Effects and influences of the opening up to the buy side of EBS and Reuters

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RBC Capital Markets

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History of the FX market

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The FX market

- 1876 to World War I – the gold exchange standard ruled over the international economic system
  - Under the gold exchange, currencies experienced a new era of stability because they were supported by the price of gold
- 1944 – the Bretton Woods Agreement was founded in order to stabilize and regulate the international Forex market
  - preventing money from moving across nations and restricting speculation in the world currencies
- 1980's – the onset of computers and technology accelerated the pace of extending the market continuum for cross-border capital movements through time zones. From Telex to telephone to computers.
- Transactions in foreign exchange increased intensively from nearly $70billion a day in the 1980s to an average of $1.86 trillion a day (Source: Bloomberg, July 2006)
  - In London trading rose 19% to an average of $1.03 trillion a day
  - U.S. currency trading increased 21% to an average of $577 billion a day
  - Currency trading in Singapore rose 17% to an average $195.1 billion a day

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FX: an over-the counter market

Inter-dealer market

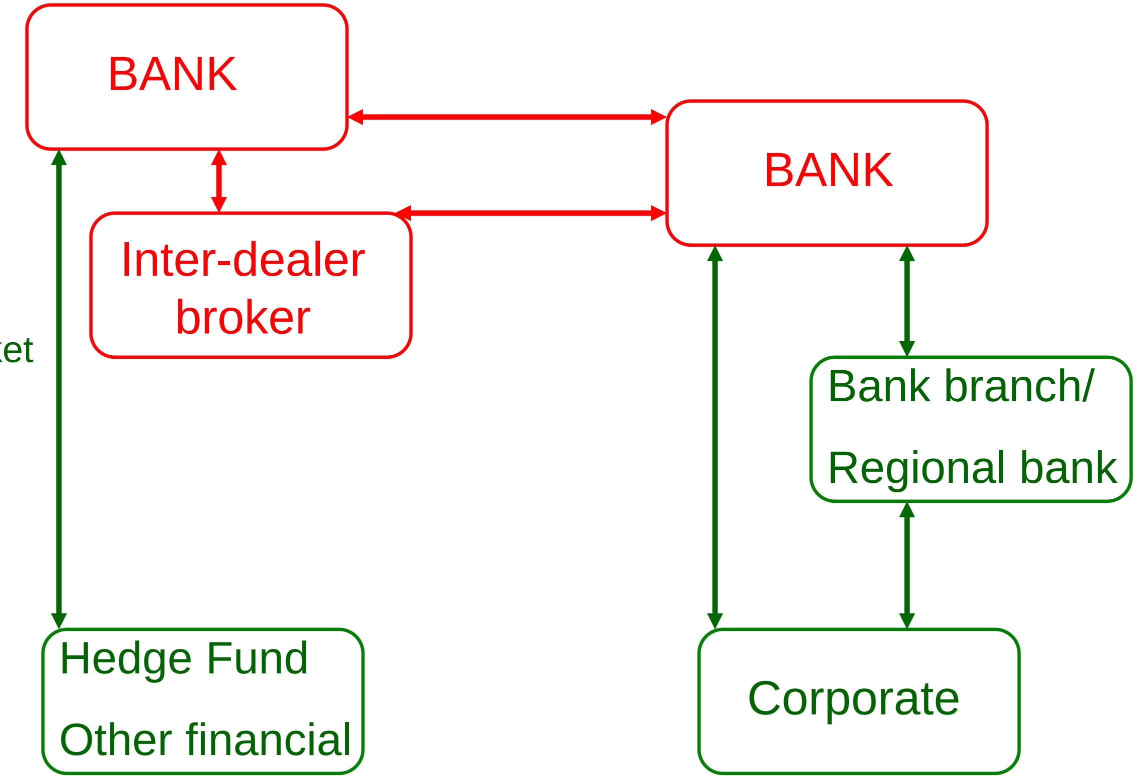
• FX electronic matching:

-EBS

-Reuters

Dealer-to-customer- market

•Portals Prime brokerage products



Inter-dealer market

• FX electronic matching:

-EBS

-Reuters

Dealer-to-customer- market

• FX Trading Portals

-Single bank portals

-Multi-bank portals

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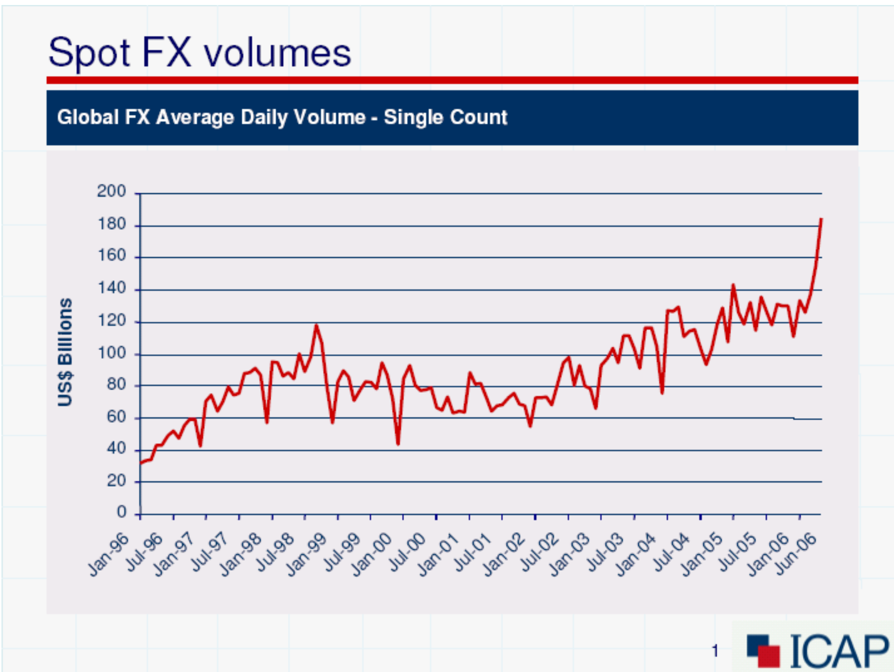
The FX market (today)

- World's biggest and most actively traded asset class
- Market growing at 19% a year and the fastest growing sector is the buy-side
- Trading moving rapidly from voice to electronic
  - Increase in high frequency trading



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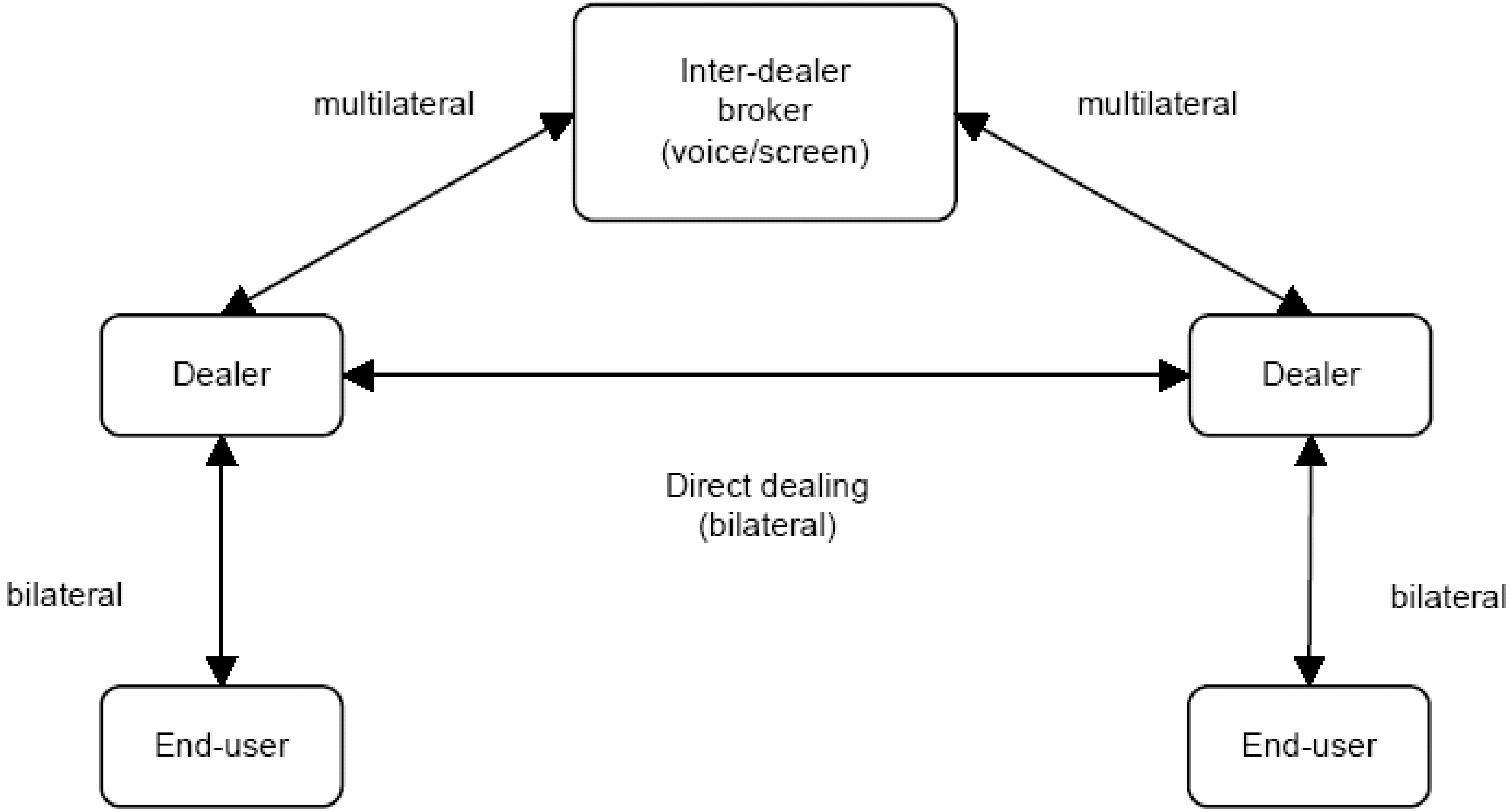
Cutting intermediaries:

Interaction between participants prior to electronic trading



Intermediates

Brokers

Dealers

End-users:

Individual traders

Institutional investors

Large corporations

Dealers' proprietary desks

Source: BIS, January 2001

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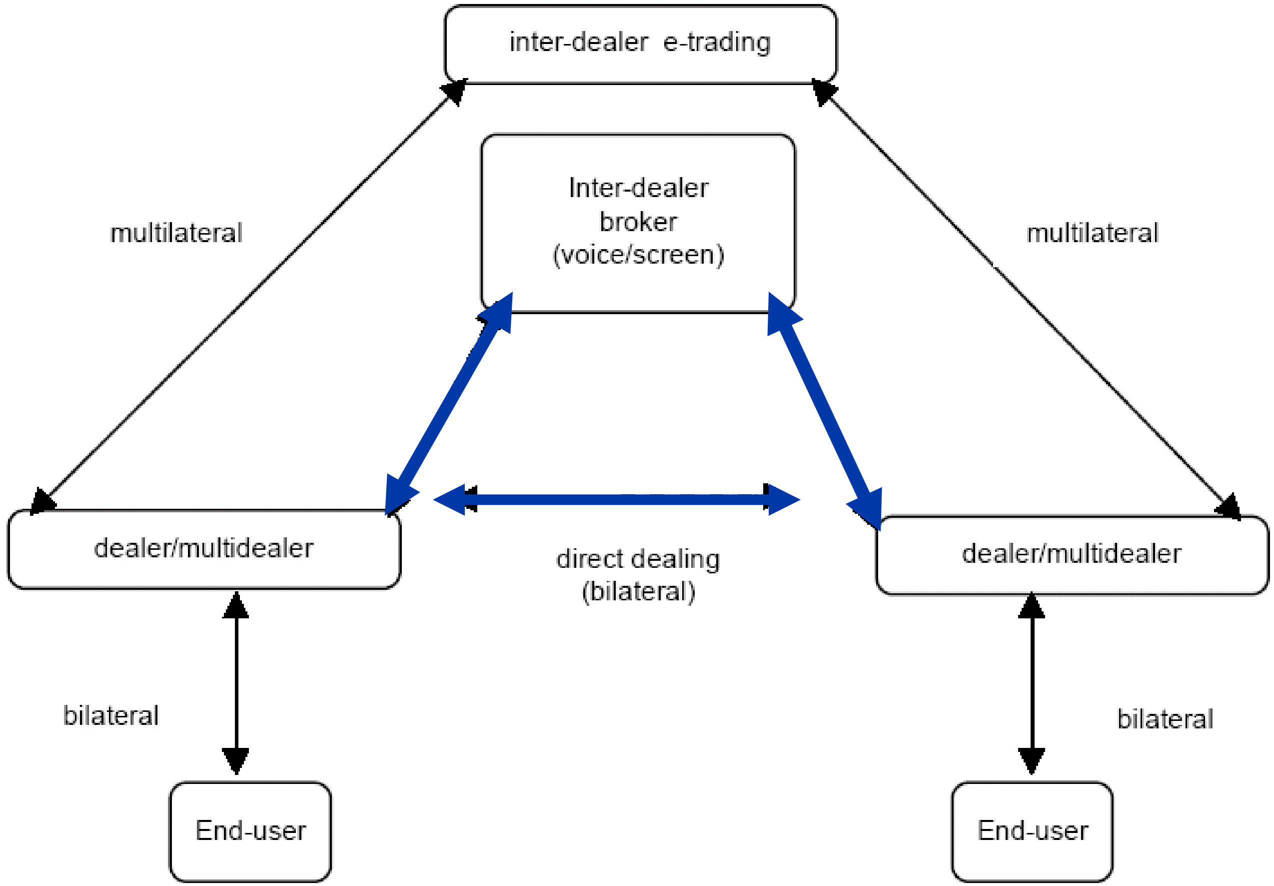
Interaction between participants after the introduction of electronic trading



Reduced importance of the direct trading channels and the traditional inter-dealer broker channels?

Source: BIS, January 2001

Current market structure

Client Adoption / Benefits

FIGURE ONE: ELECTRONIC TRADING ACTIVITY

FOREIGN EXCHANGE USERS – ELECTRONIC TRADING

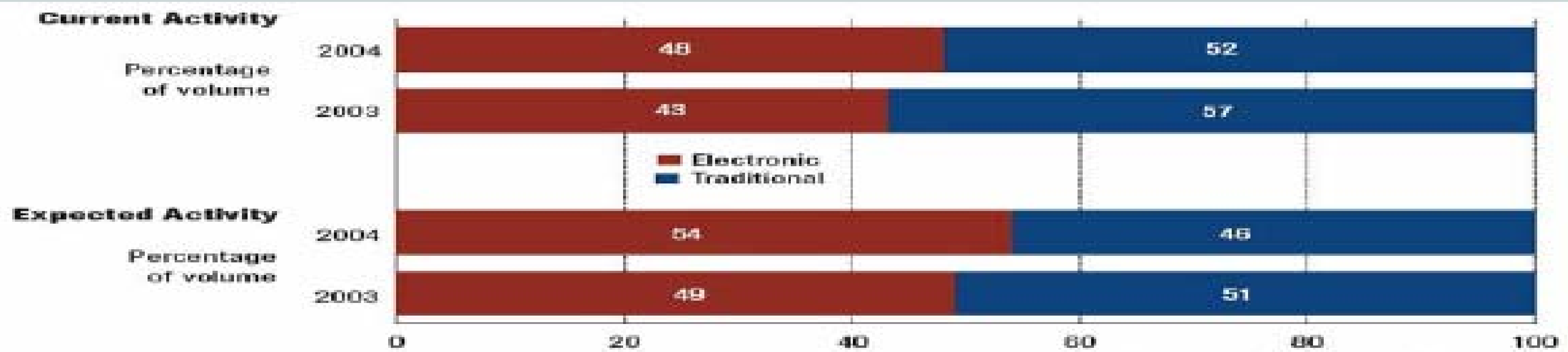
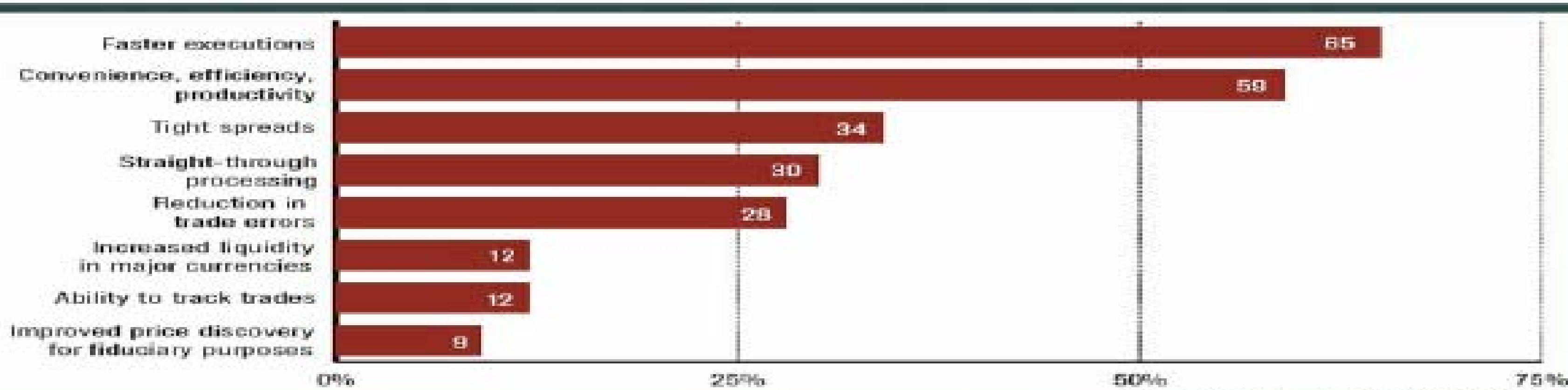


FIGURE TWO: PRIMARY BENEFITS OF ONLINE TRADING

FOREIGN EXCHANGE USERS – ELECTRONIC TRADING – 2005



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The Stock Exchange vs. an OTC market

- **Stock Exchange is a centrally organized marketplace**
- **Stock markets across Europe are planning to group together:**
  - **Bourse to merge with Brussels and Amsterdam stock exchange => *Euronex***
  - **Norway, Sweden and Denmark are pooling their exchanges**
  - **London Stock Exchange and Deutsche Boerse => *iX***
    - **Plans to link up with New York's hi-tech exchange Nasdaq**

      <u>=> could pave the way for a unified global stock exchange</u>
- **Equity markets are the best known and most widely studied examples of electronic trading**
- **Bond side can be traded on electronic platforms:**
  - **Trade Web, Market Access, Bloomberg - BBT and AutoEX System, Reuters - MTFI platform**

The FX market (OTC) is living through continuous transitions but can a similar trend be seen as in the Stock Exchange?

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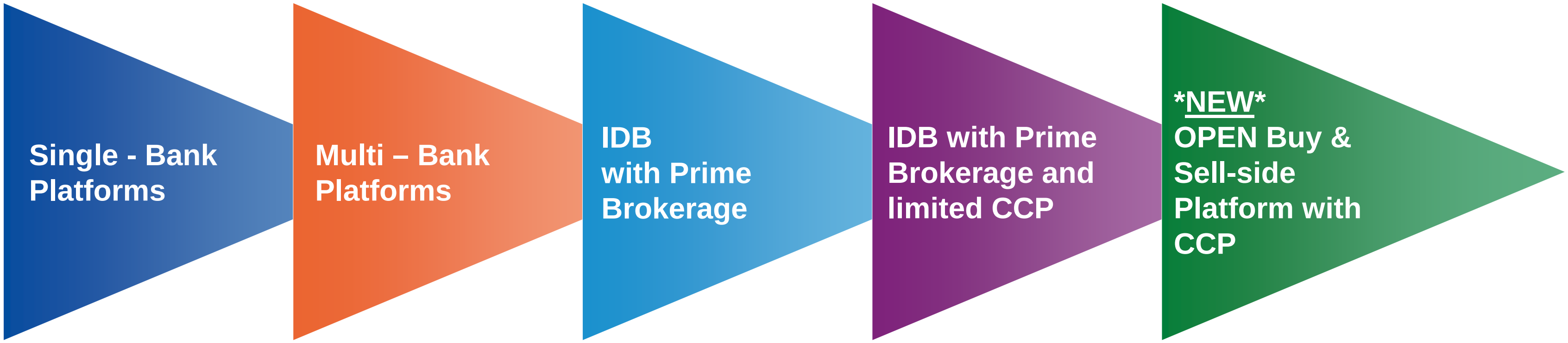
Market Evolution: The market is driving towards a more open trading alternative



- Bilateral customer relationship
- Client relationship / cross-market capability
- Attract additional order flow

- Effective liquidity management
- Manages market growth
- Consolidated market efficiencies

- Service hedge fund flows
- Support for algorithmic models
- Attract additional order flow

- Provide credit intermediation for the credit-challenged inter-bank market
- CCP = Centrally cleared counterparty

Source: Reuters, May 2006

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Inter-dealer market

- Two strong platforms with complementary currency pair strength
- EBS and Reuters have become very impressive liquidity pools'
- Number of transactions on both systems: steadily rising in recent years with little evidence of significant price-gapping

Dealer-to-client market

- A fractured market with specialized platforms
- Targeting a specific type of customer within the buy-side
- Hotspot - serving hedge funds and CTA's
- FX Connect – serving asset managers
- 360 Treasury System - dominated among European corporate treasurers
- LavaFX and eSpeed – strength in equities trading

Is there room for all the existing and new platforms in this market?

How much does the market rely on the robustness of surrounding telecommunications infrastructure?

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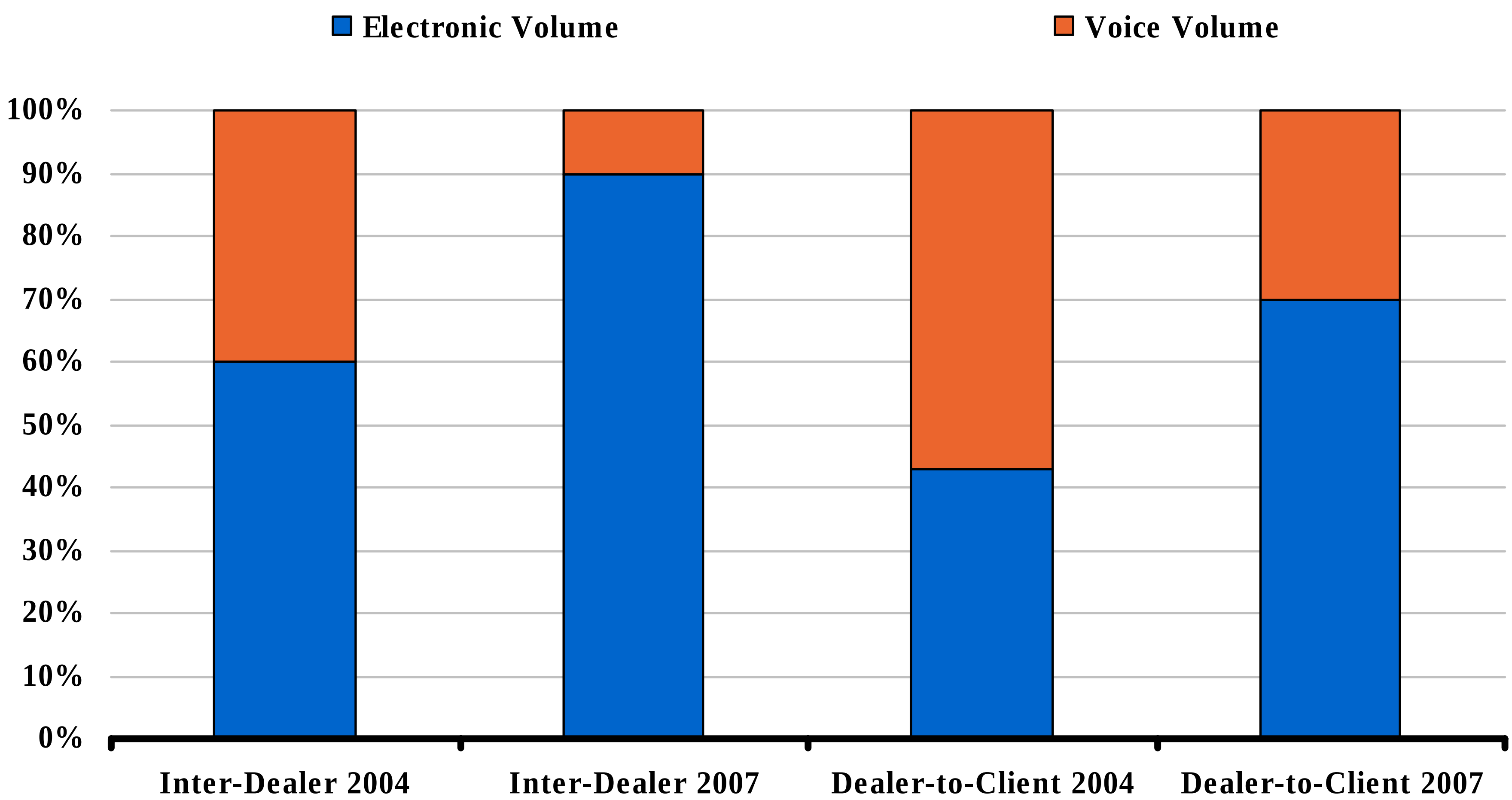

Source: BIS, December 2004

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Buy-side

- More interested in trading on electronic FX platforms:
  - Speed of execution
  - Transparency
  - Buy-side customers also are attracted to the electronic platforms by the lower transaction costs
  - The audit trail is much easier to follow with electronic platforms

Sell-side

- Interbank market is becoming more bifurcated
  - Large banks contribute price discovery and liquidity to the electronic platforms
  - Small banks act like buy-side customers in the dealer-client platforms

    => removing liquidity but only nominally providing it

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Reuters

- 20 years' experience in the FX and money markets
- 1996 launched Dealing 3000
  - Spot Matching, Forward Matching, Reuters Matching for FX Options
- 43 key currency pairs in spot and 28 currencies in forwards
- 19,000 users located in more than 6,000 organisations in 110 countries worldwide
- 112,000 users in Reuters Treasury community
- 18,000 Conversational Dealing users
- 7,000 Dealing Matching users
- Revenues of c. £1 billion in 2005 from Reuters Dealing and Treasury information services

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EBS

- World's leading FX Spot broker
- 1990 - 12 major international banks agreed to challenge Reuters' threatened monopoly in interbank spot foreign exchange and provide effective competition
- September 1993 – EBS Dealing System launched
- EBS alone averages some $90-$100bn a day and up to 700 trades a minute
- 2,000 traders on more than 800 dealing floors in + 40 countries
- EBS Spot, EBS Prime, EBS Spot Ai, EBS market data
- Average of trade per day of
  - USD 130 billion in spot foreign exchange transactions
  - 700,000 oz in gold and 7 million oz in silver

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Ai and PB

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Current situation of the Ai and PB systems:

- Prime Brokerage systems:
  - Before the advent of hedge funds services include:
    - Cash lending through margin services and ‘repos’, stock lending and foreign exchange transactions
  - Now most prime brokers:
    - Added more sophisticated services
    - Individual profitability is a matter of speculation
  - EBS Prime
  - Reuters
- Application programme interface technology:
  - EBS Spot Ai
  - Reuters’ Matching-over-internet-protocol

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Reuters Prime Broker

- 17% of Reuters volumes from trading
- 10% of the figure from the sell-side
- 90% of the figure from the buy-side

MOIP (Matching-over-internet-protocol)

FX Market Space

- Joint Venture: Reuters and CME
  - Will be a direct competitor to Reuters' and EBS
  - Created its own independent pool of liquidity

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FX MarketSpace

Reuters' value proposition

- Reduced cost of trading
- Reduced risk
- Centralised pool of deep liquidity
- Anonymous, multi-lateral matching
- STP and operational efficiency
- Strongly funded

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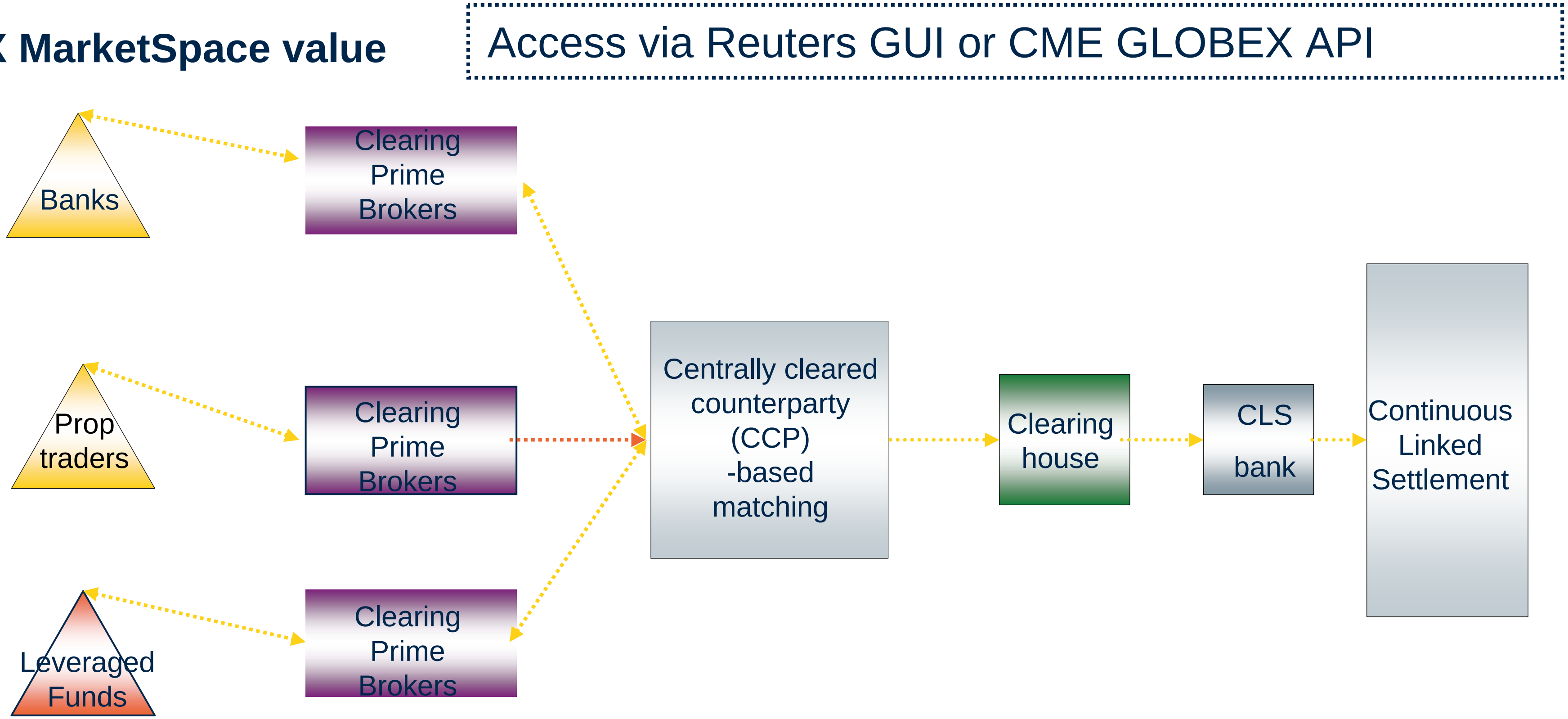
The FX MarketSpace value



Buyside / End User
- GUI - Reuters integrated
- API trading – support for algorithmic trading
- CCP – no bi-lateral credit required
- Aggregated liquidity
- Comprehensive STP

Prime Broker/Clearing Member
- Fiduciary responsibility
- Authorise access
- Enforce access rules
- Post collateral with CCP
- Limit & trade admin
- STP – allocations, etc.

Liquidity Providers
- Access to best pricing & aggregated liquidity
- Anonymous trading
- Access to flow
- No credit risk
- Operational cost savings
- Reduce e.trading costs

Clearing House
- Multilateral netting
- Collateralised margining
- Net settlement
- Improvement of funds flow
- Facilitates increased trading
- Real-time deal confirmation

CLS
- Settlement risk elimination
- Operational efficiencies

Source: Reuters, May 2006

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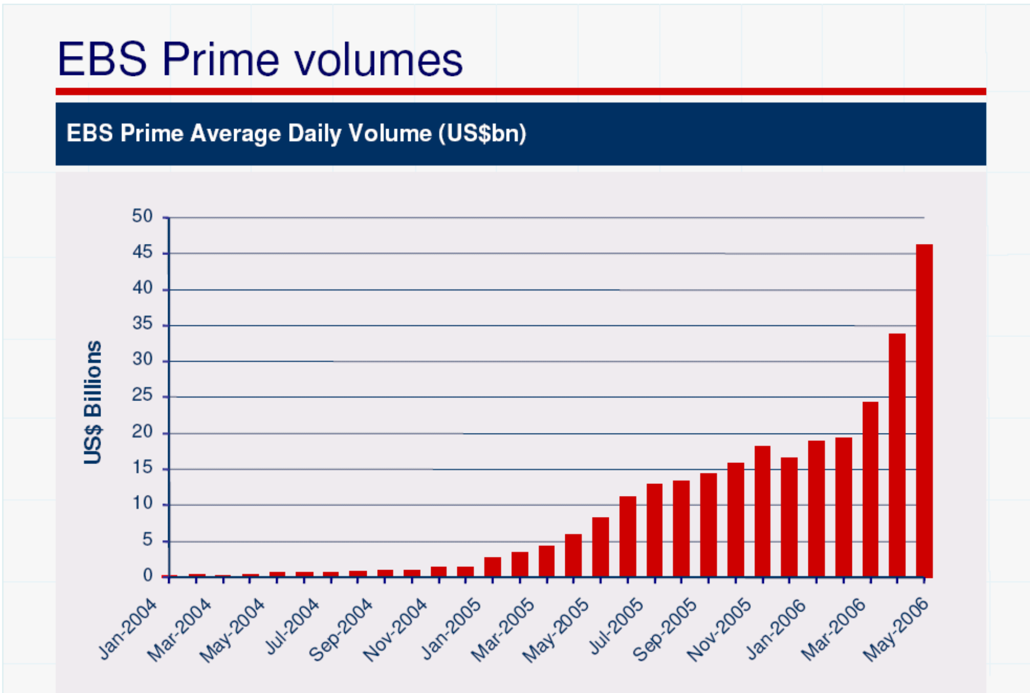
EBS Prime

- 149 users now live
  - 37 non-bank customers including hedge funds
  - 112 bank customers



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EBS Prime: Benefits for the Customer

- Same liquidity available to EBS' top tier bank
- See and trade on prices previously unavailable due to limited bilateral credit
- Access to tighter prices and greater depth of liquidity from the world's leading market making banks
- Continuous price stream of more competitive prices
- Increased probability of execution of orders (deal on your bid/offer)
- Maintain the relationship between banks and their clients

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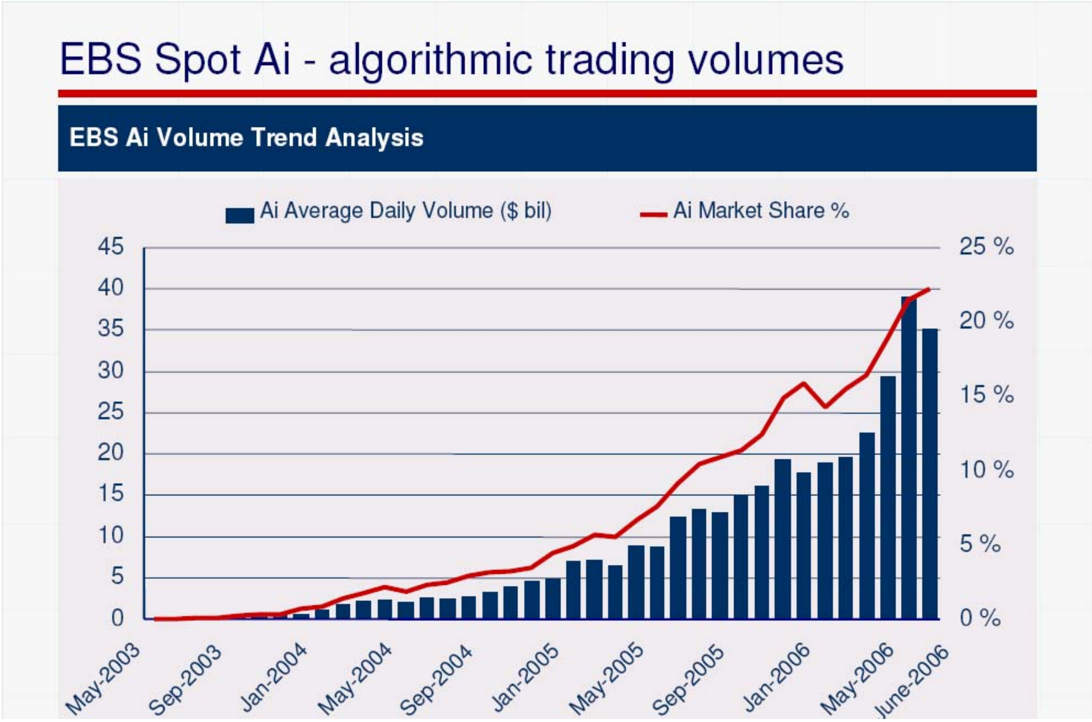
EBS Spot Ai

- **API or ‘black-box’ FX trading**
- **Average daily volumes – USD 30 billion**
- **20% of EBS volumes from API-based trading**



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Revenue

- **Services such as cash lending through margin services and 'repos', stock lending and foreign exchange transactions remain the core profitable services to the banks**
- **Customers contract directly with EBS Prime banks**

  => pay a fee to their EBS Prime bank

  (typically in the form of a spread added to the dealt price on the EBS Prime Customer's deal ticket)
- **Customers pay a standard EBS Spot transaction brokerage fee to EBS**

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Prediction for the Prime Brokerage Units of Investment Banks in 2006

- Rise in revenue for the PB Units of the major European and US Investment Banks
- Reasons for rise:
  - Prime brokerage compete to offer additional services
  - Prime brokerage services to hedge funds can be seen as the catalyst to capturing their transaction flow

Market Risk

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➢ Implications for the Market

- Lower transaction cost
- Replacing Basic Broking Services
- Perfect market conditions
- STP
- Split liquidity
- Greater competition
- Speed of execution
- Lower staffing costs
- Enhancing Operational Efficiency
- Magnification of liquidity / or under priced systematically
- Blurring of Distinctions between Inter-dealer and dealer-to-customer markets
- Concentration of Trading in “Winner System”
- Transparency

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Evaluating the market development

- Liquidity
  - Will it be possible to trade in size on demand without moving the price against the price maker?
- Settlement risk
  - How high will be the Herstatt risk?
- Systems/operations
  - How to react to upcoming errors such as non-matching trade confirmation?
- Credit intermediation
  - Will the credit risk arise?
- CLS
  - Market-standard for FX settlement between major banks
  - 04/2006: 300,000 instructions a day in 15currencies (98% of global FX trading)
  - Average daily value exceeding US$2.5 trillion
  - Will there be more exchange styles?

Profitability models

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Source of revenue

- **Proprietary trading**
- **Spread (for all products such as vanilla and exotic products, derivatives, etc.)**
- **Prime Broking fees**
- **Latency arbitrage**

What might be the future for the eFX market?

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Proprietary trading

- Banks making a profit for itself when trading its own money
- Majority of trading profits comes from bond and commodity
- Proprietary traders make big profits versus often equally high losses

Spread

- Structured in two different ways (‘cash’ versus ‘volume’)

⇒Which one is more profitable?

⇒Will the transparency ‘destroy’ the profitability?

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Prime Broking fees

- Commission or fees charged for a transaction
- Brokerage fees can be structured in lots of different ways:
  - A percentage of the contract value
  - A flat fee
  - A mixture of these two methods

$\Rightarrow$ What would be the ‘right’ commission / fee?

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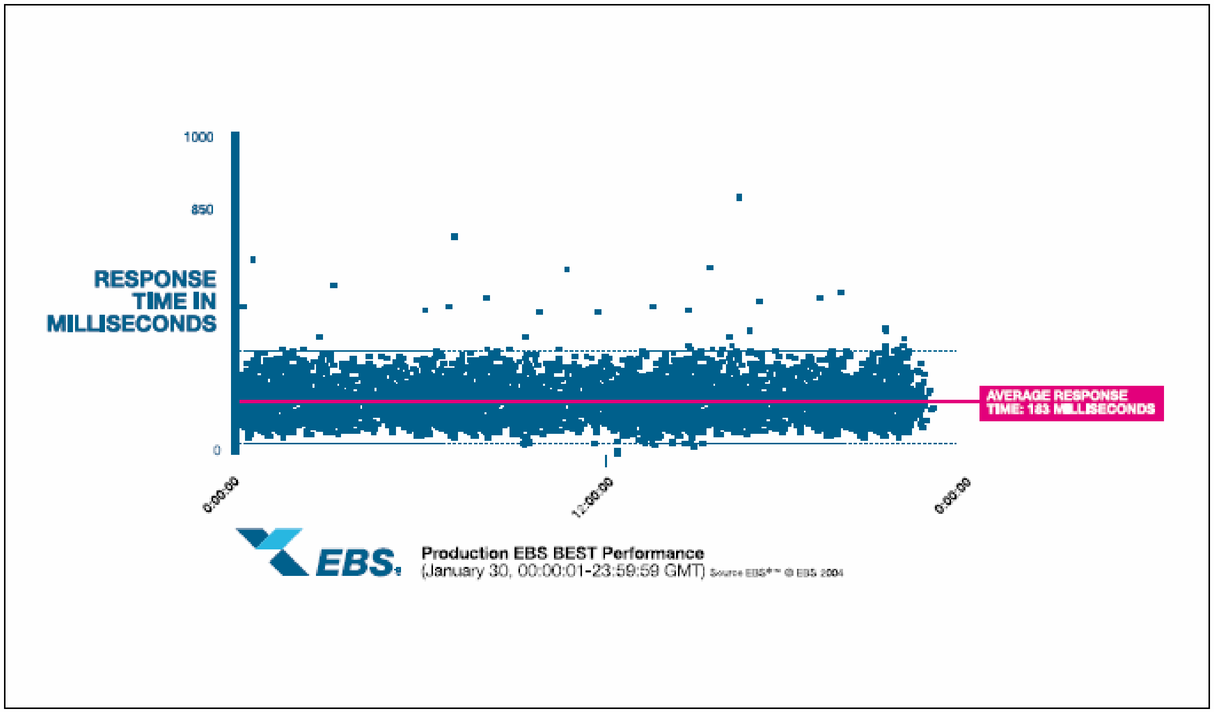
Latency arbitrage

- Delay of 0.1 sec cost money => need to be real time
- Latency reduces the competitiveness of the product
- Latency encourage clients to arbitrage among various price feeds



Source: EBS, 2004

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Future

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Discussion

- Is there a risk of creating a duopoly if EBS and Reuters are <u>the</u> source for e-pricing?
- Does cutting out intermediates equal the end of human trading?
- Is it appropriate for EBS and Reuters to further open up to the buy side?
- Other?

Implications / Discussion

- As Volumes increase will market risk or operational (technological) risk be more of an issue ?
- What will be the future growth areas? Are Emerging Markets gaining traction ?
- Sell-side race for market share and buy-side empowerment have fuelled unrestrained liquidity provision. Are we at a turning point?
- Is electronic, commission-based execution appropriate for active large buy-side clients?
- Will regulatory factors affect the development path of e-trading in FX?
- Will integrated multi-asset e-commerce grow in future?
- Is a centralized exchange-based model a foregone conclusion? What are the obstacles?
- Will an unbundling of services occur in the FX Markets?

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References

- CELENT: An More Money, More Platforms: Profiling the E-Trading Vendors in the Cash Forex Markets; Feb. 2005
- CELENT: An Overview of the Cash Foreign Exchange Markets; Feb. 2005
- Bank for International Settlement (BIS): The implications of electronic trading in financial markets; Jan. 2001
- BIS 'Report'; Dec 2004
- EBS; 2006
- Reuters; 2006

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