

28TH ASEAN+3 BOND MARKET FORUM (ABMF) MEETING AND RELEVANT MEETINGS

18-21 June 2018 / Seinan Gakuin University, Fukuoka City, Japan

DAY 2 - 19 JUNE 2018

VENUE: MULTI-PURPOSE HALL, 1ST FLOOR, CENTENNIAL HALL

28 th ASEAN+3 Bond Market Forum (ABMF)						
TIME PROGRAM						
ABMF Sub Forum 1 (SF1) Meeting						
08:30 - 09:00	Registration					
09:00 - 09:10	Opening Remarks of SF1 by Mr. Koji Ito, Sub Forum 1 Chair					
09:10 - 09:40	Session 1: Current state of Mongolian bond market by Mr. Zorigtbat Tseveenjav, Ministry of Finance, Mongolia					
09:40 – 09:55	Session 2: Update of ASEAN+3 Multi-Currency Bond Issuance Framework by ADB Secretariat - Pilot issue and possible enlargement of AMBIF participating markets					
09:55 – 10:10	Session 3: Update of ASEAN+3 Bond Market Guides by Prof. Shigehito Inukai and Mr. Matthias Schmidt, ADB Secretariat					
10:10 – 10:30	Session 4: New ASEAN3 Government Bond Index by Mr. Mohd Shaharul, Bond Pricing Agency Malaysia					
10:30 – 10:50	Coffee Break					
10:50 – 11:10	Session 5: Progress of Working Group on Information Platform by Dr. Donghyn Park, Principal Economist and Dr. Shu Tian, Economist of AsianBondsOnline (ADB)					
11:10 – 11:40	:40 Session 6: Comparison of ASEAN 6 corporate bond markets by Dr. Dong Woo Rhee, Chief Financial Officer, Credit Guarantee and Investment Facility					
11:40 – 12:00	Session 7: AMBIF Taxation Study by Mr. Kosintr Puongsophol, ADB Secretariat					
12:00 – 12:10	Wrap-up by ADB Secretariat					
12:10 – 12:15	Closing Remarks by Mr. Koji Ito, Sub Forum 1 Chair					

28 th ASEAN+3 Bond Market Forum (ABMF)							
12:15 – 13:30	Lunch (Reception Hall, Seinan Community Center)						
ABMF Sub Forum 2 (SF2) Meeting							
13:00 – 13:30	Registration						
13:30 – 13:40	Opening Remarks by Mr. Seung-Kwon Lee, SF2 Chair						
13:40 – 14:00	Session 8: Update on the Account Structure Survey by ADB Secretariat and NTT Data, ABMF International Expert - Key findings of market visits in PRC						
14:00 – 14:40	Session 9: How can ISO 20022 link the global markets and support transformation of banking? by Mr. Masayuki Tagai, JP Morgan, ISO 20022 RMG Vice Convener						
14:40 – 15:15	 Session 10: Case study: Technologies and standardization to support efficient regulatory reporting and financial transactions Financial Data Standardisation Project and Eurosystem Collateral Management System in EU by Mr. Michal Piechocki, BR-AG and Francois Laurent, European Central Bank 						
15:15 – 15:35	Coffee Break						
15:35 – 16:30	Session 11: Legal Entity Identifier by Mr. Stephan Wolf, CEO, Global LEI Foundation (GLEIF) - framework of Global LEI system and application - Potential for enhancing trust - The LEI in Reporting						
16:30 – 16:40	Wrap-up of Day 2 by ADB Secretariat						



MINISTRY OF FINANCE





Mongolian capital markets

June 2018

ZORIGTBAT Tseveenjav

Acting Director General, Financial Policy Department Ministry of Finance of Mongolia

LKHAGVAZAYA Vasha

Analyst, Financial Policy Department Ministry of Finance of Mongolia

Contents

- I. Recent developments & macroeconomic indicators
- II. Fiscal / Monetary Policy
- III. Mongolian capital market



Mongolia at a glance

Country profile:

- Location: Between Russia and China
- Population: 3.2 mln
- Territory: 1.6 mln sq. km

Key macro-economic drivers in 2017:

- GDP nominal: MNT 27.2 trillion, USD 11.2 billion
- Real GDP growth: 5.1
- CPI: 6.4 percent
- Total Revenue and Grants: MNT 7.2 trillion
- Total expenditure and net lending: MNT 8.9 trillion
- Fiscal deficit: MNT 1.7 trillion
- Government debt outstanding: MNT 14.3 trillion, USD 7.2 billion
- Trade balance: USD 1.6 billion

Key export commodities:

- Copper
- Coal
- Gold



I. Recent developments & macroeconomic indicators

Economic update: IMF Program – Implementation on Track

IMF Executive Board Completes First anda Second Reviews 15 Dec 2017	 Trigger For Ongoing Implementation: 15 Dec 2017, IMF Executive Board completed first and second reviews of Mongolia's performance under the EFF programme Completion allows draw of SDR 55.912mn (US\$ 79.1mn), bringing total disbursements under the arrangement to SDR 83.868mn (US\$ 118.6mn) 				
IMF Program Mission 19 Feb 2017 Reached a Staff-Level Agreement with the Government (GoM) and Bank of Mongolia (BoM)	 Policy Measures and Strategy: Government – stabilize the economy, boost growth prospects, and restore debt sustainability. Significant fiscal adjustments, strengthen fiscal discipline at every stage of the budget process. Diversify the economy and improve its competitiveness Bank of Mongolia – maintain prudent monetary policy, strengthen the banking sector and not to engage in quasi-fiscal activities. Revision of a new central bank law in line with international best practice. Banks subject to an independent Asset Quality Review ("AQR") Development Bank of Mongolia (DBM) - operate in an independent and purely commercial manner with adoption of revised DBM law 				
IMF Executive Board 24 May 2017 Approved a 3-year extended arrangement under the Extended Fund Facility ("EFF") program	 Funding Under the EFF Program: World Bank – US\$600 million concessional financing ADB – US\$600 million budget support concessional loan and US\$300 million concessional project loan. Country Partnership Strategy (2017-2020) is approved with amount of US\$1.2 billion Japan - US\$850 million in budget support for 3 years Korea – US\$700 million in project financing China – RMB 15 billion swap line between the PBOC and BOM extended for another 3 years Other Multilateral / Bilateral Support: EBRD – Framework Agreement \$500 million concessional financing in process. Pipeline projects under discussion USA – 2nd Millennium Challenge Compact Grant of \$350 million, terms are under negotiation India - US\$10 million in infrastructure and industry development funding (in May 2015) Turkey - US\$300 million concessional loan is under negotiation 				

Economic update: Key Highlights

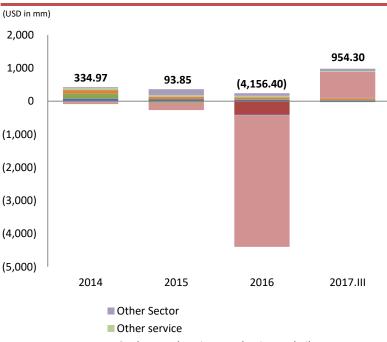
Overview	 Mongolian economy performed well in 9M2017 driven by high commodity prices, increased investment and construction in mega mining projects and other sectors that are related to the mining sector such as sales, transportation and manufacturing Economic growth reached 6.7% in the 3rd quarter, year to date growth is at 5.8% and output gap is estimated to be positive Following increased commodity prices in the 3rd quarter mining sector grew by 5.2%, while non-mining sector grew by 7.2%
Demand side	 Household consumption, investments and net exports made positive contributions to growth, which are 2.9%, 2.3% and 3.8% respectively Government expenditure shrunk 18.4% y-o-y reducing overall growth by 2.5% Imports grew by 12.5%, while export reached 17.8%. Household consumption was boosted by increasing wages, pension and other social supports
Supply side	 Given the cease of government support and discouraged by limited purchasing power of households, construction sector declined by 14.7% y-o-y and reduced overall growth by 0.4% Constructions in the mega mining projects led to increased purchase of machinery, fuel and mechanical parts, which boosted trade sector thus contributed 1.9% for overall growth Manufacturing sector also stimulated growth by 1.3%, mainly due to increased manufacturing of food, construction items and woven products Although made positive contributions for the overall growth, harvest in agricultural sector was particularly limited in 2017
Outlook	 Increased activity and investment in the mining sector is expected to boost other sectors such as trade and net taxes, employment, household income, consumption and thus economic growth. Metal concentration of copper ore at the OT project is expected to improve and create second round effect for both mining and non-mining sectors Since the budget deficit is expected to be financed by the funds of the EFF program, banks will likely lend more to the private sector thus boost economic growth

Economic update: Key Highlights

FDI overview

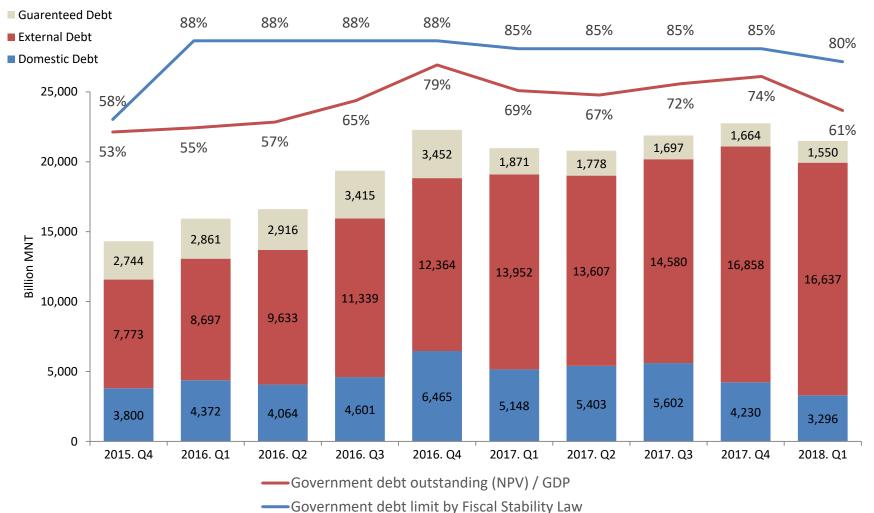
- As of October 2017, the net flow of FDI doubled to USD 992mn y-o-y (excluding OT's investor's loan repayment)
- Potential FDI inflow in 2017-2018 is expected to be higher than that of the previous 3 years substantially due to OT's Phase 2 development
- Driven by a substantial pick-up in investments in the mining sector, total amount of investment rose by 32.1% y-o-y and contributed ~9.0% to economic growth in the first 3 quarters of 2017
 - More specifically, gross fixed capital formation grew by 31.0% y-o-y owing to growth in maintenance works and machinery and equipment, while inventories increased by 34.4% y-o-y mainly to due to accumulation of spare parts
 - The upswing situation is expected to remain in 2018. Government investment expenditure is expected to slightly decrease in 2017 from the previous year and will be higher than 10% next year according to the approved budget.
 - With the reduced political uncertainty, growth prospect and restored investors' confidence, FDI flow trend have lifted upward compared to previous quarters.

Inward FDI, Mongolia

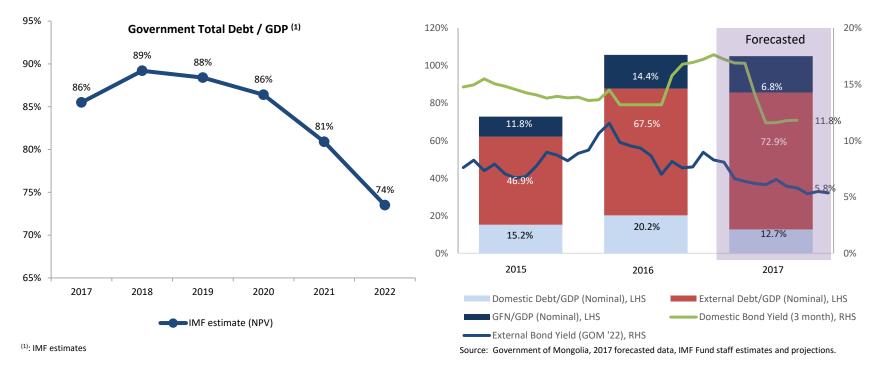


- Geology exploration, production and oil
- Transportation
- Banking and Financial service
- Science and Technology
- Information and Communication
- Trade
- Industry
- Construction

Economic update: General Government Debt Statistics by its instrument



Economic update: Debt sustainability



Prudent Liability Management and Optimization of the Government's Debt Portfolio

- With the March exchange and the proposed transaction, Mongolia will continue to term-out the nation's international debt stock.
- At the same time, the GoM is managing and reducing its overall cost of debt opportunistically.
- As a result, GoM will target consequent de-leveraging. GDP growth has kicked in again, and the Government has also issued less debt in the domestic market. Any new debt raised will be used to replace maturing or higher cost debt.

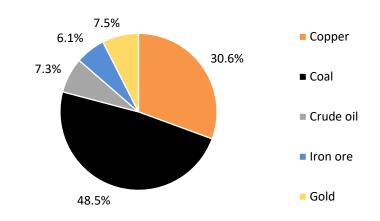
Source: Government of Mongolia, Ministry of Finance of Mongolia, National Statistics Office of Mongolia, IMF Fund staff estimates and projections.

Economic update: Mineral Resources to Drive Strong Growth Prospects



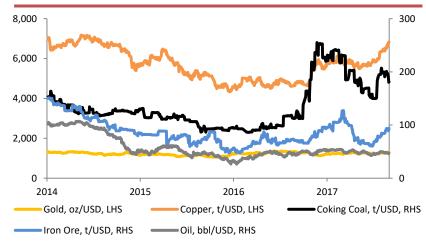
Importance of Mineral Sector in the Economy

Composition of Key Mineral Exports, 2017(1)

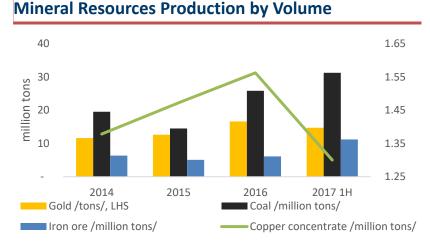


Mineral Exports % of Nominal GDP Source: Government of Mongolia, 2017 data as at 30 June

US\$ Prices of Mineral Resources have bottomed out



(1) For the seven months ended July 31, 2017

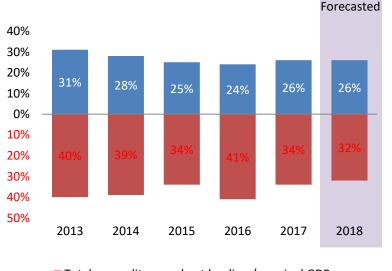


Source: Government of Mongolia, 2017 data as at 30 June

Source: Government of Mongolia

II. Fiscal / Monetary Policy

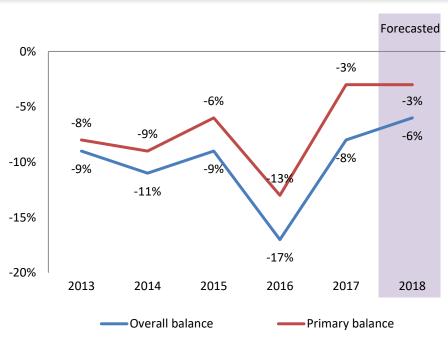
Fiscal Developments: Budget Performance on the Road to Recovery



Total expenditure and net lending / nominal GDP

Total revenue and grants / nominal GDP

Source: Government of Mongolia, 2017 forecasted data



Source: Government of Mongolia, 2017 forecasted data

The Parliament has approved all necessary legislations pertaining to the IMF's conditions on fiscal policy

Main Principles

- Deficit reduction to balanced budget by 2023
- Half of excess revenue spending through the program period
- Windfall revenue from mining accumulated to Future Heritage Fund (i.e. Sovereign Wealth Fund)
- Public sector wages freeze through 2018

Revenue Measures

- Progressive PIT
- Taxes on deposit interest income
- Increased Social Security contributions rate
- Excise taxes on petroleum, consumer vehicles, tobacco, alcohol
- Tax Reform (revised General Taxation Law, CIT, PIT)
- Simplified tax regime for SMEs
- Fees and penalties indexed to inflation

Structural Reform Measures

- Fiscal Council
- Pay-as-you-go principle for budget discussion in Parliament
- Social Security Reform: gradual increase of retirement age (65 male, 60 female)
- Targeted benefits to the vulnerable (incl. Child Money partially replaced by food stamps)

Source: IMF Fund staff estimates and projections.

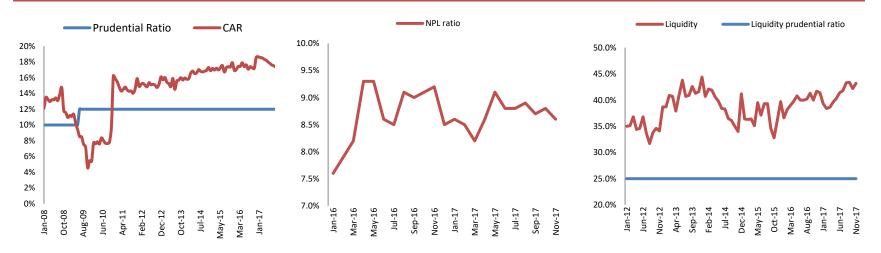
Financial Sector Reform: Creating a Sound and Stable Financial System

Upgrade regulatory environment and strengthen bank supervision framework

- Bank of Mongolia Law (to improve the Central Bank's governance and bring its mandates in line with international standards)
- Banking Law (to promote risk-based supervision and revise the legal environment for banking sector recapitalization activities)
- Deposit insurance law amendment

Dedicated measures to improve the banking sector

- Launch a comprehensive diagnosis of the banking system (Asset Quality Review)
- Bank recapitalization initiative: authorities will first seek full recapitalization of banks by their shareholders without recourse to public funds
- Comprehensive NPL resolution
- Replace quasi fiscal activities with market-driven initiatives (e.g. housing mortgage program)



Key Indicators Improved

IMF Second Review Completed Expectations Surpassed

IMF first and second reviews of Mongolia's performance under EFF

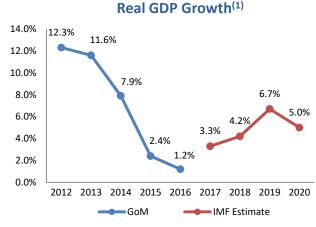
(15 December 2017):

"Performance under the program thus far has been strong. Growth in 2017 is projected to reach 3.3%, considerably better than forecasted at the time of program approval. The combination of strong policy implementation and a supportive external environment has helped the authorities over-perform on all of the quantitative targets under the program.

Performance on structural reforms has also been strong, notwithstanding the delays due to the change in government in September.

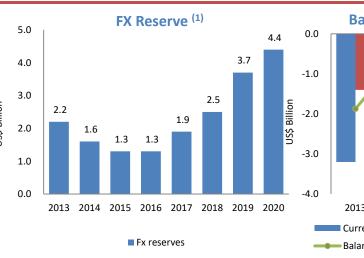
Mongolia's three-year extended arrangement was approved on May 24, 2017, in an amount equivalent to SDR 314.5mn (US\$425mn)...

The government's Economic Recovery Program, supported by the IMF, aims to stabilize the economy, reduce the fiscal deficit and debt, rebuild foreign exchange reserves, introduce measures to mitigate the boom-bust cycle and promote sustainable and inclusive growth."

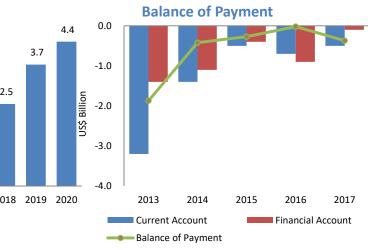


Key Indicators Improved





(1): IMF estimates Source: Government of Mongolia, 2017 forecasted data



(1): IMF estimates

III. Mongolian capital market

Mongolian capital market:

Recent developments

Key developments in Capital Market:

- In 2017 September, Financial Markets Strategy through 2025 passed by the Parliament
- In 2017 October, **Mongolian Financial Market development program 2025** approved by Government of Mongolia.

Forward looking developments:

- MoF is planned to be amend the following legislations in order to fully implement the **Strategy** and the **Program**:
 - Securities market law including related securities market regulations;
 - Integrated Insurance law;
 - Banking recapitalization;
- MoF will take following actions to increase the Market efficiency :
 - Regional cooperation development;
 - Market participants privatization including MSE;
 - Support to establish the mandatory institutions;
 - Infrastructure development;
 - Test the New technology (blockchain transactions);
 - Develop national standards parallel with International standards and best practices
 - Support private sector bond issuance

Mongolian capital market:

Capital market settlement system improvement strategy

- In 2017 October, Mongolian Financial Market development program 2025 approved by Government of Mongolia.
- In order to implement a comprehensive policy on developing and expanding capital market infrastructure, consistent with international standards on securities payment and settlement systems.
- Payment software shall be renewed in accordance with international standards and transferred to T+2/3 mode.
- Developing the electronic trade system for enabling foreign and domestic investors' participation and establish a regulatory environment for creating favorable environment for small and medium entrepreneurs.
- Establish a unified/complex system for settlement and clearing organization

Market participants:

Mongolian Securities Settlement Company

 Main Activity: Determining the payment due to the securities trading, the settlement service is based on the contractual basis and the securities trading and cash payment orders are sent to the relevant organizations. 	 Shareholder: Ministry of Finance is 100% shareholder. The Government's Resolution 2015 №147 is Mongolian Securities Settlement Company is separated from Mongolian Securities Settlement and Depository Center LLC.
 Company function: Company is the major infrastructure organization that is responsible for protecting and managing the potential risks in the securities settlement system. Depending on the circumstances of the capital market and the needs of the investors, it is necessary to expand its operations, so it has a separate organization. 	 Main challenge: Take concrete measures to increase the company's efficiency; Restructure organization /Capacity Building/ Implement DvP/T+3 according to the international standards Improve operational risk management and internal controls. Existing systems and interconnected systems in current infrastructure solutions creates difficulties for market participants; / Millennial IT system complication / Enhance the information sharing procedures and improve the cooperation of MSE, MSSC and MCSD



Market participants:

Mongolian Central Securities Depository Company

 Main Activity: Securities registration of the issuers and other participants on the basis of a contract to carry out activities to maintain storage and records of the securities are traded through stock market and OTC market; Custodian banking; 	 Shareholder: Ministry of Finance is 100% shareholder. The Government's Resolution 2015 №147 is Mongolian Central Securities Depository is separated from Mongolian Securities Settlement and Depository Center LLC. 				
 Company function: Securities / stocks, bonds / deposits Registration of ownership rights certified by securities and transfer of rights to others OTC market and registration rights Open a central depository account Custody operations Distribute dividends ISIN number 	 Related legal acts: Securities market law Company law Law on procurement of goods and services with state and local funds; Related enacts and orders approved by Financial Regulatory Committee; 				

Market participants:

Mongolian Stock Exchange

 Main Activity: The "Mongolian Stock Exchange" LLC is a "legal entity licensed to engage in securities trading" pursuant to Article 4.1.28 of the Securities Markets Law. 	The "Mongolian Stock Exchange" LLC was			
Company function: Mongolian Stock Exchange securities trading Company Bond PERCENTA Ge] Other 10% Company Bond PERCENTA GE]	 Main challenge: Privatization of the MSE Company loss Current infrastructure solutions have been working with manual involvement, no interconnected system that creates difficulties for stock market participants Listed companies 			



Market Infrastructure: Information Systems

Currently in Mongolia's capital market, many IT systems co-exist without automated interconnections. Similar operations, such as matching for the equities primary market and the secondary market, are handled by separate systems. Many daily operations require data transfer between the different systems. Many of such data transfers are executed manually, hindering the reliability of the overall operations (diagram shown in the appendix).

#	System Name	Vendor Name	Equities (MSE Traded)		Government Bond (MSE Traded)		Government Bond (BoM Traded)		Corporate Bond (MSE Traded)	
			Primary Market	Secondary Market	Primary Market	Secondary Market	Primary Market	Secondary Market	Primary Market	Secondary Market
1	Millennium IT ("MIT System") ✓ Trading System ✓ Surveillance System ✓ Depository System (including clearing module)	Millennium/Londo n Stock Exchange (Sri Lanka/UK)	✓ Depositor y	 Matching Clearing Securities settlement Depository Market Surveillance 	 ✓ Only used to accept orders (matching is done by MOF) ✓ Depository 	 Matching Clearing Depository Market Surveillance 			✓ Depository	 Matching Clearing Securities settlement Depository Market Surveillance
2	E-Clearing House System ("e-clearing")	Local Vendor (Mongolia)	 Clearing Money Settlement Securities settlement 	 Process OTC transactions Net Settlement between 4 settlement banks Money Settlement 	✓ Clearing ✓ Money Settlement	 ✓ Process OTC transaction ✓ Net Settlement between 4 settlement banks ✓ Money Settlement 	✓ Depository	✓ Depository ✓ Process Repo transaction	 Clearing Money Settlement Securities settlement 	✓ Net Settlement between 4 settlement banks ✓ Money Settlement
3	MSE IPO System	MSE (Mongolia)	✓ Matching						✓ Matching	
4	BOM Interbank ETS System	BOM (Mongolia)					✓ Matching	✓ Only used to record OTC negotiation result		
5	BOM RTGS System& ISO8583 ("RTGS System")	BOM (Mongolia)					✓ Clearing ✓ Money Settlement	✓ Clearing ✓ Money Settlement		

Market Infrastructure: Debt management strategy for 2016-2018

Government of Mongolia shall pursue the following policy objectives under the medium-term government debt management strategy for 2016-2018

- Level off burden of the government debt services on budget in long-run, reduce debt service ratio to structural revenue in phases, and lengthen average maturity of government debt portfolio;
- Improve Mongolia's Sovereign credit rating and its prospects, strengthen relationships with investors, create favorable investment environment, reduce government external borrowing costs, and establish government securities yield curve; and
- Establish optimal government debt composition by planning and implementing comprehensive debt coordination actions in the medium-term



Market Infrastructure: Debt management strategy for 2016-2018

- Government medium term /2016-2018/ debt management strategy was approved on 22nd of May, 2016 by the Parliament.
- According to the Debt management strategy, following <u>objectives to be taken</u> in medium term (almost achieved all measures):
 - ✓ To develop the Medium Term Public Investment Program (achieved)
 - To take measures to improve Sovereign credit rating (achieved)
 - To improve foreign investor relations and allow foreign and domestic investors to participate in the domestic securities market (achieved)
 - ✓ To improve liquidities of domestic securities (achieved)
 - To implement specific debt management operations (achieved)
 - To improve the infrastructure of centralized clearing house system in order to set the domestic securities benchmarks (in process)



Market Infrastructure: Future Debt Management Reforms

MoF will take following actions on debt management with the support of WB TA

- Update the MTDS 2019-2021 based on the current economic situation
- Develop secondary domestic debt securities market
- Lower short-term debt burden & lower the substantial debt repayment risk & lower interest cost
- Develop investor relations and investors base
- Strengthen market efficiency;
- Active liability management;
- Support Supranational local currency bond issuance in the international debt capital market (ADB and WB's IFC)





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ASEAN + 3 members & ADB For accepting Mongolia to join ABMF



MINISTRY OF FINANCE Address: S.Danzan street, Government building II, Chingeltei district, Ulaanbaatar 15160 Phone: 976-51-2620

Session 2: Update of ASEAN+3 Multi-Currency Bond Issuance Framework

Satoru (Tomo) Yamadera Principal Financial Sector Specialist ERCD, ADB



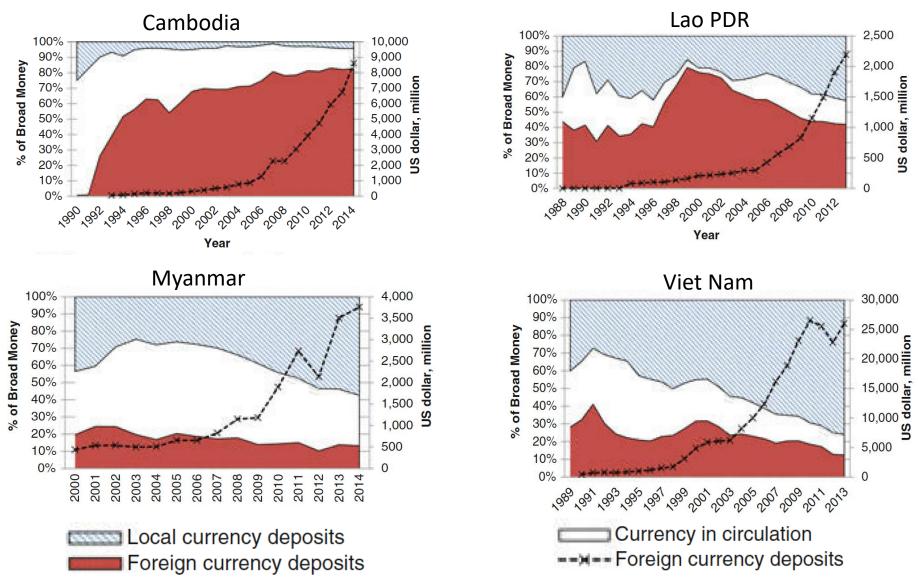
Challenges to create a bond market in emerging markets: lessons from Cambodia

- \checkmark Development of bond market needs to be in parallel with the development of banking.
 - To improve financial stability, both banking and bond finance need to be developed. Thus, regulatory conditions for banking and bond need to be comparable.
- Development of bond market relies on development of institutional investors.
 - Banks can be issuers and investors, but banks may also be competitors against bond market.
- Development of bond market needs to be accompanied with the development of money market and FX market
 - Need for hedging tools for both domestic and foreign investors
- \checkmark Rules for bond market needs to be differentiated from equities. ✓ Lack of custodian 1

Difference between equities and bonds

	Equities	Bonds	Bank
lssuers (borrow ers)	 good companies, but may not be large. Risk sharing with various investors. Discipline through market Cost can be high. Nonfixed term liability 	 Basically large companies and large projects Targeted to large investors Stable funding to meet long- term investment Improve Asset Liability Management (ALM) Fixed funding cost Fixed term liability Comparable with bank loan 	 Small to large companies and projects Short-term working capital or long-term finance Negotiation-based and company-specific monitoring Float or fixed rate Easier and quicker access to finance
Investors	 Retail and institutional investors Capital gain High risk high return Standardized products: one issuer, one equity. 	 Mostly institutional investors Stable long-term income Low risk low return or medium risk medium return Multiple but relatively standardized products: one issuer, multiple issues. 	 Normally one borrower, one bank. Risk-based return Monitor information specific to a borrower. Not standardized.

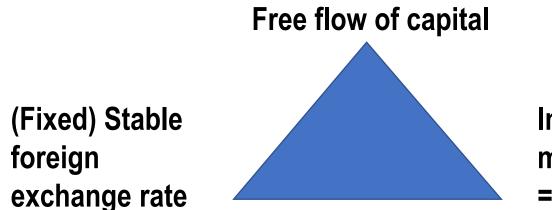
Dollarization in CLMV: additional challenge



Source: Kubo. K. 2016. Dollarization and De-dollarization in Transitional Economies of Southeast Asia: An Overview. *Dollarization and De-dollarization in Transitional Economies of Southeast Asia*. IDE-JETRO Series. Japan

Impossible trinity and de-dollarization

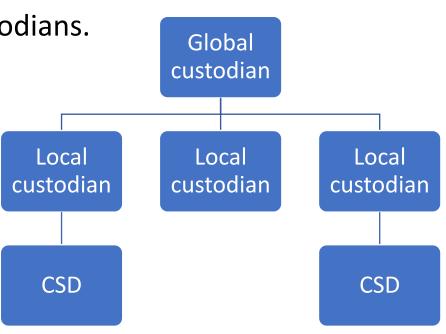
- it is impossible to have all three of the following at the same time.
 - fixed (stable) FX rate
 - free movement of capital (absence of capital control)
 - Independent monetary policy
- It is necessary to have good preparation to accept some manageable instability in FX, or capital flow, or monetary policy, not to cause unnecessary market disruption



Independent monetary policy = de-dollarization

Custodian: the chain of the crossborder settlement network

- To be a part of the custodian network, acting as a subcustodian, a bank must comply with local regulations, but should also incorporate global best practices for investors protection and AML/KYC, in order to meet the requirements and expectations of global custodians.
- On behalf of investors, global custodians will check and ensure suitability of potential local custodians.



Thank you.

syamadera@adb.org



Update on ASEAN+3 Bond Market Guides

v3.2c 11 June 2018

Shigehito Inukai Matthias Schmidt ADB Consultants

28th ABMF Meeting, Seinan Gakuin University, Fukuoka City, Japan SF1 Session, 19 June 2018

Points to Cover

1 Status of ASEAN+3 Bond Market Guides

2 Published May 2018: Republic of Korea Bond Market Guide

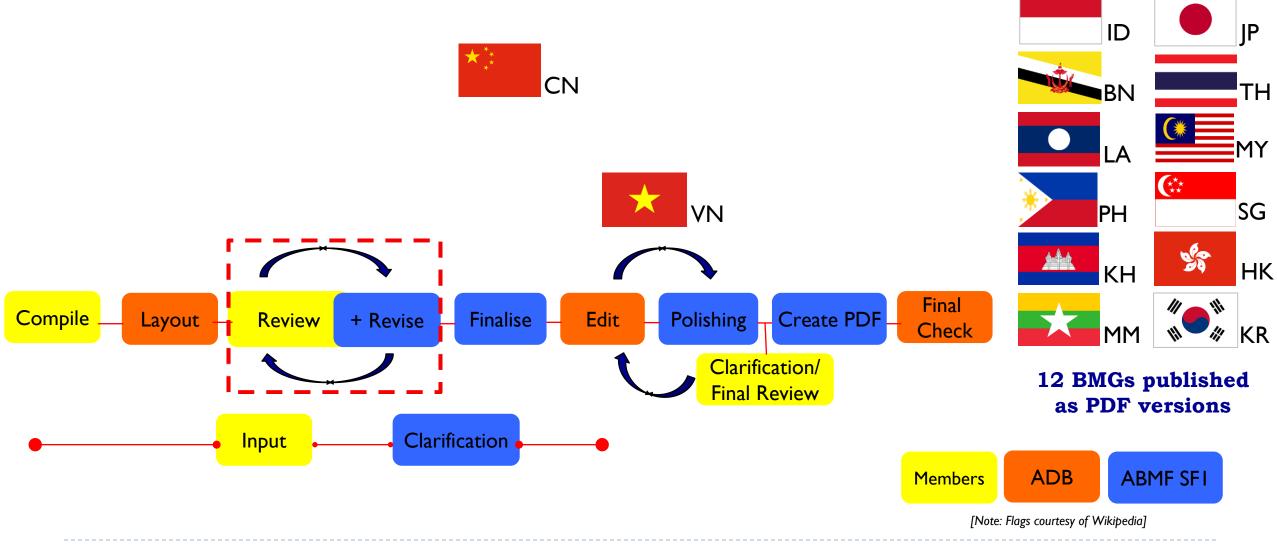
③From Market Visit Summary to ADB Flagship Publication

(4) Evolution of ASEAN+3 Bond Market Guides

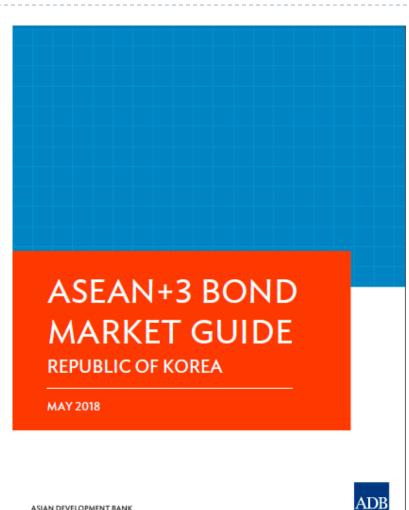
5 Next Steps for Bond Market Guides

6 Feedback & Thank You

Status of ASEAN+3 Bond Market Guides (as of 11 June 2018)



Published May 2018: Republic of Korea Bond Market Guide



ASIAN DEVELOPMENT BANK

144 pages

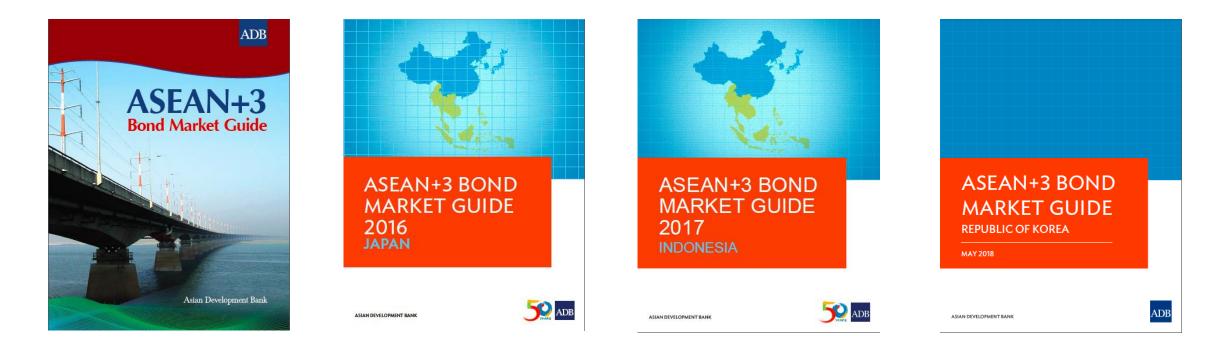
https://www.adb.org/publications/ase an3-bond-market-guide-2018republic-korea

Also available on www.asianbondsonline.adb.org

From Market Visit Summary to ADB Flagship Publication

- Created to summarise ABMF market visit findings
- Intended to bridge information gap identified from investor feedback
- Contents utilised to analyse market features
- Information became baseline for development of AMBIF concept
- 1,432 downloads from AsianBondsOnline alone in 2016/2017
- Development of ABMF BMG template for easier updating
- Became serial publication in January 2018
- Elevated to ADB flagship publication in 2018
- Inclusion of further topics planned: arbitration/dispute resolution, risk elements and due diligence/comfort letter practices, etc.

Evolution of ASEAN+3 Bond Market Guides



2012 First of its Kind 11 Markets 2016 Individual Market Publication Started 2017 ABMF BMG Word Template Developed 2018 ADB Flagship Series Publication Established 14 Markets

Next Steps for ASEAN+ Bond Market Guides

- Viet Nam being finalised; PR China by end of 2018 latest
- Creation of Comparative Analysis across body of 14 BMGs
 - ♦ To review and revisit professional markets vs. Phase 2 Report
 - \diamond To create insight for members and experts
 - ♦ To derive policy recommendations
- Update of selected BMGs (on demand or need basis)
 - ♦ Major market developments as drivers
 - ♦ Would include retrofitting of changes to format, style
- Further synchronisation with AMBIF Implementation Guidelines
- Possible integration with AsianBondsOnline

Feedback & Thank You

We welcome any questions or feedback, even if today there may not be enough time.

Thank you in advance!

Shigehito Inukai shige.inukai@me.com

Hiro Suzuki hiro.suzuki@cmaa-group.org Matthias Schmidt macschmidt@me.com



Introduction to the Capital Markets Association for Asia (CMAA)

The Capital Market Association for Asia (CMAA) was established in March 2018 as a general incorporated association, and took over naming, purpose and function of the organization established in 2007 in Japan as a voluntary framework.

19 June 2018

Shuji Yanase, Chairperson, CMAA

Shigehito Inukai, Executive President & Representative Director, CMAA

Page 2, 4, 7 and 8 will be explained in the presentation.

The Vision of AIR-PSM

An Asian Intra-Regional Professional Securities Market (AIR-PSM)

Homogeneous (Professional)

Asian Intra-Regional Professional Securities Market (AIR-PSM)

ASEAN+3 Multi-currency Bond Issuance Framework (AMBIF)

> CMAA will promote an Asian Intra-Regional Professional Securities Market (AIR-PSM). This aims to further develop public-offering domestic markets and at the same time to promote an intraregional professional market in each jurisdiction with a focus on a region-wide participation of professionals. (AMBIF market can be considered a part of AIR-PSM)

Domestic Bond Markets in Asian Region Local CMAA will promote the vision of AIR-PSM as well as AMBIF

- AIR-PSM shares Common Principles for Professional Market with the International Market/previously referred to as Eurobond market.
- AIR-PSM is aiming to disseminate its intra-regional professional bond market rules and practices that are basically consistent with the international market to the domestic professional bond markets of each country.
- CMAA has the intention to create market practices and issue processes that will be harmonized and standardized within the professional markets in the region, including AMBIF.
- Issuers will be able to tap all markets ultimately with harmonized market practices/documents for submission.
- Professional investors can ultimately invest in all intra-regional professional markets without any concerns about needing to know their detailed regulations closely.

Heterogeneous (Retail)

An Asian Intra-Regional Professional Securities Market (AIR-PSM)

There had been three camps in discussions related to the development of Asian bond markets.

- 1. One prioritizes the further development of domestic markets, or, alternatively, believes that development of domestic markets is sufficient.
- 2. The second camp seeks to promote an offshore cross-border (inter-regional) market in the region. (i.e., Asian currency denominated Eurobonds for instance, an offshore RMB bond market)
- 3. The third camp seeks to promote an Asian Intra-Regional Professional Securities Market (AIR-PSM). This aims to further develop public-offering domestic markets and at the same time to promote an intra-regional professional market in each jurisdiction with a focus on a region-wide participation of professionals. (AMBIF market can be considered a part of AIR-PSM)

AIR-PSM is intended ultimately to allow regional issuers to issue local currency bonds in any participating Asian economy on the basis of an expedited regulatory process and by making use of standardised market practices and disclosure documentation in English.

AIR-PSM is a conduit towards the creation of a region-wide open professional bond market zone. AIR-PSM will work as a framework to connect the regional domestic professional bond markets. AIR-PSM will make it possible to minimize institutional differences among countries/markets.

Purpose of Establishment of the CMAA as a General Incorporated Association

- \succ It aims at:
- 1. Promoting the value-added discussion on Asian financial markets, related laws and regulations systems, etc. among the parties concerned in Asia;
- 2. Contributing to architect and develop the laws, regulations and systems in Asian financial and capital markets as well as supporting to create the market systems, infrastructure of the Asian Intra-Regional Professional Securities Markets (AIR-PSM); and thus
- 3. Contributing to facilitate financial & capital markets transactions and corporate finance in Asia among market participants as well as contributing to healthy development of intra-regional markets based on fair pricing functioning.
- CMAA has set the objective to take leadership on standardizing documentation and creating market practices for a bond market for professional investors in the Asian region.
 - Specifically, CMAA will try and make a model form of standard documents (including every kind of standard contracts and registration format) in cooperation with self-regulatory organizations and market practitioners in the region.
 - CMAA will also try to set up and maintain "Standard Asian Market Practices" as well as "selfregulations" taking into account the consistency with global standards and real domestic conditions of the respective Asian countries.

Business of the CMAA

Create, cultivate and develop financial & capital markets in the region and every kind of system infrastructure, including cross-disciplinary and integrated financial & capital markets and regulatory systems as well as contribute to facilitate financial & capital market transactions and corporate finance transactions among market participants in Asia, including corporates.

With regard to the financial & capital markets related regulations, judicial affairs and related market systems and infrastructure within Asia, CMAA conducts the following:

- 1) Comprehensive research including cross-regional research and analysis, as well as support for cross-disciplinary and comprehensive discussions by market participants;
- 2) Comment (or advice if necessary) on the cross-regional market practices to members;
- 3) Publicity activities and dissemination of information to member;
- 4) Consulting business;
- 5) Contracted research and analysis business;
- Endorsement for market participants including governmental regulatory authorities of each Asian country/market and fostering human resources in relation to Asian intra-regional financial & capital markets; and
- 7) Business related to the above-mentioned business.

Supplementary matters on CMAA business activities

- CMAA, as a specialist group of substantial practical experience in financial & capital markets, sets out to become the conducive organization focusing on Asia for building financial and capital market infrastructure of sustainable, fair, effective and efficient market practices for professional investors and other participants. CMAA has an intention to maintain friendly relationships with other bodies in domestic and global capital markets and to make constant reference to global market standards and practices.
- Hence, making recommendations on particular issues unique to each market in the region is outside of CMAA's purview. (CMAA will be having a mutual complementally relationship with the ASEAN+3 Bond Market Forum (ABMF)/ABMF Secretariat Team who releases recommendations and suggestions, etc. as part of its operation to government agencies and regulatory authorities in each country and economy in the region. Further, CMAA will maintain close cooperation with ABMF/ABMF Secretariat Team for the foreseeable future although it is an organization independent from ABMF.)
- CMAA was established so as to contribute to developing Asian financial & capital markets for the future.

Cooperation in Asia in the future

- In the future, CMAA aims to function as SRO or nodal point that connects the securities-related self-regulatory organizations in Asian countries.
- As of now, the self-regulatory organizations in each Asia country cover their domestic securities markets only simply because they are founded under domestic laws which do not assume regulating cross border financial & capital transactions. Therefore, no SRO covering cross-Asian intra-regional domestic markets exists.
- It is quite common in the European offshore market (previously referred to as Eurobond market) to used common law based ICMA standard documents in new bond offerings.
- In Asia, however, it may be difficult to use ICMA standard documents for the offering of Asian intra-regional domestic professional bond markets due to constraints arising from local currency domestic markets. Hence, market standard documentation reflecting the appropriate domestic condition of each respective Asian country is needed.

CMAA initial personnel appointments

General Incorpora	ted Association of Capital Market Association for Asia ("CMAA")
Honorary Chairperson	Nobuyuki Idei (Quantum Leaps Corporation representative director
	/former Sony Chairperson)
Chairperson (Director)	Shuji Yanase (Lawyer, Yanase law firm/Former senior partner of
	Nagashima, Ohno, Tsunematsu law firm)
Executive President	Shigehito Inukai (former professor at Waseda University, retired at the
(Representative Director)	end of March 2018)
Managing Director &	Hirohiko Suzuki (former adjunct researcher of Waseda University, retired
Executive Officer	at the end of March 2018 / previously SMBC-NIKKO securities, Barclays,
(Secretary General)	Morgan Stanley, Goldman Sachs and Nikko Securities)
Auditor Secretary	Eiko Hakoda (Lawyer, Mori Hamada & Matsumoto law firm)
	Masaki Konishi (Lawyer, Nagashima, Ohno, Tsunematsu Law Office)

CMAA is expected to start full scale operation from September 2018. Three directors and two internal auditors were appointed when it was founded.

Membership

- 1. Constituent members: Private individuals, corporations and organizations who agree with objectives of CMAA, applied to and joined CMAA as a member under the law concerning general incorporated associations and general incorporated foundations. (Executive officers as regular members are limited to three individuals for the time being.)
- 2. General members: Those private individuals, corporations and organizations other than regular members. CMAA assumes these would be securities companies, commercial banks, institutional investors and issuers in the region.
- **3. Special members**: Those private individuals, corporations and organizations who CMAA invites to membership without annual member fee. CMAA assumes this to be organizations such as SROs in developing markets, government agencies (as observer), academic experts and business experts in the financial & capital markets.
- 4. Associate members: Associate membership is for those who are engaged in business related to financial & capital markets, including infrastructures but other than issuers, investors and underwriters. CMAA assumes this to be industry organizations, exchanges, clearing and settlement organizations, self-regulatory bodies, rating agencies, research institutes, law firms, auditing firms, consultant firms, market infrastructure related firms, etc.

Enquiries and Access to CMAA

Address: 3-21-1229, Kanda Nishiki-cho, Chiyoda-ku, Tokyo Japan Enquiry: <u>info@cmaa-group.org</u> Telephone: +81-80-3360-7551

CMAA has the intention to fulfill the role of the office of ADRB (AMBIF Documentation Recommendation Board) which helped formulate the Single Submission Form in 2015, replacing Waseda University.

[See: https://sites.google.com/site/profinukaiswebsite/adrb-ambif-documentation-recommendation-board]



AN INTRODUCTION TO THE

ASEAN3 GOVERNMENT BOND INDEX (A3GBI)

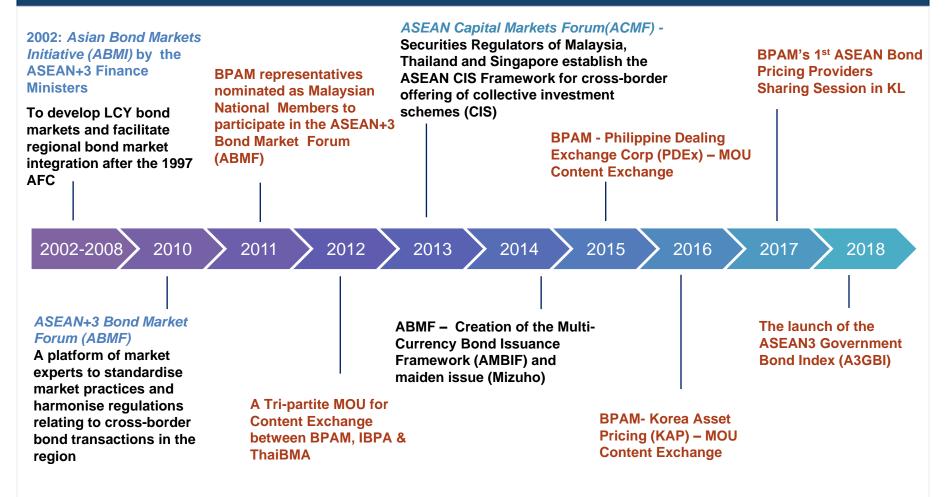
FUKUOKA, JAPAN 19 JUNE 2018

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BPAM and the ASEAN Capital Market Initiative







Peers among neighbours

BOND PRICING AGENCY MALAYSIA



Incorporated in 2004 as a market neutral entity to provide fair valuation for MYR bonds

Appointed by SC as Malaysia's 1st BPA in 2006

BPAM values about 3000 MYR fixed income instruments daily

Mutual Funds, ETFs & Private Retirement Scheme(PRS) are mandatory to use BPA prices for portfolio valuation Incorporated in 2008

Appointed by SEC as the 1st BPA in Indonesia in 2009

Values and determines the fair market price of IDR debt securities on daily basis

Prices are used by most of the financial institutions in Indonesia with mandatory mandate

ThaiBMA สมาคมตลาดตราสารหนี้ไทย

A self-regulatory organization (SRO) for a fair and efficient operation of the bond market since 2005

Previously known as The Bond Dealers Club (BDC)

ThaiBMA acts as Thailand's :

Bond Information Centre, Bond Pricing Agency, Market Convention & Education, Market Monitoring & Surveillance





What we have in common – BPAM, IBPA & ThaiBMA





Introducing ASEAN3 Government Bond Index (A3GBI)

% 1



Index value (1):	109.8
Index Value (T-1):	109.8
Day on day change:	0.015
% Change:	0.014

Stock Name	ISIN Code	Bond Type	Maturity Date	Issue Date	Outstanding Amount (Mil)	Coupon Rate	Issue Currency	Weight (%)
Obligasi Negara RI Seri FR0053	IDG000009101	Fixed Rate	15/07/2021	08/07/2010	100,027,793	8.250	IDR	10.240
Obligasi Negara Republik Indonesia Seri FR0063	IDG000010208	Fixed Rate	15/05/2023	13/08/2012	61,416,000	5.625	IDR	5.861
Obligasi Negara Republik Indonesia Seri FR0064	IDG000010307	Fixed Rate	15/05/2028	13/08/2012	70,695,000	6.125	IDR	6.655
Obligasi Negara Republik Indonesia Seri FR0065	IDG000010406	Fixed Rate	15/05/2033	30/08/2012	60,093,000	6.625	IDR	5.731
Obligasi Negara Republik Indonesia Seri FR0075	IDG000012303	Fixed Rate	15/05/2038	10/08/2017	48,310,000	7.500	IDR	4.847
GII MURABAHAH 3/2017 3.948% 14.04.2022	MYBGI1700036	Fixed Rate	14/04/2022	14/04/2017	11,000	3.948	MYR	5.880
GII MURABAHAH 1/2017 4.258% 26.07.2027	MYBGO1700018	Fixed Rate	26/07/2027	26/01/2017	11,000	4.258	MYR	5.942
MGS 4/2017 3.899% 16.11.2027	MYBMO1700040	Fixed Rate	16/11/2027	16/05/2017	14,500	3.899	MYR	7.784
MGS 4/2013 3.844% 15.04.2033	MYBMX1300040	Fixed Rate	15/04/2033	15/04/2013	14,000	3.844	MYR	6.935
MGS 3/2017 4.762% 07.04.2037	MYBMX1700033	Fixed Rate	07/04/2037	07/04/2017	12,500	4.762	MYR	6.794
LB21DA	TH0623031C01	Fixed Rate	17/12/2021	19/11/2010	306,104	3.650	THB	8.847
LB226A	TH0623032602	Fixed Rate	17/06/2022	15/07/2016	202,592	1.875	THB	5.467
LB25DA	TH0623035C07	Fixed Rate	12/12/2025	26/11/2010	205,271	3.850	THB	6.162
LB296A	TH0623039607	Fixed Rate	22/06/2029	20/11/2009	223,252	4.875	THB	7.316
LB196A	TH062303T609	Fixed Rate	13/06/2019	29/05/2009	199,379	3.875	THB	5.541

- In view of the impressive rate of development in the regional bond market, setting up an investable and replicable index which consists of the largest market-makers and liquid bonds from government segment will provide a greater visibility of the ASEAN market behavior.
- The Index is a product of three bond pricing providers in the regional market:
 - ✓ Bond Pricing Agency Malaysia (BPAM)
 - ✓ Indonesian Bond Pricing Agency (IBPA)
 - ✓ The Thai Bond Market Association (Thai BMA)
- Sub-indices are available in respective local currencies
- Index construction is rules-based, where the hallmark of a rules-based index is transparency and broadly speaking, predictability.





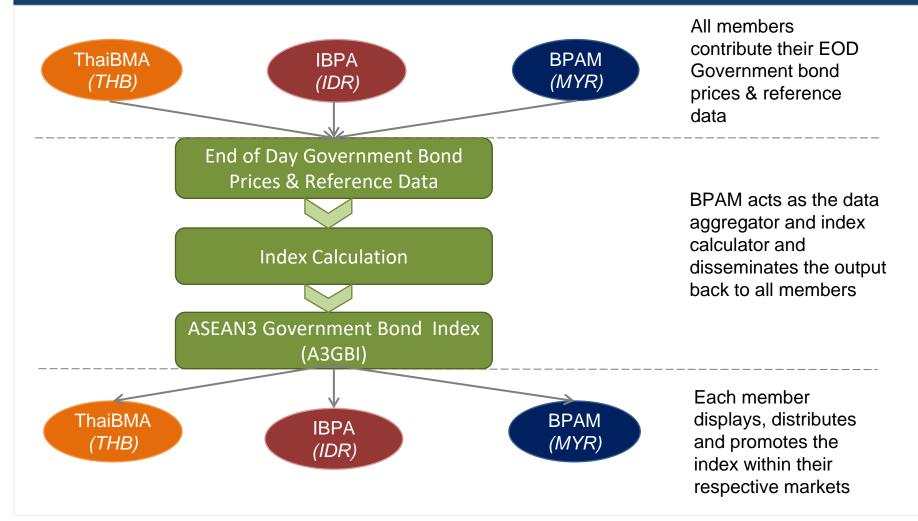
Why A3GBI is completely different

Index Characteristics	INDEX A	INDEX B	INDEX C	ASEAN3 Government Bond Index (A3GBI)
Index Summary	currency - government bonds	currency - government and	Tracks 10 local currency - government and corporate bonds	Tracks 3 local currency – Top 5 On-The-Run government bonds
Country Exposure	Korea, Indonesia, Thailand, Malaysia, Singapore, Philippines, Hong Kong	China, Hong Kong, India, ndonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan and Thailand		Indonesia, Malaysia and Thailand
Price Source	Trader pricing	Proprietary methodology	Information vendor	Independent Bond Pricing Providers - IBPA, ThaiBMA and BPAM
Market Capitalization	Market capitalization	Market capitalization	Market capitalization	Market capitalization Country weight: Equal ; Individual bond weight within country
Calculation/ Rebalancing Frequency	Calculation – Daily Rebalancing - Monthly	Calculation – Daily Rebalancing - Monthly	Calculation – Daily Rebalancing - Monthly	Calculation – Daily Rebalancing - Monthly





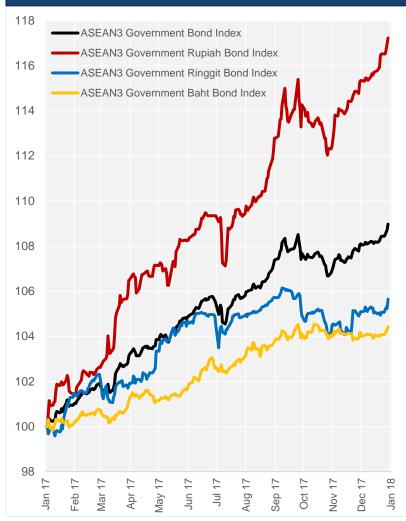
A3GBI daily process flow







A3GBI construction is rules-based



Index Specification	Description
Country Exposure	Malaysia, Indonesia, Thailand
Price Source	Bond Pricing Agency Malaysia (BPAM), Indonesia Bond Pricing Agency (IBPA), and The Thai Bond Market Association (Thai BMA)
Currency	MYR, IDR and THB
Inclusion	Top 5 on-the-run government bonds in participating countries based on outstanding amount at rebalancing day
Bond Type	Fixed rate, bullet and zero coupon bonds
Minimum term	365 days on rebalancing day
Weighting	Country weight: Equal weighting Individual bond weight within country: Market capitalisation
Calculation Frequency	Daily basis (weekday)
Rebalancing	Month end
Reinvestment of Cash Flow	Reinvest into the index
Timing	11.00 am (GMT+8) using previous day prices
Sub-index	Country specific sub-indices
Base Date	2 January 2017





A3GBI aims to be significant and applicable

Data from Reputable Sources

- Direct evaluated bond prices feed from ASEAN's accredited bond pricing providers (BPP)
- Takes into account local market conventions and behavior
- ✓ BPPs are experts of the fixed income market in the respective countries

Evaluated Prices as Input Data

- Underlying data goes through a sound methodology, tried and tested by local market participants; regulators, buy side and sell side alike.
- Evaluated prices are fairly valued, not just composite/average/contributed prices
- ✓ Data is verifiable by BPPs

Using On-the-run Government Bonds

- Eligible constituents must be all on-therun government securities, therefore covers investable bond universe
- ✓ Index captures liquidity as on-the-run bonds are highly tradable
- Allow investors focusing on the liquid government securities in the region to have their own index segment for performance benchmarking purposes

Established International Standard

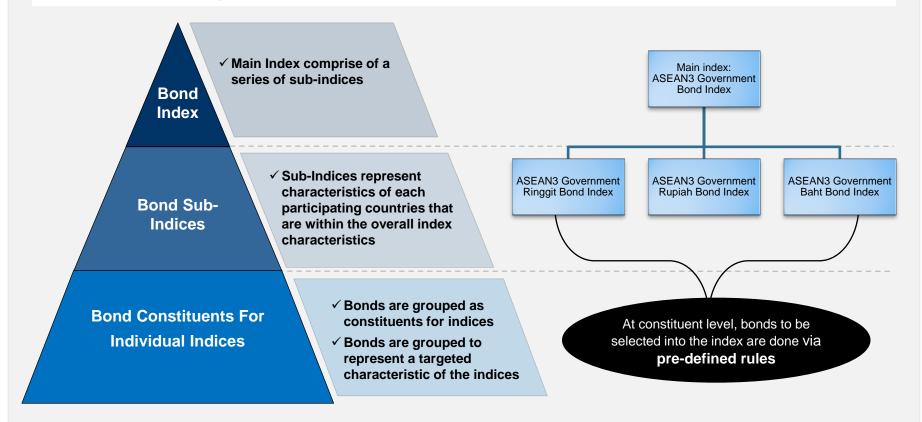
 The index construction rules and calculation methodology broadly follow the EFFAS Standardised Rules

(EFFAS - European Federation of Financial Analysts Societies)



Methodology overview: Determine rules for constituents and create portfolio

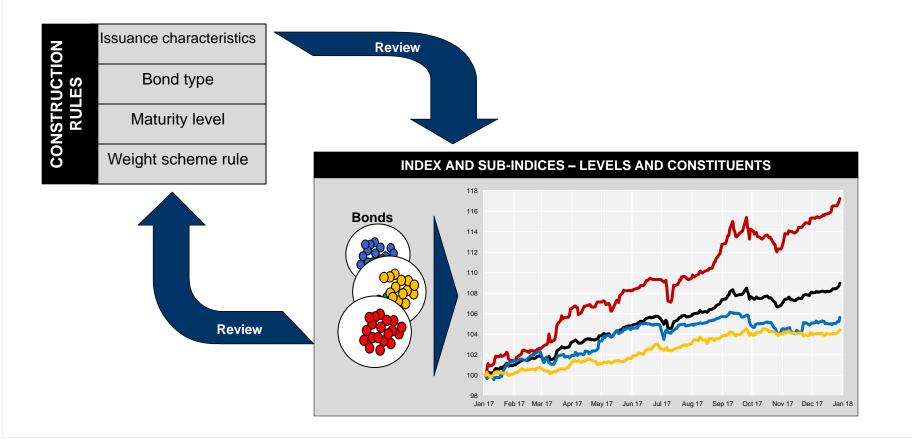
The purpose of the Index is to measure the average performance that holders of the relevant type of bonds and segments experience over time. This is achieved by creating a representative portfolio of bonds, and measuring their performance.



IBPA เกิดการเลือง Pricing Agency

Methodology overview: Specify construction rules, review period and then calculate

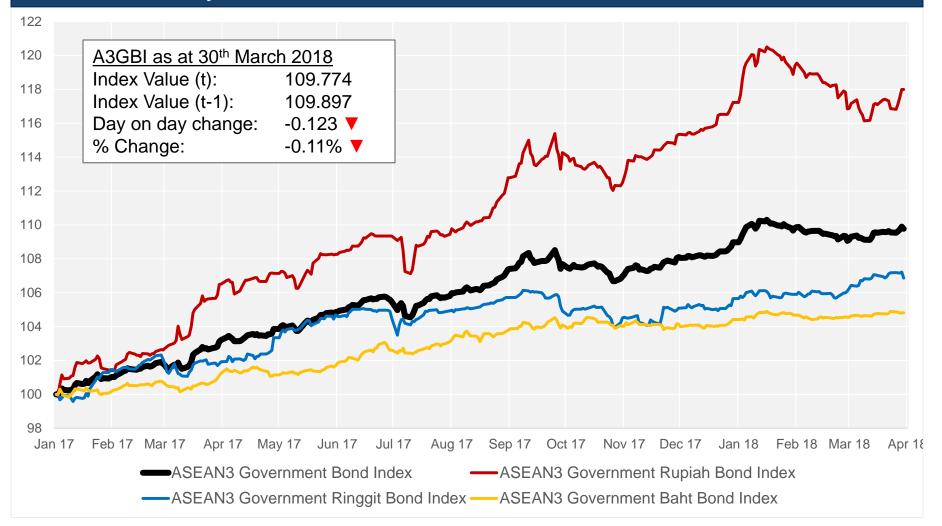
Based on the pre-defined rules, the index constituents are reviewed monthly. At this review, bonds may be added or removed accordingly, and finally the index will be calculated.







A3GBI tracks daily movement to observe the direction of the market





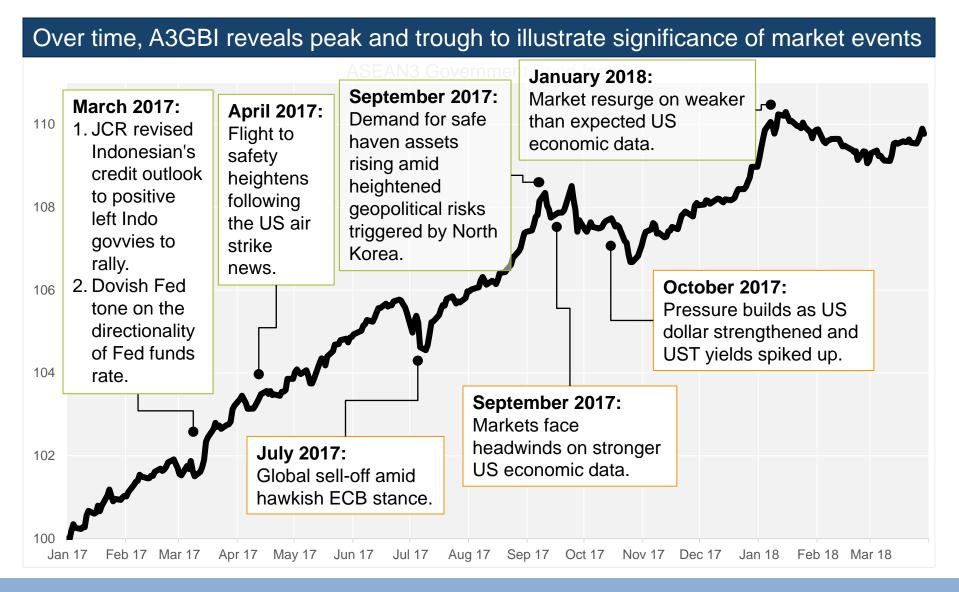


A3GBI and sub-indices serves as a benchmark to measure performance

	30/03/18	1M	3M	6M	12M	
ASEAN3 Government Bond Index	109.774	0.7%	0.7%	1.9%	6.4%	0-0-0-0
ASEAN3 Government Rupiah Bond Index	117.993	1.0%	0.7%	3.3%	10.8%	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
ASEAN3 Government Ringgit Bond Index	106.859	0.7%	1.1%	1.8%	0.7%	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
ASEAN3 Government Baht Bond Index	104.815	0.3%	0.4%	0.7%	3.5%	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Bond Fund A		?	?	?	?	



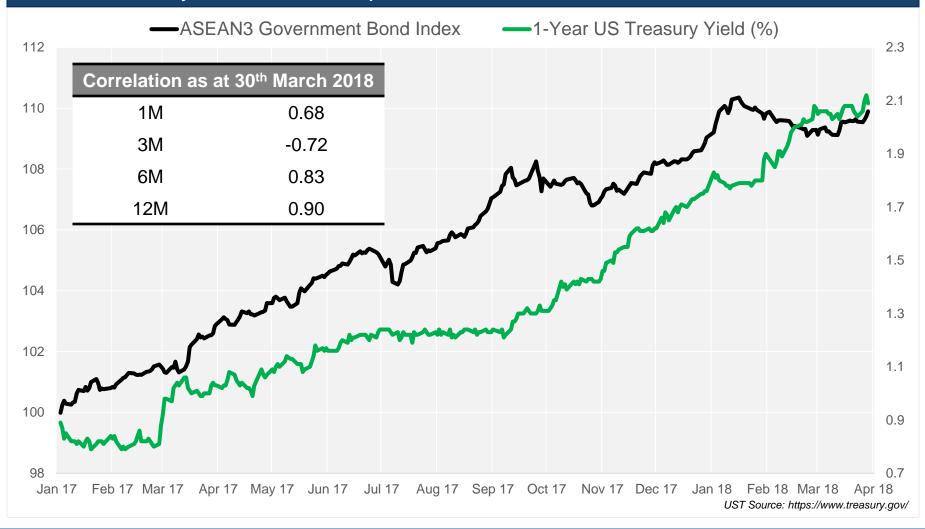








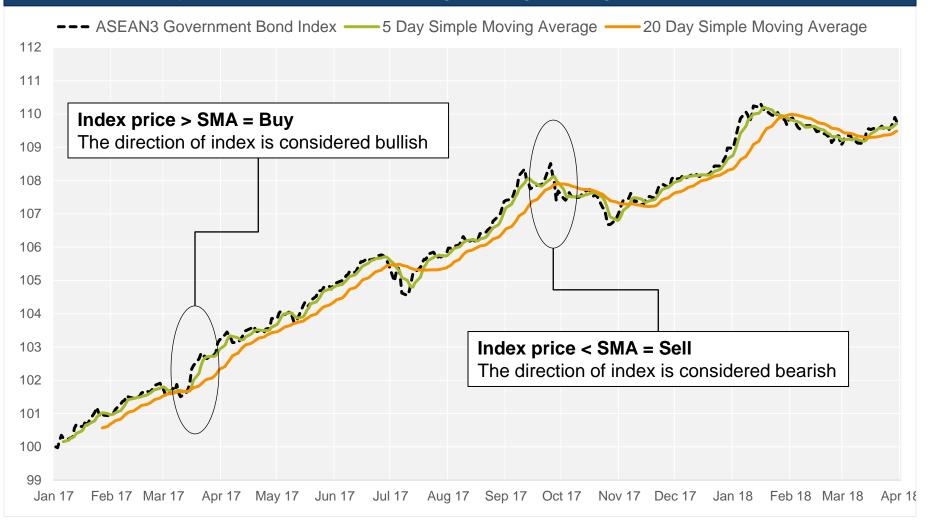
A3GBI data may be used as comparison with other data sets







A3GBI data may be useful for formulating trading strategies







A3GBI constituents may allow for portfolio emulation for index funds or ETF

Data as at 30 th March 2018	ASEAN3 Government Rupiah Bond Index		ASEAN3 Government Ringgit Bond Index		ASEAN3 Government Baht Bond Index	
Portfolio & Weight	Obligasi Negara Republik Indonesia Seri FR0070	38.8%	MGS 4/2017 3.899% 16.11.2027	23.0%	LB21DA	25.9%
	Obligasi Negara Republik Indonesia Seri FR0064	17.5%	MGS 4/2013 3.844% 15.04.2033	21.0%	LB296A	21.4%
	Obligasi Negara Republik Indonesia Seri FR0065	15.3%	MGS 3/2017 4.762% 07.04.2037	20.6%	LB196A	18.7%
	Obligasi Negara Republik Indonesia Seri FR0063	14.8%	MGS 2/2017 4.059% 30.09.2024	17.9%	LB25DA	18.0%
	Obligasi Negara Republik Indonesia Seri FR0075	13.5%	GII MURABAHAH 1/2017 4.258% 26.07.2027	17.5%	LB226A	16.0%
Market Cap	IDR 375,449 billion (USD 27.05 billion)		MYR 63.53 billion (USD 16.3 billion)		THB 1,281.73 billion (USD 40.9 billion)	
Average Coupon	7.187%		4.157%		3.706%	
Average YTM	6.574%		4.173%		1.886 %	
Average Duration	6.512		8.914		4.834	
Average Convexity	64.714		107.190		36.375	





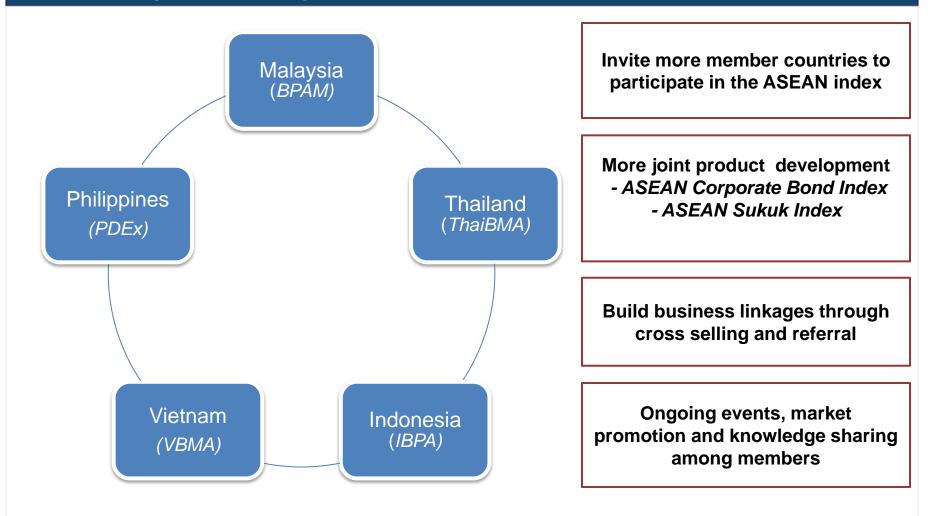
A3GBI is now available in IBPA, ThaiBMA and BPAM's platform



IBPA : <u>http://www.ibpa.co.id/DataPasarSuratUtang/Indeks/A3GBI/Data/tabid/210/Default.aspx</u> ThaiBMA : <u>http://www.thaibma.or.th/EN/Market/Index/A3GBI.aspx</u> BPAM : https://www.bpam.com.my/MB/B1680.asp

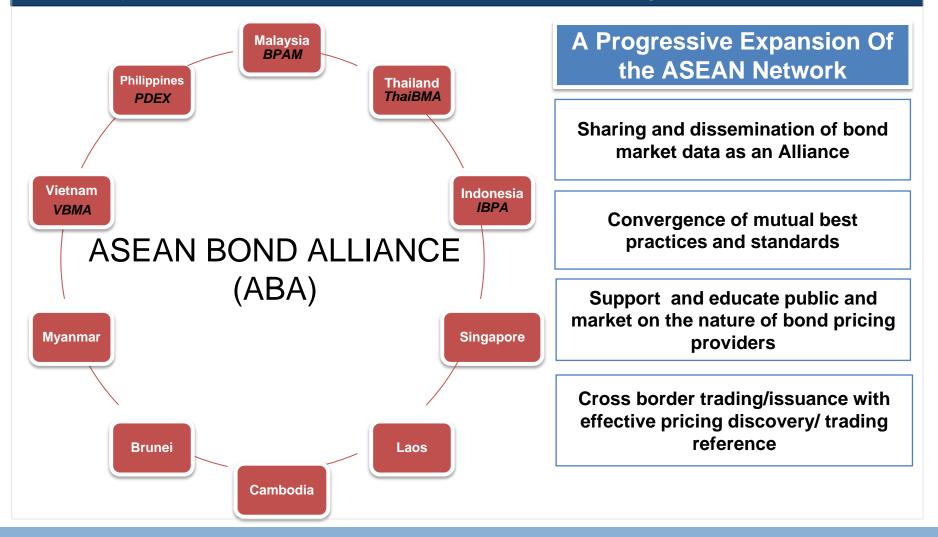


Potential for greater sharing & product expansion





An identity that is representative of the ASEAN Bond Pricing Providers





THANK YOU

No 17-8 & 19-8, The Boulevard, Mid Valley City, Lingkaran Syed Putra, 59200 Kuala Lumpur, Malaysia

Tel: +603 2772 0889 Fax: +603 2772 0808 Email : enquiries@bpam.com.my

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ASEAN+3 BOND MARKET FORUM

Developments in Emerging East Asia Bond Markets AsianBondsOnline (ABO) Website Updates

> June 2018 Donghyun Park, Shu Tian Asian Development Bank (ADB)

https://asianbondsonline.adb.org

The most systematic and comprehensive source of information for emerging East Asian bond markets



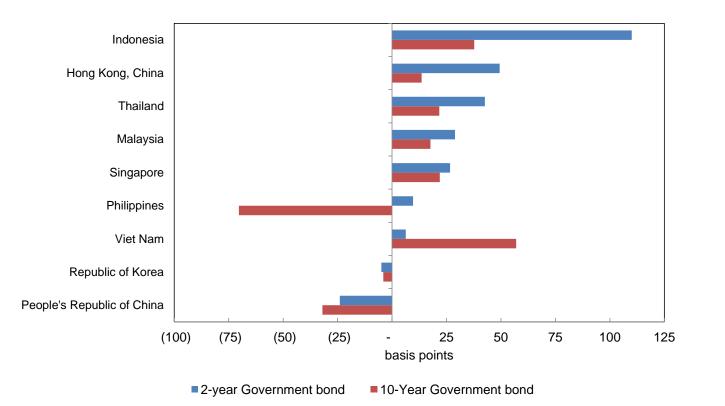
Overview

- First quarter economic growth slowed in most advanced economies.
- However, growth outlook remains positive, with central banks upgrading their economic forecasts.
- In particular, the economic outlook for the US is quite strong and the US Federal Reserve continues its monetary policy normalization.
- This has lead to a rise in yields in emerging East Asia.



Government Bond Yields Rise in Most Emerging East Asian Markets

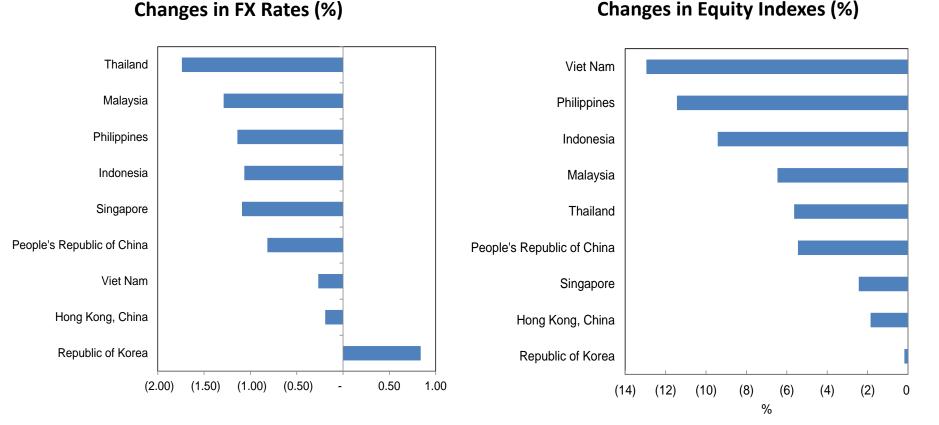
Changes in LCY Government Bond Yields



Note. Data reflect changes between 1 March and 31 May 2018. Source: AsianBondsOnline calculations based on Bloomberg LP data.



Currency Weakens, Stock Market Retreats



Note. Data reflect changes between 1 March 2018 and 31 May 2018. Source: AsianBondsOnline calculations based on Bloomberg LP data.

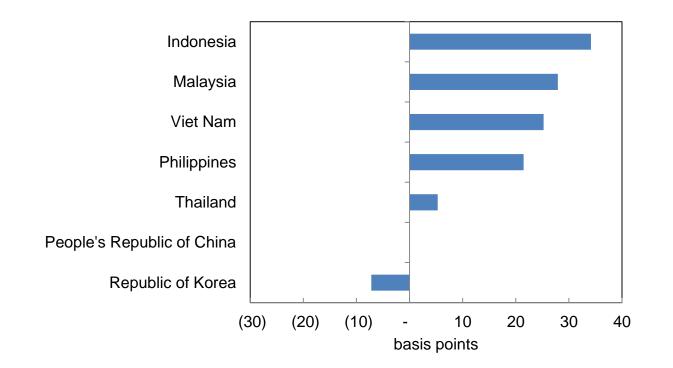
ADB

Changes in Equity Indexes (%)

asianbondsonline.adb.org

CDS Spreads Rise in Most Emerging East Asian Markets

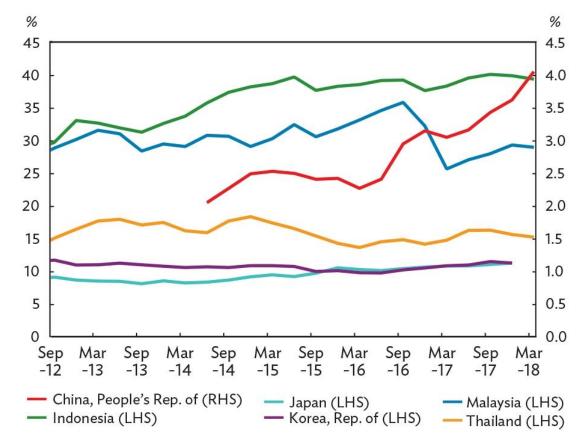
Credit Default Swap Spreads (Senior 5-year)



Note. Data reflect changes between 1 March 2018 and 31 May 2018. Source: AsianBondsOnline calculations based on Bloomberg LP data.



Foreign Holdings of Government Bonds Slightly Fell for Most Markets in March



LHS = left-hand side, RHS = right-hand side. Note: Data as of 31 March 2018 except for Japan and the Republic of Korea (31 December 2017). Source: AsianBondsOnline.

ADB

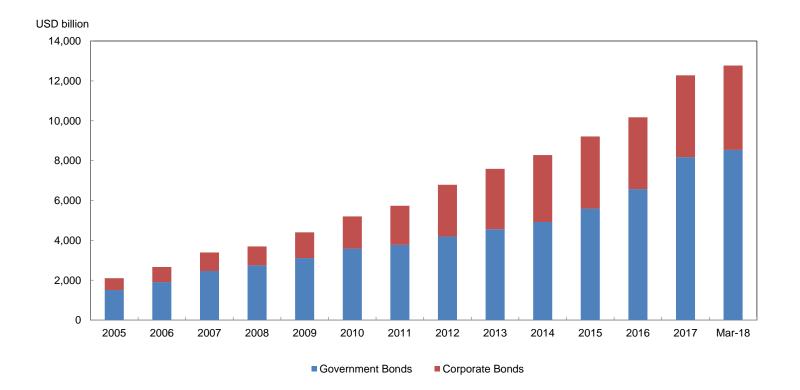
Bond Market Developments

- Emerging East Asia's LCY bond market continued to expand in the first quarter of 2018, albeit at a pace of only 1.1% q-o-q to reach USD12.8 trillion at the end of March.
 - ➢ Growth decelerated from the 3.3% q-o-q increase posted in Q4 2017.
 - Government bonds continued to dominate the region's bond market accounting for a 66.9% share of total bonds at the end of March
- 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 fell for the second consecutive month in Q1 2018 to USD1.0 trillion, driven largely by the lower issuance volume in the PRC which accounts for nearly half of the regional total issuance.



LCY Bond Markets Continue to Grow

Size of Emerging East Asia's LCY Bond Market



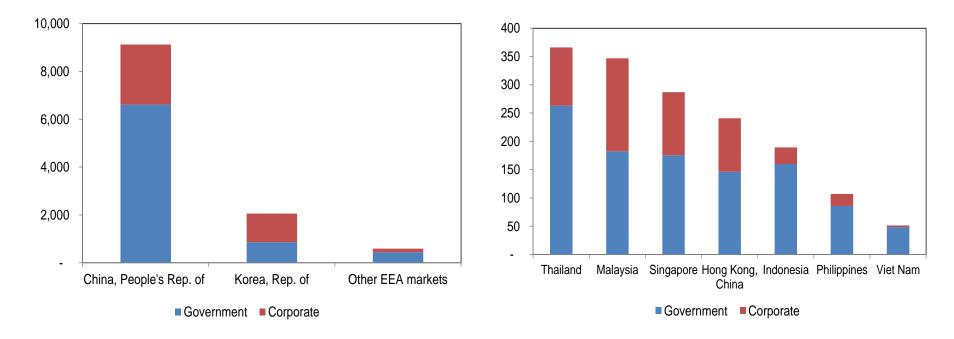
Note: Emerging East Asia comprises the People's Republic of China; Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.

Source: AsianBondsOnline.



PRC Remains the Largest Bond Market in the Region

LCY Bonds Outstanding

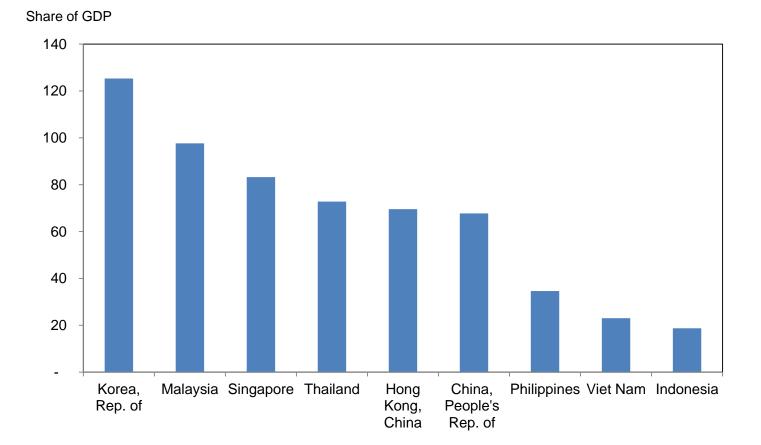


Source: AsianBondsOnline.



asianbondsonline.adb.org

Share of LCY Bonds to GDP is the Largest in the Republic of Korea



Notes: Data as of end-March 2018. Source: AsianBondsOnline.

asianbondsonline.adb.org



ABO Website Revamp: Phase One

- Web design overhaul
- Data Portal
 - Interactive and easy navigation of the various indicators/data provided by ABO
 - Users are able to select fields (Indicator, Economies, Years)
 - 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.
- Official Launch: July 3, 2018



OLD WEBSITE

DB AsianBondsOnline	DB AsianBondsOnline			Google Custom Search			SEARCH		
An ASEAN+3 Initiative	_								
GIONAL Brunei Cambodia Republic Indor	esia Japan	Republic of Korea	Lao People's Democratic Republic	Malaysia	Myanmar	Philippines	Singapor	Thailand	Viet Nam
Un Comma			nepuone						
				L	atest Upda Mark	te: June ! et Wate		9:04 (Mar	nila Time)
			and Breakland	la.					
Good Practices in Developing	Bond Ma	irket	leveloping Bo	nd Market	Gove	10 Year imment	Latest Yield	YTD Change (BP)	MTD Change (BP)
		_	_				3.730	(BP) # 29.0	(BP)
ASEAN+3 and Asian Development Bank together Issued a paper, "Good Practices Developing Bond Market," which discuss	ADB)	0	ommon Unde n Cross-Bord	rstanding er Bus.				▲ 34.8	A 2.7
Developing Bond Market," which discuss	es key	0	ontinuity Plan obersecurity	ining and			7.015	▲ 69.6	▲ 2.3
building blocks of bond markets, particu government bond markets, and success	arly ul efforts of		sia Bond Mor				0.051	▲ 0.3 ▲ 26.8	▲ 1.1 ▲ 4.0
selected countries in developing them. A ADB are currently developing Good Prac	SEAN+3 an	d P	larch 2018				2.735 4.189	▲ 20.8 ▲ 27.5	× 4.0 ▼ 0.7
focusing on corporate and other nongov bond market as in Sections IX and X.	ernment	- 5				PH (6.085	▲ 38.6	₹1.4
bond market as in Sections IX and X.		č	Yeekly Debt F June 4, 2018	ighlights			2.571	▲ 56.6	v 1.3
Download the paper							2.600	▲ 27.6 ▲ 53.7	0.0 • 8.4
							4.738	▲ 53.7 ▼ 46.6	▲ 5.4 ▲ 1.3
							More	Market W	
hat's New					Bong	1 Pricine			
								uble -	
	Latest Dat							oublic of pository & (Clearing
(MY) Foreign investors on a selling spree, pull out a	• (CN) C	redit Sp	read - LC Govt. Bo	(nde		ta. (CCDC)			
selling spree, pull out a staggering RM5.83bil in May			read - LC			ninabon			
(MY) Ringgit rises as	Corp. I	Bonds vs	Govt. Bo	nds	• Da	aily Rep Ishore F	ort of C RMB_Br	hina nd Mark	ket
greenback wavers on political risk	. (KR) P	olicy Rat	e and		0				iore Data
(CN) China Banks' Waning	Inflatio	on Trend	s					► M	ore Data
Demand Hints at More Bond Defaults Ahead	Trends		e and Infl	ation		e: Indones	ia Bond P	ricing Ager	ю
(PH) Bank Mandiri in talks to enter Philippine market	 (KR) S Market 		Y Bond			verview and Mar		onesian	
(RG) Asia Stocks Gain on U.S. Growth as Trade In Focus: Markets Wrap			 More Indica 	tor Data				• M	iore Data
					Mala Souro		icing Age	icy Malaysi	ia
More News									
ADB Research	AsianBond	sOnline Ac	tivity			ey Malay dicators		ond Mar	ket
ASEAN+3 Bond Market	 Worksl 	hop on E	ond Mark	et					ore Data
Guide 2018 - Republic of Korea	Develo East A	pment li sia 2017	n Emergir	g	DL III	ppines			one Data
Common Understanding on					Souro	e: Philippir	e Dealing	& Exchang	ge Corp.
Cross-Border Business Continuity Planning and Cybersecurity					• Co	prporate	Secur	ties - ties Boa	ard
General Principles for Participation of Non-					Su	immary			ore Data
ASEAN+3 Country in ABMF					Thai	bad			
Promoting Green Local Currency Bonds for Infrastructure Development							nd Market	Associatio	n
in ASEAN+3					= Da	ily Mar	ket Hig	hlights	
More ADB Research					• Go	overnme	ent Bor	d Yield	
Bond Market Indicators	Credit 5	tisk Wat	ch				Barri	Vield C	
	0100101		East Asian		• Co	porate	Bond	Yield Cu	
Size and Composition: Size of LCY Bond Market in % GDP (Dec 2017)	Credit D year	efault Spi	read - Seni	or 5-				F M	iore Data
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640 Sec. 2 Sec.	. <mark>.</mark>			-					
CN HK ID JO XR MY PH SO TH IN	-	Jan Aug Neb	Sep Mar Oct A	or Nov May					
Madate			5 2015 2016 2016 20 Date CR						
	DN D								
More Indicators		• M	ore Credit Ris	k Data					
Related Sites :									
Asian Development Bank (ADB) Asia	Regional I	ntegration	Center (AF	UC)					
		land Mark	et Forum (ARME)					
Asia Bond Markets Initiative (ABMI)	ASEAN+3 I								

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NEW WEBSITE SECTIONS

- Recent and upcoming events and publications
- What's New Section

- Data Portal
- Market Watch

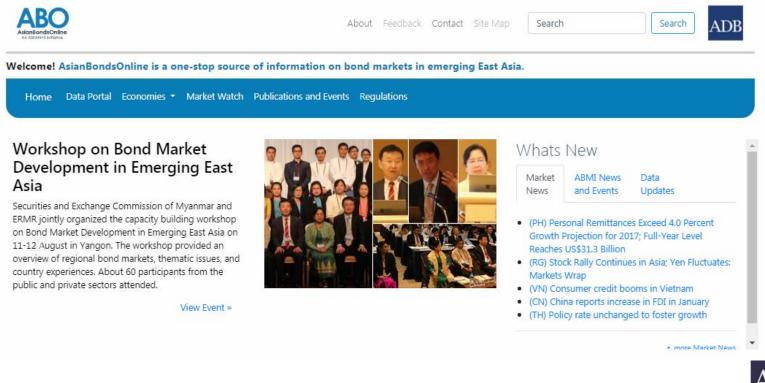
• Research (publications)

 Links to various Bond Pricing Agency websites



Home Page

- Carousel of recent and upcoming publications and events
- What's New
 - Top regional and economy-specific news updated daily
 - Recent news and events of ABMI
 - Recent data updates



Home Page

Data Portal Section

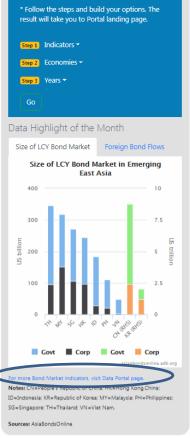
Search tool

- Users can select indicator/ economies/ period coverage
- Results will lead them to Data Portal Page

Data Highlight of the Month

 Selected bond market indicators can change depending on what ABO will want to highlight.

Link at the bottom that will lead to Data Portal page

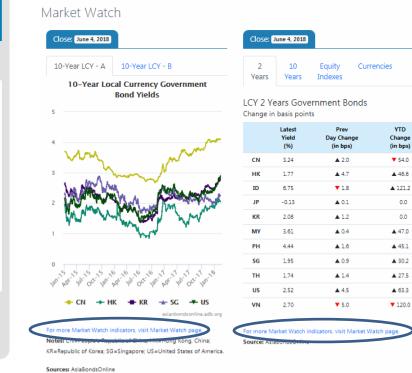


Data Portal

Data Portal Search Tool 🔻

Market Watch Section

- Historical chart of 10-year yields
- Daily updates on 2-year and 10-year government bond yields, equity indexes, and currency movements from previous day and year-to-date
- Links at the bottom that will lead to Market Watch page that contains more indicators



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Home Page

Research Section

Links to various publications by AsiaBondsOnline

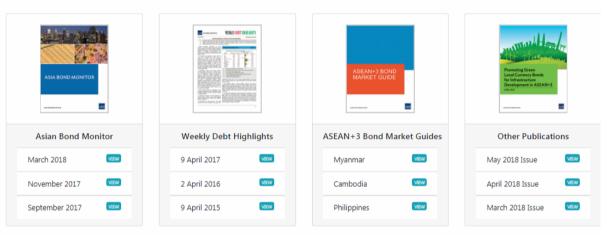
- Asia Bond Monitor
- Weekly Debt Highlights

ABMF/ABMI

- Bond Market Guides
- Other policy papers

Other Publications

R	ρ	C	ρ	а	r	С	h	
	0	5	е	a	5	C		



Bond Pricing Data

China, People's Republic of

Source: China Central Depository & Clearing Co., Ltd. (CCDC)

- (RG) Stock Rally Continues in Asia; Yen Fluctuates: Markets Wrap
- Daily Report of China Onshore RMB Bond Market
 More Data

Indonesia

Source: Indonesia Bond Pricing Agency

Overview of Indonesian Bond Market

Malaysia

Source: Bond Pricing Agency Malaysia

- Key Malaysian Bond Market Indicators
 - More Data

Philippines

Source: Philippine Dealing & Exchange Corp.

Corporate Securities - Corporate Securities Board
 Summary

Thailand

Source: Thai Bond Market Association

- Corporate Securities Corporate Securities Board Summary
- Government Bond Yield Curve
- Corporate Bond Yield Curve

More Data

More Data

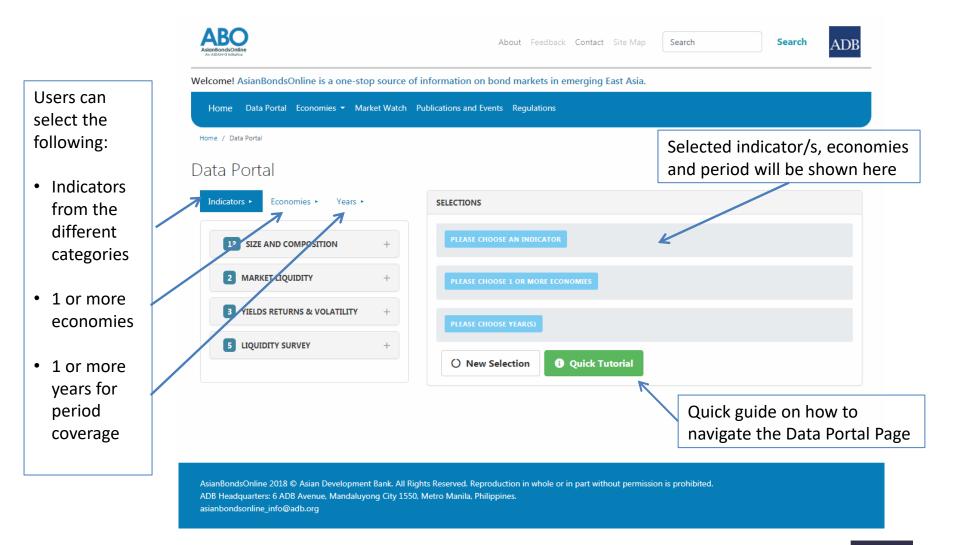
Related Sites

- Asian Development Bank (ADB)
- Asia Regional Inegration Center (ARIC)
- Asian Bonds Markets Initiative (ABMI)
- ASEAN+3 Bond MarketForum (ABMF)

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More Data

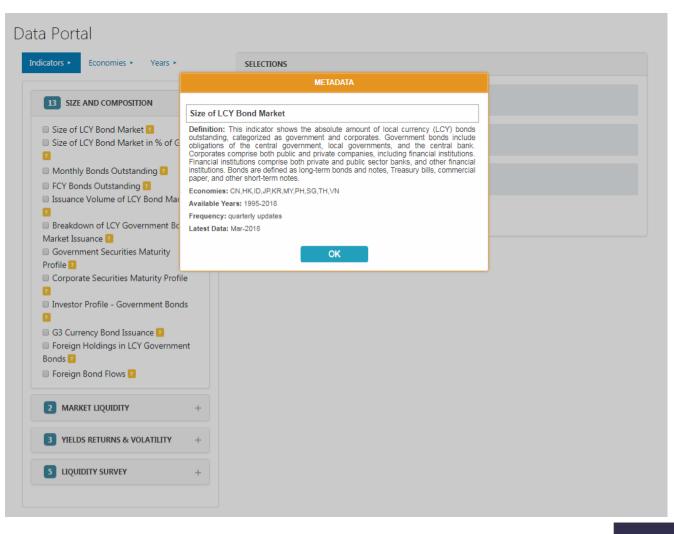




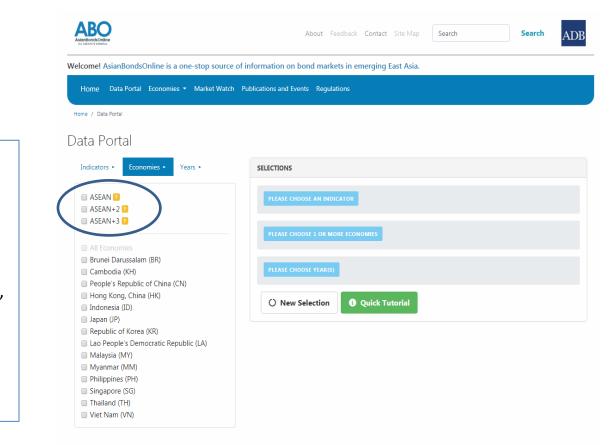


Users can also click on the (?) button to see the metadata of each indicator which will include:

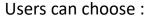
- Data description
- Economies with available data
- Years with available data
- Frequency
- Latest data available







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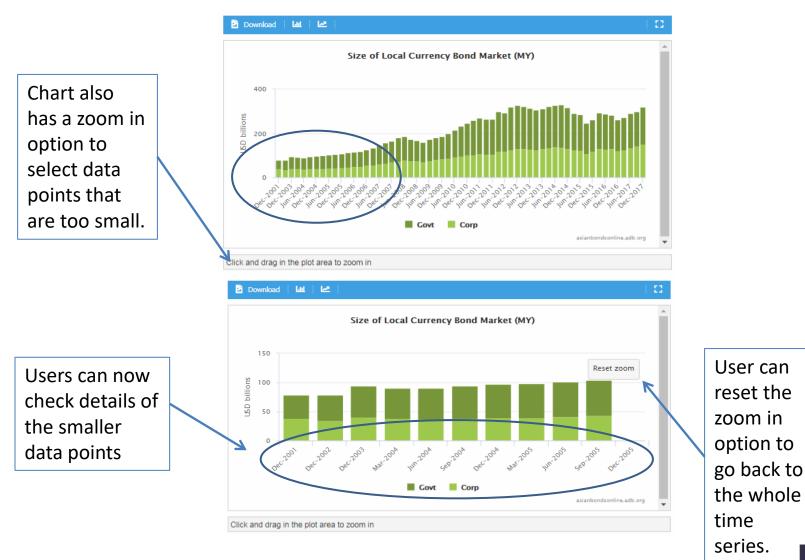
- 1 or more economies
- Aggregates for ASEAN, ASEAN+2, and ASEAN+3 (if applicable)





	SELECTIONS	
	SIZE OF LCY BOND MARKET	
Users can also choose to do a	MALAYSIA (MY) PHILIPPINES (PH) THAILAND (TH)	
new data	2016 2017 2018	
search, by		
clicking "New	✿ Process Data O New Selection ④ Quick Tutorial	
Selection"		
	🖻 Download Lut Let	0
	Size of Local Currency Bond Market	•
Toggle/deselect	Size of Local currency bond Market	
	400	
option: Users can		
option: Users can choose to deselect a		
option: Users can choose to deselect a certain data series to		
option: Users can choose to deselect a certain data series to compare the		
option: Users can choose to deselect a certain data series to compare the remaining markets in		
option: Users can choose to deselect a certain data series to compare the	300 90 90 90 90 90 90 90 90 90	
option: Users can choose to deselect a certain data series to compare the remaining markets in		





At the bottom of the chart is a description of the selected bond market indicator

Notes and sources for each economy/ies selected

Excel/csv files can be downloaded which will also include the following:

- Metadata
- Indicator description
- Notes
- Sources

SIZE OF LOCAL CURRENCY BOND MARKET

This indicator shows the absolute amount of local currency (LCY) bonds outstanding, categorized as government and corporates. Government bonds include obligations of the central government, local governments, and the central bank. Corporates comprise both public and private companies, including financial institutions. Financial institutions comprise both private and public sector banks, and other financial institutions. Bonds are defined as long-term bonds and notes, Treasury bills, commercial paper, and other short-term notes.

NOTES / SOURCES

For MY:

1. End-of-period exchange rates are from Bloomberg, LP.

2. Excludes EMTN, FX-BONDS, FX-IBONDS, ILOANSTOCK, LOANSTOCK, and STTC.

Bank Negara Malaysia - Fully Automated System for Issuing/Tendering

For SG:

1. LCY bonds outstanding include LCY bonds issued by nonresidents.

 The Monetary Authority of Singapore (MAS) publishes LCY corporate bonds outstanding data on an annual basis. Starting from 2007, quarterly LCY corporate bonds outstanding are AsianBondsOnline estimates. Fourth quarter corporate data are revised based upon the availability of MAS data.

3. End-of-period exchange rates are from Bloomberg, LP.

Monetary Authority of Singapore and Bloomberg LP.

	D	AT	A		
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🖹 Excel | 🛃 CSV |

Date	Government (LCY billions)	Corporate (LCY billions)	Total (LCY billions)	Government (USD billions)	Corporate (USD billions)
Mar-2014	613.60	437.64	1,051.24	187.96	^
Jun-2014	611.75	441.54	1,053.29	190.52	
Sep-2014	632.80	446.37	1,079.17	192.90	
Dec-2014	646.95	456.54	1,103.49	184.99	
Mar-2015	612.06	461.31	1,073.36	165.26	
Jun-2015	607.88	467.86	1,075.74	161.10	
Sep-2015	601.80	473.82	1,075.62	136.93	
Dec-2015	611.66	507.33	1,119.00	142.44	
Mar-2016	628.46	512.34	1,140.80	161.16	
Jun-2016	644.04	519.44	1,163.48	159.86	
Sep-2016	631.57	536.65	1,168.22	152.61	
D 2016	277 27	E33 77	1 167 70	141 77	



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Market Watch Page (New)

Home Data Portal Economies - Market Watch Publications and Events Regulations

Home / Market Watch

Market Watch Page

- Various indicators on yield movements, risk and volatility, currency movements, equity markets that are mostly updated on a daily basis.
- Unlike the Data Portal page, charts and data are not downloadable given license agreements with data providers.

Market Watch LCY Government Bond Yield Movements (CN) Close: 04-Jun-18 4.5% BOND MARKET YIELD CURVES GOVERNMENT BOND YIELD CURVES FOR SELECTED PERIODS Telds 3.5% MONEY MARKET INTEREST RATES 2-YEAR LCY GOVT BOND YIELDS 12 13 14 10 10-YEAR LCY GOVT BOND YIELDS End of May + End of 2017 us Wook **RISK AND VOLATILITY** Click and drag in the plot area to zoom in Credit Spread - Major USD Issues vs US LCY GOVERNMENT BOND YIELD MOVEMENTS Treasuries (5-year) Credit Spread - Major USD Issues vs. US NO HISTORICAL DATA AVAILABLE Treasuries (10-year) MTD=month-to-date; WTD=week-to-date; YTD=year-to-date Emerging East Asia CDS - Senior 5-year NOTE:Data presented in basis points (bps). FOREIGN EXCHANGE Source: Bloomberg LP. CURRENCIES DATA Change from Previous Day Latest Closing WTD YTD Tenor MTD Month-to-Date Change Change Change Change 3.11 0.00 0.00 -71.00 1 year Year-to-Date Change 3.24 0.00 2.00 2 year -54.00 Exchange Rate Indexes -45.00 3 year 3.34 0.00 2.00 4 year 3.43 0.00 3.00 -41.00 OTHERS 3.50 0.00 2.00 -42.00 5 year 3.62 2.00 -27.00 7 year 0.00 Equity Indexes 8 year 3.67 0.00 3.00 -25.00 POLICY RATE AND INFLATION 3.71 3.00 -26.00 0.00 9 year TRENDS 10 year 3.73 0.00 3.00 -29.00 3.88 2.00 15 year 0.00 -29.00

Publications/Events Page (New)

Publications and Events Page

Publications

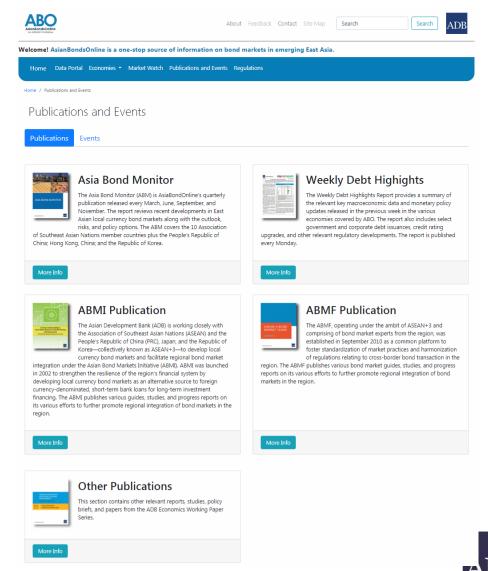
 Lists the various publications of AsiaBondsOnline: Asia Bond Monitor Weekly Debt Highlights Monthly Debt Roundup (upcoming)

ABMF/ABMI

- Bond Market Guides
- Other policy papers

Other Publications

- ADB Working Papers, etc.

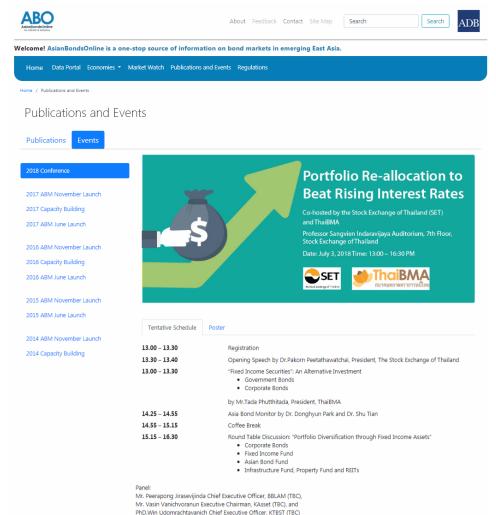


Publications/Events Page (New)

Publications and Events Page

Events

- Lists the various upcoming and previous events held/participated by ABO.
- Each event will include the program; presentations and event photos (if applicable)



Economies Pages

OLD WEBSITE



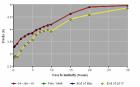
Currency: Malaysian Ringgit (MYR)

Market Watch							
Close of June 4, 201	18	CHANGE FROM					
Govt. Bond Yields	Latest Yield	Previous Day	Previous Week	YTD			
2 Year	3.608	▲ 0.4	0.0	47.0			
5 Year	3.828	▲ 0.3	0.0	▲ 26.8			
10 Year	4.189	▲ 0.7	0.0	▲ 27.5			
 Government bond yield changes are expressed in basis points. >> More details 							
Currencies	Latest Rate	Previous Day	Previous Week	YTD			
MYR per USD	3.972	▲ 0.2	0.0	▲ 1.8			
MYR per JPY	0.036	▲ 0.4	0.0	▼ 0.7			
 Exchange rate changes are expressed as a percentage change. More details 							
Interest Rates	Latest Rate	Previous Day	Previous Week	YTD			
1D KLIBOR	3.170	▼ 7.0	0.0	▲ 26.0			
3M KLIBOR	3.690	0.0	0.0	▲ 25.0			
* Interest rate change >> More details	* Interest rate changes are expressed in basis point change. >> More details						

		CHANG	E FROM			
Policy Rates	Latest Rate (25-Jan- 2018)	Previous Rate (9-Nov- 2017)	YTD Rate			
Overnight Policy Rate	3.250	▲ 25.0	▲ 25.0			
* Policy rate changes are expressed in basis point change.						

Sovereign Ratings								
Agency	Rating	Outlook	Date					
Regional Rating Institutions								
R&I	А	stable	2016-07-05					
RAM	A2	stable	2017-01-05					
Non-Regional Rating Institutions								
Fitch	A-	stable	2017-08-17					
S&P	Α-	stable	2017-06-22					
>> More detai	ls							

LCY GOVERNMENT BOND YIELD MOVEMENTS



NEWS HIGHLIGHTS

- Ringgit slips against US\$ as manufacturing sector declines
- Foreign selling of Msian equities rose to RM1.27b last week, says MIDF Research
- Foreign investors on a selling spree, pull out a staggering RM5.83bil in May
 Ringgit rises as greenback wavers on political risk
- Malaysian govt may seek more revenue from Petronas as profit jumps
- Read full index for News and Commentary

BOND ISSUANCES

- CIMB Bank unveils largest US dollar bond offering in Reg
- Edotco To Raise US\$600 Million Via Equity Private Placement
- Read full index for Bond Issuances

NEW WEBSITE

About	Feedback	Contact	Site Map	Search	Search	ADB

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Home Data Portal Economies - Market Watch Publications and Events Regulations

Home / Economies

ABO

Malaysia

Market at a Glance Data Market Structure Market Summary News

Market Watch

Close of June 4, 2018		Change From			
Govt. Bond Yields	Latest Yield	Previous Day	Previous Week	YTD	
2 Year	3.608	▲ 0.4	0.0	47.0	
5 Year	3.828	▲ 0.3	0.0	▲ 26.8	
10 Year	4.189	▲ 0.7	0.0	▲ 27.5	
* Government I • More details		es are expres	sed in basis poin	ts.	

Currencies	Rate	Day	Week	YTD			
MYR per USD	3.972	▲ 0.2	0.0	▲ 1.8			
MYR per JPY	0.036	▲ 0.4	0.0	▼ 0.7			
* Exchange rate changes are expressed as a percentage change. • More details							

Interest Rates	Latest Rate	Previous Day	Previous Week	YTD			
1D KLIBOR	3.170	▼ 7.0	0.0	▲ 26.0			
3M KLIBOR	3.690	0.0	0.0	▲ 25.0			
* Interest rate changes are expressed in basis point change. • More details							

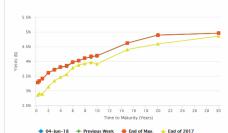
Policy Rates

		YTD Rate
50 🔺 2	5.0	▲ 25.0
	-Jan-2018) (9-M 50 🔺 2	-Jan-2018) (9-Nov-2017)

Sovereign Ratings

Agency	Rating	Outlook	Date	
	Region	al Rating Institu	itions	
R&I	Α	stable	2016-07-05	
RAM	A2	stable	2017-01-05	
	Non-Regi	onal Rating Ins	titutions	
Fitch	A-	stable	2017-08-17	
S&P	A-	stable	2017-06-22	
 More deta 	ils			

LCY Government Bond Yield Movements (MY)



NEWS HIGHLIGHTS

- Ringgit slips against US\$ as manufacturing sector declines
- Foreign selling of Msian equities rose to RM1.27b last week, says MIDF Research
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Read full index for News and Commentary

BOND ISSUANCES

- CIMB Bank unveils largest US dollar bond offering in Reg S
- Edotco To Raise US\$600 Million Via Equity Private Placement

Read full index for Bond Issuances



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Economies Pages

Malaysia

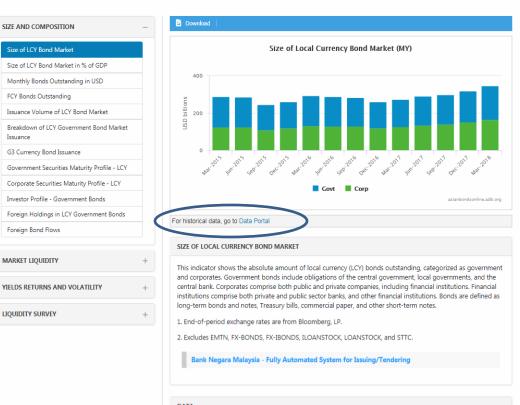
Market at a Glance

Data

Market Structure Market Summary News

New tab in individual Economies Page

- Same format of Data
 Portal Page, but
 provides only a
 snapshot (most recent
 three years), no
 historical data
- For historical data, there is a link at the bottom of the chart to Data Portal



DATA					
🖹 Excel 👼 C	sv i				
Date	Government (LCY billions)	Corporate (LCY billions)	Total (LCY billions)	Government (USD billions)	Corporate (USD billions)
Mar-2015	612.06	461.31	1,073.36	165.26	1
Jun-2015	607.88	467.86	1,075.74	161.10	1
Sep-2015	601.80	473.82	1,075.62	136.93	1

Website Updates: a summary

- Phase 1 was primarily focused on:
 - Revamping website to make it more visually pleasing and improve readability to site users
 - Making data more accessible by-
 - Creating a data portal to make it easier to find data
 - Adding interactive features to help users in accessing and downloading data

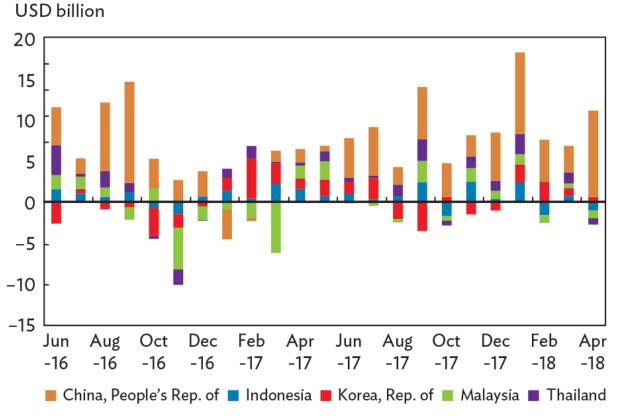


Website Updates: Future Plans

- Future Phases Will Be Focused On:
 - Expanding the breadth of the data
 - New bond indicator: Foreign Bond Flows
 - Interactive regulation in collaboration with BMG team
 - Add additional data indicators such as:
 - Macroeconomic data (inflation, etc.)
 - More bond data such as foreign currency issuance data
 - Work to add data currently not available for certain markets (ie. trading volume for Philippines)



Foreign Bond Flows (New)



 Currently also working to include data for Philippines



Regulations Page (New)

Monitored Colline An Address Ministry	About Feedback Contact Site Ma	p Search Search ADB
elcome! AsianBondsOnline is a one-stop source of infor	mation on bond markets in emerging East A	Asia.
Home Data Portal Economies - Market Watch Publication	ons and Events Regulations	
ome / Regulations		
Regulations		
REGIONAL BRU CAM PRC INO JAP KOR	lao mal mya phi sin tha	A VIE
REGIONAL OVERVIEW		
Rules and The Asian bond market is sup regulations section.	ervised by several regulatory agencies. The functions	and descriptions of these agencies are discussed in this
General Supervisory Framework		
Securities Issuance and Trading		
Exchange and Platforms		
Clearing and Settlemet Systems		
Settlemet Systems Investment		
Settlemet Systems Investment Management Deliverables		
Settlemet Systems Investment Management Deliverables Operations Specialist		

asianbondsonline_info@adb.org



Website Updates: Future Plans

- Work with government agencies in order to revise data released by government to meet investor needs for transparency
 - Design and create data that is currently not available such as non-resident holdings
 - Greater granularity in data
- Provide more breakdowns in existing bond data
 - Such as greater breakdowns in bond and issuance data



Website Updates: Future Plans

- Find ways to reach out to more users
 - Convenience: Development of apps
 - Up-to-date: Market summary on a monthly basis
 - Conduct another user survey for further improvements



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Email us at: <u>asianbonds_info@adb.org</u> <u>asianbonds_feedback@adb.org</u>



asianbondsonline.adb.org



Comparison of ASEAN6 Corpora Bond Markets

Dong Woo Rhee Chief Financial Officer / CGIF 19 June 2018





I. Introduction of CGIF

II. Corporate bond market sizes of ASEAN6

III. Characteristics of Corporate bonds of ASEAN6



INTRODUCTION OF CGIF

Legal Structure	A Trust Fund of the Asian Development Bank (ADB) Governed by CGIF Articles of Agreement, ADB acts as the Trustee for CGIF's assets		
Establishment	12 November 20	10 (commenced operations May 2012)	
Paid-In Capital	US\$ 859 million		
Maximum Leverage	2 to 2.5 times		
Contributors	Governments of	ASEAN+3	
(Shareholders)	(10 member countries of ASEAN + China, Japan, South Korea) and Asian Development Bank (ADB)		
Objective	Development of Capital Markets in ASEAN+3 (Part of Asian Bond Markets Initiative (ABMI))		
Main Operations	Guaranteeing Bo	onds issued in ASEAN+3	
Ratings	Global Scale ASEAN ScaleAA (Standard & Poor's)AAA (RAM - Malaysia)National ScaleAAA (RAM - Malaysia)AAA (RAM, MARC – Malaysia, TRIS Rating – Thaila Fitch Ratings – Indonesia)		





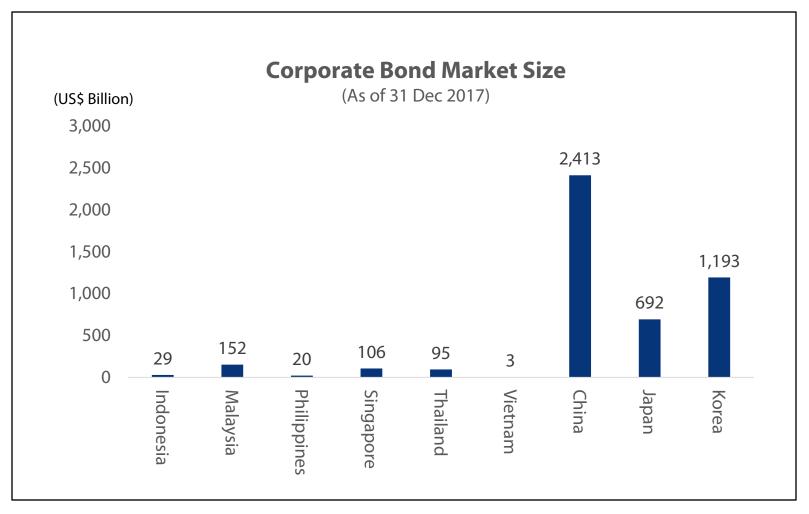
I. Introduction of CGIF

II. Corporate Bond Market Sizes of ASEAN+3

III. Characteristics of Corporate Bonds of ASEAN6



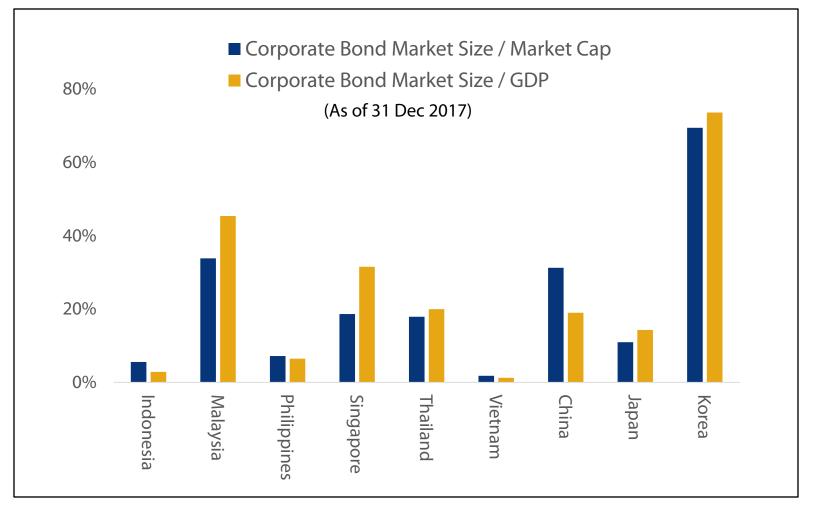
Absolute Size



(Data Source: AsianBondsOnline)



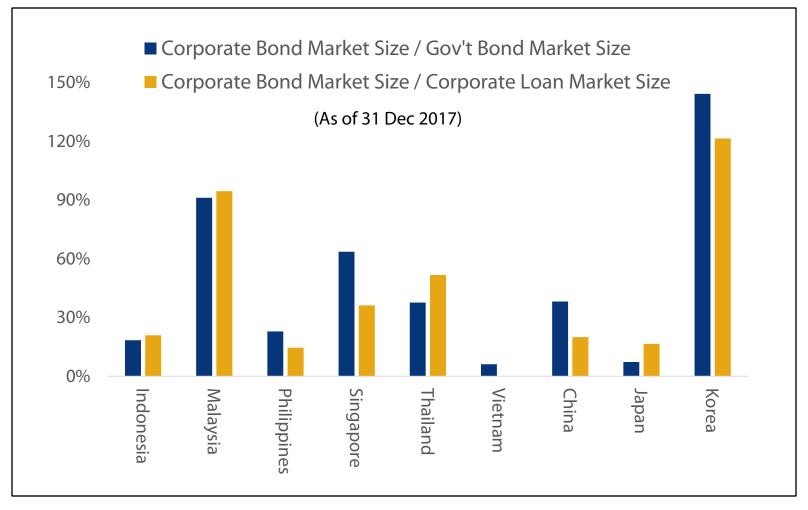
Relative Size (1)



(Data Source: AsianBondsOnline)



Relative Size (2)



(Data Source: AsianBondsOnline, Central Banks)





I. Introduction of CGIF

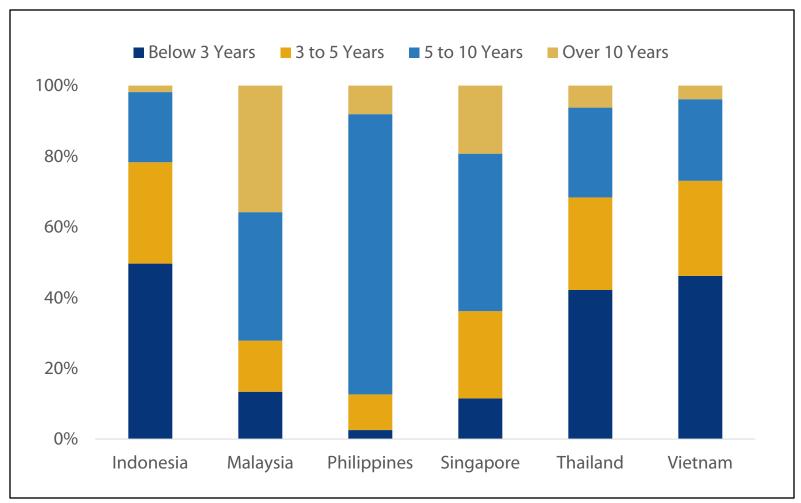
II. Corporate Bond Market Sizes of ASEAN+3

III. Comparison of Corporate Bonds of ASEAN6

- **1. Maturity Distribution**
- 2. Maturity Type
- 3. Coupon Type
- 4. Payment Rank
- 5. Credit Rating
- 6. Guaranteed Bonds
- 7. Cross Border
- 8. Summary



Maturity Distribution (1)



Notes:

(Data Source: Bloomberg, 31 Dec 2017)

- 1. Ranges include long-end tenors and exclude short-end tenors.
- 2. Data refers to original maturity



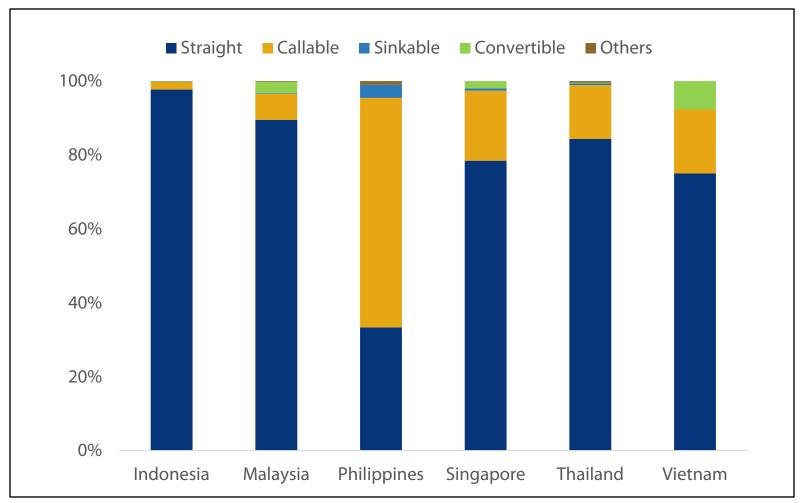
Maturity Distribution (2)

. . .

Country	Special Feature	Reason behind
Malaysia	Over 10 year maturity bonds occupy a substantial share (36%) of the corporate bond market.	Infrastructure bonds occupy more than 30% of corporate bonds in Malaysia
Philippine	Bonds having the maturities between 5 to10 years occupy a majority share (79%) of the corporate bond market.	Bank bonds whose issuance maturities are longer than 5 years are exempt from WHT (withholding tax).



Maturity Type (1)



Note:

(Data Source: Bloomberg, 31 Dec 2017)

Callable includes perpetual callable, extendible, put callable. Sinkable includes callable sink, extendible sink. Convertible includes whatever convertible.

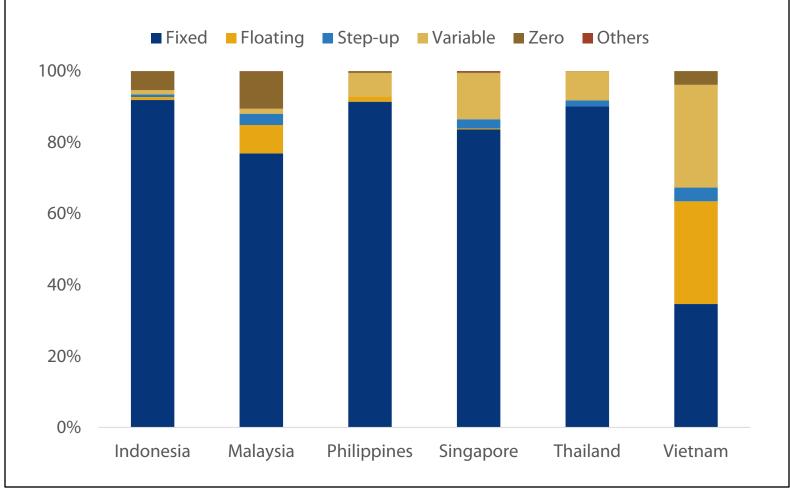


Maturity Type (2)

Country	Special Feature	Reason behind
Philippine	Callable bonds (62%) are more common than straight bonds (33%).	Issuers have more bargain power than investors in Philippine, which enables issuers to issue callable bonds with little spread.



Coupon Type (1)



(Data Source: Bloomberg, 31 Dec 2017)

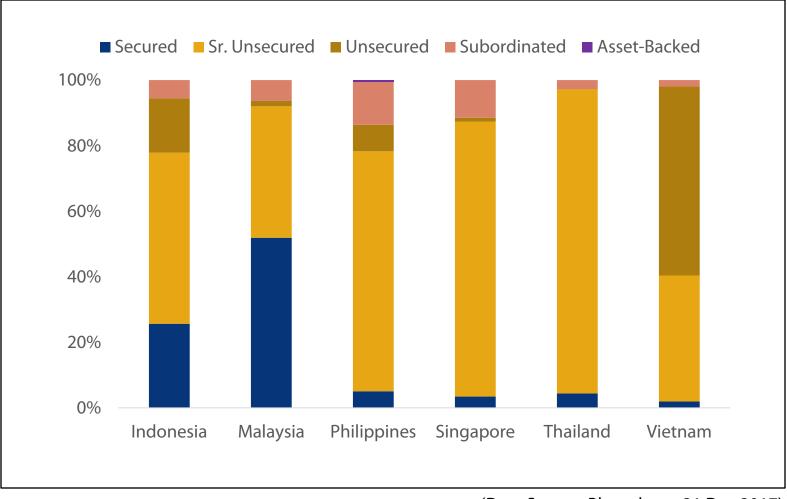


Coupon Type (2)

Country	Special Feature	Reason behind
Vietnam	Fixed coupon bonds occupy only 35% of the corporate bond market whereas the sum of floating and variable coupon bonds occupies 58%.	Variable coupon is similar to floating coupon in Vietnam as both are linked to 12M deposit rate. The difference is that the first coupon of variable coupon bond is fixed whereas that of floating coupon bond is floating. These coupon types are preferred by commercial banks, the biggest investor group in Vietnam, whose liabilities are also linked to deposit rates.



Payment Rank (1)



(Data Source: Bloomberg, 31 Dec 2017)

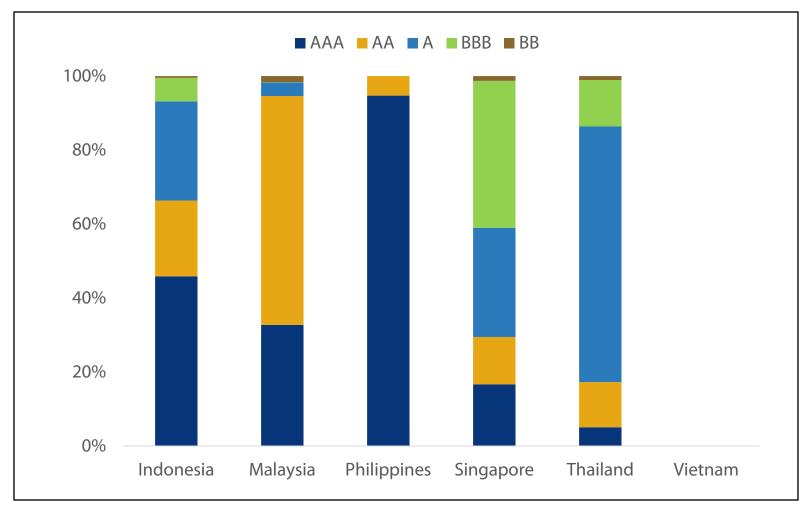


Payment Rank (2)

Country	Special Feature	Reason behind
Indonesia	Secured bonds occupy a substantial share (26%) of the corporate bond market.	Majority of corporate bonds are issued by financial entities and it is common for financial entities to provide receivables as collateral when they issue bonds in Indonesia.
Malaysia	Secured bonds occupy a majority share (52%) of the corporate bond market.	High percentage of secured bonds in Malaysia is linked to high percentage of project bonds.



Credit Rating (1)



Note:

(Data Source: Bloomberg, 31 Dec 2017)

1. Rating agencies used for each country: Pefindo (Indonesia), RAM (Malaysia), PhilRatings (Philippines), Moody's (Singapore), TRIS (Thai)

2. Unrated bonds are excluded.



Credit Rating (2)

Country	Special Feature	Reason behind
Malaysia	Rating cliff (mostly AAA and AA)	Rating cliff of Malaysia is told to be attributed to credit event experience during the financial crisis.
Philippine	Rating cliff (only AAA and AA)	Companies tap bond market only when they can no longer use bank loans due to single borrower's limit, 25% of bank's net capital. Small companies hardly touch the limit.
Thailand	Generous credit appetite	About half of corporate bond investors are retails, who pursue yields.
Vietnam	No corporate bond having a credit rating	No local credit rating agency exists in Vietnam.



Guaranteed Bonds (1)



(Data Source: Bloomberg, 31 Dec 2017)



Guaranteed Bonds (2)

Country	Special Feature	Reason behind
Malaysia	Guaranteed bonds occupy a substantial share (30%) of the corporate bond market.	Danajamin, national guarantor, plays a significant role in Malaysian corporate bond market.
Singapore	Guaranteed bonds occupy a substantial share (40%) of the corporate bond market.	Most of guarantees are done by parent companies.
Thailand	Partially guaranteed bonds	Big yield gap between A- and BBB+ gives the chance of partial guarantee.
Vietnam	High percentage of CGIF guaranteed bonds (4 out of 7)	In line with CGIF's mission to promote less developed corporate bond market.



.

Guaranteed Bonds (3)

THB Yield Matrix						(Unit: %)
	1Y	2Y	3Y	5Y	7Y	10Y
Treasury	1.46	1.52	1.56	1.74	1.83	2.05
AAA	1.64	1.81	1.87	2.11	2.30	2.63
AA+	1.77	1.99	2.09	2.39	2.62	3.00
AA	1.78	2.01	2.11	2.41	2.64	3.02
AA-	1.80	2.03	2.13	2.43	2.66	3.04
A+	1.85	2.10	2.22	2.55	2.80	3.20
A	1.85	2.10	2.23	2.55	2.80	3.21
A-	1.87	2.13	2.25	2.59	2.84	3.25
BBB+	3.09	3.36	3.50	3.85	4.11	4.53
BBB	3.34	3.63	3.78	4.15	4.43	4.87

(Data: Bloomberg, as of 8 Aug 16)

. .



Guaranteed Bonds (4)

- According to TRIS rating, BBB+ rated company's bond can be rated A- if it is 40% guaranteed by AA+ bank in Thailand.
- Below is the table comparing the economic value between full guarantee and partial guarantee from the AA+ rated guarantor's perspective. (Assume that BBB+ rated company wants to issue 5-year bond amounting to THB 100M)

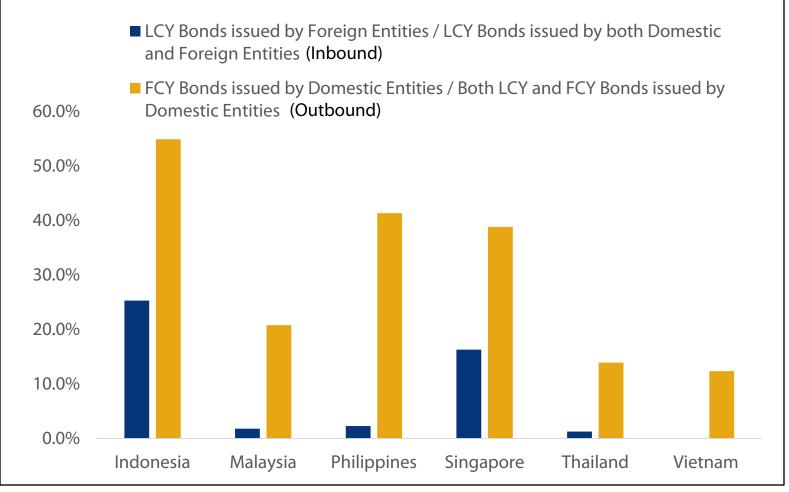
	lssuer's stand alone funding cost (A)	Coupon of guaranteed bond (B)	Maximum guarantee fee payable (A-B)	Guarantee amount	Maximum guarantee fee per1M guarantee
Full Guarantee	3.85M (3.85% ¹ × 100M)	2.39M (2.39% ² × 100M)	1.46M	100M	14.6K
Partial Guarantee	3.85M (3.85% × 100M)	2.59M (2.59% ³ × 100M)	1.26M	40M	31.5K

(¹ BBB+ 5-year rate, ² AA+ 5-year rate, ³ A- 5-year rate)

(* Economic analysis above is only for illustrative purpose, may be away from real values)



Cross Border (1)



(Data Source: Bloomberg, 31 Dec 2017)



Cross Border (2)

Country	Special Feature	Reason behind
Indonesia	High inbound percentage	Almost all inbounds are settled in hard currencies like USD or JPY. They are issued by financial institutions for economic reason.
	High outbound percentage	Average maturity (16Y) of USD bonds issued by Indonesian entities is much longer than that (4.5Y) of IDR bonds, which implies that Indonesian entities rely on offshore funding when they need long term funding.
Singapore	High inbound percentage	SGD is 1) a low interest rate currency and 2) easy to be converted to other currencies.



Summary of Comparison

Country	Summary of Characteristics
Indonesia	Less developed corporate bond market with incongruously active cross borders
Malaysia	Relatively developed corporate bond market with the longest average tenor among ASEAN 6. However, less generous to credit.
Philippine	Less developed corporate bond market, only for AAA and AA rated issues. 5 to 10 year maturity class dominates the market.
Singapore	Relatively developed corporate bond market with high percentage of parent guarantee.
Thailand	Relatively developed corporate bond market with generous credit appetite compared with peers and preference of simple type.
Vietnam	Least developed corporate bond market among ASEAN 6.



Thank You

Dong Woo Rhee

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www.cgif-abmi.org

AMBIF Taxation Study

Kosintr Puongsophol

Financial Sector Specialist Economic Research and Regional Cooperation Department

> 28th ASEAN+3 Bond Market Forum (ABMF) 19 June 2018, Fukuoka, Japan

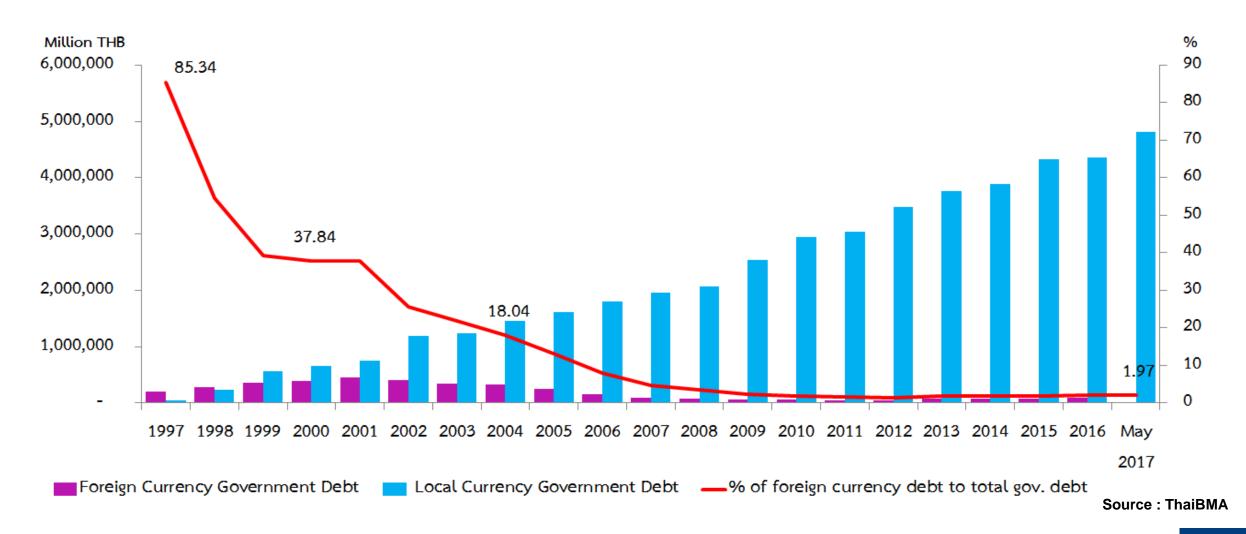


RECAP FROM LAST MEETING

- 1. Emphasized the importance of local currency bond market and key financial pillars
- 2. Proposed to complete the study 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



WHY DO WE NEED LOCAL CURRENCY CAPITAL MARKETS?

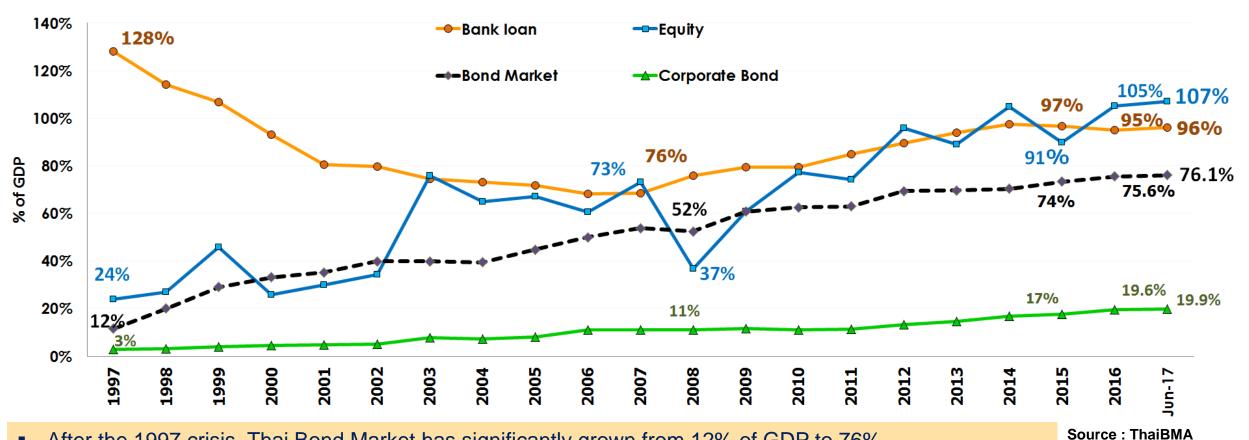


LCY bond market has helped the government (1) to reduce reliance on offshore funding and (2) to reduce foreign exchange risk.

ADB

WHY DO WE NEED LOCAL CURRENCY CAPITAL MARKETS?

Outstanding of Thailand's Financial Market (% of GDP)



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.

EVOLUTION OF BOND MARKET DEVELOPMENT

Prior to 1999

•Domestic Bond Market Development Committee was established

1999

•Public Debt Management Office (PDMO) was established

2001

•1st Domestic Bond Market Development Plan

(2001 - 2004)

2005

•2nd Domestic Bond Market Development Plan

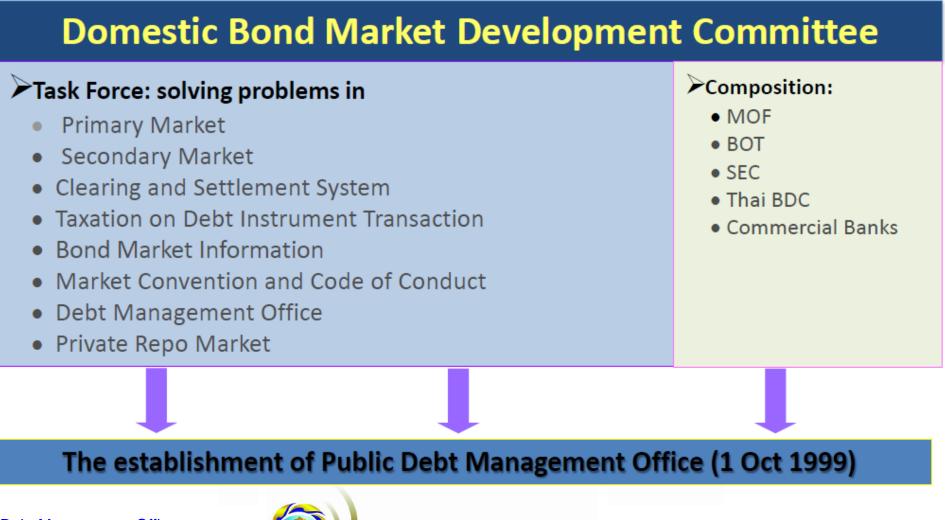
(2005 - 2014)

2016

•Developing Strategy and Regulating Bond Market



EVOLUTION OF BOND MARKET DEVELOPMENT



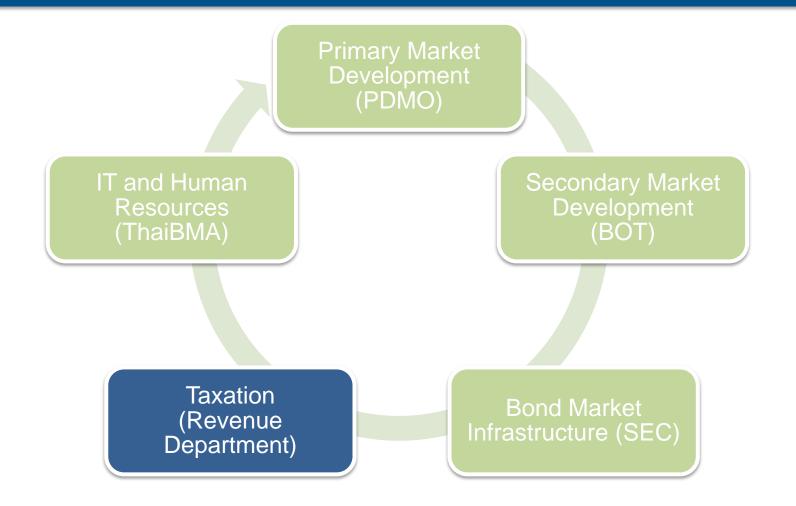




2ND DOMESTIC BOND MARKET DEVELOPMENT PLAN (2005-2014)

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





CURRENT CAPITAL MARKETS TAXATION FRAMEWORK

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

^ 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

OTHER ISSUES

- 1. Replenishment of Financial Institution Development Fund (FIDF)
- 2. Proposed tax on bond fund

OTHER ISSUES: Replenishment of FIDF

1. Replenishment of Financial Institution Development Fund (FIDF)

- The Emergency Decree on management revision of the Ministry of Finance's debt occurred from aiding the Financial Institutions Development Fund was enacted on January 27, 2012.
- The decree paves way for calling up contribution from existing financial institutions to help shoulder the burden of principle and interest payment of FIDF's massive debt.
- The current contribution is set at 0.46% p.a. from average deposits and funds received from the general public which includes funds received from security sale transactions under the repurchase agreement.



OTHER ISSUES

2. Proposed tax on bond fund

• The Ministry of Finance is currently considering amending a system of tax

implication on debenture investment through Thai mutual fund.

The draft amendment to the Revenue Code proposes to cancel the exemption on

mutual funds and its unit holders' income deriving from debentures investment.



NEXT STEPS

- 1. Submit the draft report to relevant authorities for review by July
- 2. Finalize the AMBIF Taxation Study for Thailand by August
- Present findings and circulate the report to ABMF members at the 29th ABMF meeting



THANK YOU



Confidential

NTT DATA Global IT Innovator

Market Visit - China

June 19th, 2018

NTT DATA SYSTEM TECHNOLOGIES INC.

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- QFII/RQFII
 - Foreign investors can trade bonds in a limited quota in the onshore bond market.
- CIBM direct
 - Foreign investors can participate CIBM (China Interbank Bond Market) to trade bonds directly. The settlement can be done with CCDC and SHCH in the onshore market.
- Bond Connect
 - Domestic and foreign investors can trade through the linkage between Mainland and Hong Kong bond market. The settlement can be done in the offshore bond market through CMU.



Account Opening for OTC Market

		Regulators and Market Institutions						
		CSRC	SAFE	PBOC	CFETS	SHCH	CCDC	
Investor type	Domestic		N/A	N/A	Pre-filingOpen cash account	- Create ID registered as a participant	- Open securities account	- Open securities account
	Foreign	QFII, RQFII	- Approve license	- Approve quota	Pre-filingOpen cash account	- Create ID registered as a participant	- Open securities account	- Open securities account
		CIBM direct		N/A				
		Bond Connect	N/A	N/A	- Pre-filing (BCCL assistance)	- Create ID registered as a participant (BCCL assistance)	N/A (Use CMU nominee securities account)	N/A (Use CMU nominee securities account)

- Foreign Investor entrusts the settlement agent to file all applications on behalf of the investor.
- The submission of KYC information is standardized and the information is accepted in electronic form.

NTTDATA

Account Opening for Exchange Market

		Regulators and Market Institutions					
		CSRC	SAFE	CSDC	SHSE	SZSE	
Investor type	Domestic	- Approve license	N/A	- Open securities account	- Approve commencement of trading	- Approve commencement of trading	
	Foreign (QFII,RQFII)	- Approve license	- Approve quota	- Open securities account	- Approve commencement of trading	- Approve commencement of trading	

- Foreign Investor entrusts the settlement agent to file all applications on behalf of the investor.
- The submission of KYC information is standardized and the information is accepted in electronic form.

Account structure depends on market segment and nature of investor.

	Segment			
Nature of	OTC Market	Exchange Market CSDC		
Investor	CCDC/SHCH			
Domestic Investor	Segregate/ Omnibus(Commercial Bank)	Segregate		
Foreign Investor				
QFII/RQFII	Segregate	Omnibus(Settlement Agent)		
CIBM direct	Segregate	-		
Bond Connect	Omnibus(CMU)	_		

Account naming convention follows market access and market segment prescriptions.

e.g. Domestic investors in own name or via commercial bank,

QFII/RQFII and CIBM direct in own name or via agent,

Bond Connect investors via CMU

Transactions in the OTC Market

	Domestic	Foreign Investor			
	Investor	QFII/RQFII	CIBM direct	Bond Connect	
Pre-Funding	-	-	-	CMU(T-1)	
Trade	CFETS	CFETS	CFETS	CFETS	
Bond	-CCDC	-CCDC	-CCDC	-CCDC	
Settlement	-SHCH	-SHCH	-SHCH	-SHCH	
Cash Settlement	-CNAPS	-CNAPS	-CNAPS	-CIPS	
	-CCDC	-CCDC	-CCDC		
	-SHCH	-SHCH	-SHCH		

NTTDATA

Transactions in the Exchange Market

	Domestic Investor	Foreign Investor QFII/RQFII
Pre-Funding	_	_
Trade	-SHSE -SZSE	-SHSE -SZSE
Bond Settlement	CSDC	CSDC
Cash Settlement	Commercial Bank	Commercial Bank







ISO 20022 – Universal financial industry message scheme

June 19, 2018

Masayuki Tagai Vice Convenor, ISO 20022 Registration Management Group (RMG)

ISO_20022_LV_v157

ISO 20022 The ISO recipe for all financial messages



- ISO 20022 Universal financial industry message scheme, the recipe:
- syntax neutral business modelling methodology
- syntax specific design rules
- industry led development/registration process
- financial repository on www.iso20022.org
- reverse engineering approach to ease coexistence

Why ISO 20022? Supports convergence and co-existence

Long term we want one standard,

FpML

FIX

MDDL

but in the interim several standards need to co-exist...

MDDL

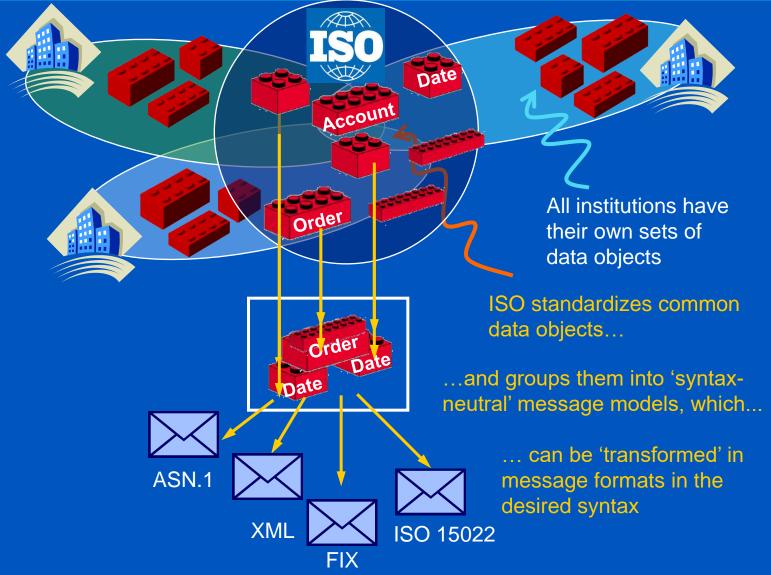
FpML

model

FIX

ISO 20022 Illustrating business modelling





The ISO 20022 recipe Main ingredients (1/2):



Modelling-based standards development

- Syntax-independent business standard
- Validated by the industry

Syntax-specific design rules for XML and ASN.1

- Predictable and 'automatable'
- Protect standard from technology evolution

Reverse engineering approach

- Protect industry investment and ease interoperability
- Prepare for future migration

The ISO 20022 recipe Main ingredients (2/2):



Development / registration process

- Clearly identified activities and roles
- Business experts and future users involved upfront
- Technical experts involved when required
- Repository on the ISO 20022 website
 - Business Process Catalogue & Data Dictionary
 - Outside of official standard (maintained by registration bodies)



The eight parts of ISO 20022



- Part 1: Metamodel
- Part 2: UML profile
- Part 3: Modelling
- Part 4: XML schema generation
- Part 5: Reverse engineering
- Part 6: Message transport characteristics
- Part 7: Registration
- Part 8: ASN.1 generation

Copies can be obtained from www.iso.org



ISO 20022 - The Financial Repository

Data Dictionary

- Business Concepts
- Message Concepts
- Data Types

Business Process Catalogue

- Financial business process models
- Financial business transactions, including messages
- XML or ASN.1 message schemas

www.iso20022.org

ISO 20022: The actors (1/2)



Submitting organisations

Communities of users or organisations that want to develop ISO 20022 compliant messages to support their financial transactions

Could be

ANBIMA ASF Banco de España **Bank of England** Banque de France **Berlin Group BIAN CBI** Consortium CFETS CFTC China UnionPay Clearstream CLS **Danish Bankers Association** Deutsche Bundesbank

DTCC Early Warning Services EPC ESMA Euroclear **European Central Bank FED** FFL **FISD** FPL FpML **IFX Forum** ISITC nexo A.I.S.B.L. OAGi

Omgeo Payments UK PBOC RU-CMPG SABS SPRING SVIFT Target TC68/SC7/TG1 Tieto Corporation TWIST T2S UN/CEFACT etc.

ISO_20022_LV_v157

ISO 20022: The actors (2/2)



Registration Management Group, RMG

- Overall governance, court of appeal
- Approve business justifications for new message standards
- Approve new member entities
- Create Standard Evaluation Groups (SEGs) and SubSEGs
- Standards Evaluation Groups, SEGs and SubSEGs
 - Represent future users in specific financial areas
 - Validate new candidate messages and change requests
- Registration Authority, RA
 - Ensure compliance
 - Maintain and publish ISO 20022 Repository

Technical Support Group, TSG

Assist RMG, SEGs, RA and submitting organisations
 ISO_20022_LV_v157

ISO 20022 The registration process (1/3)



R M G m 0 n t 0 S

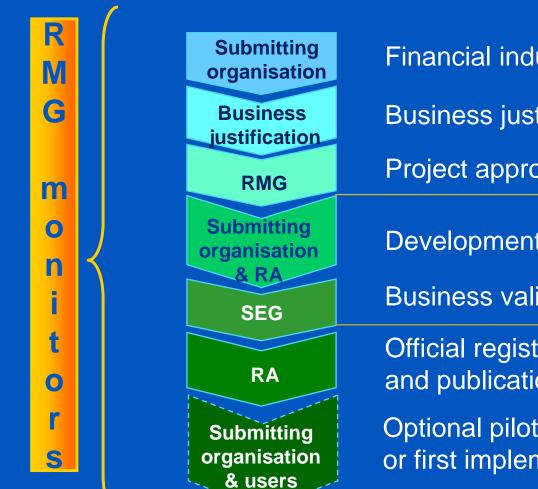


Financial industry group or standards body **Business justification** Project approval & allocation to a SEG **Development & provisional registration Business validation** Official registration Repository and publication Dictionary **Optional pilot testing** Catalogue or first implementers

www.iso20022.org

ISO 20022 The registration process (2/3)





Financial industry group or standards body **Business justification** Project approval & allocation to a SEG Candidate ISO 20022 messages **Development & provisional registration Business validation** ISO 20022 messages Official registration Repository and publication Dictionary **Optional pilot testing** Catalogue or first implementers www.iso20022.org

ISO 20022 registration process (3/3) Yearly maintenance process





Users introduce Change Requests to the RA SEG screens Change Requests (CRs) Submitting organisation prepares 'Maintenance Change Request' with each CR implementation SEG approval/rejection

Development of candidate new versions Provisional publication

Validation of new versions

Registration and publication

First implementers





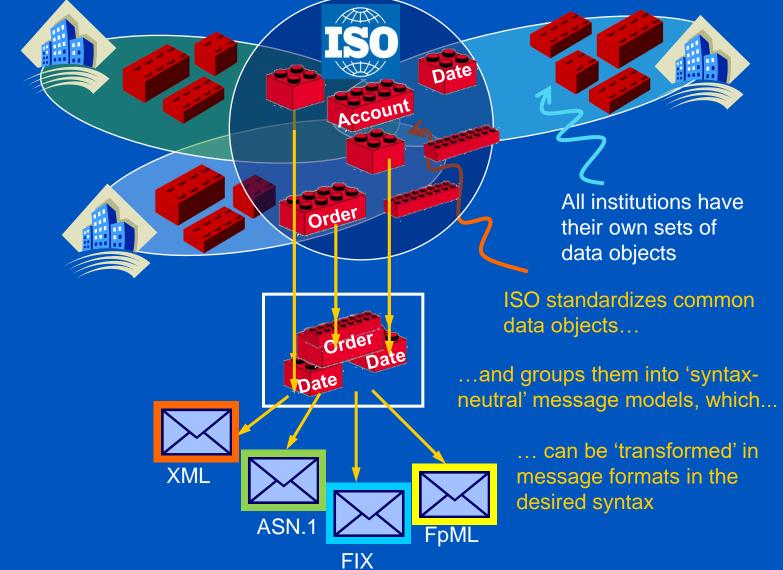
Continuing with today's agenda

ISO 20022

Interoperability within the financial industry

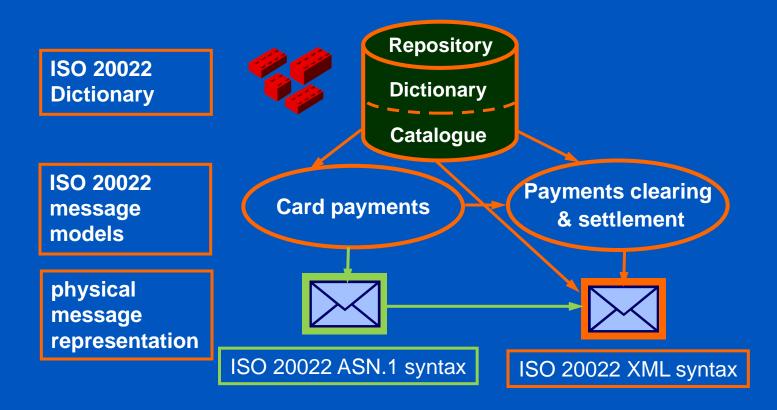
Using ISO 20022 modelling to reach interoperability





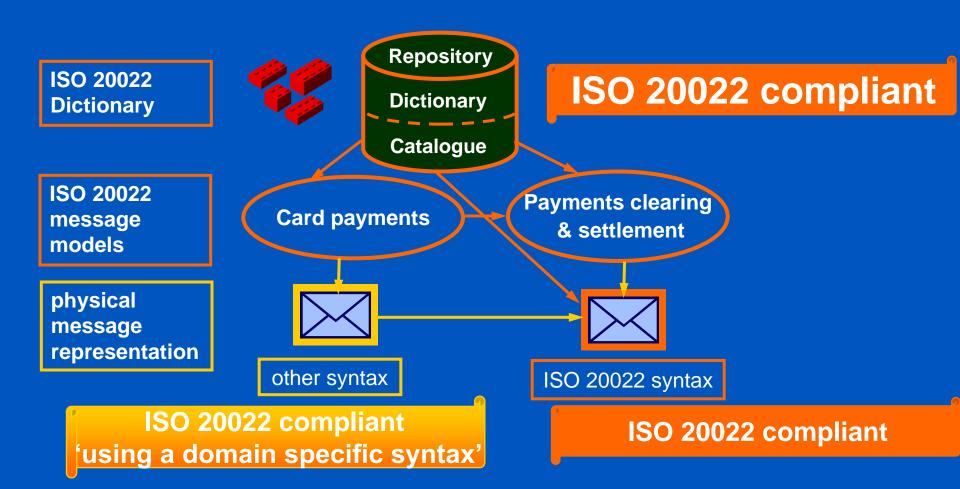


ISO 20022 compliance at model level



ISO 20022 compliance at model level





"Investment Roadmap" for ISO, FIX, XBRL and FpML syntaxes



The Investment Roadmap is maintained by the Standards Coordination Group including the following organisations:



Download the Investment Roadmap and related FAQ



www.iso20022.org

uestions Answers

iso20022ra@iso20022.org

ISO_20022_LV_v157

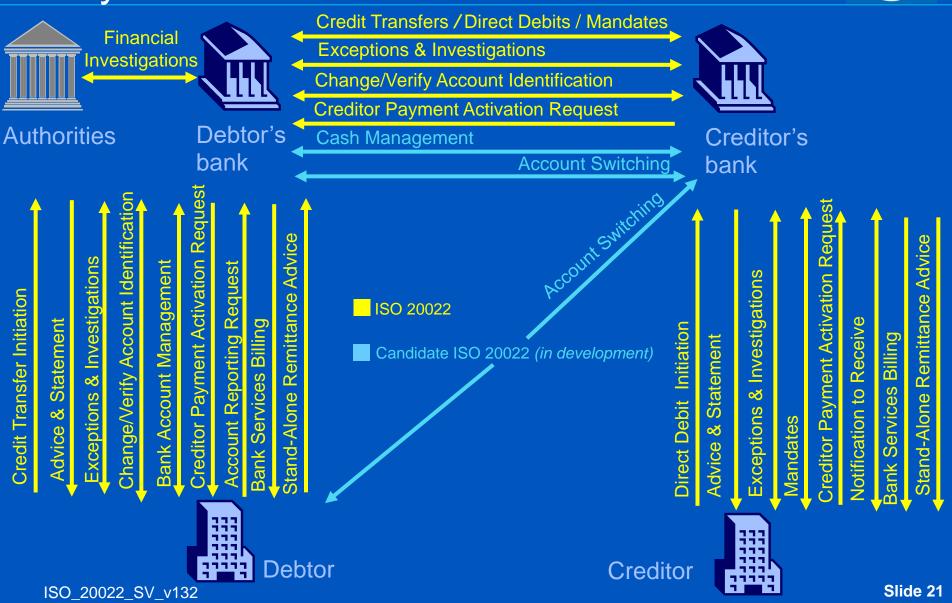




ISO 20022 – Usage Update

The ISO 20022 recipe is used! (1/11) Payments



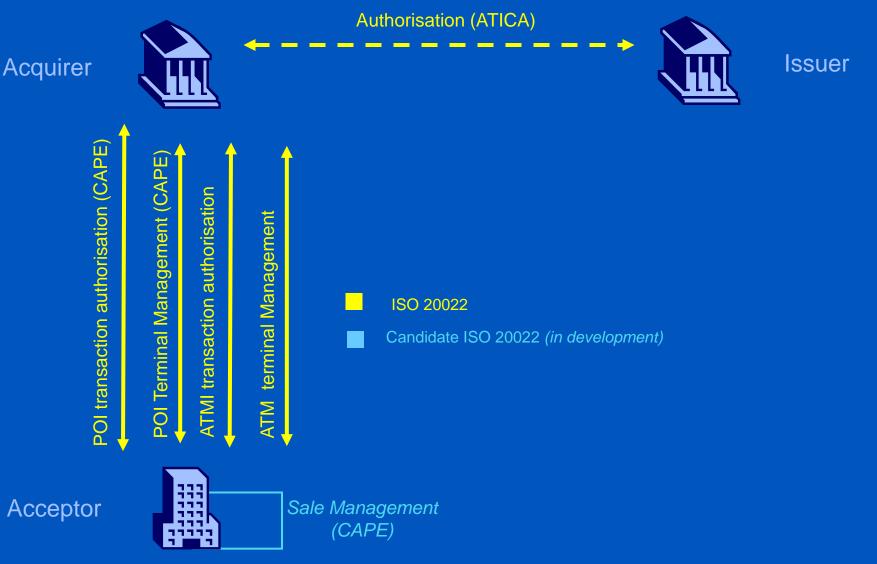


The ISO 20022 recipe is used! (2/11) Payments message portfolio is growing!



- 89 ISO 20022 messages approved:
 - Customer payment initiation
 - Interbank payment clearing and settlement
 - Payments exceptions & investigations
 - Bank-to-customer cash management
 - Payments mandates
 - Change/verify account identification
 - Bank account management
 - Creditor payment activation request
 - Cash account reporting request & notification messages
 - Bank services billing
 - Authorities financial investigations
 - Stand-alone remittance advice messages
 - Cross-border transactions currency control reporting (CTCCR)
 - Account Switching
- 31 candidate ISO 20022 messages under evaluation:
 - Cash management
- Candidate ISO 20022 messages approved for development:
 - Payment pre-authorization (PaPA)
 - Proxy for banking account numbers
- New development proposal: none

The ISO 20022 recipe is used! (3/11) Card message portfolio is growing



ISO_20022_SV_v132

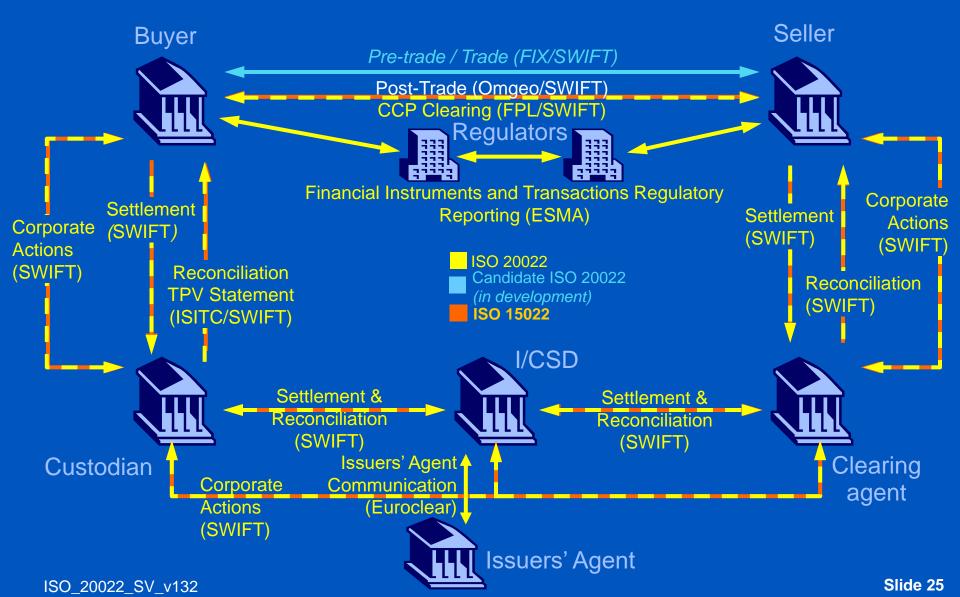
The ISO 20022 recipe is used! (4/11) Cards and related retail financial services



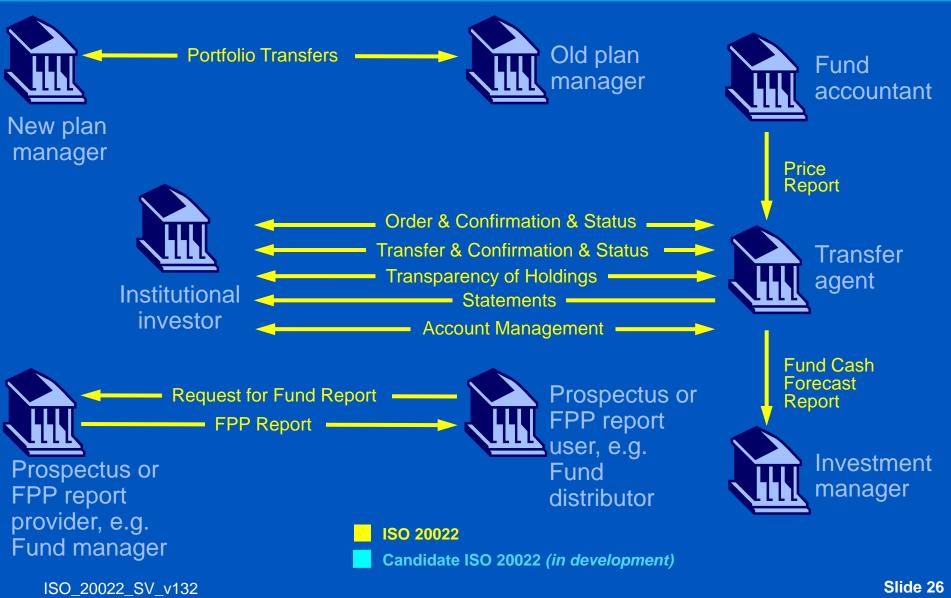
- 69 ISO 20022 messages approved:
 - Card payments exchanges (CAPE) Acceptor to Acquirer and Terminal Management
 - ATM interface for transaction processing and ATM management
 - Acquirer to issuer card messages (ATICA first version)
- Candidate ISO 20022 messages under evaluation
 - none
- Candidate ISO 20022 messages approved for development:
 - Card Payments Exchanges (CAPE) Sale-to-POI management
 - Payment Tokens Management Exchanges (TOKE)
 - Acquirer to issuer card messages (ATICA second version)

The ISO 20022 recipe is used! (5/11) Securities - equities and fixed income





The ISO 20022 recipe is used! (6/11) Securities - investment funds (CIV)



The ISO 20022 recipe is used! (7/11) Securities message portfolio is growing!

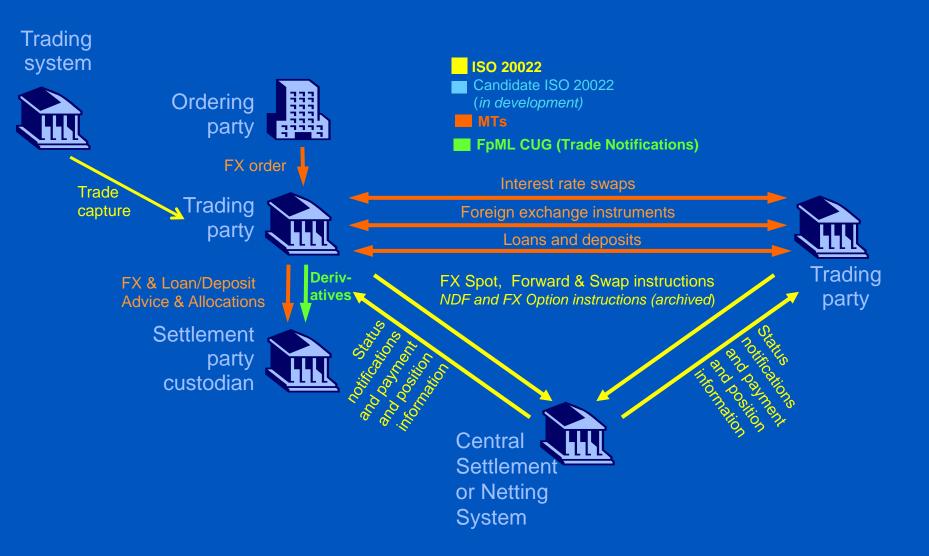


- 198 ISO 20022 messages approved and published:
 - Investment funds
 - Proxy voting
 - Issuers' agents communication
 - Securities settlement and reconciliation, including ISO 15022 variants
 - Securities corporate actions, including ISO 15022 variants
 - Securities post-trade
 - Total portfolio valuation report
 - CCP Clearing
 - Collateral management
 - Money Market Statistical Reporting (MMSR)
 - Transparency of holdings
 - SSI for Securities, Payments & FX
 - Financial instruments and transactions regulatory reporting (MiFID II / MiFIR) v1
- 49 candidate ISO 20022 messages under evaluation:
 - Financial instruments and transactions regulatory reporting (EMIR & MiFID II / MiFIR v2)
 - CCP supervisory reporting
 - TARGET2-Securities
- Candidate ISO 20022 messages approved for development:
 - Securities Financing Transactions Regulatory Reporting (SFTR)
 - Securities markets regulatory reporting message sets (CSDR, BR, MMFR)
 - New development proposals
 - None

ISO_20022_SV_v132

The ISO 20022 recipe is used! (8/11) Forex





The ISO 20022 recipe is used! (9/11) FX message portfolio is growing!

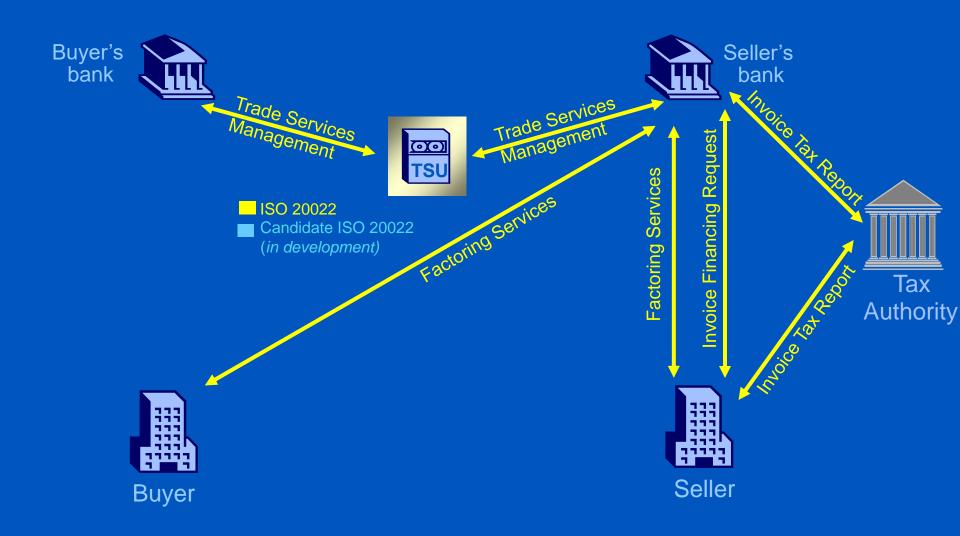


27 ISO 20022 messages approved and published:

- Post Trade FX messages
- FX Post-Trade Confirmation
- FX Post-Trade Trade Capture
- Candidate ISO 20022 messages under evaluation:
 - None
 - New development proposals
 - None

The ISO 20022 recipe is used! (10/11) Trade Services





The ISO 20022 recipe is used! (11/11) Trade message portfolio is growing!



- 86 ISO 20022 messages approved:
 - Invoice financing request
 - Trade services management
 - Demand guarantees and standby letters of credit
 - Factoring services
 - Invoice Tax Report
- Candidate ISO 20022 messages under evaluation:
 - None
- Candidate ISO 20022 messages approved for development:
 - None
- New development proposals:
 - None

BRAG

28th ASEAN+3 Bond Market Forum

Financial Data Standardisation Project by European Commission DG FISMA

Michal Piechocki CEO @ Business Reporting – Advisory Group

Representative for Poland @ ISO Technical Committee 68 Chair @ Frankfurt Group Technical Workshop Board Member @ Eurofiling Foundation Board Member @ XBRL International Member @ IFRS Taxonomy Consultative Group (IASB)

Fukuoka | Japan | 19 June 2018

We may change the name of things, but their nature and their operation on the understanding never change.

David Hume, in An Enquiry Concerning Human Understanding, (1748), Chapter VIII: Of Liberty and Necessity, Part I





The missing component is...

Collected from individuals and businesses

Generated and used in business processes & transactions

Processed for internal management purposes

Collated for compliance, supervisory and statistical purposes

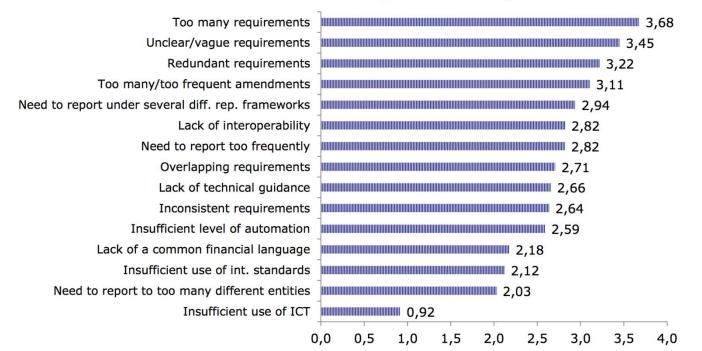
Shared with key stakeholders and partners

Enabling insight, analysis and change

Used by regulators for monitoring, supervision, macro stability evaluation

Why shall we be concerned about data?

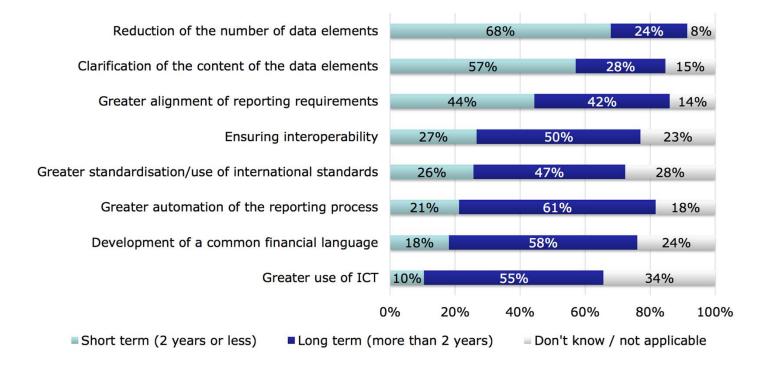
Main factors contributing to compliance costs



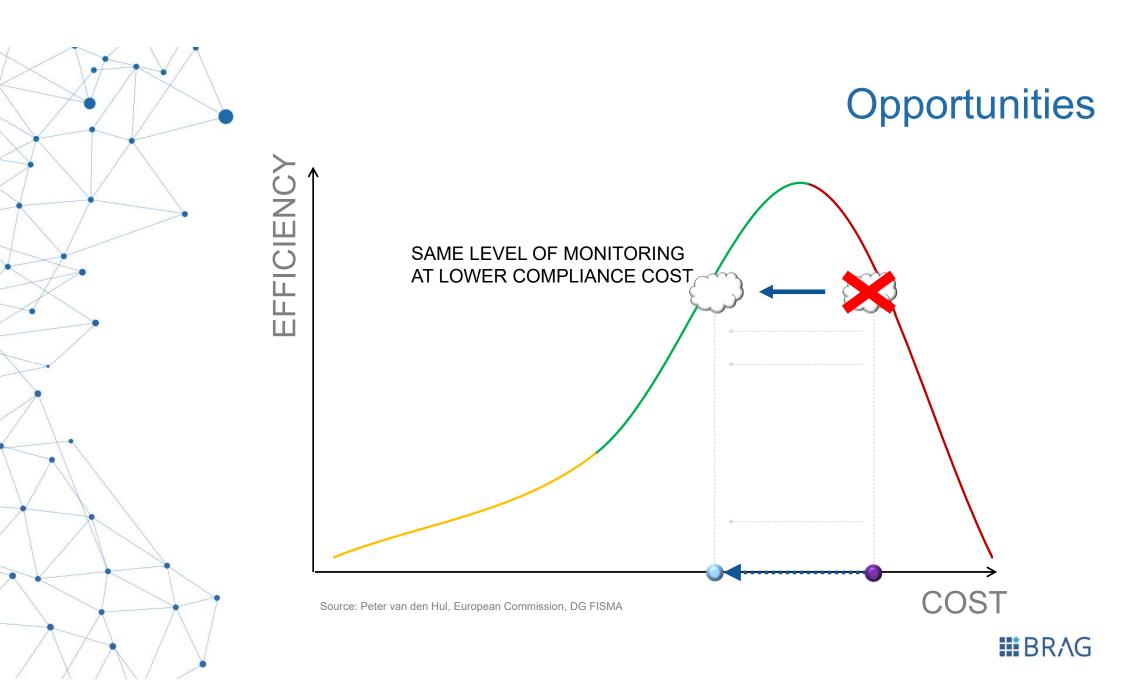
Source: Nathalie de Basaldua, European Commission, DG FISMA https://ec.europa.eu/info/sites/info/files/finance-events-180604-presentation-de-basaldua_en.pdf

What does the market suggest?

Ways to simplify and streamline supervisory reporting



Source: Nathalie de Basaldua, European Commission, DG FISMA https://ec.europa.eu/info/sites/info/files/finance-events-180604-presentation-de-basaldua_en.pdf

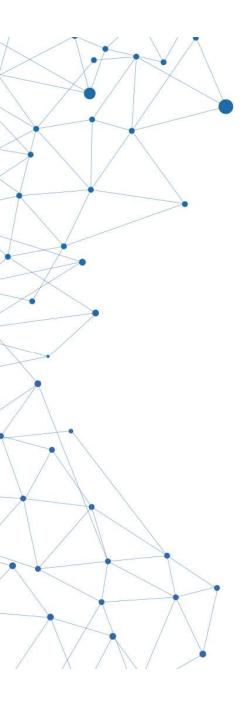


Vision of FDS Project

In order to safeguard the stability of the European Union's financial system, reporting burden must be contained by striving for a "report once" principle, which will lead to more efficient reporting of financial data, more efficient monitoring of the financial system (banks, insurance companies, and financial markets) and better risk assessment by Supervisory Authorities.

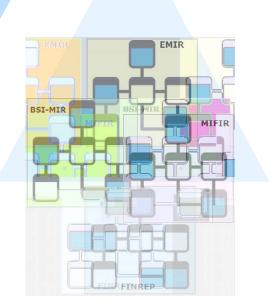
For this, it's necessary to first centrally "define once" the contents of reporting frameworks by creating one Core Supervisory Vocabulary which acts as pivotal stone and enables Regulatory Authorities to control overlaps with existing and emerging reporting frameworks in a self-improving philosophy.

Source: Peter van den Hul, European Commission, DG FISMA



How to solve the puzzle?





GAPS, OVERLAPS ? Source: Peter van den Hul, European Commission, DG FISMA

A 148 -----

REPORTING OBLIGATIONS

EGISLATIVE ACTS: L1MS, L2MS

EUR-Lex

THAT - 100-111

top down analysis

50+ REPORTING FRAMEWORKS

Scope of FDS analysis

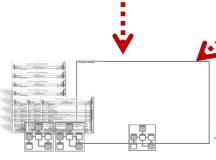
Intermediate conclusion : regulatory measures* set the basis for 50+ "Reporting Frameworks"

* the current scope is the FISMA regulation.

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LEVEL 1 MEASURES (internal refs)

1, 7, 8, 9, 10, 12, 63, 66, 69, 72, 73, 75, 81, 82, 85, 90, 91, 95, 97, 104, 108, 110, 112, 113, 119, 123, 124, 133, 134, 135, 136, 137, 139, 143, 147, 148, 149, 162, 164, 167, 169, 170, 181, 187, 197, 214, 241, 244, 245, 256, 257, 270, 272, 274, 276, 280, 286, 291, 293, 294, 299, 308, 311, 315, 323, 324, 331, 344, 348, 352, 356, 359, 360, 366, 375, 382, 383, 386, 387, 389, 391, 750, 779, 798, 839, 840, 1070



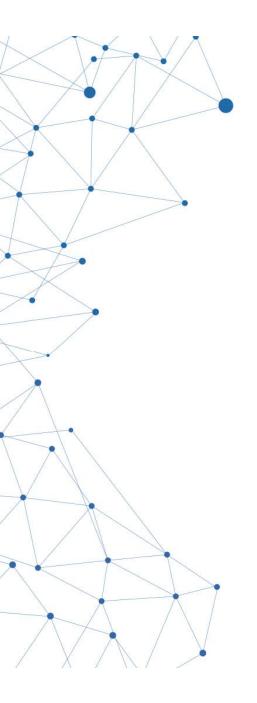
LEVEL 2 MEASURES (internal refs)

2, 3, 89, 99, 102, 105, 106, 117, 118, 125, 128, 138, 154, 158, 163, 165, 166, 168, 172, 173, 176, 184, 196, 202, 205, 206, 215, 217, 219, 221, 229, 232, 233, 234, 243, 259, 262, 263, 268, 269, 275, 281, 283, 284, 287, 297, 298, 300, 301, 302, 304, 305, 306, 313, 325, 326, 343, 346, 357, 358, 361, 363, 364, 365, 372, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 417, 418, 419, 422, 427, 430, 434, 435, 437, 438, 439, 440, 442, 444, 445, 446, 447, 448, 449, 451, 454, 455, 456, 457, 458, 459, 460, 464, 465, 469, 471, 472, 473, 474, 477, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 500, 501, 502, 503, 504, 505, 509, 516, 517, 518, 519, 520, 521, 523, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 545, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 565, 566, 567, 568, 569, 570, 571, 572, 573, 575, 576, 577, 578, 579, 580, 581, 582, 588, 589, 590, 591, 592, 596, 597, 598, 599, 600, 603, 604, 607, 608, 610, 622, 624, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 673, 674, 675, 676, 677, 678, 679, 680, 683, 692, 693, 694, 695, 696, 697, 746, 747, 748, 751, 752, 753, 754, 755, 756, 758, 759, 760, 762, 763, 764, 771, 772, 773, 774, 775, 777, 786, 787, 788, 789, 795, 813, 814, 815, 816, 817, 818, 820, 821, 822, 825, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 871, 874, 875, 877, 878, 879, 880, 881, 882, 884, 886, 892, 893, 894, 896, 898, 899, 900, 901, 902, 903, 904, 907, 908, 909, 910, 911, 912, 913, 919, 920, 921, 934, 943, 954, 955, 956, 957, 963, 975, 1000, 1003, 1014, 1015, 1017, 1117, 1121, 1126

Examples: CRD IV, Solvency II, AIFMD, CSDR, ...

50+ "Reporting" Frameworks

Source: Peter van den Hul, European Commission, DG FISMA



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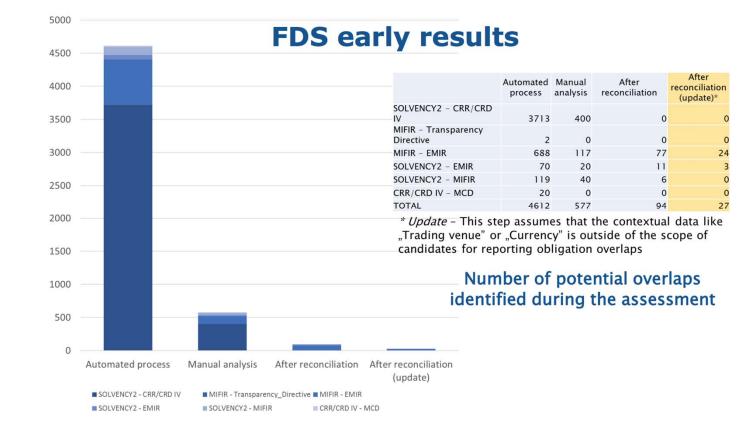
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Methodology: Data Point Model



Early results of the FDS Project



Source: Nathalie de Basaldua, European Commission, DG FISMA https://ec.europa.eu/info/sites/info/files/finance-events-180604-presentation-de-basaldua_en.pdf

Observations of FDS Project

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• Often, definitions are slightly different between legal measures

Naming in the legal act	Document name	Article	Paragraph
Non-financial counterparty	REGULATION (EU) No 648/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 on OTC derivatives, central counterparties and trade repositories (consolidated version 03/01/2017)	2	9
Non-financial entity	DELEGATED REGULATION (EU)/ on the application of position limits to commodity derivatives	8	1

"If something appears the same, how do we know it really is?"

Source: Nathalie de Basaldua, European Commission, DG FISMA https://ec.europa.eu/info/sites/info/files/finance-events-180604-presentation-de-basaldua en.pdf



Frequency	Frequency according to legal act	Framework
	Annually	CRR/CRD IV
	Annually	EMIR
	Annually	MIFID II / MIFIR
	Annually	PRIIPs
	Annually	Solvency II
	Annually	Transparency Directive
	Annual basis	MIFID II / MIFIR
	At least an annual basis	MIFID II / MIFIR
	At least an annual basis	Solvency II
	At least annually	CRR/CRD IV
Annually	At least annually	EMIR
	At least annually	MIFID II / MIFIR
	At least annually	Solvency II
	At least on an annual basis	EMIR
	At least on an annual basis	MIFID II / MIFIR
	At least once a year	MCD
	At least once a year	MIFID II / MIFIR
	At least once every 12 months	MIFID II / MIFIR
	On a regular basis and not less than once a year	CRR/CRD IV
	On an annual basis	Solvency II
	Regular basis and at least annually	Solvency II

Candidates for inconsistencies

Frequency

Source: Nathalie de Basaldua, European Commission, DG FISMA https://ec.europa.eu/info/sites/info/files/finance-events-180604-presentation-de-basaldua_en.pdf

Observations of FDS Project

MODELLING

REPORTING no standard mentioned or used standard legally imposed standard mentioned in an other FU re-

BRAG

Standards referred to in the reporting frameworks...

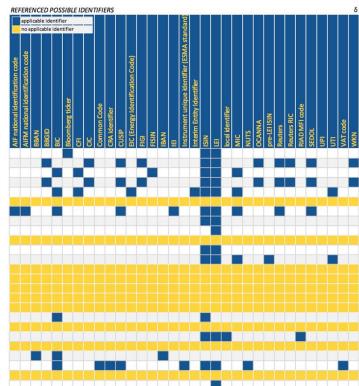
Id	Reporting Framework	structured?	MdC	ISO 20022	CUANY	Interoperable	XBRL	Excel	PDF	XML	Electronic for	E-mail
1	CRR/CRD IV	Yes				٦.						
2	Solvency II	Yes		8			00					
3	MIFID II/MIFIR	Yes										
4	MIFID I	Yes										
5	IORP	Yes										
6	EMIR	Yes			1							
7	AIFMD	Yes										
8	CSDR	Yes			1							
11	Transparency Directive	Yes										
12	Statutory Audit Regulation/Directive (SAR/SAD)	Yes										
15	SFTR	Yes										
16	AolU	Yes										
18	EuVeCaR	Yes										
19	European Social Entrepreneurship Funds Regulation (EuSEFR)	Yes										
22	Packaged retail and insurance-based investment products (PRIIPs) Regulation	Yes										
28	Short Selling Regulation (SSR)	Yes										
30	BRRD	Yes		8			00					
31	UCITS (IV) Directive	Yes										
32	UCITs (V) Directive	Yes										
33	Motor Insurance Directive	Yes										
35	MCD	Yes										
36	Credit Rating Agencies Regulation/Directive (CRAR/CRAD)	Yes										
38	DGS Directive, NEW	Yes										
40	Market Abuse Regulation/Directive (MAR/MAD)	Yes										
48	ELTIF	Yes										

Source: Nathalie de Basaldua, European Commission, DG FISMA https://ec.europa.eu/info/sites/info/files/finance-events-180604-presentation-de-basaldua_en.pdf

Observations of FDS Project

... and identifiers

ld	Reporting Framework	structured?
1	CRR/CRD IV	Yes
2	Solvency II	Yes
3	MIFID II/MIFIR	Yes
4	MIFIDI	Yes
5	IORP	Yes
6	EMIR	Yes
7	AIFMD	Yes
8	CSDR	Yes
11	Transparency Directive	Yes
12	Statutory Audit Regulation/Directive (SAR/SAD)	Yes
15	SFTR	Yes
16	AolU	Yes
18	EuVeCaR	Yes
19	European Social Entrepreneurship Funds Regulation (EuSEFR)	Yes
22	Packaged retail and insurance-based investment products (PRIIPs) Regulation	Yes
28	Short Selling Regulation (SSR)	Yes
30	BRRD	Yes
31	UCITS (IV) Directive	Yes
32	UCITs (V) Directive	Yes
33	Motor Insurance Directive	Yes
35	MCD	Yes
36	Credit Rating Agencies Regulation/Directive (CRAR/CRAD)	Yes
38	DGS Directive, NEW	Yes
40	Market Abuse Regulation/Directive (MAR/MAD)	Yes
48	ELTIF	Yes



Source: Nathalie de Basaldua, European Commission, DG FISMA https://ec.europa.eu/info/sites/info/files/finance-events-180604-presentation-de-basaldua_en.pdf

Know Your Data

TRUS

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MAKE INTEROPERABLE

MAKE ACCESSIBLE

STANDARDISE & PROVE

TRACE & LINK TO SOURCE

IDENTIFY & CLASSIFY

UNDERSTAND

USE

BRAG

Thank you

Contact: michal.piechocki@br-ag.eu



François Laurent

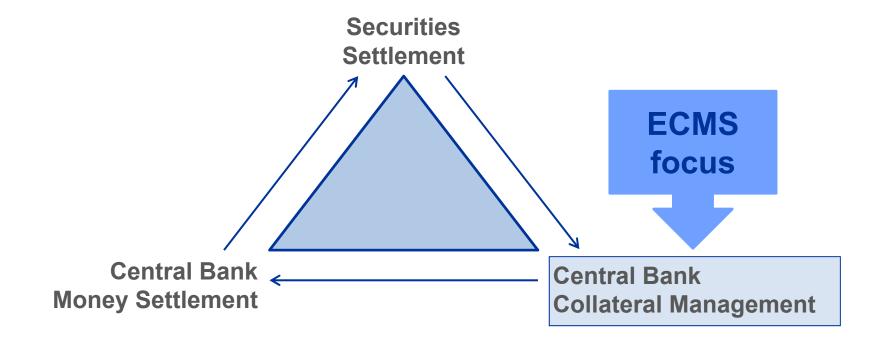
DG Market Infrastructure & Payments European Central Bank

Eurosystem Collateral Management System (ECMS)

ABMF meeting - Fukuoka 19 June 2018

Fundamental drivers of the Eurosystem

- Key function of Eurosystem market infrastructures: Ensure the exchange of securities, collateral and liquidity between financial market counterparties
- Liquidity: the fuel to effectively facilitate the exchange

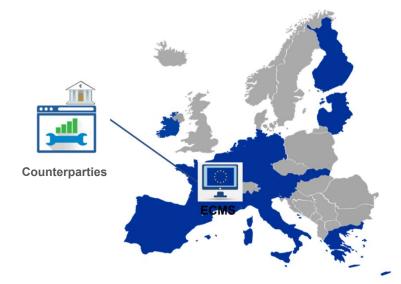


Eurosystem Collateral Management System

Current situation

Currently, there are **19 different local systems** used for managing eligible assets mobilised as collateral in Eurosystem monetary policy operations



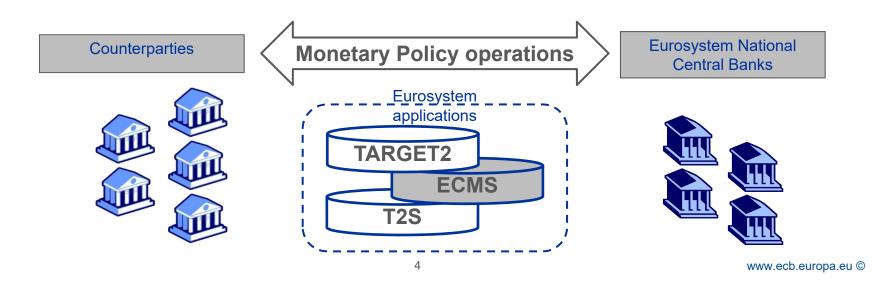


With the ECMS, there will be a **single system** for managing those assets as collateral in Eurosystem monetary policy operations



What is Eurosystem Collateral Management System?

- A system for **managing eligible assets used as collateral** for Eurosystem credit operations
- A Eurosystem application that will be used by market participants (in their role as counterparties) in a similar role as in the existing national collateral management systems
- ECMS will include harmonised functions and services

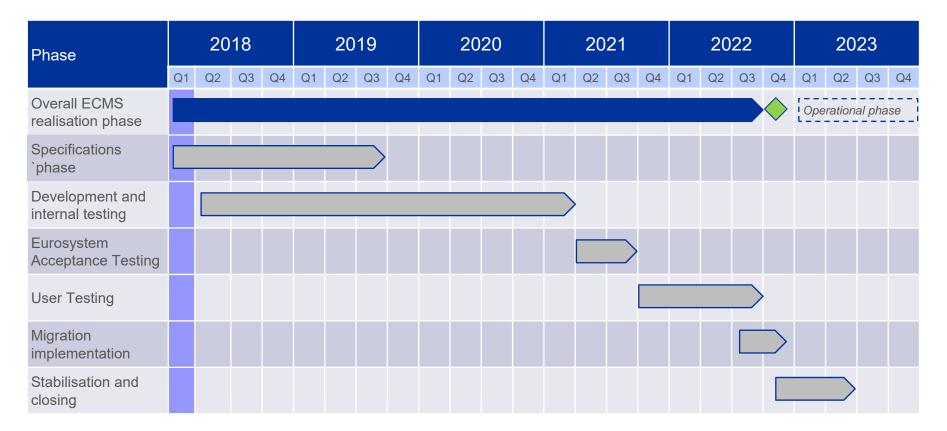


Harmonisation and Standardisation

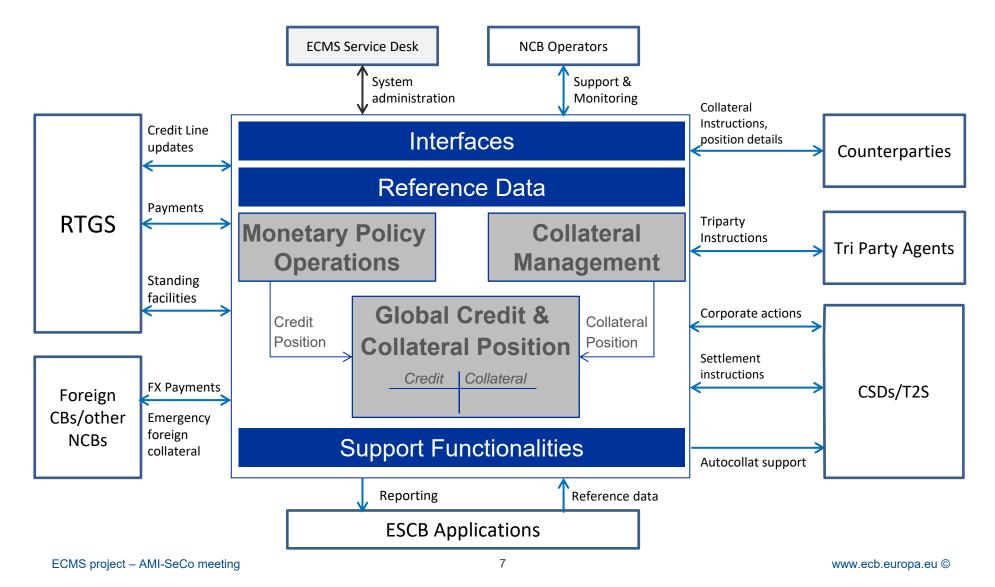
- Tri-party collateral management
 - Agreement on a single harmonised triparty model for mobilising marketable assets in Eurosystem credit operations (describing business processes, workflows and messages)
- Corporate actions management
 - Information received from CSDs delivered in an harmonised way and key processes such as usage of a standardised calculation formula, handling of rounding differences, workflows for mandatory and elective CA events
- Adoption of ISO20022
 - Used for all communications (operation and reporting) between ECMS and all market participants (Counterparties, CSDs, Triparty agents)
 - Used for communication in collateral management process between market participants

High-level planning for the realisation phase

Go-live: November 2022



Components and interaction with the market



Relevant activities for ECMS counterparties

- Information on relevant ECMS functionalities will be made available timely by sharing relevant sections of the User Detailed Functional Specifications (UDFS), Connectivity Guide and/or training materials with counterparties
- Agreed harmonisation will still require timely implementation

 → important to monitor the progress of important ECMS actors
 (e.g. counterparties, CSDs, Triparty Agents)
- One year prior to the go-live, NCBs will start conducting testing activities with their counterparties to make sure they are ready for migration to the new system

In summary...

- As of the ECMS go-live, NCBs will be able to replace their current collateral management systems with the ECMS
- The ECMS will provide a single interface (with the possibility of communication in U2A and A2A) that will be different from what NCBs might have currently in place
- Key decision has been made for ECMS to rely on harmonised functionalities and ISO 20022 as the messaging standard

Many thanks for your attention!

Any question?

http://www.ecb.europa.eu/paym/html/index.en.html

www.ecb.europa.eu ©



Session 11: Legal Entity Identifier

27th ASEAN+3 Bond Market Forum 18/19 June 2018, Fukuoka, Japan

Stephan Wolf – GLEIF CEO

GLEIF unrestricted

History of the Global LEI System



2008	2010	2011	2012	2014
In the wake of financial crisis, regulators worldwide acknowledged their inability to identify parties to transactions across markets, products, and regions.	U.S. regulators and FINRA hold a workshop, identifying the lack of a standard way to identify parties as a "linchpin" for improving regulation, private risk management, and business processes*.	The G20 called upon the FSB (Financial Stability Board) to take the lead in developing recommendations for a global LEI and supporting governance structure.	The G20 finance ministers and central bank governors and the FSB endorsed the Charter of the LEI Regulatory Oversight Committee (LEI ROC).	The Global LEI Foundation (GLEIF) was established as a not-for-profit organization overseen by the ROC to act as the operational arm of the Global LEI System.

*See: Creating a Linchpin for Financial Data: The Need for a Legal Entity Identifier

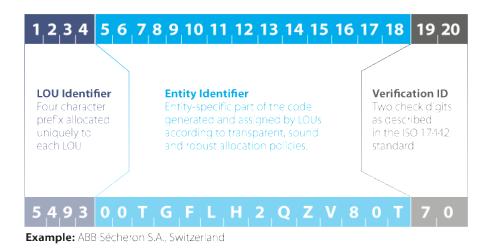
The Legal Entity Identifier (LEI)





LEI is the linchpin that connects the dots across the universe of entity identification in the digital age

 20-digit, alpha-numeric code based on the ISO 17442 standard developed by the ISO



 Connects to key reference information that enables clear and unique identification of legal entities participating in financial transactions

Information Available with the LEI: Data on 'Who is Who'



Global Legal Entity Identifier Foundation

Basel, Switzerland **Entity details** LEI LEGAL NAME

ENTITY STATUS

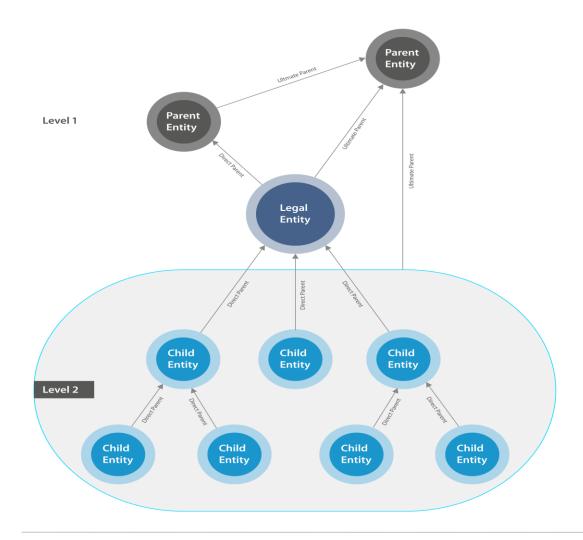
Validation against 660 selected global 506700GE1G29325QX363 registration authorities **Global Legal Entity Identifier Foundation** and standardized legal OTHER ENTITY NAMES TRANSLITERATED OTHER ENTITY NAMES forms RA000548 **REGISTRATION AUTHORITY ID** Adds OTHER REGISTRATION AUTHORITY ID CHE200595965 REGISTRATION AUTHORITY ENTITY ID CH-BS LEGAL JURISDICTION ENTITY CATEGORY ENTITY LEGAL FORM CODE 2JZ4 ASSOCIATED ENTITY ACTIVE EXPIRATION DATE EXPIRATION REASON SUCCESSOR ENTITY

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r /	Addresses	
	LEGAL	HEADQUARTERS
_/	St. Alban-Vorstadt 5 4052 Basel CH	St. Alban-Vorstadt 5 4052 Basel CH
	Registration details	
	INITIAL REGISTRATION DATE	2018-03-16 06:13:33+01:00
	LAST UPDATE DATE	2018-03-16 06:13:33+01:00
	REGISTRATION STATUS	ISSUED
	NEXT RENEWAL DATE	2019-03-16 00:00:00+01:00
	MANAGING LOU	506700LOLO7M6V0E4247 Office fédéral de la statistique (Federal Statistical Office)
	VALIDATION SOURCES	FULLY_CORROBORATED
	VALIDATION AUTHORITY ID OTHER VALIDATION AUTHORITY ID VALIDATION AUTHORITY ENTITY ID	RA000548 not available CHE200595965

Information Available with the LEI: Data on 'Who owns Whom'





- Starting 1 May 2017, the LEI data pool is enhanced to include information on 'who owns whom'.
- This allows the identification of direct and ultimate parents of a legal entity and, vice versa, so that the entities owned by individual companies can be researched.

Common Data File formats:

- <u>https://www.gleif.org/en/about-lei/common-data-file-format/relationship-record-cdf-format</u>
- <u>https://www.gleif.org/en/about-lei/common-data-file-format/level-2-data-reporting-exceptions-format#</u>

Global LEI Index: Creating transparency in financial markets and for financial transactions



Only global free of charge online source that provides open, standardized and high quality legal entity reference data.

- Consists of a file of all past and current LEI records including related reference data in one repository.
- All LEI records can be easily found and accessed using the LEI search tool developed by GLEIF.
- Publicly available LEI data pool can be regarded as a global directory, which greatly enhances transparency in the global marketplace.

Global LEI Index available on the GLEIF website https://www.gleif.org



Web site in 14 languages



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GLEIF	Tentang GLEIF	Tentang LEI	Solusi LEI	Data LEI	Ruang Berita & Media 🛛	Acara	Cari Data LEI	Q

		Memperkenalkan Pengenal Badan Hukum (LEI)
① ① ① ① ① ① ① ① ① ① ① ① ① ① ① ① ①	(LEI) とは-LEI × +	Sistem LEI Global
\leftrightarrow \rightarrow C \textcircled{a}	🛈 🔒 Global Legal Entity Identifier (CH) https://www.gleif.or 🛛 🗐 🛛 🕶 😒 🏠	 Sistem LEI Global: Jaringan
🐵 ISO Meetings 🛭 😑 Meeting starter	n - Z 🗢 My Meetings - Zoom 🛛 G google translate - G 🖕 Anmelden SLS in LinkedIn 🛞 Home -	Federasi Layanan
🔠 🔰 in		Dapatkan LEI: Cari
GLEIF	GLEIFについて LEIについて LEIソリューション LEIデータ ニュースルーム&メ:	Organisasi yang Menerbitkan LEI

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取引主体識別子(LEI)とは

的なディレクトリーとみなすことができます。

J62PLJCF

取引主体識別子(LEI)は、国際標準化機構(ISO)が定めたISO 17442に碁

桁の英数字コードです。LEIによって参照可能な主要情報により、金融取引

する取引主体を明確かつ一意に識別することができます。簡単に言うと、-

開されたLEIデータプールは、グローバル市場の透明性を大幅に高めるため

取引主体識別子(LEI)とは

グローバルLEIシステム

 グローバルLEIシステム:連携 サービスのネットワーク LEIの取得方法: LEI発行組織を

見つける 登録エージェント

LEI発行者のGLEIF認証

- 認定プロセス
- 現在の候補
- Q&A
- 認定に関する支援
- 必要書類
- ISO 17442: LEI コードの構造
- 共通データファイルフォー
- マット
- レベル1データ:LEI-CDFフォー マット = LEI-CDFフォーマット:以前 のバージョン
- レベル2データ:関係性記録 (RR) CDFフォーマット

Organisasi yang lenerbitkan LEI Agen Pendaftaran

Akreditasi GLEIF untuk Penerbit LEI

- Proses Akreditasi Para Kandidat Saat Ini
- Pertanyaan dan Jawaban
- Sumber Daya Akreditasi
- Dokumen yang Diperlukan

ISO 17442: Struktur Kode LEI

Format File Data Umum

Data Level 1: Format LEI-CDF Format LEI-CDF: Versi Sebelumnya

Data Level 2: Format Catatan

E90T974

Hubungan (RR) CDF

Memperkenalkan Pengenal Badan Hukum (LEI)

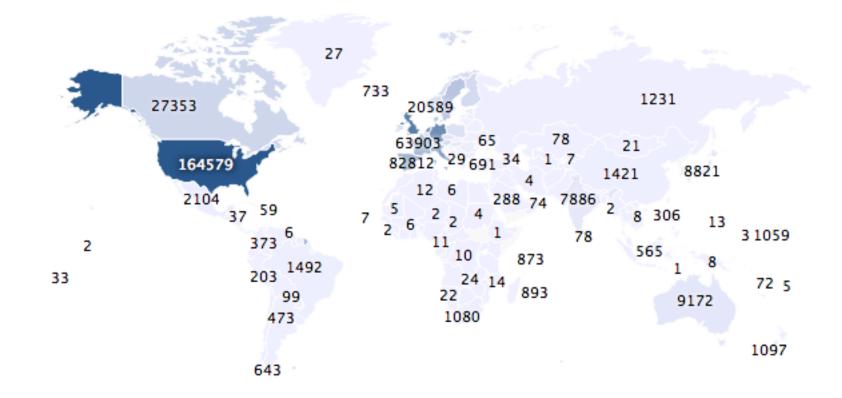
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Pengenal Badan Hukum (LEI) adalah kode alfanumerik 20 digit yang berdasarkan pada standar ISO 17442 yang dikembangkan oleh Organisasi Internasional untuk Standardisasi (ISO). Kode ini berhubungan dengan informasi rujukan utama yang memungkinkan pengidentifikasian jelas dan unik atas badan hukum yang berpartisipasi dalam transaksi keuangan. Dengan kata lain, kumpulan data LEI yang tersedia dapat dipandang sebagai buku petunjuk global, yang membantu meningkatkan transparansi di pasar global.



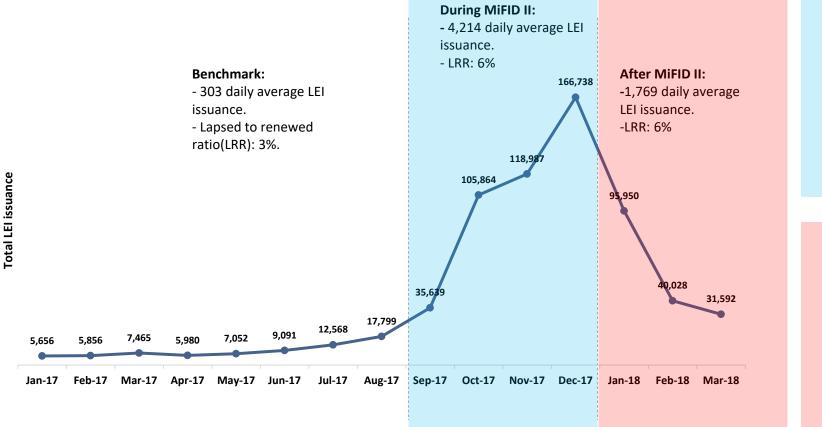
1,2 million LEIs in total and raising ...





Global LEI System Q1 2018 Update MiFID II effect





During Q4 2017, 8,000-10,400 LEIs were issued daily in some days in November and December.

New issuance has dropped after Mifid/Mifir but remains well above numbers one year ago.

Regulations in the ASEAN+3 Bond Forum Region



Recent Developments

Malaysia:

- FMA and Central Bank of Malaysia announced that RENTAS (Real-time Electronic Transfer of Funds and Securities System) will be implementing segregated securities account structure mandating the use of LEI in addition to the securities account number.
- All investors investing in Malaysian debt securities are required to obtain the LEI for securities account opening and reporting purposes by 14 May 2018.

Hong Kong (consultation):

 Hong Kong Monetary Authority (HKMA) and Securities and Futures Commission issued a joint consultation to mandate the use of LEI on OTC derivatives for the reporting obligation. Consultation period will end on 27 April 2018.

Existing Rulemaking

- Hong Kong: OTC Trade Repository
- Japan:

Financial Instruments and Exchange Act, Regulation of Over-the-Counter Derivatives Trade Reporting Obligations

 Singapore: Derivatives Trade Reporting – Securities and Futures



Global LEI System Structure

The Global LEI System

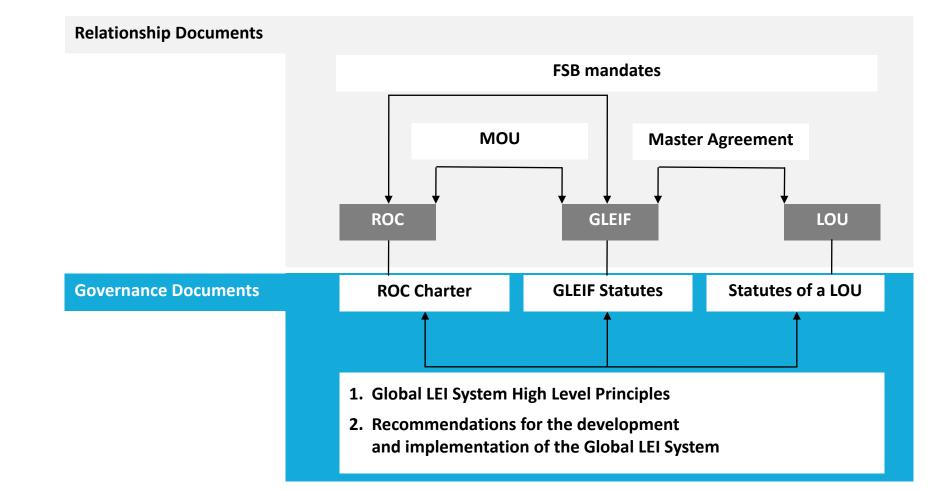




The Financial Stability Board (FSB) and the Group of Twenty (G20) have endorsed the LEI, Global LEI System and GLEIF.

Global LEI System relationship and governance documents





Objectives of the ROC



In protecting the broad public interest, the objectives of the ROC are to ensure:

- Open access to obtaining an LEI
- Open and free access to publicly available data from the Global LEI System
- No entity involved in the Global LEI System exploits its relationship with the system in a way contrary to the broad public interest
- The Global LEI System meets broad public and private sector requirements

LEI ROC members from ASEAN+3 Bond Forum region*:

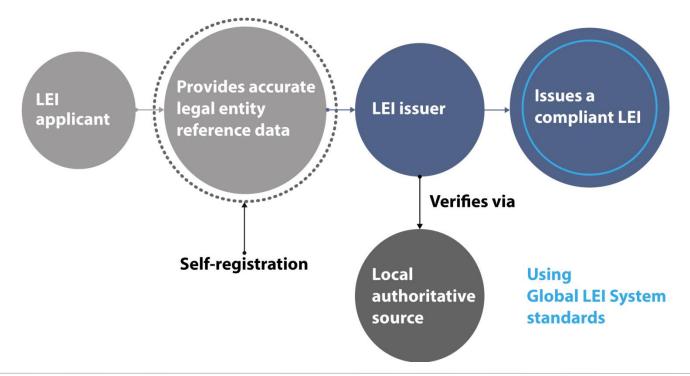
- People's Bank of China
- Hong Kong Monetary Authority
- Bank of Japan
- Financial Services Agency, Japan
- Financial Services Commission, Korea
- Bank of Korea
- Monetary Authority of Singapore

* Inclues Members and Observers. See https://www.leiroc.org/ for a listing of all members

The Role of LEI Issuers



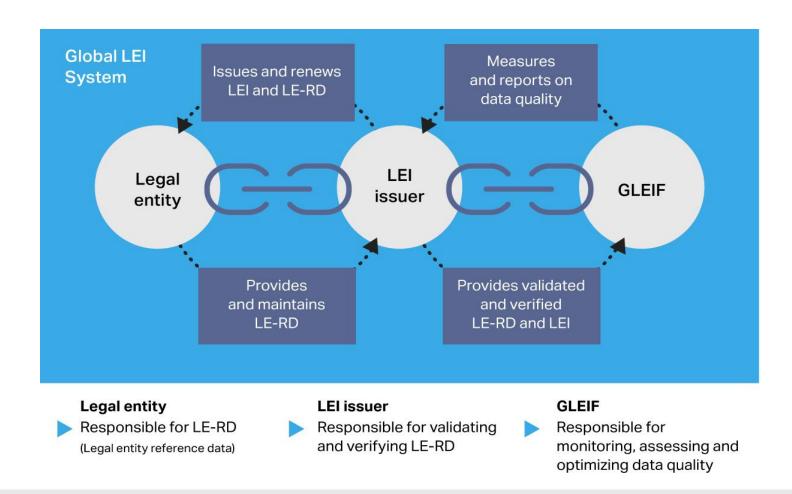
 LEI issuers – also referred to as Local Operating Units (LOUs) – supply registration, renewal and other services, and act as the primary interface for legal entities wishing to obtain an LEI.



Initial Registration and Annual Renewal

Focus on Data Quality





 Additionally, challenge to LEI & LE-RD service is available via the GLEIF website. This centralized online facility is part of the GLEIF data quality management program.

Who is GLEIF

- The GLEIF is a Swiss foundation inaugurated in June 2014 and founded by the Financial Stability Board (FSB).
- GLEIF is overseen by 71 regulators and 19 observers in the Regulatory Oversight Committee (ROC) from 50 countries.



Visibility. Stability. Integrity.





GLEIF Board has 18 independent directors.

Who is GLEIF



GLEIF in Numbers Budget 2018: 9,5 M USD Funded by LEI Issuers

GLEIF in Numbers Number of employees **34 from 19 countries**

GLEIF in Numbers Partners for LEI issuing (LOUs) **32, and growing**

GLEIF in Numbers Issued LEIs as of June 2018 Over 1.200.000



GLEIF's Vision and Mission

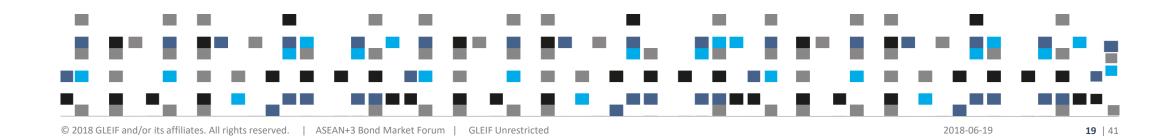


GLEIF Vision Ultimately, there should be one identity behind every business

Having an LEI will help to achieve this objective

GLEIF Mission

GLEIF manages a network of partners, the LEI issuing organizations, to provide trusted services and open, reliable data for unique legal entity identification worldwide GLEIF Scope Supra-national, non-for-profit organization GLEIF is, by its statutes, agnostic to any particular commercial or political interests



GLEIF Core Competencies





GLEIF supplies a defined and growing range of free Value-added Services to the public and private sector

GLEIF as Accreditation Agency runs a leading quality management system for its network of LEI issuing partners



Creating Business Value with the LEI

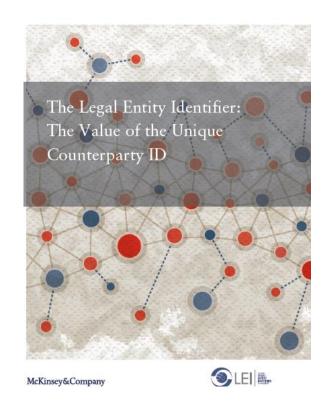
McKinsey & GLEIF White Paper



White Paper suggests combined potential savings of at least U.S. \$650m annually just in core banking

Two broad areas in which the LEI has business value :

- Reduces transactional and operational friction, both within and among organizations.
- The LEI makes important information about the background of a legal entity in a transaction more accessible and traceable.



Available on https://www.gleif.org

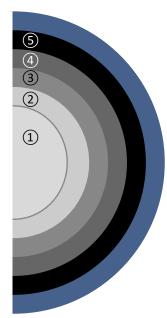
LEI Use Cases and Benefits



Capital markets	The LEI's primary value is derived from reducing the cost of onboarding clients and of middle- and back-office activities related to the processing of stocks, bonds and other securities trades. All such activities could be simplified and streamlined if LEI use were more broadly adopted throughout the lifecycle of the client relationship. The use of LEIs in the onboarding of customers and for client relationship would also reduce the time spent on data correction and reconciliation necessitated by inconsistent identification of legal entities.
Commercial transactions	LEIs enable faster processing of letters of credit and better identification for trade finance and for e-invoicing.
The extension of commercial credit	LEIs allow for more robust and efficient Know Your Customer (KYC) diligence on borrowers, as well as better traceability of information on borrowers from multiple sources.

GLEIF Strategy





Market Se	gments	Key Markets	
1 Deriv	atives	USA & Europe, Singapore 450.000 LEIs	1e
② Capit Mark	al and Money ets	Prospectus Directive Europe MiFID/MiFIR Solvency II 1,500,000 LEIs	55
③ Banki	ng Services	LEI in payments (correspondent banking) LEI in credits (AnaCredit, USA mortgage act) LEI in trade finance Potential of 30 – 40 million LEIs	<u>k</u> î
• •	ly-Chain- agement	Global reach on manufacturer, supplier, logistics and merchants supporting their Know Your Customer (KYC) and Know Your Supplier (KYS) All industries 40 – 50 million LEIs	board
⑤ Digita	al Economy	Global reach for all entities requiring a digital identity of legal entities for their transactions Includes Industry 4.0 and Internet of Things 50 – 100 million LEIs, up to 1 bn	poaro

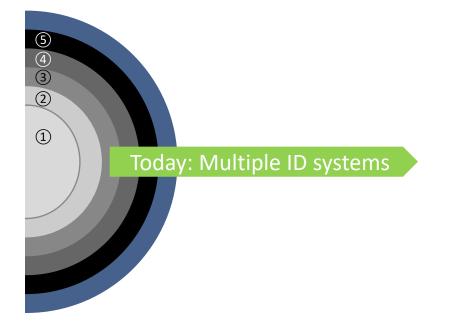


KYC Challenge and the LEI

Strategic GLEIF Initiatives will target KYC/KYS/CRM*

Beyond Regulatory Mandate (Policy)





- KYC Know Your Customer
- KYCC- Know Your Customer's Customer
- KYS Know Your Supplier
- CRM Client Relationship Management

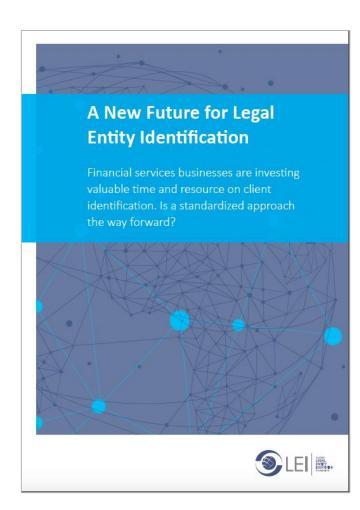
KYC using the LEI

- One identity behind every business (customer)
- Combination of Digital IDs based on cryptographic algorithms and LEI
- Requires regulatory support (legal)
- Core unique selling points of the GLEIS:
 - Entity validation
 - Data verification
 - Trusted, open data
 - LEI data free of charge for users

LEI Solutions: A new future for Legal Entity Identification in KYC



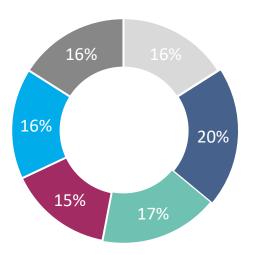
- GLEIF has undertaken research with a specialist research agency, Loudhouse, to identify the key challenges of legal entity identification in financial services.
- The findings form the basis for a research report from GLEIF titled 'A New Future for Legal Entity Identification', in which GLEIF outlines its view that replacing disjointed information with a globally accepted approach based on broad adoption of the LEI would remove complexity from business transactions and deliver quantifiable value to financial services firms.



The Challenges of Onboarding New Client Organizations Research overview



 This research explores the challenges that the banking sector faces when it comes to onboarding new client organizations, with a view to investigating, in particular, the implications of KYC regulation. The research was conducted among 102 senior salespeople in the banking sector.



Number of employees

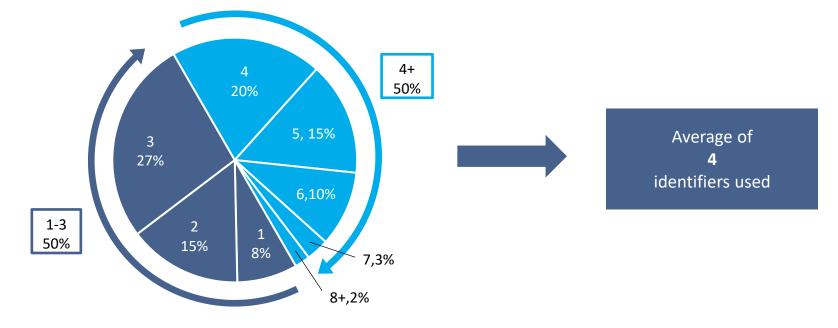
- Under 50 employees
- 50 99 employees
- 100 249 employees
- 250 499 employees
- 500 999 employees
- 1,000+ employees

	35
	34
	33
Total	102

Financial institutions use, on average, four identifiers to help identify client organizations



In order to accurately identify client organizations with the most up-to-date data, financial institutions tend to use a variety of different identifiers for cross-checks. On average they use 4 different identifiers internally, but about a third say they use 5 or more identifiers.



No single identifier has gained global acceptance

On average they use 4 different identifiers internally, but about a third say they use 5 or more identifiers.

There is no single identifier which acts as a standard for the industry. However several are used by a substantial proportion of organisations.



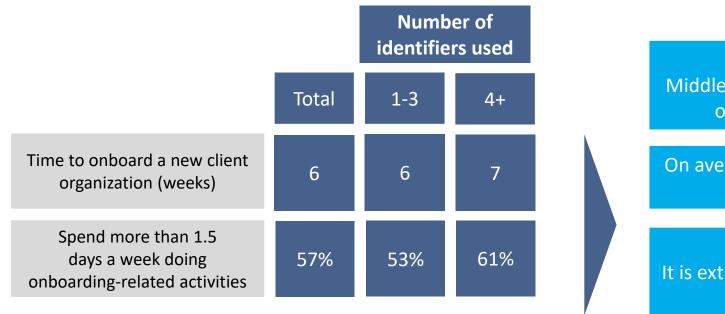


Identifiers used

Onboarding is a burdensome and time-consuming process



New clients typically take **6** weeks to onboard – more if 4+ identifiers are used. A quarter of the process involves manual tasks and 6 in 10 senior salespeople spend more than 1.5 days of their week onboarding.



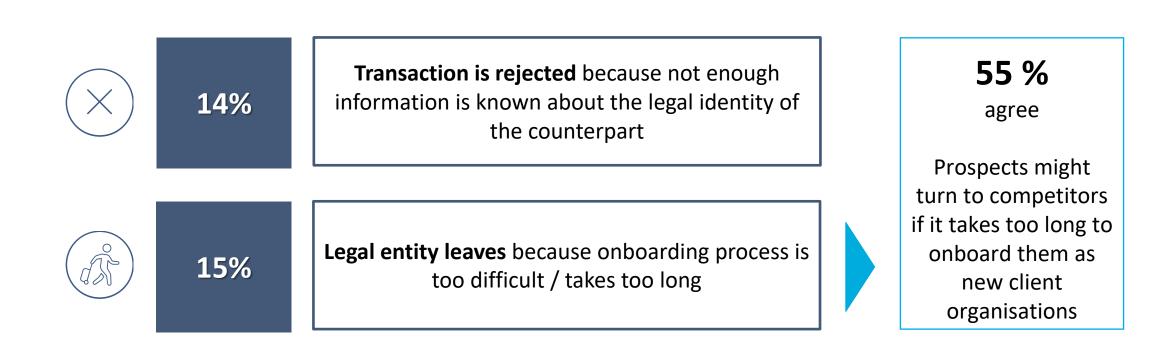
49% agree Middle and back-office activities related to onboarding are a major burden

On average **25%** of the onboarding process involves manual tasks

48% agree It is extremely difficult to quantify the exact cost of onboarding

Long on-boarding processes can lead to loss of business





Improving Identification The rise of digital technology





Summary



Institutions are facing an increasing burden as a result of the need to comply with KYC

Lack of reliable and consistent identifiers is creating more work and less certainty

There is clearly an opportunity to align on one identifier to generate efficiencies

1

2

3



Outlook

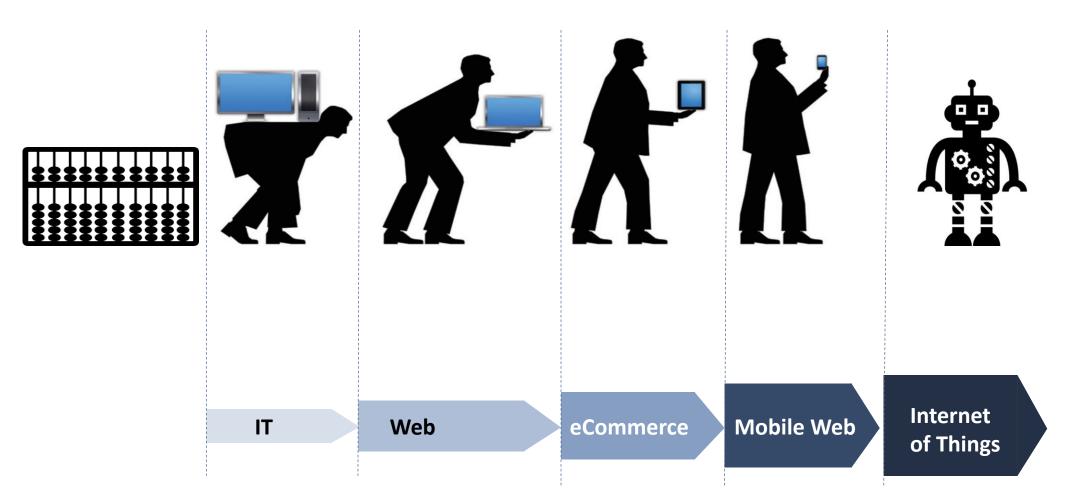
Partner Projects with Standards Organizations





Digital Age – Information Age





Picture source: http://www.thedrum.com/knowledge-bank/2013/09/13/evolution-digital

Digital Age – Information Age

Requires Identity Management





Outlook: Integration of the LEI with Digital Certificates and Seals

- Electronic seal based on the ITU X.509 standard means cryptographically secured data in electronic form, which is attached to or logically associated with other data in electronic form to ensure the latter's origin and integrity.
- Electronic seals should serve as evidence that an electronic document was issued by a legal person, ensuring certainty of the document's origin and integrity.
- The electronic seal is a promising tool to tackle the increasing document forging issues across globe.
- The integration of the LEI into the Digital Certificates and seals would significantly enhance the trust of the documents and encourage a large volume of transactions.
- Examples of such processes include the processing of e-invoices or the delivery of digital pay slips.







Digital Identity – a Proposal

- The LEI as part of a digital certificate would bind the identity to the actual individual or group of individuals.
- Transactions signed with such a certificate could be unambiguously tracked back to the originator (in finance: counterparty identification, KYC, AML).
- Validation and verification of individuals or groups need to be done anyway, but then only once, and not multiple times, as it is today. Use existing standards.
- Blockchain / distributed ledger should consider these digital certificates and the underlying standards (X.509).
- A distributed ledger could be used to manage digital certificates.



Limitations



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