AFTERNOON WORKSHOPS

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CSD deep dive
What does a Central Securities Depository (CSD) do?

1 - **Issuance**: initially record securities in a book-entry system
2 - **Settlement**: operate a securities settlement system and deliver finality
3 - **Custody**: maintain securities accounts and service securities recorded on accounts
4 - **Services**: provide added-value functionalities to customers (data, tax, issuer services, etc.)
The CSD landscape in Europe*

The market

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>International CSDs</td>
<td>2</td>
<td>€23tn</td>
</tr>
<tr>
<td>T2S participating CSDs</td>
<td>21</td>
<td>€29tn</td>
</tr>
<tr>
<td>Other CSDs</td>
<td>13</td>
<td>€4tn</td>
</tr>
</tbody>
</table>

*Source: European Central Bank

EURONEXT SECURITIES

*Source: European Central Bank

INTERNAL USE ONLY
Euronext Securities in a nutshell

400+ clients

7,700+ issuers

120m+ settlement instructions

5m securities accounts

€6tn+ Assets Under Custody

**OSLO**
- Norway is a direct holding market, with end investor accounts in the CSD
- CeBM settlement in NOK through a local platform
- Targeted Investor CSD offering through indirect links
- AUC: €0.7 trillion
- #Security Accounts: 2 million
- #Settlement Instructions: 25 million
- #Corporate Actions: 35k
- #ISINs: 9k

**COPENHAGEN**
- Denmark is a direct holding market with end investor accounts in the CSD
- CeBM settlement in EUR, DKK and SEK through T2S and a local platform
- AUC: €1.5 trillion
- #Security Accounts: 3 million
- #Settlement Instructions: 45 million
- #Corporate Actions: 11k
- #ISINs: 9k

**PORTO**
- Portugal is an omnibus market
- CeBM settlement in EUR through T2S
- CoBM settlement in other currencies through a partner bank
- AUC: €0.4 trillion
- #Settlement Instructions: 2 million
- #Corporate Actions: 8k
- #ISINs: 9k

**MILAN**
- Italy is an omnibus market.
- CeBM settlement in EUR through T2S.
- Well-developed Investor CSD offering through direct and indirect links.
- AUC: €3.7 trillion
- #Settlement Instructions: 51 million
- #Corporate Actions: 38k
- #ISINs: 20k
Focus on Euronext Securities in the Nordics

In most European countries, CSDs only maintain large **omnibus accounts** for banks who in turn maintain **retail accounts** in their own systems.

In Denmark and Norway, local retail investors have a **direct account** with CSDs although banks still acts as intermediaries facing end clients.

Euronext Securities manages **5 million** retail accounts in both countries - which is a source of enhanced protection for investors, and significant direct and indirect revenues.

**Retail accounts are a unique dataset** which we leverage through a range of services: data, tax, general meetings, etc.

**As most Nordic sub-custodians exit the value chain**, international customers growingly rely on Euronext Securities’ expertise and services.

**Nordic CSDs charge fees to both issuers and their agents, and investors and their agents.**

**Nordics CSDs operate their own settlement systems** with a specific price model.
The largest revenue driver is assets under custody (AUC)

- Revenues = AUC (in €) * unit price (in bps)
- AUC = assets issued in Euronext Securities (Issuer CSD) + assets issued outside but kept in custody in Euronext Securities (Investor CSD)
- Unit price = sliding scale (for a given client, unit price decreases with AUC)
- AUC is calculated based on market value for equities, funds and structured products, and nominal value for fixed income.

The second largest revenue driver is settlement volumes

- Revenues = number of settlement instructions * unit price (in €)
- Number of settlement instructions = number of trades * netting rate
- Unit price = constant / sliding scales (for a given client, unit price decreases with the settlement volume)

The rest of revenues are driven by a multiplicity of other factors

- Factors include number of securities (ISINs), corporate actions (dividends), retail accounts, subscription fees, etc.
Our strategy: pan-Europeanise and scale up Euronext Securities

<table>
<thead>
<tr>
<th>#1</th>
<th>EXPAND SERVICES</th>
<th>Further develop local and Nordic added value services for financial institutions and issuers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>#2</td>
<td>CONVERGE</td>
<td>Mutualize and harmonize infrastructure to facilitate access to local markets served by Euronext Securities (Corporate Actions).</td>
</tr>
<tr>
<td>#3</td>
<td>SCALE EUROPEAN ACTIVITIES</td>
<td>Support Euronext’s primary and secondary markets across Europe, and leverage Euronext Securities digital securities issuance capabilities.</td>
</tr>
<tr>
<td>#4</td>
<td>IMPROVE CUSTOMER EXPERIENCE</td>
<td>Roll-out targeted new client interfaces and client service model, addressing the needs of both local and global clients.</td>
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Q&A
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