HEDGING SURVEY:
A TOOL TO IDENTIFY POTENTIAL RISK ON CORPORATE SECTOR EXTERNAL DEBT

by

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"*This paper describes Bank Indonesia survey to examine risk behavior of the corporate sector external debt. The objective of the survey is to identify proportion of companies hedging their external debt through natural hedges (export receipts or loans from affiliated companies) or market hedges (hedging in the market for currency and interest rate risk) or unhedging their external debt. The lattest group shows high risk external debt associated with currency mismatch that need close supervision. Based on this survey, Central Bank could take anticipatory measures through appropriate controls and policies*"

I. Introduction

As stipulated by Law No. 23 of 1999 concerning Bank Indonesia dated 17 May 1999, as amended by Law No. 3 of 2004 and last amended by Law No. 6 of 2009 concerning Bank Indonesia, Bank Indonesia (BI) as the Central Bank has the task to formulate and implement monetary policy with the aim to achieve and maintain rupiah stability. The stability of rupiah shall include the stability of the rupiah against the goods and services (inflation) and the stability of the rupiah against other currencies (exchange rate). Stability of rupiah, in particular the rupiah exchange rate, is strongly influenced by the stability of the financial system and the condition of Indonesia's Balance of Payments (BOP).

As regards the Balance of Payments, uneven world economic recovery amid fluctuations in the global liquidity conditions could trigger a rapid capital flows in and out in the short term, which in turn can disrupt the economic equilibrium and monetary stability. In this regard, External Debt (ED) is one of the key factor that may impact positively or negatively on monetary stability, financial system stability, balance of payments and also the sustainability of economic development. On one hand, the management of ED compliance to the

precautionary principle will support the national economic interest and maintain the confidence of the international financial markets, but on the other hand, external debt management that ignores those principles will potentially disrupt the national economy.

Bank Indonesia has provided a manual (guidance) in the management of the precautionary principle in the private external debt through Bank Indonesia Regulation (PBI) No. 7/1/PBI/2005 dated 10 January 2005 concerning External Debt of Banks as amended by PBI No. 13/7/PBI/2011 dated 28 January 2011. Furthermore, in the context of monitoring the Report of External Debt, BI has issued a regulation on reporting procedures of ED through PBI No.14/21/PBI/2012 dated 21 December 2012 concerning Report on Activity of Foreign Exchange Flows (LLD).

Provisions governing the private sector external debt require companies to implement risk management functions which include market risk, liquidity risk, and operational risk. In an effort to manage market risk (exchange rate and interest rate), the private sector is expected to manage the risk of external debt independently by calculating the impact of exchange rate movements and interest rate on the repayment ability and to conduct hedging. Furthermore, in terms of liquidity risk — that is the risk related to the availability of funds necessary for the external debt repayment and operational risk — the private sector is expected to match the maturity with the use of the external debt and to improve the external debt information systems. Meanwhile, LLD regulations require private sectors to report all financial assets and liabilities, and particularly on the external debt, the mandatory reports are on loan agreement, debt securities, trade credits, and other debts.

Given the importance of the risk management in the private sector external debt, a survey on mapping hedging efforts is becoming increasingly essential and crucial for a central bank. Information obtained from the survey will be a complement to primary data obtained directly from the external debt reporting company (the debtor). Therefore, the availability of information on external debt hedging is important in the process of risk monitoring and management.

II. Objectives

The objectives of the hedging survey are as follows:

1. Gaining information on the potential risks faced by the companies in managing their external debt, particularly currency risk (currency mismatch and/or exchange rate risk), and interest rate risk.
2. Giving insight on the policy direction the Central Bank has to undertake, especially to minimize risks caused by the lack of cautions in managing external debts.

III. Scope and Methodology

The hedging survey has been conducted biannually since the first half of 2011. The respondents of the survey are non-bank private companies which incur external debt. This survey does not include banks as respondents because banks have certain characteristic and have been regulated by tighter prudential regulations by the Financial Service Authority (FSA). This survey maps hedging undertaken by the non-bank private companies classified in 10 (ten) economic sectors. Samples of companies were taken from the External Debt Information System's database.

Proportionate sampling method is applied to select samples, starting with grouping the largest debtors into 10 economic sectors. Then, samples for each economic sectors are determined by the proportion/percentage of each sectors to the total population of corporate external debtors.

Economic Sector	Semester II-2013			Survey sample
	Debt Outstanding (million USD)	Σ Companies	% Debt to Total Debt	
Agriculture, forestry & fishing	6,454	283	6.0%	7
Mining	25,240	135	23.3%	16
Manufacturing industry	26,660	812	24.6%	23
Electricity, gas & water	16,456	30	15.2%	7
Construction	661	32	0.6%	2
Trade, hotel & restaurant	6,787	301	6.3%	6
Transportation & communication	10,326	135	9.5%	12
Finance, leasing & financial services	12,716	319	11.7%	22
Services	563	34	0.5%	2
Other sector	2,443	115	2.3%	3
Total	**108,306**	**2,196**	**100.0%**	**100**

Table 1
Composition of survey respondent

IV. Survey results (Based on Second Semester 2013 Survey)

Respondents' income are distinguished based on their currencies between rupiah and foreign currencies. Companies generate their foreign currencies income from exports and domestic sales, either of their own account or their subsidiaries. Those foreign currency income are then used to pay their external debts and other foreign currency liabilities so that the companies do not have to face with the risk of currency mismatch. In this case, these companies can be said to have undertaken *natural hedge*.

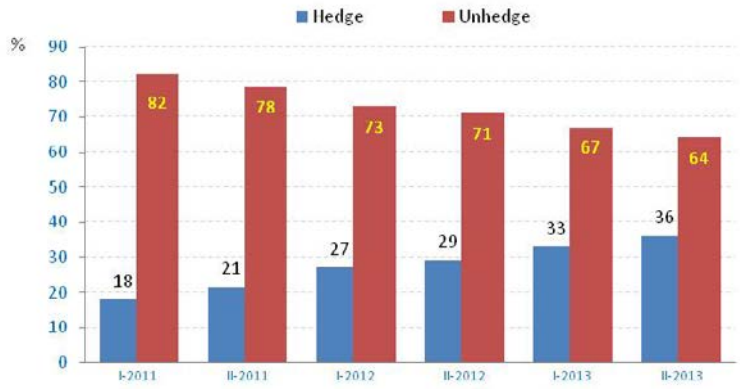
Based on the latest survey results, the proportion of companies having foreign currency and rupiah income is 68% and 32%. Of the companies with foreign currency income, around 37% generate the income from exports, 19% from domestic revenue, and the rest of 12% comes from other sources, such as capital gain from placement in subsidiary. The companies' income composition based on currencies highlight some points as follow:

a. The majority of companies incurring external debt are essentially have undertaken natural hedge and are relatively able to avoid risk from currency mismatch.

b. Number of companies incurring external debt and having foreign currency income tend to increase with average portion of above 60%. Nevertheless, it is recognized that the group of companies obtaining foreign currency income from domestic operation still face with potential market risk, which is the risk of market fluctuation, particularly domestic market.

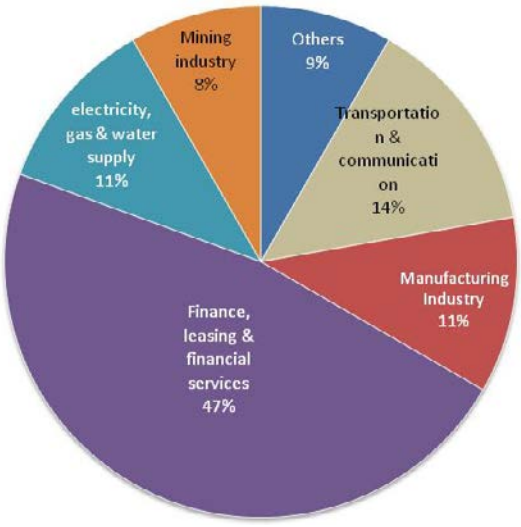
c. Conversely, number of companies incurring external debt and having rupiah income tend to decrease with average portion approximately 30%.

Furthermore, the survey shows that 36% of total private sector external debt reporters have hedged their debt, while the rest 64% have unhedged debt. Compare to the surveys on previous periods, the percentage of companies hedging their external debt is increasing every semester. Fluctuation in rupiah as an impact from the global economic uncertainty is viewed as one factor causing increased in hedging behavior of debtors from semester to semester.



Graph 1. Companies Hedging Behavior

Based on economic sector, the majority of the private external debt reporters hedging their debt are in the financial, leasing, and financial service sector which account for 47%, followed by transportation and communication sector (14%), manufacturing industry sector (11%), and electricity, gas and water supply sector (11%). The dominance of hedging behavior in the financial sector reflects the height of the prudential aspect of this industry in response to the pressure from rupiah depreciation during reporting period.



Graph 2. Hedging Behavior by Economic Sector

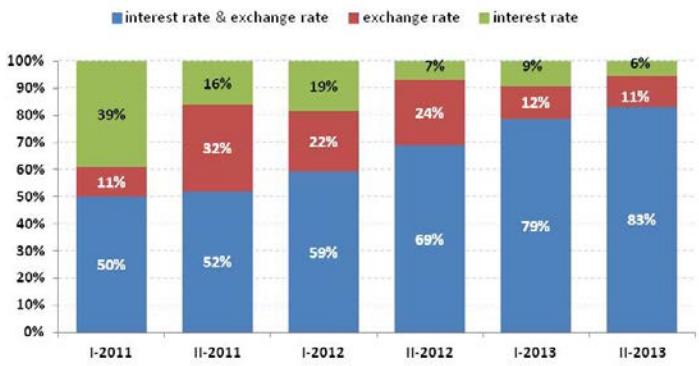
Several main findings from the second semester 2013 survey result are as follows:

a. The main considerations of private companies hedging their external debt are:

    - The benefit of hedging compared to the charge expenses
    - Indonesia and global economic condition
    - Executing parent company's policy and other considerations such as compliance to the policies of the company's owner / General Meeting of Shareholders.

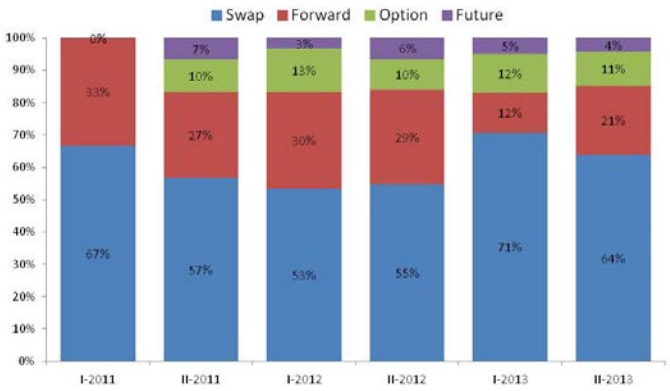
b. Most of the companies (42%) undertake hedging to cover 26%-50% of their external debt risk, followed by approximately 36% companies that hedge as much as 76%-100% of their external debt. Meanwhile, the number of respondents hedging 1%-25% and 51%-75% of their external debt is relatively small which is only approximately 14% and 8%, respectively.

c. Examined from the type of risk exposures, in general, companies undertake hedging to cover both interest and exchange risk, followed by hedging to cover either exchange rate risk or interest risk. In the second semester of 2013, 83% of the companies undertake hedging to cover interest and exchange rate risk, followed by 11% respondents hedge for exchange rate risk, and 6% hedge for interest risk. Meanwhile, at the same time, there is a tendency of decline in percentage of companies that use exchange rate risk hedging and interest risk hedging. The tendency of the decline in interest risk hedging is in line with the decline in interest risk related to the cheaper cost of borrowing of external debt as the implication of the implementation of the interest decline policy by the central banks of developed countries and quantitative easing policy which is being carried out by the US to push its economic growth.



Graph 3. Type of Risk Exposure

d. Based on the type of hedging instruments, most of the companies use swap and forward instruments. The reasons for using swap instrument are matching factor between tenure and maturity of the external debt and the hedging cost affordable to companies' cash flow. Meanwhile, companies prefer to choose forward instrument because of the matching factor between tenure and the external debt maturity as well as the facilities/the ease of transactions given by the hedging counterpart. In the latest survey, companies which used swap instrument is quite dominant weighing as much as 64%. This hedging instrument is intended to cover the increasing interest risk and the fluctuation of the exchange rate. The use of forward instrument comes in the second place (21%), and followed by option and future which are relatively limited weighing as much as 11% and 4%, respectively.



Graph 4. Type of Hedging Instruments

e. Based on the external debt instruments being hedged, most of the debt hedged by the companies are loan agreement (83%) whereas the rest are bonds.

f. From the hedging tenure perspective, most of the companies use tenure of more than 12 months (39%), and followed by the 6 months tenure (33%). The choice of such tenure is presume to be related with the swap premium which tends to be expensive for the longer tenure and rupiah that tend to weaken. Furthermore, approximately 72% of the companies will conduct rollover hedging if the hedging tenure does not match the maturity of the external debt. In business and logic perpective, rollover are generally cheaper therefore can be concluded that the players are more rational.

V. Risk Analysis of the Debtors of Unhedged External Debt

The risk management survey in semester II-2013 has identified that approximately 64% debtors do not hedge their external debt. Reasons for unhedging are, among other, companies have foreign currency income, the global and domestic economic condition are considered stable, and the hedging transactions are still relatively expensive.

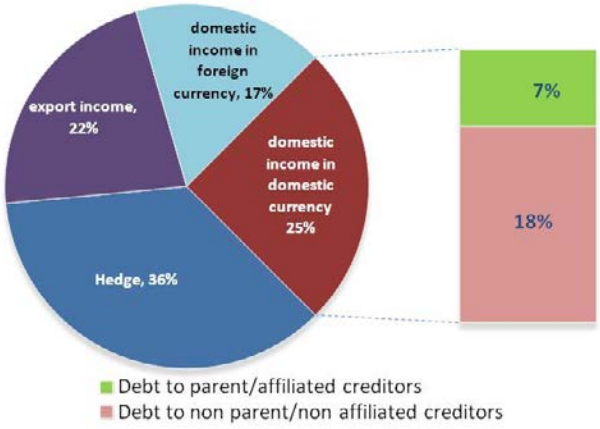
In details, information acquired from the survey result are as follows:

a. **Debtors of unhedged external debt can be classified as exporters and non-exporters.** From 64% of companies that unhedge their debt, approximately 22% have export proceeds from their own business or from their subsidiaries. The rest (42%) do not have export proceeds but merely sale their products domestically.

b. From the 42% of the companies which sells its product domestically, it is known that 17% of the companies received income in foreign currency, either directly from their own business of from their subsidiaries. **From this figure, it is implied that 25% of external debt reporters are vulnerable to currency risk their revenues are in rupiah.**

c. **However, there is still possibility that not all of the 25% reporters mentioned earlier are exposed with currency risk.** This condition mainly holds if external debt is received from parent/affiliated creditors. Generally parent/affiliated creditors have policy to centralize risk mitigation in the head office. In this context, debtors only acts passively without any authority to mitigate risk and hence currency risk is borne by the creditors which are the parent/affiliated company.

   Within the 25% of the external debt reporters exposed to currency risk, 7% receive external debt from their parent/affiliated creditors. With the tendency of parent/affiliated creditors to grant flexible refinancing/roll-over facilities, then 7% of the total external debt reporters are exposed with currency risk but relatively free from refinancing risk. Meanwhile, the rest (18%) are exposed towards currency and refinancing risk as they have rupiah income and receive external debt from non-parent/affiliated creditors.



Graph 5. Income Composition of Debtors of Unhedged Debt

d. Survey result on the 25% sample of companies exposed to currency risk depicts interesting perspective on lack of prudent risk management (non-hedging). In general, considerations that are stated by companies are not so different with the previous survey which is:

- No clear rules/policy in doing hedging. This argument applies to State Owned Enterprises which have risk management structures but remain unhedged their debt.
- Domestic and global economic conditions is still assumed to be stable therefore there is no need of hedging. Besides, hedging charges high fee and implicates a complicated procedure.
- Creditors' policy on centralizing mitigating risk of exchange rates. Generally creditors that enforce such policy are the head/parent company of the borrower.
- External debts are in rupiah so that are not exposed to currency mismatch.

e. Companies that do not have foreign currency revenues and do not undertake hedging in the money market will make some efforts to meet their repayment obligation, with these priorities in order:
   - Finding foreign currency resources in the market gradually by taking into account reasonable exchange rate
   - Finding foreign currency resources in the market when their external debts are due
   - Using their foreign currency deposits
   - Seeking for refinancing either from the parent/affiliated or non-parent/affiliated company
   - Borrowing foreign currency from domestic banks.

VI. Conclusion

a. The survey results shows that around 36% of debtors hedge their external debt and the remaining (64%) do not undertake hedging. The majority of companies undertaking hedging are in the financial, leasing and financial service sector, transport and communication sector, manufacturing sector, and electricity, gas and water supply sector.

b. The primary considerations for companies not doing hedging are: they already have foreign currency income (natural hedge), considered relatively stable global and domestic economic condition, and hedging transaction that are still considered expensive.

c. Companies not having any foreign currency income and not undertake hedging meet their external debt repayment, among other, by: buying foreign currency in the market gradually by taking account reasonable exchange rates, finding foreign currency resources in the market when their external debts are due, using their foreign currency deposits, seeking for refinancing either from the parent/affiliated or non- parent/affiliated company, and borrowing foreign currency from domestic banks.

d. From around 25% of external debt reporters that do not hedging their debt and are exposed to currency risk, 7% of them receive external debt from parent/affiliated creditors, while the remaining (18%) are exposed to currency and refinancing risk as they have rupiah income and receive external debt from non-parent/affiliated creditors.

VII. Policy Implication

In order to minimize the potential risk on corporate sector external debt, central bank or monetary authorities have some alternatives debt management policies to adopt as following:

- Debt Limits. The policy should consider setting specific limits or acceptable ranges for each type of debt. Limits of debt generally are set for legal, and financial reasons.
- Debt Structuring Practices. The policy should include specific guideline regarding the debt structuring practice for each type of debt, including maximum terms, use of variable or fixed –rate debt etc.
- Use of Derivatives (hedging policy). The Debt Management Policy should clearly state whether the entity should use derivatives or not. If the policy is allowed to use derivatives, a separate and comprehensive derivatives policy should be developed.

References

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Israel Glen D, (2012), ‘Determining Sample Size’, University of Florida