



11th ASEAN+3 Bond Market Forum (ABMF) Meeting
Heliconia Junior Ballroom, 3410A-3513, Level 3
Marina Bay Sands Expo & Convention Centre, Singapore
5-6 February 2013

DATE & TIME	PROGRAM
5 FEB 2013	DAY 1: ABMF Sub Forum 1(SF1)
08:30 – 09:00	<i>Registration</i>
09:00 – 09:10	Welcoming Remarks by Mr. Muthukrishnan Ramaswami, President of SGX
09:10– 09:20	Opening Remarks by Mr. Shunzo Kayanuma, SF1 Chair
09:20 – 10:50	Session 1: Key components of AMBIF - SF1 (Part 1) by ADB secretariat - Comments from a Regulatory Perspective by Thai Securities and Exchange Commission, Ms. JomkwanKongsakul
10:50–11:10	<i>Coffee break</i>
11:10 – 12:30	Session 2: Key components of AMBIF - SF1 (Part 2) Q and A
12:30– 14:00	<i>Lunch (Level 3, Cassia Room 3311 and Room 3312)</i>
14:00 – 14:40	Session 3 (Information Session): Securities Market by Singapore Exchange, Mr. NelsFriets
14:40 – 15:10	Session 4 (Information Session): Portfolio Adjustment of Strategic Reserves beyond G7 Debt by Deutsche Bank, Mr. Joseph Barnes
15:10 – 15:40	Session 5 (Information Session) : Trends in ASEAN Debt Capital Markets by Citibank, Mr. ShaileshVenkatraman
15:40 – 16:00	<i>Coffee break</i>
16:00– 16:40	Session 6: Other issues of SF1 - Update of Phase 1 reports (SWIFT as the secretariat of Updating team) - Work plan after Singapore meeting (ADB secretariat)
16:40 – 17:00	Wrap up by ADB Secretariat
17:00 – 17:10	Closing Remarks by Mr. ShunzoKayanuma, SF1 Chair
17.30 – 19.00	Visit to Gardens by the Bay
19:15	Dinner (<i>Level 3, Room 3900, Saraca Room</i>)

6 FEB2013	DAY 2: ABMF Sub Forum2 (SF2)
08:30 – 09:00	<i>Registration</i>
09:00 – 09:10	Opening Remarks by Mr. Jong Hyung Lee, SF2 Chair
09:10 – 10:30	Session 7: Key contents of SF2 report– SF2 (Part 1) by ADB secretariat
10:30 – 10:50	<i>Coffee break</i>
10:50 – 12:10	Session 8: Key contents of SF2 report – SF2 (Part 2) Q and A
12:10– 14:00	<i>Lunch (Level 3, Cassia Room 3311 and Room 3312)</i>
14:00 – 14:30	Session 9 (Information Session): Collateral Management by Citibank, Mr. Pierre Mengal
14:30 – 15:00	Session 10 (Information Session) : The New Normal for the ASEAN Securities Services Industry by Deutsche Bank, Mr. Mrugank Paranjape
15:00 – 15:30	Session 11 (Information Session) : Function of CCP (The Bank of Tokyo Mitsubishi UFJ) by Mr. Taketoshi Mori
15:30 – 16:00	Session 12 (Information Session) : Foreign Issuers in LCY Bond Markets: Malaysia & Thailand (BPAM & Thai BMA) by Mr. Mohd Shaharul Zain
16:00– 16:20	<i>Coffee break</i>
16:20 – 17:00	Session 13 (Information Session) : AsiaBondsOnline (ABO) – current development and cooperation with ABMF by Mr. Thiam Hee Ng, ADB
17:10– 17:40	Session 14: Other issues of SF2 - Update of Phase 1 reports (SWIFT as the secretariat of Updating team) - Work plan after Singapore meeting (ADB secretariat)
17:40– 17:50	Wrap up by ADB Secretariat
17:50 – 18:00	Closing Remarks by Mr. Jong Hyung Lee, SF2 Chair



11th ABMF SF2:





**Possible Policy Recommendations including
Roadmap on Cross Border Bond Trade and
Settlement** (final draft)

6 February 2013 in Singapore

Taiji Inui
NTT DATA Corporation
ADB Consultant - Financial Information Technology Specialist

ver. 1

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2. Key Findings
3. Observations/Policy Implications
4. Recommendations for Next Phase
5. Roadmap
6. Next Steps and Work Plan

Attachments

- A) Comment list
- B) Bond Market
Diagrams, flows,
and charts in
ASEAN+3

1. Introduction

- ① Comments from members and experts are reflected to the draft proposed at the 10 ABMF in Bangkok.
- ② List of comments are shown as attachment A.

How comments are reflected

1. Introduction

- ① Misunderstood facts are corrected based on the comments by members and experts reflecting the comments to the draft.
- ② When there are discrepancies between the comments, the comments are firstly confirmed before reflecting them to the draft. A few remaining still need to be clarified.
- ③ Different policies from different members and experts are tried to be harmonized and adjusted by ADB secretariat and SF2 consultant.
- ④ Findings, observations, and recommendations here are mainly focusing on bond market infrastructures. Therefore, those for intermediaries, trading systems and other areas are in principle out of scope of this survey.

2. Key Findings

2.1 ASEAN+3 Bond Market Diagram

2.2 Fit & Gap Analysis of DVP Flows

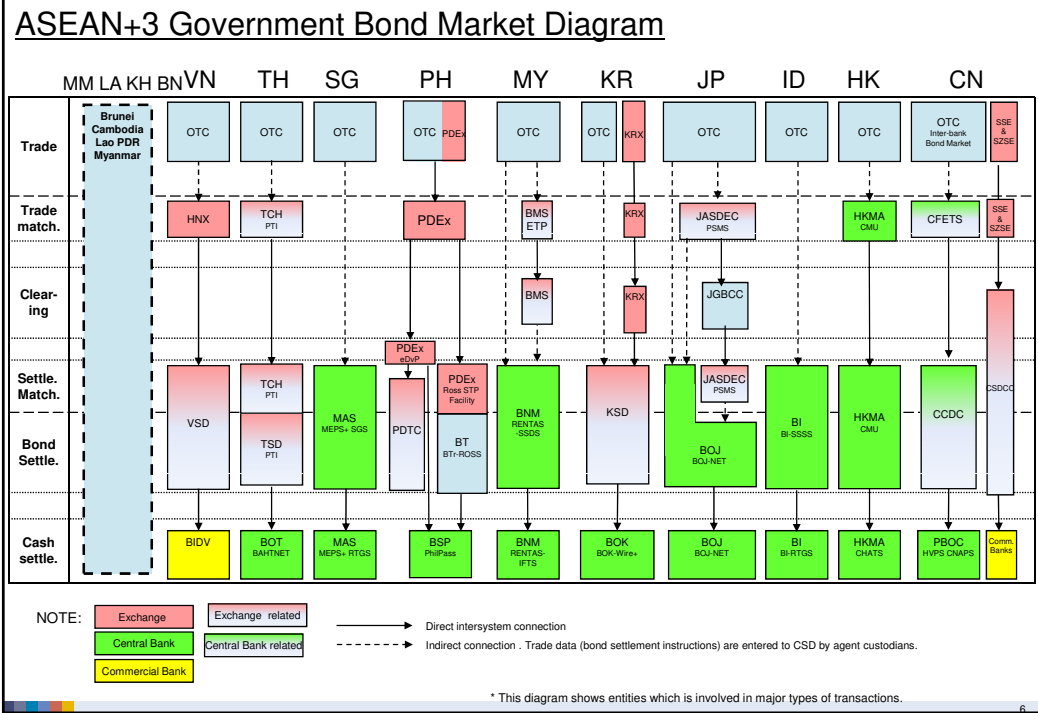
2.3 Fit & Gap Analysis of Message Items

2.4 Cross-border DVP flows

2.5 Interest Payment & Redemption

2.6 Other Issues

2.1 ASEAN+3 Bond Market Diagram



ASEAN+3 Government Bond Market Diagram

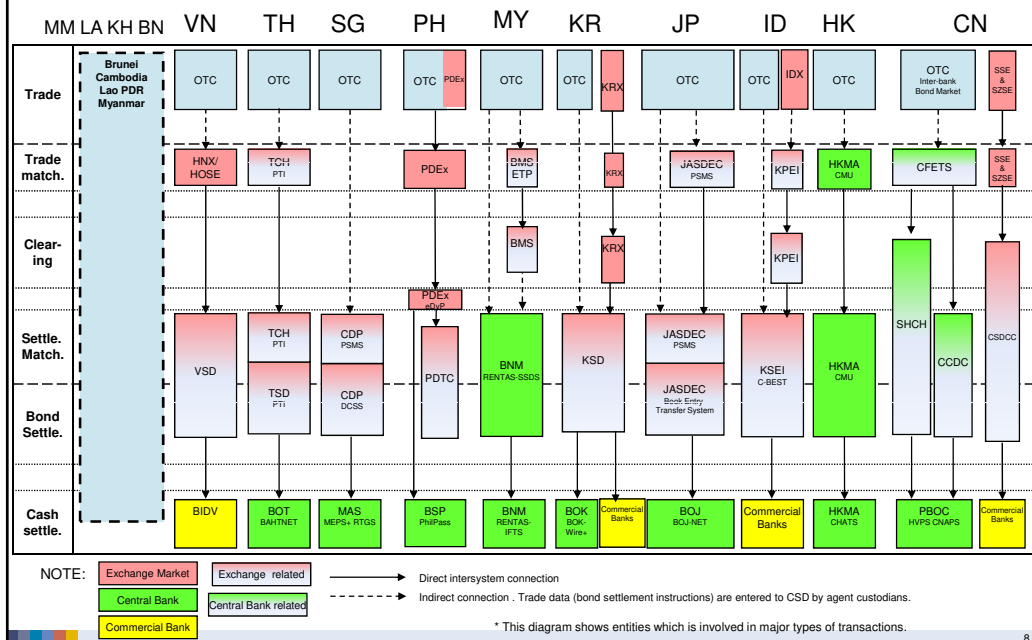
	CN	HK	ID	JP	KR	MY	PH	SG	TH	VN
Trade	OTC EX	OTC	OTC	OTC	OTC EX	OTC	OTC EX	OTC	OTC	OTC
Clearing	TBC	N	TBC	Y	Y*	TBC	N	N	N	N
Bond Settlement	Central bank Related CSD **	Central bank Owned CSD	Central bank Owned CSD	Central bank Owned CSD	Exchange Related CSD	Central bank Owned CSD	Bureau of Treasury, Exchange Related CSD	Central bank Owned CSD	Exchange Related CSD	Exchange Related CSD
Cash Settlement	Central bank money	Central bank money	Central bank money	Central bank money	Central bank money	Central bank money	Central bank money	Central bank money	Central bank money	Commer cial bank money

Note: EX (Exchange)

*: CCP exists an exchange function. But, transaction volume/value through exchange is negligibly small.

**: There is an exchange related CSD But, transaction volume/value through exchange is negligibly small.

ASEAN+3 Corporate Bond Market Diagram



ASEAN+3 Corporate Bond Market Diagram

	CN	HK	ID	JP	KR	MY	PH	SG	TH	VN
Trade	OTC EX	OTC	OTC EX	OTC	OTC EX	OTC	OTC EX	OTC	OTC	OTC
Clearing	TBC	N	TBC	N	Y*	TBC	N	N	N	N
Bond Settlement	CB and EX Related CSD	Central bank Owned CSD	Exchange Related CSD	Exchange Related CSD	Exchange Related CSD	Central bank Owned CSD	Exchange Related CSD	Exchange Related CSD	Exchange Related CSD	Exchange Related CSD
Cash Settlement	Commercial and Central bank money	Central bank money	Commercial bank money	Central bank money	Commercial and Central bank money	Central bank money	Central bank money	Central bank money	Central bank money	Commercial bank money

Note: EX (Exchange)

*: CCP exists an exchange function. But, transaction volume/value through exchange is negligibly small.

Key Findings (ASEAN+3 Bond Market Diagram)

1. Bond Market
 - Most of bonds (both government and corporate bonds) are traded in OTC markets in ASEAN+3 (where bond market exist).
 - Significant volume of bonds are traded in exchange (order driven) markets only in KR and PH.
 - Regarding bond trades, most of the trades are ordered and executed domestically.
 - Post-trade matching systems and/or trade repository systems are not always connected with pre-settlement matching system and/or CSD systems.
 - Trading systems including post-trade matching systems are not covered by the ABMF SF2 survey.
2. Clearing and Central Counter-Party (CCP)
 - CCP is in general to be established in order to mitigate counterparty risk.
 - CCPs have been established in some economies (CN, ID, JP, KR and MY) for bond trades. MY has just announced that Bursa Malaysia will have function as CCP. CN (SHCH) and JP (JGBCC) are CCPs for OTC market. CN (CSDCC), ID (KPEI), KR (KRX), and MY (Bursa Malaysia) are for exchange market.

Key Findings (ASEAN+3 Bond Market Diagram) cont.

3. Pre-settlement and settlement Matching
 - In many markets, pre-settlement matching is conducted manually using telephone, facsimile, e-mail, etc.
 - Both central matching and local matching are used as settlement matching for both government and corporate bonds.
4. Bond settlement
 - Regarding government bonds, central bank related CSDs mostly settle them in 6 markets (CN, HK, ID, JP, MY, and SG) out of 10 major markets in ASEAN+3. Exchange related CSDs mostly settle them in 3 markets (KR, TH, and VN). Government related CSD mainly settles and exchange related CSD settles significant portion of them as sub-registry in one market (PH).
 - Regarding corporate bonds, central bank related CSDs mostly settle them in 2 markets (HK and MY) out of 10 major markets in ASEAN+3. Exchange related CSDs mostly settle them in 7 markets (ID, JP, KR, PH, SG, TH, and VN). Central bank related CSDs and exchange related CSD settle them in one market (CN). Significant percentage of bonds remains as physical certificates.

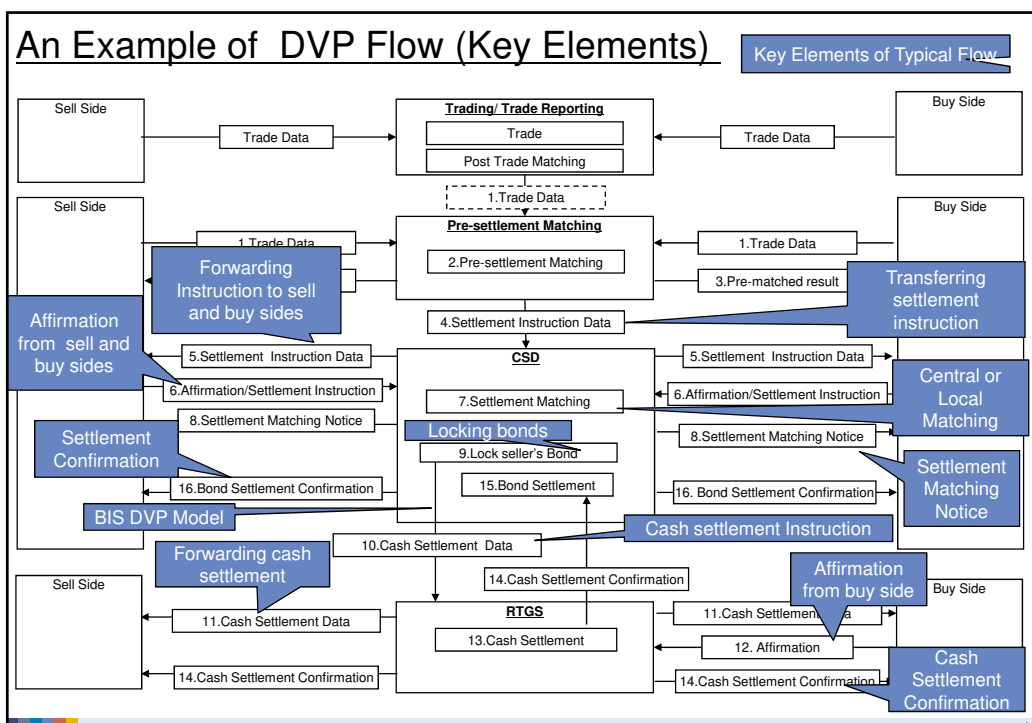
Key Findings (ASEAN+3 Bond Market Diagram) cont.

5. Cash settlement

- Regarding government bonds, central bank money is used in all markets except in VN in ASEAN+3. DVP model 1 of BIS definition is available in these 9 markets. Commercial bank money can also be used in CN though the percentage to total settlement value is very low.
- Regarding corporate bonds, central bank money is used in 8 markets (CN, HK, JP, KR, MY, PH, SG, and TH) . Commercial bank money is used in 4 markets (CN, ID, KR and VN). In CN, central bank money is mainly used but commercial bank money is used when bonds are settled in exchange related CSD.

2.2 Fit & Gap Analysis of DVP Flows

- DVP flows of government bond and corporate bond in each economy are compared with typical DVP flow in ASEAN+3
- Government bond DVP flows are analyzed. Corporate bond DVP flows will be analyzed later.



Key Findings of DVP Flow 1/4 Gov. Bond

1. Pre-settlement Matching

- JP has already implemented automated pre-settlement matching system.
- Pre-settlement matching is done by future dated transactions in some economies such as CN, HK, and KR.
- Most of the pre-settlement matchings in ASEAN+3 are done manually using telephone, facsimile, e-mail, etc.

2. Bond settlement

- A) "Settlement Instruction Data" are transferred from up-stream system such as Pre-settlement Matching System or other systems including Trade (capturing) System from the view point of STP.
 - In CN, KR, JP, PH and VN, book entry system receives settlement instruction or trade data (on-line) from other system.
 - In other economies, sell side and/or buy side enter the data.
- B) After receiving "Settlement Instruction Data" from other system, they are forwarded to sell side and buy side for affirmation.
 - If CSD receives settlement instruction data from other systems, CSD also forwards the data to sell side and buy side except in KR and VN.

Key Findings of DVP Flow 2/4 Gov. Bond

2. Bond settlement

- C) After receiving “Settlement Instruction Data” from CSD, both sides need to affirm.
 - If sell side and buy side receive settlement instruction data, they affirm it and send them back to CSD in all economy.
- D) Central matching or local matching?
 - HK, ID, KR, TH and VN adopt central matching. On the other hand, JP, MY and PH adopt local matching. CN and SG adopt both types of matching.
 - Central matching CSDs (CN, HK, ID, KR, PH, SG, TH, and VN) send matching notice to sell side and buy side. Local matching CSDs (JP and MY) functionally do not have such confirmation.
- E) “Settlement Confirmation” notices need to be sent or not.
 - CSDs send settlement confirmation except in PH and VN.
- F) Locking of seller’s bond need to be done or not. What is the definition of locking , earmarking, blocking, etc.?
 - Not available.

Key Findings of DVP Flow 3/4 Gov. Bond

2. Bond settlement

- G) What kind of DVP model does CSD adopt?
 - ① BIS DVP Model 1 is adopted in CN(OTC), HK(OTC), ID, JP, KR(OTC), MY, PH, SG and TH
 - ② BIS DVP Model 2 is adopted in CN (EX).
 - ③ BIS DVP Model 3 is adopted in HK(OTC), KR(EX), and VN.

Key Findings of DVP Flow 4/4 Gov. Bond

3. Cash settlement

- A) Which entity sends “Cash Settlement Instruction Data” to RTGS, CSD or sell side and/or buy side.
 - In almost all economy except JP and MY, CSDs send cash settlement instruction data to cash settlement system. In JP and MY, securities settlement system and RTGS are running on a same platform.
- B) If RTGS receives “Cash Settlement Instruction Data” from CSD, RTGS forwards them to sell side and/or buy side or not.
 - Only in KR, RTGS forwards cash settlement instruction data to sell side and buy side.
- C) Buy side needs to affirm them and sends them back to RTGS, both sides need to do so, or neither side needs to do so.
 - Only in KR, RTGS forwards cash settlement instruction data to sell side and buy side.
- D) “Cash Settlement Confirmations” need to be sent to sell side and buy side or not.
 - In almost all economy except MY and VN, RTGS sends cash settlement confirmation. In MY, bond and cash settlement confirmation are same message. In VN, there is no cash settlement confirmation.

2.3 Fit & Gap Analysis of Message Items

- Message format (ISO 20022, ISO 15022, or proprietary) of each CSD is surveyed.
- Message items of 10 common elements proposed by SMPG for settlement instruction (sese.023.001.03) and settlement confirmation (sese.025.001.03) are chosen as a preliminary study of FIT&GAP Analysis

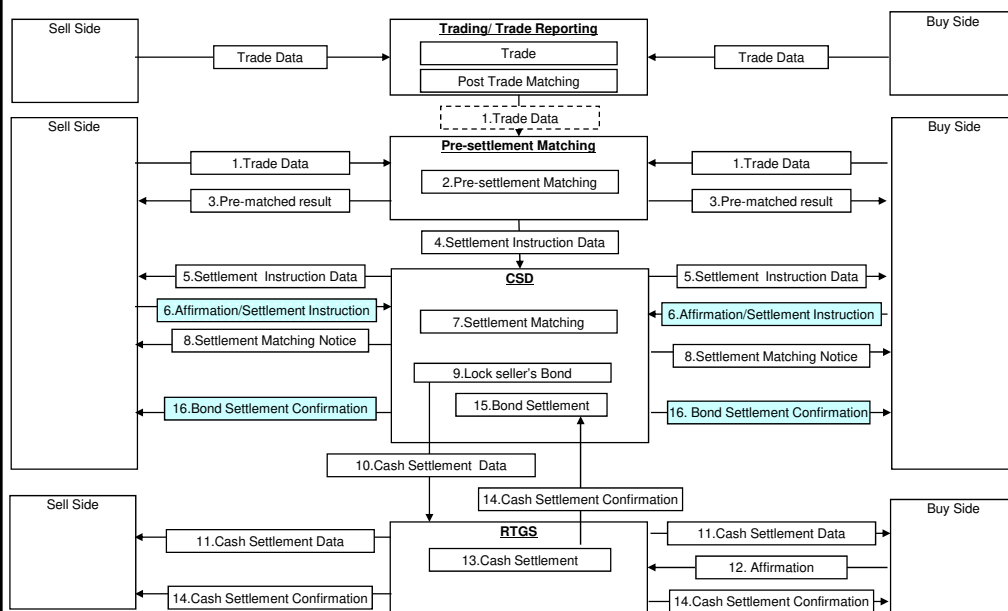
Current status of migration to ISO 2022

Economy	CSD	Instrument	Proprietary	ISO 15022 (MT)	ISO 20022
CN	CCDC	G/C	○		
CN	CSDCC	G/C	○		
CN	SHCH	C			○
HK	HKMA (CMU)	G/C		○	
ID	BI	G	○)	○	
ID	KSEI	C	○	○	
JP	BOJ	G	○)		○ (FY2015)
JP	JASDEC	C		○)	○ (FY2014)
KR	KSD	G/C	○		
MY	BNM (RENTAS)	G/C	○		
PH	BTr (RoSS)	G	○		
PH	PDTC	G/C	○		
SG	MAS	G		○	
SG	CDP	C	○)		
TH	TSD	G/C		○	
VN	VSD	G/C	○		

G: government bond
C: Corporate bond

Note: Migration projects to ISO 2022 which already announced implementation year are included in the table.

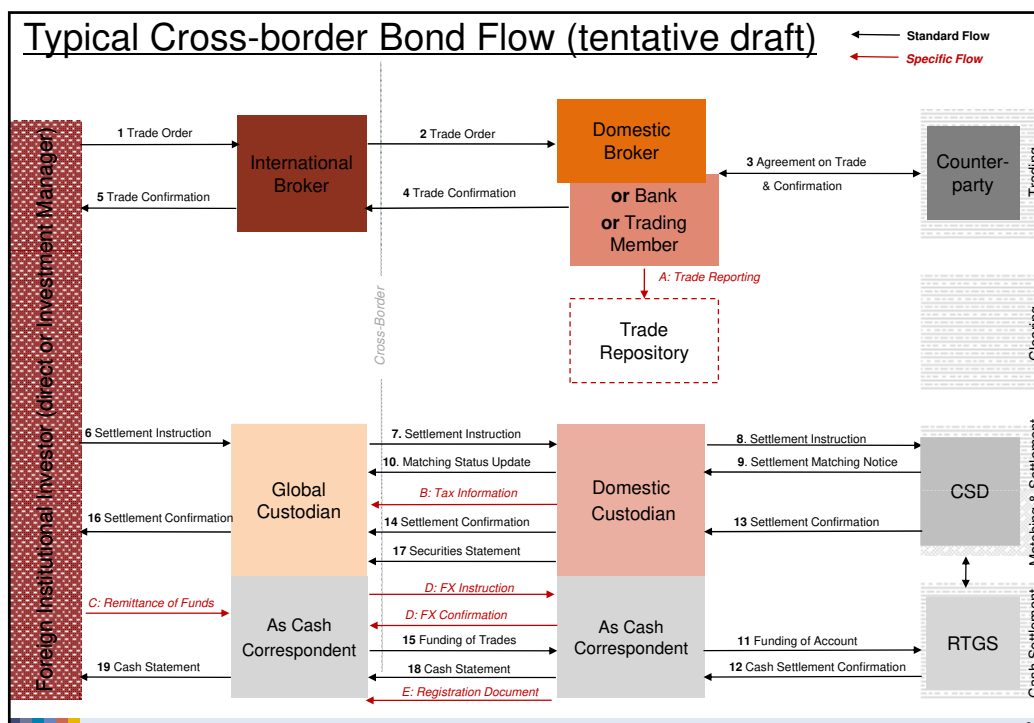
An Example DVP flow



Key Findings of Message Items (some examples)

1. In ISO15022 and ISO20022, Instruction Identification means Sender's message reference but there are some exceptions. For instance, in PDEX, CSD of Philippines, trading system numbers instruction identification and in BOJ-Net, market infrastructure numbers Torihiki-number as instruction identification. (New BOJ-Net will adopt new Torihiki ID in accordance with ISO standards.) Message reference number is essential (mandatory) to identify individual messages.
2. Regarding Trade Date, some CSDs (KSD, PDEX, MAS, TSD and VSD) specify that Trade Date is mandatory. But the Trade Date is not even regarded as input item for BOJ. Trade Date is not necessary at least in settlement, but is necessary to acquire details of transaction and tax related matter.
3. Settlement Date is mandatory for all CSDs mandatory except VSD, but VSD calculates the settlement date within their system on the basis of Trade Date. To do without Settlement Date a specific reason or authorization is required.
4. Place of settlement (PSET) is mandatory for PDEX, MAS and TSD, but not for BOJ, KSD and VSD. If a bond infrastructure is not connected with other systems, PSEN may not be entered. But, PSET may be necessary for cross-border STP perspective.

2.4 Cross-border DVP Flows



Key Findings (Cross-border DVP flows)

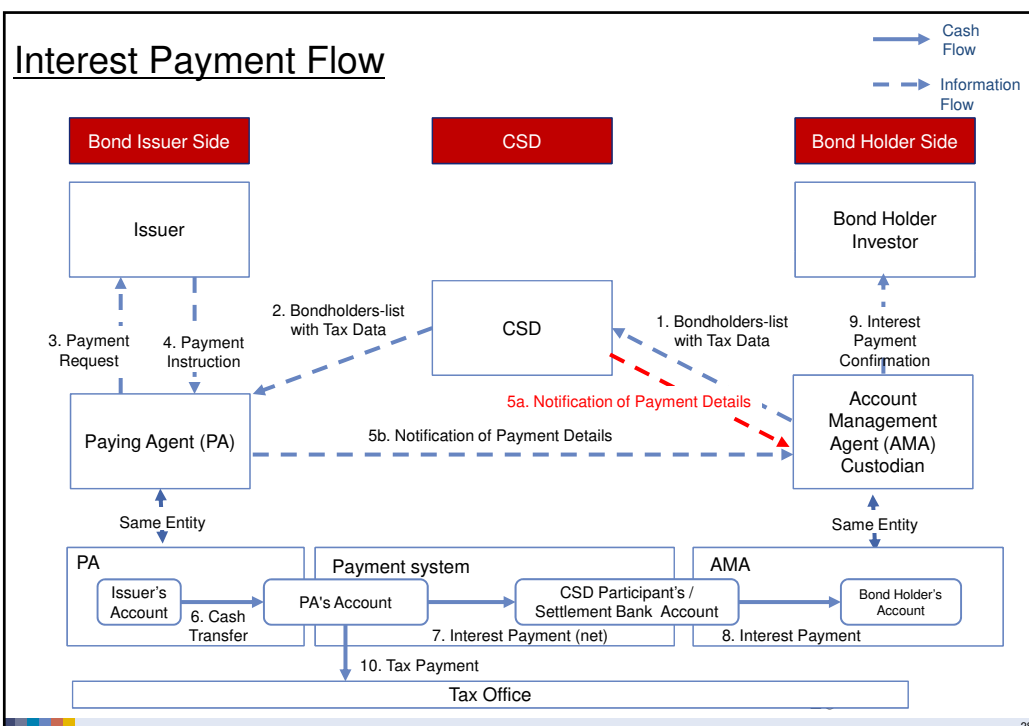
1. Trading Report [A of previous slide]
 - Domestic broker or bank should send trade detail to authority in order to ensuring transparency (ID, KR, MY, TH).
2. Tax Information [B of previous slide]
 - Extra messages may need to be exchanged in order to calculate appropriate capital gain tax (ID).
3. Remittance of Funds [C of previous slide]
 - Foreign institutional investors may need to remit funds before settlement in CN and VN due to pre-funding requirement (CN, VN).
4. FX Instruction & Confirmation [D of previous slide]
 - Global custodian and local custodian should send FX related instruction corresponding to FX regulations (ID, KR, MY, PH, TH, VN).
5. Registration Document [E of previous slide]
 - Domestic custodian should issue remittance document , certifying foreign currency inflow for ability to repatriate at later stage without consideration of FX limitations (PH).

Barriers Related FX and Cash Management

	FX Trades with Underlying Investment	Pre-funding	Prohibition of Third-party FX	FX Reporting	Prohibition of Overdraft by Non-residents	Prohibition of Offshore FX Trading for Investment	Limitation on Repatriation
CN	Y	Y	Y	Y	Y	Y	Y
HK	N	N	N	N	N	N	N
ID	Y	N	N	Y	Y	Y	Y
JP	N	N	N	N	N	N	N
KR	N	N	Y	Y	Y	Y	N
MY	Y	N	N	N	Y	N	N
PH	N	N	N	Y	Y	N	Y
SG	N	N	N	N	N	N	N
TH	Y/N	N	N	Y	N	N	N
VN	Y	Y	N	Y	Y	Y	Y/N

Revised

2.5 Interest Payment



Government Bond Interest Payment Related Entities

	PA of Issuer	CSD	Payment system	AMA of Bond Holder	TWA
CN	CCDC CCDC	CCDC CSDCC	CNAPS Commercial Bank	CSD partic. CSD partic.	None None
HK	HKMA	HKMA	CHATS	CSD partic.	None
ID	BI	BI	BI-RTGS	CSD partic.	CSD partic.
JP	BOJ	BOJ	BOJ-Net	CSD partic.	BOJ/CSD partic. (*)
KR	BOK	KSD	BOK-Wire+	CSD partic.	KSD's bank
MY	BNM	BNM	RENTAS-IFTS	CSD partic.	None
PH	BTr	BTr	PhilPaSS	CSD partic.	BTr
SG	MAS	MAS	MEPS+	CSD partic.	CSD partic. (*)
TH	BOT	TSD	BAHTNET	CSD partic.	BOT
VN	VSD	VSD	BIDV	CSD partic.	None

- ① PA (Paying Agent), AMA (Account Management Agent), TWA (Tax Withholding Agent)
- ② CSD participant includes a corresponding bank (which has an account in the payment system) designated by a bond holder.
- ③ BOJ and CSD participant are withholding Agents for national tax and local tax, respectively, in Japan .
- ④ (*) denotes no WHT for non-residents.

Summary of Interest Payment Process of Government Bond

1. When issuers pay interest to investors, paying agents (PA), which are designated by issuers, transfer money to the accounts of account management agents (AMA)s which are appointed by investors.
2. In the case of government bonds, central banks play a role of PA except China, Philippines, and Vietnam. In Philippines, there is no agent, but Bureau of Treasury operates on its own behalf.
3. CSD participants or correspondent banks of CSD participants act as AMA for bond holders. From the view point of no-residents' transaction, custodians play a role as AMA.
4. Tax withholding agents (TWA) pay withholding tax to tax office on behalf of investors. In China, Hong Kong, and Malaysia there is no withholding tax of government bond, In Japan and Singapore, no WHT for non-residents. In Japan, PA pays national tax and AMA pays local tax.

Revised

Corporate Bond Interest Payment Related Entities

	PA of Issuer	CSD	Payment system	AMA of Bond Holder	TWA
CN	CSDCC SHCH CCDC	CSDCC SHCH CCDC	Com. Bank system CNAPS CNAPS/Com. Bank Sys	CSD partic. CSD partic. CSD partic	CSDCC Bond holder Bond holder
HK	Commercial Bank	HKMA	CHATS	CSD partic.	None
ID	KSEI	KSEI	KSEI's Bnk system	CSD partic.	KSEI
JP	Commercial Bank	JASDEC	BOJ-Net	CSD partic.	PA/CSD partic.(*)
KR	Commercial Bank	KSD	BOK-Wire+ Com. Bank system	CSD partic.	KSD's bank
MY	Commercial Bank	BNM	RENTAS-IFTS	CSD partic.	None
PH	Commercial Bank	PDTC	PhilPaSS	CSD partic.	PDTC
SG	Commercial Bank	CDP	MEPS+	CSD partic.	CSD partic.(*)
TH	Commercial Bank	TSD	BAHTNET	CSD partic.	Commercial Bank
VN	VSD	VSD	BIDV system	CSD partic.	Issuer

- ① PA (Paying Agent), AMA (Account Management Agent), TWA (Tax Withholding Agent)
- ② CSD participant includes a corresponding bank (which has an account in the payment system) designated by a bond holder.
- ③ PA and CSD participant are withholding Agents for national tax and local tax, respectively, in Japan .
- ④ (*) denotes no WHT for non-residents.

Summary of Interest Payment Process of Corporate Bond

1. In the case of corporate bond, CSDs play a role as paying agent (PA) in China, Indonesia and Vietnam. In the other 7 economies, commercial banks are designated as PA.
2. AMA, which is designated by bond holders, are CSD participants, including corresponding banks.
3. There is no withholding tax in Hong Kong, and Malaysia. In Japan and Singapore, no WHT for non-residents.
4. In Japan, PA pays national tax and AMA pays local tax.
5. In China, bond holders pay tax to tax office directly in as SHCH and CCDC. CSDCC pays tax to tax office by itself. In Indonesia, Korea and Philippines, CSD or CSD's bank is designated as TWA. In Japan, PA pays national tax and AMA pays local tax. In Vietnam, bond issuers pay tax.

Revised

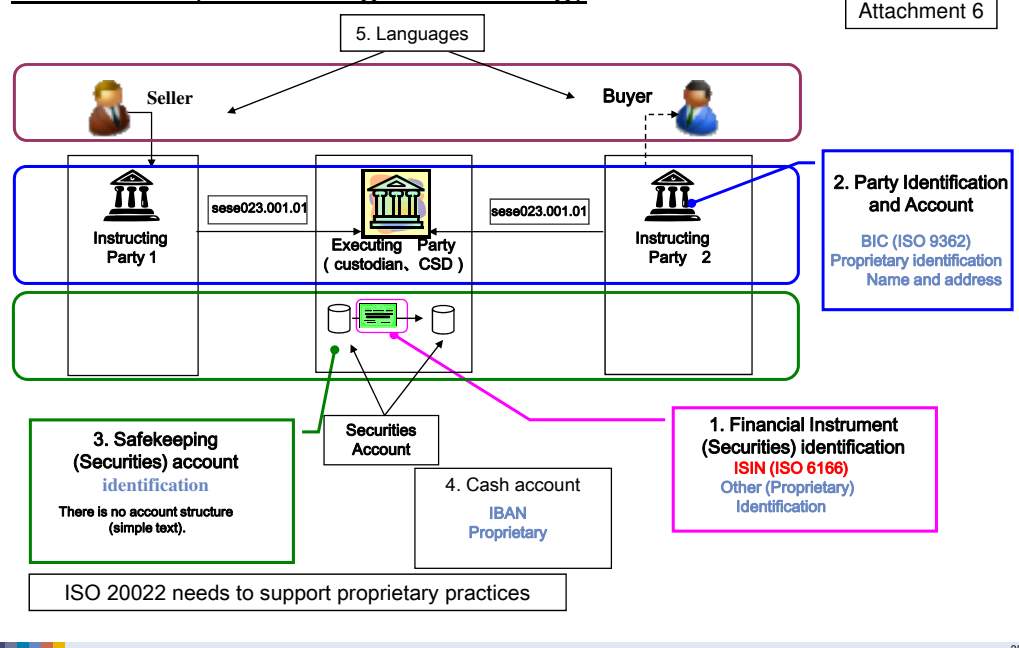
Key Findings (Interest Payment)

1. Interest payment flows differ economy by economy.
2. Paying Agent (PA) of bond issuer for interest payment and redemption
 - Regarding government bonds, central banks are PA of the issuer (MOF) in 7 economies (HK, ID, JP, KR, MY, SG, and TH) out of 10 economies which have bond markets in ASEAN+3. CSDs are the PA in two economies (CN and VN). Government (Bureau of Treasury) is the PA in PH.
 - Regarding corporate bonds, commercial banks are PA of issuers in 7 economies (HK, JP, KR, MY, PH, SG and TH). CSDs are PA in 3 economies (CN, ID, and VN).
3. Account Management Agent (AMA) of bond holder (investor) for interest payment and redemption
 - Regarding government bonds, CSD participants are AMA of bond holders.
 - Regarding corporate bonds, CSD participants are AMA of bond holders.
3. Tax Withholding Agent (TWA) for interest payments and redemptions
 - Regarding government bonds, no WHT (withholding tax) is imposed in 4 economies (CN, HK, MY and VN). In JP and SG, only non-residents are exempt from WHT. TWAs in other economies are different economy by economy.
 - Regarding corporate bonds, no WHT is imposed in 2 economies (HK and MY). No WHT is imposed only for non-residents in JP and SG. TWAs in other economies are different economy by economy.

2.6 Numbering and coding (including other Issues)

Standards (numbering and coding)

Attachment 6



Numbers and Codes

To be revised

	Securities Numbering	Financial Institution Identification	Securities Account	Cash Account	Encoding Scheme and Language
CN	Proprietary	Proprietary	Proprietary	Proprietary	Unicode (UTF-8) EBCDIC
HK	ISIN and Proprietary (CMU issue)	Proprietary	Proprietary	Proprietary	Code supported by SWIFT
ID	ISIN and Proprietary	BIC and Proprietary	Proprietary	Proprietary	
JP	Proprietary Code ISIN (*)	BIC and Proprietary	Proprietary	Proprietary	Unicode (UTF-8)
KR	ISIN and Proprietary	Proprietary (account number)	Proprietary	Proprietary	KSC5601 for Korean
MY	Proprietary		Proprietary	Proprietary	
PH	Proprietary	Proprietary (PDS-assigned firm)	Proprietary	Proprietary	Unicode (UTF-8)
SG	ISIN and SGX proprietary stock code (4 character alphanumeric)	proprietary	Proprietary	Proprietary	Unicode (UTF-8)
TH	ISIN	BIC	Proprietary	Proprietary	Unicode (UTF-8)
VN	ISIN and proprietary	N/A	Proprietary	N/A	Unicode (UTF-8)

(*) ISIN for new systems

Settlement Cycle

To be revised

Economy	Domestic	Cross-Border
CN	T+1 (negotiable, market practice)	T+1 (market practice)
HK	T+2 (negotiable, market practice)	According to the standard cycle of the respective markets
ID	Gov. T+2 (negotiable, market practice)	T+2
	Corp. T+3 (negotiable)	T+3 (negotiable)
JP	Gov. T+2	T+2 ~ T+4
	Corp. T+3	T+2 ~ T+4
KR	T+1 (negotiable, market practice) T+1-T+30 is possible.	T+1-T+3 (in-bound transaction) depend on the settlement cycle of designation country for investment. (out-bound transaction)
MY	T+1/T+2 (negotiable, market practice)	T+2
PH	T+1 (negotiable, market practice)	T+1 (same as domestic transaction)
SG	T+3 (negotiable, market practice)	T+1 (government bond), T+3 (corporate bond)
TH	T+2 (negotiable, market practice)	T+3 (US investor)
VN	T+1 ※T=trade capture date	No cross-border transaction

Operating Hours

	C S D	Operating Hour based on local time		
		Open	Cut off Time	Closing Time
CN (+1)	CCDC	8:30	17:00	18:00-19:00
	CSDCC	8:30	-	16:00
HK (+1)	CMU	8:30	16 : 00	18:30
ID (0)	BI	6:30		19:00
	KSEI	4:00	15:10 (cash settlement)	17:10
JP (+2)	BOJ	9:00	14:00	16:30
	JASDEC	9:00	16:30 (typical)	17:00
KR (+2)	KSD	9:00	16:00	17:00
MY (+1)	MyClear	8:00		18:00 (13:00 on Sat)
PH (+1)	BTr-RoSS	9:30		15:30
	PDTC	8:00		18:00
SG (+1)	MAS	5:00	-	20:00
	CDP	8:30		17:30
TH (0)	TSD	7:00	17:00	19:00
VN (0)	VSD	8:00	9:00 for bond settlement 11:00 for cash settlement	17:00

Note: Time difference from Jakarta time is shown after country code. **To be revised**

Key Findings (Numbering and coding)

1. ISIN (International Securities Identification Number) is not actually used in many economies. Also, numbering conventions and operational processes of ISIN is not standardized, yet.
2. BIC is not actually used in many economies, yet in stead, local proprietary codes are used.
3. Securities account structure is proprietary one in all economies in ASEAN+3.

Key Findings (Other issues)

1. Settlement cycle is not regarded as a rule of each market (but agreed through negotiation) except in Japan.
2. Operating hours are overlapping each other. But, market practices such as cut-off time are different CSD by CSD.
 - Cut-off time shall be the deadline decided by market participants prior to the closing time for the purpose of recognizing fails etc. aimed at completing all settlements on the day.
3. Physical certificate remains in many markets in particular for corporate bonds.
4. Post-trade (clearing and settlement) infrastructures in ASEAN+3 are fragmented. Also, cross-border STP is not yet realized.
5. Cost of cross-border transactions is perceived as higher than that of other region such as EU and US.

3. Observations/Policy Implications

Observations and policy implications related to cross-border STP in ASEAN+3 based on the survey results of Phase 1 and Phase 2 are summarized as follows. Comments from ABMF SF2 members and experts are reflected to the draft presented at the 10th ABMF SF2 in Bangkok.

- Principles for financial market infrastructures of CPSS-IOSCO published in April 2012 needs to be observed.

3.1 Bond Market Infrastructure

1. Cross-border STP Survey to include Trading Systems
Trading systems may be surveyed from the view point of cross-border STP when market size and transaction volume of the securities market are expected to become big enough. Business case needs to be considered.
2. Price discovery and transparency
Trade repositories may also be surveyed from the viewpoint of securing price transparency and improving information flows in the market when market size and transaction volume of the securities market are expected to become big enough.

3.1 Bond Market Infrastructure

3. Development of Pre-settlement matching Infrastructures
Automated pre-settlement matching system (PSMS) is not yet developed except in JP in ASEAN+3. Matching infrastructures are expected to be developed in the region with standardized manner which will make cross-border STP more realistic in the region.
 - Considering the market practice, legal framework, etc., utilizing Local Matching System as well as Central Matching System is essential.
 - As utilizing PSMS is conducive to STP, PSMS usage should be expanded. Automated PSMS could decrease the workload and time of manual processes as well as fails. Therefore, the automated PSMS could reduce operational risk and settlement cycle.

3.1 Bond Market Infrastructure

4. Discussion on CCP

Bond transaction volume (and value) of bond trade and settlement in ASEAN+3 are not very large compared to other markets such as EU and US, yet, for the time being though the volume (and value) has been growing drastically. CCPs for securities trading are far less necessary compared to that for OTC derivatives. Therefore, discussions on CCP may start later after bond trade volume increase significantly.

- In terms of risk reduction, CCP for securities transactions on a BIS Model 1 (DVP) is of limited significance, but may contribute to streamlining operating procedures. It is necessary to consider whether operating a CCP which costs significantly is financially feasible.
- Discussions on CCPs are currently focused on the OTC derivatives clearing following G20 commitment. Discussions on CCP for cash bond trading are not major focus given current volume and value of trade and settlement in ASEAN+3 with exception of a few markets.

3.1 Bond Market Infrastructure

5. Involvement of Central Banks

Since many of CSD and RTGS systems are owned and operated by central banks, it may be advisable for relevant departments of the central bank of each economy to join the ABMF discussion on standardization of messages and cross-border STP in the region.

6. Bond Settlement using Central Bank Money

Central bank money is used to settle government and corporate bond settlement in most of the economies because it is risk free money.

3.2 DVP Flow

1. STP of Flows related to CSD

Entering settlement instruction data to CSD is not automated yet in many economies. CSDs are to be connected with upstream infrastructures such as pre-matching system in order to promote STP in each economy. Also, the transferred data from the upstream system are to be forwarded to sell side and buy side for affirmation.

- CSDs are to be connected with an upstream system such as PSMS, and trading system to automatically input settlement instruction data from STP perspective.
- Quality of data needs to be secured.

3.2 DVP Flow

2. Standardization of DVP Flow

Since DVP flows are different market by market or even CSD by CSD, best practices of flows is to be discussed. A reference model may be proposed.

- Impacts to the core infrastructures such as SSS (securities settlement system) and RTGS (Real Time Gross Settlement) system should be minimized. At the same time, conversions at intermediaries are also to be minimized. A model flow in ASEAN+3 may be discussed.
- Standardizing DVP flows into a unique model is practically unfeasible since infrastructure, legal system and tax system vary among countries. Therefore, a reference model with possible variations may be proposed.

3.3 Message Item

1. Migration to ISO 20022
In ASEAN+3, a few of bond market infrastructures have already migrated (or decided to migrate) to ISO 20022 though many of them still adopt ISO15022 or proprietary messages. Considering the trend of ISO 20022 in major bond market infrastructures including EU and US, the year around 2015-2016 could be a turning point to migrate to ISO 20022.
2. The definitions of message items are different economy by economy. In order to facilitate cross-border STP, standardization of essential messages including settlement instruction and settlement confirmation is desirable.

3.4 Cross-border DVP

1. Enhancing Local Currency Availability and Liquidity
Except Hong Kong, Japan and Singapore, there remain some FX and cash controls for bond trade and settlement in ASEAN+3. Obtaining and maintaining local currency balances is critical to non-resident investors, for the purpose of cross-border bond investments. Some impact from FX and funding requirement limitations influence timing and cost of transaction processing. Since regulations concerning FX and cash controls aim not for bond trade but for other reasons, it may be difficult and inappropriate to simply abolish or change the regulations. Thus, it will be meaningful to discuss some measures such as cross-border collateral to enhance LCY (local currency) availability and liquidity for non-residents in the markets which will lead to risk mitigation.

3.4 Cross-border DVP

2. There are barriers related to FX and cash control from cross-border STP perspective though they may be introduced based on other objectives.

- FX Trade with Underlying Investment
 - FX regulation or Quota may be removed gradually as they cause disruption to STP, a process which promotes efficiency and promptness. In case when regulation is continued, flexible management on regulation frameworks may be conducted in order to implement STP as much as possible.
- Off-shore Trade
 - Off-shore trade may be eased gradually and should be accepted pursuant to market development of individual country.
- Prefunding
 - Prefunding rule may be removed to improve fund efficiency of investors and to enhance fund management.
- Third party FX
 - Third party FX may be eased.
- FX reporting
 - It may be preferred to abolish Reporting, however, first, FX reporting may be simplified or summarized. Reporting frequency may be Weekly, Monthly, etc.
- Overdraft
 - Overdraft may be accepted as it will bring smooth and efficient settlement. For example, usage of Securities such as Collateral or Pledge, etc. may be considered as well as introducing Overdraft.

3.5 Interest Payment Flow

1. Roles of PA, AMA, and TWA

In the process of interest payment from issuers to investors, paying agents (PA) which are designated by issuers, transfer interests to account management agents (AMA). In general, tax withholding agents (TWA) pay tax for bond holders to tax office. Central banks, commercial banks, CSDs and Bureau of Treasury, act as TWA. The basic roles of PA, AMA, TWA need to be clarified to find out the common matters and gaps in order to make cross-border interest payment more efficiently.

- Roles of PA, AMA and TWA or legal system or infrastructure vary in each country. The different roles cannot be defined uniformly.

3.5 Interest Payment Flow

2. Standardization of Interest Payment Flow

Interest payment flows are different market by market or even CSD by CSD. Differences of interest payment flows may be discussed from the viewpoint standardization.

- Information flows related interest payment are different in ASEAN+3. For instance, in some economies, there are the process of sending bond holder lists with tax data and notice of payment details.
- Impacts to the core infrastructures such as SSS (securities settlement system) and RTGS (Real Time Gross Settlement) system should be minimized. At the same time, conversions at intermediaries are also to be minimized. A model flow in ASEAN+3 may be discussed.
- Standardizing flows of interest payment and redemption which incurs changes in legal system, taxation, etc. seems to be difficult.

3.6 Numbering and Coding

1. Common Rules on ISIN

ISIN is recommended to be used as a unique number to identify bond in each economy. Also, common rules may be needed about numbering and notification of ISIN.

- For example after receiving bond information, CSDs need to number ISIN assigned by numbering agency and notifies trustees and CSD participants on the same day.

2. Promotion of BIC

Some market infrastructures still use proprietary code for financial institution identification. BIC will be adopted taking the opportunity of re-construction of their systems. In addition, it is desirable that each economy has common recognition about numbering , notification and maintenance of BIC.

3.6 Numbering and Coding

3. Discussion on Investor Identification

It is important to ensure the uniqueness of identification of investors in cross-border transaction.

- Each economy may have a method that each investor has unique ID and market infrastructures disclose it timely and clearly. If an economy has the method, it must be recognized by other economies. ASEAN+3 economies may try to harmonize and standardize the method.

3.7 Business Practice

1. Market Practice

- Market practices such as cut off time, fail rule and settlement cycle may be discussed for the purpose of common recognition and harmonization. SROs may lead the discussion.
- Necessity of standardization of market practices may firstly be discussed.

2. Account Structure

- Due to differences of a bond holder's right to claims on assets, there are some types of account: own account, customer account, pledge account, trustee account and so on. In addition, taxation has influences on account structures: non-taxable account and taxable account. In consideration of the above, it is desirable to discuss the flexibility of account structures. Entitlement may also be discussed.
- It is difficult to standardize account structure which is stipulated according to laws and regulations or tax system of respective countries. Necessity to establish a segregated account for customer protection may also need to be discussed.

3.7 Business Practice

3. Language and code scheme for bond settlement infrastructures
 - English may or may not be available for all cross-border transaction.
 - Latest materials about Regulations concerning Bond Book-Entry System may be shared in English.
 - Disclosure of information in English may be necessary worth while to discuss.

4. Recommendations for Next Phase

4.1 Standardize message flows

1. Through the discussion of best practices of DVP flows, ABMF SF2 may propose a reference model of DVP flows.
 - Scope of DVP flow to be proposed as the reference model is to be from pre-settlement matching to bond and cash settlement.
 - Principles such as PFMI published by CPSS/IOSCO will be followed.
2. Commonalities and differences of interest payment flows in ASEAN+3 may be discussed from the viewpoint of cross-border STP.
 - Impact of tax withholding agent on cross-border STP will also be discussed.
 - Principles such as PFMI published by CPSS/IOSCO will be taken in to account.

4.2 Standardize message items

ABMF SF2 will discuss the standardization of the basic message items of critical messages such as settlement instruction and settlement confirmation. ISO 20022 is to be recommended. When market infrastructures have a chance to re-construct their systems, it is recommendable that they will migrate from ISO15022 or proprietary to ISO20022.

- Message items of bond trade and settlement infrastructures are to be studied to have a common understanding of each message.

4.3 Recognizing Best Market Practices including numbering and coding

Mutual understanding of market practices including cut off time, fail procedures, settlement cycles, account structures, and ISIN admitting the differences each other in ASEAN+3. Standardization of market practices may be discussed where possible.

- International Standards are to be followed. Also, principles such as PFMI published by CPSS/IOSCO will be taken in to account.
- Bond account structures may be discussed by comparing the differences of CSDs in ASEAN+3 though standardization of account structure may not be feasible in the region.

4.4 Survey of cross-border collateral, repo, and DVP

For the purpose of ensuring local currency liquidity and expecting growth of demands in collateral, cross-border collateral flows in ASEAN+3 could be discussed. Flows about cross-border DVP, cross-border collateral and cross-border repo connecting bond market infrastructures will be discussed together.

4.5 Involvement of Bond Market Infrastructure Players

Central banks operate majority of CSD and RTGS systems and also play a role as paying agent for interest payment and redemption processes in many economies. It is meaningful that relevant departments of central banks participate in ABMF SF2 discussions about cross-border collateral, repo, and DVP.

- CSDs and intermediaries are also essential members and experts of ABMF SF2 as it is now.

5. Roadmap

Roadmap to implement the policy recommendations will be shown as follows:

5.1 Roadmap: Short Term (2013)

1. Preliminary studies about standardization of message flows and message items
2. Preliminary studies about numbering & coding standardization
3. Preliminary studies about business practice standard
4. Preliminary studies about standard flows of cross-border DVP and cross-border collateral
 - Current practices of collateral management and intraday liquidity facility will be surveyed.
5. Participation of relevant central bank departments
6. Drafting plans of institutional framework for discussing standardization

5.2 Roadmap: Medium Term (2014-2015)

ASEAN+3 Standard STP Flows

1. Propose possible reference models of message flows
2. Propose ISO 20022 migration of message items
3. Propose possible standards of numbering & coding
4. Propose possible standards of business practices
5. Propose possible standard flows of cross-border DVP and cross-border collateral
6. Draw roadmap of each member

5.3 Roadmap: Long Term (After 2015)

Implementation of International Standard

1. Reconstruction of financial market infrastructures and migration to ISO20022
 - Government and corporate bond market infrastructures may be reconstructed in accordance with International standard suitable for cross-border STP.
2. Standardization of business practices
 - Cut off time, fail procedures, settlement cycles, account structures, ISIN and other issues may be standardized.
3. Linkage of financial market infrastructures (cross-border DVP, cross-border collateral, and cross-border repo) could be developed subject to appropriate business cases.
 - Bilateral linkages may be practical solution in the near future among several possible models of such linkages.

6. Next steps and work plan

Next steps and work plans

Feb. 2013: 11th ABMF

- Draft contents of the report to ABMI TF3 will be presented
- Future issues based on the roadmap will be decided

Apr. 2013: 12th ABMF

- Finalizing the contents of the report for approval by Deputies and Ministers

May 2013: ASEAN+3 Finance Ministers and Central Governors Meeting

- Propose Policy Recommendations and Roadmap

Dec. 2013: Finalize ABMF SF2 Phase 2 Activities

- Preliminary study of ASEAN+3 Standard Cross-border STP Initiative
- ABMF SF2 Phase 2 Report

Facts to be clarified

1. Clearing and CCP (comment # 1, 16, and 17)

- ① Owner, operator, functions, and processes for government bond CCP/clearing in CN, ID, MY.
- ② Owner, operator, functions, and processes for corporate bond CCP/clearing in CN, ID, MY.

2. WHT (withholding tax) and WTA (withholding tax agent) in Thailand (comment # 8 and 9)

- ① WHT of government bond for residents
- ② WHT of government bond for non-residents
- ③ WHT of corporate bond for residents
- ④ WHT of corporate bond for non-residents
- ⑤ WTA for government bond
- ⑥ WTA for corporate bond

3. Limitation on repatriation in Viet Nam (comment # 37)

Things to be discussed

1. Standard flows of interest payment need to be discussed or not.
2. Issues to be discussed for cross-border collateral, cross-border repo, and cross-border DVP

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Preaching
to Buddha



Thank you so much



This PowerPoint slides are made solely for the discussions of ABMF SF2 phase 2 activities. Views expressed are those of the presenter and do not necessarily reflect those of the Asian Development Bank, NTT DATA CORPORATION or any other organizations.

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February 2013

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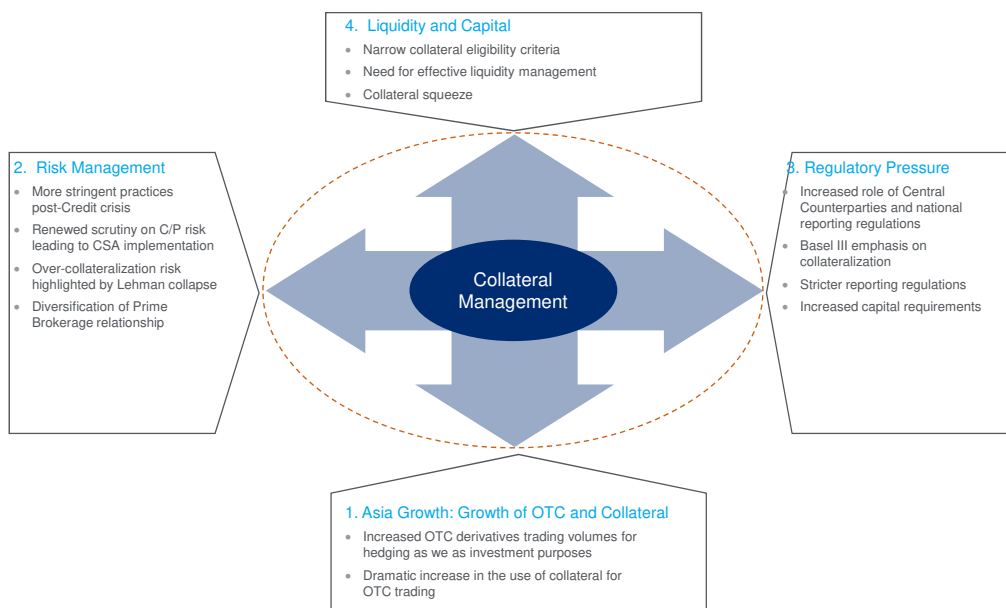
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1. The Collateral Growth



Collateral Management: Key Themes in the Markets



Growth in Collateral: Pre and Post Crises

Post financial crises, a rise in collateral usage was a key factor which supported and sustained the OTC derivatives market.

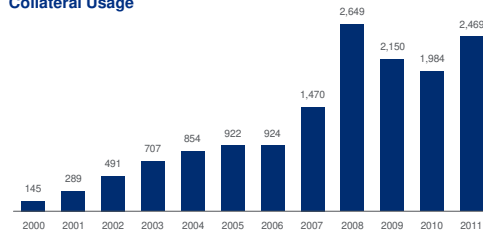
Gross Credit Exposure has Grown by 14% on Average over the Same Period

- **Market Shock:** Default of Major Banks during the financial crisis of 2008 saw an immediate concern over counterparty risk management
- **Regulation:** Dodd-Frank Act/European Market Infrastructure Regulation was introduced shortly after the crises
- **Geographical Shift:** Asia OTC derivatives growth as Europe and US volumes shrink

Key Statistics

	2002	2011
Gross Credit Exposure Across Industry	\$1.3 trillion	\$3 trillion
Value of Reported Collateral	\$491 billion	\$2.5 trillion
Value of Estimated Collateral	\$719 billion	\$3.7 trillion
Number of CSA's	28,140	137,869
Percentage of Traded Proactively Reconciliation	0%	75%

Collateral Usage



Source: ISDA Margin Survey 2012.

OTC Derivatives: A Growing Market

The Face Value of Over-the-counter Derivatives has Grown Rapidly over the Last Decade

(Face Value, US\$ in Trillions)



Source: Bank for International Settlements.

Note: "Other" derivative contracts include foreign exchange, interest rate, equity, commodity, and credit derivatives from non-reporting institutions that do not differentiate them by type.

2 The Collateral Growth



Growth in Collateral: Key Reasons

Drivers of Collateral Growth 2000–2012.

- **Counterparty Risk Exposure Management:** Establishing CSA's with counterparty and trading OTC's on a collateralized basis will minimize counterparty exposure and reduce losses on credit events such as counterparty bankruptcy, failure to pay and/or default
- **Regulatory Capital Efficiency:** The new Basel Capital Accord offers incentives through regulatory capital relief for banks that have mitigated credit risk through the use of CSA's against their trading counterparts. Note, banks also will need to display adequate operational standards in order to qualify for the relief measures
- **Expanded Trading Lines:** Collateralized trading allows banks to increase credit lines with their counterparts and therefore increase trading activity. Additionally, CSA's allow an institution to trade with a wider range of counterparties as internal credit policies frequently do not allow OTC trading unless prior CSA/collateral relationships are established
- **CVA (Credit Value Adjustment):** Previously, valuation of counterparty credit risk has largely been ignored due to relatively smaller size of the derivative exposures and the high credit rating of the counterparties which were generally AAA or AA rated financial institutions
 - As the size of the derivative exposure increased and the credit quality of the counterparties decreased, the valuation of counterparty credit risk is increasingly being priced and charged for. Credit Valuation Adjustment or CVA is the process through which counterparty credit risk is priced into the trade. This means counterparties with CSA's will avoid a CVA charge while counterparties without CSA's will be deemed as risky and face greater cost of trading through wider bid and offer spreads

3 The Collateral Growth



2. The New Collateral Landscape



The Aftermath of Lehman—The Regulatory Wave

Main Regulatory Changes Impacting Collateral Management Functions

- EMIR (Dodd-Frank in the US)
- BIS / IOSCO Global Consultation for Non Centrally Cleared Derivatives
- Basel III



EMIR—Collateral Impact and Status of Consultation

EMIR is the first European regulation that compels all financial institutions to exchange collateral on OTC exposures. Detailed rules are in preparation and are likely to require daily exchange of IM and VM on all OTCs.

Clause	Collateral Impact	Under Consultation	Notes
Bilateral Trades—Article 8 Financial counterparties shall have risk-management procedures that require the timely, accurate and appropriately segregated exchange of collateral ... mark-to-market on a daily basis the value of outstanding contracts ... have formalised processes which are robust, resilient and auditable in order to reconcile portfolios, to manage the associated risk and to identify disputes between parties early and resolve them Exemptions • Some central government entities • Corporates with OTC volumes below a set level	<ul style="list-style-type: none"> • Obligatory exchange of VM on all OTCs • Possible requirement for IM • Optional segregation of IM • Robust processes and dispute management 	<ul style="list-style-type: none"> • Timing of introduction • Conditions for use of IM • Daily margin calls • Cap on MTA • Eligible collateral • Standardised haircuts • Operational processes for collateral exchange • FX forwards may be excluded • ISDA is recommending • Regular reconciliation • Robust dispute management 	<ul style="list-style-type: none"> • Major impact to many investors who trade swaps without collateral, or who use weekly or monthly margin calls • Inclusion of FX forwards will dramatically increase the number of CSAs • Potential requirement to post IM will be a significant change for most buy-side entities.
Cleared Trades—Article 3 Counterparties shall clear all OTC derivative contracts ... if those contracts have been concluded ... between two financial counterparties Exemptions • Corporates with low volumes of OTCs • Pension funds • Some central government entities	<ul style="list-style-type: none"> • Cash collateral required for VM—in the currency of trade • Obligatory IM on all trades • Driving need collateral transformation 	<ul style="list-style-type: none"> • Endorsement of RTS by European Commission 	<ul style="list-style-type: none"> • Major change for investors is the need to appoint clearing brokers for all OTC trades • Additional margin requirements will impact all investors—particularly those with limited cash holdings to meet IM requirements

5 The New Collateral Landscape



BCBS / IOSCO: Global Consultation for Non-centrally Cleared Derivatives

Key Principles	Definition
IM Threshold	<ul style="list-style-type: none"> • Pre-set thresholds • May vary by the institution type based on the institutions regulatory capital requirements
Obligatory Exchange of Initial and Variation Margin	<ul style="list-style-type: none"> • Exchange bilaterally according to mandatory minimum amounts
Baseline Minimum Amounts and Methodologies for IM and VM	<ul style="list-style-type: none"> • Consistent across entities • IM: % of Notional or 99% confidence 10-day VaR. VaR Model to be approved by the Supervisory Authority • VM: Single Legally enforceable netting agreement with sufficient frequency. Minimum transfer amounts to be set sufficiently low • Offsetting across Asset classes not to be applied (IM only)
Transaction with Affiliates	<ul style="list-style-type: none"> • VM must be posted • IM not required unless deemed necessary by the local supervisors
Treatment of Provided Initial Margin	<ul style="list-style-type: none"> • Collateral should not be re-hypothecated or re-used • Margin collected should be immediately available to the collecting party • Collecting Margin must protect the posting party in case the collecting party enters bankruptcy
Interaction of National Regimes in Cross Border Transactions	<ul style="list-style-type: none"> • Local jurisdiction should apply to the parties of the transaction • For bank branches, domicile is the country of headquarter • Laws should discourage regulatory arbitrage, maintain a level-playing field and avoid duplication
Eligible Collateral for IM and VM	<ul style="list-style-type: none"> • Likely to include Cash, Gold, Equities in major Indices, High Quality Govt sec, Corporate secs and covered bonds • Subject to haircuts based on the approved models or from the standard list • Concentration limits may also be defined

6 The New Collateral Landscape



Key Highlights of Basel III

Basel III and CRD IV

- Basel III is a global regulatory framework setting out guidelines for the quality, definition and quantum of bank capital to achieve resilient banks and banking systems
- The Basel Committee have published 'Minimum requirements to ensure loss absorbency at the point of non-viability' and have tightened the criteria in the requirements
- The European Commission published Capital Requirements Directive IV (CRD IV) to implement the Basel III accord into European legislation
- There will be a phased implementation—increasing the current 8% capital requirement to 15+% by 2019
- CRD IV will apply to over 8,000 banks, amounting to 53% of global bank assets and at current levels of business is estimated to lead to an extra €460 billion of new capital having to be raised by 2019

Impact of Basel III

- Incentivizes clearing through CCPs (2% capital charge)
- Incentivizes collateralization as uncollateralized trades will attract higher capital charges
- Contraction of bank balance sheets could curtail trading volumes

Banks will need to raise high quality collateral to satisfy regulatory capital charges

The Collateral Squeeze driven by EMIR / DFA and asset downgrades will be exacerbated by the increased capital requirement that will leave more high quality assets unencumbered and 'locked away'

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The New Collateral Landscape



Regulations Create Additional Operational Challenges

The new regulations demand operational changes for some trade types and will impose stricter practices across all OTCs. Many financial entities are now reviewing their collateral management capacity needs.

Challenge	Implications	Requirements
Industry Trends		
<ul style="list-style-type: none"> • Increased use of OTC derivatives for hedging strategies 	<ul style="list-style-type: none"> • Greater number of ISDA counterparties • More active CSAs 	<ul style="list-style-type: none"> • Automated CSA management and operational scale to support increased margin call volume
Regulatory-driven Changes		
<ul style="list-style-type: none"> • Obligatory collateral exchange on all OTC derivatives 	<ul style="list-style-type: none"> • Inclusion of some/all FX trades in CSAs • More margin calls and disputes 	<ul style="list-style-type: none"> • Efficient dispute management
<ul style="list-style-type: none"> • Addition of new clearing broker relationships 	<ul style="list-style-type: none"> • New types of margin calls • Segregation of IM and VM • Increase in number of margin calls 	<ul style="list-style-type: none"> • Support for Clearing Broker Margin Calls
<ul style="list-style-type: none"> • Increase in overall collateral requirements 	<ul style="list-style-type: none"> • Greater pressure on efficient use of assets • Increased pressure to use securities from funds • Need to minimise interest rate shortfall on cash 	<ul style="list-style-type: none"> • Comprehensive support for use of securities • Reinvestment solutions for cash

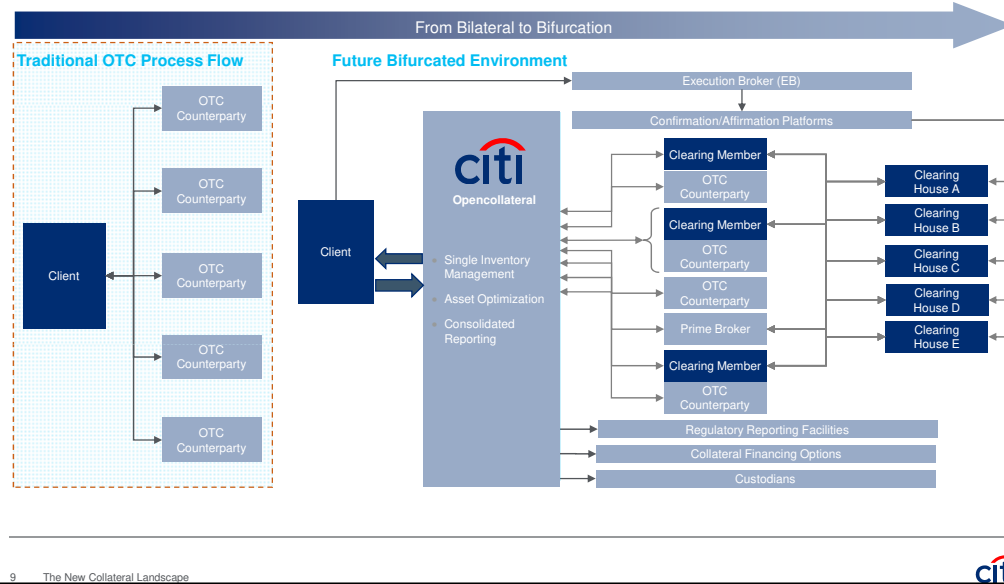
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The New Collateral Landscape



OpenCollateral: Optimal Solution in a Bifurcated Environment

New regulations driving the OTC market will lead to the creation of CCPs which will operate alongside an existing bilateral trading model creating a bifurcated environment. The absence of a regional framework on OTC clearing will lead to multiple CCPs operating independently.



3. The Collateral Squeeze

The New OTC Landscape: How Will Regulations Impact Liquidity

Mandated use of centralized clearing from 2013 (EMIR)

Obligatory Exchange of Initial Margin for non cleared trades (BCBS / IOSCO)

CCP to manage variation margins near real time (EMIR)

Lower capital charges for clearing through CCPs (2% capital charge) (Basel 3)

CRD IV will apply to over 8,000 banks estimated to lead to an extra Euro 460 billion of new capital (CRD IV)

Uncollateralized trades will attract higher capital charges (Basel 3)

This Means

- More collateral required
- Narrower collateral eligibility
- Higher capital charges for uncollateralized trades
- Solvency II and CRD IV also place significant pressures on the balance sheets of banks

Regulations: How Much More Collateral is Needed?

EMIR

Dodd-Frank

BCBS / IOSCO

Basle III

- Increasing CSA's
- Move to CCP's
- Introduction of Initial Margin
- No Rehypothecation
- No Netting
- Higher regulatory capital

Liquidity Squeeze and Stress on Existing Collateral

Estimates of How Much Additional Collateral will be Needed in the New OTC Landscape

- \$1.0 trillion (Finadium 2011 Report)
- \$2.2 trillion (Tabb Group 2010)
- \$15.7 trillion (ISDA 2012 Survey on additional collateral required for IM)

Note: According to the IMF Global Financial Stability Report (April 2012), the total global outstanding amount of marketable potentially safe assets is \$74.4 trillion out of which only a small fraction of it is available for use in the OTC markets.

4. Collateral Optimization



Dealing with a Liquidity Squeeze: What is the Response

1. Manage own liquidity more efficiently: Develop a methodology and platform for effective liquidity management
2. Develop a comprehensive collateral solution: Services offered which can help with liquidity
 - Collateral Transformation
 - Collateral Optimization
 - Reinvestment of Collateral
3. Market response: A widening of collateral eligibility criteria: Are assets below cash and US Treasuries safe to use?



Alternative Response to a Collateral Squeeze: Widening Eligibility

- **What constitutes "good" collateral**
 - Liquidity: Readily available prices and high volumes
 - Easy settlement and in less than 24H
 - Safe: US Treasuries or G7 government bonds
- **Current collateral used in the market: (ISDA Margin Survey)**
 - **Cash** (73% of USD and EUR trades according to ISDA 2005). Cash is easy to hold, easy to transfer, requires little or no valuation
 - (Other) US Treasuries and Government Securities (Treasury Bonds, Agency Bonds, etc.)
- **What else should we consider as standard collateral in the market**
 - ABS / MBS: Popular in the Australian OTC market
 - High Grade Corporate Bonds: Recent move by CME to accept this
 - Bonds/Debt instruments: ECB's move to recently widen eligibility
 - MBS: LCH has agreed to allow the use of certain MBSs in the US

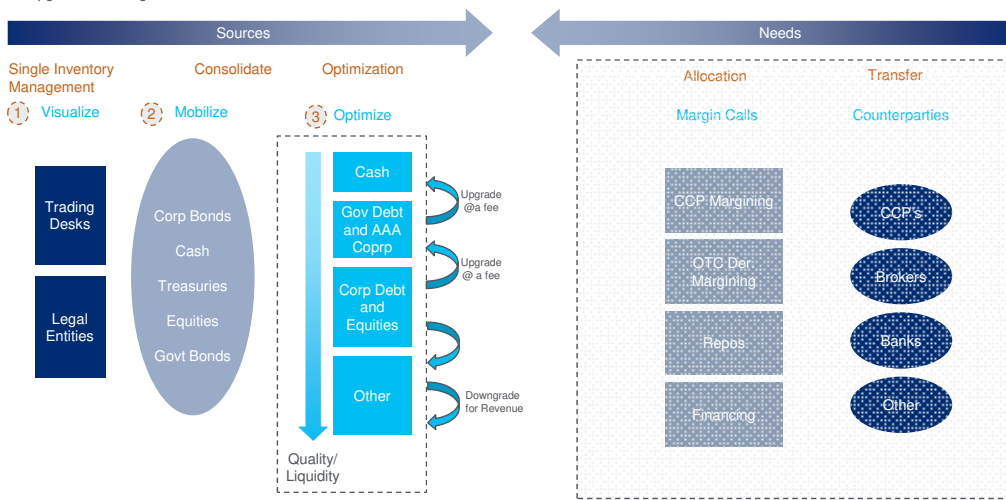
13 Collateral Optimization



Implementing the Framework: How it Works

For Optimal Use of a Firm's Inventory, it is Critical to

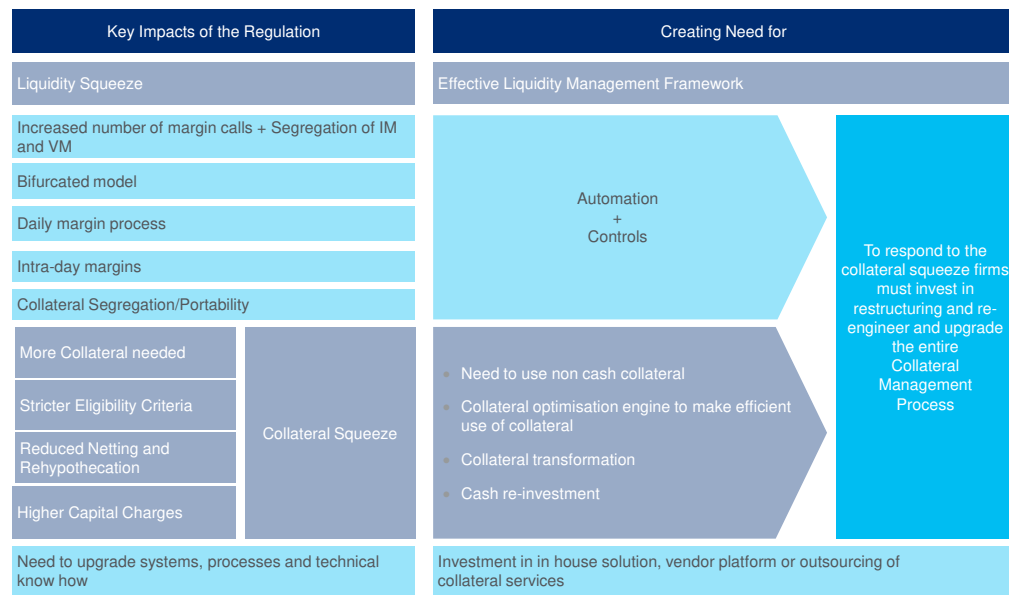
- Break down various silos across business lines and have a single inventory management view of all assets and liabilities
- Pool rank the asset
- Upgrade or downgrade



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Developing a Comprehensive Collateral Solution



15 Collateral Optimization



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Citi works with its clients in greenhouse gas intensive industries to evaluate emerging risks from climate change and, where appropriate, to mitigate those risks.

efficiency, renewable energy and mitigation





ASEAN+3 Bond Market Forum
6 February 2013

The New Normal for the ASEAN Securities Services Industry

Passion to Perform

Mrugank Paranjape, Managing Director, Regional Head of
Trust & Securities Services and Cash Management for Financial
Institutions – Asia Pacific

Extraterritoriality effects of global measures



The new directives and regulations from the U.S., European Union and world bodies like CPSS-IOSCO have implications for the Asia Pacific region. These effects are expected to continue past 2013.*

for example	Initiative/ Directive	High-level Description	Implications
	EMIR	<ul style="list-style-type: none"> ▪ Mandating central clearing for standardised contracts ▪ Imposing risk mitigation standards for non-centrally cleared contracts 	<ul style="list-style-type: none"> ▪ Similar to Dodd Frank ▪ Extraterritoriality from Article 25 (Requires ESMA recognition from CCPs established in a non-EU country to provide clearing services to clearing members or trading venues established in the Union)
	AIFMD/ UCITSV	<ul style="list-style-type: none"> ▪ Directives are designed to ensure greater transparency & greater investor protection ▪ Each Alternative Investment Fund is required to appoint a depositary 	<ul style="list-style-type: none"> ▪ Prime brokerage impact due to depositary liability: depositary may demand indemnification of asset loss risk ▪ Increased responsibility for the depositary ▪ Necessary compliance for European AIFs or Non-EU AIFs to be marketed in Europe
	FATCA	<ul style="list-style-type: none"> ▪ A new disclosure and withholding regime ▪ Identification of the shareholders would have previously been performed by the investor's custodian bank 	<ul style="list-style-type: none"> ▪ Potential high regulatory reporting requirements requiring significant system changes ▪ Extraterritorial impacts

*from a securities servicing / custody perspective

Regional financial market cooperation



Within the region, the securities servicing industry closed 2012 with a number of country level initiatives.

At the regional level, there was also momentum towards greater intra-regional financial market cooperation.

Types of regional financial market cooperation ~2012

for example

1. Infrastructure and market structure initiatives

- ASEAN+3 Bond Market Forum
- ASEAN Exchange Trading Link
- Tri-Party Repo Infrastructure (Hong Kong, Malaysia, Euroclear, J.P. Morgan)

2. Funds intermediation initiatives

- Asia Region Fund Passport (ARFP)
- ASEAN Fund mutual recognition*

Post-trade securities servicing challenges



Closer financial market cooperation and an adaptable market infrastructure can increase the region's attractiveness to investments, financial activities and growth.

However, no progress is without its challenges.

Post-trade securities servicing challenges

for example

1. Different market practices

- ASEAN+3 Bond Market Forum; identification of “fit & gap analysis” – Phase 1, Phase 2 (current)

2. Different regulatory and legal frameworks

Possible post-trade clearing models



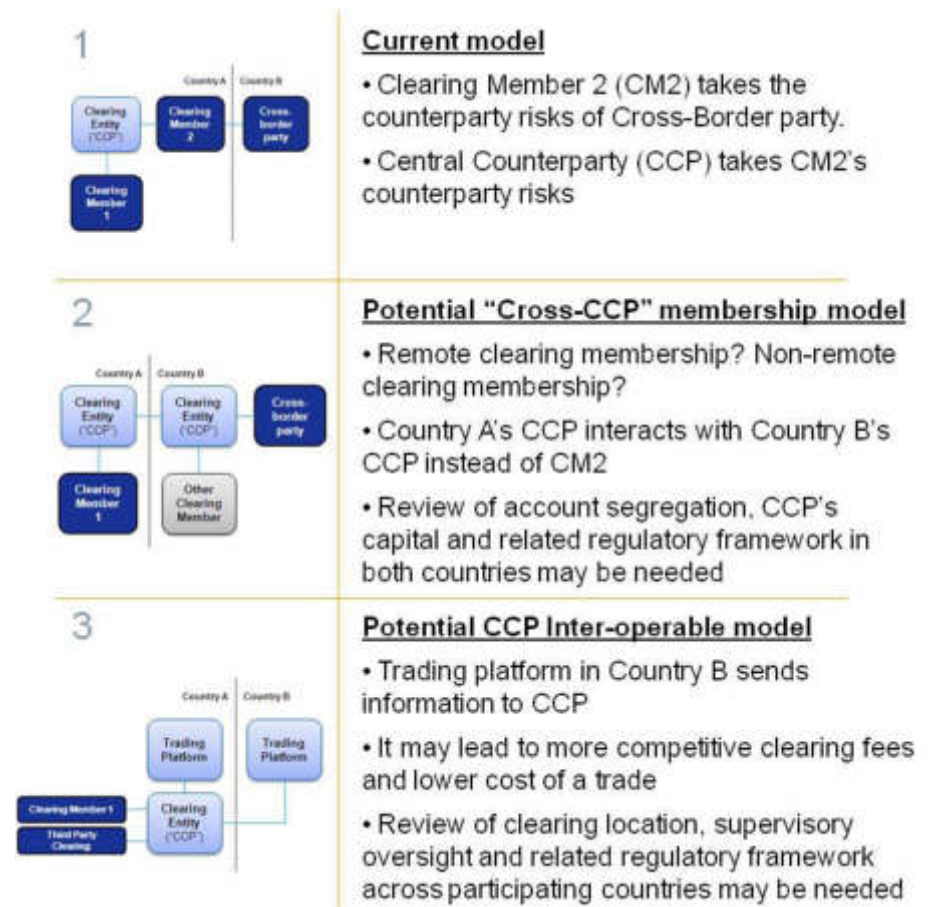
Clearing integration can deliver benefits*

Benefits of integration

- Streamlined collateral utilisation
- Netting opportunities
- Risk reduction

Considerations

- Legal framework
- Foreign exchange
- Systemic risks



Possible post-trade settlement models



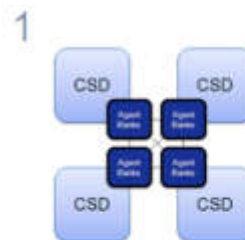
Settlement integration can improve efficiency

Benefits

- Increased efficiency
- Cross-Border investments

Considerations

- Settlement finality regimes
- Cash settlement cycles
- Systemic risks



Current model

- Settlement for cross-border trades are facilitated by custodians with direct settlement memberships to Central Securities Depositories (CSDs)



Potential correspondent-cum-central message hub model

- CSDs open settlement accounts with each other. Increases settlement efficiencies with reduced instructions
- Scope of activities would need to be clear eg/ asset servicing
- Possible systemic risks



Potential "Integrated CSD" model

- Investors and/or custodians need only to open an account in a CSD to access different CSDs
- Settlement efficiency is higher
- Model may require related regulatory reviews

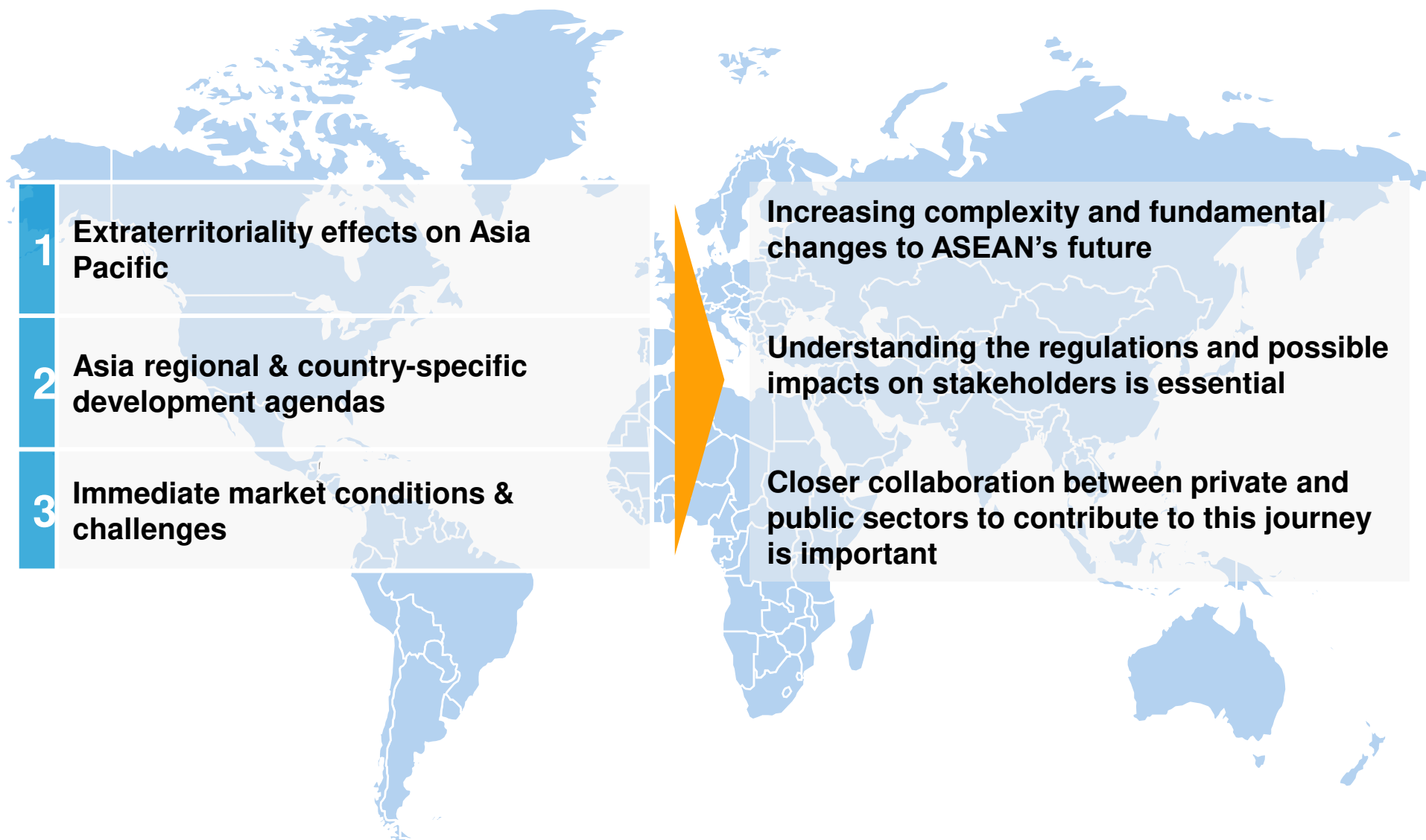
Other considerations



Other considerations could include:

- Anticipating possible effects of the following changes in aggregate:
 - Extraterritoriality effects
 - Closer financial market cooperation
 - Challenges facing post-trade integration and their potential solutions
- Looking at the impacts on each country's issuers, investors, asset managers, broker-dealers

The New Normal



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Thank you

Passion to Perform

6th Feb 2013

11th ABMF meeting in Singapore

Central Counter-Party (CCP)

**Bank of Tokyo-Mitsubishi UFJ
Transaction Services Division
Taketoshi Mori**

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1. [Definition of CCP by Basel Committee](#)
2. Concept and Outline of CCP
3. Overview of CCP in the world
4. Case study on CCP in Japanese Market
5. Feature and Difference between Instruments
6. Impact on CCP by Basel III and BIS/IOSCO FMI Principal
7. Consideration points on CCP

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BIS defines CCP

- A central counterparty (CCP) is a clearing house that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer and thereby ensuring the future performance of open contracts. A CCP becomes counterparty to trades with market participants through novation, an open offer system, or another legally binding arrangement. For the purposes of capital framework, a CCP is a financial institution.
- CCPs provide various safeguards and risk management practices so that the failure of a clearing member will not affect other members. In particular, CCPs mitigate counterparty credit risk because the impact of the failure of a major counterparty is absorbed by the CCPs default protection scheme. CCPs require initial margin to be held against losses of the defaulting clearing member. In the case of default, if the defaulting clearing members initial margin and its contribution to the CCP's default fund are not sufficient to absorb the losses, the CCP default fund, made up of all the clearing members' contributions, is used. This mutualization of losses together with other backstops that may also be in place substantially reduce the contagion risk to other counterparties.
- CCPs can also increase market transparency, as they maintain centralized transaction records, including notional amounts and counterparty identities.

Source: BIS Capitalisation of bank exposures to central counterparties

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Outline of CCP

- Purpose and Role
 - To reduce settlement risk and improve settlement efficiency via netting.
 - To increase market transparency.
- Merits
 - Reduce settlement risk with trade counterparties: settlement counterparty is CCP only.
 - Reduce cash liquidity required for settlement: compared to DVP bilateral settlement.
 - Efficiency of operations: settlement with CCP only rather than multiple counterparties.
- Things to be considered
 - Participants need to contribute margin.
 - Participants need to pay additional fee to CCP.
 - If the method of settlement is DVP (BIS Model 1) and the settlement cycle is relatively short (e.g. T+3), the risk mitigation merits are not that great.
- Netting Scheme (Two types of netting schemes)
 - Payment Netting – No assumption; only netting (bilateral netting like pair-off)
 - Obligation Netting – Assumption or novation and netting
 - CCP is Obligation Netting

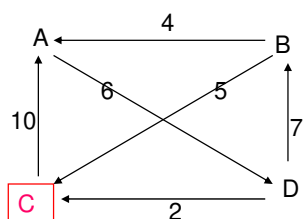
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Role of CCP

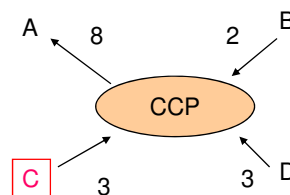
- In OTC Derivative, bilateral settlement, counterpart insolvency brings unstableness in entire market.
- ↓
- CCP can reduce the risk amount by netting
 - CCP can protect insolvency in the market in the case of players' default

Bilateral Settlement



If C goes to be insolvency, A should find new seller 10 amount.

CCP clearing



If C goes to be insolvency, A, B and D can continue to settle, only CCP have to find new buyer

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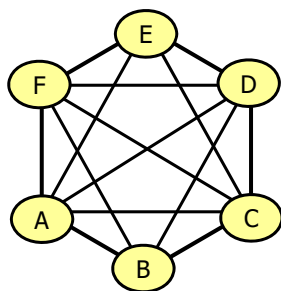
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Concept of CCP

Bilateral vs. CCP clearing

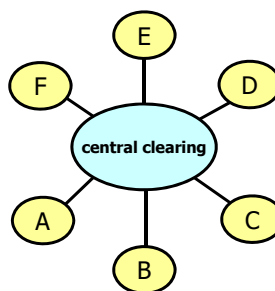
Bilateral clearing

- Web of counterparty exposure
- Complex collateral movements
- Potential domino of one participant default



CCP clearing

- Hub and spoke with central guarantors
- All collateral moves to / from CCP
- CCP capitalized to withstand participant default



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CCPs that do not process Derivatives

Domicile	Clearing Services	Products
Canada	CDS	Equity, Bond,
U S	NSCC	Equity, Corporate Bond ,CP
	FICC	Government Bond, Mortgage
	LCH.Clearnet	Equity, Bond,
Germany Ireland	Eurex Clearing	Equity, Bond
U K	Euro CCP	Equity
Italy	CC&G	Equity, Bond
Swiss, U K	SIS x-clear	Equity
Spain	MEFFCLEAR	Equity Bond
Japan	JDCC	Equity
	JSCC	Equity
	JGBCC	Government Bond
Hong Kong	HKSCC	Equity, Bond
Korea	KRX	Equity, Bond
China	CSDCC	Equity, Bond
	SHCH	Corporate Bond,
Singapore	CDP	Equity, Bond
Australia	ASX	Equity

Major CCPs handling for Bonds

FICC (US Treasury), LCH Clearnet (Gilt, OAT), Eurex (Bunds), JGBCC (JGB)

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CCPs that process Derivatives

Domicile	Clearing service	Products	Status
Brazil	BM&F Bovespa	Equity index and currency options	Active
Canada	CDOC	Equity options	Active
China	Shanghai Clearing House	Not yet specified	Proposed
France	LCH.Clearnet SA	Credit default swaps	Active
Germany	Eurex Clearing	Credit default swaps	Frozen
		Equity derivatives	Proposed
		Interest rate swaps	Proposed
Hong Kong SAR	HKEX	Interest rate derivatives and non-deliverable forwards	Proposed
India	Clearing Corporation of India	FX swaps	Active
Japan	JSCC	Credit default swaps	Active
		Interest rate swaps	Proposed
Poland	KDPW_CCP	Interest rate derivatives	Proposed
Singapore	AsiaClear	Commodity, energy and interest rate derivatives	Active
Sweden	Nasdaq OMX Stockholm AB	Commodities	Active
Sweden	Nasdaq OMX Swap Clear Nordic	Interest rate swaps	Proposed
United Kingdom	CME Clearing Europe	Energy and commodity derivatives	Active
		Interest rate swaps	Proposed
	ICE Clear Europe	Credit default swaps and energy derivatives	Active
	LCH.Clearnet Ltd	Interest rate swaps and commodity derivatives	Active
		Equity derivatives	Proposed
United States	NYSE Liffe	Equity and commodity derivatives	Active
	CME Group	Interest rate swaps, credit default swaps, and commodity and energy derivatives	Active
		FX	Proposed
	ICE Clear Credit	Credit default swaps	Active
	IDCG	Interest rate swaps	Active
	NYPC	Interest rate swaps	Proposed
	Options Clearing Corporation	Equity derivatives	Proposed

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Source from BIS/CPSS 10

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Case Study: CCP for Corporate Bonds in Japan

【General Situation】

- DVP method is BIS I (Gross vs Gross).
- Settlement cycle is T+3
- Outstanding is quite high. Primary Market is large.
- Secondary market is relatively small compared with outstanding amount.
- (Risk) Credit risk: Principle is guaranteed by DVP Market Risk: Bond is exposed mainly Interest.
- (Cost) Paying additional fee to CCP, Contributing Margin, additional IT development both market infrastructure and participants.
- (Effect) Operational Merit and Risk mitigation is limited
- (Consideration) Not enough to earn the profit in order to cover the cost, it is not easy to find the CCP operator in JP market.

【In the case of JGBCC】

- Turnover is large : more than 84 trillion Yen per day
- Operational merits: more than 30 counterparties each day but only 1 settlement counterparty
- Netting merit is significant.
- FMI principle requirement of BIS Committee: Obligation to provide cash liquidity in case of emergency - additional costs.

Size of LCY Bonds Markets source from ADB On- Line

	2012/3quarter	Amount (US\$ Bil)
China PRC	Total	3,654
	Government	2,711
	Corporate	943
Hong Kong	Total	176
	Government	93
	Corporate	83
Indonesia	Total	110
	Government	92
	Corporate	18
Korea	Total	1,370
	Government	543
	Corporate	827
Malaysia	Total	318
	Government	192
	Corporate	126
Philippine	Total	91
	Government	79
	Corporate	12
Singapore	Total	237
	Government	139
	Corporate	98
Thailand	Total	265
	Government	212
	Corporate	54
Viet Nam	Total	21
	Government	20
	Corporate	2
Japan	Total	12,955
	Government	11,814
	Corporate	1,141
Total	Total	19,197
	Government	15,921
	Corporate	3,276

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Fee Structure of CCP in Japan

- JSCC
 - Assumption (Novation) fee per payment amount
 - Maintenance fixed fee
 - Settlement fee
 - Instrument name management fee
 - Others
- JGBCC
 - Assumption (Novation) fee per payment amount
 - DVP settlement fee
 - Account maintenance fee
 - Outstanding balance fee
 - Others
- JDCC (Gross-Net)
 - DVP settlement fee

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Comparison: Derivatives, Bonds, Equities

Items	Derivatives	Bonds	Equities
Principal	Notional	Real	Real
Settlement Term	Long (5-10 years)	T+1,2,3	T+1,2,3
Market-to-Market	Daily Reconciliation	Non	Non
Credit Risk	Yes	Limited	Limited
Market Risk	Yes	Limited	Yes
Market Liquidity	Limited	Large	Large
Collateral/Margin	Yes, CSA	No	No
BIS/FSB position	CCP or Collateral recommend	No	No
CSD or SSS	No	Yes	Yes
Trade Repository	Mandatory	Repo transaction only	Not in the scope

Comparison: OTC and Exchanges

Items	OTC Trade	Exchange Trade
Trade & Settlement Counterparty	Bilateral	Exchange
Settlement	Bilateral settlement	CCP Clearing
Settlement Method	DVP (Gross-Gross) Bilateral Netting Pair-off	DVP (Net-Net) Multilateral Netting
Main Risk Control	Credit Risk	Credit & Operational Risk
Margin	Not all but CSA base is necessary	Margin is necessary
Main trading Instruments	Bonds, Derivatives	Equities, future, option

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Basel III (Risk Weight Asset) Impact on Margin and Default fund of CCP

	Designated CCP			Non Designated CCP			
	Risk Sensitive Method		Simple Method				
	Bankruptcy Remote	Non Bankruptcy Remote		Bankruptcy Remote	Non Bankruptcy Remote		
(1) Trade Exposure (TE)	<div>The smaller of (1) or (2) : (1) $2\% \times \text{TE} + 1,250\% \times \text{Ore Funded Default Fund}$ (2) $20\% \times \text{TE}$</div>						
① Current Exposure (CE)				2%	2%	Risk Weight of Standards Approach	Risk Weight of Standards Approach
② Potential Future Exposure (PFE)							
③ Variable Margin							
④ Initial Margin							
Non Loss Share				Same as Default Fund	Same as Default Fund	0%	
Loss Share						Same as Default Fund	
(2) Exposure of Default Fund							
⑤ Pre Funded	2 ~ 1,250%	2 ~ 1,250%	1,250%				
⑥ Additional Funding	Out of Scope	Out of Scope	Out of Scope				

※ In the case of CCP doesn't design the reasonable preventive measure to avoid additional loss for the survivor when the participant becomes insolvent.

FMI Principal from BCBS/IOSCO and CCP

- Major items discussed in the FMI Principal
 - Governance
 - Framework for the comprehensive management of risks
 - Credit risk
 - Collateral control
 - Margin
 - Liquidity risk
 - Participant-default rules and procedures
 - Segregation and portability
 - General business risk
 - Operational risk
- ↓
- Impact on CCP
 - Enough Capital
 - Reasonable Profit
 - Robust Operation
 - Strict Credit Risk Control framework

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Consideration points when establishing CCP for Bonds

- Need to maintain reasonable profit as a operator of CCP and considerable amount of settlement is necessary.
- In case of OTC derivative, mandatory usage of CCP by FSB or Basel committee is required, which has drawn the attention recently. However, settlement period of OTC derivatives is long (5 to 10 years), and OTC Derivatives use notional value. As it does not receive its collateral from the Counterparty until the completion of settlement. Derivative position is exposed to both market risk and credit risk. Basel Committee recommends non-CCP for OTC Derivatives with collateral or margin.
- On the other hand, in case of BIS Model 1, there are no credit risks and are exposed to market risks from the trade date to the settlement date. The impact of CCP will differ between Bonds and OTC derivative settlement. (Max T+3)
- In terms of Bonds Trading, there is no regulatory pressure to promote usage of CCP globally.
- For example, in Japan, only JGB with huge balance and volume of settlement use CCP, however, the volume of Corporate Bond is limited, therefore it does not use CCP.
- Introducing of CCP should be carefully considered in each market by comparing its impact and weak points beforehand.

Questions & Answers

Thank you!

Taketoshi Mori

(Head of Securities Market Infrastructure)

Transaction Services Division

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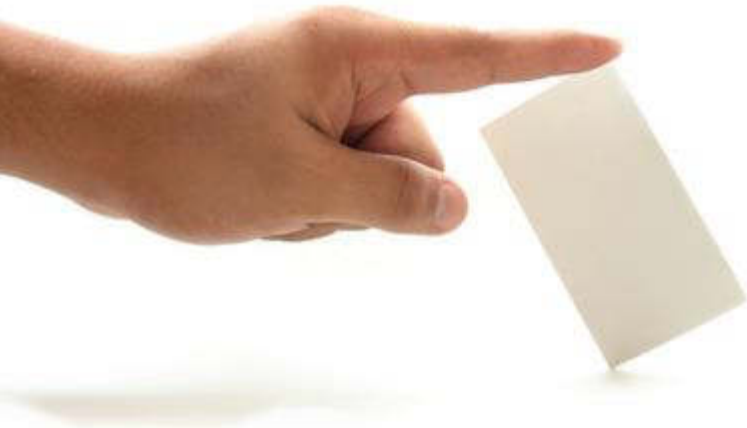
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❖ Adverse changes to the operational and/or financial condition of a financial service provider of securities services could directly result in a potential loss to clients.

❖ Custody fees are typically calculated by applying a certain fee rate to the asset balance under custody and a certain amount to the number of transactions. Other fees apply, in addition, to particular types of transactions. Please contact us for further details.

❖ BTMU Profile (This notification complies with the Japanese "Financial Instruments and Exchange Law" as of September 30th, 2007): Type II Financial Instruments Firms Association

Corporate Name:	The Bank of Tokyo-Mitsubishi UFJ, Ltd.
Registration Number:	Director General of the Kanto Local Finance Bureau Registration Number 5
Head Office:	7-1, Marunouchi 2-Chome, Chiyoda-ku, Tokyo 100-8388 Japan
Main business areas:	Banking business, Registered financial institution business
Member of	Japan Securities dealers Association, The Financial Futures Association of Japan
Designated institution for ADR	Japanese Bankers Association: +81-(0)570-017109 +81-(0)3-5252-3772 Financial Instruments Mediation Assistance Center: +81-(0)120-64-5005



Foreign Issuers in LCY Bond Markets: Malaysia and Thailand

***11th Meeting of the
ASEAN+3 Bond Market Forum***

***5-6 February 2013
Singapore***



MALAYSIA – BOND PRICING AGENCY MALAYSIA (BPAM)

- 1** **Guideline for Foreign Issuers and Investors**
- 2** **Foreign Issuer Market Statistics in Malaysia**
- 3** **Case Study - Price Discovery for Foreign Issuers**

THAILAND – THE THAI BOND MARKET ASSOCIATION (THAI BMA)

- 1** **Guideline for Foreign Issuers and Investors**
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Authorities for MYR Bond/Sukuk Markets

Since 2004 a regulatory framework has existed for foreign entities to raise funds in the Ringgit debt capital market.

Asian Development Bank (MYR 400 million) was the first bond issuer in Nov 2004

International Finance Corporation (MYR 500 million) was first sukuk issuer in Dec 2004

To date, a total of 23 foreign entities have raised MYR 29.2 (USD 9.7 billion)

Bank Negara Malaysia

- Manage public debt and MGS issuance
- Own and operate FAST and RENTAS
- Regulate involvement of financial institutions in bond market

Securities Commission

- Sole approving authority for corporate bond issuance
- Regulates primary and secondary bond market activities
- Supervises market intermediaries such as rating agencies , bond pricing agency and trustees

Bursa Malaysia

- Frontline regulator of the Malaysian capital market
- Maintain a fair and orderly market in the securities and derivatives that are traded through its facilities, Electronic Trading Platform (ETP)

Ministry of Finance

- Co-ordinate developmental efforts of Government agencies (under the National Bond Market Committee)
- Grant tax incentives – stamp duty exemption for primary and secondary market transactions, withholding tax for non-residents, real property gains tax for asset-backed securities and etc

Issuers

Incentives for Special Purpose Vehicles

- Tax exemption on income received by Special Purpose Vehicles (SPV) in issuing sukuk
- The company that established the SPV is also given a deduction on the cost of issuance of the sukuk incurred by the SPV

Tax Deduction

- Tax deduction on expenses incurred in the issuance of Islamic securities approved by the Securities Commission until year of assessment 2015.

Incentives for Instrument

- Stamp Duty exemption on instrument used in issue sukuk in any currency

Investors

Institutional

- Tax exemption and withholding tax exemption on interest or profits received by non-resident investors from investment in Islamic securities issued in any currency, other than convertible loan stock, approved by the Securities Commission.
- Stamp duty exemption on investing and trading of sukuk.

Individual

Tax exemption on interest or profits paid to an individual from investment in:

- Securities issued or guaranteed by the Government.
- Debentures, other than convertible loan stocks, approved by the Securities Commission.
- Stamp duty exemption on investing and trading of sukuk.

Rating

"AAA" on local currency rating scale or a minimum 'BBB' on foreign currency rating scale.

- Sovereigns, quasi-sovereigns, Multilateral Development Banks (MDBs) and Multilateral Financial Institutions (MFIs) and Multinational Corporations rated

Liberal Foreign Exchange Administration (FEA) Rules

- Proceeds from the issuance of bonds/sukuk are allowed to be used onshore or offshore.
- Ringgit-denominated bond/sukuk proceeds to be used offshore have to be converted into foreign currency with the licensed onshore banks.

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MYR Bond Outstanding as at 31st Dec 2012

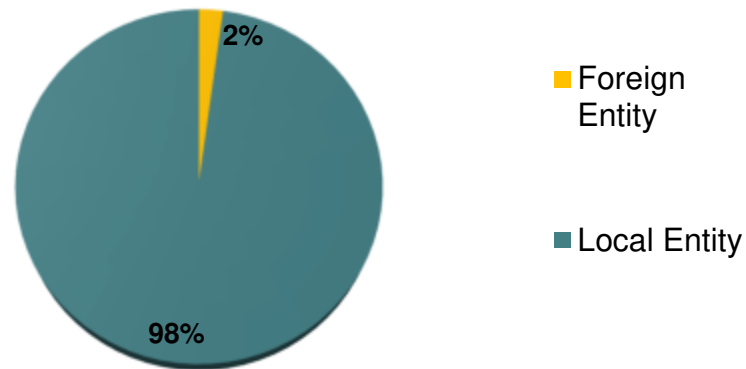
Total MYR Bond Outstanding

MYR 1.1 trillion

Foreign Entity MYR Bond

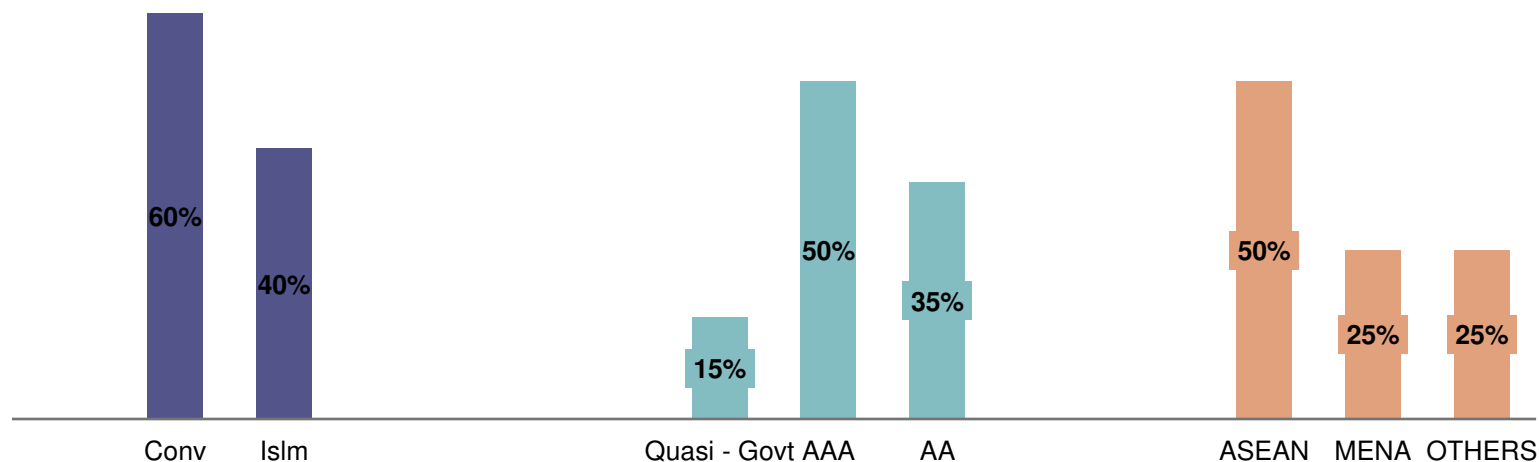
Outstanding Amount

MYR 21.5 bio = USD 7.1 bio (2.16%)



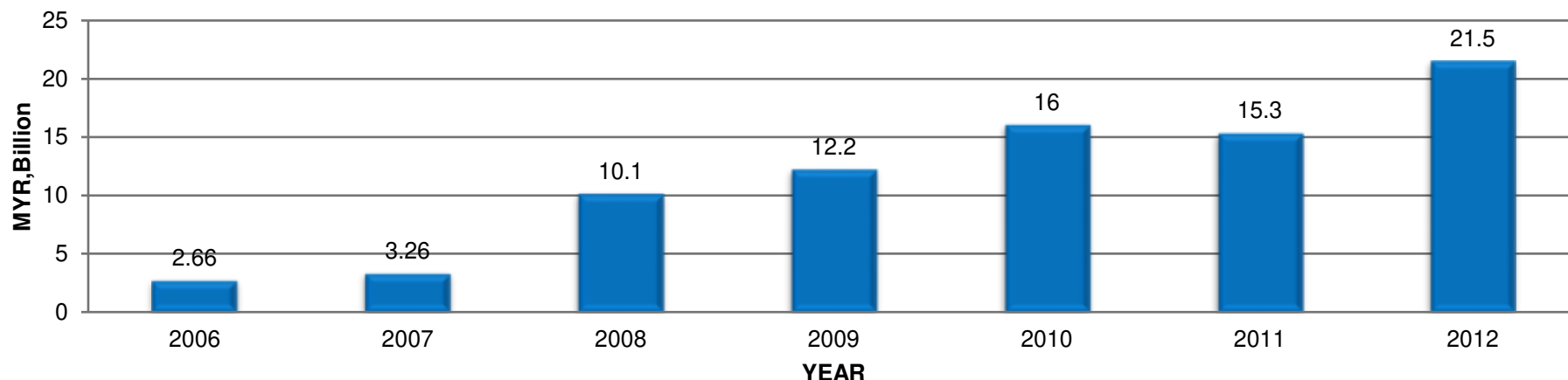
Summary of Foreign Entity Issuance Characteristics

Data as at 31 Dec 2012

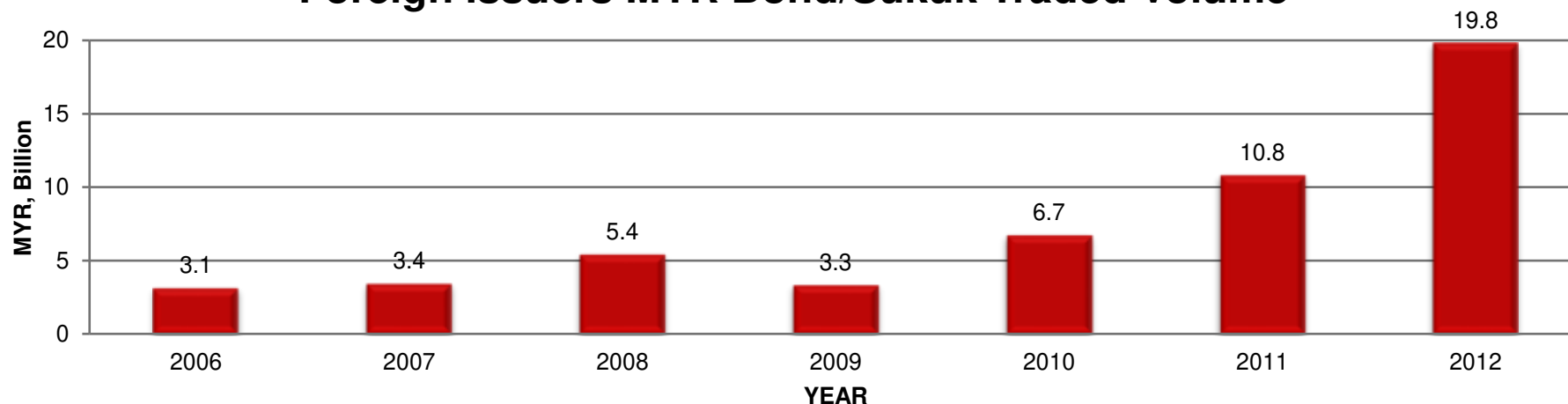


* Data Source from BPAM

Foreign Issuers MYR Bond/Sukuk Outstanding Amount



Foreign Issuers MYR Bond/Sukuk Traded Volume



* Data Source from BPAM

List of Foreign Issuers

No.	Issuer	Issue Amount (MYR, Million) Year 2006-2012	Principle	First Issue Date	Rating	Region
1	Abu Dhabi National Energy Company PJSC	650	Islamic	Mar 2012	AA1	MENA
2	ADCB Finance (Cayman) Limited	1460	Conventional	Sept 2010	AAA	Others
3	Asian Development Bank	1400	Conventional	Nov 2004	Quasi-Government	ASEAM
4	Bahrain Mumtalakat Holding Company B.S.C	300	Islamic	Oct 2012	AA2	MENA
5	First Resources Limited	1000	Islamic	July 2012	AA2	ASEAN
6	Golden Assets International Finance Limited	1500	Islamic	Nov 2012	AA2	Others
7	Gulf Investment Corporation G.S.C	2675	Conventional & Islamic	Feb 2008	AAA	MENA
8	Hana Bank	1000	Conventional	June 2009	AAA	ASEAN
9	Hyundai Capital Services Inc	3541	Conventional	May 2008	AAA	ASEAN
10	Industrial Bank of Korea	2220	Conventional	Apr 2008	AAA	ASEAN
11	International Bank of Reconstruction & Development	760	Islamic	May 2005	Quasi-Government	Others
12	International Finance Corporation	500	Islamic	Dec 2004	Quasi-Government	Others
13	JSC Development Bank of Kazakhstan	240	Islamic	Aug 2012	AA2	Others
14	KfW Bankengruppe of Germany	1100	Conventional	May 2006	Quasi-Government	Others
15	Korea Development Bankl	500	Conventional	Feb 2012	AAA	ASEAN
16	National Bank of Abu Dhabi PJSC	1500	Islamic	June 2010	AAA	MENA
17	Noble Group Limited	600	Islamic	Oct 2012	AA2	ASEAN
18	NongHyup Bank	860	Conventional	July 2008	AAA	ASEAN
19	Oversea-Chinese Banking Corporation Limited	1600	Conventional	Mar 2008	AAA	ASEAN
20	State Bank of India	500	Conventional	Mar 2008	AA	Others
21	The Export-Import Bank of Korea	3475	Conventional	Mar 2008	AAA	ASEAN
22	Tadamun Services Behad (IDB)	400	Islamic	Aug 2008	Quasi-Government	MENA
23	Woori Bank	1450	Conventional	June 2008	AAA	ASEAN

MALAYSIA – BOND PRICING AGENCY MALAYSIA (BPAM)

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- 2** **Foreign Issuer Market Statistics in Malaysia**
- 3** **Case Study - Price Discovery for Foreign Issuers**

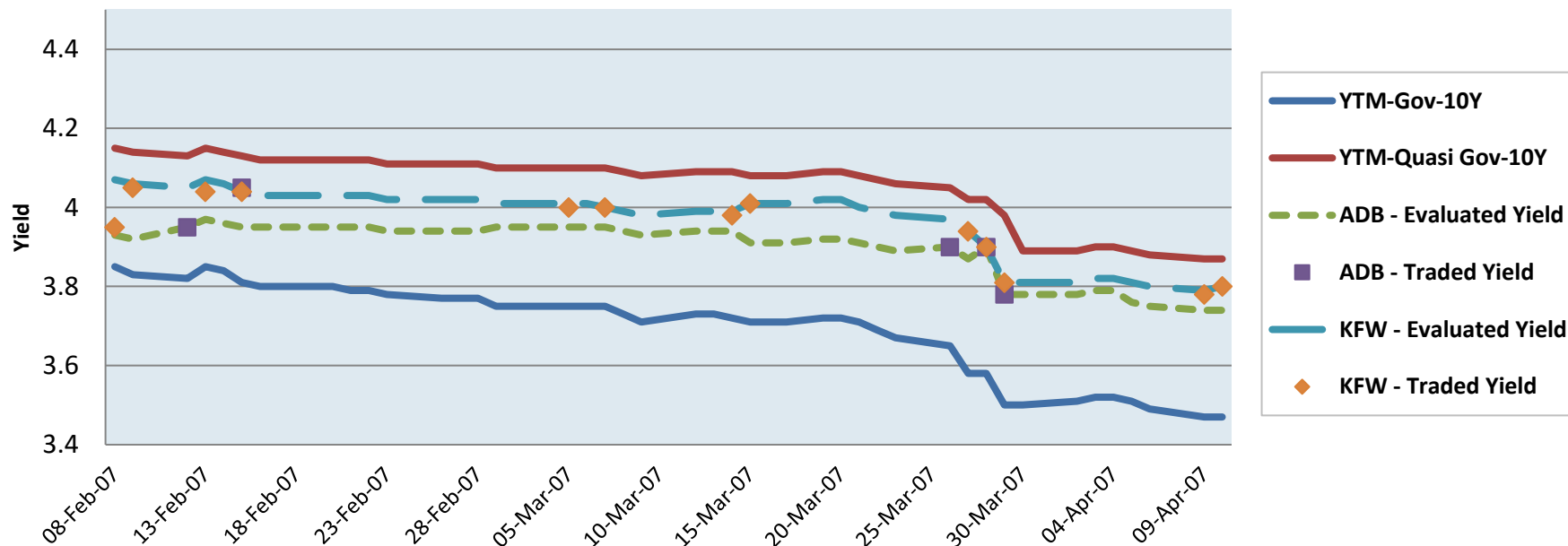
BPAM conducted a comparative study as follows:

Spread analysis of Foreign LCY vs Local LCY issuers at primary and secondary level against the MYR Government and Credit Yield Curves

- Issuance Period : between 2007 and 2011
- Duration : 3 months after issuance
- All issuers are tagged to their generic credit class
- Data Source: BPAM

Case Study 1 : Comparative Study By Region (ASEAN vs Others)

ADB vs KfW

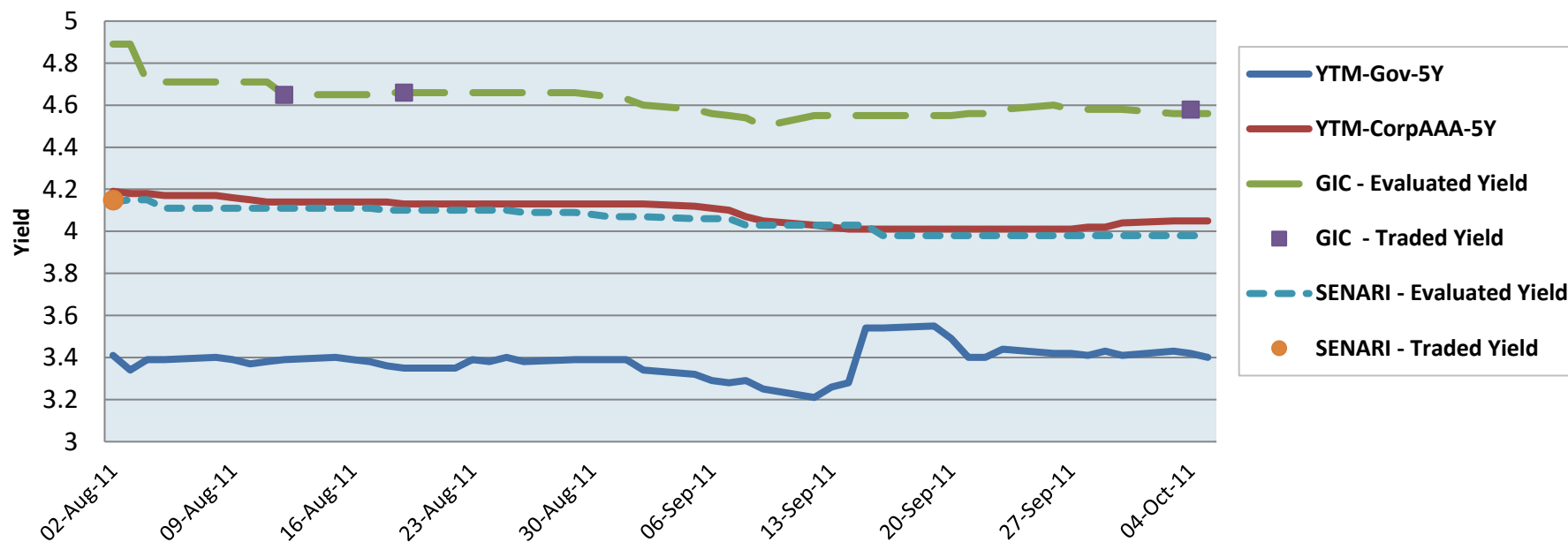


Issuer Name	Issue Date	Issue Tenure	Rating Class	Issue Amount (MYR,million)	Spread over Gov @ Issuance	Spread over Gov @ Today
Asian Development Bank	8 Feb 2007	10Y	Quasi-Government	MYR 500 mio	+ 8 bps	+ 28 bp
KfW Bankengruppe of Germany	24 Jan 2007	10Y	Quasi-Government	MYR 600 mio	+ 22 bps	+ 25 bps

* Data Source from BPAM

Case Study 2 : Comparative Study By Rating

GIC vs Senari

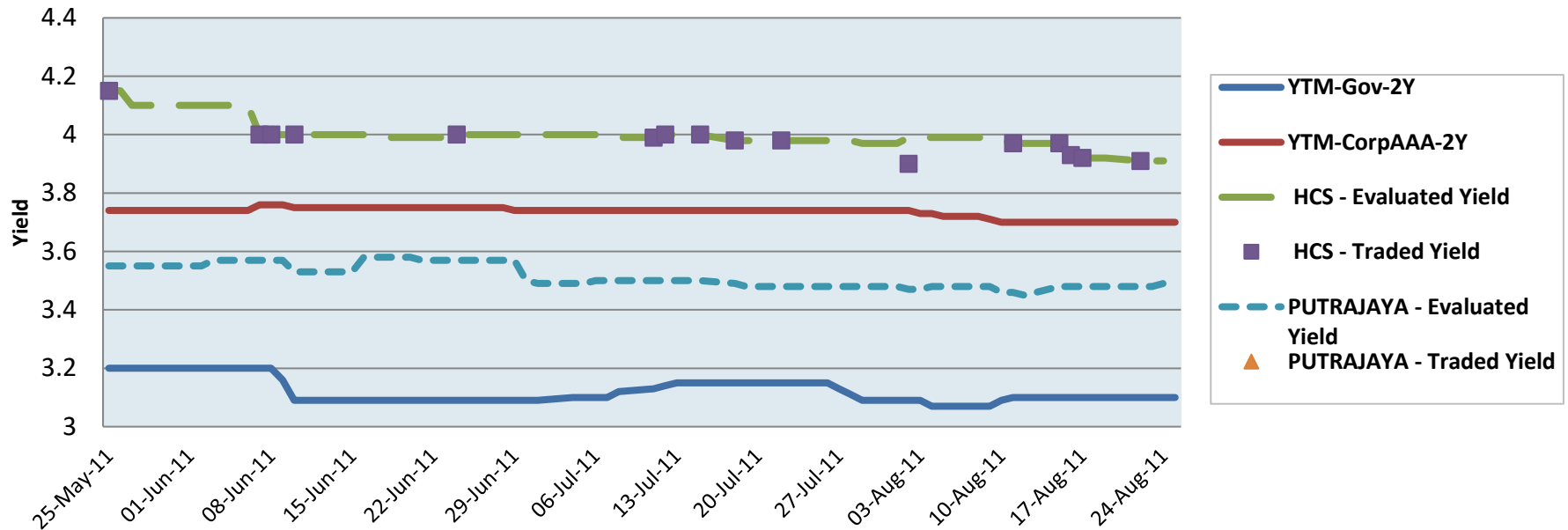


Issuer Name	Issue Date	Issue Tenure	Rating Class	Issue Amount (MYR,million)	Spread over Gov @ Issuance	Spread over Gov @ Today
Gulf Investment Corporation	3 Mar 2011	5Y	AAA	MYR 750 mio	+148 bps	+ 87 bps
Senari Synergy Sdn Bhd	2 Mar 2011	5Y	AAA	MYR 35 mio	+ 73 bps	+ 64 bps

* Data Source from BPAM

Case Study 3 : Comparative Study By Tenure

Hyundai vs Putrajaya



Issuer Name	Issue Date	Issue Tenure	Rating Class	Issue Amount (MYR,million)	Spread over Gov @ Issuance	Spread over Gov @ 31 Dec 2012
Hyundai Capital Services	25 May 2011	2Y	AAA	MYR 650 mio	+ 95 bps	+ 72 bps
Putrajaya Holdings Sdn Bhd	26 May 2011	2Y	AAA	MYR 85 mio	+ 35 bps	+ 38 bps

* Data Source from BPAM

Summary of Foreign Entity Issuance in 2012 and Spreads

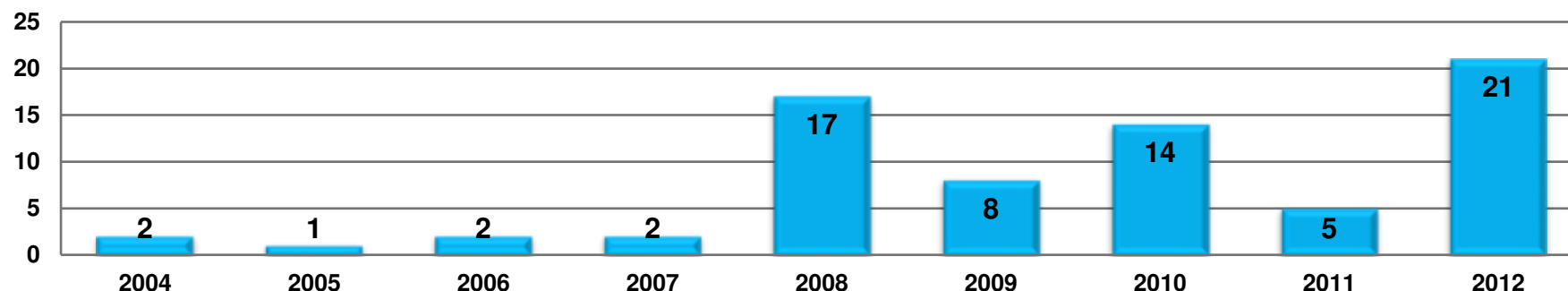
Issuer	Issue Amount (MYR, million)	Issue Date	Issue Tenure	Principle	Rating	Region	Spread Over Government	
							When Issued	31-Dec-12
Abu Dhabi National Energy Company PJSC	650,000,000	5-Mar-2012	10Y	Islamic	AA1	MENA	+ 119 bps	+ 89 bps
ADCB Finance (Cayman) Limited	310,000,000	3-May-2012	5Y	Conventional	AAA	OTHERS	+ 104 bps	+ 86 bps
Bahrain Mumtalakat Holding Company B.S.C	300,000,000	4-Oct-2012	5Y	Islamic	AA2	MENA	+ 222 bps	+ 213 bps
First Resources Limited	600,000,000	31-Jul-2012	5Y	Islamic	AA2	ASEAN	+ 126 bps	+ 95 bps
First Resources Limited	400,000,000	10-Dec-2012	5Y	Islamic	AA2	ASEAN	+ 103 bps	+ 99 bps
Golden Assets International Finance Limited	1,500,000,000	19-Nov-2012	5Y	Islamic	AA2 (S)	OTHERS	+ 117 bps	+ 105 bps
Gulf Investment Corporation G.S.C	170,000,000	18-Jun-2012	10Y	Islamic	AAA	MENA	+ 160 bps	+ 118 bps
Gulf Investment Corporation G.S.C	155,000,000	18-Jun-2012	15Y	Islamic	AAA	MENA	+ 143 bps	+ 117 bps
Hyundai Capital Services Inc	370,000,000	25-May-2012	3Y	Conventional	AAA	ASEAN	+ 86 bps	+ 97 bps
Hyundai Capital Services Inc	320,000,000	23-Feb-2012	5Y	Conventional	AAA	ASEAN	+ 95 bps	+ 90 bps
Industrial Bank of Korea	310,000,000	14-Feb-2012	3Y	Conventional	AAA	ASEAN	+ 97 bps	+ 67 bps
Industrial Bank of Korea	310,000,000	14-Feb-2012	5Y	Conventional	AAA	ASEAN	+ 95 bps	+ 65 bps
JSC Development Bank of Kazakhstan	240,000,000	3-Aug-2012	5Y	Islamic	AA2	OTHERS	+ 235 bps	+ 210 bps
Korea Development Bank	300,000,000	24-Feb-2012	4Y	Conventional	AAA	ASEAN	+ 80 bps	+ 63 bps
Korea Development Bank	200,000,000	24-Feb-2012	5Y	Conventional	AAA	ASEAN	+ 85 bps	+ 70 bps
National Bank of Abu Dhabi PJSC	500,000,000	10-Dec-2012	15Y	Islamic	AAA	MENA	+ 100 bps	+ 92 bps
Noble Group Limited	300,000,000	4-Dec-2012	2Y	Islamic	AA2	ASEAN	+ 116 bps	+ 100 bps
Noble Group Limited	300,000,000	16-Oct-2012	3Y	Islamic	AA2	ASEAN	+ 138 bps	+ 106 bps
The Export-Import Bank of Korea	500,000,000	2-Feb-2012	5Y	Conventional	AAA	ASEAN	+ 86 bps	+ 62 bps
Woori Bank	135,000,000	16-Feb-2012	4Y	Conventional	AAA	ASEAN	+ 99 bps	+ 70 bps
Woori Bank	150,000,000	15-Feb-2012	4Y	Conventional	AAA	ASEAN	+ 99 bps	+ 70 bps

* Data Source from BPAM

Based on available market statistics, foreign entities are generally issuing at premium versus comparable local names but yet are increasingly coming into the MYR market

(25 issues in 2012 alone against 51 issues from 2004-2011)

No. of Issues from 2004 - 2012



Investor perspective:

**Higher yields demanded due to perceived foreign credit and operational risk.
Spreads expected to tighten as market becomes more familiar with foreign names**

Issuer perspective:

Attracted by effective regulatory framework, ample liquidity in MYR market and easy access to FX hedging mechanisms. Total cost of issuance including hedging is still favourable.

** Data Source from BPAM*

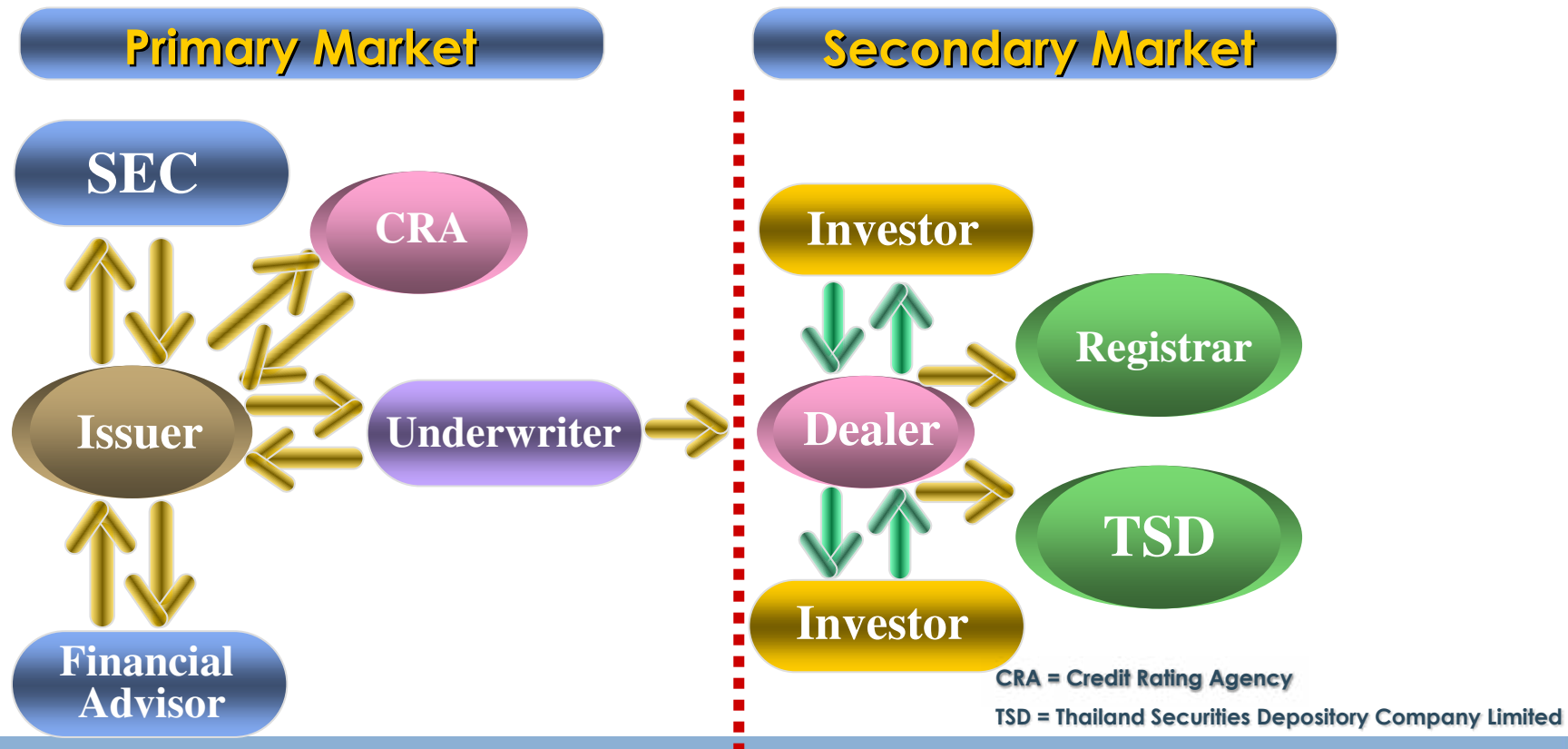
THAILAND – THE THAI BOND MARKET ASSOCIATION (THAI BMA)

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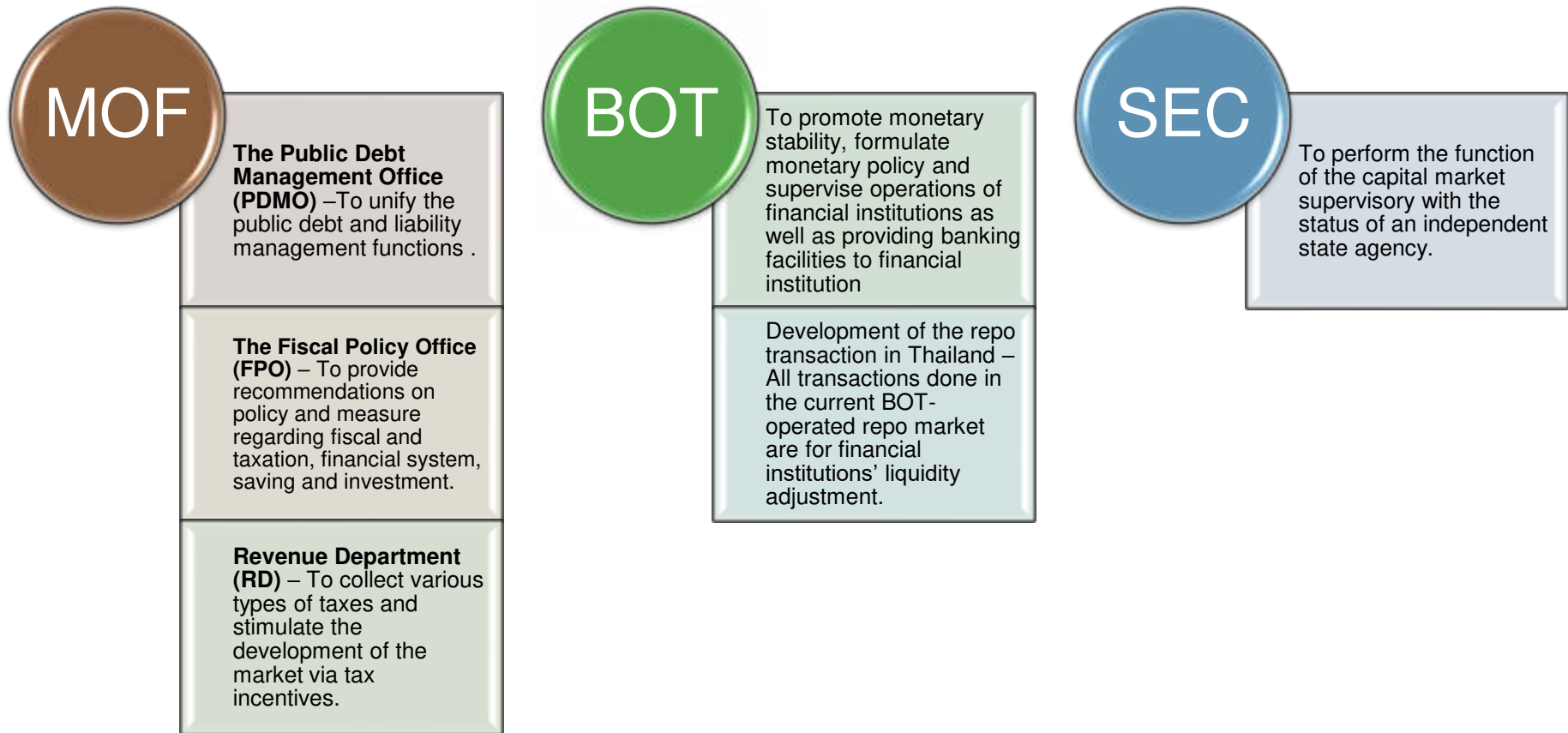
Overview of Thai Bond Markets

Historical Background - Ministry of Finance (MOF) has allowed certain types of foreign institutions to issue Baht-denominated bonds in Thailand since 2005. Eligible applicants for Baht-denominated bond include international financial institutions, foreign governments, financial institutions of foreign governments and multinational foreign entities.

Market Structure - Thailand's bond market can be separated into primary market and secondary market. Bonds issued by government/state agencies/state owned enterprises do not require SEC approval but corporate issuers have to comply with SEC regulation. Trade transactions in secondary market have to be reported to ThaiBMA.



There are 3 major government authorities that have important roles in formulating policies and regulating Thailand's bond markets: Ministry of Finance (MOF) which is composed of 3 agencies that are closely related to bond market, Bank of Thailand (BOT), and Securities Exchange Commission Thailand (SEC).





Thailand Country Rating

- S&P : BBB+ (STABLE)
- Moody's : Baa1 (STABLE)
- Fitch : BBB (STABLE)

Eligible Issuers

- International financial institutions incorporated under treaties
- Foreign governments, or foreign government institutions incorporated under specific laws
- Juristic persons incorporated under foreign laws

Issuance

- Submitting the application for issuing Baht-denominated bond to the MOF.
- The consideration for approval of the issuance is arranged 3 times a year which are in March, July, and November.
- Issuers must complete the offering of bonds within six months after permission granted by the MOF.

Related Laws and Regulations

- Public Debt Management Act B.E. 2548 (2005)
- Securities and Exchange Act B.E. 2535 (1992)
- Bank of Thailand Act, B.E. 2485 (1942)
- Derivative Act B.E. 2546 (2003)
- Royal Enactment on Special Purpose Juristic Persons for Securitizations, B.E. 2540 (1977)

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Foreign Issuers in Thai Bond Market (2006 – 2012)

List of Foreign Issuers^{1/}

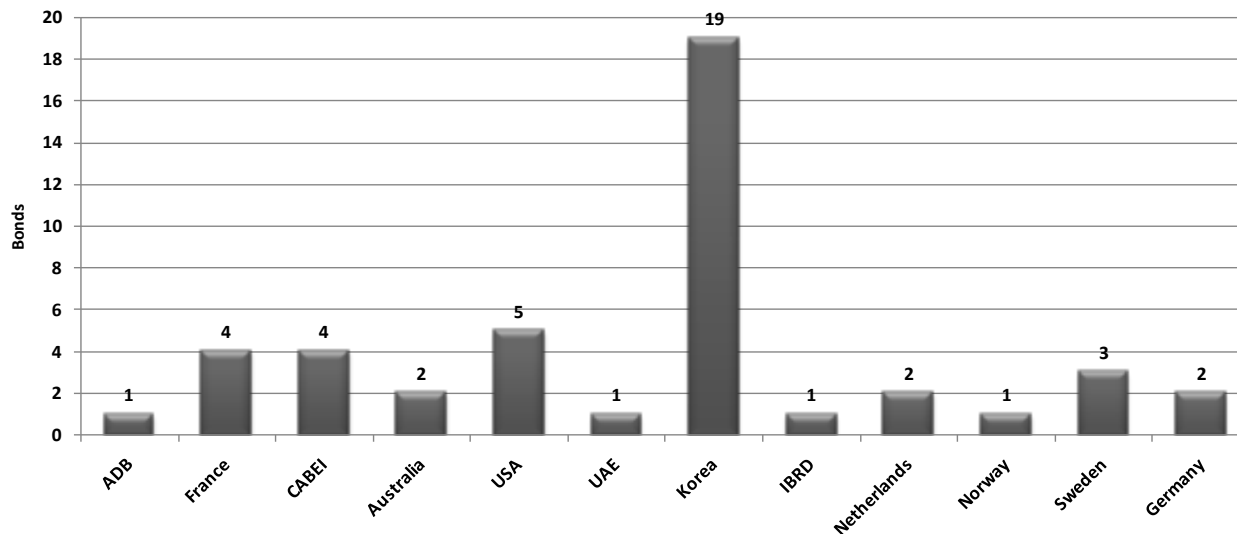
Country	Total Amount (THB mln)	Number of Bonds	Issuer
France	8,600.00	4	Agence Francaise de Developpement Credit Agricole Corporate and Investment Bank
Australia	4,000.00	2	Commonwealth Bank of Australia
USA	12,453.00	5	Citigroup Inc. Cargill, Incorporated
UAE	2,000.00	1	Emirate Bank International PJSC
Korea	62,000.00	19	The Export-Import Bank of Korea Industrial Bank of Korea The Korea Development Bank Hana Bank Woori Bank
Netherlands	10,000.00	2	ING Bank N.V.
Norway	1,570.00	1	Kommunalbanken AS
Sweden	4,965.00	3	AB SVENSK EXPORTKREDIT (SWEDISH EXPORT CREDIT CORPORATION)
Germany	7,600.00	2	Deutsche Bank Aktiengesellschaft Kreditanstalt fur Wiederaufbau
Non-country	Total Amount (THB mln)	Number of Bonds	
ADB (Asian Development Bank)	1,000.00	1	
CABEI (Central American Bank for Economic Integration)	5,474.00	4	
IBRD (International Bank for Reconstruction and Development)	1,250.00	1	

^{1/} Since 2006 - 2012

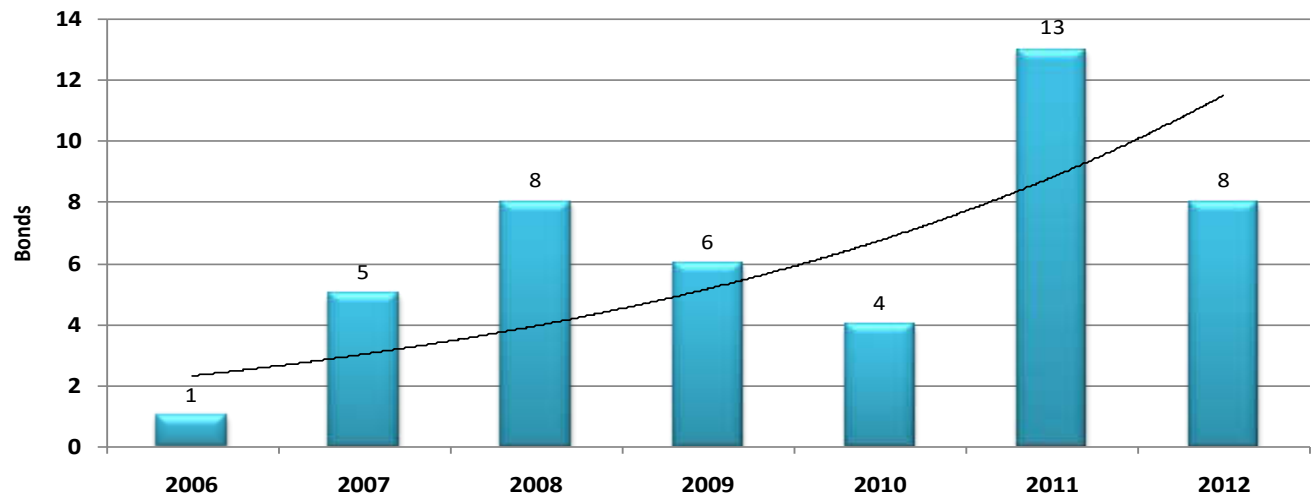
* Data Source from ThaiBMA

Foreign Bond Issuer Statistics (2006 – 2012)

Number of Foreign Bond Issues by Country

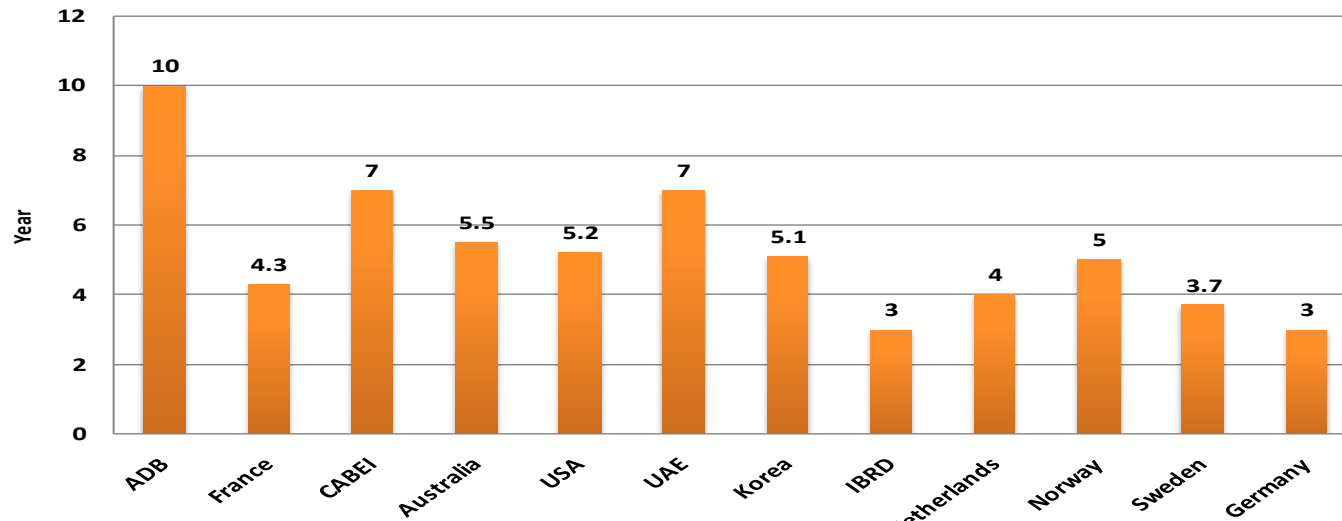


Number of Foreign Bond Issues by Year

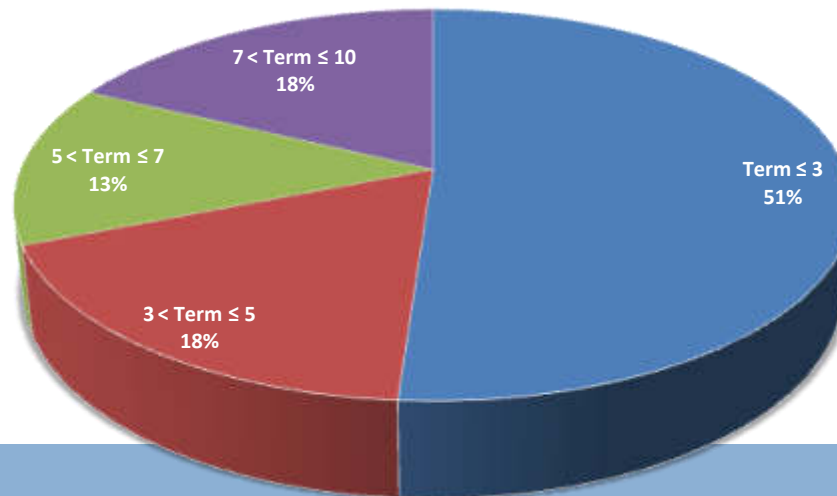


* Data Source from ThaiBMA; Since 2006-2012

Average Issue Term of Foreign Bonds

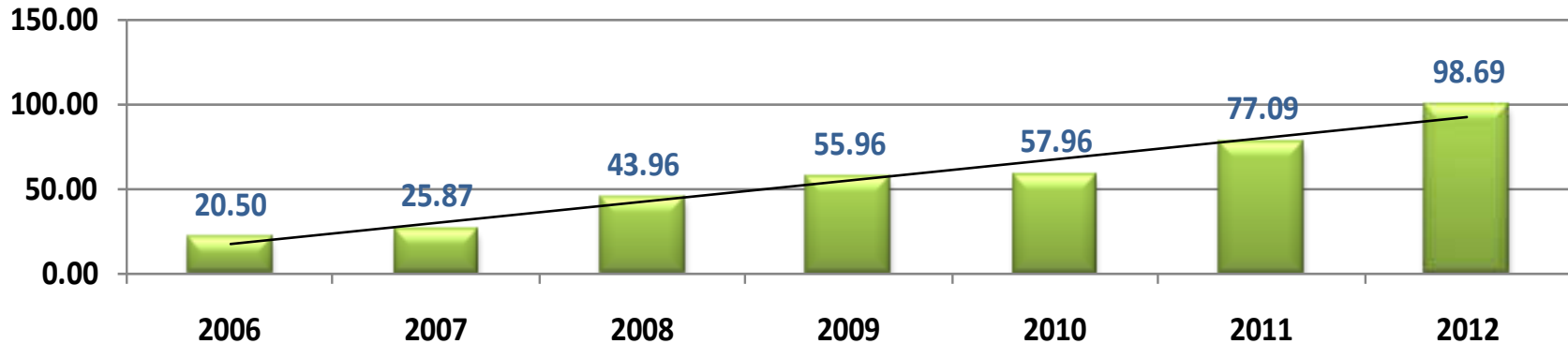


Number of Foreign Bond Issues by Issue Term





Outstanding Value (THB Billion)



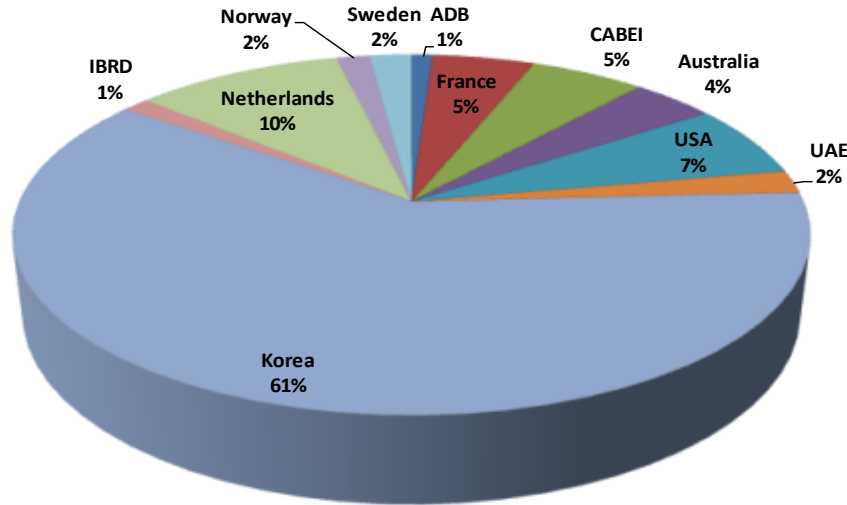
<i>Foreign Bonds</i>	2006	2007	2008	2009	2010	2011	2012
Outstanding Value (THB Bln)	20.50	25.87	43.96	55.96	57.96	77.09	98.69
Growth (% yoy)	-	26.21%	69.91%	27.30%	3.57%	33.01%	28.02%

Foreign Bond Statistics (Snapshot of Dec 17, 2012)



ThaiBMA

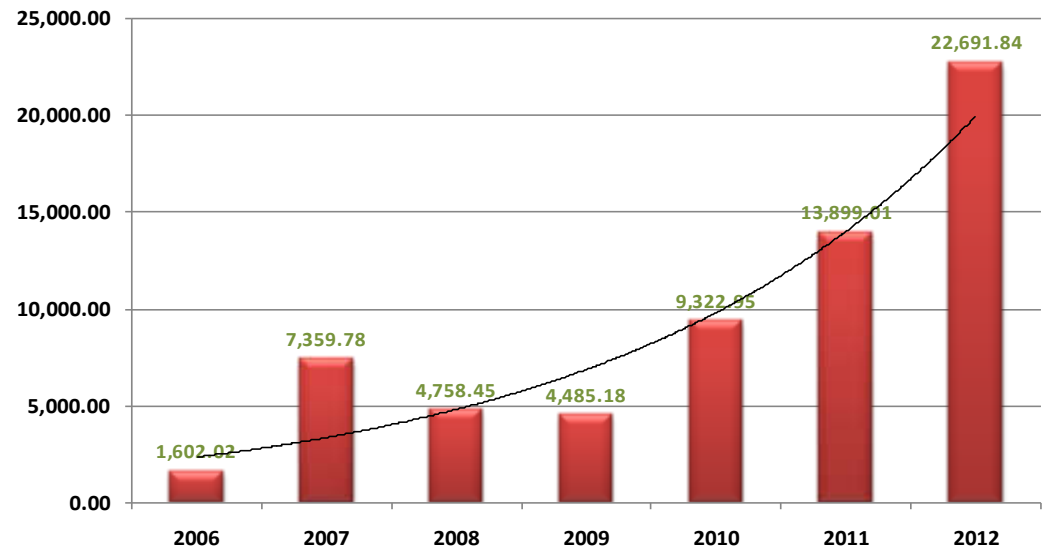
Share of Outstanding Size in Foreign Bond Market



Top 10 Traded Bond (in 2012)

No.	Symbol	Country
1	KDB145A	Korea
2	HANA152A	Korea
3	KEXIM14NA	Korea
4	HANA14OA	Korea
5	IBK15NA	Korea
6	IBK153A	Korea
7	KEXIM136A	Korea
8	KDB13NA	Korea
9	ADB169A	ADB
10	HANA192A	Korea

Outright Trading Value of Foreign Bonds (THB mln)



* Data Source from ThaiBMA; As of 17 Dec. 2012

As of the submission period ended by November 2012, the ministry of finance has permitted 8 foreign entities to issue Baht-denominated bonds/debentures in Thailand with the total amount of 59,000 THB million, **that can be used within September 30th, 2013.** The list of the permitted entities and the authorized amount is composed of:

PERMITTED ENTITY	AUTHORIZED AMOUNT (THB mln.)
Industrial Bank of Korea (IBK)	10,000
ING Bank N.V. (ING)	10,000
The Export – Import Bank of Korea (KEXIM)	10,000
The Ministry of Finance of the Lao People's Democratic Republic (Lao PDR)	1,500
Noble Group Limited (Noble) *	3,500
Coöperative Centrale Raiffeisen–Boerenleenbank B.A. (Rabobank Nederland)	4,000
Shinhan Bank (Shinhan)	10,000
Woori Bank (Woori)	10,000
Total	59,000

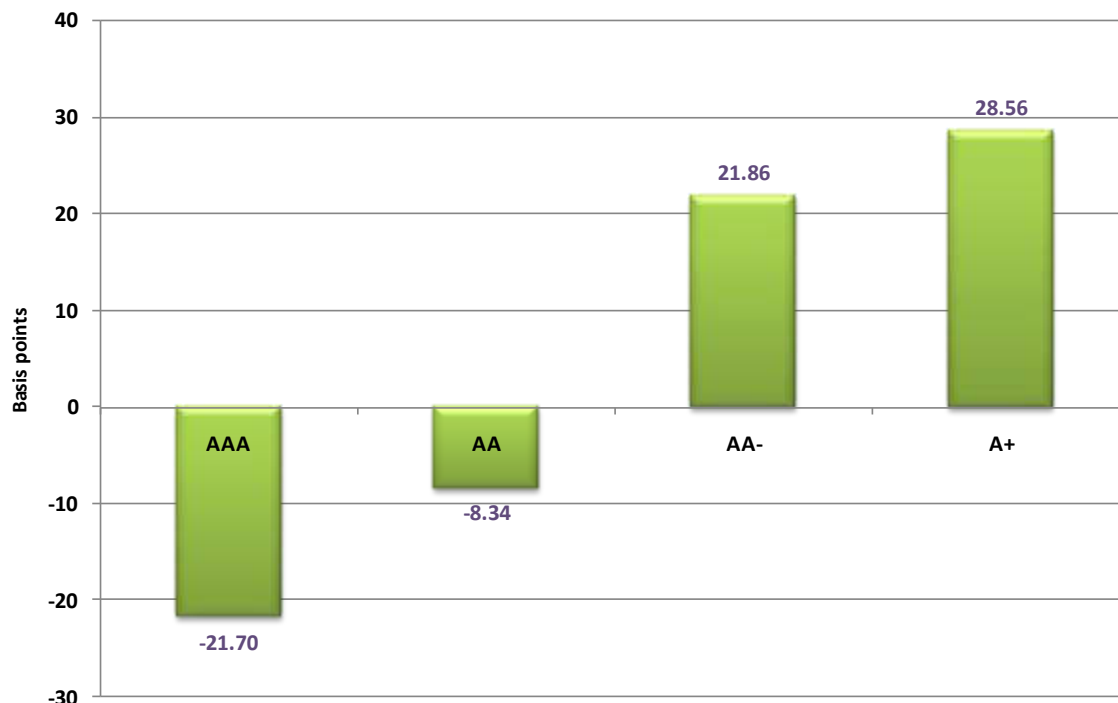
*Note : * The Ministry of Finance approves Noble to issue Thai Baht-denominated Bonds in Thailand subject to the guarantor's credit rating.*

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Issuance cost of Foreign Bond in Thailand

Avg. Different Spread at Issue between Foreign Bonds International Rating and Thai Corp. Bonds Local Rating of AAAtha (2006-2012)



Fast Facts

- The data shown in the figures is the average different spread at issue date (i.e. Spread of Foreign Bond minus Spread of Thai Corp Bond local Rating of AAA).
- The bonds are grouped by their international rating which can vary across country and issuer.
- The difference of spread at issue can reflect how much foreign issuer has to pay the premium over the Thai Corp. issuer rated local AAA (i.e. negative for lower cost and positive for higher cost).

Snapshot of Credit Spread Curve for Local Rating AAAtha in Dec. 2012

TTM (Yrs.)	1	2	3	5	7	10
2008	117.1987	122.7298	126.6542	132.1853	136.1097	140.4539
2009	41.21279	53.13411	61.59242	73.51374	81.97205	91.3351
2010	21.53748	28.49187	33.42609	40.38048	45.3147	50.7767
2011	24.59514	31.74997	36.82641	43.98125	49.05769	54.67712
2012	11.1534	16.30774	19.96479	25.11913	28.77619	32.82442

Note: ThaiBMA credit spread curve has been available since 2008.

Quick Analysis

For the high grade foreign bonds (AAA down to AA), the cost of issue, in average, is lower than the highest grade Thai corp. bond due to the higher rating (i.e. AAA that cannot be rated higher than BBB+ international).

For the foreign bonds rated below AA-, the cost of issue is higher than the Thai corp. bond rated AAA that due to 2 reasons:

➤ *Familiarity Effect: Domestic bond may be viewed superior to foreign bond which has lower rating causing the spread of foreign to be higher.*

➤ *High growth in fund raising activities in Asian country:*

For example, Korea bonds (mostly rated A+) usually offer a higher spread so as to attract the domestic investors.

THANK YOU



En Mohd Shaharul Zain, Chief Business Officer
email shah@bpam.com.my

OR

Market Development Team

email enquiries@bpam.com.my or +603-2772 0888



Mr Thananun Siwamogsatham,
SVP, Head of Bond Market Development Group
email Thananun@thaibma.or.th
or (66)-2252-3336



AsianBondsOnline

Your Data Hub for LCY Bond Markets

www.asianbondsonline.adb.org

February 2013

**Thiam Hee Ng
Senior Economist
Office of Regional Economic Integration
Asian Development Bank**



Introduction

- ABO is part of Asian Bond Market Initiative (ABMI) Task Force 2 (Facilitating demand for local currency bonds in ASEAN+3)
- Data hub for local currency bond markets
- Deepen engagement with institutional investors
- Facilitate information exchanges developments in the local currency markets
- Broaden interaction with market regulators

Latest Update: January 17, 2013 17:27 (Manila Time)

[News](#) | [ADB Research](#) | [External Research](#)

- (ID) Analysis: Jakarta jitters: Currency sensitivity study
- (ID) Rupiah gains against US dollar on intervention by central bank
- (MY) Ringgit strengthens and emerges as Asia's 2nd best
- (MY) MIER sees GDP growing 5.6% in 2013
- (SG) NODX down 16.3% on-year in Dec 2012; IE S'pore

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ASIA BOND MONITOR

NOVEMBER 2012

Local bond markets continue to expand, but risks, including spillovers from mature markets, loom large on the horizon, says the latest Asia Bond Monitor. Also read the ABO Annual Liquidity Survey.

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Asia Bond Monitor
November 2012 Issue

Asia Bond Monitor
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Weekly Debt Highlights
(January 14, 2013)

ASEAN+3 Bond Market
Guide

[What's New](#)

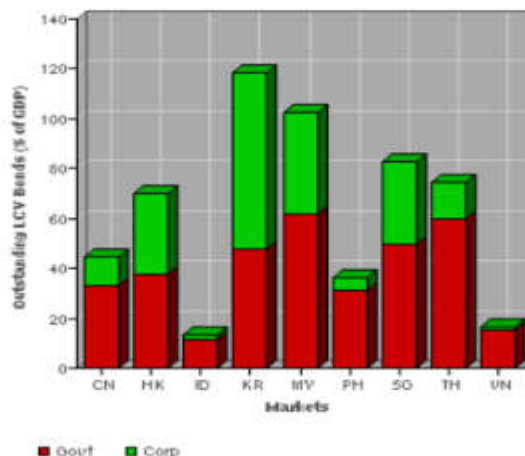
Market Watch

LCY 10 Year Government Bonds	Latest Yield	YTD Change (BP)	MTD Change (BP)
CN	3.61	▲ 2	▲ 2
HK	0.799	▲ 20.1	▲ 20.1
ID	5.26	▲ 6.9	▲ 6.9
JP	0.756	▼ 3.5	▼ 3.5
KR	3.02	▼ 14	▼ 14
MY	3.472	▼ 3.1	▼ 3.1
PH	4.301	▲ 15.09	▲ 15.09
SG	1.33	▲ 3	▲ 3
TH	3.687	▲ 17.7	▲ 17.7
US	1.819	▲ 6.11	▲ 6.11
VN	10.2	0	0

► [More Market Watch Data](#)

Bond Market Indicators

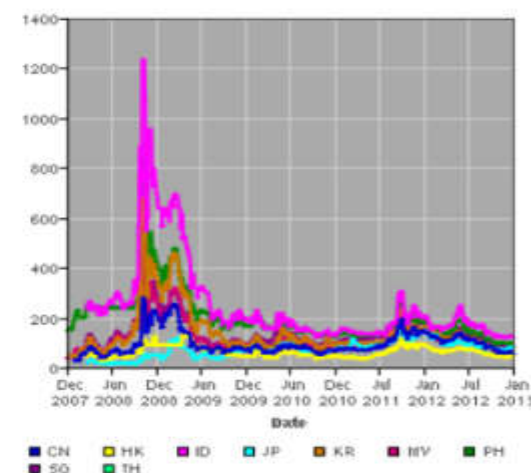
Size and Composition: Size of LCY Bond Market in % GDP (Jun 2012)



► [More Indicators](#)

Credit Risk Watch

Weekly Emerging East Asian Credit Default Spread - Senior 5-year



► [More Credit Risk Data](#)



AsianBondsOnline website

- Clearinghouse for information on sovereign and corporate bonds in ASEAN+3 markets
- Track developments about the region's developing bond markets
- Provides data on current market development, legal and regulatory framework, and monitors government policies and initiatives



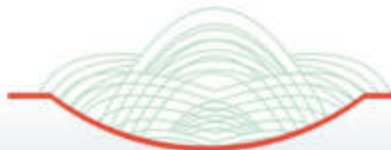
AsianBondsOnline Data

- Market Watch
 - *Yield Curves*
 - *Policy Rates*
 - *Inflation*
 - *Exchange Rate*



AsianBondsOnline Data

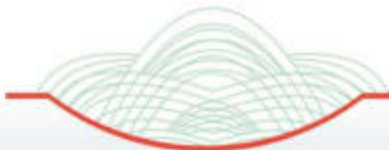
- Bond Market Indicators
 - *Size and Composition*
 - *Market Liquidity*
 - *Yield Returns and Volatility*
 - *Liquidity Survey*





AsianBondsOnline Data

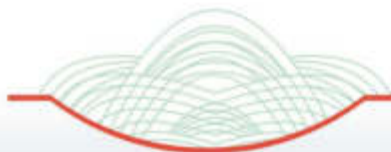
- Bond Market Indicators
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 - *Yield Returns and Volatility*
 - *Liquidity Survey*





AsianBondsOnline Data

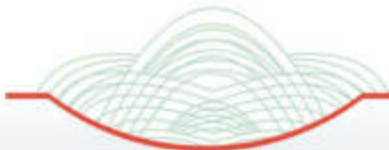
- Credit Risk Watch
 - *Credit Default Swaps*
 - *Credit Ratings*
 - *Banking System Data*





Asia Bond Monitor

- Provides near-term outlook for the LCY bond markets in the ASEAN+3 countries
- Provides data and analysis of major new developments in bond market growth and structure
- Also includes data on bond issuance, money market trends, maturity structure, holdings of contractual savings institutions, and foreign investment inflows
- Highlights most recent regulatory developments
- Presents results of ABO's Annual Bond Market Liquidity Survey





Asia Bond Monitor Nov 2012

- Global economy remains weak with uncertain prospects.
- Emerging East Asia's LCY bond market remain robust and bonds outstanding grew 3.5% quarter-on-quarter (q-o-q) and 11.0% year-on-year (y-o-y) to reach US\$6.2 trillion in 3Q12, driven by a combination of strong growth in both the government and corporate bond sectors.



Asia Bond Monitor Nov 2012

2012 AsianBondsOnline Bond Market Liquidity Survey

- 122 responses on government bonds and 92 responses on corporate bonds.
- Bid–ask spreads for both government and corporate bonds tightened in most markets in 2012, while average trading sizes also increased in most markets.
- Liquidity improved for most instruments in a number of markets.
- Greater investor diversity as the most important structural change needed to improve market liquidity. Foreign investors have continued to expand their share of bond holdings in most markets. Retail investors are also increasing their shares in some local bond markets.

Liquidity Survey - LCY Government Bond Market Quantitative Indicators

		PRC	HK	IN	ID	KR	MY	PH	SG	TH	VN	Regional
Typical Bid-Ask Spread On-the-Run (bps)	Average	2.7	6.4	0.6	6.6	0.6	2.7	2.1	3.1	3.2	30.5	5.8
	Count	19	7	5	21	11	11	16	9	13	5	117.0
	SD	1.3	2.5	0.5	2.0	0.2	1.2	2.3	0.8	1.5	9.4	8.9
Typical Bid-Ask Spread Off-the-Run (bps)	Average	4.5	8.1	2.7	11.6	1.0	4.6	11.7	3.6	5.9	40.5	9.4
	Count	16	6	5	13	11	10	16	7	13	5	102.0
	SD	2.7	4.1	1.2	5.4	0.3	2.2	8.6	1.9	2.0	12.0	11.5
Accepted LCY Bond Transaction Size On-the-Run (US\$ million)	Average	23.2	7.3	1.7	1.8	6.5	10.0	3.0	7.9	4.7	2.4	6.9
	Count	20	6	5	17	11	12	16	9	13	5	114.0
	SD	22.0	3.2	1.7	1.2	4.6	6.4	2.8	6.4	8.4	1.2	6.4
Accepted LCY Bond Transaction Size Off-the-Run (US\$ million)	Average	18.5	5.4	1.7	5.3	8.4	7.3	1.4	7.6	2.1	2.4	6.0
	Count	16	5	5	13	10	11	16	8	13	5	102.0
	SD	20.0	2.3	1.7	11.2	3.1	4.6	0.6	6.2	1.7	1.8	5.1

bps = basis points; HK = Hong Kong, China; ID = Indonesia; IN = India; KR = Republic of Korea; LCY = local currency; MY = Malaysia; PH = Philippines; PRC = People's Republic of China; SD = standard deviation; SG = Singapore; TH = Thailand; VN = Viet Nam.

Note: The bid-ask spreads for Indonesian treasury bonds presented above are expressed in terms of yield or basis points to make them comparable with bid-ask spreads in other Asian markets. Bid-ask spreads for government bonds are most often expressed in terms of "cents" in the Indonesian market. In the 2012 survey, the average treasury bond bid-ask spread was 38.8 cents.

Source: Asia Bond Monitor

Liquidity Survey - LCY Corporate Bond Market Quantitative Indicators

		PRC	HK	IN	ID	KR	MY	PH	SG	TH	VN	Regional
Typical Issue Size of Corporate Bonds (US\$ million)	Average	415.8	46.7	48.1	103.6	94.3	285.9	146.0	158.5	98.2	73.0	147.0
Typical Bid-Ask Spread for new Corporate Issues (bps)	Average	10.4	21.3	6.1	18.7	1.9	9.4	34.5	15.9	10.3	138.3	26.7
	Count	15	4	4	11	7	5	14	5	11	3	79.0
	SD	4.3	19.8	3.8	10.4	0.6	4.6	14.6	10.3	8.7	141.1	40.3
Typical Transaction Size of LCY Corporate Bonds (US\$ million)	Average	7.1	2.9	2.0	0.6	9.0	2.4	0.5	1.1	1.1	3.0	3.0
	Count	17	4	4	11	8	5	15	5	11	3	83.0
	SD	5.0	2.6	1.9	0.3	0.0	1.4	0.4	0.3	0.8	1.1	2.9

bps = basis points, HK = Hong Kong, China; ID = Indonesia; IN = India; KR = Republic of Korea; LCY = local currency; MY = Malaysia; PH = Philippines; PRC = People's Republic of China; SD = standard deviation; SG = Singapore; TH = Thailand; VN = Viet Nam.

Source: Asia Bond Monitor



Ongoing Publications and Research of ABO

- Weekly Debt Highlights (WDH) – A newsletter, sent every Monday which features and summarizes important news during the week in the ASEAN+3 bond markets and provides data on bond issuance, bond yields, CDS, interest rates and inflation trends.
- Asia Bond Market Monitor (ABM) – A quarterly publication which tracks recent developments in emerging East Asian local currency bond markets, and provides a near-term outlook
- Market Summaries – A quarterly write-up/analysis on bond market developments for individual markets we cover in emerging East Asia. An expanded analysis of the corporate bond market is now included.
- AsianBondsOnline Annual Bond Market Liquidity Survey – An annual survey which assesses the current state of liquidity of local currency bond markets in emerging East Asia. The 2012 annual liquidity survey attracted over 100 participants.



Goals

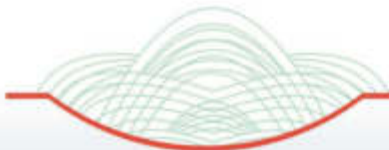
- Data hub for local currency bond markets
- ABO becomes the recognized market Information Aggregator
- Promote development of investment in the region
- Integrate data and practices of all local currency bond markets
- ABO is recognized as the authoritative source on Asian local currency markets by investors, governments, and researchers



ABO Plans

Looking forward, ABO plans to...

- Incorporate extensive data sets on investor profile
- Monitor new product developments in the government and corporate bond markets (inflation-linked bonds, bonds issued by local governments, perpetual bonds)
- Provide more granularity on corporate bonds
- Include statistics on the banking sector





ABO Website Statistics

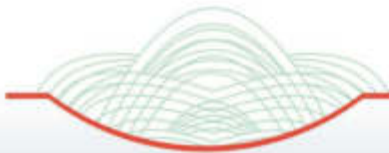
Key web retrieval statistics comparing data in 2010, 2011, and 2012 are provided below:

- Site hits and number of visitors climbed 19.9% and 29.1%, respectively in 2011 compared with 2010.
- In 2012, site hits and number of visitors climbed 14.3% and 39.6%, respectively compared with 2011.

	2010	2011	2012	2012 y-o-y change
Hits	9,674,093	11,597,752	13,250,953	14.25%
Unique Visitors	65,472	84,506	118,005	39.64%
Visits	528,971	627,179	797,558	27.17%
Page Views	1,879,713	2,294,895	2,490,148	8.51%

Thank You

Thiam Hee Ng
thiamng@adb.org

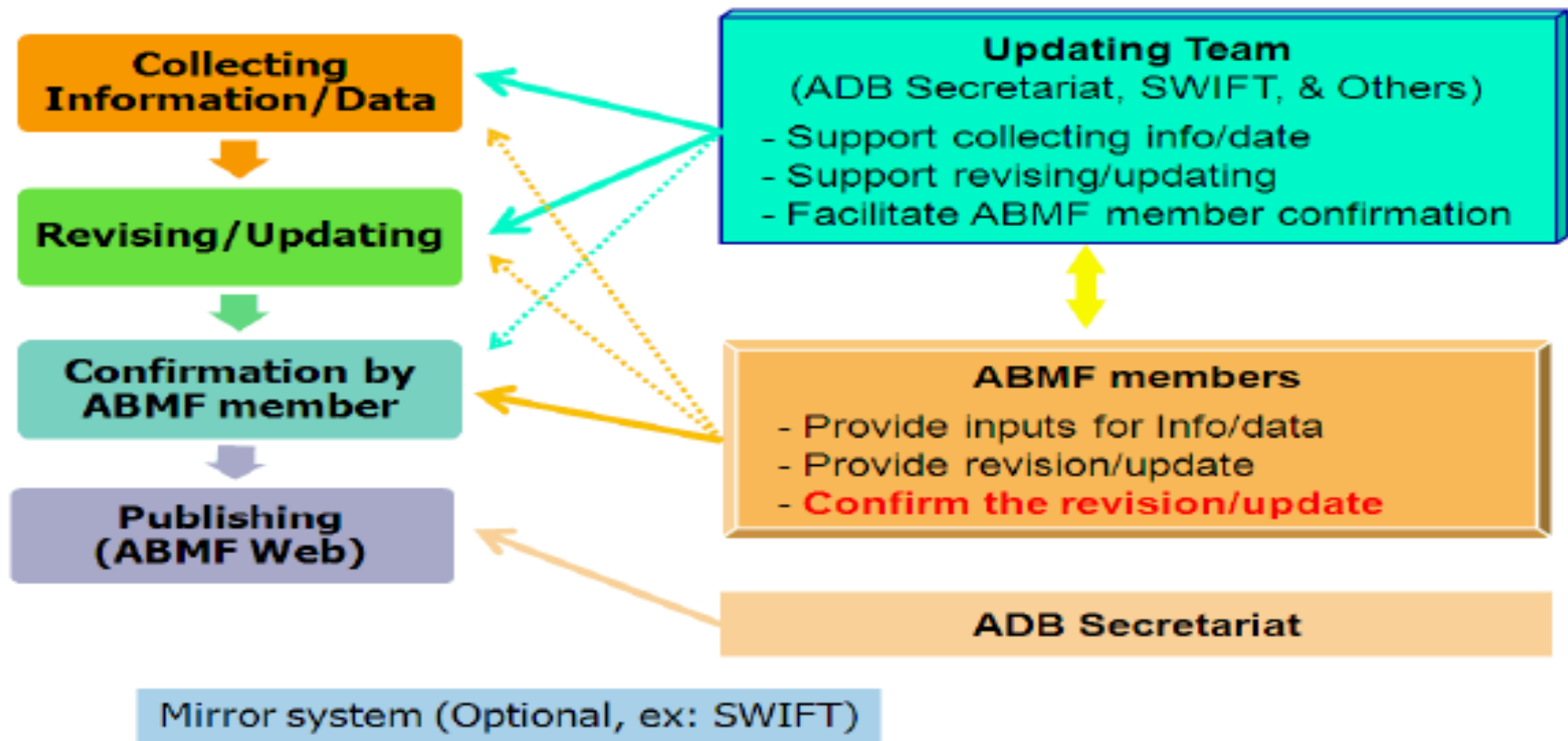




ASEAN+3 Bond Market Guide – Updating and Manintenance

6 February 2013

Already discussed process and structure



Updating Cycle

- Periodic updates (proposal is 1 to 2 updates per year)
- Ad hoc updates depending on the nature and urgency of the change



Updating Process – Submission by AMBF National Members (1)

(Case1)

1. National Members make changes in respective individual market guide or relevant part in the ASEAN+3 Bond Market Guide (the Guide), and submit it to Updating Team.
2. Updating Team reviews the changes and provides the additional revisions when needed
3. Updated document is sent to the respective National Member for confirmation
4. Once the document is confirmed by the respective National Member, document is final and published on the ADB website



Updating Process – Submission by AMBF National Members (2)

(Case2)

1. National Members submit change request to Updating Team by using 'Change request template '
2. Updating Team applies the necessary changes to the document
3. Updated document is sent to the respective National Members for confirmation
4. Once the document is confirmed by respective National Member, the document is final and published on the ADB website



Updating Process – Submission by AMBF National and International Experts (2)

1. National Experts and International Experts submit change request to Updating Team by using 'Change request template '
2. Updating Team applies the necessary changes to the document
3. Updated document is sent to the respective National Members for confirmation
4. Once the document is confirmed by respective National Member, the document is final and published on the ADB website



Updating Process – Submission by Country NMPG Chair

1. Country NMPG chair submits change request to Updating Team by using 'Change request template '
2. Updating team sends change request to repective National Member for prior review and validation
3. National Members send approval for the change request to Updating Team
4. Updating team applies changes to the document
5. Updated document is sent to the National Members for confirmation
6. Ones the document is confirmed by repective National Member, the document is final and published on the ADB website



Change Request Template Proposal

Change Request *(briefly describe the request)*

Origin of request

Requesting Country: (**Country Code** and **Country Name** in full)

Requesting National Market Practice Group: (*Full name*)

Requesting institution type : (ABMF national member, National Expert, International expert, NMPG, or others)

Name of requesting institution: (Full name)

Urgency and type of request

Urgency:

<For example, needed in order to comply with regulatory requirements (state the regulatory requirements)>

Type	
Cosmetic change	
Correction	
Market practice change	

Reference to Current Document

Chapter:

<For example, chapter II. Primary and Secondary Markets Regulatory Framework>

Section and page:

<For example, section A. XXX – page. 25>

Copy of text:

<Input a copy of the current text from the current document you would like to update>

Change Request

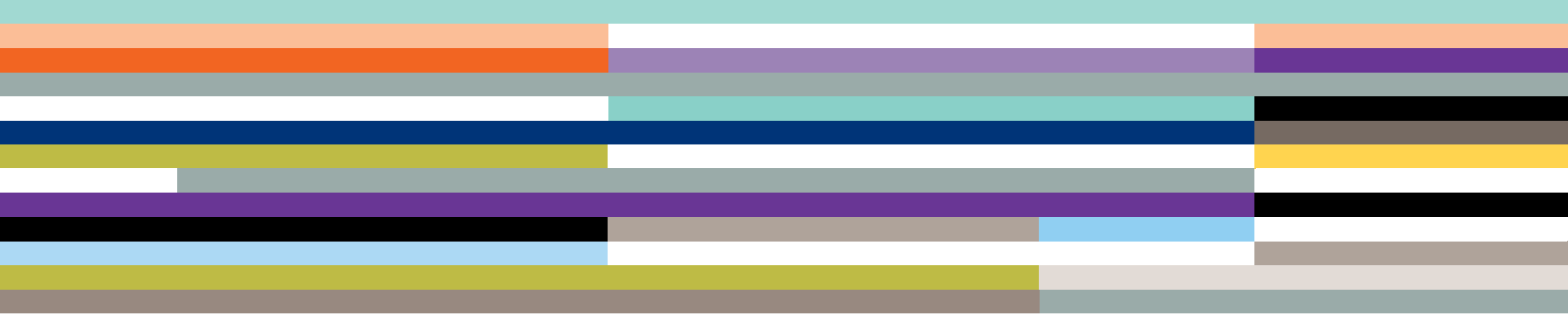
Proposal:

<Write the proposal for the new text with the differences highlighted>

Business context

<If any, explain the business context of the change, eg, change in a regulation, new system implementation. Please be as complete as possible.>





Thank you

