

AFSF Session

June 14 2022



AFSF 2021 Knowledge Sharing Workshop

The ACG New Business Initiative Task Force

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2 2020/21 Survey

The Annual Theme

Cross-border Trading: Frictionless???

Working in Unison!

Working in Silo!



I. AFSF at a Glance

1. Overview

2. Progress

Overview of the Forum

The Beginning



Exchange of Information TF
(Convener : JASDEC)

New Business Initiative TF
(Convener : KSD)

Technical TF
(Convener : NSDL)

Legal TF
(Convener : CSDC)

Risk & Recovery Management TF
(Convener : CDCPL)

Investor Services TF
(Convener : TDCC)

Asia Fund Standardization Forum (AFSF)

**AFSF Inauguration Ceremony, ACG19, Taipei
4th November 2015**



Progress of the Forum

Membership

Regular Members : 14 CSDs from 13 Economies

- ① Bursa Malaysia Depository Sdn. Bhd. (Bursa) – Malaysia
- ② Central Depository Services India Ltd. (CDSL) – India
- ③ Central Securities Depository & Clearing Corp. (CSDC) - China
- ④ Central Securities Depository of Iran (CSDI) - Iran
- ⑤ Hong Kong Monetary Authority (HKMA) - Hong Kong
- ⑥ Japan Securities Depository Center, Inc. (JASDEC) - Japan
- ⑦ Korea Securities Depository (KSD) - Korea
- ⑧ PT.Kustodian Sentral Efek Indonesia (KSEI) – Indonesia
- ⑨ National Securities Depository Ltd. (NSDL) – India
- ⑩ Philippine Depository & Trust Corp. (PDTC) – Philippines
- ⑪ Singapore Exchange (SGX) – Singapore
- ⑫ Taiwan Depository & Clearing Corp. (TDCC) - Taiwan
- ⑬ Thailand Securities Depository (TSD) - Thailand
- ⑭ Vietnam Securities Depository (VSD) – Vietnam



Advisory Members : 7 Global Fund Service Providers

- Calastone
- Clearstream
- Deutsche Bank
- DTCC
- Euroclear Bank
- Morningstar
- SWIFT



AFSF Activities

2014

Oct. Initial proposal at the 18th ACG GM

2015

Jan. Establishment of AFSF framework
Jul. 2016 Survey (Asia Fund Market)
Nov. Inauguration of AFSF

2016

Jun. 1st AFSF Knowledge Sharing workshop
Nov. Publication of Asia Fund Market Report

2017

Mar. 2017 Survey
Sept. 2nd AFSF Knowledge Sharing workshop
Dec. Publication of 2017 Annual Report

2018

Jul. 2018 Survey
Sept. 3rd AFSF Knowledge Sharing Workshop
Dec. Publication of 2018 Annual Report

2019

Jul. 2019 Survey
Nov. 4th AFSF Knowledge Sharing Workshop

2020

Jul. Publication of 2019 Annual Report

2021

Feb. Publication of 2020/21 Interim Report
May. 2020/21 Survey
Dec. Publication of 2020/21 Annual Report

2022

Jun. 5th AFSF Knowledge Sharing Workshop

II. AFSF Survey

- 1. Overview**
- 2. Part I: Fund Market Update**
- 3. Part II: Finding Asian Barriers**

Overview of the Survey

Objective

- ① To capture the latest market snapshots compared to the 2018 and draw out implications
- ② To discover possible post-trade barriers in Asia via operational mapping and gap analysis

Outline

General Theme	Period	Content	Participants
Cross-border Trade Barriers: From Silos to Symphonies	May 2021 ~ July 2021 (3 months)	43 Items under 2 Parts	8 CSDs



I. Fund Market Update

- Market Size
- Distribution
- Fund by Type
- Fund Structure
- Trading Volume
- Central Processing Platform
- Fund Code Standardization

II. Finding Asian Barriers

- Account Management
- Order Processing
- Messaging
- Cut-off Time
- Net Asset Value (NAV)
- Decimalization
- Reporting
- Reconciliation
- Business Days & Holidays
- Business Hours
- Tax Treatment

Part I : Fund Market Update

Survey Topics

- Market Size
- Distribution
- Fund by Type
- Fund Structure
- Trading Volume
- Central Processing Platform
- Fund Code Standardization

Preconditions:

1. **End of 2020 vs. end of 2017**
2. Economies to be listed in **alphabetical order**
3. Cross-border Trading Terms
 - **Outbound:** Home-domiciled fund sold abroad
 - **Inbound:** Foreign-domiciled fund sold into your economy
 - **Home Economy :** Where a fund is domiciled
 - **Host Economy :** Where the foreign fund is sold

Part I : Fund Market Update

Fund Market Size

Q1. What is the **total AUM** of the fund market in your economy? (as of end of 2020)

➔ Asian fund markets **continuously growing with speed and strength**

[Table 1. Fund Market Size by AUM]

Economy	Total AUM of Fund Market	
	End of 2020	End of 2017
Iran	\$80 bn (441%▲)	\$14.8 bn
China	\$5.65 tn (217%▲)	\$1.78 tn
Vietnam	\$19 bn (92.5%▲)	\$9.87 bn
Indonesia	\$57 bn (72.7%▲)	\$33 bn
Taiwan	\$292 bn (Public funds only) (50.5%▲)	\$194 bn
Republic of Korea	\$577 bn (36.9%▲)	\$421.34 bn
Japan	\$2.50 tn (35.1%▲)	\$1.85 tn
Hong Kong	\$1.99 tn ⁵ (19.9%▲)	\$1.66 tn
Thailand	\$155.43 bn (7.19%▲)	\$145 bn

Part I : Fund Market Update

Fund Market Size

Q2. What is the **AUM-to-GDP ratio** in your economy? (as of end of 2020)

➔ **Growing share** of fund markets **in GDP**

[Table 2. Fund Market Size by AUM-to-GDP Ratio]

Economy	AUM-to-GDP ratio	
	End of 2020	End of 2017
Hong Kong	580% (93%p ▲)	487%
China	36.3% (22.8%p ▲)	13.5%
Republic of Korea	39% (9.6%p ▲)	29.4%
Japan	47% (9.1%p ▲)	37.9%
Taiwan	42% (8%p ▲)	34%
Indonesia	5% (1.75%p ▲)	3.25%
Thailand	32% (1%p ▲)	31%
Vietnam	4.38% (0.1%p ▼)	4.48%
Iran	2.6% (65.3%p ▼)	7.5%

Part I : Fund Market Update

Fund Market Size

Q2. What is the **AUM-to-GDP ratio** in your economy? (as of end of 2020)

➔ **Much room for further growth**

Economy	Total AUM of Regulated Open-end Funds	GDP	AUM-to-GDP Ratio
U.S.	\$29.35 tn	\$15.19 tn	193%
Europe	\$21.8 tn	\$20.94 tn	104%
Asia-Pacific	\$8.8 bn	\$17.45 tn	50%

* Source: 2021 Investment Company Fact Book and World Bank

Part I : Fund Market Update

Fund Market Size

Q3. How many funds are there in your market? (as of end of 2020)

➔ Significant surge in some economies

[Table 3. Fund Market Size by Number of Funds]

Economy	Number of Funds	
	End of 2020	End of 2017
China	104,731 (2,109% ▲)	4,742
Indonesia	3,143 (100% ▲)	1,568
Vietnam	57 (58% ▲)	36
Japan	13,498 (12% ▲)	12,052
Republic of Korea	14,346 (12% ▲)	12,848
Taiwan	1,991 (8% ▲)	1,845
Thailand	1,616 (6% ▲)	1,529
Iran	179 (4% ▲)	172
Hong Kong	2,194 ⁶ (0.9% ▼)	2,215

Part I : Fund Market Update

Fund Market Size

Q7. How large is your public/private fund market? (as of end of 2020)

➔ Rise of private asset investments

[Table 5. Number of Public and Private Funds]

Economy	Public Fund	Private Fund
China	4,651 funds (\$3.05 tn, 54%)	96,818 funds (\$2.60 tn, 46%)
Japan	5,982 Funds (\$14,585 bn, 58%)	7,516 Funds (\$10,448 bn, 42%)
Republic of Korea	4,651 funds (\$253 bn, 38%)	9,695 funds (\$407 bn, 62%)
Thailand	1,428 Funds (\$142.50 bn, 91.68%)	188 Funds (\$12.93 bn, 8.32%)
Taiwan	1,991 funds (\$292 bn)	Data Unavailable
Indonesia ¹²	1,136 Funds (\$30 bn, 53%)	1,430 Funds (\$27 bn, 47%)
Hong Kong [*]	\$ 184.487 bn	Data Unavailable
Iran	179 funds (\$80 bn, 100%)	Data Unavailable
Vietnam	Data Unavailable	

* Only HK-domiciled authorized funds are applied. Non-HK domiciled authorized funds are excluded

Part I : Fund Market Update

Fund Market Size

Q6. What's the make-up of your public fund market in terms of **fund type**? (as of end of 2020)

➔ **Shifting through times** especially during market volatility

[Table 4. Trading Volume by Fund Type]

Economy	Equity Fund	Bond Fund	Mixed Fund ⁷	MMF	FoF	Others
China	12%	16%	25%	46%	-	1% ⁸
Hong Kong*	23.46%	18.64%	8.15%	3.70%	10.86%	35.19%
Indonesia	15%	17%	-	12%	-	56% ⁹
Iran	40%	48%	-	11%	-	1%
Japan	87%	7%	-	-	-	6% ¹⁰
Republic of Korea	28%	16%	-	6%	37%	13%
Taiwan ¹¹	24%	30%	8%	13%	-	25%
Thailand	15%	33%	%	7%	23%	22%
Vietnam	Data Unavailable					

* Only HK-domiciled authorized funds are applied. Non-HK domiciled authorized funds are excluded.

Part I : Fund Market Update

Distribution

Q4. As for public funds, what is the **predominant distribution channel** in your economy? (as of end of 2020)

➡ Either through **broker-dealers or direct sales**

[Table 6. Main Channel of Distribution]

Economy	Main Distribution Channel
China	Direct sales
Indonesia	Direct sales
Iran	Direct sales
Republic of Korea	Broker-dealers
Vietnam	Broker-dealers
Thailand	Direct sales, Broker-dealers
Hong Kong	Banks
Japan	Banks
Taiwan	Banks and Direct sales

Part I : Fund Market Update

Fund Structure

Q8. Please describe the changed market share by **fund structure** (if any) (as of the end of 2020).

➔ **Unit trust** is the **predominant form** of funds in Asia

[Table 8. Market Landscape by Fund Structure]

Economy	Unit Trust	Investment Company
China	100%	0%
Indonesia	100%	0%
Taiwan	100%	0%
Vietnam	100%	0%
Iran	100%	0%
Republic of Korea	98.6%	1.4%
Japan	94.9%	5.1%
Thailand	2.04%	97.96%
Hong Kong	Data Unavailable	

Part I : Fund Market Update

Trading Volume

Q9. How big is the volume of domestic assets invested by **domestic public funds?** (as of end of 2020)

➡ **Mostly going inwards** while **some** are **looking outwards**

[Table 9. Domestic Trading Volume]

Economy	Trading Volume of Domestic Public Funds	
	Domestic Assets	Overseas Assets
China	\$3.04 tn	\$12.05 bn
Republic of Korea	\$198 bn	\$43 bn
Thailand	\$62.57 bn	\$92.86 bn
Indonesia	\$56 bn	\$ 0.892 mn
Iran	\$80 bn	Data Unavailable
Hong Kong	Data Unavailable	
Japan	Data Unavailable	
Taiwan	Data Unavailable	
Vietnam	Data Unavailable	

Part I : Fund Market Update

Trading Volume

Q11/13. How big is the inbound/outbound trading volume in your economy? (as of end of 2020)

Q12/14. How many funds are being imported to/exported from your economy? (as of end of 2020)

➔ **Still mostly imported from outside**

[Table 10. Cross-border Trading Volume]

Economy	Cross-border Trading			
	Inbound		Outbound	
	No. of Fund	Trading Volume	No. of Fund	Trading Volume
China ¹⁹	27	\$2.64 bn	22	\$8.26 bn
Hong Kong ²⁰	1,384	\$1.81 tn	Data Unavailable (MRF: 29 funds)	Data Unavailable (MRF: \$5.82 bn)
Republic of Korea	648 funds	\$29 bn	0	0
Taiwan	1,011 funds	\$70 bn	0	0
Thailand	0	0	1	Data Unavailable
Vietnam	Data Unavailable	\$28.5 bn	Data Unavailable	
Indonesia ²¹	Data Unavailable			
Japan	Data Unavailable			
Iran	-	-	-	-

Part I : Fund Market Update

Trading Volume

Q15. How big is the outbound trading volume under ARFP/ASEAN CIS/MRF in your economy?
(as of end of 2020)

➔ **Asian passports are still taking baby steps except for MRF.**

[Table 11. Passport-driven Trading Volume]

Economy	Outbound Trading Volume by Passporting Scheme		
	ARFP	ASEAN CIS	MRF
China	-	-	North-bound: 27 funds, \$2.64 bn South-bound: 22 funds, \$8.26 bn
Hong Kong	-	-	North-bound: 29 funds, \$5.82 bn South-bound: 50 funds, \$206 mn
Japan	0	-	-
Republic of Korea	0	-	-
Thailand	0	Data Unavailable	Data Unavailable
Indonesia	-	-	-
Iran	-	-	-
Taiwan	-	-	-
Vietnam	-	-	-

Part I : Fund Market Update

Central Processing Platform

Q18. Do you have a central processing platform for domestic fund trading?

Q18-1. Is it mandated by law to use the platform?

Q18-2. If there is a central or major platform run by market player(s), what is its name and **who is running it?**

Q19. If any, are you using a processing platform for cross-border fund trading?

➔ **Many** are **using central platforms** for operational efficiency and safety.

[Table 12. CSD-run Platform and Private Platform]

Economy	CSD-run Platform			Private Platform
	O/X	Name	Mandatory? (Processing Rate)	O/X
Indonesia ²⁴	O	S-Invest	Mandatory (100%)	X
Republic of Korea	O	FundNet	Optional (100%)	X
Iran	O	FundReg	Optional (100%)	X
Vietnam	O	Fund Services System	Optional (90%) * 10% processed by market players	O

Thailand	O	FundConnex	Optional (10%) * 90% processed by market players	X
Taiwan	O	Fundclear	Optional (5%) * 95% processed by market players	X
China	O	Central Data Exchange Platform (CDEP)	Mandatory (0%) * 100% processed by market players * Mandatory to collect and record trading results as back-up data	X
Hong Kong	O	CMU Fund Order Routing System (FORS)	Optional (Percentage Data Unavailable)	O
Japan	O	Book-entry Transfer System (BETS)	Optional (Percentage Data Unavailable)	O (e.g. Private Vendor Financial Network System)

Part I : Fund Market Update

Central Processing Platform

Q20. What can your central processing platform do?

Q21. What can your platform do for subscription & redemption between asset managers and distributors?

Q22. What can your platform do for asset management between asset managers, brokers, and custodians?

➔ **Most platforms can process subscription and redemption orders, some can settle the institutional trades with brokers, and some function as a trading data back-up or central registry only.**

[Table 14. Functions of CSD-run Platforms]

Economy	Scope of Platform Functions
China	Post-settlement Data Storage - Data backup for trading results shared by TAs
Indonesia	Subscription and Redemption - Order processing - Settlement of orders - Management of participant accounts - Corporate action processing (Distributed income of funds: Reinvestment or cash) Post-trade Service for Asset Management - Confirmation and matching of trade (buy or sell) - Delivery of management instruction
Japan	Subscription and Redemption - Settlement of orders - Management of participant accounts Post-trade Service for Asset Management - Settlement of trades
Republic of Korea	Subscription and Redemption - Order processing - Settlement of orders - Management of participant accounts - Corporate action processing - Etc.

	Post-trade Service for Asset Management - Confirmation and matching of trade (buy or sell) - Delivery of management instruction - Settlement of trade - Management of participant accounts - Corporate action processing - Etc.
Taiwan	Subscription and Redemption - Order processing - Settlement of orders - Management of participant accounts - Corporate action processing
Thailand	Subscription and Redemption - Order processing - Settlement of orders - Management of participant accounts - Corporate action processing
Vietnam	Subscription and Redemption - Order processing - Settlement of orders - Management of participant accounts - Corporate action processing - Etc.
Iran	Unitholder registration - Management of participant accounts
Hong Kong	Subscription and Redemption - Order processing - Cash settlement through RTGS system

Part I : Fund Market Update

Fund Code Standards

Q23. Is there a common code universally used for fund identification in your economy?

Q24. If so, is the common code **ISO-compliant** (e.g. ISIN)?

➔ **Quite harmonized inside but still a long way to go for ISO compliance**

• [Table 15. Common Codes and Compliance with ISO Standards]

Economy	Common Code		Note
	O/X	ISO-compliant?	
Hong Kong	O	O	-
Indonesia	O	O	As a member of the Association of National Numbering Agencies (ANNA), KSEI has the responsibility to generate ISIN Code for all securities, including mutual funds. Also, KSEI as S-INVEST provider will generate local codes. Both codes are fund identifiers but not mainly used as the identifiers for fund trading. As for ETFs, the trading ticker code is created by IDX (Indonesia stock exchange)
Japan	O	O	-
China	O	X	-
Taiwan	O	X	For domestic funds, fund ID numbers are used as common codes, not ISINs. As for foreign-domiciled funds, the fund code provided by the master agent is used.
Thailand	O	X	-
Republic of Korea	O	X	Common codes are used by KSD to identify both listed and unlisted funds. But the codes are not ISO-compliant.
Vietnam	△	△	Common codes are used for ETFs and closed-end funds (listed on Exchange). As for open-end funds, proprietary codes are used. ISIN codes are only used for ETFs and closed-end funds.
Iran	X	X	-

Part II : Finding Asian Barriers

Survey Topics

- Account Management
- Order Processing
- Messaging
- Cut-off Time
- Net Asset Value (NAV)
- Decimalization
- Reporting
- Reconciliation
- Business Days & Holidays
- Business Hours
- Tax Treatment

Cross-border Trade Barriers: *From Silos to Symphonies*

Part II : Finding Asian Barriers

When we trade across our borders, will it be truly frictionless?

What stands in our way in the post-trade space?

What needs to be harmonized then?

Possible to take insights from MRF!

Inter-CSD Linkage for MRF			
	China (CSDC)	<i>Harmonized!</i>	Hong Kong (HKMA)
Account structure	Segregated	Nominee	Nominee
SWIFT	X	O	O
Cut-off	9pm (HK time)	HK cut-off extended	6pm (HK time)
NAV disclosure	NAV(T-1) before 8am	NAV (T-2)	No NAV(T-1) before 8am
Decimalization	Up to 2 decimal places	Up to 2 decimal places	Up to 6 decimal places
Order Processing	Batch processing (Mandatory) Electronic order routing	Batch processing (Mandatory) Electronic order routing	Batch processing (Optional) Fax or electronic order routing
BD & Holidays	Local BDs & holidays	Common BDs only	Local BDs & holidays
Reporting Docs	Electronic docs	Electronic docs	Hardcopies still in use
Reconciliation	Daily	Daily	Monthly

Part II : Finding Asian Barriers

Let's find gaps among us via operational mapping!

Gap Analysis for Better Interoperability and Harmonization

	China (CSDC)	Hong Kong (HKMA)		Others
Account structure	Segregated	Nominee		?
SWIFT	X	O		?
Cut-off	9pm (HK time)	HK cut-off extended		?
NAV disclosure	NAV(T-1) before 8am	NAV (T-2)	<i>How to Harmonize?</i>	?
Decimalization	Up to 2 decimal places	Up to 2 decimal places		?
Order Processing	Batch processing (Mandatory) Electronic order routing	Batch processing (Mandatory) Electronic order routing		?
BD & Holidays	Local BDs & holidays	Common BDs only		?
Reporting Docs	Electronic docs	Electronic docs		?
Reconciliation	Daily	Daily		?

Part II : Finding Asian Barriers

Account Management

Q1. Do you use **nominee structure** for account management?

➔ Broadly used except for VN, IN, and IR

[Table 16. Account Structure]

Economy	Nominee	Note
Republic of Korea	O	All beneficiary certificates are registered under the ultimate unit holder's name in the account book of distributors while the total sum of units are usually recorded in the account book of KSD. Only when it comes to rare occasions like unit holder's meeting, holdings are recorded in the name of ultimate unit holders in KSD's account book.
Taiwan	O	Beneficiary certificates are registered under the ultimate unit holder's name when the funds are sold directly from the asset manager. If the funds are sold via bank channel, it's nominee structure. Either way, the accounts are under the book of TDCC.
Japan	O	All accounts are registered under the name of registrar (CSD, TA, etc.) as nominee.
Hong Kong	O	For the fund orders routing via CMU platform, the accounts are normally registered under the name of registrar as nominee (Tier 2). However, no holding of investment fund units is recorded in the CMU system.
Thailand	O	Both nominee and segregated account structure are in place.
China	△	As for domestic trading, all accounts are registered under ultimate unit holder's name. However, China has adopted nominee account structure for MRF trading.
Vietnam	X	All accounts are registered under ultimate unit holder's name.
Indonesia	X	All accounts are registered under ultimate unit holder's name.
Iran	X	All accounts are registered under ultimate unit holder's name.

Part II : Finding Asian Barriers

Order Processing

Q2. How do you route orders from distributor to asset manager?

Q3. Do you have to use batch processing for order routing?

Q4. Are orders processed in a single batch before being sent to the fund side? Or in multiple batches?

Or are orders simply routed on a **transaction-by-transaction** basis (with no batch processing)?

➡ **Quite much automated** (e.g. batch processing, real-time processing, etc.)

[Table 17. Automation and Batch Processing for Order Treatment]

Economy	Automation	Batch Processing	Note				
China	O	<ul style="list-style-type: none"> Mandatory Single batch 	Order routing is fully automated via platform. All orders are routed via single batch processing.	Vietnam	△	<ul style="list-style-type: none"> Mandatory Single batch or one-by-one 	On the Fund Services platform, distributors and asset managers can process orders via STP or manually. Orders are routed via single batch processing in case of STP order processing. As for manual order processing, orders are routed on a one-on-one basis.
Indonesia	O	<ul style="list-style-type: none"> Optional One-by-one 	Order routing is fully automated on platform via file uploading and downloading. SFTP Procedures is currently under development.	Japan	△	<ul style="list-style-type: none"> Optional Depending on funds 	Order routing is partially automated via platform while the rest is manually handled via emails, faxes, etc.
Republic of Korea	O	<ul style="list-style-type: none"> Optional Real-time 	Order routing is fully automated by FundNet. Once placed into FundNet, all orders are automatically routed from distributor to asset manager via the central platform in a real-time manner. Batch processing is not mandatory. Plus, batch processing is not needed for order routing from distributors to the fund side since order routing is done on a real-time basis. Once a distributor places an order in FundNet, the corresponding asset manager can immediately confirm the receipt of the order via FundNet.	Thailand	△	<ul style="list-style-type: none"> Optional Multiple batches 	Order routing via FundConnex is fully automated. However, as FundConnex is not the only channel for order routing, some orders are still being handled manually. Speaking for FundConnex, orders are sent to DAP from distributors real-time and then sent by FundConnex to AMC's in batch. However, for other channels, it depends on the service agreement between AMC's and distributors. Batch processing is not mandatory. FundConnex goes through nine rounds of batch processing depending on the fund cut-off time.
Taiwan	O	<ul style="list-style-type: none"> Optional One-by-one 	-	Iran	X	<ul style="list-style-type: none"> Optional Single batch 	The structure of funds in Iran is in a way that the fund itself carries out both distribution and management of assets and there is no other separate entity as distributor anymore. Subscription and redemption are both conducted by the fund and the information will then be sent to CSDI to be registered in the platform.
Hong Kong	O	<ul style="list-style-type: none"> Optional Real-time 	Fund order routing is fully automated via CMU FORS. All orders are automatically routed from distributors to transfer agents/fund houses. CMU receives the fund orders from distributors by batch processing and then routes the orders to transfer agents on a real-time basis. Moreover, CMU receives the fund orders' acknowledgement and confirmations from transfer agents and further passes to the designated distributor on a real-time basis. CMU routes the fund orders on a real-time basis instead of batch processing.				

Part II : Finding Asian Barriers

Messaging

Q5/Q6. Does your economy use SWIFT messages for domestic/cross-border trading?

➔ Low level of adoption

[Table 18. ISO Compliance of Messaging]

Economy	ISO Compliance		Note
	Domestic	Cross-border	
Japan	△	△	Combination of both SWIFT and local messages are used.
Hong Kong	△	△	As for domestic trading via CMU FORS, SWIFT messaging is one of the channels for domestic trading. As for MRF via CMU FORS, SWIFT messaging is one of the channels for cross-border trading with local users. Once the local instructions are sent from domestic market participants, CMU FORS will convert them into readable format for mainland users, vice versa.
Republic of Korea	X	O	As for domestic trading, trade instructions are communicated with either manual key-ins on FundNet (as for subscription/redemption) or non-ISO compliant local messages called CCF, or Computer-to-Computer Facility, (as for post-trade support for management). As for cross-border trading, instructions are mostly communicated via SWIFT messages. (Some are communicated via fax and email). Once the local messages (CCF) are sent from domestic market participants, KSD's FundNet translates them into SWIFT messages before shooting them to overseas institutions. The vice versa is also true when overseas market participants send SWIFT instructions to KSD (translated into CCF).

Domestic Trading

Thailand	X	△	As for FundConnex, SWIFT is used solely for cross-border trading. For other distributors, DAP does not know whether AMCs, custodians, or other participants use SWIFT or not. DAP assumes market participants may be using some interfaces.
China	X	△	CSDC does not use SWIFT messages, but local messages. As for MRF, CSDC has adopted SWIFT messaging.
Taiwan	X	X	-
Vietnam	X	X	VSD does not use SWIFT messages, but local messages.
Indonesia	X	X	Currently there is no cross-border trading handled in S-INVEST
Iran	X	X	CSDI uses local messaging.

Part II : Finding Asian Barriers

Cut-offs

Q7. When is the cut-off time for order processing (e.g. subscription, redemption)?

➔ In need of **mutual understanding**

Dealing Cut-off Time

• [Table 19. Cut-off by Economy]

Economy	Cut-off (Local Time)	Note
Vietnam	T-1	Exact time for cut-off depends on funds.
China	3 pm	In Mainland China, the cut-off time for order processing is 3pm in local time.
Iran	3 pm	-
Thailand	3:30 pm	-

Indonesia	4 pm	-
Taiwan	5 pm	The cut-off time for order processing is 5pm in local time.
Republic of Korea	6 pm	In Korea, the cut-off time for order processing is 6pm in local time. Distributors should place their orders in FundNet before 6pm.
Hong Kong	6 pm	As for domestic trading, the operating hour for CMU FORS is from 8:30 am to 6:00 pm.
Japan	-	It depends on funds.

Part II : Finding Asian Barriers

NAV Disclosure

Q8. When can I know yesterday's NAV (T-1 NAV)?

➔ Mostly before 9am on TD

[Table 20. NAV Disclosure Timing]

Economy	NAV Disclosure (T-1 NAV)	Note
Republic of Korea	By 7am (TD)	In Korea, if today is the trading day (TD), yesterday's NAV (T-1) is available at 7am in the morning.
China	By 8am (TD)	-
Iran	By 8am (TD)	-
Thailand	By 9am (TD)	-
Indonesia	By 9am (TD)	Before 9am of TD. Custodian bank should report NAV to media on T-1 night (around 7.30pm) so that the media will be able to publish the NAV on the morning newspaper/other media outlets on TD
Vietnam	TD	Although NAV will be available in TD, the exact time for disclosure depend on funds.
Taiwan	-	In Taiwan, there is no regulation on when the NAV shall be reported.
Hong Kong	-	In Hong Kong, the announcement date of NAV (T-1) is stated in the fund documents.
Japan	-	The exact time for NAV disclosure depends on funds.

Part II : Finding Asian Barriers

Decimalization

Q9. How many decimal places are allowed for unit valuation?

➔ In need of **harmonization** or **mutual understanding**

[Table 21. Decimalization by Economy]

Economy	Decimalization	Note
Vietnam	Up to 2 decimals	-
Thailand	Up to 4 decimals	-
Indonesia	Up to 4 decimals	-
Taiwan	Up to 6 decimals	-
Hong Kong	Up to 6 decimals	CMU FORS can support up to 6 decimal places for unit valuation.
China	Up to 8 decimals	-
Japan	-	Decimalization depends on funds.
Republic of Korea	X	Decimal place is not used for unit valuation (one unit is KRW1 when first issued). Every unit is only counted as whole number and it is unallowed to break down one unit into smaller decimals.
Iran	X	Decimal place is not used for unit valuation.

Part II : Finding Asian Barriers

Reporting

Q10. Are documents from the fund side (on dividends or other fund information) shared with distributor in a digital format like PDF? Or still in a paper form?

➔ Broad adoption of digital formats

• [Table 22. Accepted Form of Documents]

Economy	Document Sharing		Note
	Paper	Digital	
China	X	O	Only electronic documents are accepted.
Iran	X	O	Only electronic documents are accepted.
Vietnam	O	O	It depends on funds.
Thailand	O	O	-
Indonesia	O	O	-
Taiwan	O	O	As for public funds, asset managers can upload fund information onto Fundclear. And distributors and investors could access the information in digital format on Fundclear.
Hong Kong	O	O	It depends on the mutual agreement between the distributors and the transfer agent. For MRF inbound trading arrangement, information about processing of fund account position reconciliation document (05), dividend information document (06), fund information document (07) for mainland funds are transmitted from ChinaClear to Hong Kong distributors in a digital format via CMU FORS system
Japan	O	O	-
Republic of Korea	O	O	As for public funds, asset management reports are sent to investors via mail or email. Due to latest legal changes, before the end of 2021, the asset management reports are expected to be also available for the retail investors holding units of private funds.



Investor



Manager

nd

Part II : Finding Asian Barriers

Reconciliation

Q11. Who does reconcile the cash/securities balance?

Q12. How often do you reconcile the cash/securities balance?

➔ Quite quickly reconciled among key market players

• [Table 23. Responsible Institution and Frequency of Reconciliation]

Economy	Reconciled by	How Often?	Note
Indonesia	Custodians	Daily	-
Taiwan	Distributors Asset managers	Daily	-
Japan	Distributors Asset managers Trustees CSD	Daily	-
Republic of Korea	Trustees	Daily	Trustees should reconcile their balance with the one they see in the balance records of FundNet. Distributors (1st tier Account Management Institution) should reconcile their balance with the one they see in the FundNet balance records of KSD (2nd tier account management institution) on a daily basis.
China	TAs Asset managers	Daily	-
Thailand	TAs	Daily	-
Iran	Asset managers	Daily	-
Vietnam	Asset managers	Each trading session of fund	-
Hong Kong	TAs	-	TAs are responsible for the reconciliation of cash/ securities balance. Reconciliation frequency depends on the mutual agreement between distributors and TAs.

Part II : Finding Asian Barriers

BDs & Holidays

Q13. In cross-border trading, you need to decide whether to open for holidays in order to respect your targeted market's business day. Are you going to open for holidays if your targeted market is open for business? Or are you going to **open for common business days only**?

➔ **Common BDs only** in general

• [Table 24. Trading Day for Cross-border Trading]

Economy	Trading Day (Cross-border)	Note
Taiwan	Common BDs only	-
Japan	Common BDs only	-
Republic of Korea	Common BDs only	As for KSD, we only open for common business days to support cross-border fund trading.
China	Common BDs only	-
Thailand	Common BDs only	-
Vietnam	Common BDs only	-
Hong Kong	Common BDs only	As for MRF, CMU only opens for common business days (Hong Kong & Mainland).
Indonesia	Undecided	Currently there is no cross-border trading in Indonesia. However, in case cross border-trading is available in the future, further analysis needed to decide the business day
Iran	Undecided	-

Part II : Finding Asian Barriers

Business Hours

Q14. As for domestic fund trading, what is your business hour?

Q15. When it comes to cross-border trading, have you adjusted (or are you willing to adjust) your business hours to respect the time difference with your trading party?

➔ In need of **mutual understanding**

• [Table 25. Business Hour by Economy]

Economy	Business Hours	Willing to change? (Cross-border)	Note
Taiwan	8:30am-5:30pm	No	The responsible department of TDCC usually opens from 8:30am to 5:30pm.
Hong Kong	8:30am-6pm	Yes	The operating hour for CMU FORS is from 8:30 am to 6:00 pm on Hong Kong business day. The operating hour is extended to 11:59pm only for MRF.
Vietnam	8am-5pm	Undecided	There is no cross-border trading yet.
Indonesia	8am-5pm	Undecided	The responsible department of KSEI usually opens from 8am to 5pm.
Thailand	8:30am-5pm	No	-
Republic of Korea	9am-6pm	No	The responsible department of KSD usually opens from 9am to 6pm and has no plan to change its 9-to-6 work schedule yet.
China	8:30am-5pm	No	Some duty personnel may work from 5pm to 8:30am.
Japan	9am-5pm	No	-
Iran	9am-5pm	Undecided	-

Host



Investor

Business

Economy



Asset Manager

Hours

Part II : Finding Asian Barriers

Tax Treatment

Q16. In case of **domestic** trading, who does the job of **tax withholding on fund profits?**

Q17. In case of **outbound** trading, who does the job of **tax withholding on fund profits?**

➔ In need of **harmonization** or **mutual understanding**

[Table 26. Tax Withholding Agent]

Economy	Tax Withholding Agent		Note
	Domestic	Cross-border	
Thailand	TAs Distributors	TAs	-
China	Listed companies, Bond issuers, Banks		For the dividends and bonus shares obtained by the fund, the interest income of bonds and savings deposits, listed companies, bond-issuing companies and banks need to withhold and pay 20% personal income tax when paying the above income to the funds; Personal income tax and corporate income tax are temporarily not levied on the income obtained by investors from fund distribution.
Japan	Distributors	Distributors	-
Republic of Korea	Trustees	Undecided	As for domestic trading of funds, it is trustees that perform tax withholding duties on the fund profits belonging to end-investors. As for outbound trading of home-domiciled funds, it is undecided yet who will do the tax withholding on fund profits belonging to the foreign distributor and end-investors.

Country	Agent	Domestic	Cross-border	Note
Hong Kong	TAs	N/A		TAs are responsible for the job of tax withholding on fund profits. In Hong Kong, for outbound trading of home-domiciled funds (MRF), the fund profits for mainland investors are not subject to tax for the time being.
Vietnam	Asset managers	N/A		There is no cross-border trading yet.
Indonesia	Custodians	N/A		-
Iran	Asset managers	N/A		-
Taiwan	N/A	N/A		There is no withholding tax on domestic fund profits. There is no outbound trading yet.

This is where we are today

[Table 27. Inter-CSD Operational Mapping Results]

Economy		China	Hong Kong	Indonesia	Iran	Japan	Republic of Korea	Taiwan	Thailand	Vietnam
Account Management	Nominee	△	O	X	X	O	O	O	O	X
Order Processing	Automation	△	O	△	X	O	O	O	O	△
	Batch Processing	Mandatory Single batch	Optional Real-time	Optional One by one	Optional Single batch	Optional Depending on funds	Optional Real-time	Optional One by one	Optional Multiple batches	Mandatory Single batch & One by one
Messaging	Domestic	X	△	X	X	△	X	X	X	X
	Cross-border	△	△	X	X	△	O	X	△	X
Cut-off		3:00 PM	6:00 PM	4:00 PM	3:00 PM	-	6:00 PM	5:00 PM	3:30 PM	T-1
NAV Disclosure		By 8am (TD)	-	By 9am (TD)	By 8am (TD)	-	By 7am (TD)	-	By 9am (TD)	TD
Decimalization		Up to 8 decimals	Up to 6 decimals	Up to 4 decimals	X	-	X	Up to 6 decimals	Up to 4 decimals	Up to 2 decimals
Reporting	Paper	X	O	O	X	O	O	O	O	O
	Digital	O	O	O	O	O	O	O	O	O
Reconciliation	Responsible Institution	TAs Asset managers	TAs	Custodians	Asset managers	Distributors Asset managers Trustees CSD	Trustees	Distributors Asset managers	TAs	Asset managers
	Frequency	Daily	-	Daily	Daily	Daily	Daily	Daily	Daily	Each trading session of fund
Trading Days		Common BDs only	Common BDs only	Common BDs only	Undecided	Undecided	Common BDs only	Common BDs only	Common BDs only	Common BDs only
Business Hours	As-Is	9am-3pm	8:30am-6pm	8am-5pm	9am-5pm	9am-5pm	9am-6pm	8:30am-5:30pm	8am-3:30pm	8am-5pm
	Willing to change?	No	Yes	Undecided	Undecided	No	No	No	No	Undecided
Tax Treatment	Domestic	Listed companies, Bond issuers, Banks	TAs N/A	Custodians	Asset managers	Distributors	Trustees	N/A	Asset managers	Asset managers
	Cross-border			N/A	N/A	Distributors	Undecided	N/A	N/A	N/A

The background of the slide features a light gray gradient. On the left side, there is a faint, vertical binary code (0s and 1s) that appears to be part of a larger digital structure. In the bottom left corner, there is a faint, stylized illustration of a modern city skyline with several skyscrapers. The overall aesthetic is clean and technological.

Thank You

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