>39</td>
<td>20</td>
</tr>
</tbody>
</table>

### Commentary

- New regulations after the Global Financial Crisis increased capital requirements of banks, changing the economics.
- Adjacent non-bank firms with low-capital, network-like economics trade at much higher P/E multiples.
- The shift of revenues to capital light competitors has been slower and less extreme than feared, however, meaning the scale of the shift in valuation may be unwarranted.

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1. Market cap calculated as % of IBD & Markets revenue / total bank revenue multiplied by total bank market cap as of 3/10/2021.
2. Revenue includes revenue streams from Market Infrastructure and Financial Services activities only. Market cap is calculated as % of total revenue from these streams in 2020.

Source: Coalition proprietary data, Refinitiv Datastream, Public earnings reports and corporate financial information, Oliver Wyman proprietary data, Oliver Wyman Analysis.

Sensitivity: C1
Public
**Sell side opportunities:** businesses will need to capitalize on structural shifts in client demand to thrive in the future

<table>
<thead>
<tr>
<th>Description</th>
<th>Market size</th>
</tr>
</thead>
</table>
| **1 ELECTRONIC TRADING**  
• Investing in electronic trading platforms that offer edge and scale across asset classes  
• Deep specialization in less liquid asset classes with hybrid electronic and high touch capabilities  
• Reassessment of the user interface (investing in client portals that create stickier relationships with investors with broad market access and value-added services) | >$50 BN     |
| **2 PRIVATE MARKETS**  
• Expand early-stage coverage and product offering for corporates staying private longer  
• Invest in platforms that can channel the wide range of financing options/solutions for private companies  
• Establish new fund structures and other vehicles for individual investors to access expanding universe of private investments  
• Invest in capital light services for private borrowers (transaction banking) or private markets investors (custody and fund admin) | >$25 BN     |
| **3 EMERGING OPPORTUNITIES**  
• ESG: Financing the transition to a low carbon economy and underwriting a spectrum of green labelled products for investors  
• Digital Assets: trading and servicing new asset classes (e.g. crypto) and trading and servicing existing asset classes more efficiently  
• Outsourcing: commercializing existing capabilities, infrastructure, and data | N/A         |
OW has modelled three scenarios with the level of global economic stimulus and evolution of the pandemic key swing factors

<table>
<thead>
<tr>
<th>Scenario description</th>
<th>Partial Recovery</th>
<th>Full Recovery</th>
<th>Runaway Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Policy:</strong> Near-term stimulus</td>
<td>No meaningful additional stimulus is US or Europe</td>
<td>Some moderate fiscal stimulus passed in US and Europe in 2021-22</td>
<td>US passes a large infrastructure bill in 2021-22, with European countries also approving large fiscal stimulus</td>
</tr>
<tr>
<td><strong>Policy:</strong> Med-term fiscal</td>
<td>Political pressures and inflationary concerns result in 2022 fiscal tightening</td>
<td>No tax increases or spending cuts as fiscal policy remains accommodative</td>
<td>Fiscal policy remains accommodative through 2023 in drive to full employment</td>
</tr>
<tr>
<td><strong>Policy:</strong> Monetary policy</td>
<td>Accommodative monetary stimulus and QE continues, rates stay near zero through 2023</td>
<td>Rates very low through 2023, QE starts to taper off in 2022</td>
<td>Inflationary pressures result in rates rises in 2022 and withdrawal of QE in 2021</td>
</tr>
<tr>
<td><strong>Policy measures:</strong> Trade</td>
<td>Geopolitical tensions escalate resulting in increasing trade barriers</td>
<td>Geopolitical and trade tensions gradually ease in some areas, ongoing tension between US-China and EMEA-UK</td>
<td>Geopolitical tensions significantly de-escalate, widespread easing of trade barriers (including US and China)</td>
</tr>
<tr>
<td>Pandemic evolution</td>
<td>Variants continue to emerge which are resistant to current vaccines</td>
<td>Vaccine rollout on schedule, herd immunity reached in developed countries during late summer</td>
<td>Vaccines and distribution accelerate, herd immunity reached in developed countries early summer</td>
</tr>
<tr>
<td>Macro environment</td>
<td>Weak global recovery as global GDP increases to 4.7% in 2021, with China rebounding to 8% growth, offset by mild recoveries of 2-3% in Europe and US</td>
<td>Solid rebound in global economy led by Asia as global GDP increases by 6.4% in 2021; China grows at 9%, European and US economies grow 4-7%</td>
<td>Surging global economy with gobal GDP rises 8.1% in 2021; European and US economies grow by 5-10%, matching China’s growth at 10%</td>
</tr>
<tr>
<td>Credit</td>
<td>Default rates at 8% as recovery is weak and government assistance is withdrawn</td>
<td>Default rates at 6% as defaults are contained to sectors most exposed to pandemic shock</td>
<td>Default rates at 3% as rapid recovery and continued government backstop results in few defaults</td>
</tr>
<tr>
<td><strong>2020-21 YoY</strong></td>
<td>-2.4%</td>
<td>-1.0%</td>
<td>+0.6%</td>
</tr>
<tr>
<td><strong>2020-23 CAGR</strong></td>
<td>-1.5%</td>
<td>+0.6%</td>
<td>+3.3%</td>
</tr>
</tbody>
</table>

Source: Oliver Wyman analysis
Securities services revenues remain in range or above 2017–2019 levels in all but our partial recovery scenario

CIB revenue projections for three modelled scenarios
$ BN, 2018–2023e

<table>
<thead>
<tr>
<th>$ BN, 2018–2023e</th>
<th>Partial Recovery</th>
<th>Full Recovery</th>
<th>Runaway Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>535</td>
<td>521</td>
<td>547</td>
</tr>
<tr>
<td>2019</td>
<td>524</td>
<td>520</td>
<td>548</td>
</tr>
<tr>
<td>2020</td>
<td>562</td>
<td>532</td>
<td>563</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Macro</th>
<th>Credit</th>
<th>Equities</th>
<th>IBD</th>
<th>Securities services</th>
<th>Transaction banking</th>
<th>Lending</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td></td>
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<tr>
<td>2019</td>
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<td>2020</td>
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<td>2021</td>
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<td>2023</td>
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</tbody>
</table>

CIB Rev. YoY growth

-10.9% -2.8% -0.8% -7.3% -0.2% 2.4% -2.7% 0.3% 2.7%

Source: Coalition proprietary data, Oliver Wyman analysis
Strategic implications for the securities services industry

Overview strategic industry forces and associated drivers

**Continued pressure on the top-line forcing additional focus on cost**
- Downward pressure on fees
- Collapse of net interest margin
- Shift to lower margin solutions and lower cost providers

**New revenue opportunities from innovative services**
- Emergence of different asset classes
- Emergence of new investor types
- Demand for solutions to new or unaddressed problems

**Disruption of the current market structure and value chain**
- Disruption by new market participants (e.g. BigTech)
- Disruption through M&A / Partnerships
- Breakdown of traditional value chains and business models

**Industry responses to COVID-19 and early-lessons learned**
- Drastic push to digitization, automation and new ways of working
- Further shift of value from capital markets participants to market infrastructure
Imperatives for the Securities services Industry

Overview of imperatives for the industry

**Continued pressure on the top-line forcing additional focus on cost**
- Transformation of legacy IT
- Transition to Cloud
- Service and product standardization
- Participation choices
- M&A and consolidation

**New revenue opportunities from innovative services**
- Build new products and services
- Use data and artificial intelligence for value-add
- Recalibrate distribution channels

**Disruption of the current market structure and value chain**
- Re-think positioning along the value chain and activities conducted
- Fill capability gaps with acquisitions and partnerships
- Review insourcing and outsourcing decisions

**Industry responses to COVID-19 and early-lessons learned**
- Review ongoing digital transformation programs to increase ambition and accelerate delivery
- Review manual and cost intensive processes
- Adopt new ways of remote working
We defined strategic priorities that ISSA will work on together with the members to drive impact over the next years

Voice of the industry: What is the present key focus for your firm?
Survey during online webinars with ISSA members, N=37

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>Percentage</th>
<th>Focus Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Growth Plans</td>
<td>17</td>
<td>46%</td>
<td>• Private Markets and Digital Assets</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Client value-add increase (and differentiated charging models)</td>
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<tr>
<td></td>
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<td></td>
<td>• Geographical cooperation to tap into new growth markets</td>
</tr>
<tr>
<td>Cost Pressure on the Core</td>
<td>12</td>
<td>32%</td>
<td>• Definition and adoption of industry APIs</td>
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<td></td>
<td>• Application of common data standards</td>
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<td></td>
<td>• Partnering to share R&amp;D investments</td>
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<td></td>
<td></td>
<td></td>
<td>• Front-to-back cost reduction</td>
</tr>
<tr>
<td>Industry Disruption</td>
<td>7</td>
<td>19%</td>
<td>• Cyber threats from move to Cloud</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Applications of Quantum Computing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Positioning to shape upcoming regulations and achieve / protect level playing field against FinTechs</td>
</tr>
<tr>
<td>COVID-19 early lessons learned</td>
<td>1</td>
<td>3%</td>
<td>• Accelerating digitization</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Adopting new ways of working</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Improving operational resilience</td>
</tr>
</tbody>
</table>
Future of Securities Services

Part 2
Collin Parry - ISSA
The detailed proposals

COST PRESSURE TO THE CORE

- Industry APIs: Joint development of standardized industry APIs for core industry processes
- Common data standards: that facilitate data analytics
- Front-to-back ecosystem cost reduction: Identification of areas that lead to inefficiencies for all
- Business Process as a Service (BPaaS):
- Cost sharing for selected R&D investments: Collaboration on key investments in digitalization
- Consolidation within the industry: out of the scope of this paper as ISSA would not be involved.

NEW GROWTH PATHS

- Client value-add increase: Identification of areas to increase the value they provide to their clients
- Private Markets and digital assets: Development of a shared Private Markets/Alternatives/token infrastructure
- Pursue a more rigorous Front to Back cooperation: Identification of beneficial areas to address opportunities.
- Geographical cooperation: Facilitation of increased collaboration, specifically among smaller players.

INDUSTRY DISRUPTION

- Joint positioning: Joint efforts to accelerate the development of ESG standards
- Cyber threats arising from Cloud and Quantum Computing: Joint analysis and sharing of perspectives on risks
- SaaS ecosystems: Development of an interoperable SaaS ecosystem for data analytics and workflow solutions

COVID-19 EARLY LESSONS LEARNED

- Best practice sharing digitization: Sharing of best practices and lessons learned from the accelerated digitization.
- Best practice sharing: Sharing of best practices with respect to the implementation of regulation and risk management/operational resilience
- Best practice sharing future of work: Sharing of best practices and lessons learned from operating our businesses
The detailed proposals – first filter from Sept Webinars

Priority for Members

Client Value Add
- F2B Cooperation
- R&D Investments
- F2B Cost Reduction
- Geographic collaboration

SaaS
BPaaS
Consolidation

ISSA’s ability to influence

Private Market & Digital
- Digitisation Best Practices
- API
- Common data standards
- ESG Standards
- Cyber – Cloud and Quantum

Risk and Resolution Best Practices
Future of Work Best Practices
The detailed proposals – Remove those with little ability to influence

ISSA’s ability to influence

<table>
<thead>
<tr>
<th>Priority for Members</th>
<th>Private Market &amp; Digital</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Digitisation Best Practices</td>
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<td>API</td>
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<td>ESG Standards</td>
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<td>Cyber – Cloud and Quantum</td>
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<td>Risk and Resolution Best Practices</td>
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<td>BPaaS</td>
<td>Future of Work Best Practices</td>
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<td>Consolidation</td>
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</tr>
<tr>
<td>Client Value Add</td>
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</tr>
</tbody>
</table>

- Sensitivity: C1
- Public
The detailed proposals – second filter existing WG

ISSA’s ability to influence

- Digital Assets
  - API
  - Private Market
  - Common data standards
  - ESG Standards
    - Digitisation Best Practices
    - Cyber – Cloud and Quantum
  - Risk and Resolution Best Practices
  - Future of Work Best Practices

Priority for Members
The detailed proposals – for debate

ISSA’s ability to influence

API

Private Market

Common data standards

ESG Standards

Digitisation Best Practices

Cyber – Cloud and Quantum

Priority for Members
Poll your first thoughts

- **Industry APIs:** Joint development of standardised industry APIs for core industry processes together with key client/user groups on the buy- and sell-side. Standardised APIs will have a long-term industry value and facilitate data sharing and service interoperability between industry participants to counter the risk of API fragmentation that could arise if players develop their own APIs without broader industry interoperability.

- **Common data standards:** Development of common data standards that facilitate data analytics creating value for clients that can be monetized in the industry and increase collaboration among industry players.

- **Private Markets and digital assets:** Development of a shared Private Markets/Alternative infrastructure and common industry standards.

- **Cyber threats arising from Cloud and Quantum Computing:** Joint analysis and sharing of perspectives on risks that could arise from a mass adoption of Cloud and Quantum Computing in Capital Markets and Securities Services, specifically with regard to cyber risk.

- **Best practice sharing digitisation:** Sharing of best practices and lessons learned from the accelerated digitisation efforts induced by running our businesses during the COVID-19 pandemic, to enable participants to review and improve own digitalisation programs.

- **Joint positioning:** Joint efforts to accelerate the development of the securities services market standards for Environmental, Societal & Governance (ESG) or to develop common positioning for upcoming regulation

Polling tool

www.Pollev.com/8wpolling
Activity – Ends 13.45 CET

➢ Split into the Breakout Rooms – technology willing
  ▪ Randomly assigned but I tried to break up a firm’s participants
➢ Under your team leader create a proforma rationale template for the topic.
  ▪ Some details have been completed
➢ Return ready to present to the plenary

➢ Template is simple and covers the following
  ▪ Name of Potential Group
  ▪ Purpose
  ▪ Goal
  ▪ Description of working group topic
  ▪ Time Frame / Important Milestones
  ▪ Evaluation Criteria:
    o How will the work effect change through collaboration and communication to make the Securities markets more efficient and effective whilst reducing the risk for all participants
    o On which aspects can ISSA express clear strong (authoritative) views on implementation, industry positioning, etc.?
    o Is this topic already covered by another industry organization? Is this topic an area where ISSA is uniquely positioned to address?
    o How will the Working Group's output be used? Ideally, it should lead to action and not just be a one-time thought piece.
    o Any additional points the Breakout Team think are important
Presentation of the Templates
Poll your thoughts on the priority for the Board

- **Industry APIs:** Joint development of standardised industry APIs for core industry processes together with key client/user groups on the buy- and sell-side. Standardised APIs will have a long-term industry value and facilitate data sharing and service interoperability between industry participants to counter the risk of API fragmentation that could arise if players develop their own APIs without broader industry interoperability.

- **Common data standards:** Development of common data standards that facilitate data analytics creating value for clients that can be monetized in the industry and increase collaboration among industry players.

- **Private Markets and digital assets:** Development of a shared Private Markets/Alternative and Digital Asset infrastructure and common industry standards.

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Q&A and Next Steps