



สำนักงานบริหารหนี้สาธารณะ
PUBLIC DEBT MANAGEMENT OFFICE



Public Sector Financing



Ranee Itarat
Director of Project Financing Division 2
Public Infrastructure Project Financing Bureau
21 June 2016



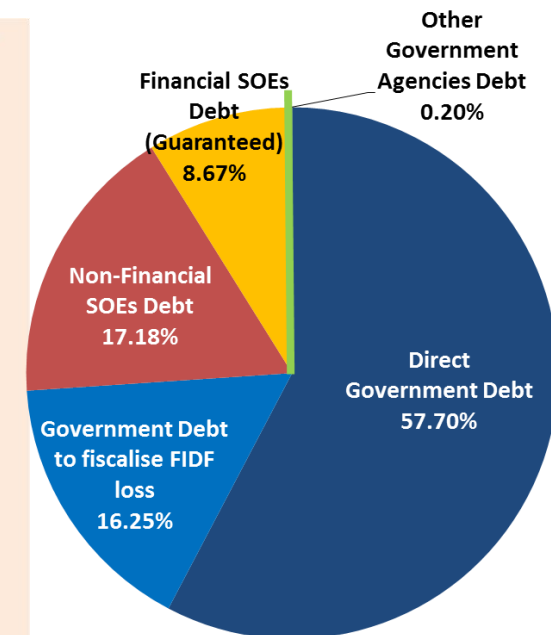
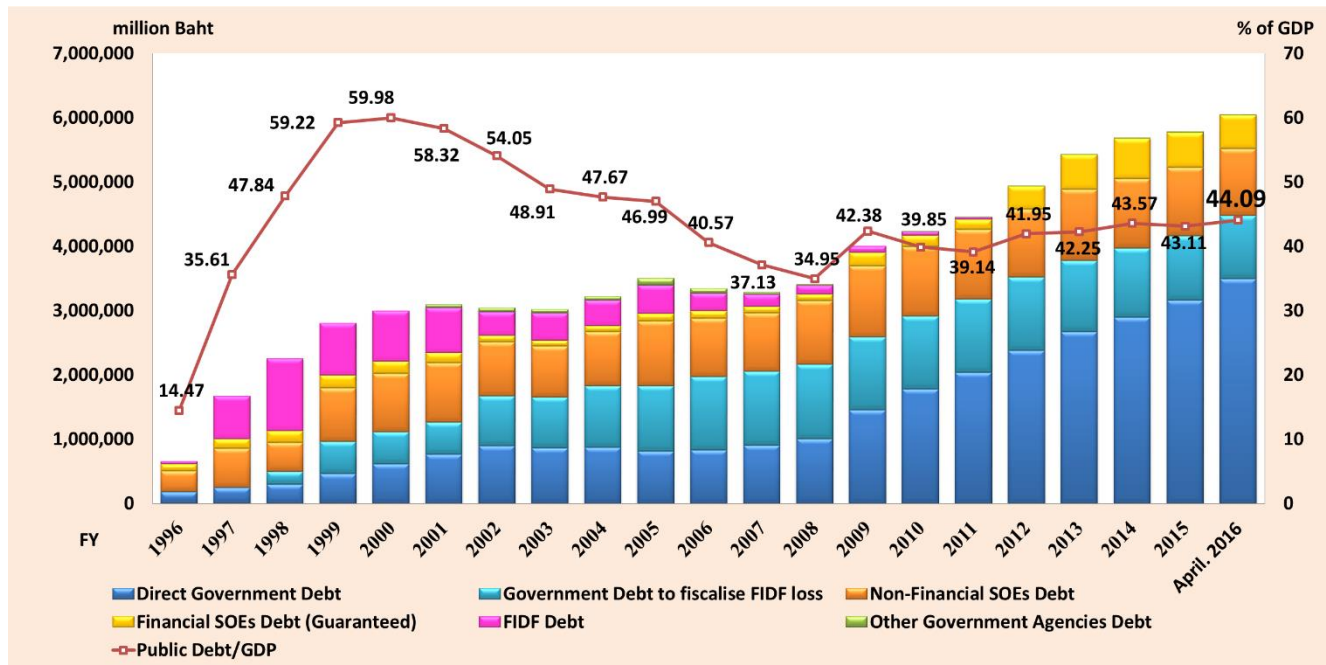
Outline

- **Thailand Public Debt Overview**
- **Legal Framework**
- **Public Debt Management Plan & Borrowing Instruments**
- **Domestic Bond Market Development**
- **Baht-Denominated Bonds in Thailand**
- **Sovereign Credit Rating**

Thailand Public Debt Overview



Public Debt Outstanding *(As of April 2016)*



Thailand's public debt composition and size

Public Debt Outstanding as of April 2016	Amount (Million THB)	% of GDP
Direct Government Debt	3,491,049.04	25.44
Government Debt to fiscalise FIDF loss	983,170.11	7.16
Non-Financial SOEs Debt	1,039,689.49	7.58
Financial SOEs Debt (Guaranteed)	524,402.57	3.82
Other Government Agencies Debt	12,284.67	0.09
Total	6,050,595.88	44.09



General government debt stood at comparatively low level around 33% of GDP



General government debt
4,468,676.25 million baht

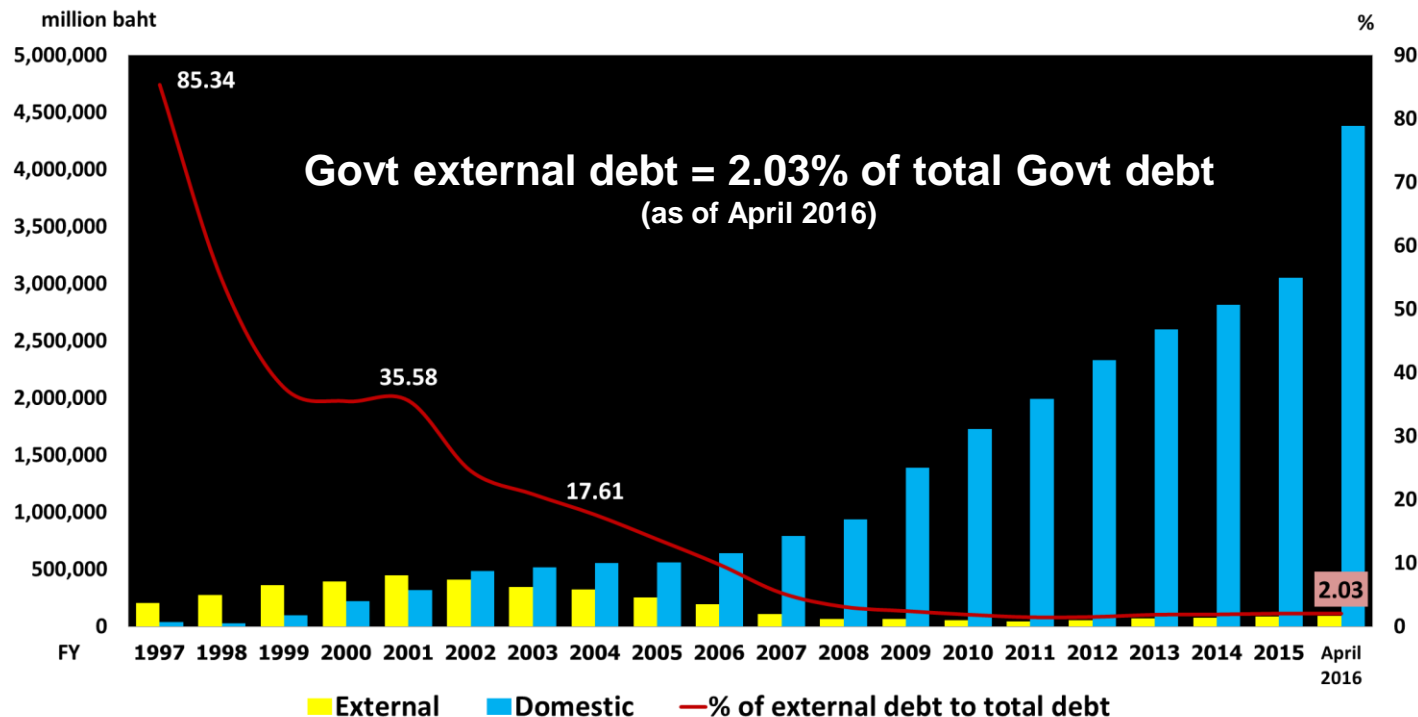
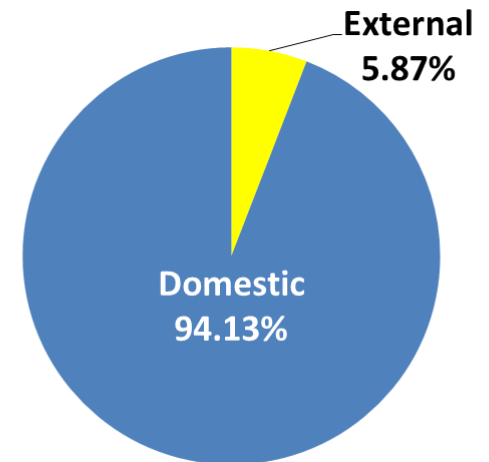
General Government Debt as of April 2016	Amount (Million THB)	% of GDP
Direct Government Debt (deducted onlending)	3,439,127.81	25.06
Government Debt to fiscalise FIDF loss	983,170.11	7.16
Non-Financial SOEs Debt	1,039,689.49	7.58
Financial SOEs Debt (Guaranteed)	524,402.57	3.82
Other Government Agencies Debt	12,284.67	0.09
Local Government Debt (as of December 2015)	34,093.66	0.25
Total	4,468,676.25	32.56



94% of public debt is in local currency

Unit : Million THB

Public Debt Outstanding as of April 2016	External	Domestic
Government Debt	91,028.97	4,383,190.18
Non-Financial SOEs Debt	262,090.49	777,599.00
Financial SOEs Debt (Guaranteed)	2,077.16	522,325.41
Other Government Agencies Debt	-	12,284.67
Total	355,196.62	5,695,399.26



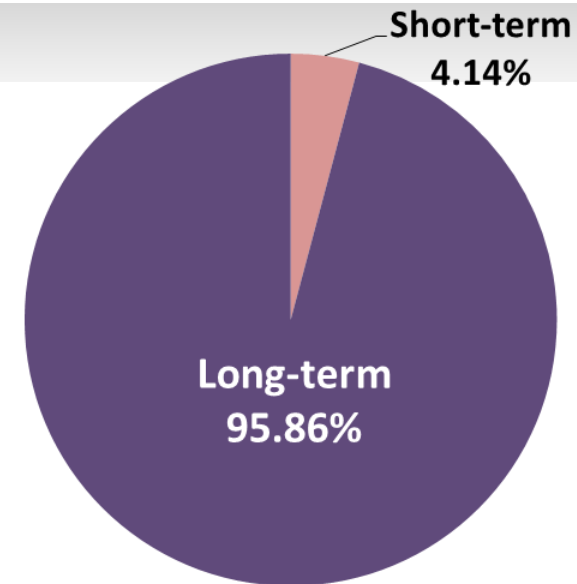


Most of public debt is long term

By Instrument...

Unit : Million THB

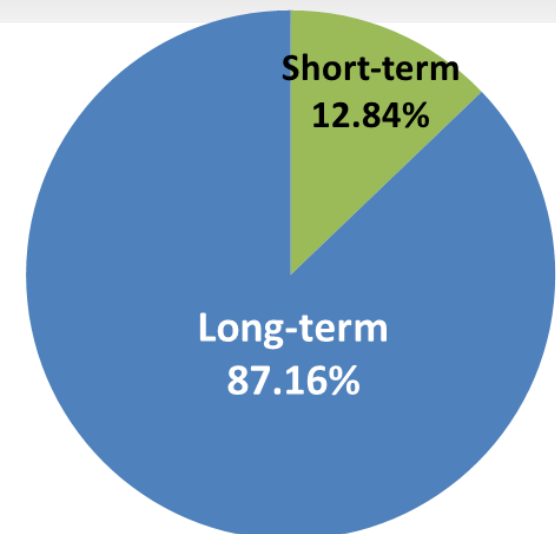
Public Debt Outstanding as of April 2016	Short-term	Long-term
Government Debt	162,095.49	4,312,123.66
Non-Financial SOEs Debt	26,217.30	1,013,472.19
Financial SOEs Debt (Guaranteed)	62,286.00	462,116.57
Other Government Agencies Debt	-	12,284.67
Total	250,598.79	5,799,997.09



By remaining maturity...

Unit : Million THB

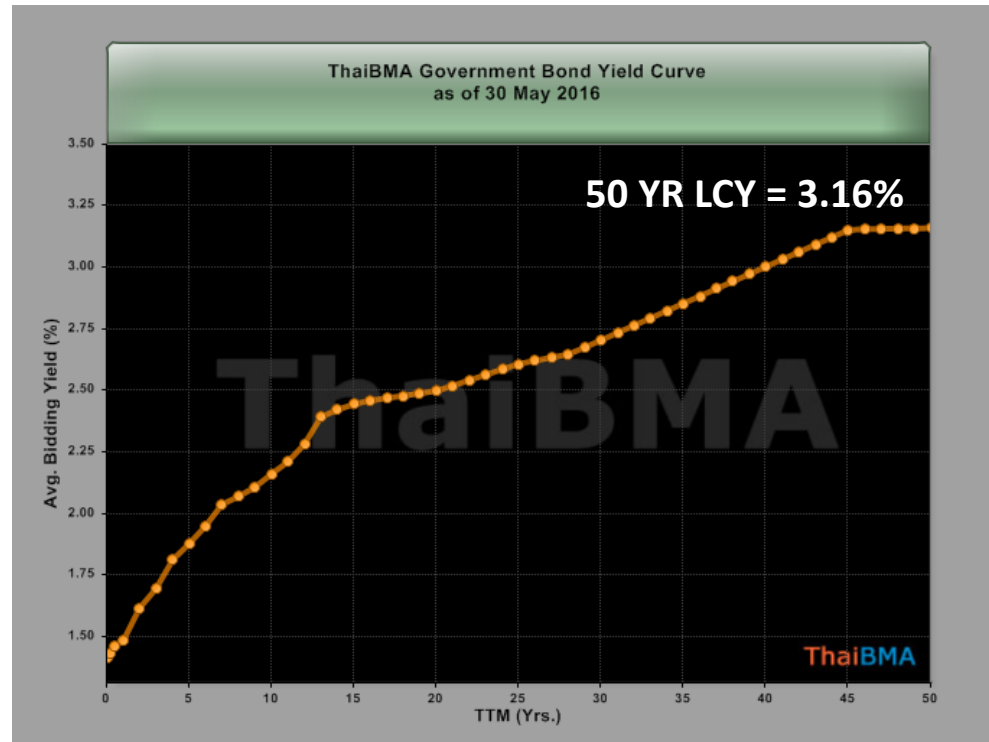
Public Debt Outstanding as of April 2016	Short-term	Long-term
Government Debt	459,071.69	4,015,147.46
Non-Financial SOEs Debt	156,408.83	883,280.66
Financial SOEs Debt (Guaranteed)	154,168.77	370,233.80
Other Government Agencies Debt	7,083.72	5,200.95
Total	776,733.01	5,273,862.87



Note: Short term debt refers to the debt outstanding figures having the remaining maturity less than 12 months.

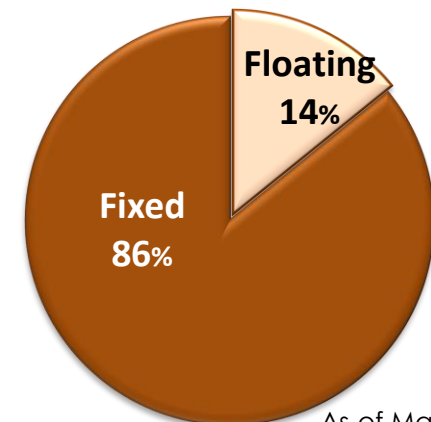


Thailand's public debt portfolio with low cost of funding under acceptable risk level

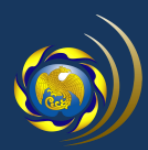


Average Time to Maturity at the end of March 2016 (Unit: Years)

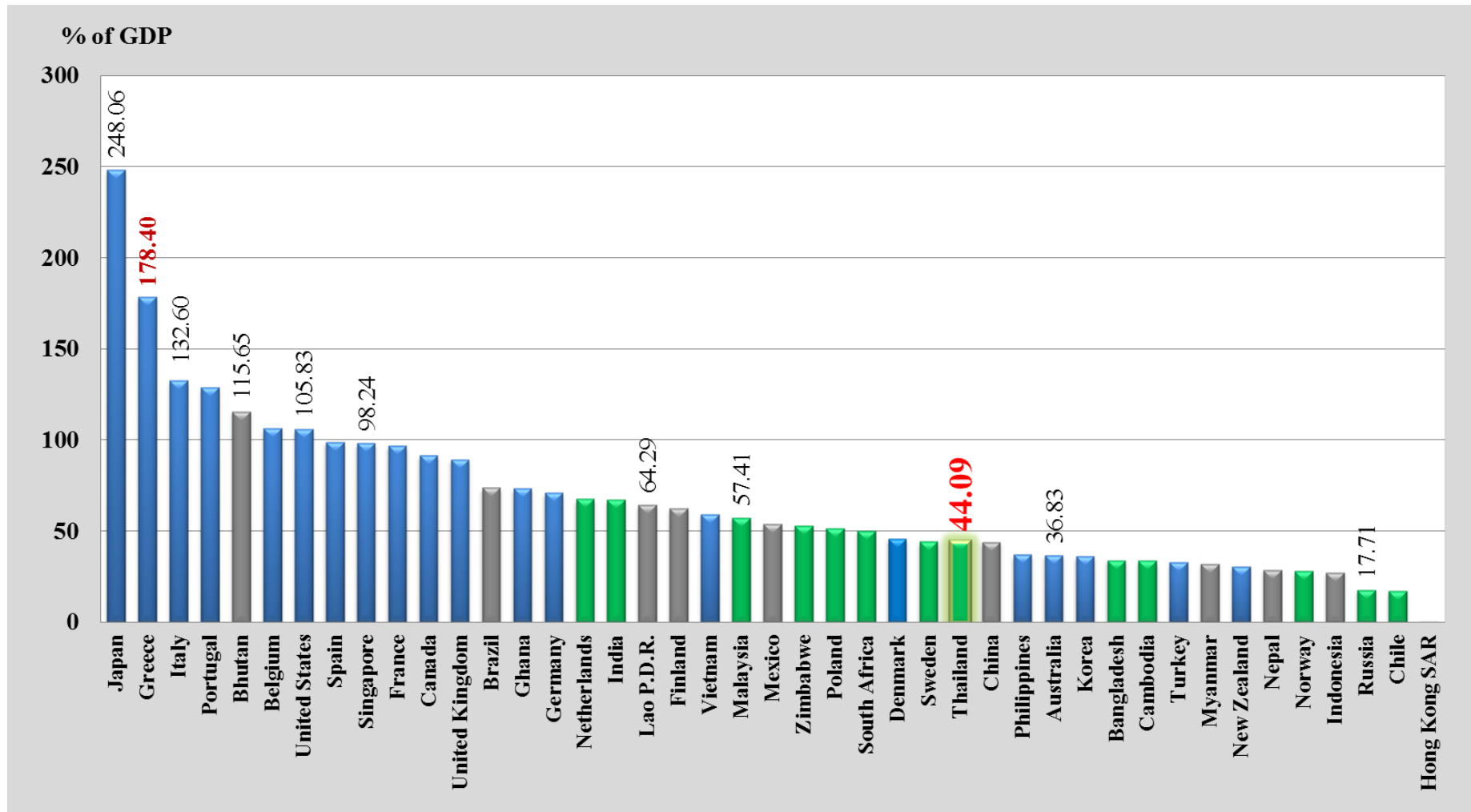
	Public Debt	Government Debt	State Enterprise Debt
Total	8.16	9.50	4.43
- Fixed rate	8.92	10.05	5.26
- Floating rate	3.54	4.92	1.83
- Domestic Currency	8.14	9.53	3.81
- Foreign Currency	8.54	7.76	8.78
Average Cost (%/year)	3.77	3.85	3.55



As of March 2016



Thailand's Public debt to GDP stood at moderate level compare to other countries



Source : World Economic Outlook Database, April 2016, International Monetary Fund (IMF)

Note : - Thailand's debt to GDP is number of Public Debt where as other countries are General Government Debt.

- Thailand's debt to GDP is real figure at the end of April, 2016 while other countries are both real figure and IMF estimation.

(Source: <https://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx>)

Legal Framework



Legal Framework

Public Debt Management Act B.E. 2548 (2005)

Public Debt Definition:

1. Direct government debts: budget deficit, infrastructure investment projects, economic stimulation, crisis management, on-lend to government agencies and State Owned Enterprises (SOEs)
2. Non-financial SOEs debts, both government guaranteed and non guaranteed (SOEs include privatized companies)
3. Financial SOEs debt that government guaranteed
4. Other public organizations debts such as Energy Fund
5. Not included local government debts

Public Debt Management :

- incur debt through loans or guarantees
- debt repayment
- debt restructuring
- other activities involving public debt



Public Debt Management Act is the MAIN borrowing framework

A Borrowing Ceiling to Finance Budget Deficit

20% of Annual Budget



80% of Principal Repayment
Expenditure

B Ceiling for Government Guaranteed + Borrowing for THB On lending

20% of Annual Budget

- Support SOEs Investment Project

C Borrowing Ceiling to promote Economic and Social Development

10% of Annual Budget

- Enable government's long-term investment project
- Borrow in foreign currency and have import content
(avoid crowding out and FX neutral)
- Or borrow in THB if domestic market allowed



Public Debt Management Act

Public Debt Restructuring

- Shall be made for the purpose of economies, minimising foreign exchange risk, or diversifying debt repayment burden.
- Shall raise loan for repayment debt incurred by MOF in an amount of not exceeding the outstanding debt
- Shall raise loan for repayment debt incurred by MOF guarantee in an amount of not exceeding the guaranteed debt
- In case the amount of public debt which will be restructured is large and MOF considers that it is not appropriate to restructure in one time, MOF is able to restructure the debt 12 months in advance before the due date.
- The proceeds from the advanced debt restructuring shall be transferred to the Debt Restructuring and Bond Market Development Fund



Public Debt Management Act

Debt Restructuring Methods

MOF shall have the power to restructure public debt by means of:

- ✓ Refinancing the existing debt
- ✓ Repayment of debt before the repayment period
- ✓ Extending or shortening repayment period
- ✓ Roll over
- ✓ Buy back
- ✓ Redeeming government debt instrument, or
- ✓ Undertaking any financial transaction which is beneficial to public debt restructuring specified in the Ministerial Regulation



**Government, under parliament's approval,
can issue the emergency decrees to maintain economic stability and stimulate economy**



**Emergency Decree authorizing the MOF to Secure Loans for
Economic Restoration and Development Fund B.E. 2541 (A.D. 1998)
500 billion THB**



**Emergency Decree authorizing the MOF to Secure Loans for
Restoring and Strengthening the Financial Institutions System
Development B.E. 2541 (A.D. 1998)
300 billion THB**



**Emergency Decree authorizing the MOF to Secure Loans for
Strengthening and Developing the Financial Institutions System
Phase II B.E. 2545
(A.D. 2002) 780 billion THB**



**Emergency Decree authorizing the MOF to Secure Loans for Restoring
and Strengthening Economic Security B.E. 2552 (A.D. 2009)
400 billion THB**



**Water Resource Management and Country Development
Decree B.E. 2555 (A.D. 2012)
350 billion THB**

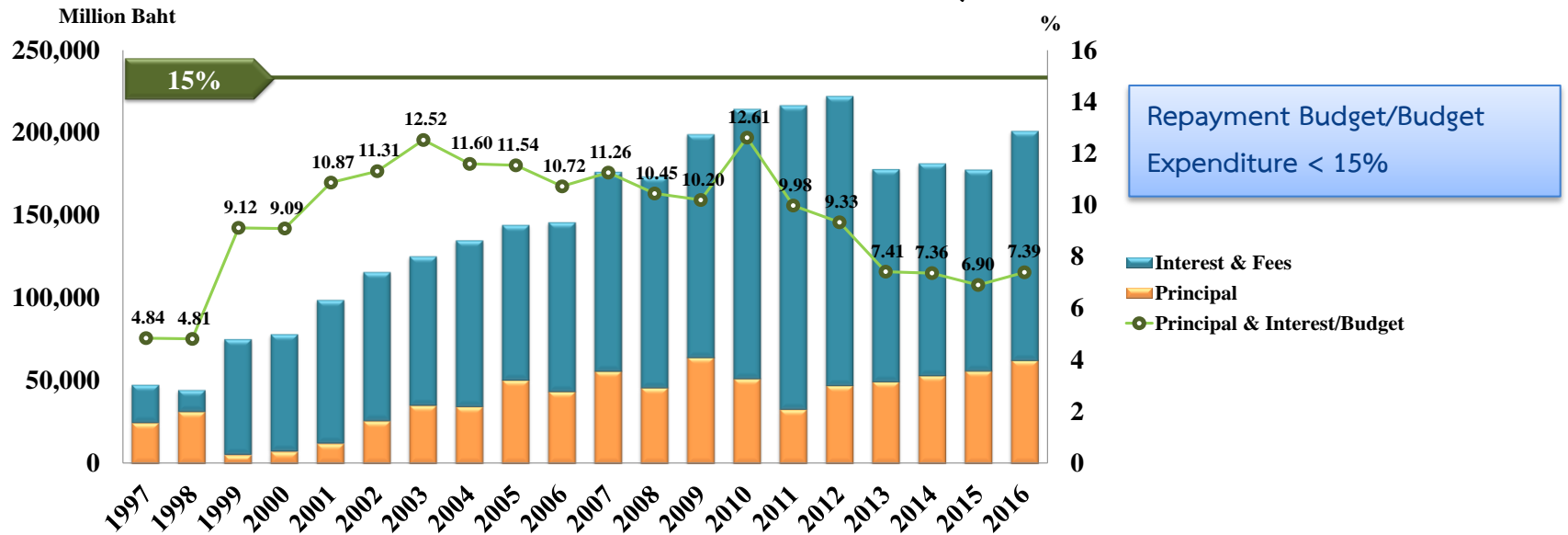
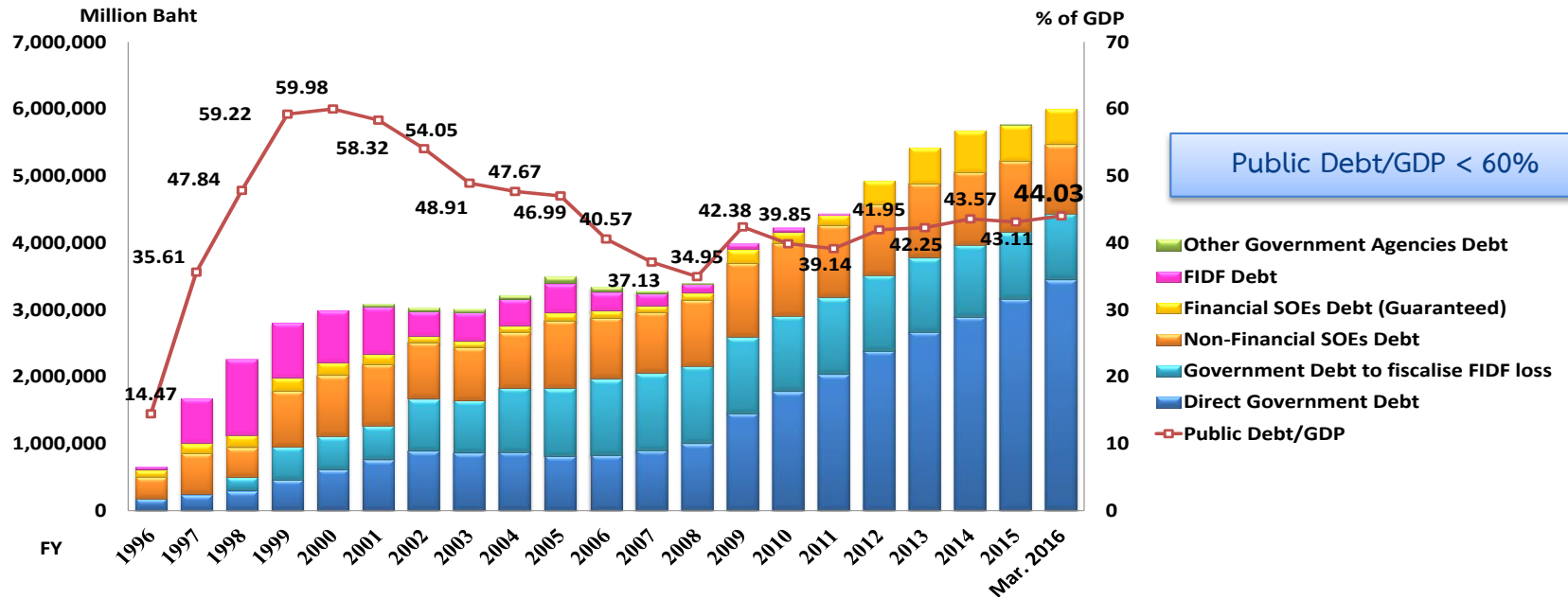


**Disaster Insurance Fund Decree B.E. 2555 (A.D. 2012)
50 billion THB**





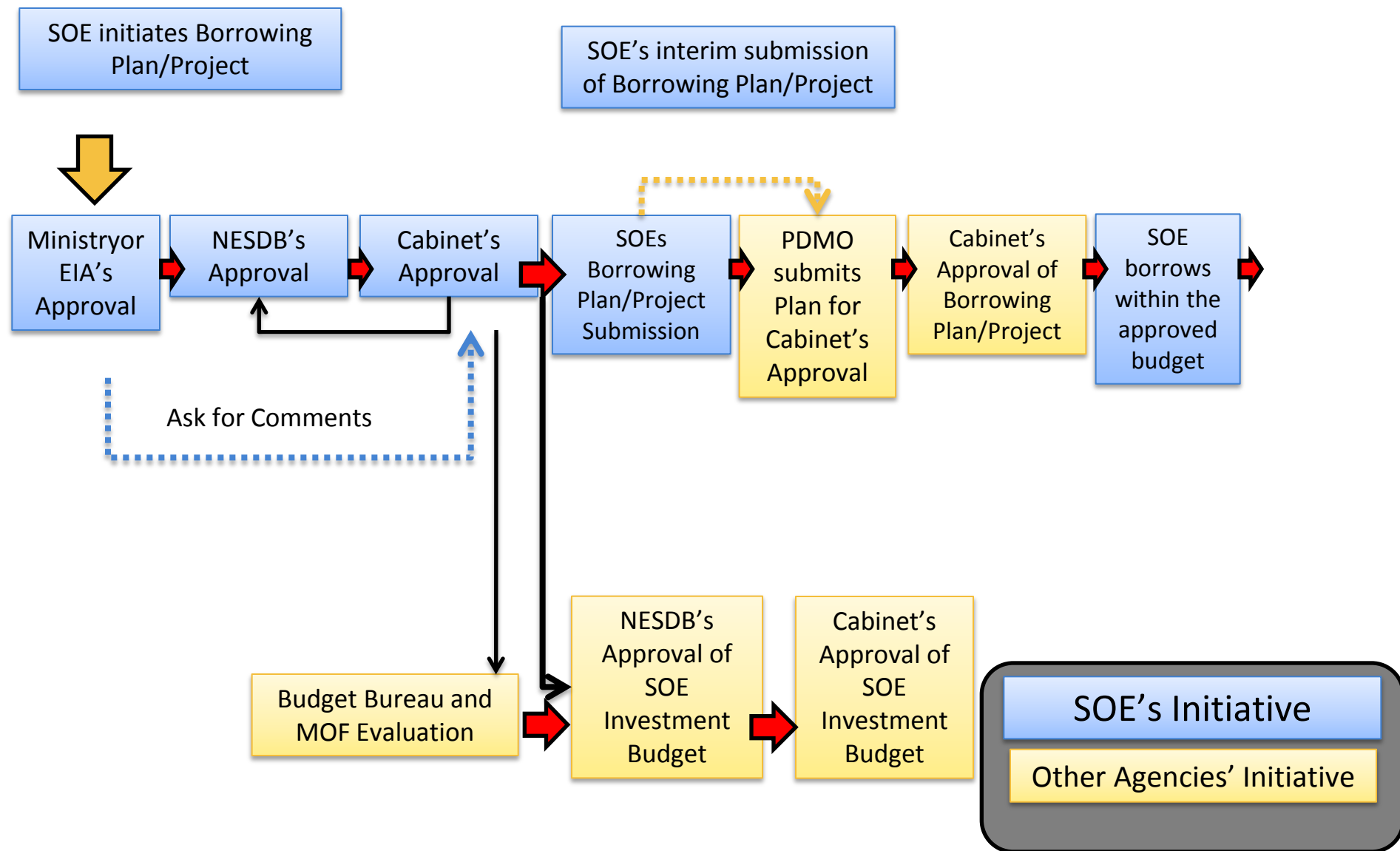
Sustainability Framework



Public Debt Management Plan and Borrowing Instruments

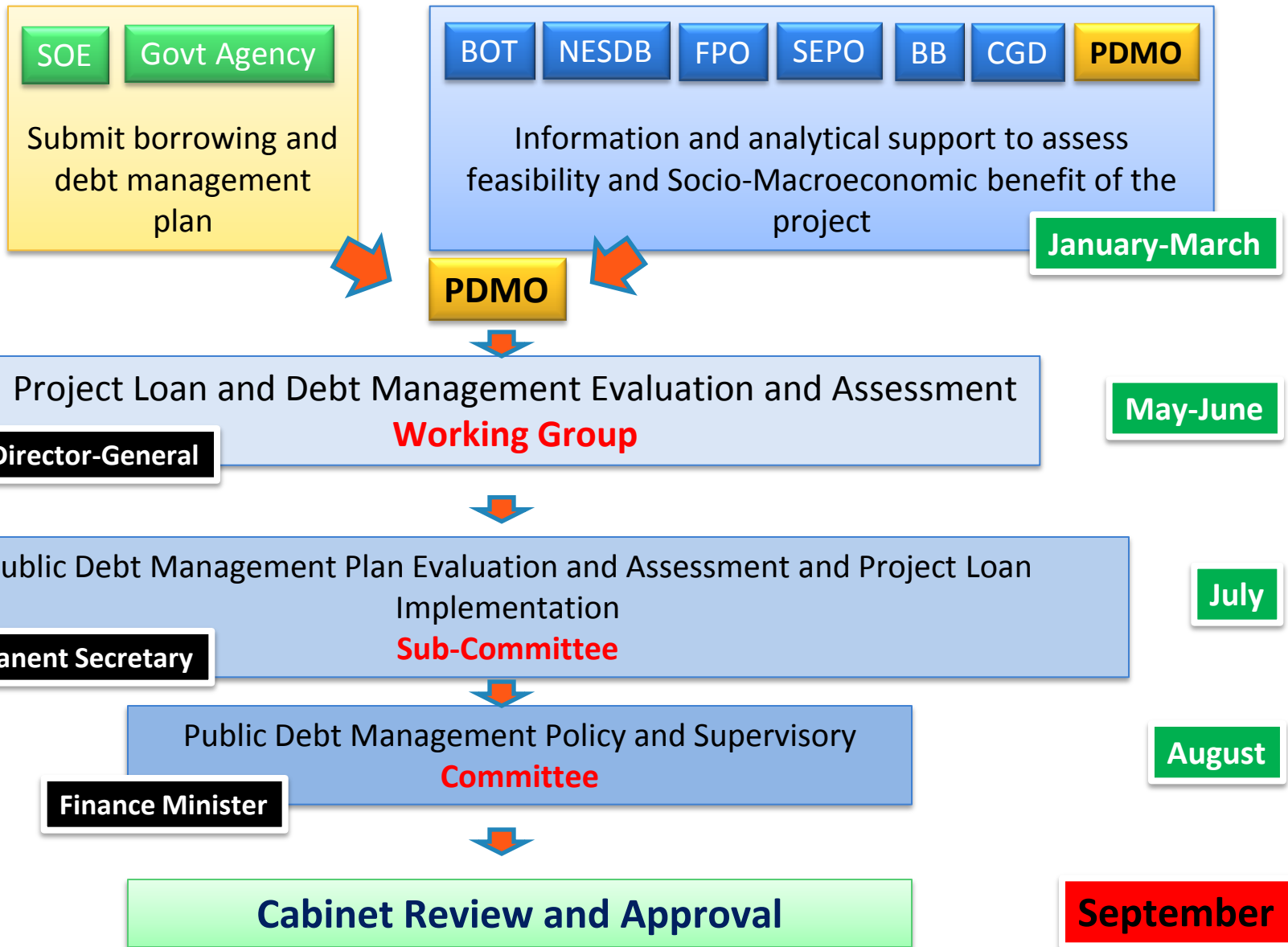


SOE/Government agency borrowing plan approval procedure





Public Debt Management Plan





Government Borrowing Plan in FY2016

**FY 2016 Annual Budget Expenditure
(2.766 trillion THB)**

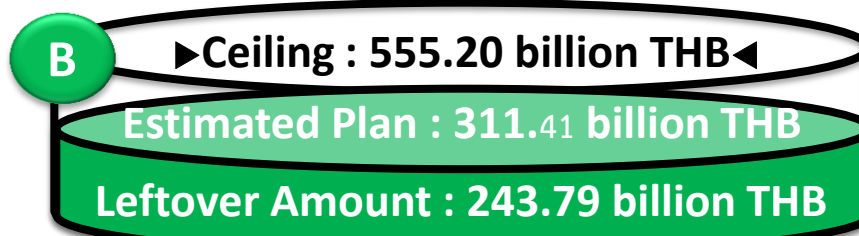
**Borrowing Ceiling up to 20% of Annual Budget
to Finance Budget Deficit**

**FY 2016 Principal Repayment Budget
(61.99 billion THB)**

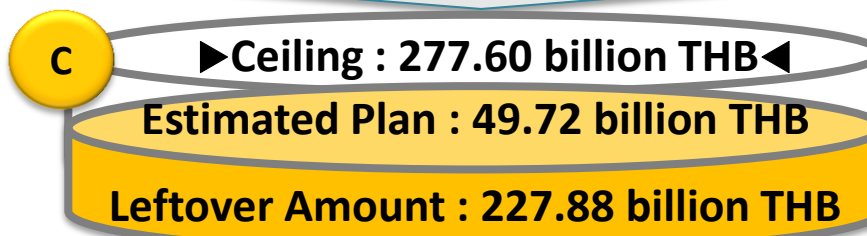
**Borrowing Ceiling up to 80% of Principal
Repayment Exp. To Finance Budget Deficit**



**Borrowing Ceiling up to 20% of Annual Budget
To undertake Guaranteed + THB On lending**



**Borrowing Ceiling up to 10% of Annual Budget
To promote Economic and Social Development**





Summary of FY2016 Public Debt Management Plan

Borrowing Plan	Amount (million baht)		
	Domestic	External	Total
1. New Borrowing	502,947.85	52,177.60	555,125.45
1.1 Government	417,470.50	49,715.95	467,186.45
1.2 State-Owned Enterprises	35,095.62	-	35,095.62
1.3 Others State Agencies	50,381.73	2,461.65	52,843.38
2. Refinancing	868,878.36	4,800.00	873,678.36
2.1 Government	604,762.12	4,800.00	609,562.12
2.2 State-Owned Enterprises	261,816.24	-	261,816.24
2.3 Others State Agencies	2,300.00	-	2,300.00
3. Risk Management	124,284.47	120,225.67	244,510.14
3.1 Government	101,109.04	45,630.88	146,739.92
3.2 State-Owned Enterprises	2,075.43	26,374.62	28,450.05
3.3 Others State Agencies	21,100.00	48,220.17	69,320.17
Total Public Debt Management Plan	1,496,110.68	177,203.27	1,673,313.95

Plans to prefund

221,482.96
Million baht

As of May 2016



Government Financing Instruments

Instruments

Short-Term Securities

Long-Term Securities

**Promissory Note (PN)/
R-Bill**

- For restructuring debt (refinancing ST debt and prepayment)

Treasury Bill (T-Bill)

- Cash Management for the mismatch of Gov't revenue and expenditure (1, 3 and 6 months)

Benchmark Bond

5-10-15-30-50 yrs.

- Main Government's financing instrument (5-50 yrs)
- Building the benchmark yield curve for SOEs and private sectors
- Building liquidity in secondary market

Innovation Bonds

Inflation-Linked Bond (ILB),
Amortized Bond (LBA)

- Create alternative option for investment and broaden investors base
- Suitable financing instrument for government mega-project investment

Saving Bond

- Promote private saving (3-10 yrs)
- Sustainable Government financing instrument

Term-Loan (Bank loan)

- Correspond with project disbursement which depend on progress of implementation

**Foreign Currency Bond (FX
bond)**

(\$USD, Euro, Yen, Yuan,...)
Last issuance in 2006

- In case of tight liquidity
- Absorb the gov't mega-project investment (import content)
- Prevent the crowding out effect



Sources of Fund: Government or SOEs?

High Financially Viable : SOEs



Expressway



Airport



Electricity



Energy

SOE Revenue/
Borrowing

Project
Finance

PPPs

Infrastructure
Fund

Low Financially Viable with High Economic Return : Government



Rapid Transit System



Public Health



Road System



Education

Budget

Government
Borrowing

PPPs



On-lending VS. Loan Guaranteed

**Borrow under
Public Debt
Management
Act**

SOEs Borrowing

(SOEs are
responsible for
principle and
interest payment)

**Non
guarantee**

- **Good
credit SOEs**



Guarantee

- **Bad credit
SOEs**



**Gov't
Borrowing and
on-lending to
SOEs**

- **Gov't is responsible for
principle and interest
payment.**



**Borrow under
Emergency
Decrees**

**Gov't
Borrowing and
allocating to
Implementing
Agencies**

- **Projects that follow the
Emergency Decree's
Objectives**





On-lending VS. Loan Guaranteed

Considerations	On-lending	Loan Guaranteed
Contractual Commitments	<ul style="list-style-type: none"> - Contract Agreement between MOF and lender - Contract Agreement between SOE and MOF 	<ul style="list-style-type: none"> - Contract Agreement between SOE and lender
Costs	If interest costs are in line with other financing sources both domestic and external	
Level of Risk Management Oversight	Government (Public Debt Management Act art.icle 14 : Grant MOF power to refinance loan)	SOEs (Cabinet approval in 2000: Allow SOE to borrow externally and undertake its own risk management in both interest rate and exchange rate)
Criteria on Financing Methods	<ul style="list-style-type: none"> - Mega project - Required gov't assistance - program loan financing 	<ul style="list-style-type: none"> - SOEs can manage on their own
Sample Projects	Red line Rail Project (Bang Sue-Rangsit)	MRT Blue Line (Chaloem Ratchamongkhon)



Market Liquidity and Disbursement Flow are Key Considerations for Borrowing Instruments Selection

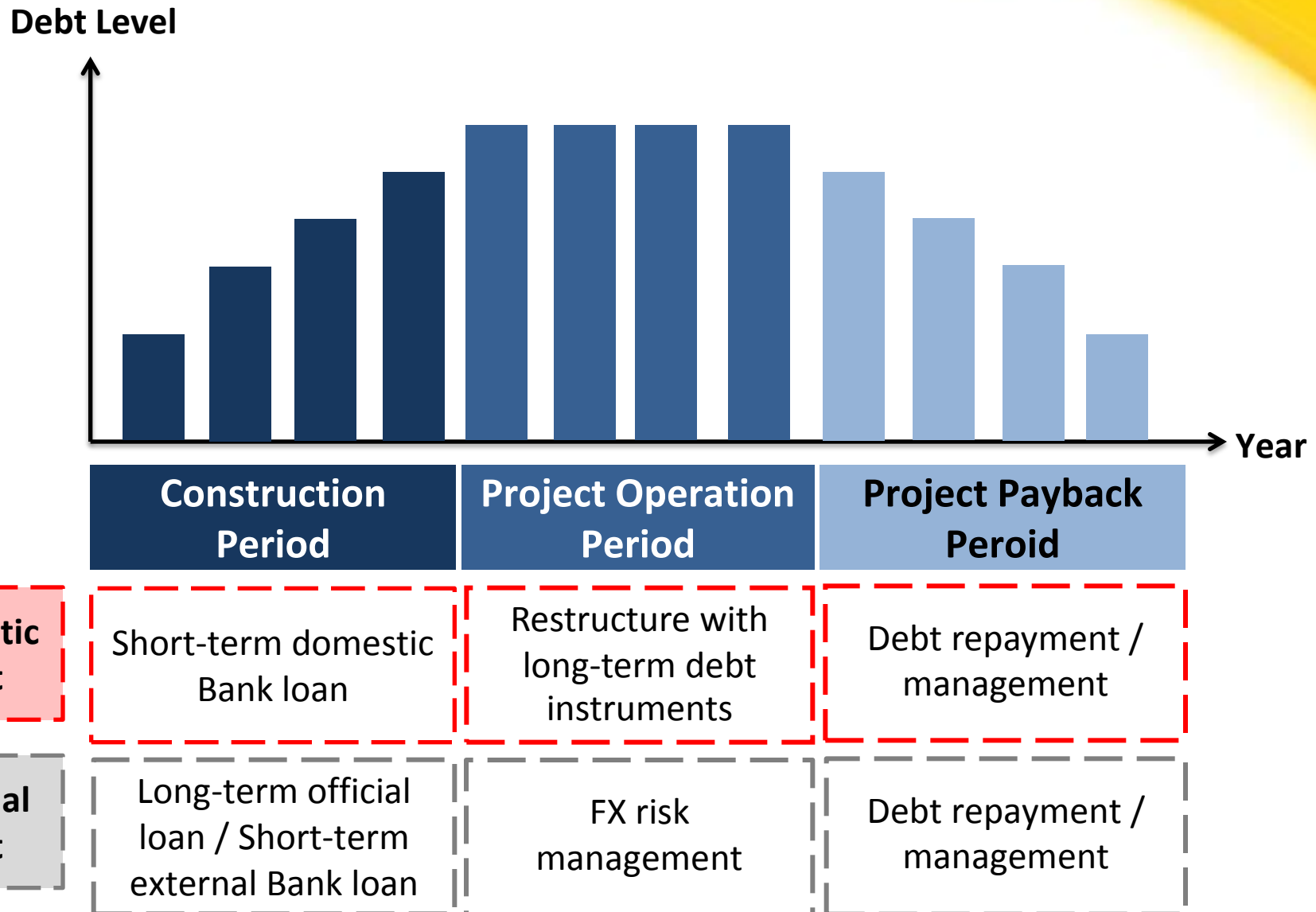
Borrowing Alternatives	PROS	CONS
Domestic Borrowing	<ul style="list-style-type: none">- Suitable when HIGH liquidity in domestic financial market	<ul style="list-style-type: none">- Affect market liquidity and may cause Crowding out effect
Term Loan	<ul style="list-style-type: none">- Disbursement depends on project's progress- Can be prepaid	<ul style="list-style-type: none">- Higher interest rate than bonds and P/N- Amount and cost of fund depend on bank liquidity
Bonds	<ul style="list-style-type: none">- Lower interest rate than other tools- Medium to long-dated tenors- Bullet/amortizing structures available- Issuer can lock-in fixed rate- Cash flow can be matched with domestic assets- Supporting domestic bond market development	<ul style="list-style-type: none">- Mismatched between project cash flow and bond disbursement (not suitable for early stage of project funding since the interest will be calculated from the bond issuance date)
Promissory Notes (P/N)	<ul style="list-style-type: none">- Can be prepaid & transferable (lower cost than Term Loan)- Shorter process and time than bonds	<ul style="list-style-type: none">- Mismatched between project cash flow and bond disbursement



Market Liquidity and Disbursement Flow are Key Considerations for Borrowing Instruments Selection

Borrowing Alternatives	PROS	CONS
External Borrowing	<ul style="list-style-type: none">- Suitable when LOW liquidity in domestic financial market	<ul style="list-style-type: none">- Need well-manage FX risk exposure
Official Loan	<ul style="list-style-type: none">- Long term loan that can be disbursed as project progress- International Bidding- Soft loan, low interest- Project monitoring and evaluation- Know-how and Technology transfer	<ul style="list-style-type: none">- Cannot manage risk immediately so it is difficult to estimate real funding cost- Fund flow may put pressure on value of currencies- Exchange Rate Risk- Loan fee
International Bond	<ul style="list-style-type: none">- Create benchmark bond yield curve in international market- Diversified sources of fund- Improve investor's confidence and understanding	<ul style="list-style-type: none">- Mismatched between project cash flow and bond disbursement- Fund flow may put pressure on value of currencies- Higher cost than official loans

Considered Borrowing Tools for Project Finance





External Borrowing Criteria

Who are the main sources of Thailand's external borrowing?



1. Favourable Terms and Conditions

- High ratio of capital investment with long tenure (15 – 40 years)
- Grace period (5 – 10 years)



2. Know-how Transfer

- Knowledge and Technology transfer
- Technical assistant project and expertise




3. Match Nature of Project and Diversified Sources

- Mega or long term project (10-30 years)
- Imported contents
- Avoid crowding out effect
- Reserve budget for other loans





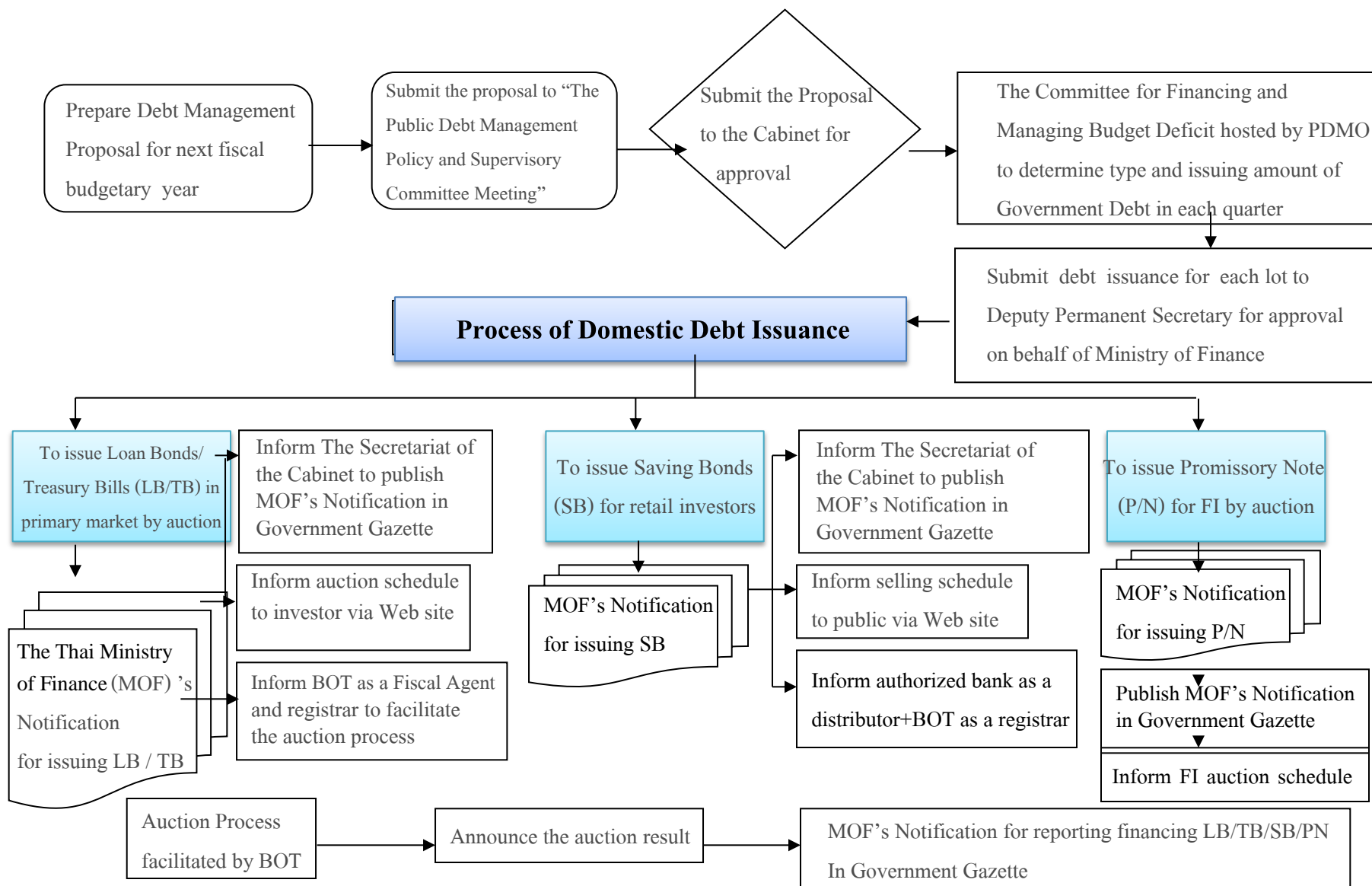
Cost of External Borrowing

ATM (Years)				
6	1.81	1.83	General	Preferential
10	1.90	1.82	3.88	2.68
13	2.30	2.02	4.00	2.80
16	2.59	2.31	4.12	
18	2.68	2.50		

As of 15 June 2016



Process of Government Debt Instrument Issuance

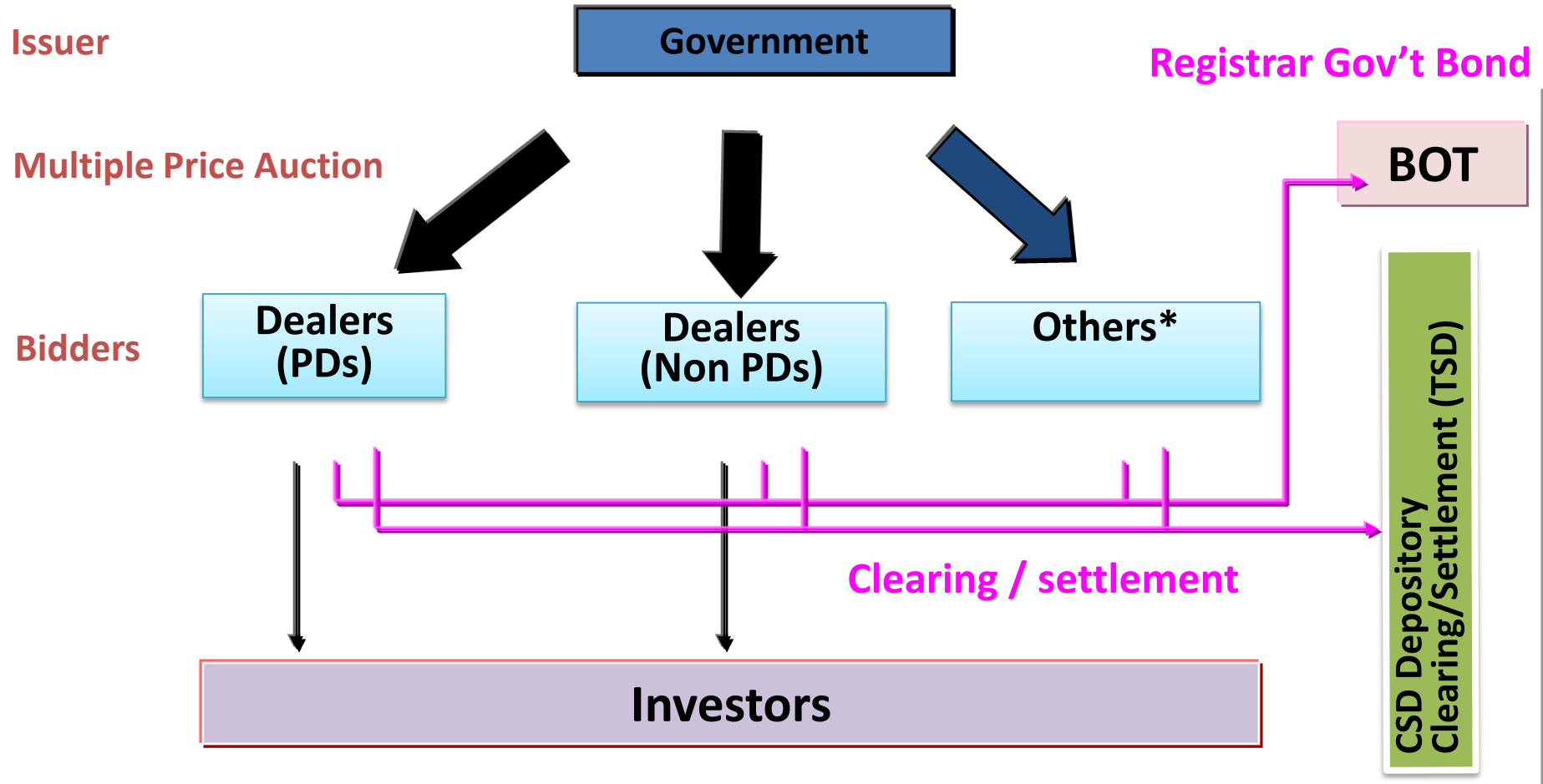




Primary Market Transaction Flow

Government Bonds

Primary Market Transaction Flow



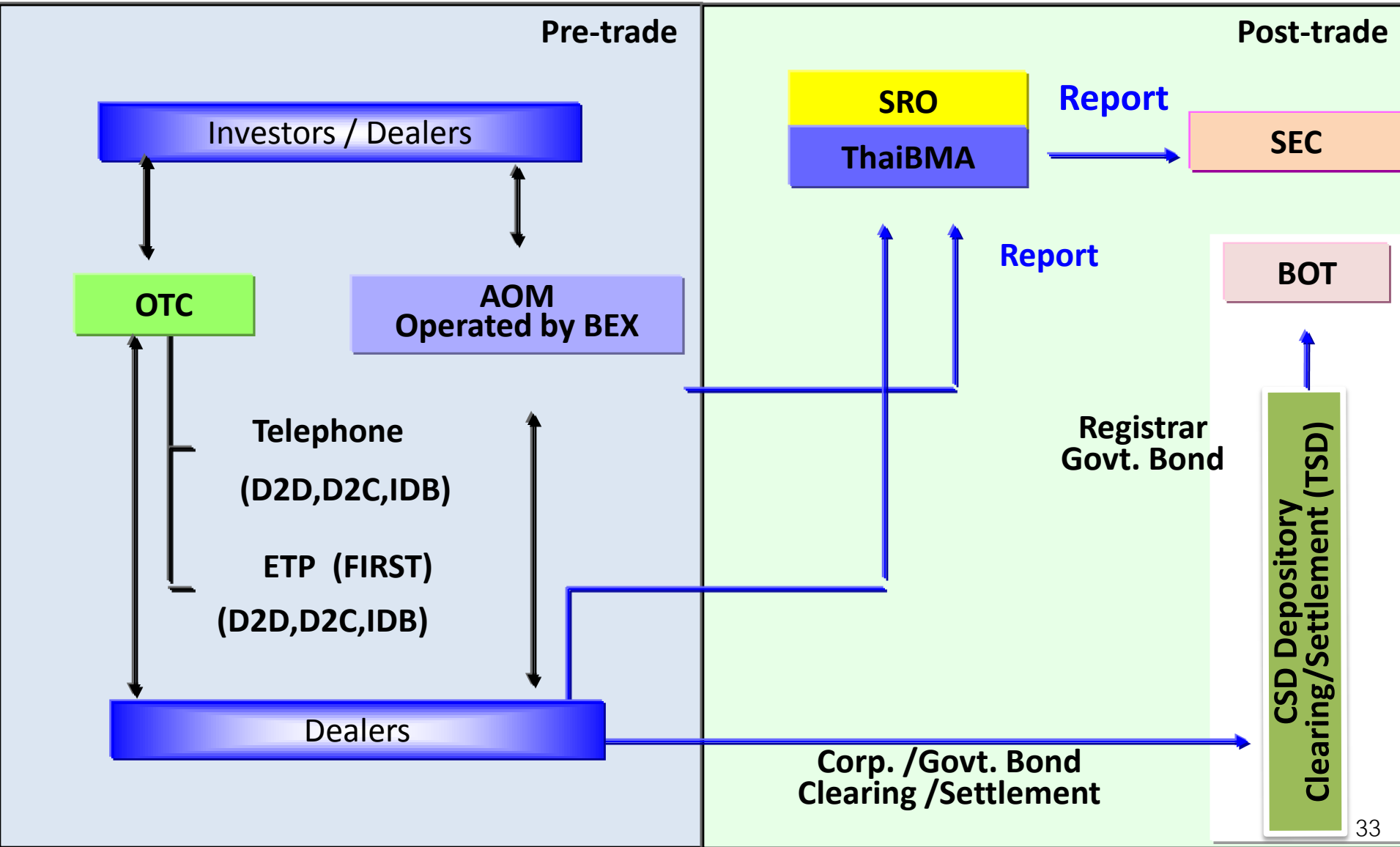
* Others institution investors who have accounts with BOT



Secondary Market Transaction Flow

Government Bonds

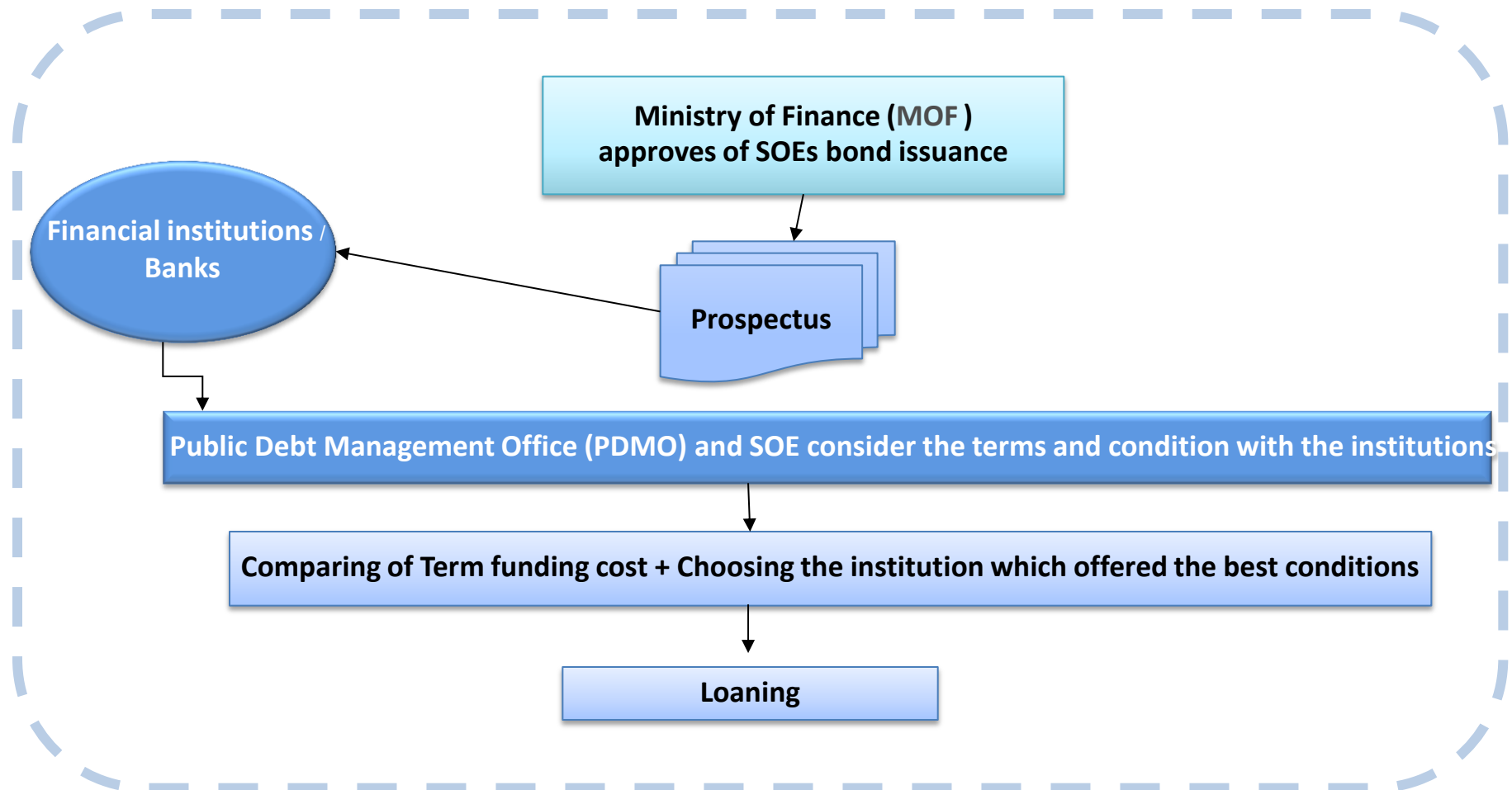
Secondary Market Transaction Flow





SOEs Bond Issuance

SOE Bonds





Bond Financing Spectrum

Issuing international bonds help raise the profile of the issuer among a variety of investors, while also providing numerous structural, diversification and tenor benefits vs. domestic bonds or other commercial sources. Below we present a list of the different types of international bonds and the available offering formats.

Domestic Bonds

- Securities issued into issuer's home country and denominated in local currency

International Bonds

Foreign Bonds

- Issued in a domestic market by a foreign borrower
 - Either in the domestic currency, such as Yankee (US\$), Samurai (JPY) Kangaroo (AUD), or
 - Into domestic market in foreign currency i.e. Uridashi (IDR sold to Japanese investors)

Global Bonds

- Securities simultaneously issued into more than one major market, including the U.S.
- Denominated in any currency

Eurobonds

- Generally refers to bonds issued into the "Euromarket" (ex-U.S.)

Offering Formats

SEC Registered

- Access to all investors in the U.S., including retail
- Meet relatively more onerous U.S. SEC requirements

144A

- Strictly private placements
- Sold to Qualified Institutional Buyers (QIBs) only, including those located in the U.S.

144A with Reg. Rights

- Issued as 144A with the plan to register with the SEC at a later date (i.e. post acquisition as accounts are not yet available)

Regulation D

- Placement of small groups of accredited investors (principally insurance companies)
- Generally need strong Investment Grade ratings

Regulation S

- Bonds not issued into the U.S. fall within the Regulation S exemption
- Can be issued into U.S. after seasoning period via non-U.S. initial investor ("offshore" U.S. market)



International Bond

There are numerous structural, diversification and tenor benefits of an international bond transaction.



Locks-in long-term capital to refinance or to meet funding requirements

- Maximizes tenor by issuing bonds with tenors of up to 10-years in the case of sub Investment Grade issuers, or perpetual / 30-years in the case of Investment Grade issuers, including sovereign issuers
- Features bullet repayment (no amortization payments necessary)
 - Term out short-term debt
 - Excellent alternative to address funding requirements



Competitive funding rates

- All-in funding costs remain in the vicinity of historical lows, despite recent global market volatility (technical bid)



Diversifies investor base

- Provides outstanding diversification benefits to issuers and allows issuers to preserve remaining domestic bank lines
- Reduces reliance on bank loans or multilateral funding moving forward



Establishes benchmark and lays the groundwork for future issuances in the international capital markets

- Introduces issuer as a market-savvy international borrower with a US\$ benchmark trading in the secondary market
- Opens another medium for financing – after inaugural bond is issued, follow-on bond issues can be executed in a fairly straightforward manner



Incurrence based, flexible covenants / terms and conditions

- Unlike bank-driven financing transactions, features incurrence-based covenants or terms and conditions
- Typically more lenient compared to bank loans
- Permanent financing for acquisitions



Introduces credit and profile to quality global fixed income investors

- Addresses key markets and broadest audience to maximize momentum and price tension
- Positions the issuer favorably with fixed income investors globally



Choice of Bond Offering Format

A 144A / Regulation S format allows the debt securities to be offered to institutional investors in the U.S., Europe, and Asia, while a Regulation S only format can only be offered into Asia, Europe, and offshore U.S. accounts. An SEC registered bond offering would also allow for distribution to U.S. retail investors.

	SEC Registered	144A / Regulation S Offering	Regulations S Only Offering
Investor Distribution	<ul style="list-style-type: none"> Allows an issuer to market to the Asian, European and U.S. Qualified Institutional Buyer (QIB) and retail investors Permits access to additional pockets of liquidity from the U.S. retail investor base 	<ul style="list-style-type: none"> Allows an issuer to market to the Asian, European and U.S. Qualified Institutional Buyer (QIB) bases Permits access to liquid and diverse U.S. QIB names 	<ul style="list-style-type: none"> Asian-focused distribution Supplemental demand from European accounts, including offshore U.S. accounts
Funding Size	<ul style="list-style-type: none"> Substantial amounts doable 	<ul style="list-style-type: none"> Usually in the context of US\$1 billion+ Larger transactions are doable 	<ul style="list-style-type: none"> Typically up to US\$1 billion + for strong credits
Maturities	<ul style="list-style-type: none"> Greatest flexibility, with tenors of up to 30-years (and potentially longer) 	<ul style="list-style-type: none"> Deepest pool of liquidity for 10-years 10 / 30-years maturities are very common 	<ul style="list-style-type: none"> Typically tenors up to 10-years Limited capacity for tenors > than 10-years
Disclosure and Documentation	<ul style="list-style-type: none"> Prospectus and Registration Supplement filing compliant with the SEC Other applicable diligence and transaction documentation, including 10b-5 legal opinions and comfort letters by the Auditors (for corporate issuers) Legal obligation to on-going SEC disclosure Maintain on-going SEC Registration No restatement or reconciliation from financial statements to U.S. GAAP if IFRS 	<ul style="list-style-type: none"> Full issuer description and sections on industry and risk factors in the Offering Memorandum MD&A discussion, describing main drivers of last three years and interim financial performance (for corporate issuers) 10b-5 (negative assurance) opinion required from legal counsels No restatement or reconciliation from financial statements to U.S. GAAP 	<ul style="list-style-type: none"> Disclosure and other documentation largely in line with 144A issues including risk factors and company descriptions No MD&A discussion, although inclusion is best practice No negative assurance (i.e. 10b-5) opinion required from counsel No restatement to U.S. GAAP
Resale / Trading Restrictions	<ul style="list-style-type: none"> Freely re-sold by investors without re-registration 	<ul style="list-style-type: none"> 144A securities can only be resold to QIBs within the first year after the issue date Freely tradable to the public two years after the issue date 	<ul style="list-style-type: none"> Trading of Regulation S securities are restricted to non-U.S. investors for life, in the same way a Regulation S offering is restricted in the primary distribution



MTN Program vs. Standalone Bond Issuance

Issuers can choose to issue their bond offerings on a standalone basis or as drawdowns under an MTN program. The choice of either format does not determine the success of an offering and depends primarily on the issuer's preference for financing flexibility and documentation costs.

Standalone Bond Issuance

MTN Program

1 Issuance Strategy

- | | |
|---|--|
| <ul style="list-style-type: none"> • Suited for an infrequent issuer that typically issues not more than once a year | <ul style="list-style-type: none"> • Facilitates fast, economical and frequent (more than twice a year) issuance of debt instruments of any size • Caters for opportunistic and reverse enquiry issues |
|---|--|

2 Transaction Types

- | | |
|--|--|
| <ul style="list-style-type: none"> • Only deals with a single issuance of a specific type, tenor, level of seniority and currency | <ul style="list-style-type: none"> • Flexible in terms of tenor, level of seniority, currency and interest rates (i.e. fixed, floating, index-linked, etc.) |
|--|--|

3 Market Perception

- | | |
|---|--|
| <ul style="list-style-type: none"> • Creates profile of a borrower with an opportunistic fund-raising strategy | <ul style="list-style-type: none"> • Issuer is portrayed as being more sophisticated with a long-term commitment to markets |
|---|--|

4 Market Timing

- | | |
|---|---|
| <ul style="list-style-type: none"> • Full set of documentation has to be prepared at the time of each issuance | <ul style="list-style-type: none"> • The majority of documentation can be prepared in advance for much quicker market access • Suited for taking advantage of specific borrowing opportunities under volatile market situations |
|---|---|

5 Economics

- | | |
|--|--|
| <ul style="list-style-type: none"> • Cheaper on single, or at the most 1 – 2 additional subsequent issues | <ul style="list-style-type: none"> • Slightly higher cost than standalone for infrequent issuers • Cost efficient for borrowers with repeat issuances and reverse enquiry demand |
|--|--|

6 Approval & Documentation

- | | |
|--|---|
| <ul style="list-style-type: none"> • Offering Circular, Purchase / Subscription Agreement, Trust Deed, etc. | <ul style="list-style-type: none"> • Similar to standalone, with Program Agreement and all underlying documentation in agreed form |
|--|---|

7 Reverse Enquiries

- | | |
|--|---|
| <ul style="list-style-type: none"> • Cannot be executed | <ul style="list-style-type: none"> • Can be structured with minimal documentation to meet on-going demand from key investors |
|--|---|



Choice of MTN Documentation Format

Different MTN documentation formats allow for distribution to institutional and retail investors globally.

	SEC Registered	GMTN (144A / Regulation S)	EMTN (Regulation S only)
Investor Distribution	<ul style="list-style-type: none"> Registered pursuant to the requirements under the U.S. Securities Act of 1933 Distribution to the entire universe of fixed income investors, including institutional accounts (QIBs) and retail investors 	<ul style="list-style-type: none"> Placed to Asian, European and U.S. QIBs, providing global access to capital 	<ul style="list-style-type: none"> Offered outside the U.S. under the safe harbor guidelines of Regulation S of the 1933 Act Distribution to Asian accounts, with follow-on demand from European accounts and offshore U.S. accounts
Market Access Timing	<ul style="list-style-type: none"> Approx. 6 – 8 weeks+ for U.S. SEC-registered shelf based on Schedule B review of about 4 weeks 	<ul style="list-style-type: none"> Approx. 5 – 4 weeks to establish the program Potentially additional time to draft MD&A 	<ul style="list-style-type: none"> Approx. 4 – 5 weeks to establish the program
Funding Size	<ul style="list-style-type: none"> Substantial funding amounts 	<ul style="list-style-type: none"> Benchmark sized deals well in excess of US\$1 – 2 billion + 	<ul style="list-style-type: none"> Benchmark sized deals typically less than US\$1 billion + but potentially larger
Tenor	<ul style="list-style-type: none"> Flexible and up to 30-years or longer 	<ul style="list-style-type: none"> Flexible, with usual drawdowns in the context of 10 and 30-years 	<ul style="list-style-type: none"> Typically 5 to 10-years, depending on the credit
Ratings	<ul style="list-style-type: none"> Program and drawdowns required ratings 	<ul style="list-style-type: none"> Program and drawdowns required ratings 	<ul style="list-style-type: none"> No ratings required
Transaction Expense	<ul style="list-style-type: none"> Substantially more than for 144A / Regulation S, as it includes SEC-registration fees Requires on-going disclosure to the SEC 	<ul style="list-style-type: none"> Less than an SEC-registered offering Avoids added costs of SEC-registration fee and on-going disclosure requirements 	<ul style="list-style-type: none"> Least expensive due to lower disclosure requirements (i.e. no 10b-5 legal opinion)
Disclosure	<ul style="list-style-type: none"> Greater due diligence and disclosure Additional SEC-registered disclosure on top of general requirements 	<ul style="list-style-type: none"> Greater due diligence and disclosure, similar to SEC registered requirements 	<ul style="list-style-type: none"> Lower documentation requirements vs. 144A (i.e. no 10b-5 legal opinion and MD&A section in some cases)
Resale / Trading Restrictions	<ul style="list-style-type: none"> Freely re-sold by investors without re-registration 	<ul style="list-style-type: none"> 144A securities can only be resold to QIBs within the first year after the issue date but are freely tradable to the public 2 years after the issue date 	<ul style="list-style-type: none"> Trading of Regulation S securities in the secondary market is restricted to non U.S. investors in the same way it is restricted in the primary distribution



Third Party Fees for the Proposed Issuance

The below estimated issuance expenses are subject to discussions between the Issuer and the relevant third party service providers.

	Estimated Expenses
Issuer's International Counsel and Domestic Counsel	US\$300,000 – 350,000
Underwriter's International Counsel and Domestic Counsel	US\$250,000 – 300,000
SGX Listing Fees	US\$20,000
SGX Listing Agent	US\$8,000
Trustee ⁽¹⁾	US\$6,000 one time / US\$6,000 p.a.
Trustee Counsel	US\$20,000
Printing ⁽²⁾	US\$10,000
Net Roadshow	US\$7,500
Roadshow Expenses	US\$100,000
Total	US\$721,500 – 821,500

Note: The above excludes auditor fees. Fees are purely indicative and would be subject to further revision once transaction details are disclosed to the third parties

(1) Also perform roles of paying agent, registrar, transfer agent, DTC custodian

(2) To be determined based on number of pages and Offering Circular copies printed. Printing charges may vary due to overtime, usage of facilities and courier charges.



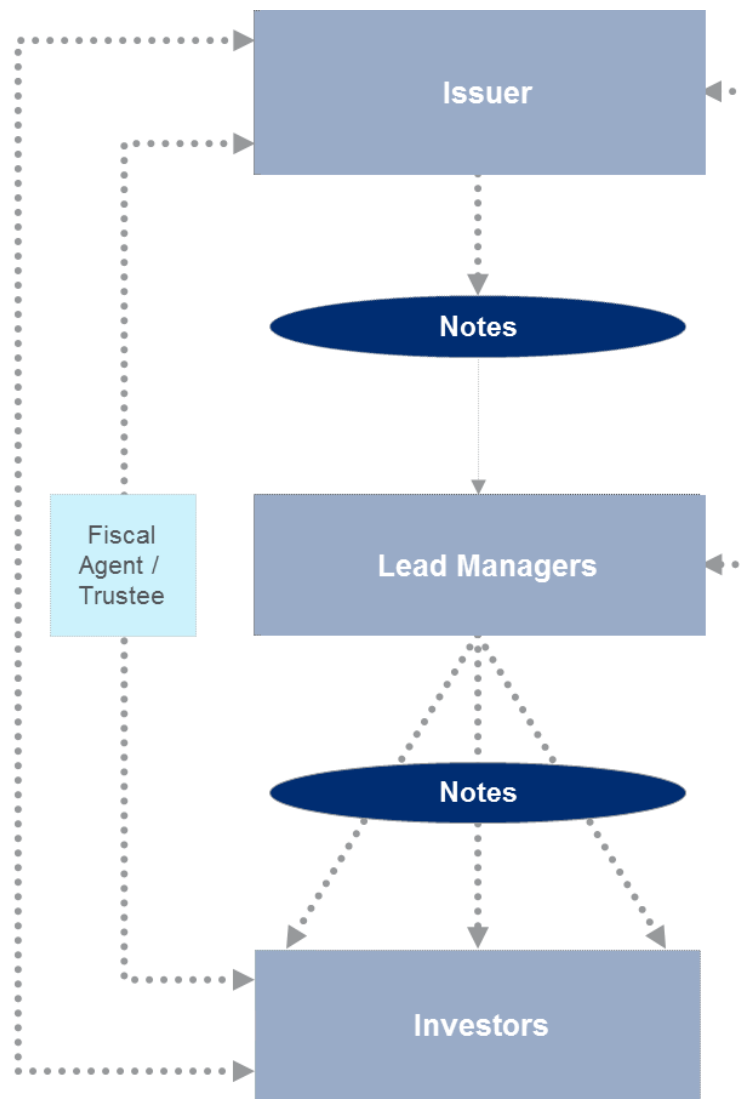
Anatomy of an International Bond Offering

1 Parties to a Deal

2 The Documentation

3 The Process

Flow Chart



Key Documents Relating to Investors

- Offering Memorandum or Program Document (in case of a transaction via MTN Program establishment / drawdown)
- Terms and Conditions / Description of the Notes
- Global Notes

Key Documents Relating to the Managers

- Purchase Agreement / Subscription Agreement
- Legal Opinions

Key Documents Relating to the Auditors (for corporate issuers)

- Arrangement Letter
- Comfort Letter

Note: assumes issuance via 144A / Regulation format



Anatomy of an International Bond Offering : Key Working Groups

1

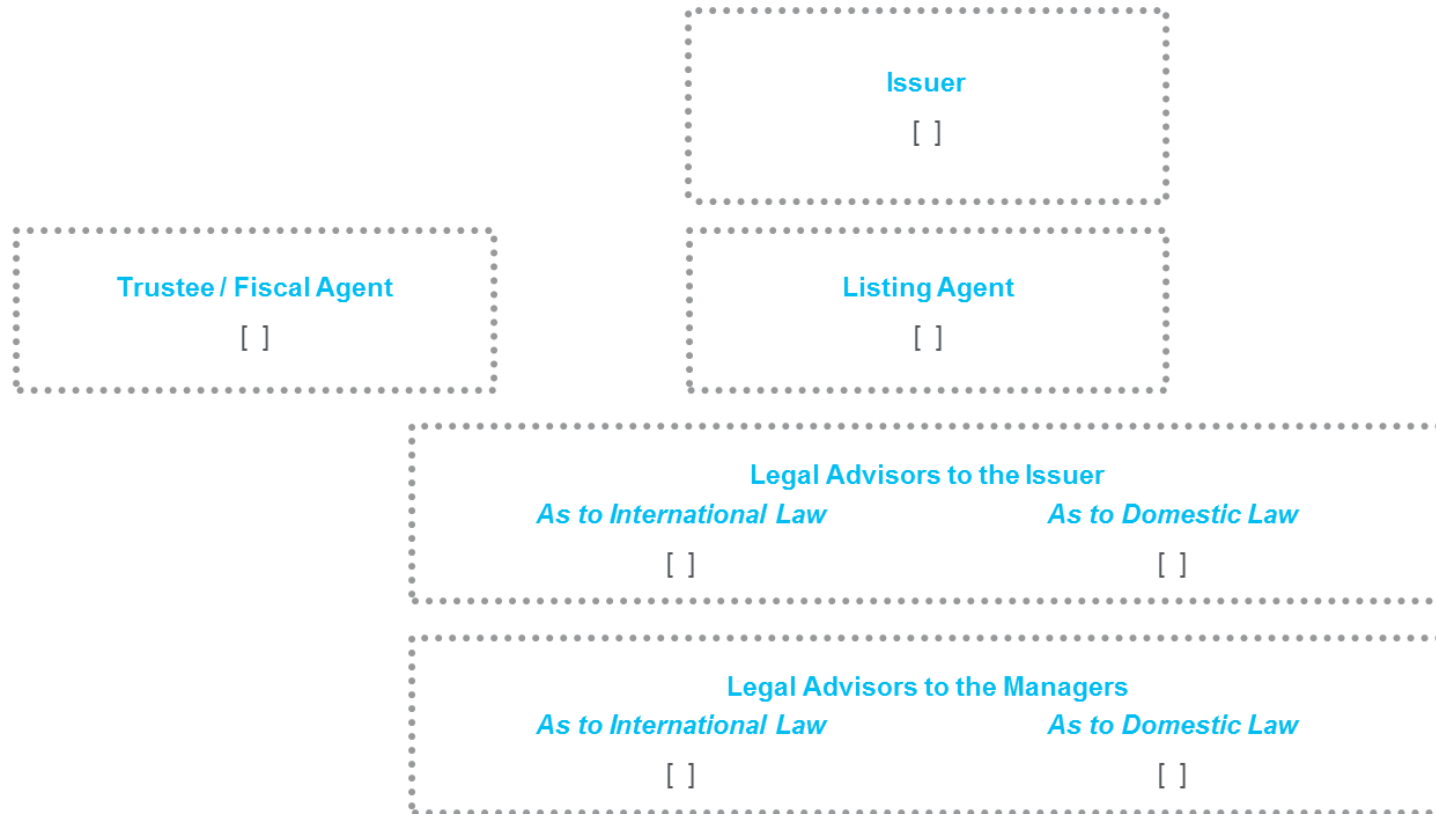
Parties to a Deal

2

The Documentation

3

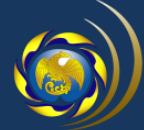
The Process



Other Parties

- Stock Exchange (SGX, HKSE, LxSE)
- Clearing Systems (i.e. DTC, Euroclear, Clearstream)
- Trustee Counsel
- Rating Agencies (i.e. Moody's, S&P, Fitch)

Note: assumes issuance via 144A / Regulation format



Anatomy of an International Bond Offering : Scope of Work

1

Parties to a Deal

2

The Documentation

3

The Process

Party	Scope of Work
Issuer	<ul style="list-style-type: none"> Appoints third parties and participates in due diligence Confirms information in Offering Circular Reviews transaction documentation Reviews roadshow presentation Assists with obtaining approvals (internal and regulatory)
Joint Lead Managers	<ul style="list-style-type: none"> Coordinate overall execution process of the transaction Provide detailed timetable and periodic market updates Coordinate due diligence and documentation Coordinate with rating agencies Prepare roadshow presentation and marketing materials Advise on pricing and marketing strategy Coordinate roadshow logistics and investor meetings Manage the book-building, pricing and settlement processes
Issuer's International Legal Counsel	<ul style="list-style-type: none"> Provides legal advice to issuer and conducts due diligence Primary responsibility for the drafting the issuer related sections of the Offering Circular Reviews and comments on legal documentation, including the terms and conditions and the Purchase Agreement Provides legal opinion (10b-5 as necessary) Prepares publicity guidelines Works with the Listing Agent for the listing of bonds Liaises with Printer to set up the Offering Circular on printer system and generate the document

Party	Scope of Work
Joint Lead Managers' International Legal Counsel	<ul style="list-style-type: none"> Provides legal advice to the Joint Lead Managers Prepares and conduct due diligence questions Provides legal opinion (10b-5 as necessary) Negotiates Arrangement and Comfort Letters with the Auditor (for corporate issuers) Prepares legal documentation, including Terms and Conditions, Purchase Agreement, etc. Coordinates settlement
Domestic Legal Counsels	<ul style="list-style-type: none"> Provide legal advice under local law and conduct due diligence Review and comment on legal documentation Provide requisite domestic legal opinions
Trustee, Registrar and Paying Agent	<ul style="list-style-type: none"> Provide trustee, depository and book keeping services Responsible for the disbursement of funds, such as coupon and principal payments
Auditor (for corporate issuers)	<ul style="list-style-type: none"> Prepare and review issuer's financials for inclusion in the Offering Circular Provide Comfort Letters, including circle-up OC Participate in due diligence
Listing Agent	<ul style="list-style-type: none"> Liaise with exchange(s) and effect listing of bonds
Printer	<ul style="list-style-type: none"> Printing and delivery of the Offering Circular (both preliminary E-red and final versions)



Typical international bond execution process takes approximately 7 – 8 weeks to the start of the roadshow.

1 Parties to a Deal

2 The Documentation

3 The Process

Start of the Process

Documentation & Regulatory Approvals

Marketing

Launch & Pricing

Week 1

Weeks 2 – 7

Week 8

Week 9



Lead Managers

- Transaction execution, coordination and guidance
- Marketing strategy, distribution and execution

Legal Counsels

- Issuer's Counsel: draft Offering Circular
- Lead Manager's Counsel: draft legal transaction documents

Issuer / Guarantor

- Work with lawyers in developing the Offering Circular
- Deliver marketing presentation on the roadshow



Adequate due diligence and investor disclosure is critical for the protection of the issuer, investors and the Lead Managers.

1 Parties to a Deal

2 The Documentation

3 The Process

Due Diligence Disclosure for International Offerings

Legal Due Diligence

- Legal due diligence is initiated early in the execution process
- Counsels will assist the issuer with document collection to result in the most efficient preparation time possible

Tasks

Participants

- | | |
|--|--|
| • Prepare document list / submit | • Issuer's Counsel |
| • Includes minutes of the Board Meetings, financial statements / economic data | • Lead Managers' Counsel |
| • Assemble documents | • Issuer's Management / Internal Counsel |
| • Document review | • Issuer's Counsel |
| | • Lead Manager's Counsel |

Regulatory Due Diligence

Business / Financial Due Diligence (for corporate issuers)

- Managers and their international and domestic counsels will facilitate due diligence meetings with the issuer's management and auditors

How does the company's business work? Who runs the company and how?

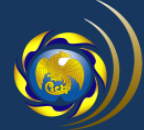
What do the financial statements say? How does the company's business result in these financial statements?

Tasks

Participants

- | | |
|---|--------------------------|
| • Prepare business-related questions | • Lead Managers |
| • Submit these to the issuer prior to the scheduled due diligence session | • Lead Managers' Counsel |
| • Conduct due diligence meetings / calls (i.e. business / financial / accounting litigation issues) | • Lead Managers |
| | • Issuer's Management |
| | • Issuer's Auditors |

Auditor's Due Diligence (for corporate issuers only)



The Offering Circular or Program Document (and subsequent pricing term sheet or pricing supplement)

1 Parties to a Deal

2 The Documentation

3 The Process

The roadshow presentation form the base marketing materials for the bond transaction.

Investor Disclosure for International Offerings

Offering Circular (or MTN Program Document)

- Primary marketing document for the offering, provides thorough business and financial / economic data disclosure
- Key sections include:
 - Summary and Risk Factors
 - Management's Discussion and Analysis (required for a 144A corporate offerings only) or Overview of the Issuer's Economy (if sovereign issuer)
 - Description of the Notes (alternatively, Terms and Conditions)

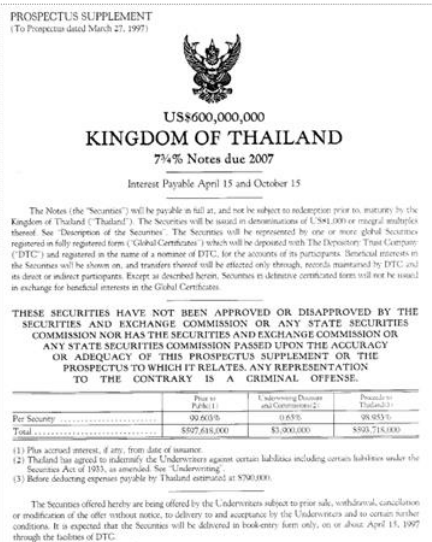


Table of Contents (MTN Program)

Summary.....	pg. ●
Description of the Program.....	pg. ●
Risk Factors	pg. ●
Recent Developments	pg. ●
Use of Proceeds.....	pg. ●
Summary of the Program.....	pg. ●
Government of Thailand.....	pg. ●
The Thai Economy.....	pg. ●
Terms & Conditions	pg. ●
Form of Pricing Supplement.....	pg. ●
Form of the Notes.....	pg. ●
Book Entry & Clearance.....	pg. ●
Exchange Rates.....	pg. ●
Taxation.....	pg. ●
Subscription & Sale.....	pg. ●
Transfer Restrictions.....	pg. ●

Roadshow Presentation

- Marketing document used in investor meetings during the roadshow
- Contents must be consistent and reflect what is in the Offering Circular or MTN Program Document
- Forward looking projections not to be included
- Typically 25 – 30 pages
- Key sections include:
 - Presenters
 - Summary of the Offering or MTN Program
 - Issuer Overview (i.e. industry and economy overview)
 - Key Credit Highlights
 - Financial or Economic Highlights





Documentation will need to be negotiated between the issuer and all third parties involved.

1 Parties to a Deal

2 The Documentation

3 The Process

Auditor's Letters (for corporate offerings) and Legal Opinions must be put in place as well.

Contractual Documentation

Purchase / Subscription Agreement

SUBSCRIPTION / PURCHASE AGREEMENT

US\$[•] mm
Senior Notes Issue

Issuer and
Lead Managers

- Agreement as to purchase and distribution of the securities, conditions of the offering and other matters as agreed between the issuer and its Lead Managers
- Signed at pricing and contains the following:
 - Representations and warranties from the issuer
 - Provisions for payment for and delivery of the notes
 - Settlement and closing conditions
 - Covenants and indemnity provisions
 - Termination clauses, including force majeure and material adverse change

Indenture / Trust Deed / Paying Agency Agreement

INDENTURE / TRUST DEED

US\$[•] mm
Senior Notes Issue

Issuer and
Guarantor and Trustee

- While the preliminary Offering Circular (E-red) or MTN Program Document constitute the marketing materials, the document which forms the promise of issuer to pay is the Note, which is issued from an Indenture or Trust Deed
- The Indenture or Trust Deed includes:
 - Procedures for the issuance of notes, including payment of amounts (interest, principal or any premiums)
 - Redemption provisions
 - Covenants
 - Terms of the guarantee
 - Events of default
 - Remedies
 - Amendment
 - Rights and obligations of the Trustee



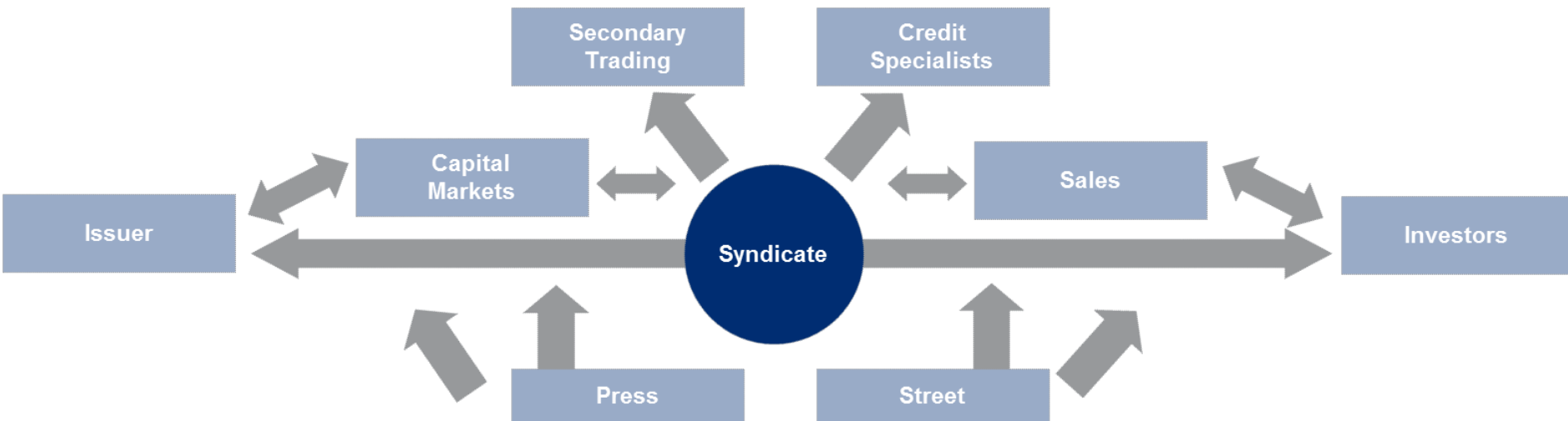
Fixed income syndicate is the pivot point between an issuer, investors globally and sales and trading

1 Parties to a Deal

2 The Documentation

3 The Process

Fixed Income Syndicate



- Responsibilities of the fixed income syndicate include:
 - Providing market color and new issue recommendations
 - Pricing execution
 - Judgment on allocations
- Fixed income syndicate professionals develop and maintain issuer and investor client relationships



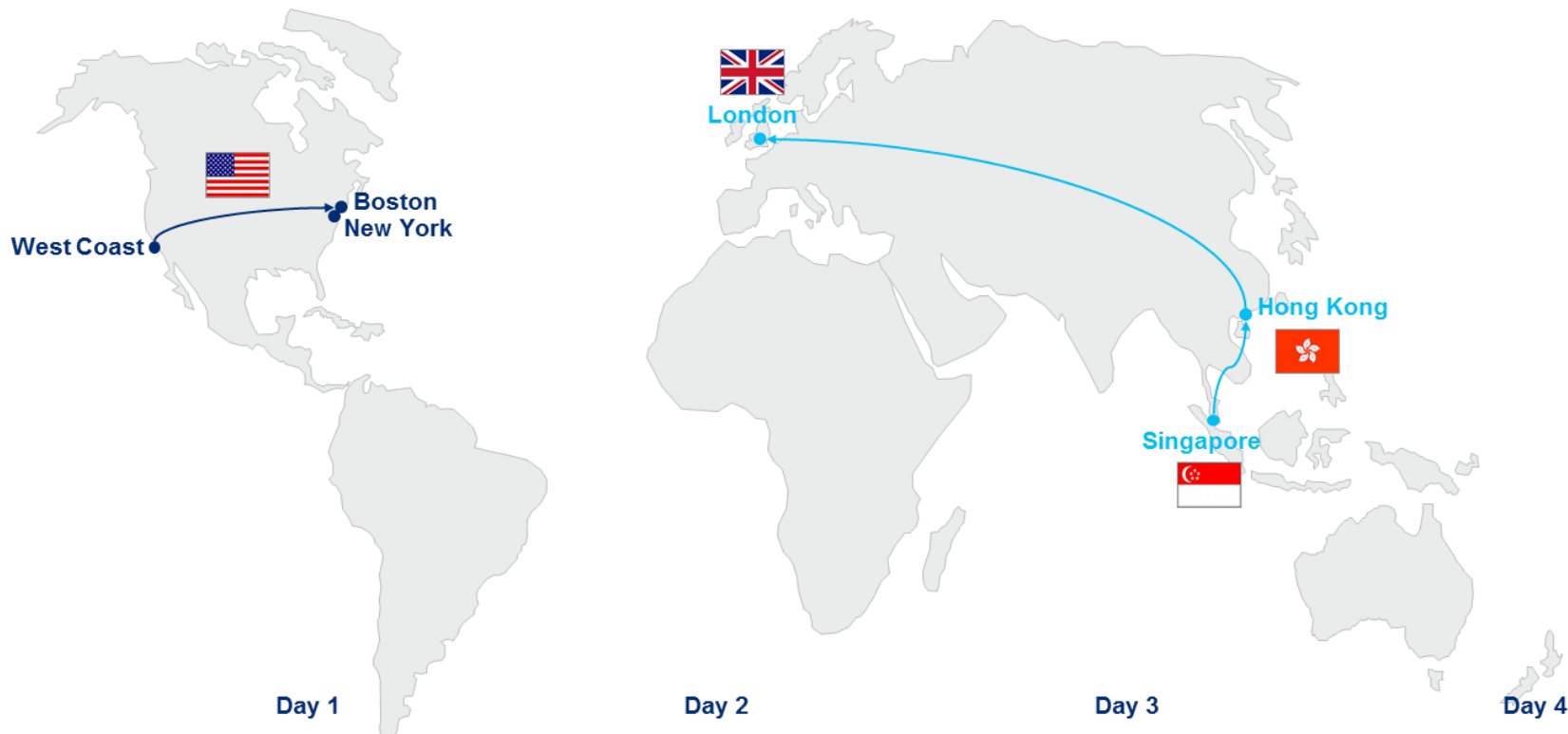
Comprehensive Global Investor Roadshow

(for a 144A / Regulation S Bond Offering)

1 Parties to a Deal

2 The Documentation

3 The Process



Team 1	Singapore	Hong Kong	London	New York
	<ul style="list-style-type: none">• ~6 meetings• Group luncheon	<ul style="list-style-type: none">• ~6 meetings• Group luncheon	<ul style="list-style-type: none">• ~6 meetings	<ul style="list-style-type: none">• Pricing
Team 2	West Coast	Boston	New York	New York
	<ul style="list-style-type: none">• ~6 meetings	<ul style="list-style-type: none">• ~6 meetings	<ul style="list-style-type: none">• ~6 meetings	<ul style="list-style-type: none">• Pricing



Global Institutional Fixed Income Investor-base (for a 144A / Regulation S Bond Offering)

1 Parties to a Deal

2 The Documentation

3 The Process

West Coast

- CalPERS
- Capital Research
- Dodge & Cox
- Franklin Templeton
- Pacific Life
- Payden & Rygel
- PIMCO
- TCW
- WAMCO
- Wells Capital

Chicago / Mid-West

- 40/86 Advisors
- Allstate
- Aviva
- Legal & General
- Neuberger
- NISA
- Northern Trust
- PPM America
- UBS GAM

Other East Coast

- Calvert
- Delaware
- GE AM
- Hartford
- Invesco
- Logan Circle
- T Rowe
- Vanguard

Boston

- Eaton Vance
- Fidelity
- GMO
- Hancock
- Liberty Mutual
- Loomis Sayles
- Mass Financial
- Pioneer
- Standish Mellon
- Wellington

New York

- AIG
- AllianceBernstein
- Blackrock
- GSAM
- JPM AM
- Lord Abbett
- Marathon
- Metlife
- MSAM
- NY Life
- NWI
- Oppenheimer
- Pinebridge
- Prudential
- Schroders
- Stone Harbour
- TIAA-CREF

London

- Aberdeen
- Amundi
- Ashmore
- Aviva
- AXA IM
- Blackrock
- Bluebay
- BNP AM
- F&C
- Finisterre
- GAM
- GLG
- Invesco
- Investec
- M&G
- Pictet
- Pioneer
- Rogge
- Schroders
- Stone Harbour
- Thames River
- Threadneedle

Amsterdam

- APG
- Aegon
- ING IM
- MN Services
- PGGM
- Robeco

Germany

- Allianz / PIMCO
- BayernInvest
- DeAM / DWS
- Deka
- MEAG
- Union Investment

France

- Amundi AM
- AXA IM
- Aviva Investors
- BNP AM
- Carmignac
- LBRAM
- Natixis AM

Vienna

- Erste AM / Bank
- OeVAG
- Raiffeisen
- UNIQA Group

Milan

- Arca
- Eurizon
- Fideuram

Switzerland

- Lombard Odier
- Swiss Life
- Swiss National Bank
- UBS Zurich

Scandinavia

- Danske Bank
- Ilmarinen Pension
- Jyske Bank
- Norges Bank

Hong Kong

- AIA
- BComm
- BEA
- BEA Union
- BFAM
- BTG
- BOC HK
- CIC
- Citi PB
- Claren Road
- Fidelity
- First State
- Harvest
- HKMA
- HSBC AM / PB
- ICBC HK
- Income Partners
- Marathon
- Mirae Asset
- Nomura GCM
- Och-Ziff
- PIMCO
- Pinebridge
- UBS GAM

Singapore

- Aberdeen
- AIA
- Ashmore
- Aviva
- Bank of Singapore
- Blackrock
- Broadpeak
- DBS CTU
- Fullerton
- GIC
- GSAM
- ING IM
- Lion Global
- Nikko AM
- OCBC
- Pictet
- Pramerica
- Prudential
- Saka
- Schroders
- Tahan
- UBS PB
- UOB AM
- WAMCO



After a new issue is announced, the bookbuilding process begins together with the commencement of investor marketing.

1 Parties to a Deal

2 The Documentation

3 The Process

Bookbuilding Process

Marketing

Net Roadshow (i.e. electronic roadshow)

Investor Presentation

Offering Circular or MTN Program Document

Investor Conference Calls

Credit Specialists



Book-building

Size Indication

Pricing Limits

Investor Feedback

Firm / Soft Indication





Following completion of transaction preparation, the transaction will be officially announced, market conditions permitting.

1 Parties to a Deal

2 The Documentation

3 The Process

Announcement

- A new issue is said to be announced when the Lead Managers officially communicate the transaction to the market
- Messages to investors will be sent via sales forces globally
- The Lead Managers will decide, together with the issuer, on the degree details such as size, tenor and price guidance are disclosed to the market

Sample of mandate and roadshow announcement

```
<HELP> for explanation.
Screen Printed
1) Delete 2) Reply 22) Reply All 3) Forward 12) Prev 11) Next 99) Options- Message: View
✓ Mar 28 2014 16:49:40
From: DUNCAN PHILLIPS (CITIGROUP GLOBAL MAR) +852-2501-2552
Subject: ** PERTAMINA: GMTN PROGRAM UPDATE & INVESTOR MEETINGS **
Attached 91) PT Pertamina Persero - Offering Memorandum dated 91) ☆ 92) Move ▼ 94) Tags ▼
Asia Debt Syndicate W: 852 2501 2552 C: 852 6409 4228 duncan.phillips@citi.com

PT Pertamina (Persero), rated Baa3 (stable) by Moody's, BB+ (stable) by S&P and
BBB- (stable) by Fitch, has mandated Barclays, Citigroup and HSBC to arrange a
series of fixed income investor meetings commencing Tuesday, 1 April 2014,
following the recent update of its US$10 billion Global Medium Term Note
Program.

This notice is not an offer of securities for sale in the United States. The
securities referred to herein have not been and will not be registered under
the U.S. Securities Act of 1933, as amended (the "Securities Act"), or any
state securities laws of the United States, and may not be offered or sold in
the United States absent registration or an applicable exemption from
registration requirements under the Securities Act and applicable state
securities laws of the United States. Any public offering of securities to be
made in the United States will be made by means of a prospectus. Such
prospectus will contain detailed information about the company making the offer
and its management and financial statements. Nothing in this communication
Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2014 Bloomberg Finance L.P.
SN 313280 H160-3948-2 06-Jun-14 12:14:28 HKT GMT+8:00
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Sample of transaction terms announcement after completion of global roadshow

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<HELP> for explanation.
<Menu> to Return.
1) Delete 2) Reply 22) Reply All 3) Forward 12) Prev 11) Next 99) Options- Message: View
✓ May 22 2014 14:23:26
From: EESWARY KRISHNAN (CITIGROUP GLOBAL MAR) +852-25012693
Subject: ** PERTAMINA US$ 30YR 144A/REG S: PX GUIDANCE @ 6.70% AREA **
Attached 91) PT Pertamina (Persero) GMTN Program - Offering Me 91) ☆ 92) Move ▼ 94) Tags ▼
Asia Debt Syndicate W: +852-2501-2693 M: +852-9287-8153

Issuer: PT Pertamina (Persero)
Issuer Ratings: Baa3 stable (Moody's)/BB+ stable (S&P)/BBB- stable (Fitch)
Exp Issue Ratings: Baa3 (Moody's) / BB+ (S&P) / BBB- (Fitch)
Issue: Fixed Rate, Senior, Unsecured Notes Off GMTN Program
Format: Rule 144A / Regulation S
Tenor: 30 Years
Size: Benchmark
Price Guidance: 6.70% Area
Change of Control: 101% put (ratings decline applies, terms as per GMTN)
Terms: SGX-ST listing, 200k/1k denoms, NY law
UOP: Capex and general corporate purposes
Bookrunners: Barclays / Citigroup / HSBC
Timing: As early as today

This notice is not an offer of securities for sale in the United States and
shall not constitute a public offering in Indonesia. The securities referred to
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Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2014 Bloomberg Finance L.P.
SN 313280 H160-3948-2 06-Jun-14 12:14:56 HKT GMT+8:00
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Intraday Deal Execution

(for a 144A / Regulation S Bond Offering)

1 Parties to a Deal

2 The Documentation

3 The Process

Price guidance

- Guidance released at announcement
- Guidance on both yield / spread and size will be provided to the market
 - A yield / spread range would be released to the market and agreed with the issuer's team beforehand
 - Indications of size may involve announcement of a "benchmark" offering
 - Expected timing of transaction also indicated

Revision(s) to price guidance

- Based on book-build momentum, the Lead Managers may consider and recommend, as appropriate, further revisions to the price guidance later in the day

Final guidance

- Final price guidance will be released tentatively before Asia close
- Definition around size will also be required at this time

Launch, allocation, pricing

- After marketing during the New York morning, the Lead Managers would confirm final sizing and pricing and proceed to launch the offering to the market
- Allocations would be released to the market with pricing to follow thereafter

Timezone

HK	UK	NY	Tasks
0930H	0230H	2130H	<ul style="list-style-type: none"> • Go / no-go launch call with the issuer's team • Pre-announcement bringdown due diligence call to follow soon thereafter
1000H	0300H	2200H	<ul style="list-style-type: none"> • Syndicates announce transaction <ul style="list-style-type: none"> – Release summary transaction terms and price guidance – Release preliminary Offering Circular or E-red (or MTN Program document) and Net Roadshow log-in details – Asia books open
1430H	0730H	0230H	<ul style="list-style-type: none"> • Transaction update call, to discuss potential revision to price guidance
1600H	0900H	0400H	<ul style="list-style-type: none"> • Europe books open • Syndicates to release revised price guidance as appropriate
1730H	1030H	0530H	<ul style="list-style-type: none"> • Market / transaction update call, final price guidance discussion
1800H	1100H	0600H	<ul style="list-style-type: none"> • Syndicates release final price guidance
2100H	1400H	0900H	<ul style="list-style-type: none"> • U.S. books open
0000H	1700H	1200H	<ul style="list-style-type: none"> • Market / transaction update call, launch parameters discussion
0030H	1730H	1230H	<ul style="list-style-type: none"> • Launch transaction with final spread and size
0100H	1800H	1300H	<ul style="list-style-type: none"> • Discuss allocations with the issuer's team
0200H	1900H	1400H	<ul style="list-style-type: none"> • Syndicates release investor allocations
0215H	1915H	1415H	<ul style="list-style-type: none"> • Pre-pricing bring down due diligence call
0230H	1930H	1430H	<ul style="list-style-type: none"> • Pricing of transaction
0245H	1945H	1445H	<ul style="list-style-type: none"> • Finalize term sheet
0300H	2000H	1500H	<ul style="list-style-type: none"> • Finalize term sheet, Purchase Agreement • Release comfort letters and finalize final Offering Circular or Pricing Supplement

Note: Times are indicative and will be subject to confirmation closer to announcement of the transaction



Bonds are negotiable certificates that represent the indebtedness of the issuer

1 Parties to a Deal

2 The Documentation

3 The Process

Ownership of a bond can be transferred from one party to another in the secondary market.
Bid / offer prices indicate where an investor is willing to buy / sell a particular instrument.

Secondary Market Trading

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<Menu> to Return.

1) Delete	2) Reply	2) Reply All	3) Forward	12) Prev	11) Next	99) Options	Message: View
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Subject	Indonesia Sov and Quasi Sov Closes:						IB
Attached	No Attachments						
Off+852 2501-2652	mob+852 6826	hakan.sofuoglu@citi.com	91) ☆	92) Move	94) Tags		
INDON 16	106.750-107.500	Unch	1.41/0.77	103/39	-4	{ID EF1243650<GO>}	
INDON 17	111.000-111.500	Unch	1.90/1.69	105/84	-1	{ID EF3106491<GO>}	
INDON 18	113.250-113.750	Unch	2.45/2.29	128/113	+1	{ID EH1592292<GO>}	
INDON 19	134.375-134.875	Unch	2.97/2.86	150/139	+1	{ID EH7402611<GO>}	
INDON 20	112.200-112.800	Unch	3.34/3.22	159/147	+3	{ID EI1085899<GO>}	
INDON 21	107.200-107.700	Unch	3.61/3.53	164/156	+3	{ID EI6588996<GO>}	
INDON 2.875	102.625-103.125	Unch	2.44/2.36	188/180	+1	{ID EK3495885<GO>}	
INDON 22	100.250-100.750	Unch	3.71/3.63	159/151	+3	{ID EJ1371511<GO>}	
INDON 23	96.250-97.000	Unch	3.90/3.80	166/155	+3	{ID EJ5847425<GO>}	
INDON 23N	110.750-111.375	-0.06	3.93/3.85	167/159	+3	{ID EJ7521259<GO>}	
INDON 24	115.000-115.500	Unch	3.90/3.84	163/157	+3	{ID EK0152380<GO>}	
INDON 35	140.500-141.500	0.13	5.27/5.21	255/248	+2	{ID EF1243775<GO>}	
INDON 37	118.250-119.250	Unch	5.23/5.16	244/237	+2	{ID EG1787985<GO>}	
INDON 38	133.000-134.000	0.25	5.27/5.20	249/243	+1	{ID EH1592250<GO>}	
INDON 42	102.250-102.875	Unch	5.10/5.05	224/219	+3	{ID EI9526373<GO>}	
INDON 43	94.000-94.250	Unch	5.02/5.01	214/212	+2	{ID EJ6246908<GO>}	
INDON 44	124.500-125.000	Unch	5.12/5.09	227/224	+3	{ID EK0152265<GO>}	

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1: Bid / Offer Prices

- Indicates where an investor is willing to buy / sell a particular bond
- Investors would normally wish to purchase an instrument at a lower price than it will sell the instrument
- The difference between the bid and offer is known as the spread
- In occasions traders would indicate the day change, which tracks movement of bond prices on a day-to-day basis
- Increases in price (and inversely, decreases in spread) indicate the bond has rallied
- Decreases in price (and inversely, increases in spread) indicate the bonds have lost

2: Bid / Offer Yield

- Expressed in percentage points, is the equivalent yield of bid and offer price
- In general, the lower the price, the higher the yield and vice versa

3: Bid / Offer Z Spread

- The Zero Volatility Spread of "Z Spread" is the bond's "constant spread" over the benchmark zero coupon swap curve



Price, yield and spread are important measures in bond pricing analysis.

1 Parties to a Deal

2 The Documentation

3 The Process

Bond Pricing Basics

<HELP> for explanation, <MENU> for similar functions.

INDON 5 7/8 01/15/24 Corp				Yield and Spread Analysis			
115.543/115.985		3.837/3.784		BGN @ 15:07		95 Buy 96 Sell 97 Settings	
1) Yield & Spread				2) Graphs 3) Pricing 4) Descriptive 5) Custom			
INDON 5 7/8 01/15/24 (USY20721R174)				Risk			
Spread	172.46 bp	vs 10y T 2 1/4 11/15/24		Workout	OAS		
Price	115.000	↺ 100-20+	15:07:51	Duration	7.196	N.A.	
Yield	3.902649	Wst 2.17800	S/A	Risk	8.277	8.417	
Wkout	01/15/2024 @ 100.00 Consensus			Convexity	0.615	0.633	
Settle	12/04/14	12/02/14		DV 01 on 1MM	828	842	
				Benchmark Risk	8.937	9.144	
				Risk Hedge	926 M	921 M	
				Proceeds Hedge	1,164 M		
Spread				Yield Calculations			
1) G-Sprd	180.4	Street Convention	3.902649	3			
2) I-Sprd	167.5	Equiv 1 /Yr	3.940726	1,000 M			
3) Basis	12.7	Mmkt (Act/ 360)		Principal 1,150,000.00			
4) Z-Sprd	174.7	True Yield	3.901308	Accrued (139 Days) 22,684.03			
5) ASW	182.1	Current Yield	5.109	Total (USD) 1,172,684.03			
6) OAS	188.6						
TED	-159.3						

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1: Price, Yield, Treasury Spread

- Given a particular bond trading price and settlement date, one can calculate:
 - Trading yield (yield to maturity or YTM, yield to call or YTC, yield to worst or YTW)
 - Spread to the related U.S. Treasury
- Bonds due in 2019 – 2020 trade against the 5-year U.S. Treasury, bonds due 2021 – 2029 trade against the 10-year U.S. Treasury and bonds due in 2030 onwards trade against the 30-year U.S. Treasury

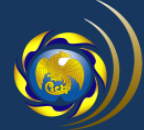
2: Other Spreads

- Apart from the spread to U.S. Treasury above, various measures such as floating and interpolated spread are important
- “G Spread” is the interpolated bond spread to government curve of matching currency
- “I Spread” is the interpolated bond spread to the Swap Curve of matching currency
- “Z Spread” or Zero Volatility Spread is the bond’s “constant spread” over the benchmark zero coupon swap curve of matching currency

3: Clean vs. Dirty Price

- When bonds are purchased in the secondary market, accrued interest must be paid by the one purchasing the bonds
- Accrued interest = Days Accrued * Coupon

Source: Bloomberg



Cultivating a Fixed Income Investor Base

Fixed Income Marketing Best Practices

A consistent and thorough fixed income investor marketing platform should be a core component of the strategy of an issuer to improve the performance of its outstanding bonds in the secondary market and further expand its investor base.

Future Access to the International Capital Market

- After the a bond transaction is completed, an issuer can access the international capital markets again in the form of a re-opening of the existing notes or an issuance of a new series of notes
- A re-opening or further issue of the existing notes deepens the issuer's existing investor base, while attracting new investors, increases the liquidity of the existing notes, reduces overall costs (i.e. generally no roadshow needed due to investor familiarity and lower legal costs as documentation process is simpler and faster)
- Alternatively, the issuer may choose to issue a new series of notes, enabling the building of a yield curve to target different investor bases across maturities and avoiding a maturity tower, where a large amount of debt becomes due at a certain maturity date

Fixed Income Marketing Best Practices

- There is a growing trend amongst borrowers away from "deal specific" marketing to a more programmatic platform
- It is now generally accepted that investor relations does not just apply to equity – debt investors demand transparency with the latest information and regular access to management via direct marketing
- A variety of strategies and best practices are employed by borrowers to enhance transparency and communication with investors including:

1	Non-deal roadshows	At least annually
2	Global fixed income investor conference calls	Semi-annually
3	Participation in industry or product conferences	At least annually
4	Posting fixed income presentations online	Semi-annually
5	Posting disclosure and press releases online	As and when required



Fixed Income Marketing Best Practices (cont'd)

Non-Deal Roadshows

- Annual 1-on-1 investor meetings (or group events) are recommended to increase investor awareness of the issuer and allow greater comfort on transparency
- Such meetings could be timed together with full-year annual results / project announcements which generates greatest investor attention

Global Fixed Income Investor Conference Calls

- To complement 1-on-1 investor meetings and presence in industry conferences, the issuer may choose to conduct semi-annual fixed income investor conference calls and webcasts
- Efficient way to reach investors globally, including those in cities not reached by physical roadshow
- Prepared remarks generally last 15 – 20 minutes, with an additional 15 minutes of Q&A

Participation in Global Fixed Income Conferences

- Borrowers can take advantage of industry conferences to update investors on their credit and funding needs
- Borrowers have access to group meetings, 1-on-1 meetings and conference calls with global investors through these conferences
- Citi hosts several credit conferences every year to update the investor base on any recent developments. These conferences include the Asia Pacific Fixed Income Conference held annually in Hong Kong or Singapore

Posting Fixed Income Presentations Online

- Reviewing posted presentations online is a quick and effective way for investors to educate themselves through interactive media
- It is also a useful way for investors to prepare for investor conference calls or 1-on-1 meetings having gone through the credit, and allow meaningful discussions on the issuer's outstanding growth story

Posting Disclosure and Press Releases on Website

- Current and comprehensive disclosure that investors can easily access will allow investors to stay informed and updated about the issuer's credit and latest developments