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SOLVENCY ANALYSIS ON INDONESIA'S EXTERNAL DEBT

Analisis Daya Bayar Utang Luar Negeri Indonesia

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ABSTRAK

Selama periode 2010-2013, Indonesia mengalami pertumbuhan yang positif. Namun, utang luar negeri (ULN) pun ikut meningkat, dan telah mencapai USD264,99 miliar per 2013. Tingginya ULN menimbulkan pertanyaan seberapa jauh daya bayar Indonesia terhadap ULN nya. Dengan metode debt sustainable framework (DSF) yang dikembangkan Bretton Woods Institution (BWI) dapat diketahui seberapa besar tingkat daya bayar Indonesia tersebut. Berdasarkan data 2012 dan hasil perhitungan, diketahui bahwa dari 6 indicator DSF, Indonesia mempunyai 2 indikator merah yaitu debt service to export ratio dan debt service to budget revenue ratio. Kedua indikator ini menunjukan bahwa tingkat likuiditas Indonesia lemah, dan pemerintah memiliki keterbatasan kemampuan fiskal dalam mengintervensi penyelesaian permasalahan ULN (bila ada). Selain DSF, beberapa indikator seperti kondisi neraca perdagangan dan kurs rupiah juga menunjukan potensi risiko gagal bayar yang disebabkan oleh faktor ketersediaan USD. Beberapa rekomendasi utama diusulkan dalam paper ini. diantaranya adalah 1) memperbaiki tingkat likuiditas atau ketersedian mata uang asing (USD), 2) mengelola utang luar negeri swasta nonkeuangan dan non BUMN, 3) meningkatkan transaksi ekspor dan menurunkan impor.

Kata Kunci : daya bayar, debt sustainable framework, rasio, utang luar negeri, valuta asing

ABSTRACT

During periods 2010-2013, Indonesia had economic growth. However, external debt had also increased and reached USD265 billion in 2013. Indeed, this achievement raises a question, what the solvency level of Indonesia's external debt is. By using Debt Sustainable Framework (DSF) method developed by Bretton Woods Institution (BWI), it can be known. Based on sample data in 2012 and calculation result, it can be known that from 6 DSF indicators Indonesia had 2 red indicators. They are debt service to export ratio and debt service to budget revenue ratio. The two indicators showed that Indonesia's solvency has risk regarding liquidity capability, and a limited fiscal support in the case Government do an intervention for external debt condition. Some main recommendations are proposed in this paper. Some of them are: 1) to improve liquidity or availability of foreign currency (USD), 2) to manage external debt of nonfinancial enterprises and non SOEs, and 3) to increase export and decrease import.

Keywords : debt sustainable framework, external debt, foreign currency, ratio, solvency

JEL Classification: G.01

I. INTRODUCTION

After economic and financial crisis in 1997/1998, Indonesia's economy has improved. It can be shown by economic growth in the last some years. Indonesia Statistic Agency called BPS (2014) reported that economy grew 4.6% - 6.49% per year in average. In addition, international investors is also confident to Indonesia's economy, where it can be reflected by improvement of sovereign rating to become BBB- by R$I in October 2013, BBB- by Fitch in November 2013, and BB+ by S&P in 28 April 2014 (ADB. 2014). In the fact, it could be shown by the yield of Indonesia's 10 years bond that decreased from 10% for in 2008 (Bespoke Investment Group. 2008) to 7.97% in 5th Mei 2014 (ADB. 2014).

Improvement of Indonesia's economy could not be separated from the role of external debt as one of source of funds. For government, external debt was mainly to fill the deficit budget. Perhaps, this was the best solution for government in the condition when domestic state budget revenue and internal debt could not be expected, and government got pressure to be main actor in the recovery of national economy (Atmadja A. S, 2000). In addition, Government needed US dollar to improve rupiah's exchange rate to stabilize economy. For private sector, external debt was also very important because it was to fund business expansion by import capital tools, and also to pay back their debt when its time maturity would due date.

Obtaining external debt occurs continuously, and tends to increase in the recent time. Government still implements budget deficit policy, and needs external debt. In addition, private sectors tend to be more active to get external debt that it can be as effect of the decreasing of cost of debt. Finally, external debt achieved a round US$ 264,994 million in the end of 2013 (BI. 2014). It increased US$12,630 million or 5.0% from the previous year 2012. BI (2014) also reported that external debt balance in 2013 dominated by private sector around 53.4% or US$141,445 million, whereas Government and Central Bank were around 43.1% or US$114,294 million and 3.5% or US$9,255 million respectively.

Increasing external debt could give both benefit and threat for the economy. Atmadja A. S. (2000) stated that 1) external debt can be appropriate source of fund if it can fund the economic development that can increase the citizen's prosperity and welfare, 2) otherwise, it can put Indonesia in the debt trap if it is not managed well. Now, Indonesia has a huge balance of external debt, and it means that Indonesia faces a higher risk, and probably can cause the economy in the crisis condition again. Therefore, It is very important to know the solvency level of Indonesia's external debt.

The research is one of ways to know the external debt's solvency. It can inform to the Goverment and Central Bank whether Indonesia is still in the solvency condition or near with insolvency, and support them to make decision for issuing some policies as risk mitigation instrument. The importance of a research regarding this issue solvency issue is known from many existed previous studies. Some of them are Jafri S.K. (2008) who studied the sustainability of external debt for Pakistan, Imnaishvili A. (2008) for Georgia, and Shymanovich G. & Kirchner R. (2011) for Belarus.

This paper also intends to know external debt's solvency for Indonesia. To do it, this paper will analyze Indonesia's economy performance, such as gross domestic product (GDP) and export-import transaction to know fundamental performance, and balance of payment especially current account. Then, some Indonesia's indicators regarding external debt such as debt service ratio, debt to GDP ratio, and others, will be calculated and compared with threshold indicators and other countries to know solvency risk and where Indonesia solvency level position is.

II. LITERATURE REVIEW

2.1. Definition of Debt

In the daily activities, debt is a common word and already known by everyone. Debt can be defined as amount of money owned person or entity was borrowed by other person or entity

(Yudiviantho A. 2010). The money will pay back in the certain date including additional money as compensation to owner called interest.

Debt can be classified to some kinds. Based on interest rate, debt can be classified to fixed rate, floating rate and zero coupon debt (Yudiviantho A. 2010). Fixed rate means that the interest of debt is fixed during the time to maturity. Floating rate means that the interest of debt fluctuates following the certain bechmark such as JIBOR and LIBOR. Zero coupon implies commonly in bond. It means that there is not interest rate stated explicitly. However, there is cost of debt in the real because the bond is sold under the par value. So, the cost of debt is the gap between par value and sold price. Based on the time to maturity, debt can be divided to short term debt and long term debt (the World Bank. 2014). Short term debt is commonly the debt that has a time to maturity less than 1 year, while the long term debt is debt that has a time to maturity more than 1 year. According to the the currency used, debt can be to become original currency debt and foreign currency debt. Based on where the creditors are from, debt can be divided to become domestic debt (the creditors are from original country) and external debt (creditors are from others countries). In addition, domestic debt is usually in original currency whereas external debt is in foreign currency. Moreover, there are still kinds of debt, depend on how the debt can be classified.[1]

2.2. Role of External Debt

To develop economy, fund both from domestic and abroad is needed. The fund can be equity or foreign direct investment (for from abroad) and debt or loan. In the developing countries, the reason why foreign fund is required can be explained by some theories or arguments below.

The first, it is the two model gap funds, saving gap and foreign exchange gap (Chenery and Strout (1966) in Prawoto N. (2009)). The saving gap occurs because citizen's income in the developing countries is low, so citizen's saving is also low. The effect is citizen's saving can not fill a need of investment. Foreign exchange gap happens because in the import in developing countries is more than export, so their foreign currency from export can not fill need of foreign currency for import. This model shows that foreign debt is needed to fill that gap.

The second, foreign debt is required as source of fund to fill three deficits, saving-investment gap, budget deficit, and current account deficit (Harahap M. D. M. 2008). The relationship between foreign debt and three deficits can be illustrated by combination of mathematic formulation of national income in the incomes side and expenditures side (Basri. 2004 in Harahap M. D. M. 2008). In the income side, national income (Y) is society's consumption (C) plus total government's saving (S) and government income from tax (T), or $Y = C + S + T$. In the expenditures side, national income is society's consumption plus private's investment, plus government's expenditures and export minus import, or $Y = C + I + G + (X-M)$. Combination of two formulation is $(M-X) = (I-S) + (G-T)$, where M-X is current account deficit, I-S is gap of saving and investment, and G-T is budget deficit. The last formulation shows that if three deficits occur, foreign fund is needed.

In addition, foreign fund flow can happen because of some factors both from debtors (loan pull theory) and from creditors or (loan push theory) (Prawoto N. 2008). Some factors in the loan pull fund theory can be to import capital goods, a limited society's saving and etc. In the loan push theory, the some factors can be a surplus fund or dollar in the creditors, to expand market, political interest, and etc.

[1] The definition of external debt used in this paper is debt owned by nonresidents, repayable in currency, goods, or services. So, total external debt is included the sum of public, publicly guaranteed, and private nonguaranteed long-term debt, use of IMF credit, and short-term debt (The World bank. 2014). In addition, based on the time of maturity, total external debt consists of short term and long term external debt. Short-term debt includes all debt having an original maturity of one year or less and interest in arrears on long-term debt.

2.3. External Debt's Risk

As described in the paragraph above that debt and interest must be paid back by debtor when it will due in the future. Risk occurs when debtor does not have capability to pay back the debt. This condition can called insolvency or unsustainable debt or default debt. This paper uses insolvency.

There are some factors called risk factors that caused insolvency debt. First, it is availability foreign currency or liquidity. It means that debtor can not provide cash in the suitable foreign or USD currency when the external debt and its interest due date. The second, it is exchange rate. External debt is owned nonresident of Indonesia, so automatically they need suitable foreign currency or USD when the debt due date. Although the denomination of debt is in rupiah, the lenders or holders of bond (nonresidents) will change rupiah to USD. The risk is appearance when the rupiah depreciate, so debtors should provide rupiah more than when they borrowed. The third, it is interest rate. When the debt uses floating rate as its coupon, the debtor will face fluctuation of interest rate. When interest rate increases, debtor will also provide the amount of money to be much more.

The fourth factor risk is economic fundamental performance. This risk factor consists of economic growth and export-import performances. Regarding to economic growth, a risk appears when economic growth declines or minus. It means that economic actors' productivity decline, and can't generate enough revenue. Government productivity also declines because tax income declines and then can't get loan or issue bond. Purchasing power of households declines because unemployment increases. The effect, debtors can't pay back the debt. Regarding export – import performance, the risk occures when exsport is less than import or deficit in current account, and then financial and capital transaction is also deficit. The effect is a deficit in balance of payment, and then influences foreign reserve to declines continuously until zero balance. Finally, there is a limited foreign currency in the domestic money market used to pay back the debt. If the debtors exchange rupiah to USD in the international money market, the rupiah will depreciate.

2.4. Previous External Debts Studies

Debt sustainability or solvency is an important issue for stakeholders related with economic growth, investment, trading, and others. Therefore, it encouraged some analysts or governments or monetary institutions to study about sustainable external debt. Table 2.1 shows those some studies.

Table 2.1. The Summary of Some Debt Sustainability Studies

Study	Methodology	Results
Imnaishvili A. (2010). To study about Georgia's external debt sustainability.	Nominal External Debt Dynamic. Usage external debt indicative (debt service ratio, NPV of external debt to GDP, and NPV of external debt to export) and variable shock such as interest rate, real GDP growth, price, exchange rate.	Overall, external debt sustainability risk is low. The export growth rate is the most risky variable for external debt sustainability. Interest rate shock did not effect on debt sustainability.
Jafri S.K (2008). To study external debt sustainability for Pakistan: outlook for the Medium	Debt Sustainability Assessment (DSA) technique	Although the external debt to GDP ratio increased, this was still in safe limit. A significant 30-40% depreciation of exchange rate could break the threshold level. A large combined shock to real GDP growth

Term		such as non-interest current account balance to GDP ratio, and the ratio of net non-debt creating capital inflows to GDP will pressure to debt rescheduling.
Shymanovich G. and Kirchner R. (2011). To study the sustainability external debt in Belarus.	Using financial sustainability approach (measuring liquidity and solvency and economic sustainability approach (measuring economic indicators such as GDP, budget deficit, inflation, exchange rate and others.	Belarus faces the potential problem from external debt sustainability.
IMF and The World Bank (2006). Debt sustainability analysis in Georgia	Indicative External Debt Burden Indicators	Debt distress risk in Georgia is low.

Source: Author's summary. 2014

2.5. Indonesia Policy for Foreign Debt

Regarding foreign debt, Indonesia has been already aware that Indonesia has a risk regarding its external debt. Experience from economic and financial crisis event in 1997/1998 caused Indonesia learn and try to manage external debt more prudent. Even, BI and Government have implemented some regulations to manage foreign debt of private sectors (banks and nonbank enterprises).

BI issued some Bank Indonesia regulations. For private sectors, BI issued PBI No. 12/24/PBI/2010 about obligation for reporting foreign debt to BI. For banks, BI issued PBI No. 7/PBI/2005 about foreign debt for bank, PBI No. 13/7/PBI/2011 about foreign debt for bank (second revised) and PBI No. 13/8/2011 about daily reporting of bank. For private sectors non bank, BI issued PBI No. 12/1/PBI/2010 about foreign debt for nonbank enterprise, PBI No. 13/20/PBI/2011 about income of foreign exchange derived from export and withdrawal of foreign exchange of foreign debt, and PBI No. 13/22/PBI/2011 about obligation for reporting the withdrawal of foreign debt.

From those regulations above can be taken some main points. Firstly, there is an obligation to submit a report of foreign debt. Secondly, there are a limitation of balance for bank's short term foreign debt (maximum 30% from capital), an obligation to get approval from BI when bank will obtain long term foreign debt, and an obligation of receiving income of foreign exchange derived from export (DHE) through domestic foreign exchange bank. Thirdly, there is a mandatory withdrawal of income of foreign exchange of foreign debt (DULN) through domestic foreign exchange bank. Lastly, from those regulations, it can not be found that there is no regulation regarding with certain amount or ratio of foreign debt of non bank private sectors

Government also issued Presidential Decree No. 39 Year 1991 about the formation of the team for the coordination of management of offshore commercial loan. The main point of this regulation is that state owned enterprises (SOEs) must have an approval from government if they will obtain foreign debt. Government can reject a proposed foreign debt of SOEs' with some considerations.

III. METHODOLOGY

This paper uses secondary relevant data from reputable institutions. They are Indonesia of Central Bank or Bank Indonesia (BI) and the World Bank. Periods of data used are from 2009 to 2012. In

addition, there are some data used directly or given data because to trace how thus data formed are very difficult.

Furthemore, to determine whether Indonesia has solvency external debt or not, this paper will use Debt Sustainability Framework (DSF) developed by the Bretton Woods Institutions (BWI). DSF is a developed version from Heavily Indebted Poor Countries (HIPC), so DSF is more widely for long term context (DFI. 2009). DSF is also developed as the tool to assess country's risk of debt distress especially for lower income countries, and based on a series of debt indicators and thresholds.

DSF combines the debt sustainability thresholds with the quality of a country's policies and institutions (DFI. 2009). BWI (2009) stated that countries with strong or good policies and institutions has higher burden so are less likely to go down into debt distress condition than countries that have weak or poor policies and institutions. Therefore, BWI formulated the relationship between threshold and quality of countries as illustrated in the Table 2.2. Some indicators in thresholds showed in the Table 2.2 explain as follow: 1) the ratios of external debt or its PV or debt service to GDP or exports show capability of debtors in a package of economy environtment to pay back debt and its interest, 2) The ratios of debt service or its PV to budget revenue ratio show capability of government's intervention with fiscal policy to inject or participate for solving external debt problem when debtors in the economy are having a potential default credit.

Table 2.2. DSF Indicators and Thresholds

DSF Indicators and Tresholds			
Indicators	**Assessment of Institutional Strenghth and Quality of Policies**		
	Poor	**Medium**	**Strong**
PV DEBT/GDP	30%	40%	50%
PV DEBT/EXSPORTS	100%	150%	200%
DEBT SERVICE/EXPORTS	15%	20%	25%
PV DEBT/BUDGET REVENUE	200%	250%	300%
DEBT SERVICE/BUDGET REVENUE	25%	30%	35%

Source : BWI. 2009. PV : present value

For the quality policy and institutions, countries are classified to become 3 classifications, such as poor, medium, and strong. The classification is measured by the World Bank's IDA Resource Allocation Index (IRAI). The World Bank (2014) stated that countries are classified as 1) strong quality if they have overall IRAI equal or more than 3.75, 2) medium quality if they have overall IRAI between 3.25 and 3.75, and 3) poor quality if their overall IRAI equal or to less than 3.25.

IRAI is based on the results of the annual Country Policy and Institutional Assessment (CPIA) exercise that covers the IDA eligible countries (the World Bank. 2014). The CPIA rates countries are measured by a set of 16 criteria grouped in four clusters: (a) economic management; (b) structural policies; (c) policies for social inclusion and equity; and (d) public sector management and institutions. Table 2.3 shows the IRAI scores for some countries.

Beside of the DSF, this paper also uses some additional indicators to increase the quality of analysis. They are current account of BoP, characteristic of exchange rate of rupiah. This paper also analyzes more detail.

Table 2.3. IRAI Scores

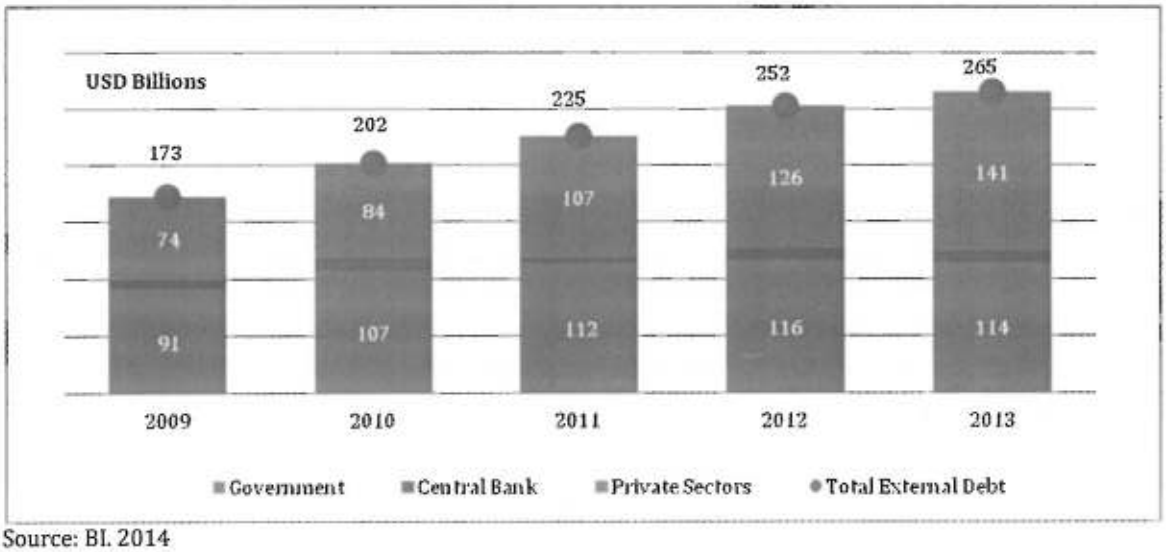
Country	Value	Year
Georgia	4.42	2011
Armenia	4.07	2011
Vietnam	3.73	2011
India	3.72	2011
Azerbaijan	3.68	2010
Indonesia	3.68	2006
Nigeria	3.43	2011
Cambodia	3.41	2011
Lao PDR	3.36	2011
Papua New Guinea	3.30	2011
Bangladesh	3.28	2011
Pakistan	3.07	2011
Afghanistan	2.68	2011

Source: the World Bank. 2006-2011

IV. ANALYSIS AND DISCUSSION

4.1. External Debt's Performance

As stated in the introduction, external debt of Indonesia tends to increase. During periods 2009 – 2013, there was a growth of external debt around 11.4% p.a. It was happened caused by private sectors that were more aggressive to increase their debt than some previous years. During the same periods, private sectors' debt increased 17.9% p.a. Government also contributed in an increased debt. Government's external debt grew 6.1% a year in average although it decreased 1.6% in 2013.



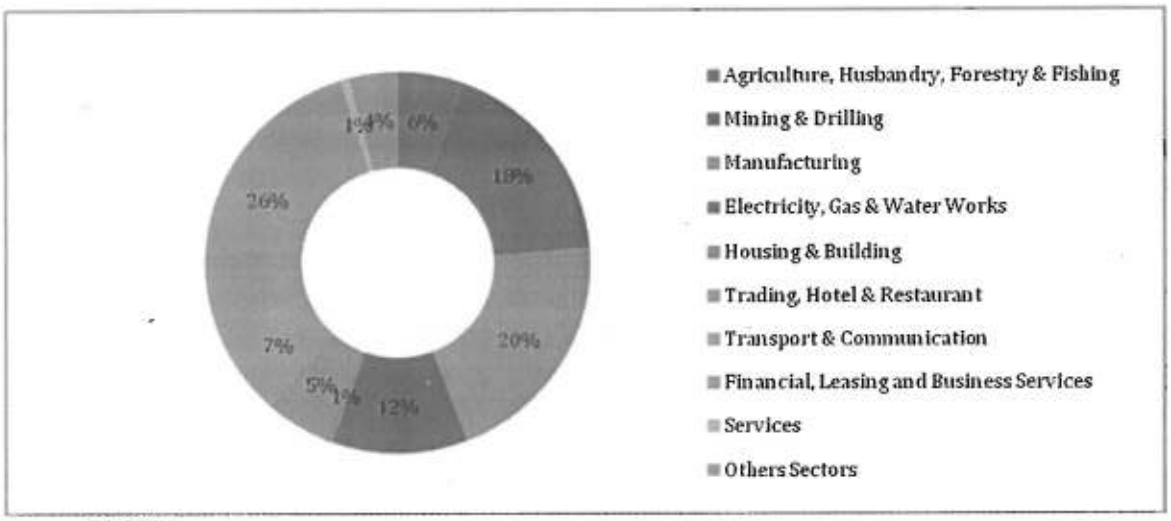
Source: BI. 2014

Figure 4.1. Growth of External Debt.

Based on remaining maturity, external debt is classified to become short term debt (≤ 1 year) and long term debt (> 1 year). During period 2009 - 2011, Government external debt dominated national external debt. However, in 2012 and 2013, private's external debt increased and dominated national external debt. Per 31 December 2013, short term debt was around USD 56,662 million or 21.4% from

total external debt, and long term debt was around USD 208,331 million or 78.6% from total external debt. From short term debt, private sectors dominated around 72.6% or USD 41,159 million, but for long term debt private sector contributed 48.1% or USD 100,286 million. In total of external debt, private sector dominated 53.4%, while Government and Central Bank contributed 43.1% and 3.5% respectively. A domination of private sectors to total external debt can put Indonesia economy had a high pressure related insolvency risk of external debt. It can be happened because private sectors are more sensitive to exchange rate risk, interest rate risk, commodity price risk, their own operational risk, and etc than Government and Central Bank.

Regarding private sectors and economic sectors, external debt in the end of 2013 was dominated by four sectors, such as financial, leasing, and business services (26%), manufacturing (20%), mining and drilling (18%), and electricity, gas & water works (12%). In the view of portfolio, those percentages also show that external debt was spread evenly. Detail information is showed in Figure 4.2.



Source : BI. 2014

Figure 4.2. External Debt of Private Sector Based on Economic Sector Per 31 December 2013.

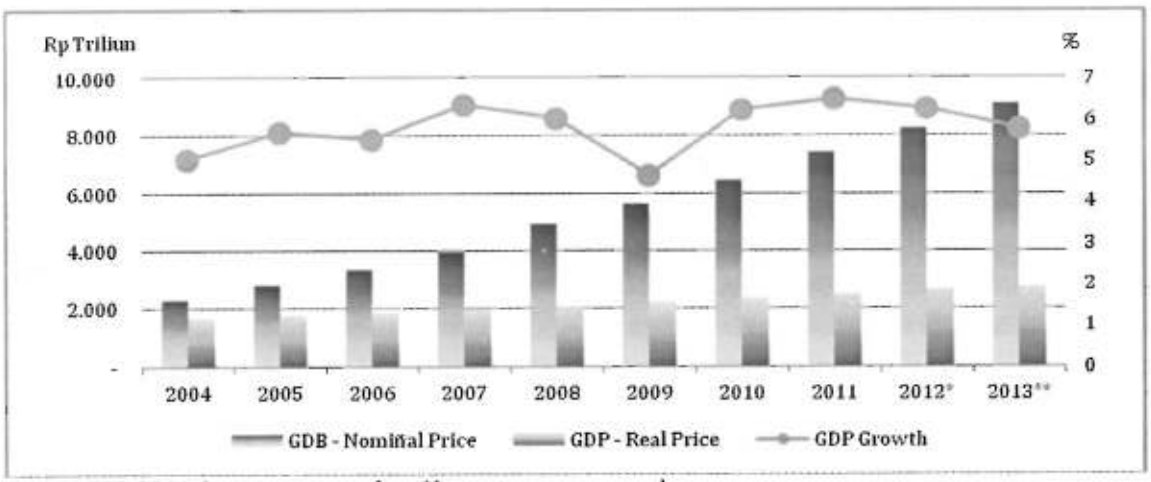
Based on the currency, external debt of private sectors per 31 December 2013 was dominated by USD significantly around 90.1%. Then, Yen and IDR contributed by 5.1% and 3.1%. The remaining is Euro, Pound Sterling, Yuan, and others currencies. The Domination of USD shows that the portfolio of external debt is no good enough and tends to have high exposure of exchange rate risk, especially a fluctuation of USD exchange rate to Rupiah. Normally, appreciation of USD to Rupiah means that debtors will have more much debt than before.

Based on institution of private sector, bank contributed 17.1% and nonbank contributed 82.9% from total external debt of private sectors. If non bank is break down to nonbank financial enterprise and nonfinancial enterprises, those kind of non banks were contributed 5.5% and 77.5% respectively from total external debt of private sectors. Then, from nonfinancial enterprises, SOEs contributed 14.7%, foreign company 7.5%, joint venture company 28.7%, and private national company 26.6%. If this condition is linked with foreign debt policy in Indonesia, where nonfinancial enterprises and non-SOEs are uncontrolled institution regarding foreign debt, there is uncontrolled external debt by Government or Central Bank around 62.7% from total private sector or USD 88,698 million. This condition shows that there is an increased default risk of external debt.

4.2. GDP and External Debt

4.2.1. Gross Domestic Product Performance

Indonesia has a good performance of GDP. In 2004 -2013, GDP grew 5.8% a year in average. The lowest growth was in 2009 by around 4.63%, and the highest was in 2011 by around 6.49%. From money's value perspective, both nominal GDP and real GDP increased from 2004 to 2013. Nominal GDP increased 295.7% or jumped from Rp2,295,826.20 billion in 2004 to Rp9,083,972.20 billion in 2013, and real GDP also grew 68.8%, increased from Rp1,656,516.80 billion in 2013 to Rp2,770,345.10 in 2013. An illustration of GDP's growth can be looked in the Figure 4.3.



Source: BPS. 2014. * temporary number, ** very temporary number

Figure 4.3. Growth of GDP.

If we looked in economic sectors that contributed in nominal GDP, we found that manufacturing industry gave the biggest contribution by 24.6% in average during 2009 to 2013. Then it was followed by agriculture, livestock, forestry and fishery by 14.8% in average, and trade, hotel & restaurants by 13.8% a year in average. This condition could be showed that Indonesia' economy depended on the manufacturing industry performance although agriculture livestock, forestry and fishery still had an important role on the economy. Table 4.1. describes percentage of contribution for every economic sector.

Table 4.1. Contribution of Economy Sector to GDP

Industrial Origin	2009	2010	2011	2012*	2013**
Agriculture, Livestock, Forestry and Fishery	15.3	15.3	14.7	14.5	14.4
Mining and Quarrying	10.6	11.2	11.8	11.8	11.2
Manufacturing Industry	**26.4**	**24.8**	**24.3**	**24.0**	**23.7**
Electricity, Gas & Water Supply	0.8	0.8	0.8	0.8	0.8
Construction	9.9	10.3	10.2	10.3	10.0
Trade. Hotel & Restaurants	13.3	13.7	13.8	14.0	14.3
Transport and Communication	6.3	6.6	6.6	6.7	7.0
Finance, Real Estate and Business Services	7.2	7.2	7.2	7.3	7.5
Services	10.2	10.2	10.6	10.8	11.0

Source: BPS. 2014. Note: * Preliminary figures ** very preliminary figures

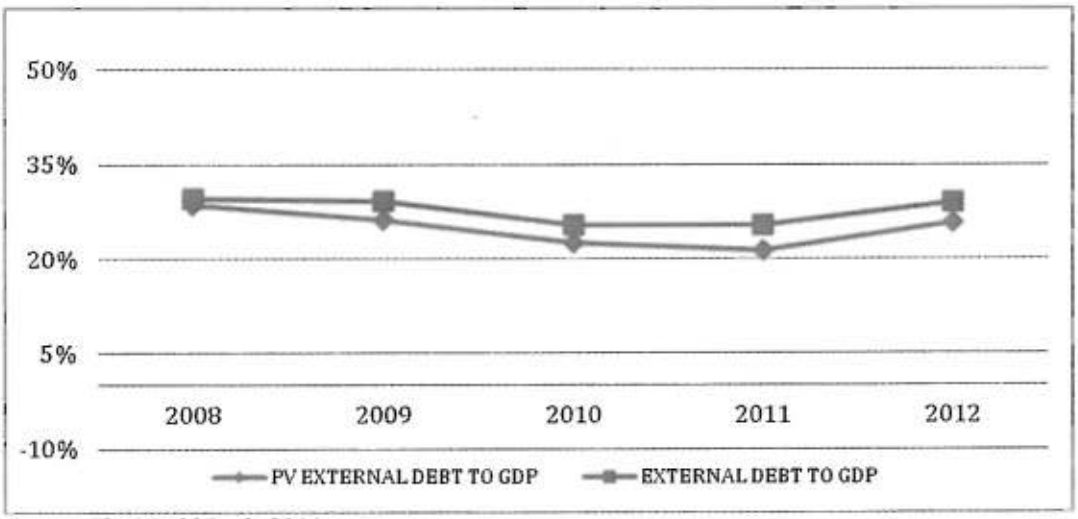
More detail about manufacturing industry, it could be found that sub sector of Non-Oil & Gas Manufacturing Industry dominated in contribution of this sector. It contributed 86.7% p.a. for manufacturing industry, and the remaining contribution or 13.3% was Oil & Gas Manufacturing. Non-Oil & Gas Manufacturing Industry also had a significant contribution for GDP because it contributed 21.2% p.a. for GDP. In addition, this sub-sector had a good growth by 10.4% p.a. during 2009-2013.

In the sub sector of nonoil & gas manufacturing, there are 3 main sub sub sectors that had main contribution. Firstly, it was food, beverages, and tobacco Industries, and contributed to the sub sector around 35.0% p.a. Secondly, it was transport equipment, machinery & apparatus industries that contributed 27.6% p.a. Thirdly, It was fertilizers, chemical and rubber products industries that contributed around 12.5% p.a.

Based on the historical analysis above, it can be taken an underline that Indonesia should be predicted to have a potential ability to pay the external debt. However, it is for short and medium term. In the long term, it is heavy challenge. It will be happened because Indonesia economy depends on manufacturing industry and agriculture, livestock, forestry& fishery sectors which this product of thus sectors has less competitiveness than foreign product. More detail about domestic product's competitiveness will analyze in the next topic of export-import performance.

4.2.2. External Debt to GDP Ratio

External debt to GDP ratio of Indonesia grew gradually until 1997. Then, it jumped to 158.69% in 1998 from 63.19% in 1997 (The World Bank. 2014). A high growth of it in 1998 was one the effects of Indonesia's loan from IMF as part of economy recovery effort and a decreased GDP. After 1998, economy has grown until now so the ratio has decreased. However, if our views focus on period 2008-2012, external debt to GDP ratio were relatively stable. The latest two years, the ratio reached 29.0% in 2012 (The World Bank. 2014) and 30.3% in 2013 (BI. 2014).

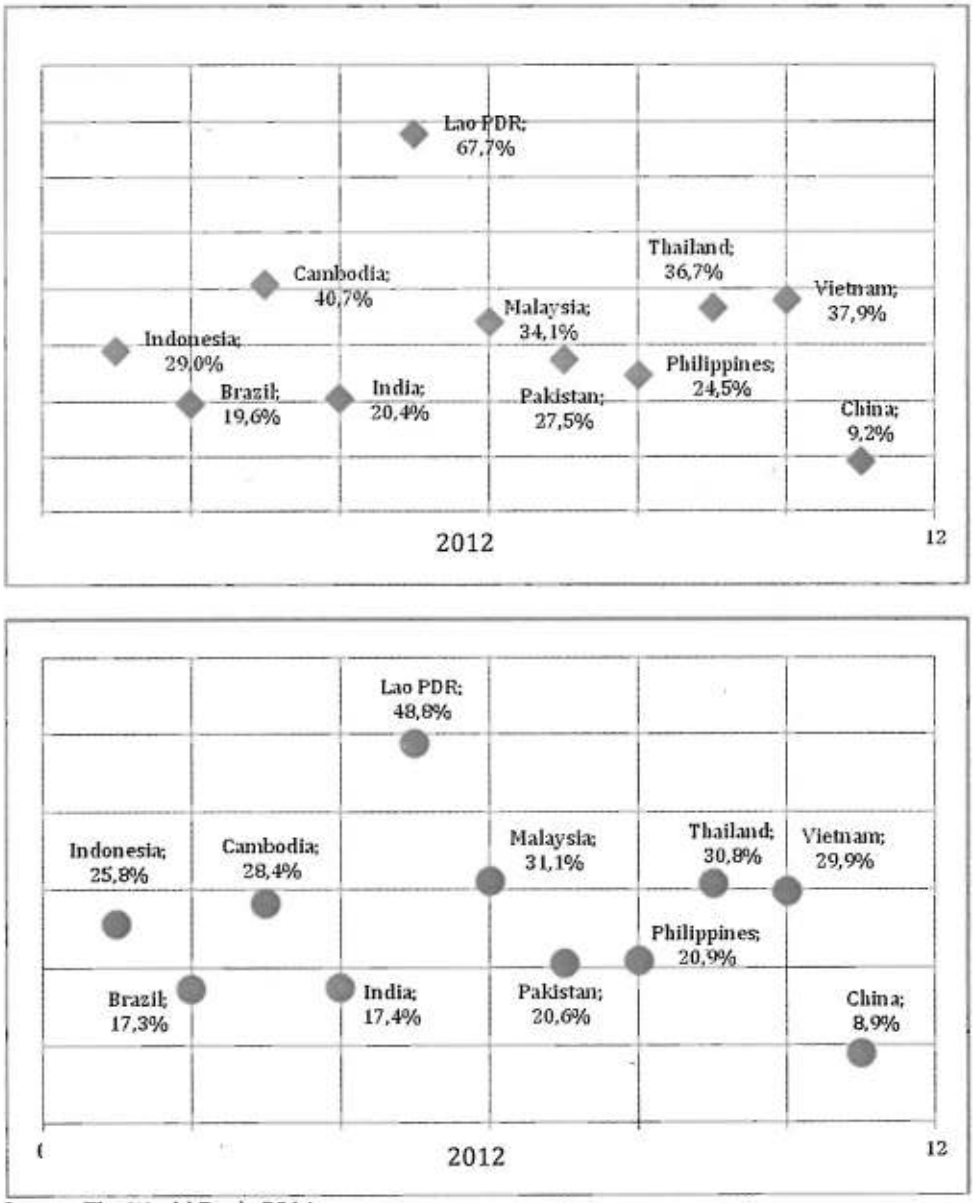


Source: The World Bank, 2014

Figure 4.4. Movement of External Debt to GDP Ratio.

The PV external debt to GDP ratio also showed a same trending although the ratio was under external debt to GDP ratio. It was stable at around 24.8% in average during period 2008-2012, and the ratio reached 25.8% in 2012. Finally, if this ratio compares to DFS threshold (< 40%), it can be concluded that Indonesia's external debt is in **solvency position.**

In comparison with some countries' external debt ratios in the world, Indonesia's ratios were in the midle position. It was better than LAO PDR, Cambodia, Vietnam, Thailand, and Malaysia. See Figure 4.5.



Source: The World Bank. 2014

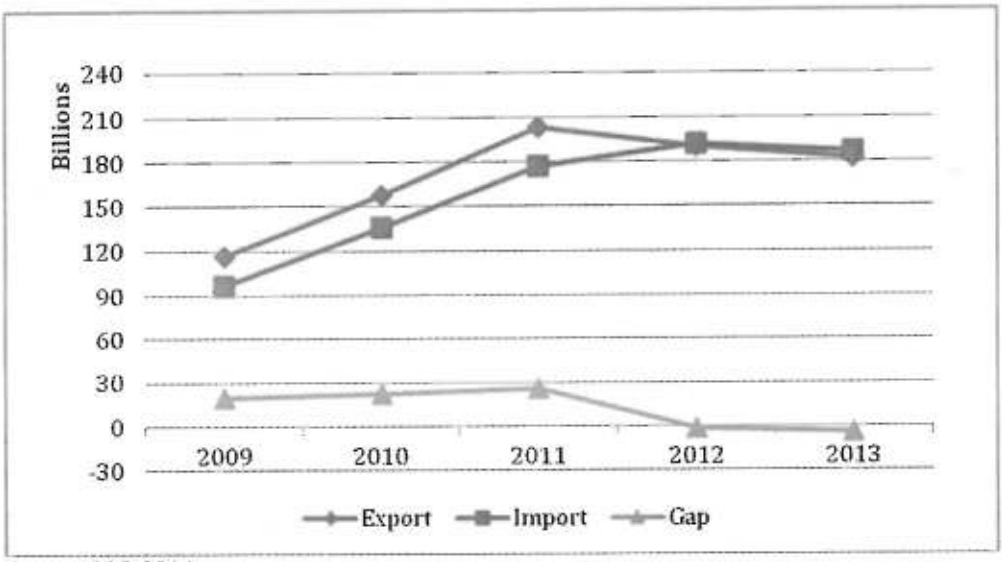
Figure 4.5. External Debt to GDP Ratio & PV External Debt to GDP Ratio In 2012.

4.3. Export – Import and External Debt

4.3.1. Export and Import Performance

At the glance, export and import performance showed the same trending as illustrated in the Figure 4.6. However, the import showed a better performance than the export. In the 2009-2011, the export grew up, but export performance showed a declining in the last two years. The export in 2013 reached USD182.5 or decreased around 3.9% from 2012, and in 2012 it also declined around 6.6% from 2011. Whereas, the import grew up in 2009-2012, just in 2013 it declined to USD186.6 billion or 2.6%

from 2012. As implication, there were deficit export both in 2012 and 2013. In 2013, the deficit was USD 4,076.87 million, while in 2012 it was USD 1,659.15 million.



Source: BPS. 2014

Figure 4.6. Movement of Export and Import.

Declining export in 2012 and 2013 are caused especially by declining export of oil and gas, industry product, and mining product. In the last two years, oil and gas was decreased around USD 4,487.37 million (-10.8%) in 2012 and USD 4,357.45 (-11.8%) in 2013. Industry product went down by USD 6,064.40 (-4.96%) in 2012 and USD 3,093.60 (-2.66%) in 2013. In addition, mining product declined by USD 3,322.10 (-9.59%) in 2012 and USD 170.40 2013 (-0.5%) in 2013.

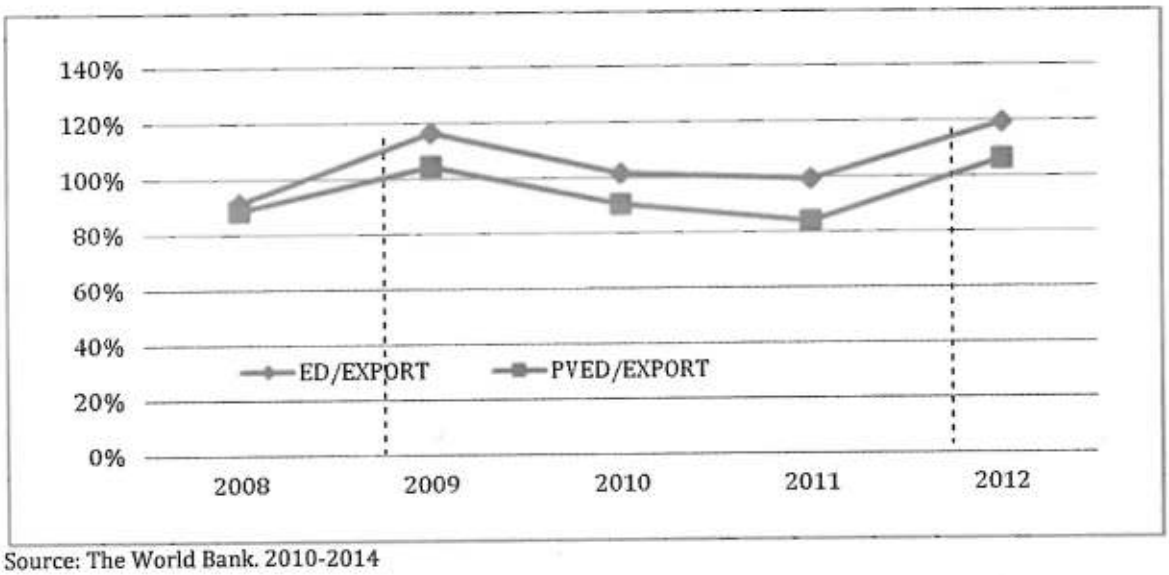
In the import side, an increased import in 2012 was caused mainly by raw material and capital goods that increased USD 9,191.7 million or grew 7.02% from 2011 and USD 5,046.40 million or grew 15.2% from 2011 respectively. Imported raw material dominated by an increased of raw materials for industry (processed) by USD 6,027.40 million or 11.3% and fuel by USD 2,099.30 million or 17.5% from previous year, whereas import of capital goods (exclude transportation equipment) pressured capital good to increase. In addition, a decreased import occurred in 2013 especially was as effect of capital goods that declined by USD 6,622.90 million.

Some products should be concerned regarding the prospect of export and import in the future. Firstly, it is industry product. A decreased industry product can be caused by losing of competitiveness Indonesia's industry product from foreign industry product. Industry products were just as winner for domestic market for a long time, and do not enough experiences to compete with foreign products. Secondly, it is imported fuel. Indonesia's crude oil product has declined so there is shortage of fuel in domestic. However, Indonesia still has much natural gas, and much cheaper than crude oil. It is the best idea if conversion primary energy usage from crude oil to natural gas will be implemented. Government has had difficulty to implement it because in other side Government has implemented fuel subsidy policy. As effect of fuel subsidy, in the domestic market natural gas is a losing competitiveness from fuel so the demand of fuel can't be controlled and tend to increase. Finally, if fuel consumption is not controlled, imported fuel can't be avoided, and will pressure the balance of payment (BoP).

4.3.2. External Debt to Exports Ratio

Figure 4.7 shows the movement of external debt to export ratio and present value (PV) of external debt to export ratio during the period 2008-2012. These ratios showed a fluctuation, and in average

105.5% p.a for external debt to export ration and 94.4% p.a for PV external debt to export ratio. The highest performance occurred in 2012 around 119.3% for external debt to export ratio and 106% for PV external debt to export ratio. Those were happened as effect of a decreased export performance and increased external debt in the contrary.

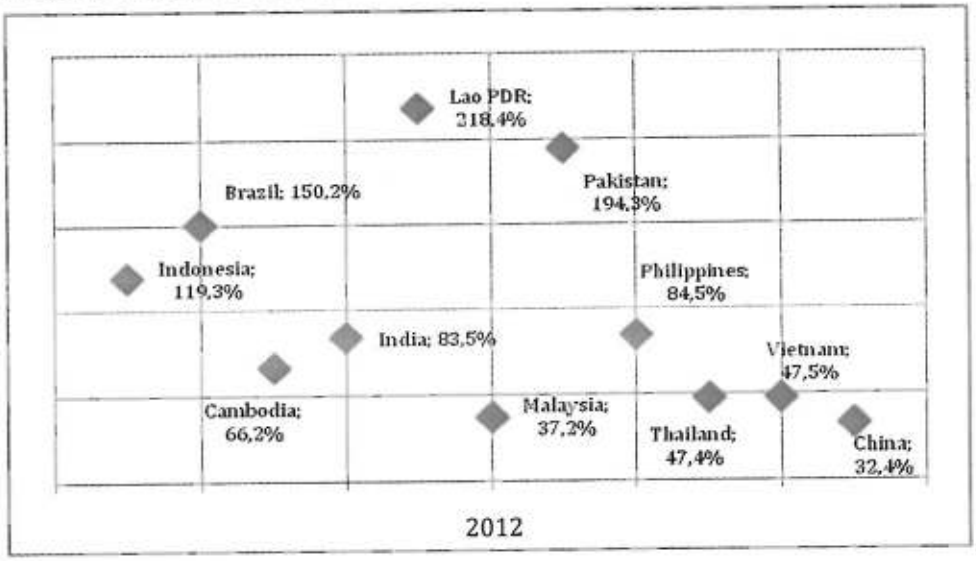


Source: The World Bank. 2010-2014

Figure 4.7. The Movement of External Debt and Its PV to Export Ratios.

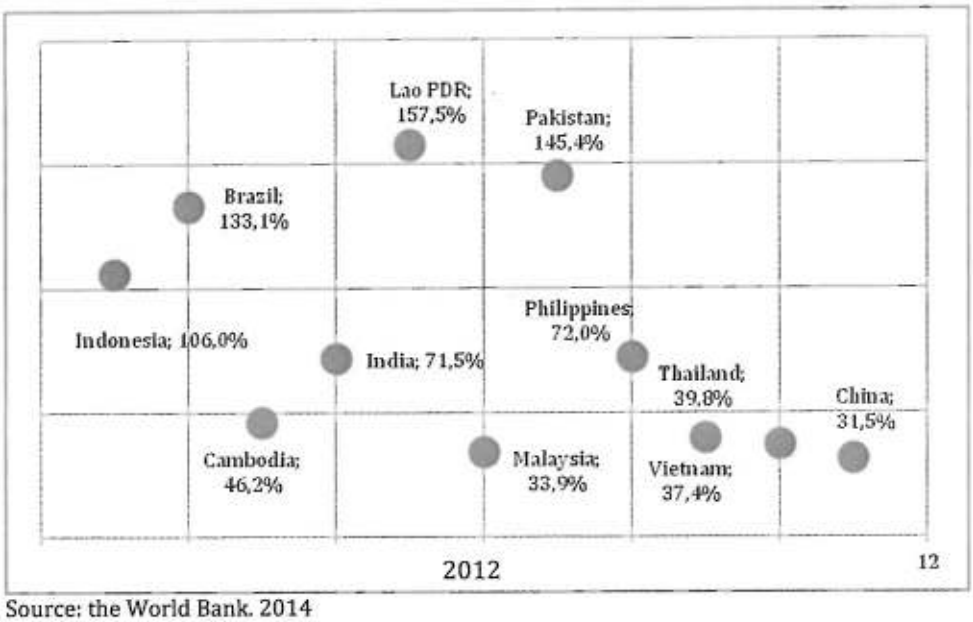
Based on these ratios in 2012, those ratios showed a good performance for Indonesia regarding its capacity to repay the external debt. External debt can be funded for less than 2 years with an assumption that import is ignored. Futhermore, if PV of external debt to exports ratio compare to DSF threshold, Indonesia also still under threshold or 150%, or it can be underlined that **Indonesia is in solvency position**.

There was a different performance if those ratios in 2012 compare with some countries' ratios as illustrated in Figure 4.8 & Figure 4.9, Indonesia was in bad enough condition. Those Indonesia's ratios were higher than India, Philippines, Cambodia, Thailand, Vietnam, Malaysia, and China. Indonesia was just under LAO PDR, Pakistan, and Brazil.



Source: the World Bank. 2014

Figure 4.8. External Debt to Export Ratio 2012 of Indonesia and ASEAN Plus.

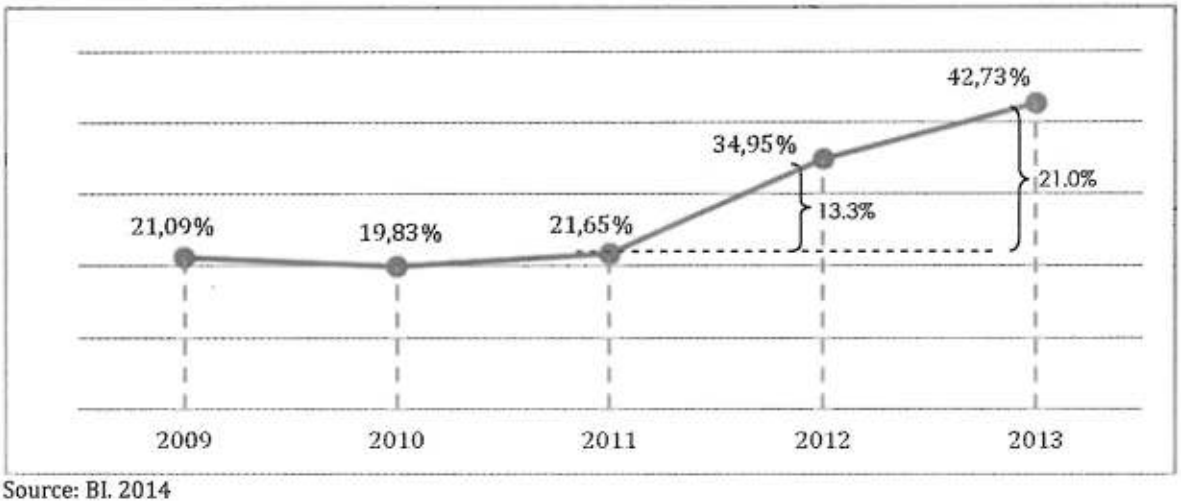


Source: the World Bank. 2014

Figure 4.9. PV External Debt to Export Ratio 2012 of Indonesia and ASEAN Plus.

4.3.3. External Debt Service to Export Ratio

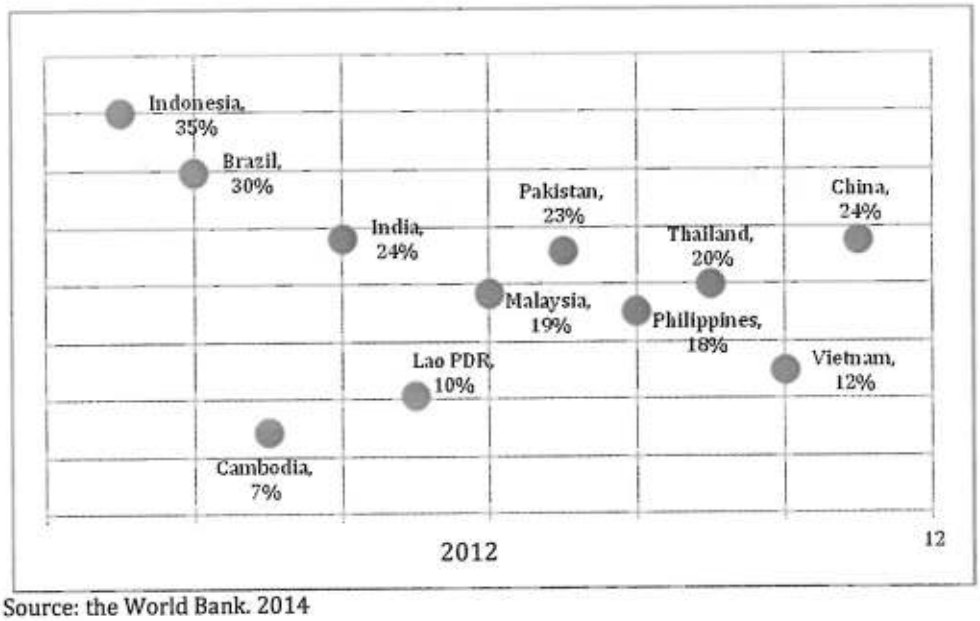
Regarding liquidity capability, export value can be related it by debt service to export ratio called debt service ratio (DSR) indicator. The ratio shows a capability of a country to fund external debt and interest when the debt due date (debt service) from its export value. Based on the BI's data, there was a growth around 28.05% p.a. during periods 2009-2013. This growth was contributed significantly from an increased DSR in 2012 by 13.3% and 2013 by 7.78% from previous year. It happened caused by the decreasing of export value during the thus two years and the increasing of debt service. In 2013, the DSR showed that 42.03% of export value or around USD 92.6 billion was used to pay principal and interest of external debt. This movement of DSR showed that liquidity risk increased. Futhermore, this ratio is also above the DSF threshold or more than 20%. It means that **Indonesia is in the insolvency position.**



Source: BI. 2014

Figure 4.10. Debt Service To Export Ratio.

In comparison with some countries, Indonesia's DSR showed at not a good performance. It was the highest ratio than all ratios of countries of ASEAN Plus as showed by Figure 4.11.

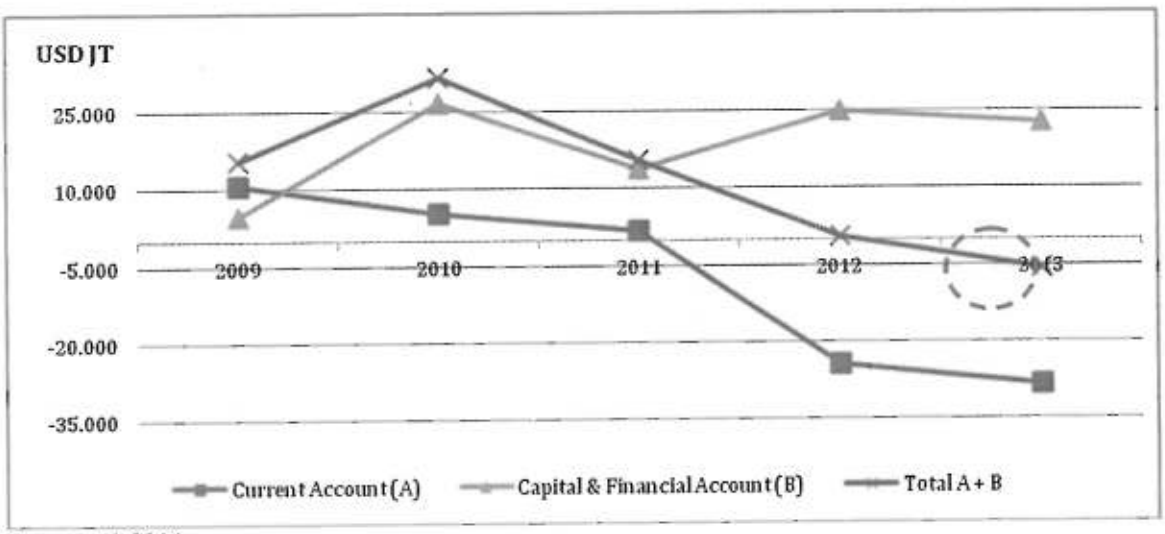


Source: the World Bank. 2014

Figure 4.11. DSR of Indonesia and ASEAN Plus in 2012.

4.4. Balance Sheet of Payment and External Debt

The deficit performance of export automatically pressured to current account balance (CA). The Indonesia of Central Bank (2014) reported that in the periods 2012 - 2013, Indonesia had deficit current account around USD 24,418 million in 2012 and USD 28,450 million in 2013. Although CA had deficit in the two years, the balance of payment (BoP) had deficit just in 2013 by USD 5,719 million. It occurred caused a good performance of capital & financial account (CFA) when CFA increased in 2012 from previous year.



Source : BI. 2014.

Figure 4.12. Movement of Balance of Payment.

Regarding liquidity capability too, the graph above showed that in the 2013 and 2012, in the CA, there were not remaining positive balance of net foreign inflow to Indonesia. It means that the foreign cash flows from export were not enough to pay import. It was automatically not enough to pay external debt service. External debt service in thus years could be paid because there were positive foreign cash inflow from capital and financial account especially from foreign direct investment and issued new

global bond and new loan by Government and private sectors. Thus condition showed as signal that the liquidity risk for external debt increased.

4.5. Budget Revenue and External Debt

During periods 2008 – 2012, total revenue increased 9% p.a. in average. However, the spending grew more or around 11.4% p.a. so the deficit tended to increase and grow 541.2%. This growth mainly was caused by a growth in 2009 that grew 2,050.3% from 2008. Table 4.2 shows a performance summary of national budget from 2008 to 2012.

Table 4.2. The Summary of Realized National Budget (Rp. Billion)

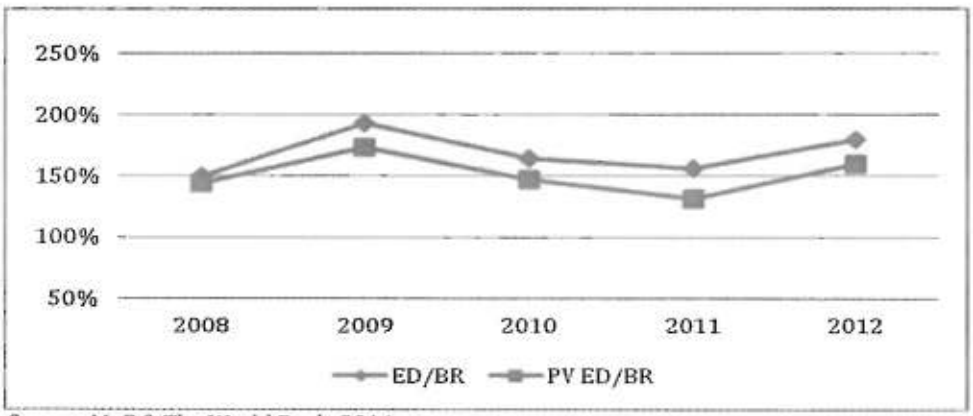
Description	2008	2009	2010	2011	2012
Total Budget Revenue*	981.609,4	848.763,2	995.271,5	1.210.599,7	1.338.109,6
Total Spending	985.730,7	937.382,1	1.042.117,2	1.294.999,1	1.491.410,2
Surplus (Deficit)	-4.121,3	-88.618,9	-46.845,7	-84.399,4	-153.300,6
Total Financing	84.071,7	112.583,2	91.552,0	130.948,9	175.158,2

Source: Ministry of Finance. 2014. * include grant

To fund the budget deficit, Government issued government bond in domestic and abroad market, and got also loan from bank and financial institutions from domestic and abroad. The consquency was the nominal debt of Government increased. As fact, total debt of government reached Rp2.371,39 trillion in 2013, or grew 19.9% from the previous year or 2012.

Moreover, national budget is facing some problems cuased fiscal space of national budget that is limited and not flexible. First problem is mandatory spending, such as education budget that is formulated by 20% of spending. The second problem is uncontrolled energy subsidy budget (fuel subsidy and electricity subsidy). Ministry of Finance reported that energy subsidy reached Rp.94.6 trillion in 2009, then increased to Rp.306.5 trillion in 2012. This subsidy budget tends to increase year by year caused by increased consumption of fuel and electricity, depreciation of Rupiah, and increased crued oil price. Government has a difficulty to control it because it can be an effect of politic interest.

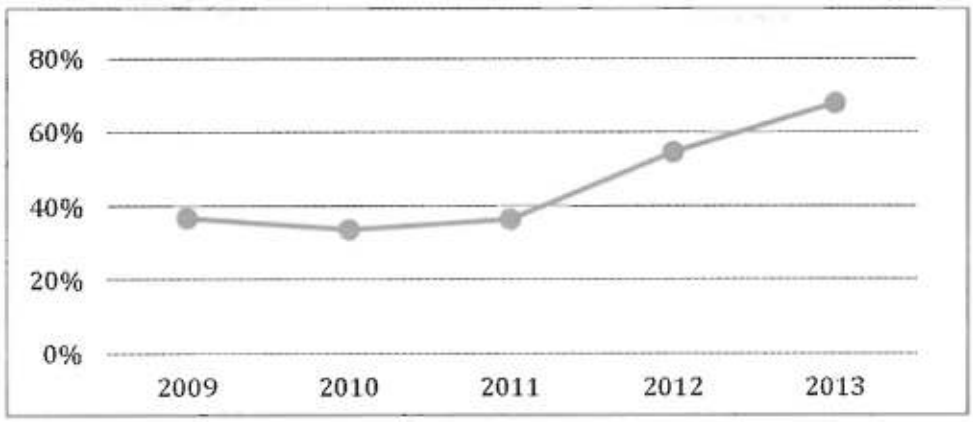
Regarding with external debt, external debt and its preseent value can compare with budget revenue (exclude grant) to know capacity of government to control external debt condition. Figure 4.13 shows the both ratio of external debt to budget revenue and PV of external debt to budget revenue. During periods 2008-2012, Those ratios reached 168.4% p.a for external debt to budget revenue, and 150,8% p.a for PV of external debt to budget revenue ratio. In addition, based on DSF threshold (< 250%), it can be concluded that Indonesia is in **solvency condition** regarding national external debt.



Source: MoF & The World Bank. 2014

Figure 4.13. External Debt and PV External Debt to Budget Revenue Ratios.

It is different performance if it is looked based on debt service to budget revenue ratio. Indonesia is in **insolvency condition** related to its external debt, where debt service to budget ratio around 54.7% in 2012 and 68.0% in 2013. These ratios are over the DSF threshold or < 30%.



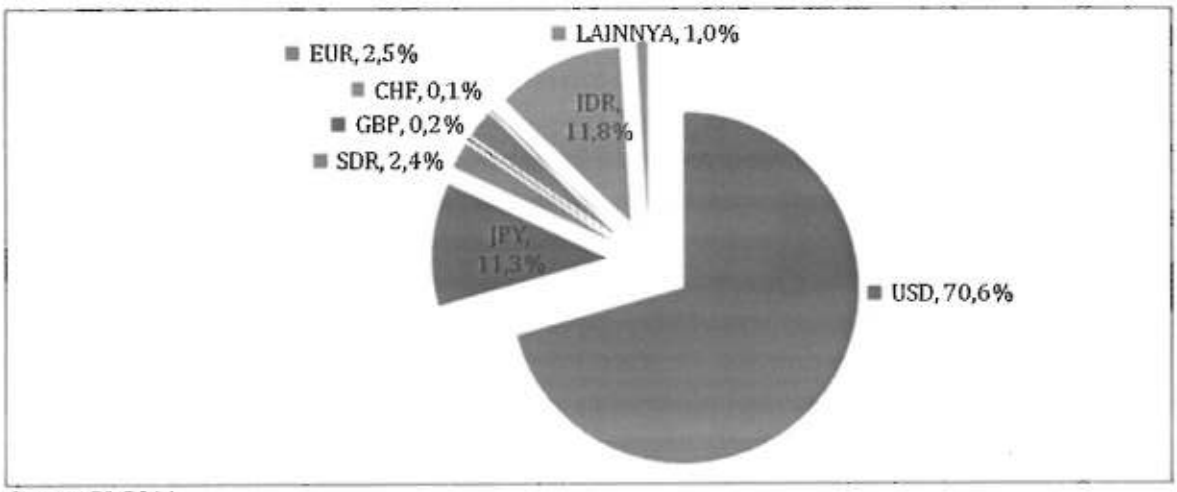
Source: MoF & BI. 2014

Figure 4.14. Debt Service to Budget Revenue Ratio.

4.6. Exchange Rate Performance

Indonesia uses Rupiah as exchange currency in domestic market, so Indonesia's citizens pay and buy with Rupiah. When Indonesia has no much foreign currency reserve as result of net export activities, payment of external debt will have a problem. Indonesia should change Rupiah to get foreign currency especially USD. When the demand of USD increases continuously, Rupiah will depreciate. The effect is the external debt will be paid more expensive when it will be due date in the future than before. This is one of risk factors of external debt.

Regarding external debt, BI (2014) reported that portfolio of external debt's currency mainly consist of USD, Rupiah, and Yen. Figure 4.15 shows that almost or 70.6% of external debt in the end 2013 used USD. Yen just was 11.3%, and the remaining were under 3%.

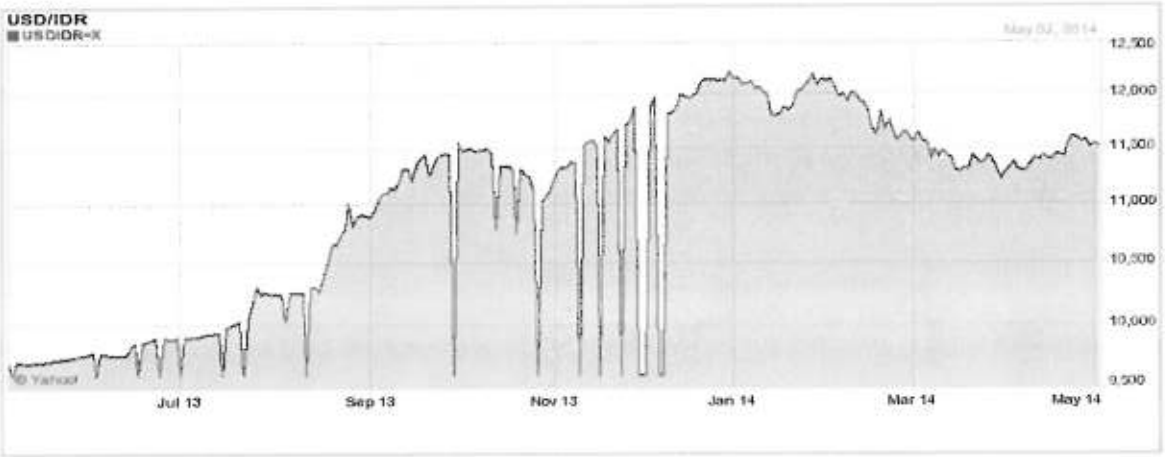


Source: BI. 2014

Figure 4.15. Composition of Indonesia's External Debt Based on The Currency in 2013.

High percentage of USD showed high risk for Indonesia because Rupiah to USD exchange rate was very fluctuation, and Rupiah tends to depreciate. It can be seen in the Figure 4.16. During September 2013 to May 2014, Rupiah exchange rate was above Rp.11.000 per USD. If this exchange rate will stand

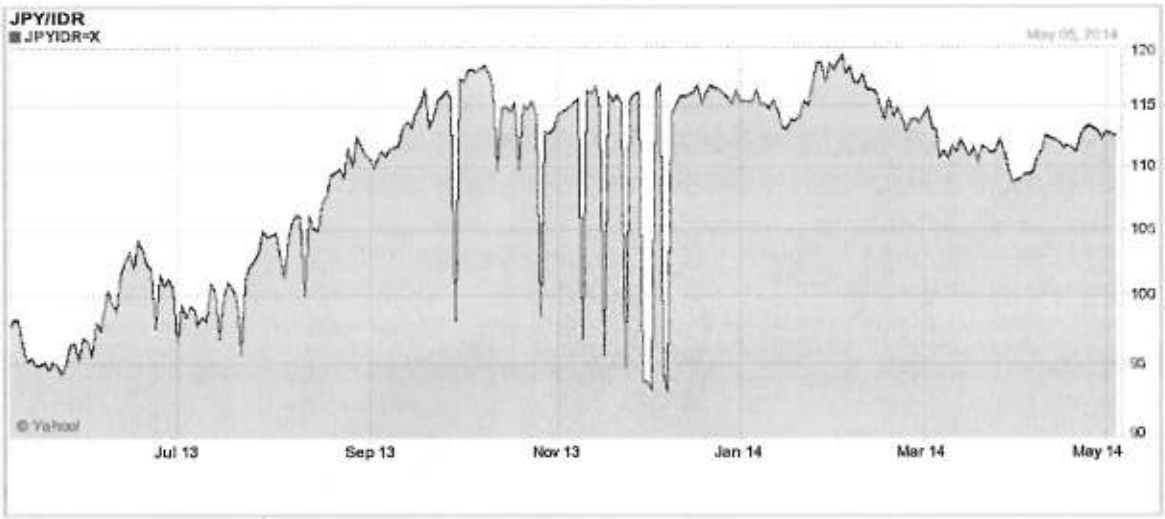
in Rp.11.000 per USD, the external debt that issued in July 2013 and before will be paid more expensive. It will make debtors get suffer or loss.



Source: Finance yahoo.com. 2014

Figure 4.16. Rupiah to USD Exchange Rate Movement.

Yen to Rupiah exchange rate was also very fluctuation as illustrated in the Figure 4.17. However, exchange rate USD to Rupiah and Yen to Rupiah was different in interval of fluctuation. USD to Rupiah was in hundreds till thousands or around between Rp.9.000 and Rp.12.300 per 1 USD, while Yen to Rupiah was in teens or around between Rp.96 and Rp.107 per 1 Yen. Therefore, the exchange rate Rupiah per Yen will be not high risk.



Source: Finance yahoo.com. 2014

Figure 4.17. Rupiah to Yen Exchange Rate Movement.

V. CONCLUSIONS AND POLICY RECOMMENDATION

5.1. Conclusion

Based on analysis above, it can be concluded that Indonesia can be **near with insolvency condition** regarding with payment capability for external debt. It can be looked at DSF indicators for Indonesia that showed that from six DSF indicators, Indonesia has two bad indicators with description as follow: 1) PV external debt to GDP ratio was 25.8%, it was less than DSF threshold or 40%, 2) PV of

external debt to exports ratio reached 106% in 2012 and still under the threshold of DSF 0r 150%, 3) External debt service to exports ratio reached 34.95% in 2012, and it was more than DSF threshold or 20%, 4) PV of external debt to budget revenue ratio in 2012 was 150.8%. It was less that DSF threshold or 250%, and 5) Debt service to budget revenue ratio was 54.7% in 2012, and it was more than DSF threshold 30%.

Furthermore, based on additional analysis, such as condition of current account of BoP and fluctuation of Rupiah exchange rate, Indonesia deserves to get **warming related to its payment capability**. Indonesia is having a deficit current account, and if it will be occurred continuously, it can effect at a decreased availability foreign currency in the domestic money market and a foreign currency reserve. Then, it can effect to Rupiah exchange rate increase or depreciation. Finally, the depreciation causes external debt more much that must be paid by debtors, and caused debtors default.

5.2. Policy Recommendation

Based on the analysis result, there are some recommendations that can be considered by both Government and Central Bank.

The first is to improve liquidity or availability of foreign currency (USD). There are some recommendations that could be considered by Government and Central Bank. The first is to implements some existing Bank Indonesia's regulations especially PBI No. 13/20/PBI/2011 about an obligation to put the result of export and loan of non bank enterprises in domestic foreign exchange bank. The second is to keeps the foreign investors feel secure especially investors in capital market. The third is that Government and Central Bank should try to rollover their short term external debt or pay back external debt by issuing new external debt, and recommend to private sectors to do the same way. The fourth is that Indonesia should attract foreign investors to invest in Indonesia or increase foreign direct investment performance.

The second is too manage external debt of nonfinancial enterprises and non SOEs. As stated in the sub title of Indonesia Foreign Debt Policy, there is no regulation that can use to control Non Financial Enterprises & Non SOEs to obtain external debt. In addition, data of external data showed that Non Financial Enterprises & Non SOEs had a high contribution to total external around 33.5% and 62.7% of total external debt of private sector. This condition showed that there is a much uncontrollable external that can increase a default risk of external debt. Therefore, Central bank and Government should control the external debt of thus enterprises.

The third is to increase export and decrease import. Two recommendations above will be useless if Indonesia has a deficit export-import continuously. It happens because there is not foreign currency inflow to Indonesia. Therefore, to improve solvency of external debt, Indonesia should improve the performance of export-import to become surplus. Some recommendations can be considered by government.

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