

Consolidation of Capital Markets and European Stock Exchanges

- Brief overview of Clearstream's core activities
- Structure of the European Securities Industry
- Current consolidation activities in Europe
- How Clearstream is responding
- How we see the future

- **Clearing and Settlement**

- An intermediary role to ensure that transactions between financial institutions for bonds and equities are completed efficiently and successfully;

- **Custody**

- Safe custody and management of customer securities held on deposit;

- **Banking Services**

- Provision of additional value added services to customers, for example, securities lending and borrowing, collateral management, etc.

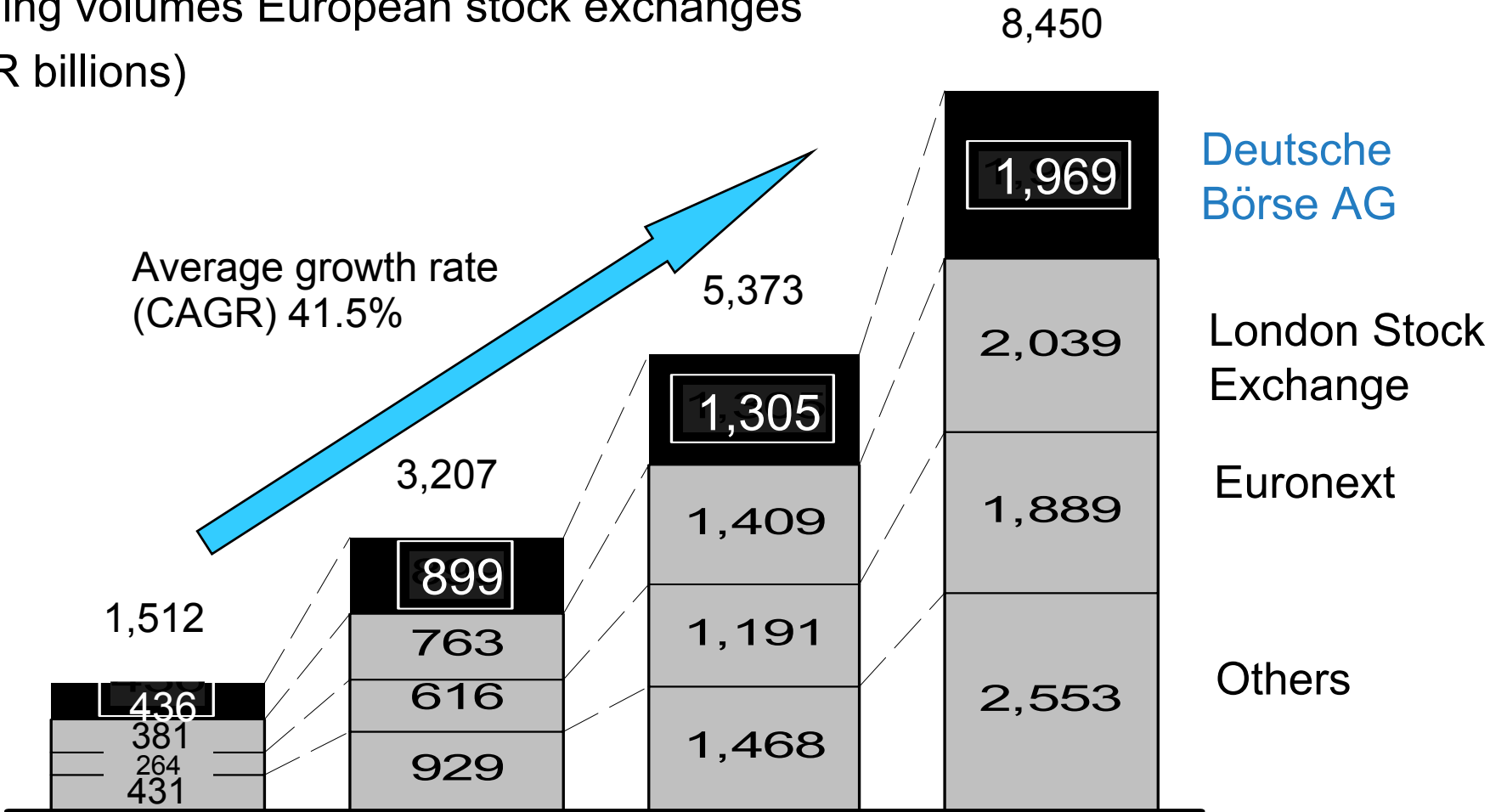
- **Additional Services**

- Operating Luxclear, the Central Securities Depository (CSD) for the Grand Duchy of Luxembourg;
- Vestima, our innovative STP solution for Investment and fund processing.

- International Central Securities Depository (ICSD)
- Central Securities Depository - Luxembourg (CSD)
- EUR 7 Trillion assets on deposit
- Clearstream, Euroclear plus 39 domestic markets
- 500,000 Transactions settled daily
- 200,000 Securities eligible
- CORE: Clearing, Settlement, Custody
- Securities Lending, TriParty Repo, Collateral Management
- Top rated TriParty Agent 2003
- Top STP rates confirmed by SWIFT

Double digit growth rates to be expected

Trading volumes European stock exchanges
(EUR billions)





- **2,500 customers in 94 countries**
- **1,700 employees**
- **42 nationalities**

Principal industry layers

Trading

Marketplaces for pooling of liquidity, matching buy and sell orders of market participants

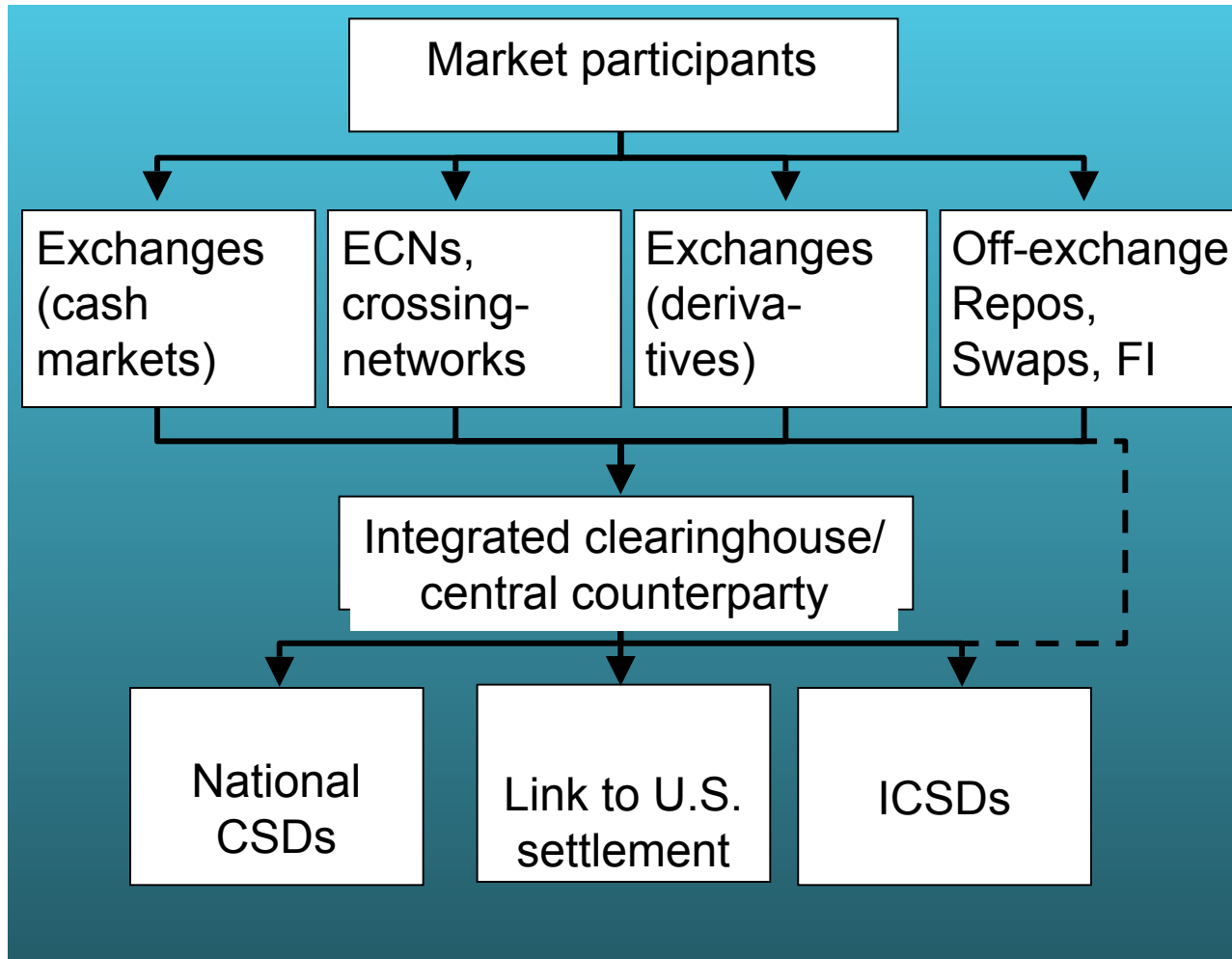
Clearing (CCP / netting)

Counterparties to all market participants, assuming respective settlement risks

Settlement

Carry out settlement between counterparties, delivering securities in exchange for payment and serving as custodians of participants' securities

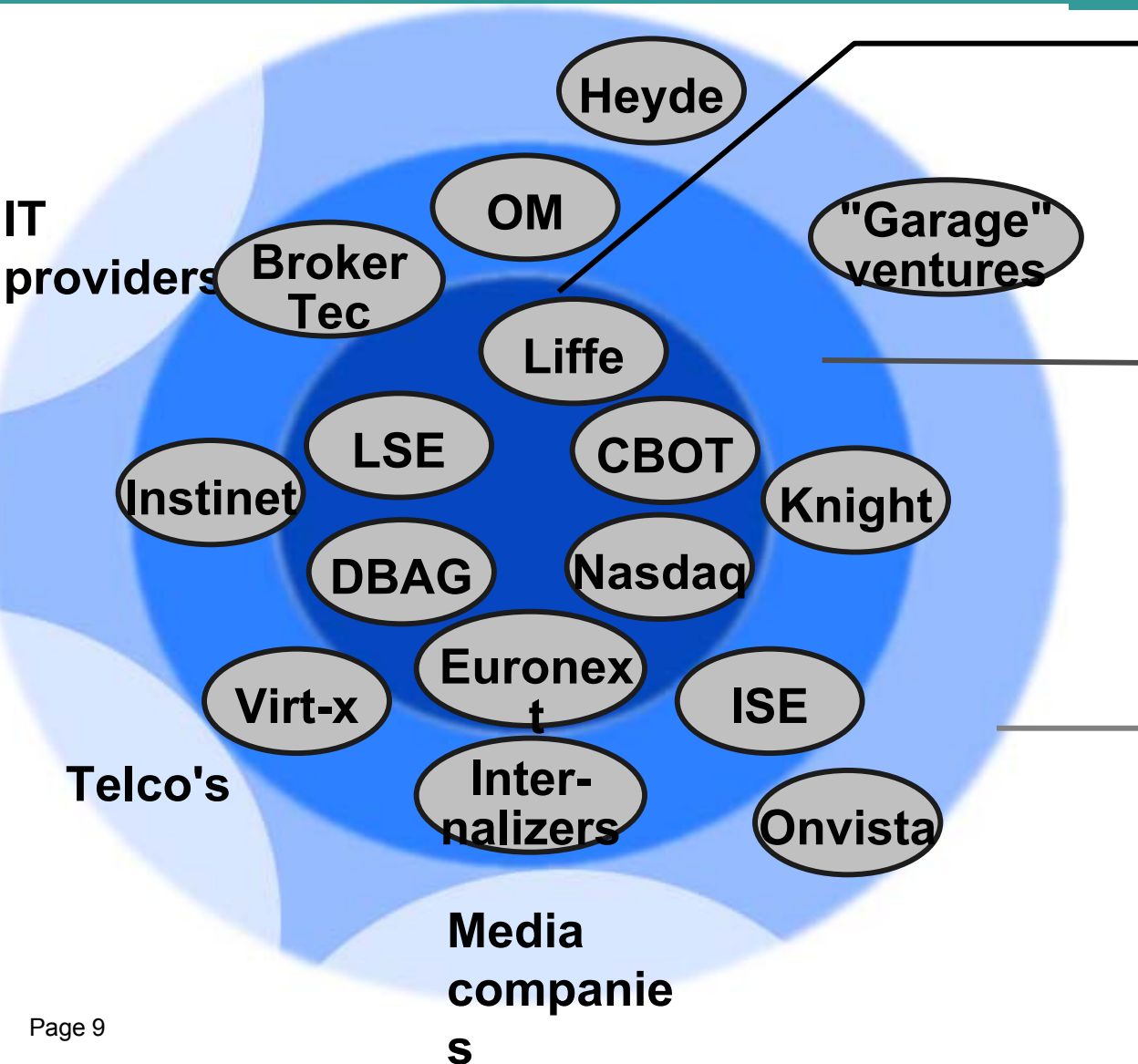
Target structure of the European securities industry



Trading

Clearing
(CCP / netting)

Settlement



"Incumbent competitors":

Key focus of our strategic and operational efforts. Deep knowledge of business models, strategies, people

"Visible threats":

Influencing our strategic decisions but not (yet) changing the rules of the game. Some insight, but not fully understood

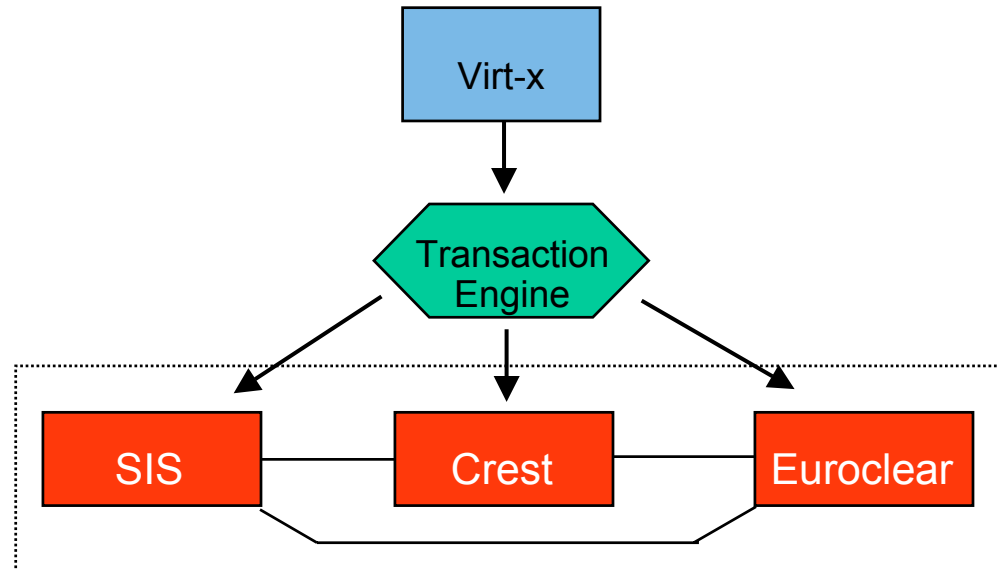
"Periphery":

Invisible threats or companies/industries not yet competing – trends unclear – opportunities unexplored – threats not recognized

- The Exchanges are driving the strategies for consolidation
- Key drivers for Exchanges
 - Liquidity
 - Product range
 - Cost
- Competition benefits all market participants
- Four models demonstrate how Exchange strategies drive Clearing and Settlement infrastructure

1. Virt-x : An “Open” model

Exchange strategy: Single trading platform for pan-European blue-chip equities



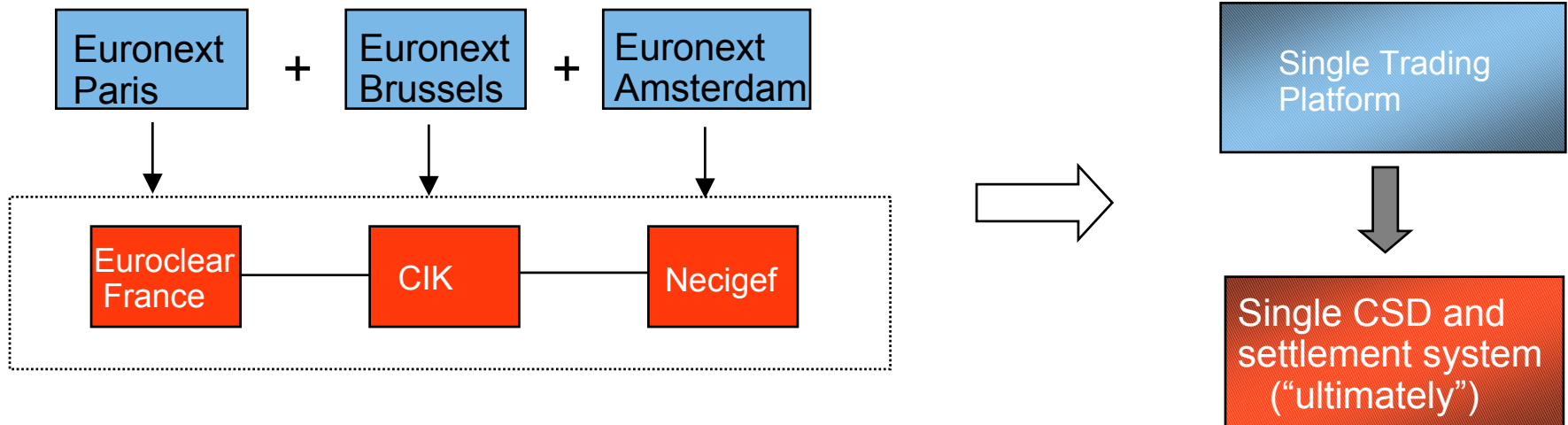
Clearing and Settlement Model:

- Independent (I)CSDs co-operating to support an exchange
- Flexible settlement location - offers a degree of user choice
- Virt-x defines which (I)CSDs form part of “virtual” single settlement system

2. Euronext: A “Quasi-Vertical” model

Exchange strategy:

Expand trading in European equities by absorbing domestic exchanges



Clearing and Settlement Model:

CSDs from a single business group, supporting a related group of exchanges

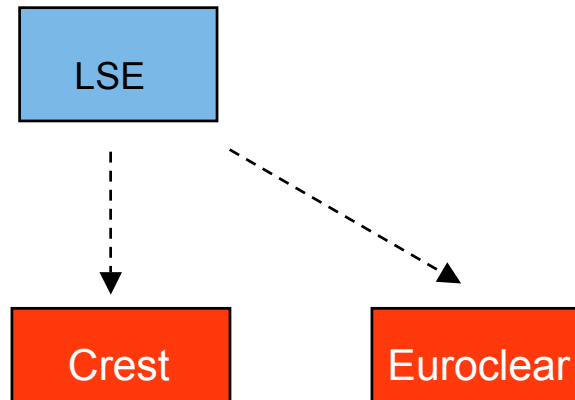
Today, each exchange retains direct link to its ‘home’ CSD

Ultimate plan - a single settlement system supporting a single trading platform

3. LSE Model

Exchange strategy:

To encourage International companies to list and be traded on the Exchange.



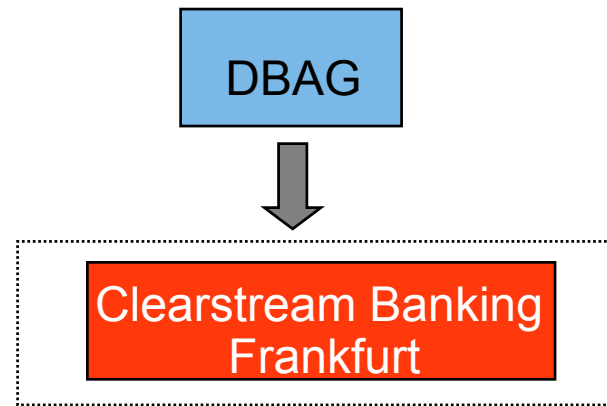
Clearing and Settlement Model:

- Until recently, a single CSD supporting a trading platform
- Euroclear due to be added to attract more non-UK members to the exchange

4: DBAG: The so-called “Vertical” model

Exchange strategy:

Enable trading in International equities on a single platform via Xetra Stars segment



Clearing and Settlement Model:

- A single CSD supporting a trading platform
- Existing infrastructure of an efficient domestic CSD also settles transactions of European and International markets

Horizontal consolidation

brings together institutions, such as stock exchanges [or clearing and settlement providers], that provide the same services.

Avoidance of duplicate standards, procedures, systems and costs creates economy of scale for customers.

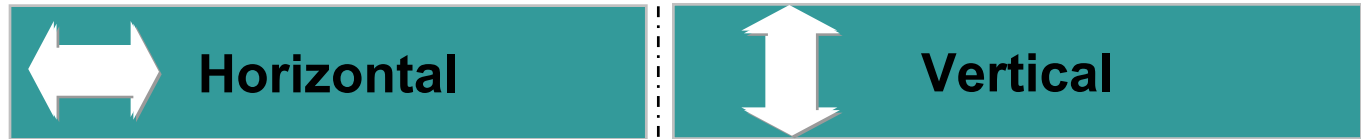
Vertical integration

brings together institutions providing different but complementary services - for example, trading, clearing and settlement along the value chain.

The attractions are a consistent 'package' with an opportunity for efficiency gains and savings.

(Source: The Banker, January 2002)

Both directions of consolidation possess advantages and disadvantages



Advantages

- lower cross-border costs
- potential cost cuts
- economies of scale

- competition to the customer's benefit
- easy and fast to realise
- low installation costs for customers
- easier straight-through-processing
- reduced interfaces > reduced risk
- increased legal certainty
- increased speed, safety and risk management

 reduced risk and costs

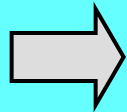
Disadvantages

- can be very costly / high installation costs (industry experience)
- Long time spans until benefits are reaped
- rise of a monopoly

- lower potential for cost cuts
- lower economies of scale

What do customers really want?

- More liquidity
- Less risk
- Lower costs
- A broad range of products
- Higher settlement efficiency
- Fewer failures



provide the right products at the right price

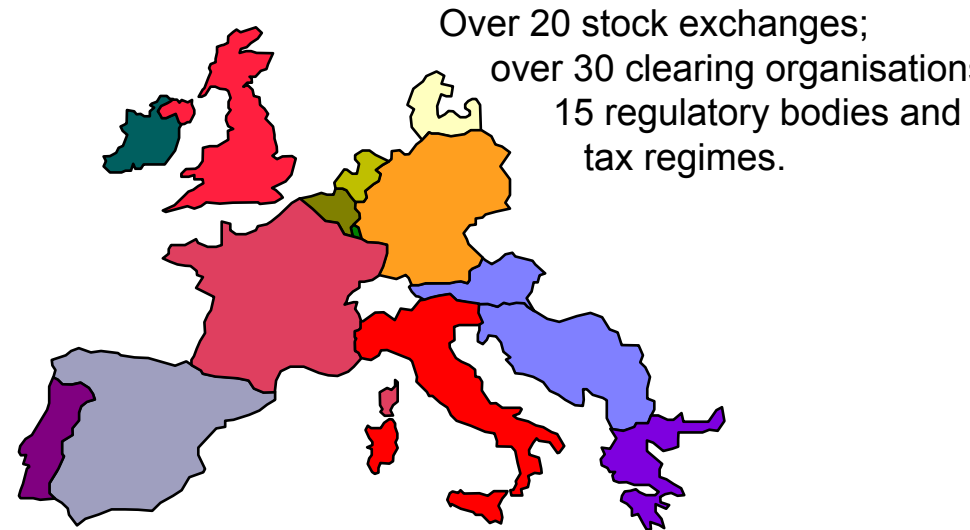
The USA reality



USA: High volume and high centralisation
= efficient and low cost

1,585 million transactions

The European reality



Europe: Low volume and high decentralisation
= inefficient and high cost

537 million transactions

Comparison of stock trading costs

Basis Points

Liquidity cost

Trading and settlement costs



Overall cost in UK driven up by stamp duty

Source: DBAG study

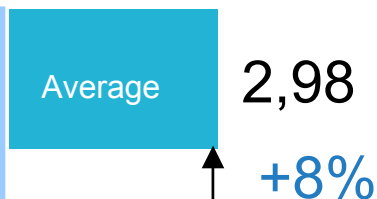
Settlement Costs of Domestic markets - Europe vs USA

Post netting

“Cost” per settlement transaction

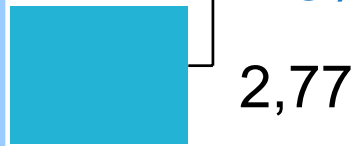
in EUR

EU



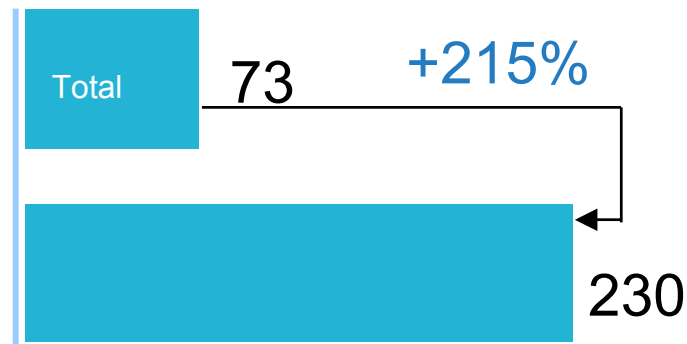
+8%

USA
(DTCC)



Volume of settlement transactions

in millions

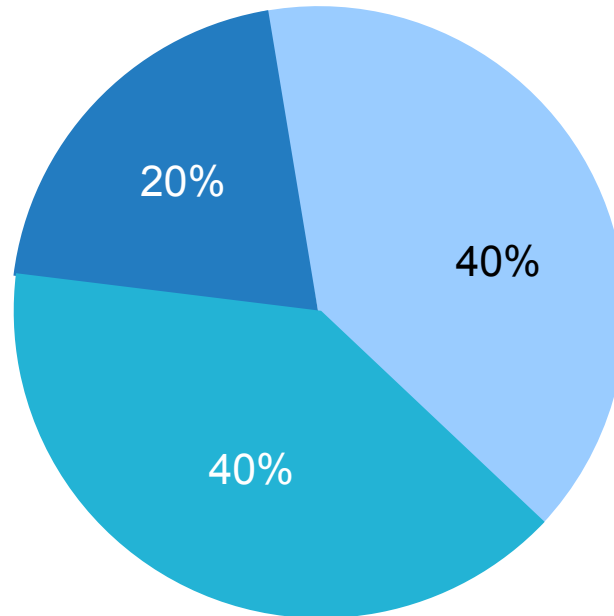


Source: CEPS study

Are high cross border costs due to a lack of horizontal integration?

Costs being influenced by intermediaries and stock exchanges

- Different market practices
- Higher economies of scale



Costs being influenced by the EU and member states


- Different legal and tax systems
- Different rules for corporate action
- Different countries

Which are difficult to influence or can only be influenced in the long term

- Small volumes
- Different languages and cultures

Source: The Future of Equity Trading in Europe - a joint research by McKinsey and JPMorgan

How Clearstream is responding

Integration	<p><u>Clearstream Solutions</u></p> <p><u>Our focus on customer needs</u></p> 	Liquidity	Risk reduction	Cost cuts	Broad product range	Settlement efficiency	Fewer failures
	Extended World-wide CSD Network	✓	✓	✓	✓		
	Central Bank Money Settlement	✓	✓	✓		✓	✓
	Broad Customer Base/Internalise Trans.			✓		✓	✓
	Value added products (Lending, Xemac)				✓		✓
	New Settlement Model (Germany, Finality)	✓	✓	✓		✓	✓
	Global Markets Concept (e.g. U.S. Stars)	✓	✓	✓	✓	✓	✓
	Straight-Through-Processing		✓	✓		✓	✓

Industry structure

- Concentration into 2 or 3 'hubs' built around the major exchanges;
- Strong competition between these few;
- Open Model enabling global customer access.

Our business

- Contribute actively to the creation of the premier European stock exchange;
- Become a leading player in custody, clearing and settlement through delivering high quality, low cost products and services;
- Continue to play an active role in the consolidation of the European market;
- Prepare new sources of revenue for the future;
- Develop our people and our corporate culture.

In summary: Continuing towards the goal of a single European capital market

- Support the elimination of legal/regulatory/tax barriers;
- Competition helps deliver what users want - Monopolies are not the answer;
- The equity strategies of the major Exchanges are:
 - all seeking to eliminate cross-border settlement;
 - creating some form of vertical silos.
- The target model must be an open one;
- Not be distracted by ‘popular myths’ of the path to consolidation;
- With the support of Clearstream Banking, DBAG strategy is already delivering real value to the market and our customers.

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