## Asia-Pacific Financial Forum Interim Report to the APEC Finance Ministers

ANNEX B Repo Best Practice Guide for Asian Markets

# asifma

**Asia Securities Industry & Financial Markets Association** 

**Developing a Repo Best Practice Guide for Asian Markets** 

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## Why Repo Markets Matter to the Real Economy

A more open and accessible local currency (LCY) bond market, coupled with a more active repo (repurchase) market, would improve access to finance and support the real economy.

In particular, efficient, liquid "classic" repo markets support the real economy in the following ways:

- 1. Repos help establish a benchmark yield curve, which:
  - a) Improves price discovery and transparency across long- and short-term securities;
  - b) Facilitates pricing and valuation of corporate and infrastructure bonds; and
  - c) Provides the foundation upon which bond futures and credit markets may grow.
- 2. Repos help support access to capital market financing for a broad range of investors and end users by:
  - a) Reducing funding costs for governments, pension funds, asset managers and other long-term investors;
  - b) Reinforcing longer-term investment and mitigating volatility;
  - c) Developing market infrastructures that are necessary to serve the real sector; and
  - d) Enhancing the ability of foreign investors to finance domestic assets (onshore and offshore).
- 3. Repos deepen liquidity in primary and secondary bond markets by:
  - a) Broadening investor participation;
  - b) Improving investor confidence by ensuring bonds can be sold in secondary markets with minimal impact on the selling price; and
  - c) Offering hedging tools which contribute to risk management.

Sources: Fung Global Institute and Oliver Wyman, "Asia Finance 2020: Framing a New Asian Financial Architecture;" Nick de 3 Boursac, "Government Bond Secondary Market Liquidity: Seven Basic Requirements," February 2012.



## Role of Repo Markets in Capital Market Development

Deep, liquid classic repo markets are important for the functioning of global capital markets by facilitating market making that provides liquidity in secondary bond markets.

Repo markets serve as a critical component of capital market development by:

- Improving investor appeal and broadening investor participation;
- Providing access to alternative means to meet financing needs;
- Decreasing dependence on bank funding in Asia;
- Deepening liquidity in bond markets, which in turn enhances institutional investment in long term assets such as infrastructure; and
- Allowing the use and re-use of excess collateral, thereby deepening the pool of available finance.

Integrating regional bond and repo markets by establishing a cross-border repo market in Asia would:

- Improve access to funding pools across the region;
- Encourage retention of Asian savings and investment in the region by improving cross-border mobility of assets;
- Reduce reliance on USD funding and liquidity, and thereby improve macroeconomic stability in the region; and
- Help mobilize needed collateral to counter the adverse effects of increased asset encumbrance driven by regulatory change (such as Basel III, new asset segregation rules, and central clearing mandates, among others).

Sources: Fung Global Institute and Oliver Wyman, "Asia Finance 2020: Framing a New Asian Financial Architecture;" Nick de Boursac, "Government Bond Secondary Market Liquidity: Seven Basic Requirements," February 2012.



## **Overview of a Classic Repo Transaction**

Repos are the most widely used form of secured financing transactions and are mainly used to meet financing needs of banks and broker/dealers, the widest *users* of repo

Asset management companies (and other institutional investors) are typically the most active *providers* of liquidity in repo markets

In a classic repurchase transaction, one party sells securities to a counterparty, and simultaneously commits to repurchase the same or equivalent securities at an agreed future date.

Typically, the "seller" is the bank, or financial institution (FI) that needs cash; and the "buyer" is the institutional investor, or FI that provides cash in exchange for collateral.

Between the sale and the repurchase dates:

- The seller is able to use the cash proceeds of the sale of the assets; and
- The buyer takes legal ownership of the assets received in exchange for the cash it has paid.



## Types of Repurchase Transactions\*

#### Classic repurchase transactions – or "classic repos"

- A classic repo is a secured financing transaction in which cash is exchanged for collateral, usually in the form of bonds or other securities.
- Importantly, repo collateral is not pledged, like traditional collateral, but sold and then repurchased at maturity.
- Provide *full ownership transfer* of collateral, affording the lender stronger control over the collateral, and enables the lender to use those assets or net them against the amount owed to them by the seller, if the seller defaults.
- The substitutability of collateral assets (i.e. whether the same assets or "economically equivalent" assets are repurchased on the repurchase date) should be stipulated in the repo contract before execution
- Both legs of the contract are stipulated in a single contract (see "Importance of Repo Documentation," slide 13)

#### **Buy-and-sell backs**

- Have the same function as "classic" repos, however they have legal and operational differences
- Principal difference: Repurchase agreements are always documented, but traditional buy/sell-backs are not
- Undocumented buy-and-sell backs may have serious pricing issues due to differences in mark-tomarket conventions and margin call timing, which increases the riskiness of these transactions

#### Pledge model

- Establishes priority right over the collateral; however other parties may have higher ranking rights over the collateral which may not always be transparent
- Rights to use collateral tend to be limited
- Pledge models may also be more complicated than classic repos in terms of administration and execution of collateral

\*Note: In some Asian jurisdictions, such as Japan, a "borrow and lend" repo structure has emerged, in part in response to transaction taxes that deter development a "classic" repo structure.

Sources: ICMA "ERC Guide to Best Practices in European Repo Market," March 2014; and Euroclear, "Understanding Repos and Repo Markets," March 2009



## **Types of Classic Repos**

#### Classic repos – Bilateral vs. Tri-Party

- Tri-party repos reduce counterparty and operational risk by having a centralized repo intermediary through which all transactions are margined
- Repo documentation between buyer and seller is executed in the usual manner, although adapted for the role of the tri-party agent. Parties will also enter into an agreement with the tri-party agent to agree on collateral management services to be provided
- Tri-party agents undertake the operational processes of managing and valuing collateral (including mark-to-market valuations and meeting margin calls) on a more granular basis than what would be operationally feasible on a bilateral basis
- Settlement and delivery fails are more easily resolved in a tri-party platform versus a bilateral platform
- Tri-party agents enhance settlement efficiency by integrating their collateral management systems with their settlement platforms, which allows for automated substitution of collateral
- Understanding the credit risk of a tri-party repo provider, as well as their asset segregation and portability policies, is key to effective risk management in tri-party repo markets



## **Role of Collateral in Repo Transactions**

The exchange of collateral protects the buyer from the risk of a seller default in the repo transaction

#### Importance of collateral:

- The provision of collateral is key to hedging the credit exposure of the seller in the repo transaction
- The buyer holds assets as collateral, the value of which can be netted against the amount owed to the buyer by the seller, if the seller defaults.

#### Importance of usage rights:

- Since the buyer owns the collateral assets (in a classic model), the buyer can use them during the term of the repo by: (i) selling the assets outright; (ii) repoing them; or (iii) pledging them to a third party.
- The buyer must reacquire the assets by the end of the repo, in order to be able to sell them back to the seller.
- The right to use collateral plays an important role in deepening market liquidity because it:
  - extends collateral chains;
  - increases secondary market trading; and
  - lengthens the yield curve, which will help develop pricing benchmarks and local currency bond markets.



## **Necessary Conditions to Grow Regional Repo Market**

#### Legal & regulatory issues

- Legal certainty about the right to the title of assets and the right to net in the event of counterparty default is a vital cornerstone of classic repo transactions
- Bankruptcy and resolution framework must protect creditors' rights in insolvency cases for consistency and enforceability of repo contracts
- Market access for foreign investors

#### **Tax treatment**

- Exemption from withholding and transaction taxes for repo market participants
- Elimination of stamp duties

#### Depth of liquidity in regional bond markets

- Availability of pricing data
- Robust bond market and bond yield curve, which is enhanced by the establishment of a repo market
- Need to establish regional index rate, such as Japanese and Aussie dollar overnight rates
- Large participation from institutional investors in the region, as they are the traditional providers of repo market funding

#### **Market infrastructure**

- Links to ICSDs and CSDs
- Interoperability between regional payment and settlement systems
- Improved cross-border settlement processing and timing through STP

#### Currency barriers and exchange rate volatility

- Prohibition of offshore FX trading for investment
- Assured currency convertibility and repatriation rights

Sources: Ryuichi Shiina, Japan Securities Dealers Association, "Enhanced Comparative Analysis of Repo Markets in 9 ASEAN + 3 Countries & Jurisdictions," 15 April 2014; ICMA Repo Margining Best Practices, March 2014 and Euroclear, "Understanding Repos and Repo Markets," pages 25-27, March 2009.



## **Current Repo Market Dynamics in some ASEAN + 3 Jurisdictions\***

	Sale & purchase (Classic or	Sub-categories:		
	buy and sell backs),	-Special collateral (SC) and	OTC vs. Exchange	Restrictio
	borrow & lend, and	General collateral (GC)		ns on
	pledge	-Bilateral vs. Tri-party repos		foreign
		-Other distinctions		participat
				ion
China	Pledged repo (mainly)	N/A	OTC (mainly) and	Υ
			exchange	
Hong Kong	Classic repo	N/A	OTC (mainly) and	N
			exchange	
Japan	Borrow & lend (mainly),	GC and SC repos	ОТС	N
	also classic repo (Gensaki	(Tri-party repo under		
	market)	consideration)		
Korea	Classic repo	Distinctions between	OTC (mainly) and	N
KUIEd	Classic repo	institutional, customer and	exchange	IN
		Central Bank repos	exchange	
Indonesia	Buy/Sell-back (mainly) &	GC and SC repos	ОТС	Y
Indonesia		de and se repos	UIC	T
Malauria	Classic repo	N1/A	ОТС	
Malaysia	Classic & Buy/Sell-back	N/A	UIC	N/A
Philippines	Classic repo	Tri-Party Repo	Exchange (PDEx)	N/A
Πηρριτες				
Thailand	Classic repo (mainly)	Distinction between bilateral	ОТС	Y
		repo and private repo		
Vietnam	Classic repo	N/A	OTC and Exchange	Y

Source: Ryuichi Shiina of Japan Securities Dealers Association's working document for the ABMF, "Enhanced Comparative Analysis of Repo Markets in 9 ASEAN + 3 Countries & Jurisdictions," 15 April 2014.



## **Market Infrastructure Considerations**

Market infrastructures need to be strengthened and integrated to support cross-border repo markets, for example by:

- Building links to ICSDs so government bonds can be delivered and held at the ICSDs easily
- Linking CSDs in ASEAN + 3 to utilize central bank money
- Establishing cross-border links between securities settlement systems (SSS)
- Linking SSS with a central-bank operated payment system in another country

In addition, harmonizing message flows will improve cross border settlement and reconciliation, which can be improved by:

- Using DVP models for both government and corporate bond settlement
- Standardizing message format related to bond settlement (e.g. ISO 15022/20022, etc.)
- Developing a common rule on data standards and transaction identifiers (e.g. ISIN, etc.)



## **Importance of Repo Documentation**

In order to minimize legal risks in repo transactions, it is best practice to ensure proper documentation underpins all repo transactions before they are executed.

To decrease the operational burden of managing diverse repo contracts, the Global Master Repurchase Agreement has emerged as the international standard for cross-border repo markets.

#### Global Master Repurchase Agreement (GMRA) is:

- Standardized repo documentation; and
- Supported by <u>annually-updated legal opinions</u> (link below) in respect of over 60 jurisdictions.

#### Main features of GMRA include:

- Netting rights in the event of counterparty default
- Operational processes (such as margining and manufactured payments)
- 'Events of default' & consequent rights and obligations of counterparties
- Failure to Deliver provisions
- Early Termination Rights
- Netting and close-out provisions
- Transfer of legal title, margin, collateral, among others
- Management of coupon and other payments on collateral

#### Enforceability of GMRA is determined by:

- Recognition of repo structures and contracts and the legal agreements that underpin them (e.g. GMRA) in member jurisdictions
- Arbitration clauses for cross-border transactions
- Rule of law



## **Default Protections & Insolvency Regimes**

The 2011 GMRA provides protections against counterparty default, which contributes to risk management

## Failure to Deliver Collateral versus Event of Default:

- Under GMRA, a failure by either party to deliver collateral is *not* an automatic event of default, so the non-defaulting party is required to serve a Default Notice in order to trigger a default
- If the non-defaulting party chooses not to serve a Default Notice, the defaulting party should endeavour to deliver margin at the earliest opportunity

## **Event of Default protocol:**

- Receipt of a Default Notice will trigger all transactions to be terminated (closed out) and their Repurchase Dates accelerated for immediate settlement.
- The net present value of the obligations owed to the defaulting party are then netted (set off) against the net present value of obligations owed by the defaulting party to leave a residual net amount.

## Mini-close outs:

- In the event that a buyer has failed to deliver equivalent collateral on the repurchase date, a seller may trigger a mini-close out.
- Seller must provide advisory note to the buyer ASAP on the same day as the fail or the morning of the next business day
- Seller ought to accept partial delivery of the equivalent securities from the buyer



# Addressing Policy & Market Constraints to Developing a Regional Repo Market



#### Key Issues to Address in Developing a Cross-Border Repo Market

- 1. Move towards a "classic repo" market in participating jurisdictions, as the full legal ownership title of collateral:
  - Affords the buyer rights to use assets, which improves market depth; and
  - Offers the buyer netting rights in the event of a counterparty default, which eases the process of resolving settlement and delivery fails.
- 2. Consider moving towards a tri-party platform, which may reduce counterparty and operational risk, and improve collateral efficiency
- 3. Adopt standardized documentation, such as the Global Master Repurchase Agreement (GMRA), to underpin cross-border repo transactions
- 4. Provide creditors' rights protection clauses (such as by recognizing close-out netting and the GMRA) in bankruptcy and insolvency regimes
- 5. Improve tax treatment by exempting all repo market transactions from withholding and transaction taxes, and eliminating stamp duties
- 6. Develop and phase-in sensible minimum holdings of government bonds by asset managers, pension funds and insurance companies to increase liquidity in repo markets and move away from the current environment of commercial bank dominance
- 7. Review electronic platforms and price feeds to improve real-time price discovery access
- 8. Improve interoperability of key market infrastructures, such as linking onshore and offshore repo markets at ICSDs, CSDs, and SSSs
- 9. Liberalize currency convertibility and repatriation policies to unlock collateral pools across the region
- 10. Establish regional pricing benchmarks to improve transparency and valuation of long- and short-term securities
- 11. Promote the use sovereign and corporate bonds in APEC as eligible collateral, as collateral in the form of benchmark securities (such as those issued by major governments) usually retain their value and are easily liquidated, even in market crises



# Annexure

# Annex I: Key Issues and Recommendations

Impediments	Current Status	Recommendations	Key stakeholder(s)
Legal architecture	Enforceability of repo contracts, investor protections, and bankruptcy procedures vary due to divergent legal treatment and judicial interpretations across jurisdictions	<ol> <li>Ensure legal frameworks reflect the underlying characteristics of repo agreements (such as the full ownership transfer of assets in "classic repos");</li> <li>Incorporate protections of creditors' rights during bankruptcy or insolvency proceedings (such as those reflected in the 2011 GMRA) in jurisdictions' bankruptcy laws; and</li> <li>Move towards adoption of a "classic repo" market in which the buyer maintains rights to use assets and netting rights in the event of a counterparty default; and</li> <li>Share information with securities regulators and judiciaries on repurchase agreements and the legal contracts that underpin them.</li> </ol>	<ul> <li>Legislative/policy/legal experts,</li> <li>Judiciary for necessary reforms or interpretations to bankruptcy and insolvency regimes,</li> <li>Banking/securities regulators;</li> <li>Multilaterals such as the World Bank's handbook (see: "Repo Markets," March 2010).</li> </ul>
Divergent legal constructions of repo markets	Regional differences in the legal constructions of the Repo (i.e. "Classic Repo" vs. "Buy and Sell Back," "Pledge," and "Borrow and Lend" models)	Harmonize legal constructions of repo transactions to enable the full ownership transfer of title, as well as netting and close-out rights during periods of insolvency or bankruptcy	<ul> <li>Legislative/policy/senior officials/legal experts/academics</li> <li>Judiciaries</li> </ul>
Market infrastructure	Lack of pricing feeds, and linkages / interoperability between securities depositories and settlement systems across the region inhibits transparency and encumbers asset in domestic markets	<ul> <li>i. Review electronic platforms (i.e. to improve real-time price discovery access); and</li> <li>ii. Improve interoperability of key market infrastructures, such as linking onshore and offshore repo markets at ICSDs, CSDs, and Securities Settlement Systems to enable cross-border mobilization of assets.</li> </ul>	<ul> <li>FMIs (CCPs, CSDs, TRs, etc.);</li> <li>Global custodians;</li> <li>Commercial data providers;</li> <li>Data vendors; and</li> <li>Technology, information and securities regulators.</li> </ul>

# Annex I: Key Issues and Recommendations (continued)

Market conventions and industry best practices	<ul> <li>Divergent market conventions and industry practices for:</li> <li>collateral management;</li> <li>management of tri-party repo platforms;</li> <li>data issues (such as flows and messaging);</li> <li>risk management and leverage; and</li> <li>interoperability of key market infrastructures;</li> <li>among others.</li> </ul>	1. 2. 3. 4.	Adopt industry best practices regarding documentation of repurchase agreements and collateral arrangements (such as the 2011 GMRA); Employ standardized, best practices for data management and trade communications (such as messaging codes); Upgrade risk management practices to international best practice; Adopt international standards for flows and messaging, settlement timing, <i>inter alia</i> , which will enhance interoperability of market infrastructures.	•	Trade associations, such as ICMA, JSDA, AFMA, ISDA, and ASIFMA; ASIFMA Repo Best Practice Guide and Repo Market Workshop; ICMA's GMRA document; and Euroclear's guide to "Understanding Repos and Repo Markets."
Liquidity issues	<ol> <li>Liquidity is impeded by:</li> <li>Underdeveloped local currency (LCY) bond markets and lack of pricing benchmarks;</li> <li>Limitations to utilize bond holdings in the repo market;</li> <li>Restrictions on foreign investor participation;</li> <li>Insufficient eligible liquid assets to be traded across borders</li> <li>Market practice of holding assets to maturity;</li> </ol>	i. ii.	Strengthen LCY bond markets and use them as eligible collateral; Collaborate with Asian central banks to establish cross-border collateral arrangements to increase pool of eligible securities to be traded across borders;	•	Monetary authorities; Financial regulators; and Political or administrative authorities concerning trade and investment issues.

# Annex I: Key Issues and Recommendations (continued)

Restrictions on currency convertibility and repatriation	Restrictions on the amount of currency that can be remitted or repatriated would reduce market access and participation, thereby constraining the development of a cross-border repo market	Liberalization of such controls is necessary to promote cross-border trade and settlement in LCY bond and repo markets	•	Monetary policy officials Treasury officials Central Banks
Tax treatment	Withholding taxes, transaction taxes stamp duties, and others may increase costs and decrease liquidity	Harmonized tax treatment, exemptions and double taxation treaties should be considered for repo market participants	•	Tax authorities, Government Officials Legislative/policy experts
Market access issues	Restrictions on foreign investors, or registration requirements for foreign investors may deter market participation, impede the development of a cross-border repo market, and reduce liquidity	Liberalize market access for foreign financial institutions across the region to enhance participation, diversify the investor base, and increase market liquidity	•	Financial regulators, Treasury officials Political or administrative authorities concerning trade and investment issues, Legislative/policy officials



# Annex II: Bilateral vs. Tri-Party Repo

Parameter	Bilateral	Tri-Party Repo		
Market infrastructure	Direct links to SSS and ICSDs	Onboarding requirements to tri- party repo settlement systems		
Efficiency	In-house repo and balance sheetCentralized operational supportmanagementthrough third party			
Legal documentation	Bilateral agreements offer more latitude for customizing repo contracts	Standardized agreements and documentation		
Risk profile	Counterparty default protections stipulated in GMRA	-Custodial risk, collateral segregation and portability policies -Tri-Party repo infrastructure reform ongoing		



# Annex III: Eligible Bonds and Trading Term Structures\*

	Eligible Bonds	Trading Term Structure		
China	(Case of Interbank market ) (Year 2012 ) Policy bank bonds 37.0%	(Case of Interbank market) Divided into 11 types of term. Most of them are overnight, 7 days, 14 days.		
	Gov. bonds32.0%Central bank bills10.0%MTNs10.0%	(Year 2012)         Pledged Repo         Outright Repo           ON         81.2%         66.2%           7D         12.6%         21.2%           14D         3.5%         7%           Total         100%         100%		
Hong Kong	No restriction	No restriction		
Indonesia	Government bond and Corporate bond	Minimum 3 days, maximum 3 years, average 1 month		
Japan	Short-term government securities such as TBs, FBs, T-bills, Coupon bearing JGBs, CPs, CDs and overseas issued CPs.	(Only data regarding borrowing and lending type Repos ~cash (Monthly data for Sept.2013) ON (80.4%), Open-end (0.02%), Others (19.6%)		
Korea	[OTC Repo] Won denominated bonds: Government Bond 46.3%, Special Bond 23.0%, Financial Bond 15.1%, MSB: 8.8%, Corporate Bond (with BBB or higher (for customers A or higher))4.6%, Municipal Bond: 0.4%, ETF: 2.9%, CPs are also possible [Exchange Repo] Currently, only Government Bonds (KTBs) are traded, though FESBs, MSBs, and Corporate bonds with credit rating of AA or above are eligible.	[OTC Repo] There are fixed-term Repos and open-ended Repos. Most of [Exchange Repo] 8 different tenors (ON, 3D, 7D,14D, 21D,60D and 90D)		
Malaysia	Specified RENTAS securities, private debt securities, negotiable instrument of deposit, banker's acceptance, and any other types of financial instruments as may be specified by BNM.	IP-Repos are "term repos". In last active year 2011, volume share by tenor: O/N 27%, 1W 1%, 2W 1%, 1M 61%, 2M 0%, 3M 10%		
Philippines	Limited to Government bonds for the time being with criteria set on issue size and liquidity	At peak volumes 2009-2010 Annual Turnover PHP345 billion (=USD8.02 billion) Peak Repos Outstanding PHP37 billion (= USD0.86 billion)		
Thailand	Thai Baht denominated (Government, and investment grade corporate bonds). Most of collateral used is short-term paper. (Central bank bills 75%, Government bond 25%, State owned enterprise bonds 0.3%)	Over night accounted for approx. 56% Breakdown: 1D 56%, 2-3 D 23%, 4-7D 15%		
Vietnam	Government bonds, Municipal bonds (legally acceptable, but in reality, they are rarely used)	(Case of Exchange market) Repo term is ranging from 2 days to 180 days, consists largely of 7 week term (47%)		

Comparative Analysis of Repo Markets in 9 ASEAN + 3 Countries & Jurisdictions," 15 April 2014.



## Annex IV: Participants, Market Openness to Foreigners\*

	Participants	Market Openness to Foreigners
China	[Case of Interbank market] Starting with 16 commercial banks, now expanding to 2200 institutions (banks, securities companies, insurance companies, trusts, funds, non- banks)	Not Open for overseas investors, but foreign investors who are incorporated in China are allowed to participate in the Repo market (Currently there are about 30 participants.)
Hong Kong	No restriction	Open
Indonesia	Banks (for government bond). (Insurance companies and pension funds are prohibited from engaging in repo transactions based on KMK No. 424/KMK.06/2003).	Partially open?
Japan	Both domestic and overseas Institutional investors including corporations	Open
Korea	[OTC Repo] Institutional Investors Repos are open to financial institutions that hold securities accounts with KSD. Overseas participants should have an standing proxy in Korea. [Exchange Repo] Limited to KRX member firms	Open
Malaysia	Both licensed FIs and non-financial institutions (NFIs) subject to the requirement that at least one principal to the Repo transaction must be licensed FI	n/a
Philippines	Participants as Repo Buyer Only: Trusts, mutual funds, pension funds, insurance companies, other qualified institutional investors. Participants as Repo Buyer & Repo Seller: PDEx Dealer Members	n/a
Thailand	Primary dealers appointed by BOT (currently 13), FI (dealers), Institutional investors	Open for foreign investors who are resident in Thailand, but not opened for overseas investors
Vietnam	SBV and commercial banks (for the open-monetary market using T- Bills and government bonds with maturities of more than 1 year). Securities firms, commercial banks, and financial firms (through HNK's bond system, using government bonds with maturities of more than 1 year).	Not open

Source: \*Ryuichi Shiina of Japan Securities Dealers Association's working document for the ABMF, "Enhanced Comparative 22 Analysis of Repo Markets in 9 ASEAN + 3 Countries & Jurisdictions," 15 April 2014.



**Annexure: Additional Resources** 

ICMA "ERC Guide to Best Practices in European Repo Market," March 2014 http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/short-termmarkets/Repo-Markets/repo0/

Euroclear, "Understanding Repos and Repo Markets," March 2009 http://www.theotcspace.com/sites/default/files/2011/11/003-the-repo-market.pdf

Ryuichi Shiina of Japan Securities Dealers Association, Working document for the ABMF, "Enhanced Comparative Analysis of Repo Markets in 9 ASEAN + 3 Countries & Jurisdictions," 15 April 2014.

World Bank, Repo markets handbook, March 2010, <u>http://siteresources.worldbank.org/FINANCIALSECTOR/Resources/Repo\_Markets\_Ha</u> <u>ndbook.pdf</u>

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