27th ASEAN+3 Bond Market Forum (ABMF) Meeting
And Relevant Meetings
1-2 February 2018
Conference Hall, 1st Floor
Cambodia Securities Exchange, Phnom Penh, Cambodia

DAY 1 – 1 February

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<th>TIME</th>
<th>PROGRAM</th>
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<tr>
<td></td>
<td><strong>27th ASEAN+3 Bond Market Forum (ABMF)</strong></td>
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<tr>
<td></td>
<td>ABMF Sub Forum 1 (SF1) Meeting</td>
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<tr>
<td>08:30 – 09:00</td>
<td>Registration</td>
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<tr>
<td>09:00 – 09:10</td>
<td>Welcome Remarks by CSX</td>
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<tr>
<td>09:10 – 09:20</td>
<td>Opening Remarks by ADB</td>
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<tr>
<td>09:20 – 09:25</td>
<td>Opening of SF1 by Mr. Koji Ito, Sub Forum 1 Chair</td>
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<tr>
<td>09:25 – 09:35</td>
<td>Keynote Address by H.E. Mr. Sou Socheat, Director General, SEC Cambodia (SECC) on the publication of Bond Market Guide for Cambodia</td>
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<tr>
<td>09:35 – 10:30</td>
<td>Session 1: Cambodia Capital Market Development and Future Plans by SECC, and CSX</td>
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<tr>
<td>10:30 – 10:45</td>
<td>Session 2: Update of ASEAN+3 Bond Market Guides by ADB Secretariat</td>
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<tr>
<td>10:45 – 11:00</td>
<td>Coffee Break</td>
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<tr>
<td>11:00 – 11:45</td>
<td>Session 3: Introduction to Credit Guarantee and Investment Facility (CGIF) and Its Roles in Supporting Bond Market Development by CGIF</td>
</tr>
<tr>
<td>11:45 – 12:30</td>
<td>Session 4: Promotion of Local Currency Denominated Green Bonds for Infrastructure Development by ADB</td>
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<tr>
<td>12:30 – 14:00</td>
<td>Lunch</td>
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<tr>
<td>14:00 – 14:45</td>
<td>Session 5: Collective Investment Scheme: Its Roles in Supporting Capital Market Development and Infrastructure Investment by Stock Exchange of Thailand</td>
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<tr>
<td>14:45 – 15:15</td>
<td>Session 6: Progress of Working Group on Information Platform by ABO team</td>
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### 27th ASEAN+3 Bond Market Forum (ABMF)

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<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>15:15 – 15:30</td>
<td><strong>Session 7: AMBIF Taxation Study</strong> by ADB Secretariat</td>
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<tr>
<td>15:45 – 16:00</td>
<td><strong>Coffee Break</strong></td>
</tr>
<tr>
<td>16:00 – 16:15</td>
<td><strong>Session 8: Update on ASEAN+3 Multi-Currency Bond Issuance Framework and Outcomes of Market Visits</strong> by ADB Secretariat</td>
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<tr>
<td>16:15 – 16:25</td>
<td><strong>Session 10: Wrap-up</strong> by ADB Secretariat</td>
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<tr>
<td>16:25 – 16:30</td>
<td><strong>Closing Remarks by Mr. Koji Ito, Sub Forum 1 Chair</strong></td>
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### DAY 2 – 2 February

<table>
<thead>
<tr>
<th>Time</th>
<th>Program</th>
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<tbody>
<tr>
<td>08:30 – 09:00</td>
<td><strong>Registration</strong></td>
</tr>
<tr>
<td>09:00 – 09:10</td>
<td><strong>Opening Remarks by Mr. Seung-Kwon Lee, SF2 Chair</strong></td>
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</table>
| 09:10 – 10:10 | **Session 1: Update on the Account Structure Survey** by ADB Secretariat and NTT Data as International Expert  
  – Key findings of market visits in the Philippines and Indonesia |
| 10:10 – 10:40 | **Session 2: Update on the payment and settlement system upgrade in Myanmar** by ADB consultant |
| 10:40 – 11:00 | **Coffee break**                                                                            |
| 11:00 – 11:50 | **Session 3: The Importance of ISO20022 and its interoperability with FinTech in Securities and Payment Business Processes** by SWIFT |
| 11:50 – 12:00 | **Session 4: Wrap-up** by ADB Secretariat                                                   |
| 12:00 – 12:10 | **Closing Remarks by Mr. Seung-Kwon Lee, SF2 Chair**                                        |
| 12:10 – 13:30 | **Lunch**                                                                                  |
DAY 1: Session 1a

Cambodia Capital Market Development And Future Plan
27th ABMF Meeting

Cambodia Capital Market Development
And Future Plan

Ms. HOR Likea, Acting Director of Research, Training, Securities Market
Development and International Relations
Phnom Penh, 01st February, 2018

Content

1. Cambodia at a Glance
2. The Step of Cambodia Capital Market Development
3. Future Plan
1. Cambodia at a Glance

Overview

<table>
<thead>
<tr>
<th>Area</th>
<th>181, 035 Km²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>15.76 Million (2016)</td>
</tr>
<tr>
<td>Key Sector</td>
<td></td>
</tr>
<tr>
<td>Agricultural Sector</td>
<td>27%</td>
</tr>
<tr>
<td>Industrial Sector</td>
<td>32%</td>
</tr>
<tr>
<td>Service Sector</td>
<td>42%</td>
</tr>
<tr>
<td>Export</td>
<td>61%</td>
</tr>
<tr>
<td>Import</td>
<td>66%</td>
</tr>
<tr>
<td>Poverty Rate</td>
<td>13.5% (2014)</td>
</tr>
<tr>
<td>Nominal GDP</td>
<td>$20.2 Billions (2016)</td>
</tr>
</tbody>
</table>

Source: Data from World Bank
Cambodia’s GDP Growth by Sectors

Cambodia: What’s behind the growth?
Economic growth remains strong, supported by garment exports, tourism, and real estate.
(contributions to growth, in percent)

- Stable macroeconomic environment
- Sectors-centered growth & policies
- FDI (infrastructure, & logistic) & Energy investment
- Abundant young labor force

Sources: IMF

Key Development Highlights

1995 - Economic Status: Low Income
- Economic structure: Agriculture-based
- Nominal GDP: $1.3 Billion
- GDP per capita: $2,173
- Total trade volume: $69 million
- Export: $283 million
- Domestic Revenue: 72.5 million

1998 - Economic Status: Low Income
- Economic structure: Agriculture-based
- Nominal GDP: $5.3 Billion
- GDP per capita: $417
- Poverty rate: 3.2%
- Gini Coefficient: 0.38%
- Unemployment rate: 5%
- Total trade volume: $5.827 million
- Export: $2,589 million
- Domestic Revenue: $333 million

2015 - Economic Status: Lower Middle Income
- Economic structure: Less agriculture-dependent
- Nominal GDP: $10.368 Billion
- GDP per capita: $1,302
- Poverty rate: 13.5%
- Gini Coefficient: 0.29
- Unemployment rate: 0.16%
- Total trade volume: $21.382 million
- Export: $9,235 million
- Domestic Revenue: $3.67 billion
- Financial sector: Rapid-growing yet stable

Sources: Cambodian authorities; IMF’s World Economic Outlook; and IMF staff estimates.
2. The Step of Cambodia
Capital Market Development

SECC Board of Directors

SECC chaired by Minister of Economy and Finance and 8 Members with the mandate of 5 years, consists of the following:
- One Representative from the Ministry of Economy and Finance
- One Representative from the National Bank of Cambodia
- One Representative from the Ministry of Justice
- One Representative from the Cabinet of Council of Ministers
- The Director General of SECC
- Two Experts in Securities sector
Steps of Development

Policy, Law and Regulations  ->  Regulator SECC  ->  Market Operator  ->  Securities Firms, others

Conduct and Organization of the SECC

Director General
  - Deputy Director General
    - Administration and Finance Dept.
    - Securities Market Supervision Dept.
    - Securities Intermediaries Supervision Dept.
  - Deputy Director General
    - Research, Training, Securities Market Development, and International Relations Dept.
  - Deputy Director General
    - Securities Issuance Supervision Dept.
    - Legal Affairs Dept.
Securities Industry System in Cambodia

Operator of Securities Market, Operator of clearing and Settlement Facility, and Operator of Securities

1. CAMEX (Cambodia Derivatives Exchange Co., Ltd)
2. Phnom Penh Derivative Exchange PLC
3. Royal Financial Corporation
4. Gold Financial Global Investment PLC

Securities Firms and Investment Advisor

Securities Underwriter
1. Yuanta Securities (Cambodia) Ptc.
2. RHB Industries Securities Ptc.
3. Citi Securities Ltd.
4. ING Securities PLC
5. Psar V Khmer Securities PLC
7. Securities Dealer

Securities Broker
1. ACLERA Securities Ptc.
2. CaMy Securities Limited

Asset Management
1. Angkor Capital Advisors Co Ltd.
2. F.S.C.G. Global Co, Ltd

Auditors
1. PWC Cambodia Ltd.
2. KPMG Cambodia Ltd.
3. BDO Cambodia Limited
4. Ernst & Young Cambodia Ltd.
5. Angkor Certified Accountants Network Ltd.
6. Grant Thornton Cambodia Limited
7. Crow Howard LLP
8. Deloitte Cambodia Co, Ltd

Securities Agent

Cash Settlement Agent
1. ACLERA Bank Ptc.
2. CAMEX Bank Ptc.

Securities Registration Agent
1. ACLERA Bank Ptc.
2. Trust Securities Services Ptc.

Insurance
1. KHE Law Firm
2. RAI S & Kung Law Office
3. Dech Shrestha & Associates, a Member of Zolotar
4. Sketch Law Office
5. Asia Cambodia Law Firm
6. Don & Associates
7. SYT & Associates Law Office
8. CS & Partners Law Office
9. BNR & Partners Law Office
10. FBA & Kisk Law Office
11. W & Rich Law Group
12. Cambodian Bayon Law Group

Market Segment Development

Launching 2016

2016
Equities
- Main board
- Growth board

2019
Commodities
- Derivatives

2022
Collective Investment Scheme

Corporate Bond (៛ and $)
3. Future Plan

- Promote Listing
- Promote Trading
- Enhance Stability and Market Confidence
**Policy To promote Listing**

- Increase market segment
- Simplify disclosure document
- Increase incentive
- Strengthen the cooperation with related authority

**Policy To promote Trading**

- Simplify Trading Method
- Increase Market Segment
- Bring in Securities Lending and Borrowing
Policy To Enhance Stability and Market Confidence

- Promote Financial Literacy
- Enforce the Conduct and Dispute Resolution
- Adopt Trust and Investment Operations under the Trust Law
- Strengthen the Cooperation

WHAT'S NEXT?
What is Coming up Next?

- Diversify Product: CIS, Bond
- Focus on the capital market ecosystem by establishing related key players in the market
- Strengthen law enforcement
- Focus more on the good companies
- Regulations related to future and commodity market

Thank you
DAY 1: Session 1b

CAMBODIA SECURITIES EXCHANGE (CSX) and
UPCOMING DEVELOPMENTS
CAMBODIA SECURITIES EXCHANGE (CSX)

and

UPCOMING DEVELOPMENTS

CONTENT

CSX’ s Milestones

Current Market Status & Investor Structure

Upcoming Developments
MILESTONES

2010
- Incorporated (MOC Registration)

2011
- Received approval to be the 3 operators
  - Establishment of Equity Product (Main board)

2012
- First listing and trading of Equity Product

2013
- Increasing the number of trade executions from 2 to 6 times per day

2015
- Implementation of “Continuous Trading” and “Trading before Settlement”
  - Establishment of Equity Growth Board (SME)

2016
- Introduce Securities Liquidity Provider

2017
- Implementation of Market Order and Negotiated Trade (block trade) for Equity

2018
- Establishment of Debt Securities Product

CSX MARKET

5 listed companies on the Equity Main Board.

2 additional markets including Equity Growth Board and Corporate Bond Market, ready for new securities to be listed.
CSX Market

Total Market Capitalization
≈ 307.67 Mil. USD
(As of Dec 31, 2017)


Total Account Number
8,984
(As of Dec 31, 2017)

Investor Structure: Statistics

Foreign vs. Domestic
69%
31%

Institutional vs. Individual
99%
1%

NOTE: Institutional Investors include Securities, Commercial Banks, General Corporations and others.
Investor Structure: Statistics

Turnover of Institutional and Individual Investors
2013 – 2017

- Institution
- Individual

<table>
<thead>
<tr>
<th>Year</th>
<th>Institutional Turnover</th>
<th>Individual Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>68%</td>
<td>32%</td>
</tr>
<tr>
<td>2014</td>
<td>53%</td>
<td>47%</td>
</tr>
<tr>
<td>2015</td>
<td>76%</td>
<td>24%</td>
</tr>
<tr>
<td>2016</td>
<td>82%</td>
<td>18%</td>
</tr>
<tr>
<td>2017</td>
<td>92%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Investor Structure: Statistics

Turnover of Domestic and Foreign Investors
2013 – 2017

- Domestic
- Foreign

<table>
<thead>
<tr>
<th>Year</th>
<th>Domestic Turnover</th>
<th>Foreign Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>68%</td>
<td>32%</td>
</tr>
<tr>
<td>2014</td>
<td>53%</td>
<td>47%</td>
</tr>
<tr>
<td>2015</td>
<td>76%</td>
<td>24%</td>
</tr>
<tr>
<td>2016</td>
<td>62%</td>
<td>38%</td>
</tr>
<tr>
<td>2017</td>
<td>40%</td>
<td>60%</td>
</tr>
</tbody>
</table>
Investor Structure: Statistics

Top 5 Foreign Ranking by Turnover (2017)

- China: 38%
- Taiwan: 11%
- Republic of Korea: 5%
- Japan: 7%
- Malaysia: 15%
- Others: 24%

UPCOMING DEVELOPMENTS

- Implementation of Mobile Trading System (MTS)
- First listing and trading of debt securities product through exchange traded system
- Bond Negotiation Trading Platform (BONETP), a new platform allowing qualified investors to place their bond quotation and match
UPCOMING DEVELOPMENTS

- Depositary Receipt (DR)
- Collective Investment Scheme (CIS)
- Government Bonds
- Custodians

THANK YOU!

Cambodia Securities Exchange (CSX)
DAY 1: Session 2

Update on ASEAN+3 Bond Market Guides 2018
Points to Cover

① Bond Market Guides published today
② Changes to Bond Market Guides in 2018
③ Status of Bond Market Guides
④ Next Steps for Bond Market Guides
⑤ Bond Market Guides as ADB Flagship Publication
⑥ Q&A
SECC and ADB announce the Publication of the Cambodia Bond Market Guide 2018 today!

80 pages


And available on www.asianbondsonline.adb.org

Changes to Bond Market Guides in 2018

- Bond Market Guides 2018 for those to be published this year
- This may also include revisions to already published markets
- Use of ADB’s 50-year anniversary logo concluded at end 2017
- Inclusion of Japan’s Official Development Assistance logo
- Changed front cover; map was found to be inaccurate
- Inclusion of statement on use of ISO standards (country/currency)
Also published today: **Myanmar Bond Market Guide 2018**

ASEAN+3 BOND MARKET GUIDE 2018
MYANMAR

82 pages


Also available on
www.asianbondsonline.adb.org

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**Status of Bond Market Guides** (as of 1 Feb 2018)

[Flag images courtesy of Wikipedia]

11 BMGs published as PDF versions

Members: ADB, ABMF SFI

[Note: Image courtesy of Wikipedia]
Next Steps for Work on Bond Market Guides

- Completion of remaining 3 markets (CH, KR, VN), out of 14
- Update of selected markets (on a need or request basis)
- Creation of Comparative Analysis across body of 14 BMGs
  - To review and revisit professional markets vs. Phase 2 Report
  - To create insight for members and experts
  - To derive policy recommendations
- Synchronisation with AMBIF Implementation Guidelines

Next to be published as Bond Market Guides 2018

Viet Nam and Korea

Contents being finalised
Target for final draft: end March 2018
Publication after final review and ADB process
Bond Market Guides 2016-2018 as ADB Flagship Publication

- DER (ADB Department of External Relations) believes that the ASEAN+3 Bond Market Guides are one of ADB’s flagship publications
- This is a strong endorsement for the efforts of ABMF members and experts invested in the creation of the Bond Market Guides
- …and, also requires continuous commitment from all parties to maintain and develop the Bond Market Guides

Questions & Answers

- We welcome any questions or feedback.
Thank You!

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DAY 1: Session 3

Introduction to Credit Guarantee and Investment Facility (CGIF) and Its Roles in Supporting Bond Market Development
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CGIF AT A GLANCE

• Guarantees local currency bonds by ASEAN+3 issuers
• Objective: To strengthen ASEAN+3 local currency bond markets
• Established by ASEAN+3 Governments, ADB.
• USD845.8M paid-in capital.
• Max guarantee capacity 2.5 times (USD2.1B)
• AA global scale rating by S&P (AAA ASEAN scale by RAM)
• Since 2013: USD1.1B for 14 issuers from 8 countries in 5 currencies

WHAT WE SUPPORT

• First bond / First-time issuer in a domestic bond market
• Tenure extension / matching
• Cross border
• Access offshore investors
• New asset classes:
  • Project Bonds
  • Securitization
  • Green Bonds
HOW IT WORKS

• Irrevocable & unconditional, non-payment event.

• 100% principal and interest payments

• Documents:
  • With Issuer: Facility agreement, & security agreement
  • With Bondholders: Guarantee agreement

• Risk-based guarantee fee, paid annually

• Security: Based on structure, risk assessment, pari passu terms

BOND GUARANTEE STRUCTURE
ROLE & TARGETS: CAMBODIA

• For Cambodian Capital Market: First bond
• For Investors: New asset class
• For Financial Institutions: Asset-liability management
• For Local Currency: Facilitate gradual adoption of KHR

WHY CGIF’S SUPPORT?

SHORT TERM:
• To bridge gap in required conditions:
  • No credit rating agency yet
  • Investor aversion
  • Trade-ability and Liquidity concerns
  • Limitations in banking appetite/capacity
• Success of first bond crucial for follow-on transactions

LONGER TERM:
• Mobilization of long-term savings
• Precursor to benchmark rate
ELIGIBILITY

• ASEAN+3 companies and shareholders
• Acceptable credit, governance and reputational profile
• ADB’s environmental and social safeguard standards
• Bonds not for controversial or prohibited activities
• Max. Tenor: Corporate (10 years), Project (15 years)

PROCESS

Preliminary Assessment
• Submission of Preliminary Information Pack (PIP) to CGIF
• CGIF deal team assesses eligibility
• Clearance from the Guarantee and Investment Committee (GIC) to apply

Formal Application
• Formal Application by potential issuer
• Submission of detailed information to CGIF

Due Diligence & Approval
• Due diligence by CGIF deal team
• Approval from the GIC for the guarantee exposure
• Endorsement from CGIF’s Board of Directors
• CGIF extends Guarantee Offer to issuer

around 2 – 3 weeks*  Around 8 – 12 weeks*

*subject to complexity of application
DAY 1: Session 4

Promotion of Local Currency Denominated Green Bonds for Infrastructure Development
Promoting Green Local Currency Denominated Bonds in ASEAN+3

A. Noy Siackhachanh
January 2018

Outline of the presentation
- Background on the study
- What are green bonds and four drivers of the green bond market
- Why green bonds?
- Industry-wide norms and voluntary standards
- Green bond principles
- Climate bond standard
- Costs of issuing green bonds
- Investors in green bonds
- Green bond indices and listing boards
- ASEAN+3 experience with green bonds
- Barriers to green bond markets
- Recommendations to promote green bonds in the ASEAN+3 region
3  

Background of the study

- Part of ASEAN+3 efforts to promote the long-term financing for infrastructure development under the Asian Bond Markets Initiative.
- It is funded by the Ministry of Finance of the People’s Republic of China.
- The study is nearly complete and is expected to be published on AsianBondsOnline.Adb.org and Adb.org in the coming months.

4  

What are green bonds?

Green bonds are debt securities whose proceeds are used to finance projects or assets with positive environmental benefits. Green bonds differ from conventional bonds only in their use of proceeds.

Defining features of green bonds are:

(i) the issuer commits to investing the proceeds in projects or assets meeting explicit eligibility criteria (or the “green bond framework”),
(ii) the proceeds are segregated from other funds available to the issuer,
(iii) the issuer provides ongoing reporting on the use of the proceeds and, where possible, the environmental impact of the investments, and
(iv) prior to issuance the bond is often evaluated or certified by an independent external reviewer attesting to the veracity its “green” claim.
Drivers of the green bond market

Four drivers of the green bond market include:

(i) greater awareness of and statements of support for the need to develop green financing mechanisms (such as the Paris Agreement and Nationally Determined Contributions (NDCs));

(ii) MDBs and public entities provided leadership in issuing green bonds;

(iii) the establishment of Green Bond Principles to judge credibility of green bonds; and

(iv) responsible investment creates a ready demand for green bonds.

Why green bonds?

- Issuers issue green bonds to improve their reputation and to broaden their investor base. Issuing green bonds demonstrates commitment to improving the environment.
- Green bonds are attractive to responsible investors, who consider both financial and non-financial factors in their investment decision-making process.
- Investors buy green bonds to align their portfolios with responsible investment mandates, and to earn a competitive rate of return.
- Governments promote green bond markets to increase long-term financing available to support national commitments under the Paris Agreement and the United Nation’s Sustainable Development Goals (SDG).
Industry-developed norms and voluntary standards

- Green bond markets have emerged largely in the absence of a formal public policy framework. Instead, the market has been guided by industry-developed norms and voluntary standards.
- The most important ones are the Green Bond Principles (GBP) and the Climate Bonds Standard (CBI Standard).
- In most countries, any issuer can call their bond “green,” although investors and other stakeholders will only accept them as such if they are issued in accordance with industry norms, such as the GBP.

Green bond principles

The GBP are voluntary guidelines on the issuance of green bonds. They are overseen by the International Capital Market Association (ICMA), an industry group.

Compliance with the GBP require issuers to:

1. Specify that the proceeds will be used for environmentally beneficial projects and assets;
2. Set out a clear process for project evaluation and selection;
3. Keep the proceeds separate from other funds available to the issuer; and
4. Report regularly on the use of the proceeds and the environmental impact of funded projects and assets.

The GBP also recommend that issuers obtain an external review to confirm alignment with the Principles.
Climate bond standard

For the purposes of the Standard, “green” refers to projects and assets that support “low-carbon industries, technologies and practices that mitigate green-house gas emissions” and measures to adapt to “the consequences of climate change”.

The CBI Standard is aligned with the GBP but provides enhanced credibility with investors because of its detailed eligibility criteria and certification scheme.

Costs of issuing green bonds

- For green bonds, the issuer must also commit staff time to prepare a “green bond framework” setting out how the proceeds will be invested, manage the allocation of proceeds and develop an appropriate reporting program.
- Prior to issuance the issuer generally engages an external reviewer to confirm that the bond is aligned with the GBP or international or national standards.
Costs of issuing green bonds

- External reviews, such as an assessment by an independent firm with environmental experience as to the credibility of an issuer’s green bond framework, costs between $15,000 and $50,000.
- Other types of external reviews are verification and certification, assurance and green ratings.

Costs of issuing green bonds

- After issuance, the issuer must provide reporting on the use of the proceeds and, increasingly, on the environmental impact of the projects and assets.
- Depending on the size, tenor, previous experience of the issuer and extent of post-issuance reporting, the added cost of green bond issuance is 0.1 to 7.0 basis points.
- However, there is no systematic difference between the yield on green bonds and comparable conventional bonds.
Investors in green bonds

- Investors in green bonds can be divided between institutional investors and retail investors; asset owners and asset managers; foreign investors and domestic investors; and conventional investors and responsible investors.
- Conventional investors are those whose investment decision-making processes focus on financial factors, such as profitability, cash flows and debt levels.
- The decision-making processes for responsible investors include both financial factors and non-financial factors, referred to as environmental, social and governance (ESG) factors.
- Both conventional and responsible investors hold green bonds, but they are attractive to responsible investors as the proceeds from green bonds focus on projects and assets with positive environmental impacts.

Investors in green bonds

- No precise breakdown of who owns the outstanding stock of green bonds.
- Placement details from green bond issuers indicate that they are largely held by institutional investors, such as asset managers, pension plans, insurance companies and banks, in proportions similar to conventional bonds.
- The main difference from conventional bonds is that green bonds are more likely to be held by investors with responsible investment mandates.
- About 45-65% of green bonds appear to be placed with investors with responsible investment mandates according to a market survey.
Green bond indices

- Several green bond indices have been created since 2014.
- The most widely used is the Bloomberg Barclays MSCI Green Bond Index, which is composed of about 150 green bonds issued in multiple currencies.
- Three other widely used indices are the S&P Green Bond Select Index, the Bank of America Merrill Lynch Green Bond Index and the Sodactive Green Bond Index.
- The ChinaBond Green Bond Index Series and the CUFE-CNI Green Bond Index Series provide measures of the PRC’s green bond market.

Green bond listing boards

- The Luxembourg Stock Exchange and the London Stock Exchange have the largest number of green bond listings.
- The Singapore Exchange also lists green bonds.
- Both the Shanghai Stock Exchange and the Shenzhen Stock Exchange are listing green bonds on a pilot basis.
ASEAN+3 experience with green bonds

- The PRC issued national standards governing green bond issuance in 2015. With the exception of those issued for state-owned enterprises, these standards are broadly in line with the 2016 version of GBP.
- The Japan Ministry of the Environment issued voluntary green bond guidelines in March 2017, which are aligned with the GBP.

ASEAN+3 experience with green bonds

- The ASEAN Capital Market Forum released in November 2017 agreed ASEAN green bond standards as part of the broader regional convergence program.
- The ASEAN green bond standards are closely aligned with the GDP, which helps to promote alignment with international and other national and regional standards.
- The regional standards will be implemented by national authorities.
Green bond issuance in the ASEAN+3 region

- There are only about $180 billion of outstanding green bonds globally.
- The PRC was the largest issuer of green bonds in 2016 and during the first half of 2017 ($6.2 billion).
- For issuances elsewhere in ASEAN+3, Japan issued $2.2 billion, the Republic of Korea $1.7 billion, Singapore $549 million, the Philippines $200 million, Malaysia $58 million and Thailand $92 million.

Barriers to green bond markets in the ASEAN+3 region

- Lack of national policy framework (issuers and investors in the region appear less comfortable relying on industry norms than their counterparts in Europe and North America);
- Limited supply of green bonds;
- Limited demand for green bonds (absence of investors with responsible investment mandates); and
- Low level of understanding of benefits of green bond markets and limited awareness of international standards and how they work.
Recommendations to promote local currency green bonds in the ASEAN+3 region

The preconditions for local currency bond markets and private financing of green projects and assets should be in place prior to considering direct interventions in support of green bonds.

At the national level
- Link efforts to promote green bond markets into national strategies dealing with climate change and/or sustainable development.
- Require knowledge of responsible investment including both financial factors and ESG factors and ESG analysis to be a licensing requirement for investment managers.

Recommendations to promote local currency green bonds in the ASEAN+3 region

At the national level
- Encourage national, regional, and global public entities to issue green bonds and national, regional, and global public funds to commit to investing in local currency green bonds.
- Provide support for awareness programs and technical and financial support to facilitate potential green bond issuers’ access to green debt markets.
Recommendations to promote local currency green bonds in the ASEAN+3 region

At the regional level

- Encourage CGIF allocate a portion of guarantee operations to green bonds;
- Consider a possibility of establishing a regional green bond support facility to provide technical and financial support for potential issuers to tap green bond market (similarly to what was provided for AP Renewables, Inc. with its climate bond for the Tiwi-MakBan geothermal energy facilities);
- Provide specific coverage of green bonds on AsianBondsOnline.Adb.org

Recommendations to promote local currency green bonds in the ASEAN+3 region

At the regional level

Under ABMF

- Consider requesting ICMA to present annual updates on GBPs and green bond market development globally to members of ASEAN+3 Bond Market Forum (ABMF); and
- Continue efforts to work with market participants in addressing barriers to cross-border bond issuance and investment under ABMF.
Policies that should not be considered

- Tax incentives or subsidies for issuers of green bonds;
- Tax incentives for investors in green bonds;
- Official assistance or financial support for national or regional green bond indices;
- Official assistance or financial support for national or regional local-currency bond exchange traded funds (ETF); and
- Official support for a regional securitization vehicle

Thank you

Noy Siackhanchan
Asian Development Bank
Collective Investment Scheme: Its Roles in Supporting Capital Market Development and Infrastructure Investment
Collective Investment Scheme: Its Roles in Supporting Capital Market Development and Infrastructure Investment

Kitti Sutthiatthasil
Senior Vice President
February 1, 2018

Agenda

- Thailand’s Capital Market
- Local Institutional Investor Development
- Infrastructure Investment
Sources of fund for Thailand’s economic development are balanced

Thailand’s Outstanding Value of Bank Loan, Equity Market and Bond Market Since 1980

<table>
<thead>
<tr>
<th>Year</th>
<th>Bank Loan (Billion USD)</th>
<th>Corporate Bond Outstanding</th>
<th>Gov't Bond Outstanding</th>
<th>Market Capitalization of Stock Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>245</td>
<td>87</td>
<td>245</td>
<td>526</td>
</tr>
<tr>
<td>1982</td>
<td>245</td>
<td>87</td>
<td>245</td>
<td>526</td>
</tr>
<tr>
<td>1984</td>
<td>245</td>
<td>87</td>
<td>245</td>
<td>526</td>
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<tr>
<td>1986</td>
<td>245</td>
<td>87</td>
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<td>526</td>
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<td>1988</td>
<td>245</td>
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<td>1992</td>
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<td>1994</td>
<td>245</td>
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<td>1996</td>
<td>245</td>
<td>87</td>
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<td>526</td>
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<tr>
<td>1998</td>
<td>245</td>
<td>87</td>
<td>245</td>
<td>526</td>
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<tr>
<td>2000</td>
<td>245</td>
<td>87</td>
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<td>2002</td>
<td>245</td>
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<td>2004</td>
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<td>2006</td>
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<td>2008</td>
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<td>2010</td>
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<tr>
<td>2014</td>
<td>245</td>
<td>87</td>
<td>245</td>
<td>526</td>
</tr>
<tr>
<td>2016</td>
<td>245</td>
<td>87</td>
<td>245</td>
<td>526</td>
</tr>
<tr>
<td>2018</td>
<td>245</td>
<td>87</td>
<td>245</td>
<td>526</td>
</tr>
</tbody>
</table>

Global Financial Crisis 2008
Asian Financial Crisis 1997

Note: Market cap and bond outstanding as end of December 2017. Bank lending as end of October 2017
Source: WFE, Bank of Thailand, ThaiBMA

Thailand’s capital market is relatively developed compared to that of peers

<table>
<thead>
<tr>
<th>Country</th>
<th>Market Capitalization</th>
<th>GDP**</th>
<th>Market Cap / GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>787,255</td>
<td>305,757</td>
<td>257%</td>
</tr>
<tr>
<td>Thailand</td>
<td>525,713</td>
<td>444,898</td>
<td>118%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>520,687</td>
<td>1,010,937</td>
<td>52%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>455,773</td>
<td>309,858</td>
<td>147%</td>
</tr>
<tr>
<td>Philippines</td>
<td>290,401</td>
<td>321,189</td>
<td>90%</td>
</tr>
</tbody>
</table>

Note: Market cap and bond outstanding as of December 2017. Bank lending as of October 2017
Source: SETSMART, World Federation of Exchanges as of December 2017, IMF
Thailand operates the largest exchange in ASEAN in terms of liquidity

Average daily trading value of equity markets
Unit: Million USD

Investor base in Thai stock market is well diversified

Value of stocks held by investor type
Unit: Percent, data as of May 2017

Trading participation by investor type
Unit: Percent, data as of 2017
The size of institutional investors differs widely

Institutional Investor Asset Size to GDP (%) - Year 2014

Source: Tapping Capital Markets & Institutional Investors for Infrastructure Development, ESCAP
Asset held by Thai institutional investor has grown rapidly

Size of Thailand’s local institutional investors

Unit: Million USD

<table>
<thead>
<tr>
<th>Year</th>
<th>Total AUM (Mil. USD)</th>
<th>% to GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>161,950</td>
<td>49%</td>
</tr>
<tr>
<td>2011</td>
<td>164,578</td>
<td>50%</td>
</tr>
<tr>
<td>2012</td>
<td>202,412</td>
<td>54%</td>
</tr>
<tr>
<td>2013</td>
<td>208,027</td>
<td>57%</td>
</tr>
<tr>
<td>2014</td>
<td>249,480</td>
<td>68%</td>
</tr>
<tr>
<td>2015</td>
<td>255,040</td>
<td>67%</td>
</tr>
<tr>
<td>2016</td>
<td>276,671</td>
<td>69%</td>
</tr>
<tr>
<td>Nov 17</td>
<td>332,143</td>
<td>75%</td>
</tr>
</tbody>
</table>

Non-life insurance
Life insurance
Social securities office
Government pension fund
Provident funds
Mutual funds**

Total AUM held by local institutional investors

Unit: Million USD

<table>
<thead>
<tr>
<th>Year</th>
<th>Total AUM (Mil. USD)</th>
<th>% to GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
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</tr>
<tr>
<td>Nov-17</td>
<td>332,143</td>
<td>75%</td>
</tr>
</tbody>
</table>

Part of their asset is invested in Thai stocks

Total AUM held by local institutional investors

Unit: Million USD

Thai stocks = 14%

Thai stocks = 12%

Other assets

Source: AIMC (Association of Investment Management Companies)
Mutual fund is the driving force that expands domestic investor base

Equity holding value in Thai stock by local institutional investors

<table>
<thead>
<tr>
<th>Year</th>
<th>Equity holding value (Mil. USD)</th>
<th>Market cap (Mil. USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>19,833</td>
<td>264,438</td>
</tr>
<tr>
<td>2011</td>
<td>18,480</td>
<td>278,248</td>
</tr>
<tr>
<td>2012</td>
<td>25,837</td>
<td>384,897</td>
</tr>
<tr>
<td>2013</td>
<td>26,116</td>
<td>378,870</td>
</tr>
<tr>
<td>2014</td>
<td>32,793</td>
<td>438,348</td>
</tr>
<tr>
<td>2015</td>
<td>30,013</td>
<td>349,425</td>
</tr>
<tr>
<td>2016</td>
<td>35,850</td>
<td>442,597</td>
</tr>
<tr>
<td>2017</td>
<td>47,103</td>
<td>526,580</td>
</tr>
</tbody>
</table>

Remark: * Excluding open-ended fund which have specific objective, i.e. Vayupak fund, property fund for resolving financial institution problems, Thailand equity fund.

** Including Thai equity funds, LTF, RMF equity, 50% of mix funds

Source: SET, AIMC, OIC, GPF, SSO

The Government has provided tax incentive to encourage long-term and retirement planning using equity funds

Total asset value, classified by fund type*

<table>
<thead>
<tr>
<th>Year</th>
<th>Fixed income fund</th>
<th>Foreign Investment Fund (FIF)</th>
<th>Mixed Funds</th>
<th>Equity Fund**</th>
<th>LTF (since 2004)</th>
<th>RMF (since 2001)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>8,754</td>
<td>12,182</td>
<td>19,390</td>
<td>42,398</td>
<td>118,295</td>
<td>5,466</td>
</tr>
<tr>
<td>2009</td>
<td>16,680</td>
<td>27,862</td>
<td>19,327</td>
<td>42,558</td>
<td>118,295</td>
<td>5,466</td>
</tr>
<tr>
<td>2010</td>
<td>14,807</td>
<td>29,790</td>
<td>19,327</td>
<td>52,382</td>
<td>118,295</td>
<td>5,466</td>
</tr>
<tr>
<td>2011</td>
<td>10,961</td>
<td>20,697</td>
<td>19,327</td>
<td>50,836</td>
<td>118,295</td>
<td>5,466</td>
</tr>
<tr>
<td>2012</td>
<td>10,961</td>
<td>20,000</td>
<td>0</td>
<td>50,836</td>
<td>118,295</td>
<td>5,466</td>
</tr>
<tr>
<td>2013</td>
<td>134</td>
<td>26,636</td>
<td>0</td>
<td>67,588</td>
<td>118,295</td>
<td>5,466</td>
</tr>
<tr>
<td>2014</td>
<td>0</td>
<td>40,875</td>
<td>0</td>
<td>69,144</td>
<td>118,295</td>
<td>5,466</td>
</tr>
<tr>
<td>2015</td>
<td>0</td>
<td>47,719</td>
<td>0</td>
<td>87,699</td>
<td>118,295</td>
<td>5,466</td>
</tr>
<tr>
<td>2016</td>
<td>0</td>
<td>27,538</td>
<td>0</td>
<td>88,322</td>
<td>118,295</td>
<td>5,466</td>
</tr>
<tr>
<td>2017</td>
<td>0</td>
<td>27,538</td>
<td>0</td>
<td>93,570</td>
<td>118,295</td>
<td>5,466</td>
</tr>
</tbody>
</table>

Remark: * Excluding special purpose fund (Ex. Vayupak, Fund for Resolving Financial Institution Problem Fund)

** Equity fund exclude equity LTF/RMF/FIF

Source: Association of Investment Management Companies (AIMC)
Local institutional investor development requires a long-term planning

Average daily trading value and Market capitalization 1975 – 2017
Unit: Million USD

Domestic investors help stabilize the market amid volatile foreign fund flows
Cumulative net buy (sell) by investor type
Unit: Million Baht

Source: The Stock Exchange of Thailand
Institutional investors actively promote corporate governance

ACGA's CG Watch market scores: 2007 to 2016*

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hong Kong (67)</td>
<td>1. Singapore (67)</td>
</tr>
<tr>
<td>2.</td>
<td>Singapore (65)</td>
<td>2. Hong Kong (65)</td>
</tr>
<tr>
<td>3.</td>
<td>India (56)</td>
<td>3. Japan (63)</td>
</tr>
<tr>
<td>4.</td>
<td>Taiwan (54)</td>
<td>4. Taiwan (60)</td>
</tr>
<tr>
<td>5.</td>
<td>Japan (52)</td>
<td>5. Thailand (58)*</td>
</tr>
<tr>
<td>6.</td>
<td>Korea (49)</td>
<td>6. Malaysia (56)</td>
</tr>
<tr>
<td>7.</td>
<td>Malaysia (49)</td>
<td>7. India (55)</td>
</tr>
<tr>
<td>8.</td>
<td>Thailand (47)</td>
<td>8. Korea (52)</td>
</tr>
<tr>
<td>9.</td>
<td>China (45)</td>
<td>9. China (43)</td>
</tr>
<tr>
<td>11.</td>
<td>Indonesia (37)</td>
<td>10. Indonesia (36)</td>
</tr>
</tbody>
</table>

Source: Asian Corporate Governance Association

* Remark on Thailand: ACGA sees Thailand is moving ahead with pre-existing national CG policies and plans. Enforcement is also better. However, political / regulatory falls in Thailand remain a drag, though this could be improved as political blockage is solved and institutional framework is enhanced.

Number of top 50 companies in ASEAN were awarded 2015 ASEAN CG scorecard*

<table>
<thead>
<tr>
<th></th>
<th>Thailand</th>
<th>Philippines</th>
<th>Singapore</th>
<th>Malaysia</th>
<th>Indonesia</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>23</td>
<td>11</td>
<td>8</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: ASEAN CG Scorecard is a program initiated by the ASEAN Capital Markets Forum (ACMF) and supported by the Asian Development Bank (ADB).

Agenda

- Thailand’s Capital Market
- Local Institutional Investor Development
- Infrastructure Investment
Thailand plans to invest 1.8 trillion Baht in infrastructure projects

Total Investment budget for logistics and infrastructure investment project

1.8 trillion THB
for 20 projects under 5 transportation sectors

Source: State Enterprise Policy Office, Ministry of Finance

Government financing alone will not be sufficient

Source of fund for Thailand's infrastructure development projects

<table>
<thead>
<tr>
<th>Source of fund</th>
<th>Total Infrastructure Investment Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Million THB</td>
</tr>
<tr>
<td>Government/ SOEs borrowing</td>
<td>1,137,558</td>
</tr>
<tr>
<td>PPPs</td>
<td>376,890</td>
</tr>
<tr>
<td>Annual Budget</td>
<td>212,235</td>
</tr>
<tr>
<td>SOEs Revenue</td>
<td>55,503</td>
</tr>
<tr>
<td>Toll Road Fund</td>
<td>14,200</td>
</tr>
<tr>
<td>Total</td>
<td>1,796,386</td>
</tr>
</tbody>
</table>

Source: State Enterprise Policy Office, Ministry of Finance as of March 2016

- Government has to manage its public debt
- Private participation in infrastructure is needed
- Bank loans have been the main source of funding private participation
- However, bank capacity may be limited and constrained
Infrastructure funds serve as an alternative funding source

**Benefits to Investors**
- Match long-term duration
- Generate higher return and relatively lower volatility
- Portfolio diversification
- Inflation protection

**Benefits to Issuers**
- Recycle operating assets in order to generate cash flow for new projects

Source: State Enterprise Policy Office, Ministry of Finance

---

**Ecosystem of Infrastructure Investment**

1. Portfolio of Infrastructure assets
   - Express Way
   - Airport
   - Pier
   - Other Assets

2. Sponsor Company/Operator
   - Public/PPP/Private

3. Infrastructure Fund Manager
   - Professional to increase efficiency and add value into infrastructure
   - Enhance Corporate Governance

4. Retail Investors (Invest in listed fund)
   - Institutional Investors (Pension fund/Insurance/Sovereign wealth fund)

5. Regulator/Government
   - Plan to establish and enhance infrastructure
   - Fundraising
   - Determine rights and regulations
   - Cooperate with stakeholders

Other Assets

**Ecosystem**
- 1. Portfolio of Infrastructure assets
- 2. Sponsor Company
- 3. Infrastructure Fund Manager
- 4. Institutional Investors
- 5. Regulator and Government

- Similar sector
- Acquired assets into portfolio by starting from Brownfield
Characteristics of infrastructure fund

- **Low-risk core**
  - Brownfield project which has no income risk
  - Cash flow is similar to fixed income asset
  - Social Infrastructure e.g. educational institution, hospital, prison

- **Medium-risk value added**
  - Brownfield Expansion Project e.g. expanding express ways and improving administration of airports and piers
  - Require administrative and management professionals to increase efficiency and knowledge of the industry

- **High-risk opportunistic**
  - Greenfield project e.g. satellite or utilities of developing countries
  - Similar to private equity
  - Require professionals to manage risk and add value to assets

Mostly invest in Core/Mature and Core/growth

<table>
<thead>
<tr>
<th>Characteristics of infrastructure fund</th>
<th>Low-risk core</th>
<th>Medium-risk value added</th>
<th>High-risk opportunistic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low-risk core</strong></td>
<td>Brownfield project which has no income risk</td>
<td>Brownfield Expansion Project e.g. expanding express ways and improving administration of airports and piers</td>
<td>Greenfield project e.g. satellite or utilities of developing countries</td>
</tr>
<tr>
<td></td>
<td>Cash flow is similar to fixed income asset</td>
<td>Require administrative and management professionals to increase efficiency and knowledge of the industry</td>
<td>Similar to private equity</td>
</tr>
<tr>
<td></td>
<td>Social Infrastructure e.g. educational institution, hospital, prison</td>
<td></td>
<td>Require professionals to manage risk and add value to assets</td>
</tr>
</tbody>
</table>

Local institutions are major investors in listed infrastructure funds

Example of infrastructure investments raising fund through SET

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Local Investor</th>
<th>Foreign Investor</th>
<th>Local Institute</th>
<th>Foreign Institute</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABPIF</td>
<td>41.65%</td>
<td>29.03%</td>
<td>57.35%</td>
<td>70.69%</td>
</tr>
<tr>
<td>EGATIF</td>
<td>17.52%</td>
<td>36.71%</td>
<td>13.35%</td>
<td>51.56%</td>
</tr>
<tr>
<td>BTSGIF</td>
<td>29.77%</td>
<td>11.22%</td>
<td>17.52%</td>
<td>12.52%</td>
</tr>
<tr>
<td>DIF</td>
<td>57.35%</td>
<td>57.36%</td>
<td>36.71%</td>
<td>51.56%</td>
</tr>
<tr>
<td>JASIF</td>
<td>11.22%</td>
<td>12.52%</td>
<td>51.56%</td>
<td>51.56%</td>
</tr>
</tbody>
</table>

**Source:** The Stock Exchange of Thailand as of November 2017
Conclusion

- Capital market development is a long journey that requires coordination and planning on both demand and supply sides
- Local institutional investors improve market quality and stability
- Local institutional investors provide availability of funds to finance infrastructure investments
DAY 1: Session 6

Progress of Working Group on Information Platform
Progress of Asian Bonds Online

- ABO maintains and improves the online data portal that disseminates bond market development information to users from both public and private sectors within and outside the region.

- ABO serves as the regional information platform to support bond market development of ASEAN+3 under the ABMI.

- A new ABO TA from the Japanese government has been approved and formally started in Jan 2018.

- This new ABO TA focuses on making the information dissemination more user friendly via a website revamp.
Other work done in 2017

- Knowledge dissemination: Quarterly publication of the Asia Bond Monitor (ABM) which discusses the development in bond markets of ASEAN+3.
  - March and September issues were launched online
  - June issue was launched in Tokyo to jointly with ADBI
  - November 2017 issue was launched in Kuala Lumpur jointly with CIMB ASEAN Research Institute.
- Capacity building on “Bond Market Development in Emerging East Asia”
  - We have conducted workshops in partnership with the Securities and Exchange Commission of Myanmar.
  - Experts from Thailand, Malaysia, Indonesia shared knowledge and experience on their bond market development process.
  - Participants are from public and private sectors

Improvement in 2017

- Based on user request, we enriched some market indicators in 2017:
  - Added pricing data from several bond pricing agencies
  - Made some upgrades to website appearance
- Key information and updates are highlighted for easy accessibility
Feedback on the ABO website

- Based on a user survey conducted in 2017
  - Users rated the following aspects: visual appearance, easy navigation, accessibility, relevance of content, timeliness of data and market coverage

![Bar chart showing user ratings](chart.png)

ABO Revamp Plan

- **Easy Navigation** —
  Make the data inquiry interactive.
  - Users are able to select fields (country, variable, currency, time etc)
  - Users can generate online figures upon their inquiry criteria as well as downloadable data set.
  - This saves users time and make relevant information easier to find.
ABO Revamp Plan

• **Accessibility** –
  Launch mobile app to foster convenient data search and usage.
  – This is to make it more mobile device friendly, supporting usage on smart phones and ipads etc.
  – To make information easy to locate, key information will be highlighted

• **Timeliness of data** –
  Automatically updating non-data information
  – Given standard framework of Bond Market Guides, some of the key information can be extracted in *a comparable manner* and disseminated on ABO
  – Non-data information can be automatically updated once BMG is revised when a market has major changes in regulation.
ABO Revamp Plan

• Richer data & greater market coverage
  – Based on users’ feedback, more variables that are of users’ interests can be developed. Possible future variables include dim sum bonds, advanced economy data indicators, FCY bond issuance and capital flows.
  – Similar to situations faced by databases of BIS and World Bank, some variables may be not comparable due to authority reporting inconsistency.
  – One possible improvement is to provide support to the member countries, and create more standard data that are structured as much comparable as possible.
  – Country coverage may be further expanded

Bond Market Developments

• Emerging East Asia’s LCY bond market continued to expand in the third quarter of 2017, reaching a size of USD11.6 trillion at the end of September 2017
  ➢ Growth was higher at 4.2% q-o-q and 11.6% y-o-y in Q3 2017 compared with 3.3% q-o-q and 10.6% y-o-y in Q2 2017.
  ➢ Government bonds continued to dominate the region’s bond market accounting for a 66.5% share of total bonds at the end of September
• The People’s Republic of China remained the largest bond market in the region
• The Republic of Korea had the highest bonds to GDP share
• LCY bond issuance rose in Q3 2017 to USD1.3 trillion, driven largely by a recovery in the PRC’s issuance
LCY Bond Markets Continue to Grow

Size of Emerging East Asia’s LCY Bond Market—Taka’s san’s 2/3 rule

Note: Emerging East Asia comprises the People’s Republic of China; Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.
Source: AsianBondsOnline.

PRC Remains the Largest Bond Market in the Region

LCY Bond Outstanding—Taka’s san’s 2/3 rule

Source: AsianBondsOnline.
Share of Bonds to GDP is the Largest in the Republic of Korea

LCY Bonds Outstanding as a Share of GDP

Government Bond Yields Movements Mixed in Emerging East Asian Markets

Note: Data reflect changes between 1 October 2017 and 15 January 2018.
Source: AsianBondsOnline calculations based on Bloomberg LP data.
Currency Strengthens, Equity Gains

Changes in FX Rates (%)

Changes in Equity Indexes (%)

Note. Data reflect changes between 1 October 2017 and 15 January 2018.
Source: AsianBondsOnline calculations based on Bloomberg LP data.

CDS Spread Declines in All Emerging East Asian Markets

Credit Default Swap Spreads (Senior 5-year)

Note. Data reflect changes between 1 October 2017 and 15 January 2018.
Source: AsianBondsOnline calculations based on Bloomberg LP data.
Foreign Holdings of Government Bonds Rose at the end of September

Foreign Holdings in LCY Government Bonds

LHS = left-hand side, RHS = right-hand side.
Note: Data as of end-September 2017.
Source: AsianBondsOnline.

THANK YOU
DAY 1: Session 7

AMBFIF Taxation Study
WHY DO WE NEED LOCAL CURRENCY CAPITAL MARKETS?

Source: IMF Working Paper - The Development of Local Capital Markets: Rationale and Challenges by Luc Laeven
WHY DO WE NEED LOCAL CURRENCY CAPITAL MARKETS?

LCY bond market has helped the government (1) to reduce reliance on offshore funding and (2) to reduce foreign exchange risk.

Source: ThaiBMA

After the 1997 crisis, Thai Bond Market has significantly grown from 12% of GDP to 76%.
This created more balance among 3 main financial pillars (bank loan, equity and bond market).
Corporate bond has been continuously increasing, and unaffected by 2008 subprime crisis impacts.

Source: ThaiBMA
CURRENT STATUS OF REGIONAL LCY CAPITAL MARKETS

EVOLUTION OF BOND MARKET DEVELOPMENT

Prior to 1999
- Domestic Bond Market Development Committee was established

1999
- Public Debt Management Office (PDMO) was established

2001

2005

2016
- Developing Strategy and Regulating Bond Market

Source: World Federation of Exchanges, AsianBondsOnline
EVOLUTION OF BOND MARKET DEVELOPMENT

Domestic Bond Market Development Committee

- Task Force: solving problems in
  - Primary Market
  - Secondary Market
  - Clearing and Settlement System
  - Taxation on Debt Instrument Transaction
  - Bond Market Information
  - Market Convention and Code of Conduct
  - Debt Management Office
  - Private Repo Market

- Composition:
  - MOF
  - BOT
  - SEC
  - Thai BDC
  - Commercial Banks

The establishment of Public Debt Management Office (1 Oct 1999)

Source: Public Debt Management Office

2ND DOMESTIC BOND MARKET DEVELOPMENT PLAN (2005-2014)

Objectives:
1. Strengthen the role of bond market in promoting financial market and economic stability
2. Develop Thailand’s bond market as a regional fund raising hub and investment destination of choice

Primary Market Development (PDMO)
IT and Human Resources (ThaiBMA)
Taxation (Revenue Department)
Bond Market Infrastructure (SEC)
Secondary Market Development (BOT)
DEVELOPMENT OF TAXATION – KEY MILESTONES

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Source: Bank of Thailand, AsiaBondsOnline</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEVELOPMENT OF TAXATION – KEY MILESTONES</td>
<td></td>
</tr>
<tr>
<td>% of Foreign Holdings</td>
<td>Foreign Holdings in LCY Government Bonds and Movement of Exchange Rate (USD/THB)</td>
</tr>
<tr>
<td>20%</td>
<td>RD No. 425 &amp; MN No. 249 (Jan 2008) - Repealed RD No. 353 - SBT reduced to 0.01%</td>
</tr>
<tr>
<td>18%</td>
<td>RD No. 430 (Dec 2000) - Only investment made before 13 Dec 2010 are eligible for exemption</td>
</tr>
<tr>
<td>16%</td>
<td>RD No. 353 (Dec 2000) - SBT reduced to 0.01%</td>
</tr>
<tr>
<td>14%</td>
<td>RD No. 425 (Jan 2001) - SBT was waived for bond market transactions</td>
</tr>
<tr>
<td>12%</td>
<td>RD No. 429 &amp; MN No. 249 (Jan 2005) - NRs not doing business in Thailand are exempted from income tax on income derived from government securities</td>
</tr>
<tr>
<td>10%</td>
<td>RD No. 469 (Jan 2008) - Repealed RD No. 429 - only investment made before 13 Dec 2010 are eligible for exemption</td>
</tr>
<tr>
<td>8%</td>
<td>RD No. 388 (Sep 2001) - BGT imposed capital control</td>
</tr>
<tr>
<td>6%</td>
<td>RD No. 429 &amp; MN No. 249 (Jan 2005) - NRs not doing business in Thailand are exempted from income tax on income derived from government securities</td>
</tr>
<tr>
<td>4%</td>
<td>RD No. 469 (Jan 2008) - Repealed RD No. 429 - only investment made before 13 Dec 2010 are eligible for exemption</td>
</tr>
<tr>
<td>2%</td>
<td>RD No. 388 (Sep 2001) - BGT imposed capital control</td>
</tr>
<tr>
<td>0%</td>
<td>RD No. 429 &amp; MN No. 249 (Jan 2005) - NRs not doing business in Thailand are exempted from income tax on income derived from government securities</td>
</tr>
</tbody>
</table>

Rationale:
To develop and recover financial market in the aftermath of AFC
To support fund-raising activities of the Government, and special purpose FIs under Asian Bond Fund Framework
To promote treasury portfolio and participation of FIs in financial market
Repealed RD No. 429 and MN No. 249 as tax incentives may cause economic instability and to slowdown influx of foreign capital, thus subject to 15% WHT

CURRENT CAPITAL MARKETS TAXATION FRAMEWORK

<table>
<thead>
<tr>
<th>Types of Income</th>
<th>Resident Retail Investors</th>
<th>Resident Juristic Persons</th>
<th>Non-Residents Juristic Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity Securities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital gains</td>
<td>Exempted</td>
<td>No WHT, but subject to CIT</td>
<td>15% FWT^</td>
</tr>
<tr>
<td>Dividends</td>
<td>10% WHT</td>
<td>10% WHT</td>
<td>15% FWT</td>
</tr>
<tr>
<td>Debt Securities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital gains</td>
<td>15% WHT</td>
<td>No WHT, but subject to CIT</td>
<td>15% FWT**</td>
</tr>
<tr>
<td>Interest</td>
<td>15% WHT</td>
<td>No WHT (FI-FI*), but subject to CIT, or else 1% WHT</td>
<td>15% FWT**</td>
</tr>
<tr>
<td>Discount</td>
<td>15% WHT taxed at first hand</td>
<td>No WHT (FI-FI*), but subject to CIT, or else 1% WHT</td>
<td>15% FWT** only at first hand</td>
</tr>
<tr>
<td>Stamp Duty</td>
<td>1 THB for every 1,000 THB (0.1%)***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Business Tax</td>
<td>0.01% for interest income on bonds</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

^ Foreign investors from these countries are exempted from capital gain tax under tax treaties
* Under the law of finance business, securities business and credit foncier business
**Except gains/interest/discount from bond issued by government, state agencies, or financial institution under specific law for the agricultural, commerce and industrial lending
*** Only apply to physical certificates of non-listed securities. Transfer of government securities is exempted
NEXT STEPS

1. Continuously provide technical support to ABMF members e.g.
   - Philippines’ Capital Income Tax Reform: Briefing on the Capital Income and Financial Services Taxation (PACKAGE 4 OF CTRP) in November 2017

2. Finalize AMBIF Taxation Study for Thailand by June 2018
   1. Bond Market Overview
   2. Key Development Milestones, including bond market development plans
   3. Bond Market Taxation in Thailand
      - Description of different types of taxes
      - Major developments and policy implications
      - Current framework
   4. Recommendation

THANK YOU