Indonesia Sovereign Asset Liability Management
Managing FX Exposure

Sovereign Debt Management Forum
December 3-4, 2014, Washington DC
Background

● Rationale
  ► Asian Crisis 1997 Indonesia was very badly hit because of large exposure to short term FX Debt.
    ▪ Small fx reserve not enough to service short term obligation
    ▪ Large exposure to short term fx borrowing especially from private sector
    ▪ Weak financial system without effective risk management could not prevent financial crisis
  
  ► Alarming signal about Increasing vulnerabilities to Public Balance Sheet due to higher growth in country FX borrowing especially by State Owned Enterprise.
    ▪ Huge need for borrowing in FX to finance the expansion
    ▪ Ample liquidity in global market provide easy access to borrow
    ▪ Lack of natural hedge or hedged position
  
  ► 2008-2009 IMF-World Bank Mission to analyze the management of Financial assets and liabilities on the balance sheet of Government and Bank Indonesia, gave recommendations:
    – Coordinating the management of FX reserve and external debt portfolio in order to reduce currency risk
    – Strengthening institutional role between government and BI: reducing SBI (BI Certificates) role and optimizing the use of Government Securities as monetary instruments.
    – Improving cash management and coordination between debt & cash management units within MOF.
**Cordination FX Management Current Condition**

**Bank Indonesia**
- Monetary Policy
- Monetary Operation to stabilize IDR exchange rate
- Managing FX Reserve liquidity safety performance
- BI has independency on managing FX reserve
- Government agent bond auction cash Payment government Bank received deposit
- Operated Based on BI Law

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**Government**
- Fiscal policy
- Managing fiscal (budget)
- Collect tax and non tax revenue, spending, financing, investment
- Issues government securities both IDR and FX
- Coordination with BI on issuance plan
- Managing debt portfolio Securities and loan
- Give onlending to SOE State investment
- Operated based on state finance law and treasury law

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**State Own Enterprises**
- Agent development
- Public service obligation
- PT Pertamina, PT PLN, PT Telkom
- Financial service
- Bank insurance
- Pure Business
- Goverment long term investment
- Received on lending from goverment
- Issue bond and loan both IDR and FX,
- Goverment permit for FX borrowing
- Operated Based on SOE Law

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**Flowchart:***
- Surplus
  - IDR & FX deposit
- Subsidies, govt. investment, on lending
  - Divident, tax, royalty

● Objectives

► Mapping the FX exposure conditions on:
  – Government, Bank Indonesia, and SOEs balance sheet. Consolidated B/S of Govt. and BI, and Consolidated of Neraca Pemerintah, BI, BUMN, dan Neraca Publik (Neraca Konsolidasi)
  – Analyzing the vulnerabilities on FXexposures of Public B/S
  – Results of Analysis will propose:
    – Portfolio management and its risk mitigation on public fx asset & liabilities
    – an alternative framework for FX management especially -for Government & BI B/S

● Scope

► Financial Assets & Liabilities of Government, Bank Indonesia and 6 SOEs

► Main currencies : Major and Significant Currencies (USD, JPY, and EUR)

► Risks:
  – At this time only mapping the net fx risk exposures on balance sheet of Government, BI, and SOEs
  – In future it will focus on analysis of interest rate and refinancing risks, NPV of assets & liabilities, analysis on duration/maturity of asset & liabilities, analysis on cash flow of public fx exposures

● Method

► Source of Data:
  – LKPP (Audited Govt. Financial Statement)
  – LKBI (Audited BI Financial Statement)
  – Annual Audited Financial Statement of 6 Non Banks – SOEs (incl. PT. Pertamina dan PT. PLN)

► Converting all the FX currencies into rupiah denominated numbers

► Applying assumptions for detailed breakdown of BI’s balance sheet items
## Balance Sheets of Govt., BI, SOEs

<table>
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<tr>
<th><strong>Government</strong></th>
<th><strong>2008</strong></th>
<th><strong>2013</strong></th>
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**Notes:**
1. Nominal in trillion Rupiah.
2. Liabilities is shown by positive numbers and assets in negative ones.
3. Currencies includes all FX currencies and IDR.
4. Govt.’s numbers are using LKPP 2008-2013 (audit)

- Government and SOEs had larger financial liabilities compared to their financial assets.
- Bank Indonesia had larger assets than its liabilities.
- Most of government financial asset is on Demand Deposits in BI and on the liabilities side most of it are government securities.
- The largest asset in BI’s balance sheet is the international reserves for the purpose of financing imports and debt services (from government and private sectors). The largest liabilities is the Demand Deposits for national banks.
- The largest asset in SOEs balance sheet is in Cash and the largest liabilities are debts (bonds and loans).
Overview B/S - Government

**Govt.’s Gross FX Exposure**

- GBP
- USD
- JPY
- EUR
- USD
- JPY

**Govt.’s Net FX Exposure**

- Net EUR
- Net JPY
- Net USD
- Total Net Exposure
- Net GBP

**Govt.’s B/S Component**

- On-Lending
- Cash in BI
- Demand Deposits in BI
- Bonds

Notes:
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3. Currencies only includes USD, JPY and EUR
4. Govt.’s numbers are using LKPP 2008-2012 (audit) and Un-audited LKPP 2013.

- In recent 5 years, the gross fx exposure in USD and EUR increased while JPY decreased. The net USD exposure in USD and JPY remained significant. However the net USD exposure increased sharply in 2013, because of widening budget deficit which caused USD borrowing -to increase and Rupiah depreciation against USD.

**Characteristic of B/S**

- **Assets:**
  - mostly in form of Demand Deposits in BI & On Lending to SOEs,
  - mostly in fixed assets

- **Liabilities:**
  - Biggest portion is in FX Debt consists of FX Loans and Securities
Overview B/S – Bank Indonesia

- Characteristic of B/S
  - Assets: mostly in Securities (detailed currencies proportions are not clearly defined) and FX Demand Deposits
  - Liabilities: majorities in Bank Demand Deposits, Govt. Demand Deposits

- Fortunately on the BI side of B/S, their liabilities are much lower than their assets
- Those assets which are mostly in Securities (other sovereign bonds) increased dramatically after 2009, possibly because of the effect of large issuance Government’s FX denominated bonds (as the consequences of increased budget financing).

Notes:
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4. Numbers are using LKBI 2008-2013 (audit).
**Overview B/S - SOEs**

- **Scope**
  - Consists of 6 SOEs with largest assets and liabilities and also largest fx exposure
  - 4 SOEs are public companies, the others are PT Pertamina and PT PLN
  - These 6 SOEs can represent 80% of all SOEs (140 SOEs)
  - Excluding SOEs’ Banks, considering Regulations from BI for Banks to have less fx exposure in their portfolio, so we considered them to have very little net fx exposure

- **Characteristic**
  - Most of SOEs assets are in form of Inventory, Receivables from Govts, Cash
  - Majorities of liabilities are in Loans, On-Lending, Trade Payables, and Bonds

- **SOEs Liabilities**
  - The net positive fx exposure of USD had sharply increased after it decreased in 2012
  - Main contributors of the increasing net fx exposure of USD were from Pertamina’s Debt (Rp122 trillion) and Short Term Borrowing (Rp61 trillion) and also PLN’s Debt (Rp106 trillion)

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**Notes:**

1. Nominal in trillion Rupiah,
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3. Currencies only includes USD, JPY and EUR

**SOEs’s Gross FX Exposure**

![Gross FX Exposure Chart](chart1)

**SOEs’s Net FX Exposure**

![Net FX Exposure Chart](chart2)

**SOEs’ B/S Components**

- Cash
- Other Asset
- Electricity Purchase Payable
- On-Lending
- Short Term Borrowing
- Trade Payables
- Bonds
- Loans

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![B/S Components Chart](chart3)
Findings

► Biggest Public FX Net Exposure is in USD then followed by JPY, EUR net exposure is negative (assets > liabilities)

Vulnerabilities Analysis

► Net exposures to USD is spewing up. Main reason is the widening fiscal deficit which translates into bigger financing need which causes increasing need for government FX borrowing. The other reason is the expansion of some SOEs especially PT. Pertamina to finance its foreign-investment and PT. PLN to meet its electricity capacity targets

► Net exposures JPY is slightly down, because even though the SOEs JPY debt is increasing, on the government side JPY debt continues to decrease.
Conclusion & Recommendation

- Conclusion
  - B/S of Government & BI
    - Net FX Exposure JPY which is quite vulnerable → positive net exposure
    - Net FX Exposure USD is within measurable/controllable level
    - Net FX Exposure EUR provides more room to expand such as issuing EUR denominated Bonds. The EUR Bonds issuance will also support efforts to balance debt portfolio in JPY and USD denomination
    - A need for coordination in high level officials to analyze the detail breakdown of FX reserves and to support strong and reliable analysis on Government & BI net FX exposures. (right now it is still challenging to gather detail data for each balance sheet due to regulation)

- Recommendations
  - Increase fx asset
    - Increase export repatriation → export revenue is not directly transferred to Indonesian economy
  - Reducing fx debt issuance by reducing budget deficit
    - Increasing issuance of domestic SBNs → need domestic market development to increase domestic market absorption
    - Limiting issuance of fx denominated SBNs → SOMETHING MISSING HERE?
    - Limiting fx borrowing for SOEs → need more coordination within government institutions
  - Converting EUR assets to USD or JPY to minimize USD and JPY exposures
  - Conduct hedging to mitigate USD & JPY risks
    - Coordination with Bank Indonesia to map the exact amount of hedging. This needs joint policy to determine which currency and how much exposure to be hedged, and who should do it.
Next steps on Managing FX Exposure

Next Step:

- Improving the research with more detail aspect among others about short term Horizon of FX exposure where currently not yet addressed and interest rate exposure aspect of consolidated balance sheet.
- Revising current regulation to give umbrella to a much better coordination as follow:
  - BI Law where new draft incorporate a clause about Sovereign ALM where the current is not.
  - Improve regulation about SOE FX borrowing which currently regulate a procedure for SOE to borrow in global market.
  - Create an MOU between Government and BI to arrange coordination mechanism on sovereign ALM including FX management.
- Create a new unit in ministry of Finance that in charge of managing sovereign balance sheet including FX exposure.
- Improve Coordination in fx debt and reserves composition
  - Realignment which will require more transparencies on detailed currency selection on some B/S item
  - Coordination in hedging policy to minimize amount required/executed for each hedging transaction.
Thank You
B/S Compositions of Govt, BI, and SOEs in 2008 & 2013 including all fx currencies

**Government**

**Assets**
- Demand Deposits in BI: 27 (2008), 61 (2013)
- Cash in BI: 7 (2008), 42 (2013)

**Liabilities**

**Bank Indonesia**

**Assets**
- FX Demand Deposits: 34.8 (2013), 118.8 (2008)
- Foreign Currencies: 7.1 (2013), 0.0 (2008)

**Liabilities**
- Banks DD: 56.3 (2013), 5.5 (2008)
- Govt. DD: 26.8 (2013), 61.6 (2008)
- Term Deposits: 7.6 (2013), 7.6 (2008)

**SOEs**

**Assets**
- Inventory: 40.0 (2013), 74.4 (2008)
- Receivables from Govt.: 25.0 (2013), 71.3 (2008)
- Other Asset: 0.9 (2013), 2.0 (2008)

**Liabilities**
- Loans: 79.2 (2013), 47.3 (2008)
- Electricity, P/E, Payable: 7.1 (2013), 8.0 (2008)
Compositions of Consolidated B/S in 2008 & 2013 including all fx currencies

by B/S Components

Assets
- Securities
- FX Demand Deposits
- Inventory
- Receivables from Govt.
- Cash
- Demand Deposits in BI
- Gold
- Receivables
- Cash in BI
- On-Lending
- FX Deposits
- SDRs
- ST Investment
- Other Asset
- Foreign Currencies

Liabilities
- Loans
- Bonds
- Liabilities for SOE
- Govt. DD
- Trade Payables
- Short Term Borrowing
- On-Lending
- Bank DD
- SDR Allocations
- Electricity Purchase
- Term Deposits

by Currencies

Assets
- USD
- EUR
- JPY
- GBP
- AUD
- TWD
- SDR
- NZD
- CAD
- CNY
- Others
- SGD
- MYR
- HKD
- SAR
- CHF
- KRW
- SDR1
- CNY
- CAD
- NZD
- TWD
- AUD
- GBP
- EUR

Liabilities
- USD
- JPY
- SDR
- EUR
- GBP
- AUD
- SGD
- SAR
- CHF
- KRW

All Currencies Net Exposures

- JPY
- USD
- SDR
- Others
- SGD
- MYR
- HKD
- SAR
- CHF
- KRW
- SDR1
- CNY
- CAD
- NZD
- TWD
- AUD
- GBP
- EUR

Net Exposures

- 2008
- 2013
If considering all fx currencies, the public B/S experienced a deficit in net fx exposure

This happened as a result of extensive fx borrowing conducted by Govt. (for financing budget deficit) and SOEs (for expansion) in 2013, while the size of BI’s assets did not expand significantly.

Notes:
1. Nominal in trilion Rupiah,
2. Liabilities showed by positif numbers dan assets in negative ones,
3. Currencies including all fx currencies
4. Govt.’s numbers are using LKPP 2008-2012 (audit) and Un-audited LKPP 2013. SOEs numbers are from SOEs financial statements. BI numbers are from financial statement 2008-2013.
Sample of SOEs Balance Sheet

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<th>PT. PGN</th>
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<td>0.0</td>
</tr>
<tr>
<td>Inventory</td>
<td>0.2</td>
<td>0.2</td>
</tr>
</tbody>
</table>