

# FIX Environment of Korean Trading Market

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**FIX at KRX's EXTURE**

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# FIX in Korean Trading Market

**EXTURE** : KRX tried FIX.

## Why?

Differences between KRX institution and FIX

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Speed difference between FIX and API

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Other idea between domestic and foreign securities firms

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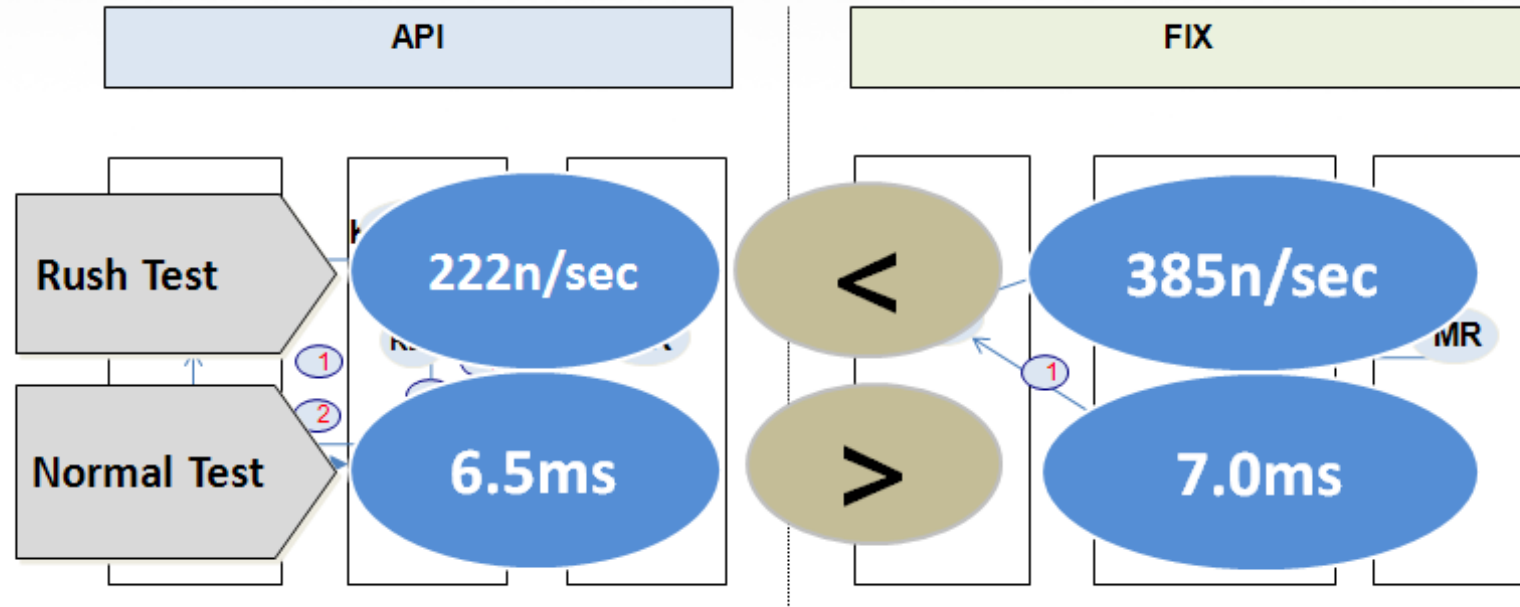
# FIX in Korean Trading Market

## ➔ Differences between KRX institution and FIX

	FIX	Local regulations
Order Qty Replace	<ul style="list-style-type: none"> <li>▪ The replace order bases on total leaves Qty (Order can't be spilt)</li> <li>▪ Replace/Cancel for quantity is dealt as the replace order</li> <li>▪ The cancel order means "delete the order"</li> </ul>	<ul style="list-style-type: none"> <li>▪ allow to change other price as concerns partial Qty</li> <li>▪ The partial reduction is dealt as the cancel order</li> <li>▪ Order can be spilt</li> </ul>
Order ID Management Method	<ul style="list-style-type: none"> <li>▪ The replace order ID becomes the basis after original orders amended</li> <li>▪ After cancel order is completed, it is deleted</li> </ul>	<ul style="list-style-type: none"> <li>▪ When handling partial cancel orders, the partial Qty would be canceled so the remain Qty would be handled as amend/cancel order continuously.</li> </ul>
Order Management Field	<ul style="list-style-type: none"> <li>▪ Provide "Order State", "Total Orders Qty", "Accumulated Execution Qty", and "Leaves Qty" in the execution report message</li> </ul>	<ul style="list-style-type: none"> <li>▪ Not provided</li> </ul>

# FIX in Korean Trading Market

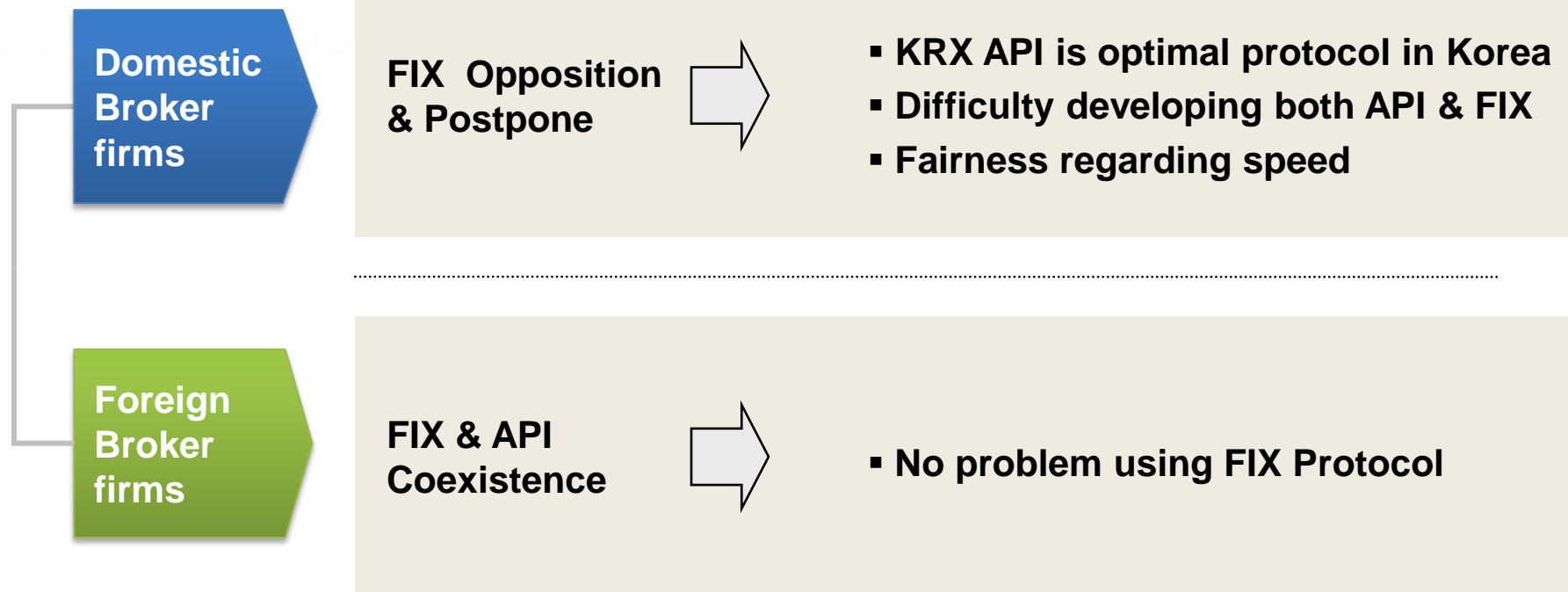
## ➔ Speed difference between API and FIX



# FIX in Korean Trading Market

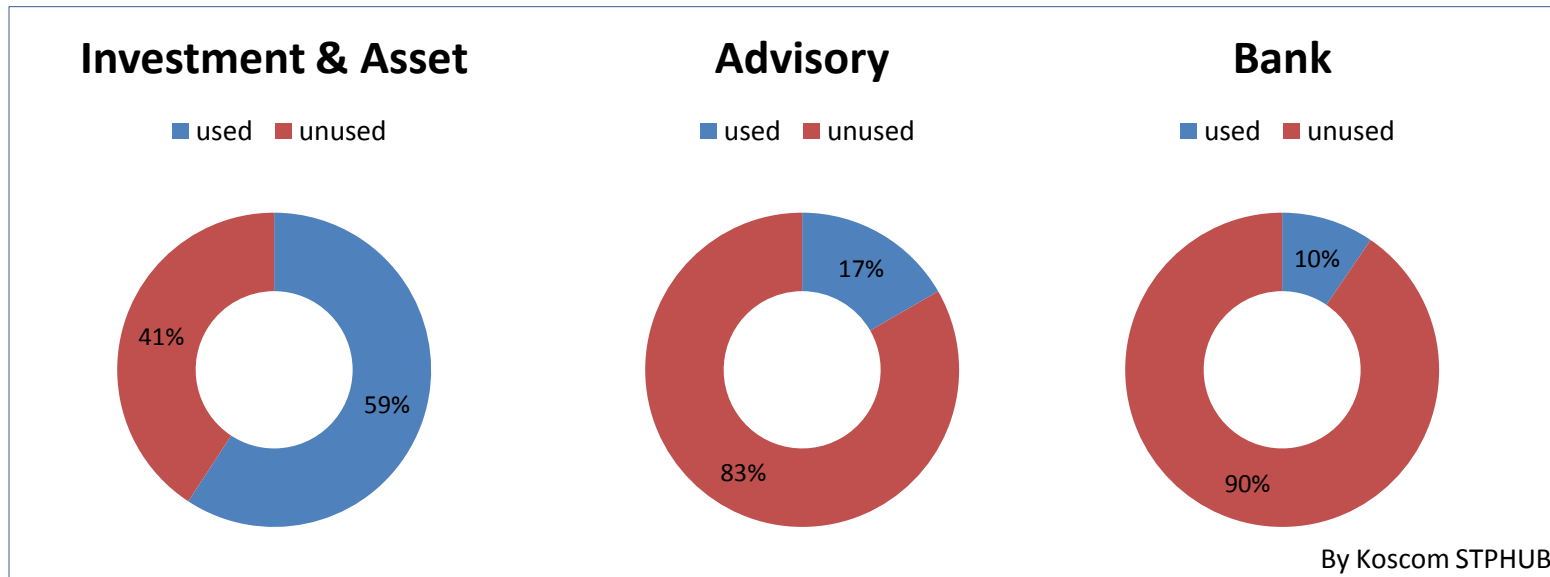
## ➔ Other idea between domestic and foreign securities firms

(Broker Poll, 2008)



# FIX at Korea **Buyside**

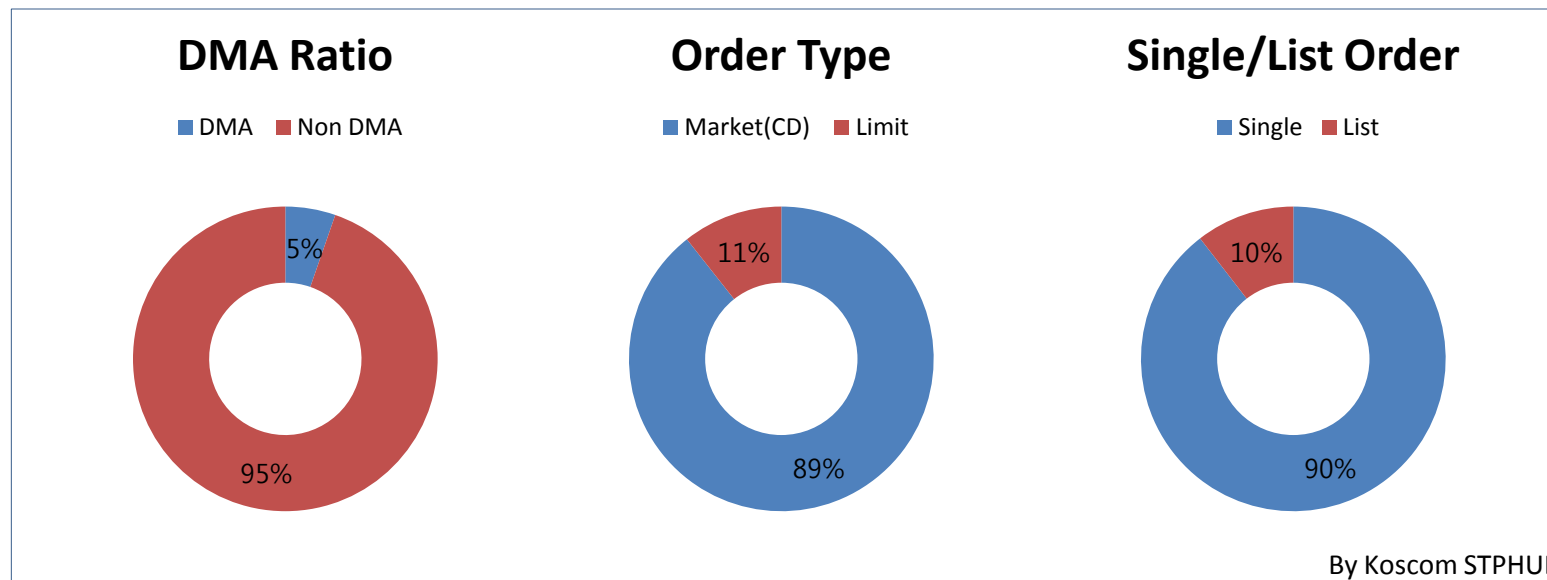
- ➔ **Korea buyside used FIX protocol to deliver order in 2003**
- ➔ **Now major & middle size buyside used FIX & OMS**
  - National Pension, Mirae Asset, PCA, Franklin Templeton, Hankook ...
  - Most of Korea buyside use Biz-Trust Vendor's FIX OMS
  - Trade to Korea Equity, Derivatives in KRX and foreign market



# FIX at Korea **Buyside**

## ➔ Restriction

- Non DMA & Market(CD) oriented Trading
- Lack of Algorithmic trading function & need on Buyside OMS
- Lack of FIX & IT intra for middle and small size Buyside
- Non manage Transaction cost, but buyside want to get TCA information

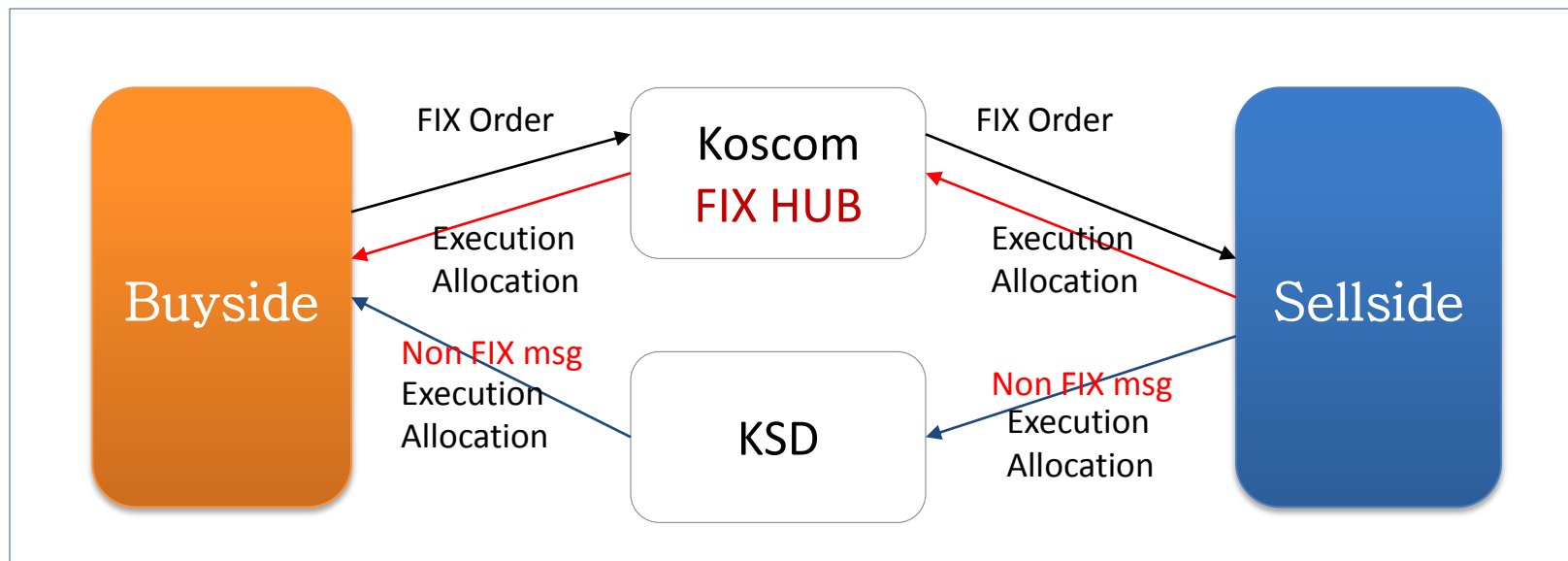




# FIX at Korea **Buyside**

## ➔ About FIX Allocation data

- Two execution and allocation in both KOSCOM and KSD(Korea Security Depository)
- KSD data : Non FIX message(Execution, Allocation)
- Most of Buyside use Non FIX allocation data provided by KSD



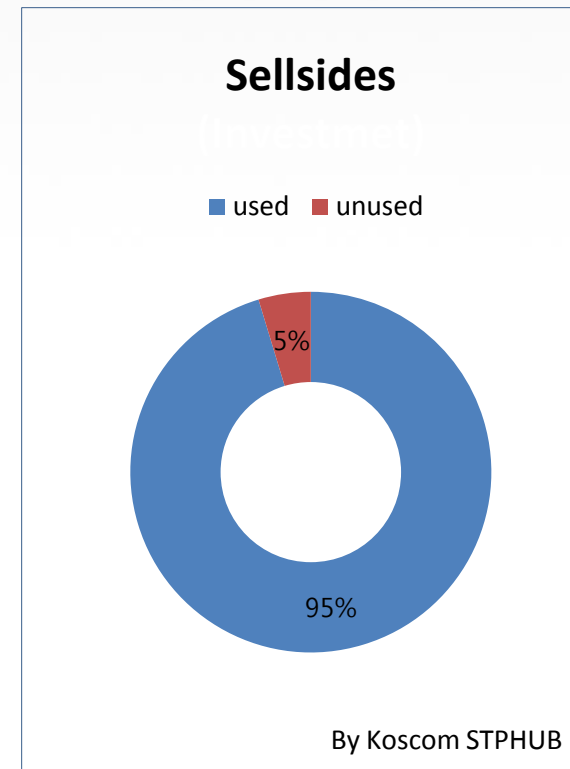
# FIX at Korea **Sellside**

## ➔ Sellside FIX Usage

- 95% used (61/64)
- To receive FIX order from buy-side
- To provide FIX DMA
- To FX margin trade

## ➔ Rising up

- Lack of algorithmic trading function
- Low latency



# Korea FIX HUB : **STPHUB**

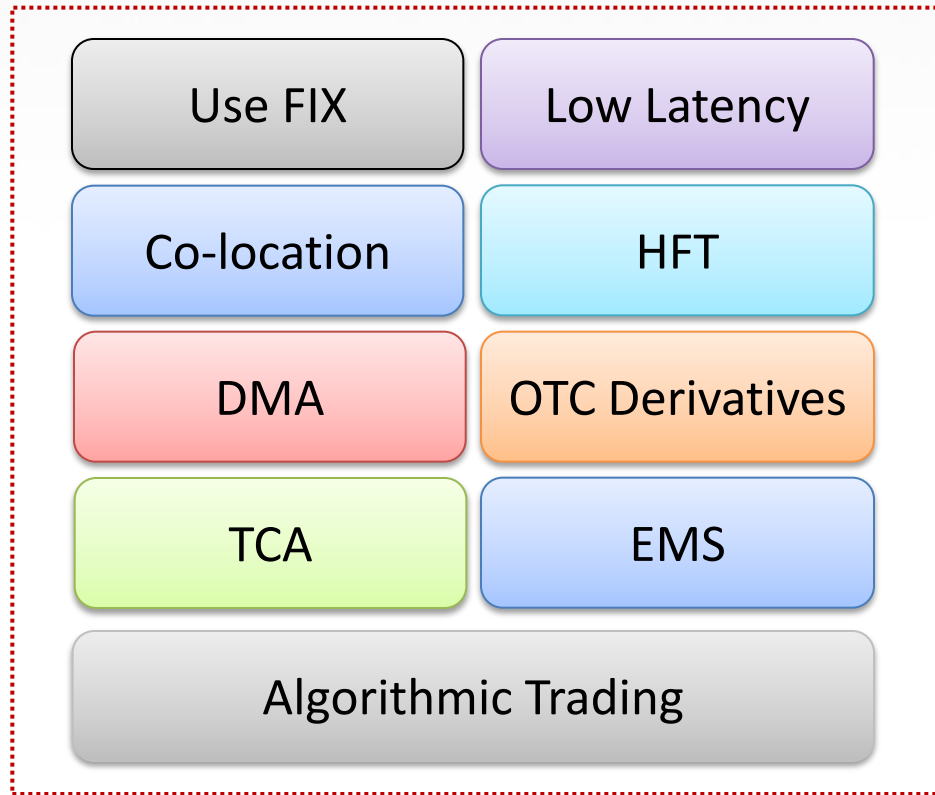
## ➔ KOSCOM STPHUB

Date	Contents
2002.05-2003.03	STP-HUB Development
2003.08.06	Service Start between Samsung Investment – Samsung securities
2003.12	Join Daewoo, Shinyoung, Hyundai, SK, Hankook ....
2004.12	Service to 20 buy/sellside
2005.06	Join Mirae Asset Investment
2006.12	Tier Service to BT-Radianz and Koscom
2008.06	Tier Service to TradeWeb and Koscom
2010.10	Support 130 connection(buy-side, sell-side/domestic, foreign) Support overseas derivatives/equity/fx-margin . DB, MFGlobal, JPM, RJO – overseas derivatives . HIMAWARI, IBFX - FX Margin

# Korea Market **Issue & View around FIX**

KRX

Sellside



Buyside

FIX  
HUB

# Korea Market **Issue & View around FIX**

KRX

## -Open FIX : Postulation

- . Speed difference API-FIX
- . Gap domestic-foreign broker
- . Regulation difference

## -Low Latency : 40 ~ 50ms, KRX

- . Improve Low latency at Pilot system for overseas markets sales
- . NYSE : Promote(110ms→within10ms)
- . LSE : 2ms → 0.7ms
- . TSE : 2ms
- . SGX : 4~20ms → 1ms

## -Co-location : issue of fairness

# Korea Market **Issue & View around FIX**

## Buy-side

-FIX OMS for middle & small buy-side : Web based EMS

-Provide TCA service : RealTime or Batch on Web

. Buy-side's usage

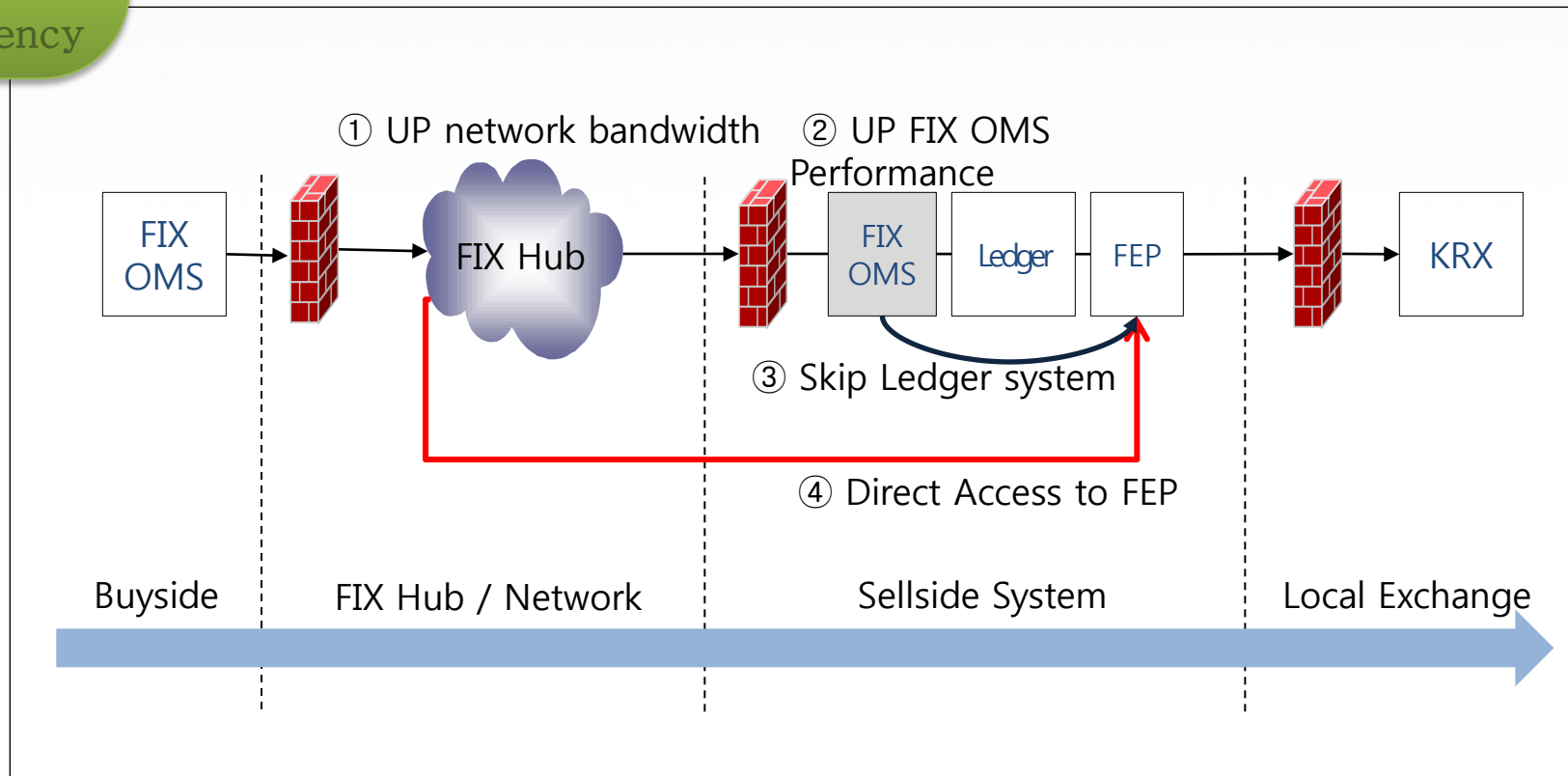
- measurement of buy-side trader's performance
- measurement of sell-side dealer's performance

-Support Algorithmic Trading Strategy

. provide Algorithmic Trading function into EMS

# Korea Market **Issue & View around FIX**

**Buy-side**  
Low Latency



# Korea Market **Issue & View around FIX**

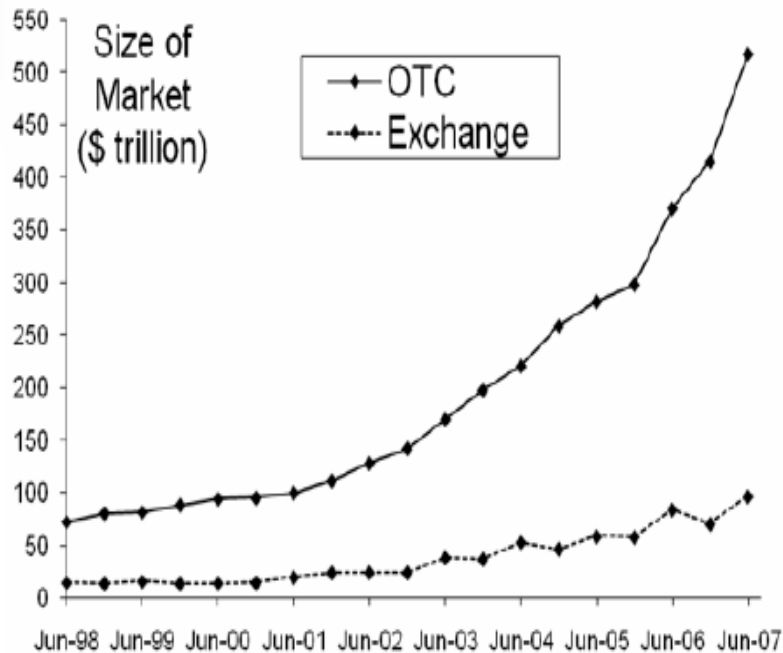
## Sellside

- Algorithmic Trading(execution/alpha strategy)
- Low Latency
- HFT
- Co-location
- **OTC Derivatives**

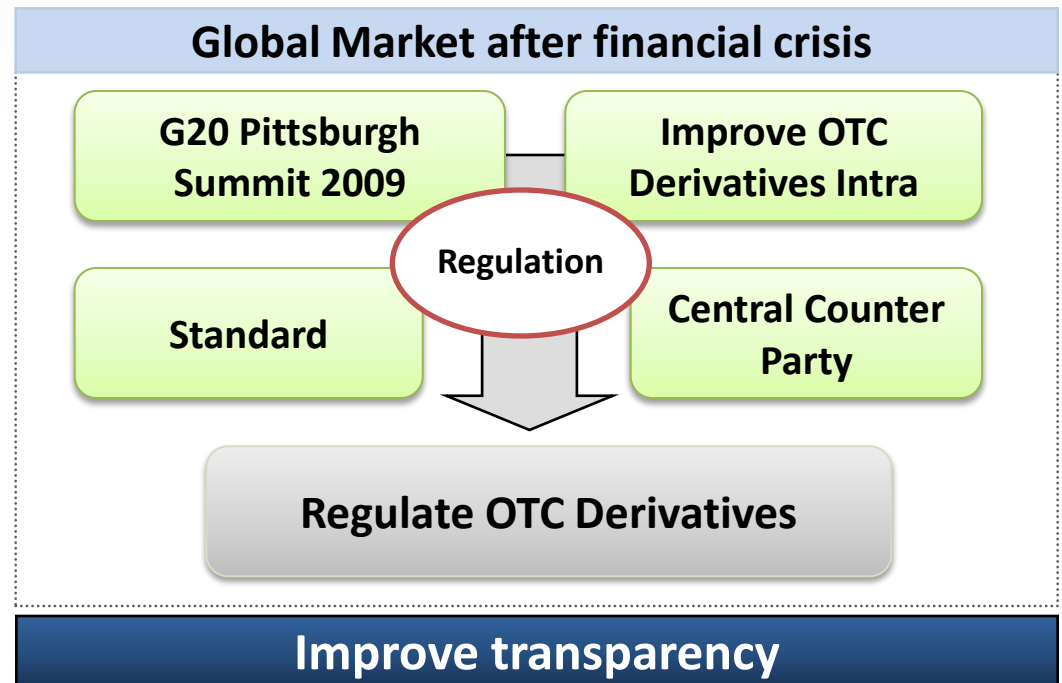


# Korea Market **Issue & View around FIX**

## ➔ OTC Derivatives Market



(By Korea Capital Market Institute)



# Korea Market **Issue & View around FIX**

## ➔ Korea OTC Derivatives Market

Improve OTC Derivatives Intra

Introduce Central Counter Party

Standard

Korea market size 0.7% of global

( A billion dollar )

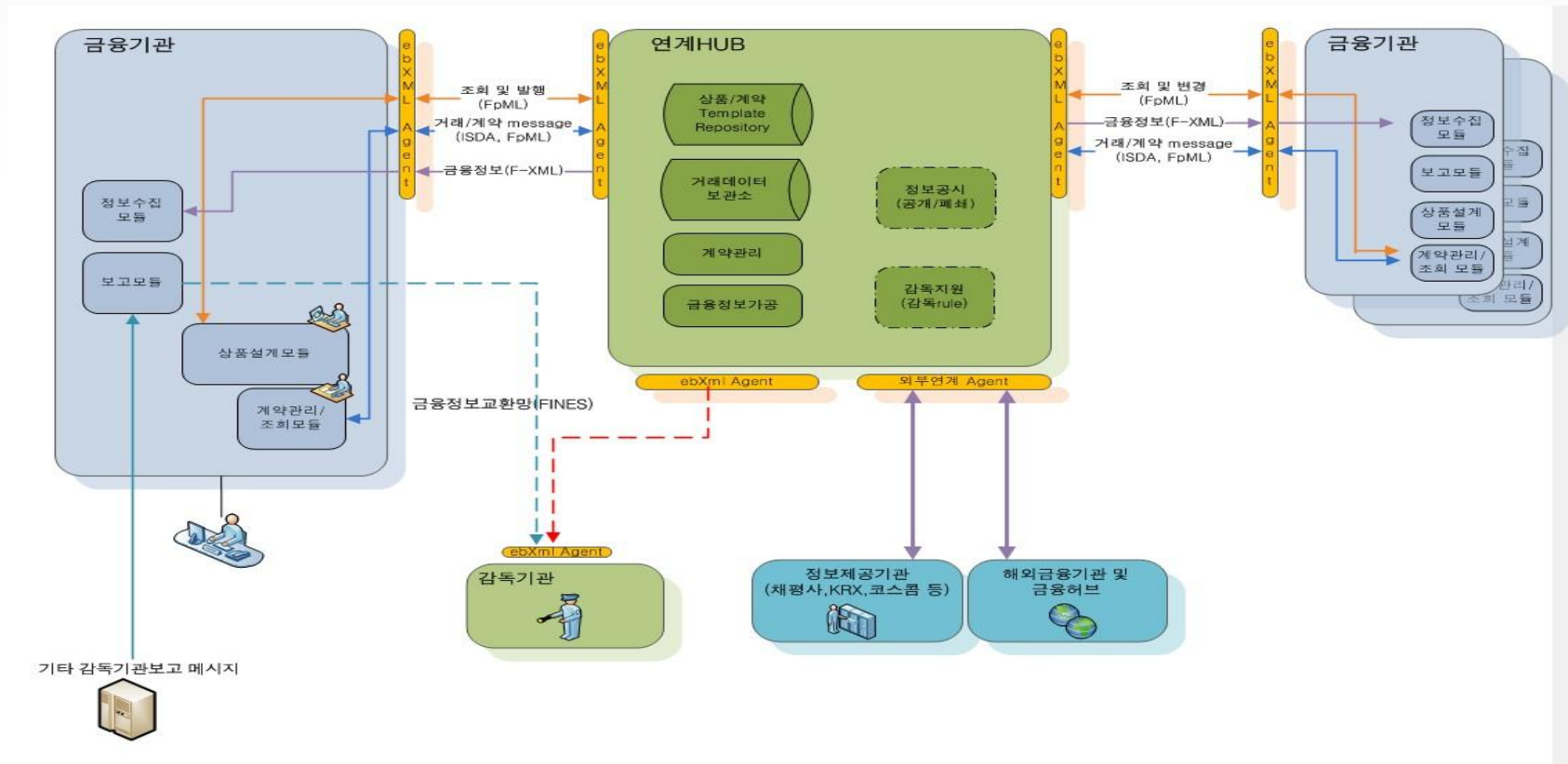
	Korea			Global		
	2007	2008	2009	2007	2008	2009
Related Equity	65	46	46	8,469	6,519	6,619
Related IR	2,699	2,689	2,632	393,138	385,896	437,198
Related Currency	2,197	2,042	1,803	56,238	44,200	48,775
Related commodity	-	-	-	8,455	3,820	3,729
Related credit	2	5	7	58,244	41,883	36,046
etc	6	6	4	71,194	65,413	72,255
Sum	4,969	4,787	4,492	595,738	547,371	604,622

(By Korea Capital Market Institute)

# Korea Market **Issue & View around FIX**

## ➔ Electronic trading platform for OTC Derivatives (B2B)

- Search the dealing partner, matching and execution : Front Office



# Korea Market **Issue & View around FIX**

FIX HUB  
STPHUB

- “Easy” & “Cost Reduce” global connectivity service & Market data

Product	Partner
Equity	via TradeWeb
Derivatives	DB, MFGlobal, JPM, RJO
FX Margin	HIMAWARI, IBFX

- Difference KFIX - GFIX → Integration, Conversion
- Provide TCA Tool & EMS for middle & small buy-side
- OTC Derivatives Front HUB



# Q & A