How to promote use of local currency government bond for cross-border transaction in Asia - Discussion under ABMF and CSIF

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ASEAN+3 is a group of East Asian countries, consisting of ten countries of the Association of Southeast Asian Nations (ASEAN), the People’s Republic of China, Japan, and the Republic of Korea.

There are various ministerial meetings of ASEAN+3, but the most active one is ASEAN+3 Finance Ministers and Central Bank Governors Meeting (AFMGM+3)

- There are two initiatives led by AFMGM+3: Chiang Mai Initiative (CMIM), and Asian Bond Markets Initiative (ABMI) as a reaction to the Asian Currency Crisis in 1997-98
Organizational chart of ABMI and ADB’s involvement in the regional policy process

ASEAN+3 Finance Ministers and Central Bank Governors’ Meeting

ASEAN+3 Deputy Ministers and Deputy Governors’ Meeting

CMIM*
Regional safety net

ADB as the Secretariat

ABMI
Asian Bond Markets Initiative

ASEAN+3 Macroeconomic Research Office

ASEAN+3 Bond Market Forum (ABMF)

Credit Guarantee and Investment Facility (CGIF)

Asian Bonds Online Asian Bond Monitor

Green, Social, Sustainability bond market development

TF 1 (Supply)
TF 2 (Demand)
TF 3 (Regulation)
TF 4 (Infra)

Asian Prime Collateral Forum

Promoting LCY bond markets to address the double mismatch problem

CH TH JP SG JP MY KR PH

Sub-forum 1 AMBIF
Sub-forum 2 ISO 20022

Cross-border settlement Infrastructure Forum (CSIF)
ASEAN+3 Bond Market Forum
ASEAN+3 Bond Market Forum as a regional platform for collaboration

The ABMF, operating under the ambit of ASEAN+3 and comprising of bond market experts from the region, was established in September 2010 as a common platform to foster standardization of market practices and harmonization of regulations relating to cross-border bond transaction in the region.

- Collaboration between public and private sector experts
  - Utilize private sector expertise to build regional institutional framework
- Voluntary participation with commitments
  - Participants bear costs of participation
  - Establishing acceptable market practices and standards

inter-operability > harmonization
Backgrounds of discussion under ASEAN+3 Bond Market Forum

In Europe and the US, secured or collateralized transactions have increased after the global financial crisis. Similarly, Asia will face increase in demand for more secured transactions.

**Asian currency crisis in 1997**
- Various international projects have been carried out so far after the crisis.
  - 2003: ABMI, ABF
  - 2008: ABMF, CGIF
  - 2013: CSIF

**Outstanding of LCY bonds is increasing thanks to improvements of Asian bond markets**
- Historical Growth of Asian LCY Bond Market (excluding Japan)

**The financial crisis in 2008**
- A chain bankruptcy of market participants
- The fall in security prices and increases of margin call
- Having difficulties in funding due to sudden drop of liquidity

**Market**
- The change from uncollateralized to collateralized

**Regulation**
- Margin requirements for non-centrally cleared OTC derivatives
- The LCR requirement

**Can we utilize such large LCY bonds for secured transactions regionally?**
- Repo markets become more important.
- Collateral demand will increase globally because of Basel III
Cross-border transaction survey by ABMF

- Step 1: Identify possible cross-border transaction flows
- Step 2: Conceptualize typical cross-border transaction flows
- Step 3: Identify problems and impediments
Step 1: Identify possible cross-border transaction flows - Case studies
Case 1: Cash collateral (USD to USD) for CCP

● Outline
Japanese bank A (head office) collateralizes USD as a forward margin after receiving notice from CCP at U.S.A.

● Requirement
1. Japanese bank A has become a participant of the CCP.

● Purpose & characteristics
FICC demands to deposit a forward margin to participants, because of avoiding a risk of bond value change from starting settlement guarantee until settlement date.
Case 1: Cash collateral (USD for USD) for CCP

Japanese bank A in JP

FICC

对应银行

① notice of margin amount

② payment instruction

③ execute fund settlement
correspondent bank

correspondent bank's payment system

bank A's account

JPY

correspondent bank's account

BONY

④ execute fund settlement

BONY Payment System

correspondent bank's account

USD

FICC's account

日本

U.S.A

Note: Since FICC can not have an account in Fed, FICC assigns Bank of New York Mellon and JP Morgan Chase (they have accounts in Fed) as the clearing bank.
Case 2: Cash collateral (FCY to FCY) for margin call

● Outline
Japanese bank B (head office) is required additional collateral of HKD for margin call from Hong Kong bank A.

● Requirement
1. Japanese bank B (head office) and Hong Kong bank A (head office) are engaging in tri-party repo at Euroclear.
2. As a result of mark to market, value of bond declining, hence, Japanese bank B need to pledge additional collateral to Hong Kong bank A.

● Purpose & characteristics
Euroclear has a custodian's function that is the management of repo transaction. (e.g. margin calls, hair cuts, setting current market price)
Case 2: Cash collateral (FCY to FCY) for margin call

1. Margin call
2. Settlement instruction
3. Received notice of additional collateral
4. Pledge additional collateral

Japanese bank B in JP

Hong Kong bank A in HK

Euroclear's Payment System

Bank B's account

Bank A's account

Japan

Hong Kong

Belgium
Case 3: Bond collateral (JGB to THB)

● **Outline**
Japanese bank C (Bangkok branch) receives THB from BOT in exchange for collateralizing JGB via BOJ system.

● **Requirement**
1. BOJ acts as BOT's custodian.
2. BOT permits JGB as an eligible collateral for THB.
3. Japanese bank C (Bangkok branch) has an account at BAHT-NET system.

● **Purpose & characteristics**
Japanese banks in Thailand can have an additional liquidity facility from BOT in case of emergency.
Case 3: Bond collateral (JGB to THB)

1. Collateralize JGB
2. Execute bond settlement and receiving collateral
3. Update collateral amount
4. Credit application
5. Supply THB
Case 4: U.S. Dollar Funds-Supplying Operations against Pooled Collateral by BOJ

● Outline
To allocate USD as a result of BOJ and FED currency swap, Japanese bank D (head office) participate an auction by BOJ to receive USD funding by pledging collateral (JGB or UST).

● Requirement
Bank D is a FED’s direct or indirect participant.

● Purpose & characteristics
To encounter USD shortage by Japanese banks and ensure financial stability.
Case 4: U.S. Dollar Funds-Supplying Operations against Pooled Collateral by BOJ (UST to USD)

- notification of USD operation
- subscription to the auction
- auction result
- notification of pledging UST as collateral
- notification of collateral received
- instruction of bond transfer
- execute bond settlement
- BOJ account
- bank D's account
- Fedwire Bond Settlement System
- global custodian's account
- UST
- FED account
- USD
- BOJ account
- Fedwire Payment Settlement System
- BOJ account
- USD
- bank D's account
- UST

After bond settlement has been confirmed, notify FED to transfer USD cash from BOJ account to Bank D’s account.

The same transaction flows are applied to fund-supplying operations for EUR, CAD, GBP, and CHF. In addition to UST, government bonds of UK, Germany, and France are recognized as eligible collateral.
Case 4: U.S. Dollar Funds-Supplying Operations against Pooled Collateral by BOJ (JGB to USD)

- notification of USD operation
  - subscription to the auction
  - auction result
- notification of pledging JGB as collateral
- notification of collateral received

5. settlement of bonds collateralized
   - BOJ account
   - JGB
   - bank D’s account

9. After bond settlement has been confirmed, BOJ notify FED to transfer USD cash from BOJ account to Bank D’s account

7. notification of cash settlement completed

8. supply credit (loan)
   - Fedwire Payment Settlement System
   - BOJ account
   - USD
   - bank D’s account

The same transaction flows are applied to fund-suppling operations for EUR, CAD, GBP, and CHF.
Case 5: US onshore bilateral repo via global custodian (UST to USD)

- **Outline**
  Japanese bank E (head office) receives USD from Singapore bank A (head office) via UST repo.

- **Requirement**
  2. Japanese bank E (NY branch) and Singapore bank A (head office) have account in the same global custodian.

- **Purpose & characteristics**
  To get USD
Case 5: US onshore bilateral repo via global custodian (UST to USD)

1. Transaction agreement (OTC)
   - Agree repo and make a contact
   - Transaction confirmation
   - Decide the way of settlement

2. Settlement instruction

3. Bond transfer
   - Fedwire Bond Settlement System
   - Bank E's account to sub custodian's account
   - Sub custodian's account to global custodian's account

4. Bond transfer
   - Sub custodian's Bond Settlement System
   - Sub custodian's account to global custodian's account

5. Execute bond & fund settlement (DVP)
   - Global custodian's Bond Settlement System
   - Global custodian's account to bank A's account
   - Bank E's account to global custodian's account

Japanese bank E in Japan
Japanese bank E in U.S.A
Singapore bank A in Singapore
Case 6: US offshore bilateral repo via CMU or global custodian (UST to USD)

- **Outline**
  Japanese bank F (Hong Kong branch) receives USD from U.S.A securities company A (Hong Kong branch) by UST.

- **Requirement**
  Japanese bank F and U.S.A securities company A are participants of CMU and USD-CHATS.

- **Purpose & characteristics**
  To get USD.
Case 6: US offshore bilateral repo via CMU or global custodian (UST to USD)

1. Transaction agreement (OTC)
   - Select a bond brand and make a contact
   - Transaction confirmation
   - Decide the way of settlement

2. Settlement instruction
3. Securities block
4. Notification of securities blocked
5. Notification of fund settlement completion
6. Settlement instruction
7. Execute fund settlement
8. Notification of fund settlement completion
9. Release securities and settle

Japanese bank F in JP
- Bank F’s account
- CMU’s Bond Settlement System
- Hold securities

Japanese bank F in HK
- Bank F’s account
- CMU’s Bond Settlement System
- UST
- Sec company A’s account

U.S.A securities company A in U.S.A
- U.S.A securities company A
- Bank F’s account
- USD
- HSBC
- US dollar CHATS

U.S.A securities company A in HK
- Bank F’s account
- CMU’s Bond Settlement System
- Sec company A’s account

Hong Kong, China
Case 7: Securities lending

● Outline
Japanese securities company C borrows UST for securities settlement from a global custodian/ICSD.

● Requirement
1. Japanese securities company C has participated the lending and borrowing of securities program in advance.
2. Japanese securities company C has pledged collateral in advance to participate the program.

● Purpose & characteristics
A lender can get securities lending fee safely (and no administrative) and improve yield on investment, a borrower can solve lack of securities to avoid a settlement fail.

Logical model:

- Global custodian/ICSD (e.g. Euroclear)
- Collateral
- Securities
- Japanese securities company C (head office)
Case 7: Securities lending

① submit a registration request for participating in the program and pledge collateral.

② To avoid a settlement fail, the system automatically allocates securities from a lending pool. (transaction agreement)

③ execute bond settlement

Global custodian / ICSD (e.g. Euroclear)

- Euroclear's lending pool
- each participant's account
- Euroclear's account

- To avoid a settlement fail, the system automatically allocates securities from a lending pool. (transaction agreement)

Euroclear's Bond Settlement System

- Euroclear's account
- securities
- sec company C's account

Euroclear's Collateral Management System

- sec company C's credit amount

Institutional investor

Securities company

Custodian

U.S.A

Germany

Hong Kong

Japan

Europe
Step 2: Conceptualize typical cross-border transaction flows
Model 1: Cross-border collateral and repo in two transactions via local branches
Model 1: Cross-border repo or collateral in two transactions via local branches

- Bank X’s branch B provides credit to Bank Y’s A branch while Bank Y A branch sells or pledges securities to Bank X’s A branch.

**Assumption**

- Both Bank X and Y have branches (or subsidiary) in the two countries concerned.
- Though sales of securities and provision of funds are two separate transactions, Bank X and Y can agree to consider them as one.
- Bank X and Bank Y knows each other well and have enough counterparty credit.
- However, a legal difference in two jurisdictions may be high.

![Diagram showing the relationship between Bank X and Bank Y across two countries with specific branches and transactions.]
Model 2: Cross-border collateral and repo business via ICSD

Tri-party repo with ICSD, which may be observed most frequently.

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ICSD

Market side

Collateral

Repo

Credit

Cash

Securities lending

Securities

Bank Y

Bank Q

Offshore

Relationship diagram

As per the diagram, Asian currencies and bonds are not allowed to be settled offshore. Exceptions are JPY and CNH (offshore RMB).

*FI= Financial institution
Model 3: Cross-border collateral and repo business via global custodian

**ICSD**

**Market side**

**Relationship diagram**

- Bank X Branch in A
- Global custodian X
- Bank X Branch in B
- Bank Y in A
- Bank Y in B

*FI= Financial institution*
Model 3: Cross-border collateral and repo business via global custodian

- Service provider provides tri-party repo service through local branches.

**Assumption**

- A service provider needs to have branch offices in each country.
- The service provider can provide custody service to banks in each market.
- The service provider will transfer funds in Country B in exchange for securities in Country A.
- Service provider needs to be permitted FOP transfers.
- As a global custodian normally has high credit, they may be able to agree the legal relationship.
Model 4: Cross-border collateral and repo business via cross-border collateral agreement between central banks

**Central Bank side**
- Monetary Policy

**Market side**
- Needs of funding, pledging, ensuring liquidity

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**Relationship diagram**

- **Central bank A**
  - Collateral
  - Cross-border collateral scheme
  - In emergency situation, some central banks have already agreed.
  - It is not clear to what extent central bank can accept other country’s securities as eligible collateral in peace time.

- **Central bank B**
  - Credit

- **Bank Y in A**
- **Bank Y in B**

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**Country A**

**Country B**
Model 5: Cross-border collateral and repo via CSD-RTGS Linkages

- Like CCBM in Europe, banks can get local liquidity in another country by pledging home-country’s securities to the central bank.
- CSD-RTGS Linkages will provide DVP
- The Linkages can accommodate increase in demand for cross-border collateral by central banks.

**Diagram:**

- Central bank A (Collateral provider)
- Bank Y - A branch
- Central bank B (Credit receiver)
- Bank Y - B branch
- Collateral provided to central bank Y is managed by central bank X
- CSD-RTGS Linkage
- Funds

Country A

Country B
Step 3: Identify problems and impediments
Problem 1: Invisibility of transactions

- Limited cross-border transactions
  - CBCR transaction in the region is limited.
  - Most of transaction are USD/UST, USD/JGB, USD/AGB.

- Lack or fragmentation of information
  - Identifying whether a transaction is repo or buy/sell is difficult because transactions are booked outside the region (e.g. London).
  - It is not easy to trace CBCR because FI’s systems does not capture such data.

Difficult to capture current state of the market

- Market players may have psychological barriers to use CBCR because they can’t judge what they can or cannot do, with whom, and where.

- Invisibility of transaction may be a barrier for CBCR market.
- We need to gather further information to understand and validate possible transactions.
Problem 2: Differences in legal arrangement

- We suspect lack or limited confidence in legal framework and market practices of developing markets may be one of reasons why financial institutions can’t accept LCY bonds in CSA, particularly for cross-border transactions.

- To change the situation, it is often recommended to changing domestic laws to meet international practices, but it is not easy.

- As domestic repo and collateral transactions expands, there will be more sound market practices in developing markets, which foreign FIs also participate. Then, we may be able to create common recognition that the differences in legal arrangements in Asia may be negligible or not as large as expected.


  - The extension of BOJ-NET operating hours enabled JGBs to be collateral in Europe. Some FIs revised CSA to accept JGBs.

  - Though Singapore and Malaysia are English law countries, there is a difference in GMRA country annex, which seems preventing cross-border collateral.
Proposals to create regional cross-border collateral and repo transactions

- Most of cross-border collateral and repo transactions are in USD/UST or limited currencies and bonds.
- Difficulty in accepting different legal framework and market practices seems to be the biggest hurdle for CBCR to be created in the region.
- Besides, counter-party of cross-border transactions are normally internationally active banks which have large operation in USD/UST.
- To foster CBCR market, we explore feasibilities of connecting each market with existing legal framework.
- It is desirable for central banks in the region to expand eligibility of collateral further.

Cross-Border Settlement Infrastructure Forum as an enabler to establish a regional infrastructure
Cross-Border Settlement Infrastructure Forum
1. Basic Principles on Establishing a Regional Settlement Intermediary and Next Steps Forward


3. Common Understanding on Cross-Border Business Continuity Planning and Cybersecurity

Roadmap for Establishing a Regional Settlement Intermediary in ASEAN+3
Implementation phase 3
2019–2020

Implement CSD-RTGS linkages
Starting production operation of CSD-RTGS Linkages

Integration phase
2020–

Implement integrated solution
Developing a central hub and connecting each CSD system and RTGS system with the hub
Next phase of CSIF TA

(i) a regional overview of recent technological advancements applicable to financial market infrastructures;

(ii) a benchmark for product and market infrastructure design for regional fund markets and related infrastructures; and

(iii) collateral eligibility for market infrastructures and central banks, and enabling factors to push local currency collateral utilization for cross-border financial transactions.
Thank you.
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