



FIXGlobal

**FACE2FACE**

Forum 2009

In support of

**FIX**PROTOCOL  
INDUSTRY-DRIVEN MESSAGING STANDARD<sup>SM</sup>

# Setting the Scene: Electronic Trading Globally and Regionally



**Robert Laible**

**Managing Director, Electronic Trading Services, Asia-Pacific,  
Nomura International (HK) Ltd.**

---



FIXGlobal

**FACE2FACE**

Forum 2009

In support of

**FIX**PROTOCOL  
INDUSTRY-DRIVEN MESSAGING STANDARD<sup>SM</sup>

## Setting the Scene Electronic Trading and the FIX Protocol

---



FIXGlobal

**FACE2FACE**

Forum 2009

In support of

**FIX**PROTOCOL  
INDUSTRY-DRIVEN MESSAGING STANDARD<sup>SM</sup>

# Topics

- Overview of FIX and connectivity
- Direct Market Access
- Algorithmic Trading
- Dark Pools and Smart Order Routing
- Trends in Electronic Trading



FIXGlobal

**FACE2FACE**

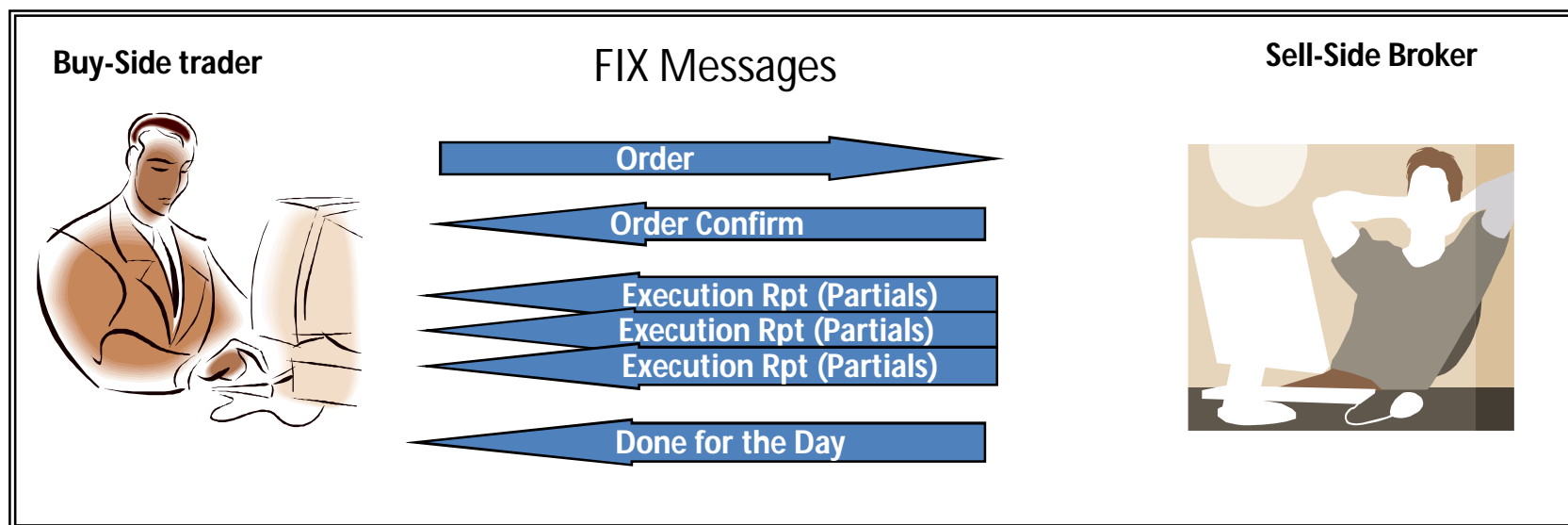
Forum 2009

In support of

**FIX** PROTOCOL  
INDUSTRY-DRIVEN MESSAGING STANDARD<sup>SM</sup>

# FIX - Financial Information eXchange

- FIX = The Financial Information eXchange Protocol
- FIX is a standard way of communicating trading information electronically between brokers, institutions and markets
- FIX is not a piece of software, network or a service – it is just a specification of a protocol





FIXGlobal

**FACE2FACE**

Forum 2009

In support of

**FIX**PROTOCOL  
INDUSTRY-DRIVEN MESSAGING STANDARD<sup>SM</sup>

# FIX - Financial Information eXchange

An example FIX message:

```
BeginString<8>=FIX.4.2 | BodyLength<9>=182 | MsgType<35>=Order-Single<D> | SenderCompID<49>=Client1 |  
TargetCompID<56>=GSUBSCS | MsgSeqNum<34>=7554 | SendingTime<52>=20090518-03:02:35 | SenderSubID<50>=Client1 |  
HandlInst<21>=Automated execution order, private, no Broker intervention<1> | Side<54>=Buy<1> | TransactTime<60>=20090518-03:02:34  
| OrdType<40>=Limit<2> | TimeInForce<59>=Day<0> | OrderQty<38>=100 | Symbol<55>=0005 | Price<44>=60.0000 |  
SecurityExchange<207>=Hong Kong Stock Exchange<HK> | Currency<15>=HKD | Account<1>=1 | IDSource<22>=CUSIP<1>  
SecurityID<48>=HK99000055 | ClOrdID<11>=02682870 | CheckSum<10>=215
```

- ◆ The FIX Protocol supports multiple message types...
  - Single orders
  - Indications of interest
  - Programs / List Trading
  - Allocations/Confirmations
- ◆ And multiple product types
  - Equities, Exchange Traded Derivatives, FOREX, Fixed Income



FIXGlobal

**FACE2FACE**

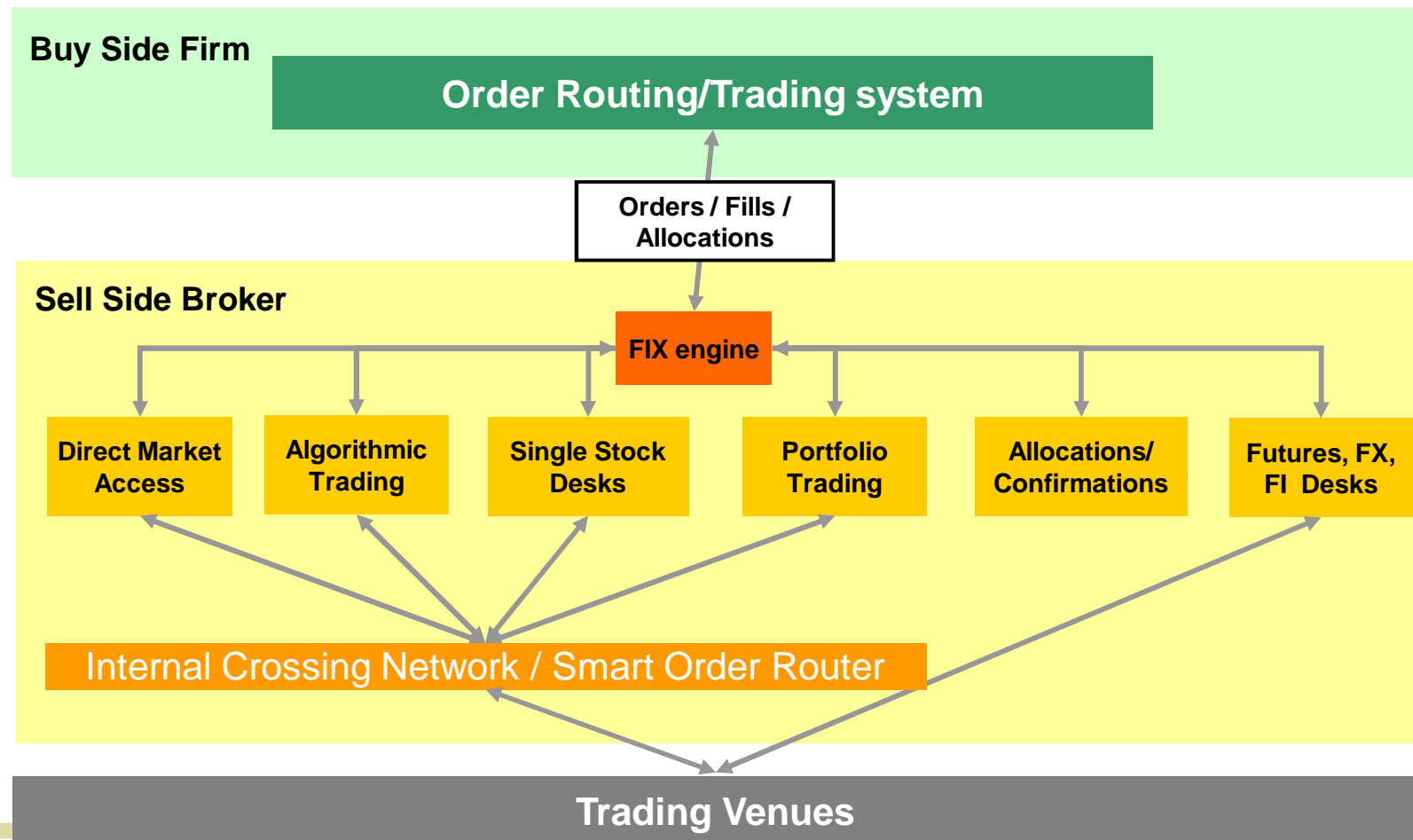
Forum 2009

In support of

**FIX**PROTOCOL  
INDUSTRY-DRIVEN MESSAGING STANDARD<sup>SM</sup>

# FIX – Electronic trading example

Connecting electronically via FIX gives access to a wide range of services.





FIXGlobal

**FACE2FACE**

Forum 2009

In support of

**FIX**PROTOCOL  
INDUSTRY-DRIVEN MESSAGING STANDARD<sup>SM</sup>

# Clarifying the Terminology

- **Worked (or Care) or Basket order flows**
  - Sending orders electronically to sellside's sales-traders or program traders for manual acceptance
  - Traditional trading process similar to telephoned orders
- **Direct Market Access (DMA)**
  - Buy-side trading desk routes/trades orders directly to an execution venue without intervention by a sell-side trader
  - The sell-side provides memberships, technology, trade support and credit
  - Comprehensive automated checks and controls are in place to protect both the client and the broker
- **Algorithmic Trading**
  - Placing an order of a defined quantity into a strategy that automatically generates the timing and size of market orders
  - Typically constrained to trade to a benchmark, price or time
  - In-house or vendor provided models or broker provided models
- **Smart Order Routing**
  - Algorithmic model for managing multiple liquidity venues
  - All trading can make use of SOR to achieve Best Execution



FIXGlobal

**FACE2FACE**

Forum 2009

In support of

**FIX**PROTOCOL  
INDUSTRY-DRIVEN MESSAGING STANDARD<sup>SM</sup>

# The drivers towards DMA and Algorithmic Trading

- ◆ **Control**  
Client wants more control over how the order is executed
  - ◆ **Speed**  
Sometimes want to lift an offer “right now”
  - ◆ **Anonymity and Confidentiality**  
Wants to trade in secret for a variety of reasons
  - ◆ **Cost**  
Low-touch execution leads to a lower execution charge
  - ◆ **Unbundling**  
Payment model allowing clients to decouple execution from advisory
  - ◆ **Fragmentation and Liquidity**  
Multiple venues for trading the same stock. Computer algorithms make it easier
-





FIXGlobal

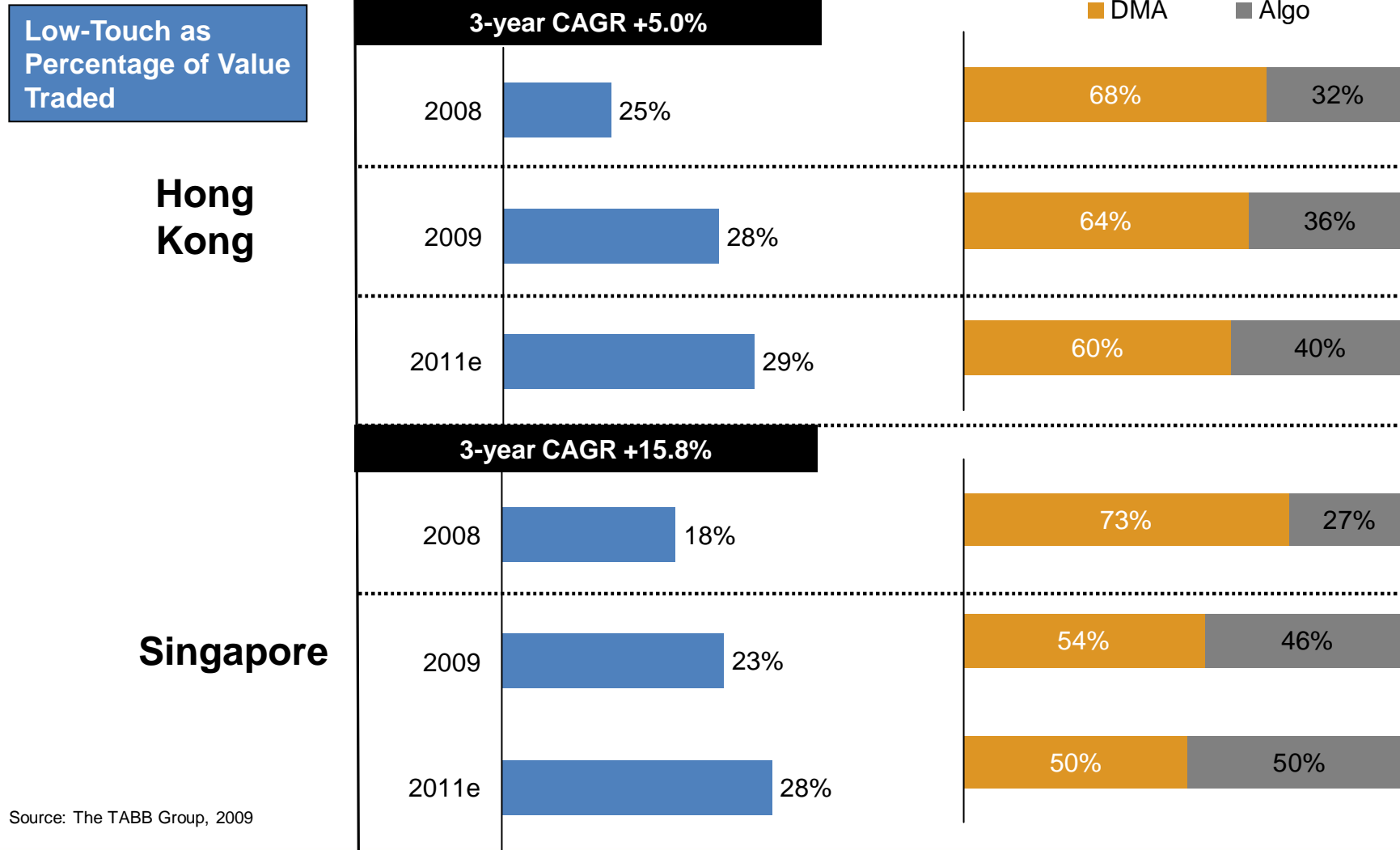
**FACE2FACE**

Forum 2009

In support of

**FIX**PROTOCOL  
INDUSTRY-DRIVEN MESSAGING STANDARD<sup>SM</sup>

## Growth in DMA and Algorithmic trading



Source: The TABB Group, 2009



FIXGlobal

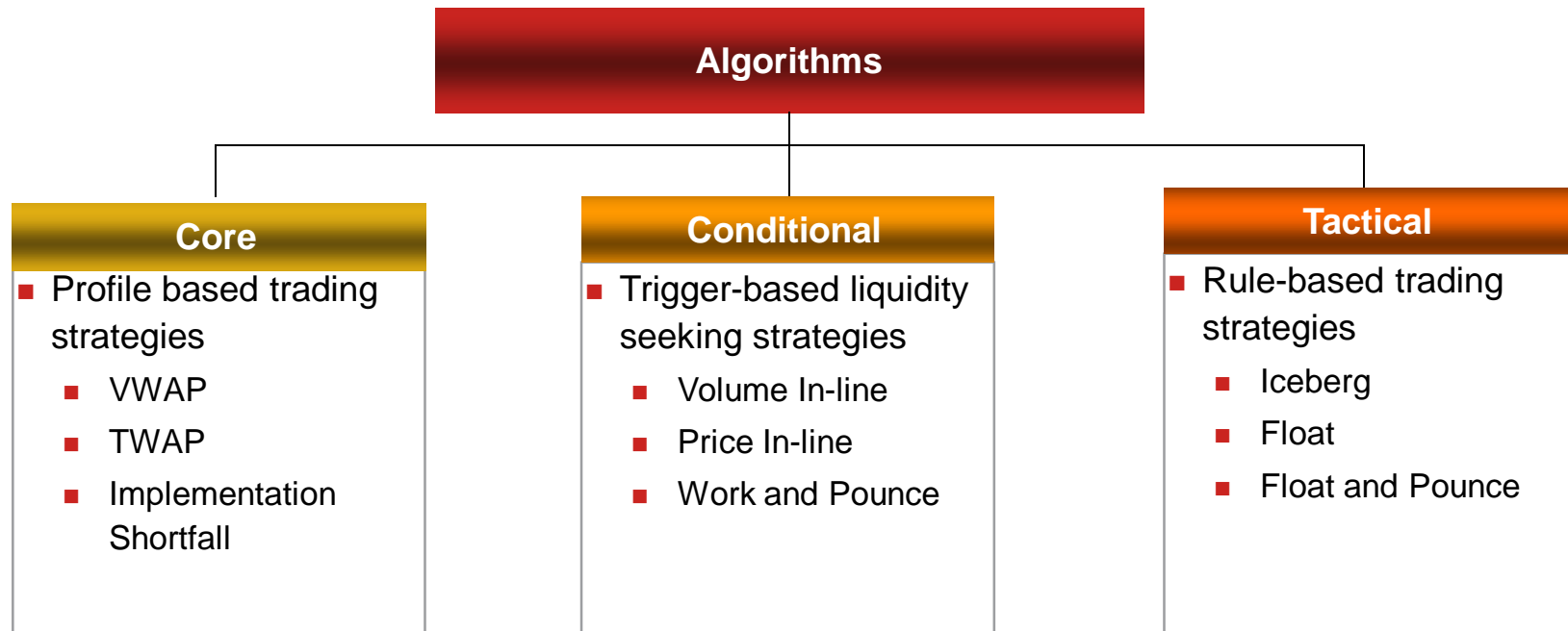
**FACE2FACE**

Forum 2009

In support of

**FIX**PROTOCOL  
INDUSTRY-DRIVEN MESSAGING STANDARD<sup>SM</sup>

## Several types of algorithms have evolved

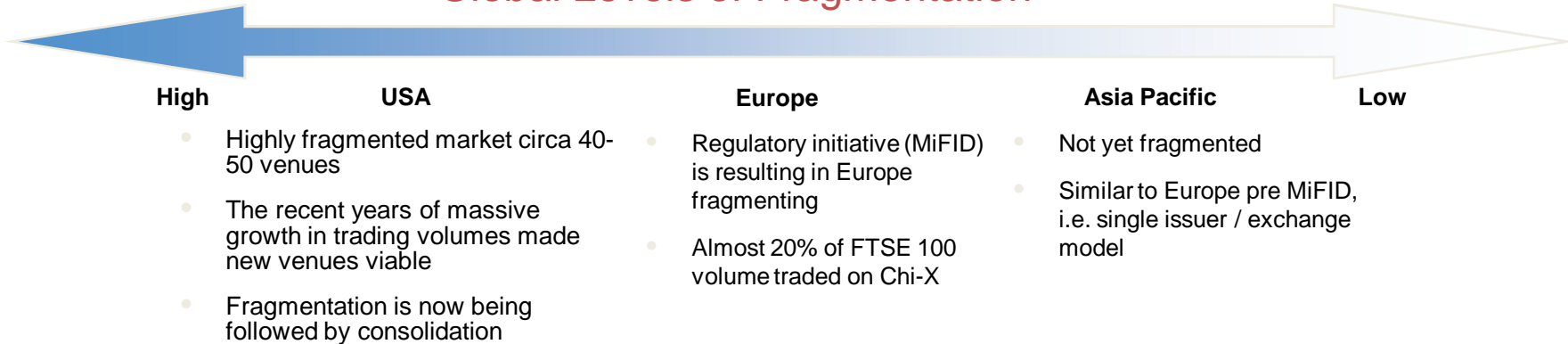


- Selecting the right algorithm is key. Selecting When to use algorithms and Which Algorithms to use



# Dark Pools

## Global Levels of Fragmentation



*“Dark pools have become a significant source of liquidity in the US and Europe, however, the accepted solutions from providers already established in those regions do not quite fit the bill in Asia. To meet this challenge, new breeds of dark pool service offerings are springing up, purpose-built to meet the specific needs of Asia Investors.”*

*CEO, BlocSec*

*Ned Phillips*



FIXGlobal

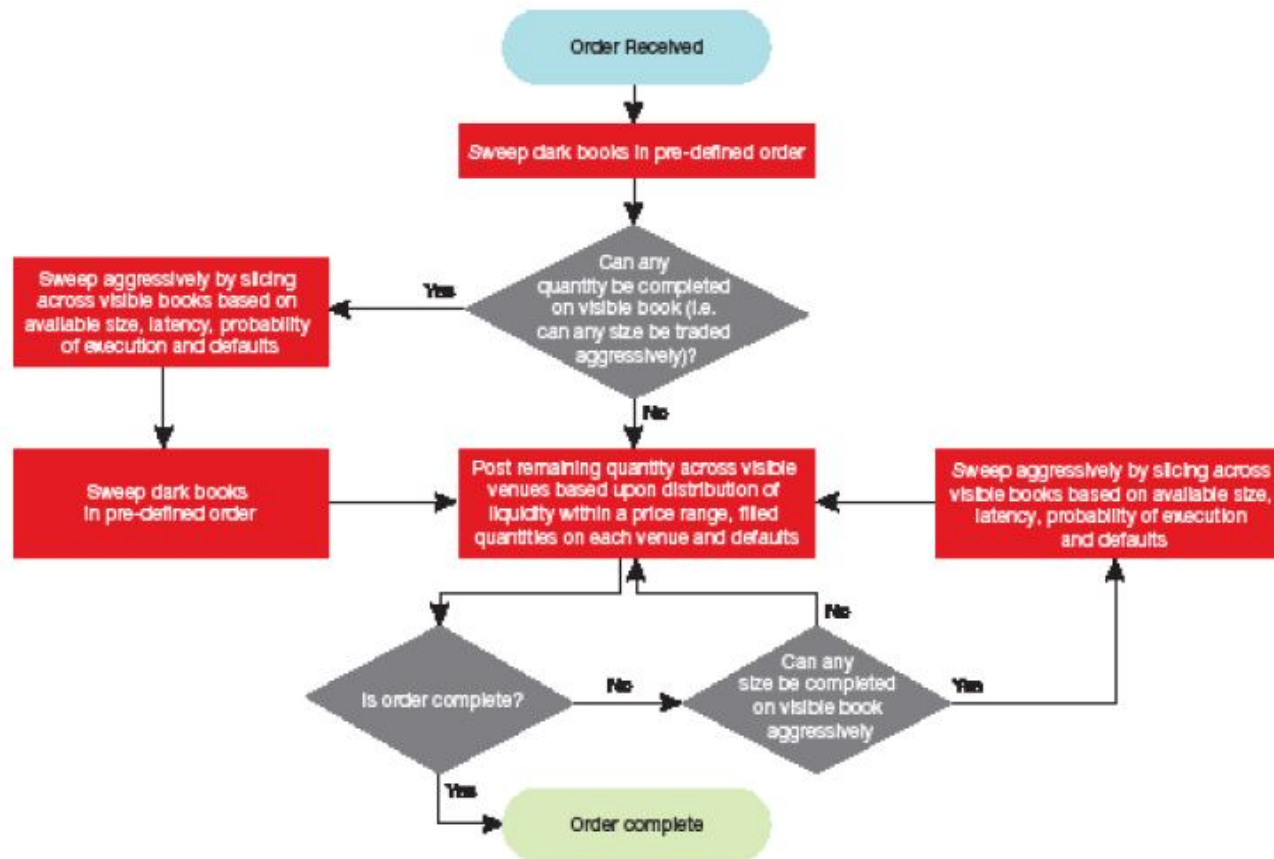
**FACE2FACE**

Forum 2009

In support of

**FIX**PROTOCOL  
INDUSTRY-DRIVEN MESSAGING STANDARD<sup>SM</sup>

**SOR (Smart Order Routing):** Advanced smart routing logic underpins execution technology to enhance the overall trading performance. SOR optimizes execution quality by aggressively sweeping liquidity from dark venues and both sweeping and posting liquidity to lit venues.





FIXGlobal

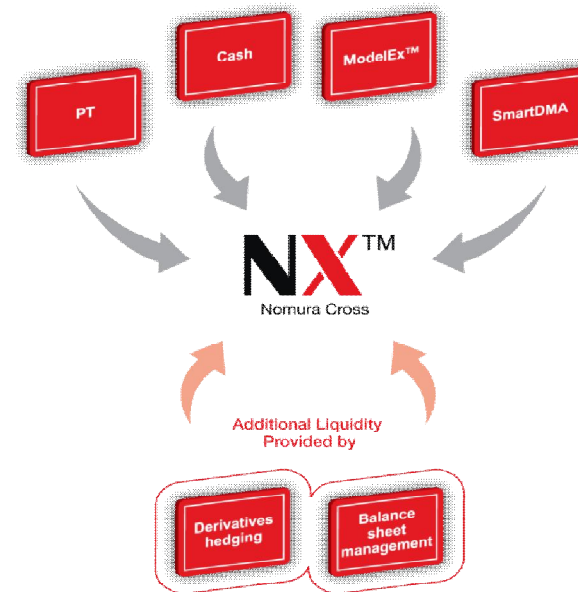
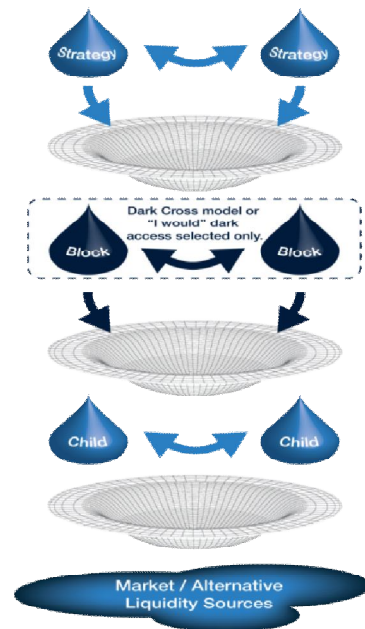
**FACE2FACE**

Forum 2009

In support of

**FIX**PROTOCOL  
INDUSTRY-DRIVEN MESSAGING STANDARD<sup>SM</sup>

The ability to anonymously source blocks of stocks without fear of leakage of information will be the key. Brokers need to provide liquidity and freed up traders to focus their attention on higher "value add" orders



- Traders are utilizing dark pools and SOR to execute large orders without signalling to the primary exchanges
- Illiquid orders and large blocks were difficult to trade during the crisis. Traders leveraged off exchange venues for price and liquidity discovery.
- Counterparty risk is reduced as clearing house unveiled plans to support alternative trading platforms (i.e. Japan).



FIXGlobal

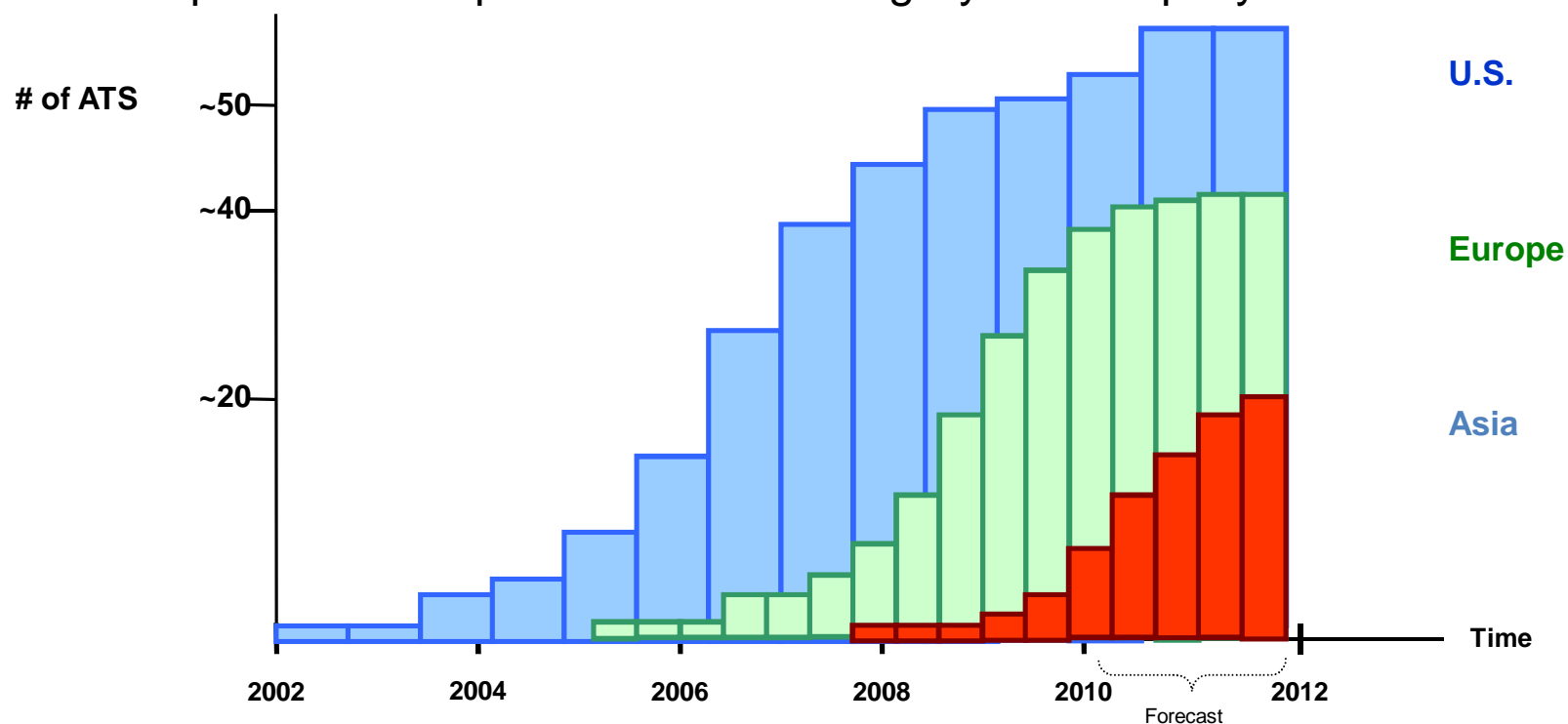
**FACE2FACE**

Forum 2009

In support of

**FIX**PROTOCOL  
INDUSTRY-DRIVEN MESSAGING STANDARD<sup>SM</sup>

Asia is expected to adopt Alternative Trading Systems rapidly in the next few years



- **US** – Roughly 25% of the U.S. turnover are contributed from off-exchange venues. Market fragmentation resulted in a competitive industry landscape. The recent years of massive growth in trading volumes made new venues viable
- **Europe** – Introduction to MIFID resulted in new entry of new trading venues at roughly 16%. The popularity of Smart Order Routing in Europe is a strong catalyst for the buy side adoption of ATS and Dark Pools.
- **Asia** – Referencing the adoption curves from U.S and Europe, the number of Asia ATS are estimated to accelerate in 2010 before tapering in 2012. Although Japan is in the forefront, other markets are also making huge strides.



FIXGlobal

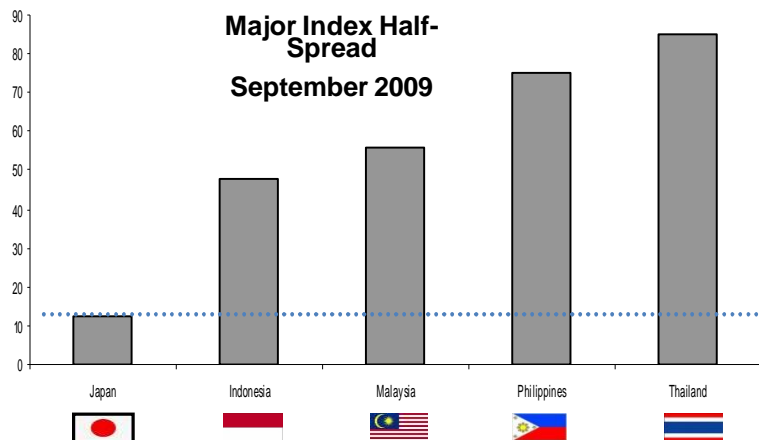
**FACE2FACE**

Forum 2009

In support of

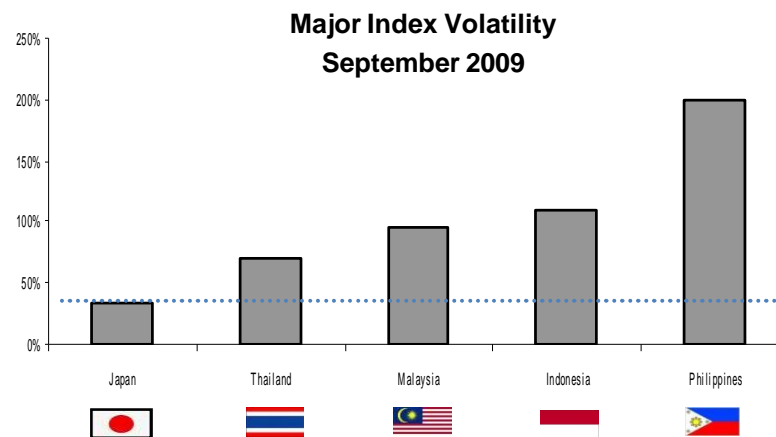
**FIX**PROTOCOL  
INDUSTRY-DRIVEN MESSAGING STANDARD<sup>SM</sup>

## Strong algorithmic growth potential for Southeast Asia markets.



*"SET supports algorithmic trading, as increasing liquidity is important to us. There is much potential for us to grow in using algorithmic trading. In 2008, for example, such programs in Singapore Stock Exchange accounted for 15.0% of total value of trades; for Korea Stock Exchange, the figure was 13.5%, for Tokyo Stock Exchange, it was 9.3%, and for us, it was just 0.7%,"*

*SET Chief Marketing Officer,  
Sopawadee Lertmanaschai.*



- Electronic trading appeals to foreign institutional investors, thus helping to draw flow to the emerging markets.
- Adoption of electronic trading can reduce transaction costs and improve market liquidity.
- Efforts in coordination from exchanges and regulators have increased considerably.





FIXGlobal

# FACE2FACE

## Forum 2009

In support of

# FIX PROTOCOL

INDUSTRY-DRIVEN MESSAGING STANDARD<sup>SM</sup>

## Complexity and Flexibility

- Customized algos that have smart conditional triggers. Intricacy of absorbing large amount of market information.
- Ability to trade multiple assets classes. Built-in tools for dynamic hedging.
- Algos with performance that can be measured in real-time. Traders are increasingly keen to learn why the strategies behaved as they did.

### Example from Nomura's ModelEx Suite: Aggressive Step

"Buy 100,000 shares with an ¥ 110 top. Work order using With Volume at a 10% participation rate, aggressively taking any stock offered at ¥100 or less."

