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# The Effects of European Bilateral Debt Crisis on International Banking Finance Behavior in The Philippines and Indonesia

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**ABSTRACT**

European sovereign debt crisis phenomenon becomes the evidence of unstable economy as impact of financial and banking liberalization that debating with focused about the benefit and cost that will be taken by the flow of international bank lending from European Union (EU) to Philippines and Indonesia. This research is aimed to identify the determination of international bank lending that divide to be push factor and pull factor, and the deepening of contagion effect of European sovereign debt crisis and the opportunity of financial risk mitigation scenario in Philippines and Indonesia. Implementation of analysis method is such as Ordinary Least Square (OLS), Generalized Method of Moment (GMM), and Diagnostic Selection Test. The result of analysis showed that the EU economic turmoil due to bilateral debt crisis caused shocks to the financial markets in the Philippines and Indonesia indicated by the fluctuation of international bank lending in line with the fluctuation of the economic growth of the EU.

JEL Classification: C32; F34; G15; G32.

Key Words: European Sovereign Debt Crisis; International Bank Lending; GMM; Financial Risk Mitigation Scenario.

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## 1. INTRODUCTION

Bilateral debt crisis in 2011 caused instability of member countries of European Monetary Union (EMU) making it be an important historical record of the financial system of each country in the world. This phenomenon gives a picture of the fragility of financial system as a cost to be paid as a result of the ongoing economic globalization (Mishkin, 2008; Gianvity et al., 2010; Arghyrou and Kontonikas, 2011; Majone, 2012; Ponties and Siregar, 2012). Instability in the European Union (EU) region gives its own worry for every country in the world, including the Southeastern Countries which are members of Association of South-East Asian Nations (ASEAN) especially in relation to the existence of banking and financial relationship between two regions. This relationship is shown by the EU banking penetration in the Philippines and Indonesia through international bank lending (Jeanneau and MICU, 2002; Aiyar, 2011; Silalahi et al., 2012), which contracted in the period of the European sovereign debt crisis. It was seen at the value of total claims to the Philippines which declined dramatically, especially in the fourth quarter of 2011. Similarly, Indonesia also experienced a big contraction occurred in the first quarter of 2011 by USD 20.458 million to USD 15.793 million in the fourth quarter of 2011. The slowdown in lending activity of the European Union to the Philippines and Indonesia was caused by the slowdown in economic growth in the home country (Aiyar, 2011, Silalahi et al., 2012), so this indicates a

withdrawal of short-term capital which then indicated that the debt crisis occurred in the EU mainland can give contagion effects through international bank lending to ASEAN countries, especially the Philippines and Indonesia. The indication of the risk transmission of the financial system needs management by a large number of policies as an effort to mitigate the financial risks (Murphy, 2010) in order to minimize the transmitted effects of the crisis in both countries.

To determine the effect of global shock on the international bank lending, it is necessary to investigate first about the determination that is divided into push factors and pull factors (Jeanneau and MICU, 2002; Ponties and Siregar, 2012). Herrmann and Mihaljek (2010), Aiyar (2011), and Silalahi et al. (2012) point out that push factors are the external factors that come from the home country, and pull factors are internal factors coming from the host country. Therefore, based on the phenomena mentioned above, the empirical questions that can be proposed are:

i. How are the effects of the push factors and pull factors on the behavior of international bank lending in the Philippines and Indonesia?

ii. How is the depth of the contagion effect of the European sovereign debt crisis on the behavior of international bank lending and the possibility of financial risk mitigation scenario in the Philippines and Indonesia?

## 2. REVIEW OF LITERATURE

Jeanneau and Micu (2002) tested the determination of international bank lending (IBL) in the years 1985-2000 by dividing the explanatory variables into three parts, namely push factors, pull factors, and other factors which were considered in this study. The aim was to determine IBL causality with several affecting variables by using granger causality test and durbin wu Hausman test. The study was conducted using seven home countries and ten host countries. The conclusion that can be drawn is that the pull factors and push factors significantly affected the amount of lending to emerging markets, except in Venezuela with a variety of causality with different independent variables in each country. By the analysis of dynamic data panel, Ponties and Siregar (2011) emphasize that in the three developed countries as the home countries and five East Asian countries as host countries, IBL determination was examined with years of study ranging 1983-2009. The conclusion is that all variables, including IBL of previous periods, significantly affected IBL to Indonesia, Korea, Malaysia, The Philippines, and Thailand with $\alpha$=10 %. In addition, the increasing local finasial exposure indicated the impacts of financial shock on IBL to the five East Asian countries.

Then Silalahi et al. (2012) in his study with OLS method, fixed effect and GMM generated a conclusion that some variables that affected significantly IBL were, among others, the economic growth rate of the host countries and home countries, global liquidity condition, growth interaction and banking exposures of developed countries, and global risk conditions. However, for the variable of nominal interest rate in both home countries and host countries did not significantly affect the level of IBL to Indonesia and directly transmitted shocks from developed countries to Indonesia by a decrease in lending and indirectly by lending contraction by foreign affiliates.

## 3. RESEARCH METHODOLOGY

*Types and Sources of Data*

The types of data in this study were secondary data in the forms of time series data with quarterly period that began in years 2000Q.I - 2012Q.IV with research objects of the Philippines and Indonesia as the host counties and Italy, Germany and France as the home countries.

*Specifications Model Research*

The models used in this study were adapted from the research models of Jeanneau research and MICU (2002), Ponties and Siregar (2011), and Silalahi et al. (2012) which are transformed into an econometric model to be:

$$IBL_{ijt} = \beta_0 + \beta_1 LNRGDP_{it} + \beta_2 IIR_{it} + \beta_3 EXPO_{ijt} + \beta_4 RGDP_{jt} + \beta_5 EDR_{jt} + \beta_6 IBL_{ij(t-1)} + e_t \quad (1)$$

where:

| | | |
|---|---|---|
| $IBL_{ijt}$ | = | total financing of international bank lending from the home countries (i) to the host countries (j) in period t (Current U.S.$) |
| $LNRGDP_{it}$ | = | Total Gross Domestic Product of home countries (i) in period t (Current U.S.$) |
| $IIR_{it}$ | = | International interest rate benchmark of home countries (i) in period t (%) |
| $EXPO_{iit}$ | = | Banking exposure of home countries (i) in the host countries (j) in period t (%) |
| $RGDP_{jt}$ | = | Gross Domestic Product of home countries (j) in period t (Current U.S.$) |
| $EDR_{jt}$ | = | The ratio of foreign debt to GDP of host countries (j) in period t (% of GDP) |
| $IBL_{ij(t-1)}$ | = | Total financing of international bank lending from the home countries (i) to host countries (j) of previous period prior in the period t (Current U.S.$) |

*Method of Data Analysis*

*Causal Analysis.* This analysis was used to answer the first empirical question with analysis method used in this causal analysis including Ordinary Least Square (OLS) and Generalized Method of Moment (GMM); a simulation of best model selection was conducted through diagnostic selection test with the discerning approach.

*Analysis Method of Ordinary Least Square (OLS)*

Regression analysis with OLS method or the least square is the simplest and most popular analysis in estimating regression parameters. Test with OLS method was performed on model (1) to determine the effect of independent variables on the dependent variables like the concept of determination used in this study (Greene, 2012:225).

*Analysis Method of Generalized Method of Moment (GMM)*

GMM is a method of valuation which is robust estimator with the principle of undertaking the selection of estimated value of the parameters in order that moment of the samples is in line with that of population, that is, equal to zero. Theoretical linkage required is the orthogonality condition between functions of linear or non-linear parameters and collection of instrumental variables. Different from the OLS estimation and MLE, GMM does not require information on the distribution form of residuals (Joundeau, Le Bihan and Galles, 2004). GMM estimation method is done by calculating the minimum value of the objective functions to determine the model validity to the data with the value of the Jacobian Test which generates J-statistics that refers to on the objective functions of GMM estimation (Greene, 2012:468).

*Diagnostic Selection Test*

Simulation of model selection using diagnostic selection test that is focused on non-nested test is to determine the differences in two research models. Wardhono (2004:113) explains that this method is performed when the models that will be selected for this study are classified as non-nested, where one model cannot be used as a special case of the other models. Model specification in equation (1) is split into two models, that is, push factor model and pull factor model by dividing six independent variables into two groups of the factors. The push factor model is presented as follows:

$$IBL_{ijt} = \alpha_0 + \alpha_1 LNRGDP_{it} + \alpha_2 IIR_{it} + \alpha_3 EXPO_{ijt} + e_t \quad (2)$$

While the *pull factor* model is as follows:

$$IBL_{ijt} = \beta_0 + \beta_1 RGDP_{jt} + \beta_2 EDR_{jt} + \beta_3 IBL_{ij(t-1)} + e_t \quad (3)$$

Simulation of model selection is done by the discerning approach by using the Joint Test (J Test) and Joint McKinnon Test (JM Test).

## 4. RESULT AND DISCUSSION

*Results of Estimation by Ordinary Least Square (OLS) Method*

The estimation results above indicated that the size of international bank lending to the Philippines and Indonesia was dominated by the effect of economic growth, the level of banking exposure of the three finance providing

countries, and international bank lending in previous period. Simultaneously, the six variables significantly affected the amount of international banks lending to the Philippines. In addition, the results of all independent variables of 49.4816% and 89.0977% affected the amount of international bank lending to the Philippines and Indonesia, while the rest was affected by other variables outside the model.

**Table 1** Estimation Result for *Ordinary Least Square* (OLS) Method

| | **The Philippines** | **Indonesia** |
|---|---|---|
| C | -31177.45 | -95425.39 |
| | [-4.687703] | [-12.37436] |
| | (0.0000) | (0.0000) |
| $\beta_1$ ($LnRGDP_{it}$) | 3856.041 | 11655.19 |
| | [4.970664] | [12.99637] |
| | (0.0000)* | (0.0000)* |
| $\beta_2$ ($IIR_{it}$) | -6.525450 | 4.810243 |
| | [-0.174377] | [0.123050] |
| | (0.8623) | (0.9026) |
| $\beta_3$ ($EXPO_{ijt}$) | 126065.4 | 545732.0 |
| | [0.428408] | [3.111690] |
| | (0.6703) | (0.0031)* |
| $\beta_4$ ($RGDP_{jt}$) | -0.365480 | 0.182560 |
| | [-1.691047] | [1.589716] |
| | (0.0973) | (0.1185) |
| $\beta_5$ ($EDR_{jt}$) | 10.68041 | -15.58401 |
| | [1.0s65039] | [-1.696049] |
| | (0.2922) | (0.0964) |
| $\beta_6$ ($IBL_{ij(t-1)}$) | 0.288320 | 0.054349 |
| | [2.494126] | [0.809327] |
| | (0.0161)* | (0.4223) |
| F-hitung | [9.815308] | [74.55139] |
| | (0.000000) | (0.000000) |
| Adjusted $R^2$ | 0.494816 | 0.890977 |

1. The numbers without brackets are the regression parameter values for each varuables;
2. The numbers in the square brackets [ ] are t-statistic value for each variables and F-statistic for each countries;
3. The numbers in the brackets ( ) are t-statistic probability values for each variables and F-statistic probability values for each countries;
4. *) was significant on $\alpha = 5\%$.

Source: Thesis Apendix

*Results of Estimation by Generalized Method of Moment (GMM)*

Like criteria for the model validity to the data as the purpose of GMM method that a model can be said valid if the value of J- statistics < $\chi^2$. In The Philippines, the value of Jacobian or J-statistic was 1.91E-39 which was smaller than $\chi^2 = 55.8$. Not far different from that in Indonesia, J-statistic test result was also smaller than $\chi^2 = 55.8$, that is, equal to 2.34E-40. The results of the GMM estimation method are simplified in the following table:

The presentation of the test results by GMM method in Table 1 above shows that economic growth, the banking exposure of finance providing countries, and the previous international bank lending significantly affected the level of international bank lending from European Union to the Philippines and Indonesia. Meanwhile, the level of international interest rate used as a reference which encouraged the provision of financing by Italian, German, and French significantly affected the financing to Indonesia, while it did not to the Philippines.

The results of OLS and GMM tests showed that the decline in economic growth in the European Union led to contraction of international bank lending to the Philippines and Indonesia as a form of capital withdrawal especially due to bilateral debt crisis. The test results also confirmed the results of research by Mihaljek and Hermann (2010) which showed the effect of economic growth in home country on the flow of international bank lending in the selected developing countries including the Philippines and Indonesia. In addition, the EU banking exposure and the previous lending also showed the same effect, in which the level of banking exposure and

previous lending would provide its own confidence level for EU banking to increase the flow of financing to both ASEAN countries. This showed that the increased exposure and the perevious lending means that there was a great confidence to the two countries which then would also increase the flow of international bank lending and showed the stable financing in the Philippines and Indonesia.

**Table 2** Estimation Result for *Generalized Method of Moment Method*

| | **The Philippines** | **Indonesia** |
|---|---|---|
| C | -31177.45 | -95425.39 |
| | [-4.478309] | [-7.498525] |
| | (0.0000) | (0.0000) |
| $\beta_1$ | 3856.041 | 11655.19 |
| ($LnRGDP_{it}$) | [4.735840] | [7.725925] |
| | (0.0000)* | (0.0000)* |
| $\beta_2$ ($IIR_{it}$) | -6.525450 | 4.810243 |
| | [-0.174573] | [0.102110] |
| | (0.8621) | (0.9191) |
| $\beta_3$ ($EXPO_{ijt}$) | 126065.4 | 545732.0 |
| | [0.592178] | [3.238292] |
| | (0.5565) | (0.0022)* |
| $\beta_4$ ($RGDP_{jt}$) | -0.365480 | 0.182560 |
| | [-1.555316] | [1.153389] |
| | (0.1264) | (0.2545) |
| $\beta_5$ ($EDR_{jt}$) | 10.68041 | -15.58401 |
| | [1.208029] | [-1.969466] |
| | (0.2330) | (0.0547) |
| $\beta_6$ ($IBL_{ij(t-1)}$) | 0.288320 | 0.054349 |
| | [2.353541] | [0.546110] |
| | (0.0227)* | (0.5875) |
| J-statistik | 1.91E-39** | 2.34E-40** |

1. The numbers without brackets are the regression parameter values for each variables;
2. The numbers in the square brackets [ ] are t-statistic value for each variables;
3. The numbers in the brackets ( ) are t-statistic probability values for each variables;
4. *) was significant on α = 5%;
5. **) j-statistic values are more less than Chi-Square table = 55,8
   Source: Thesis Apendix

*Diagnostic Selection Test Results*

*Joint test results (J test).* In joint test (J test), push factor model was added with $IBLpull_{ijt}$ regressor as an estimate of international bank lending in the model. Meanwhile, the pull factor model was added with the $IBLpush_{ijt}$ regressor as an estimation from international bank lending in the model. The results of J test for the models of push factor and pull factor can be seen in the table 3.

Table 3 describes that the t-statistic result of IBLpull variable for push factor model in the Philippines is lower than α (α = 5 % = 0.005) which means that push factor model can be accepted as the correct model. While in Indonesia, the t-statistic result of the IBLpull variable for push factor model is greater than α (α = 5 % = 0.005). Besides, the pull factor model also confirmed the same results. Thus, in Indonesian, J test cannot provide the most superior or best model in affecting the level of international bank lending to Indonesia. This suggests that the driving force in the EU economy can affect better the behavior of international bank lending in the Philippines, while in Indonesia it cannot.

*Joint McKinnon Test results (JM Test).* To complete the results of diagnostic selection test by the method of discerning approach to test J test, it is necessary to conduct joint McKinnon test (JM Test), especially for the simulation of model selection which cannot provide exact conclusions. JM Test results are shown in Table 4.

**Tabel 3** Diagnostic selection test result by using joint test (J test) for the Philippines and Indonesia

| The Philippines | | | | | |
|---|---|---|---|---|---|
| **Variable** | **Push Factor Coeficient** | **t-value** | **Variable** | **Pull Factor Coeficient** | **t-value** |
| IBLpull | $\alpha_4$=0.871205 | 3.470386 (0.0011)* | IBLpush | $\beta_4$=1.258568 | 1.611799 (0.1137) |
| Adjusted $R^2$ | 0.329142 | | Adjusted $R^2$ | 0.369620 | |
| J-statistik | 1.17E-41 | | J-statistik | 0.000000 | |
| **Indonesia** | | | | | |
| **Variable** | **Push Factor Coeficient** | **t-value** | **Variable** | **Pull Factor Coeficient** | **t-value** |
| IBLpull | $\alpha_4$=0.666160 | 1.935479 (0.0590) | IBLpush | $\beta_4$=0.036632 | 0.071314 (0.9435) |
| Adjusted $R^2$ | 0.564034 | | Adjusted $R^2$ | 0.507366 | |
| J-statistic | 1.65E-40 | | J-statistic | 2.24E-44 | |

1. The numbers in the brackets ( ) are t-statistic probability values for each variables;
2. *) was significant on α = 5%.

Source: Thesis Apendix

**Tabel 4** Diagnostic selection test by using joint McKinnon test (JM test) for the Philiipines and Indonesia

| Filipina | | | | | |
|---|---|---|---|---|---|
| | **Model Push Factor** | | | **Model Pull Factor** | |
| | **C** | **$\alpha_1$** | | **C** | **$\beta_1$** |
| Koefisien | -0.000306 | 0.204430 | Koefisien | -0.000306 | 0.795570 |
| t-hitung | -4.59E-06 | 0.897951 | t-hitung | -4.59E-06 | 3.494518 |
| Probablitas | 1.0000 | 0.3735[x] | Probablitas | 1.0000 | 0.0010* |
| **Indonesia** | | | | | |
| | **Model Push Factor** | | | **Model Pull Factor** | |
| | **C** | **$\alpha_1$** | | **C** | **$\beta_1$** |
| Koefisien | 4.238225 | 0.002940 | Koefisien | 4.238225 | 0.997060 |
| t-hitung | 0.012173 | 0.014310 | t-hitung | 0.012173 | 4.853533 |
| Probablitas | 0.9903 | 0.9886[x] | Probablitas | 0.9903 | 0.0000* |

[x]) was not significant on α = 5%; *) was singnificant on α = 5%.

Source: Thesis Apendix

Table 4 shows that in the Philippines and Indonesia, the push factor model is the best model where the probability value of t-test coefficient α1 is higher than the degree of error of 5% = 0.05, in other words the value of β1 = 0. This indicates that the driving force of EU economy is bigger than the economic attractiveness of the two ASEAN countries in affecting EU banking to provide financing to both countries.

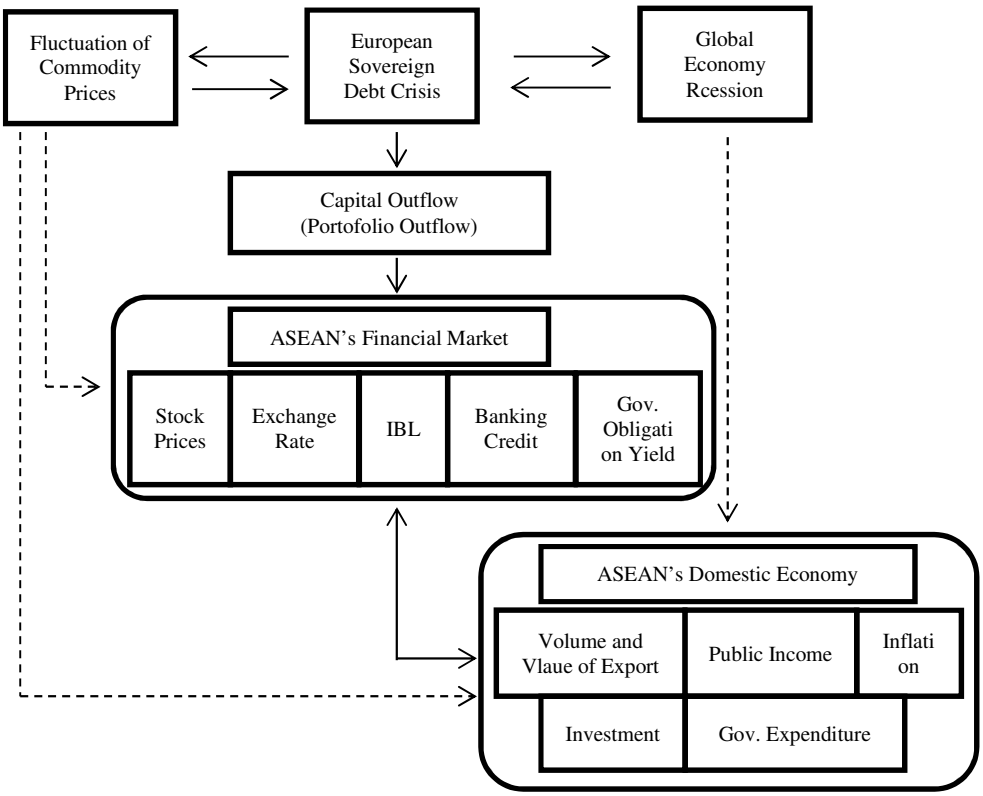
*Contagion Effects of European Sovereign Debt Crisis on Behavior of International Bank Lending and Financial Risk Mitigation Scenario in the Philippines and Indonesia*

The phenomenon of bilateral debt crisis in Europe, or known as the European sovereign debt crisis, is one economic turmoil in the spotlight of international economy. The existence of the financing from three EMU member countries which were affected by the domino effect of bilateral European debt crisis to the Philippines and Indonesia will provide an overview of the risk of contagion effect on the behavior of international bank lending in the two ASEAN countries.

*Depth of Contagion Effects from European Sovereign Debt Crisis on International Bank Lending Behavior in ASEAN*

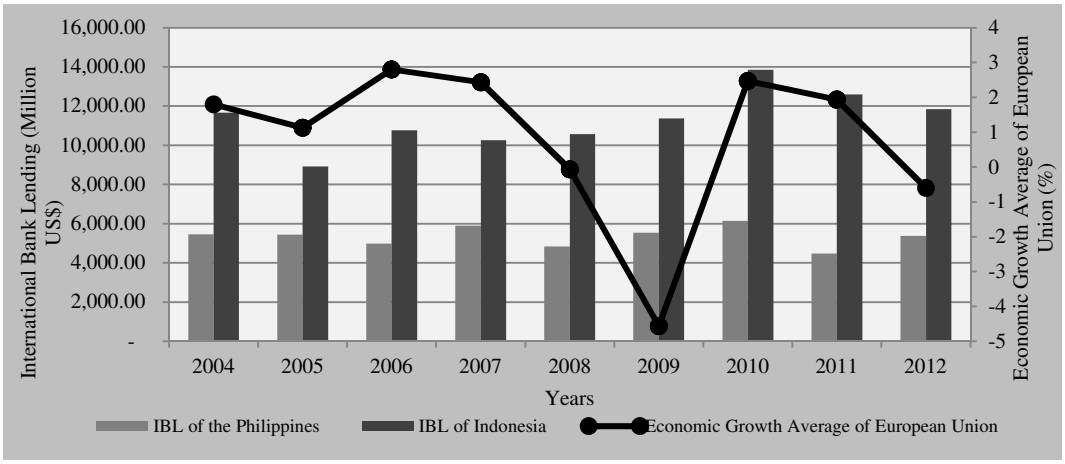
One of the easiest channels of contagion of crisis as described by Aiyar (2011) and Silalahi et al. (2012) is financial and banking sector. The depth of the contagion effects of the European sovereign debt crisis on the behavior of international bank lending to the Philippines and Indonesia is explained following the framework in Figure 1 below.

**Figure 1** Contagion effect transmission depth of European sovereign debt crisis on ASEAN's economy (Walace, 2009 in Bappenas, 2011)




Contagion effects of European bilateral debt crisis, viewed from its depth, followed the economic level experiencing turmoil through descriptive narrative analysis. Financial markets in ASEAN, represented by the movement of international bank lending and exchange rate, have a sentiment on the global economy which is turbulent due to dynamics of economic growth of the home countries, in this case, Italy, Germany, and France. Empirical studies by Jeaneau and MICU (2002) and Silalahi et al. (2012) provided two hypotheses of international bank lending behavior in which the decline in the EU economic performance would increase and might also decrease financing to ASEAN.

**Figure 2** The effect of European Union economic growth towards the flow of international bank lending from European Union to the Philippines and Indonesia (Source: Eurostat and Bank for International Settlement, 2014)



The exposure in Figure 2 above shows that in the period of European sovereign debt crisis which was characterized by an increase in the ratio of government debt per GDP and the declining average economic growth in the three member countries of EMU became -0.6% in 2012 where average decrease in EU economic growth was followed by a decline in the financing until 2012 in the Philippines by U.S.$ 5.368 million which was the smallest financing over the last one decade. Similarly, in Indonesia this also decreased up to U.S. $ 11.848 million in 2012. Thus, the description of the effect of economic growth dynamics in the European Union on the behavior of international bank lending to ASEAN may conclude the existence of contagion effects on financial markets. This is in line with the results of empirical studies by Aiyar (2011) in which the shock that occurred in the home countries will reduce financing by foreign banks in the host countries. On the other cedars, the global economic slowdown which then led to the withdrawal of short-term capital or portfolio would also lead to weakening of the exchange rate in some ASEAN countries.

**Figure 3** The development of the Philippines Peso and Indonesian Rupiah (Source: Asia Regional Integration Center-ADB, 2014)

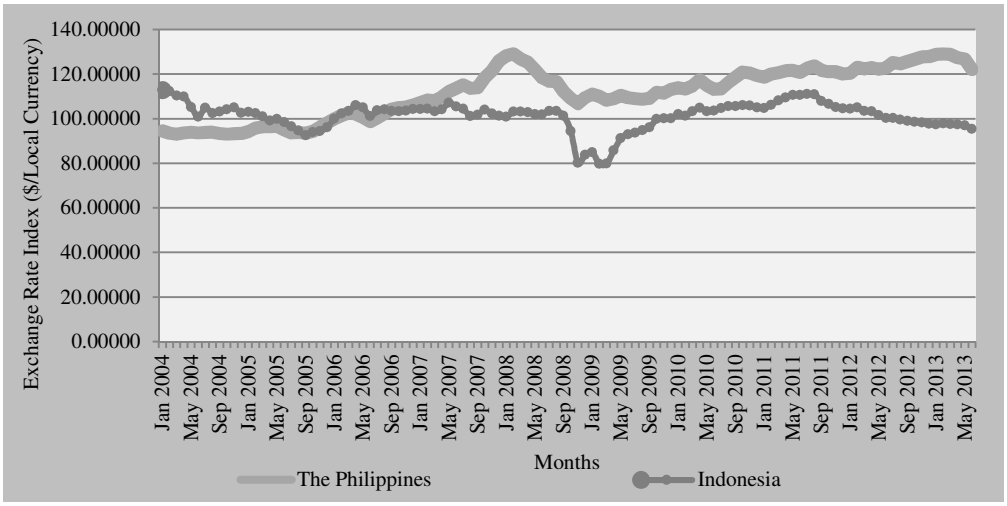



Figure 3 above shows that the strengthening of Dollar against the local currency indicated weakening of the local currency against Dollar, and vice versa. In the period of bilateral European debt crisis and its aftermath, the effects on the exchange rate in ASEAN made Dollar exchange rate index against the currencies in the three countries increased which means the lowering of the exchange rate index of the three ASEAN countries against Dollar. The largest decline in the exchange rate index in the period of crisis in Europe occurred in August 2011 with the recorded index of Dollar exchange rate against Philippine Peso by 123.69 while in Indonesia it was to be 110.98 Dollar per Rupiah up to August 2011. Hence, the global conditions due to European bilateral debt crisis could spread to the financial markets in ASEAN countries, especially in the effect of foreign banking through the dynamics of international bank lending from the European Union to ASEAN as well as the exchange rate although it was not as volatile as that in the international banking financing channels. However, the impacts of the EU economic turmoil due to European bilateral debt crisis cannot respond to shocks of inflation and a decrease in export volume during the period of European bilateral debt crisis (Bappenas, 2011). Thus, there is no indication of European bilateral debt crisis deep contagion to the domestic economy in the Philippines and Indonesia.

**Opportunities of Financial Risk Mitigation Scenario in ASEAN**

The application of financial risk mitigation scenario follows the existence of opportunities through the mitigation instrument adopted from framework the financial system stability in order to mitigate the risk of financial system instability due to the contagion effects of the crisis through financial markets derivation. The strategies in financial risk mitigation scenarios are described as follows (Koch and MacDonald, 2003:64-69; Walker, 2006; Santoso and Batunanggar, 2007).

i. Implementation of regulations and standards. It is needed to implement prudential regulations in international scope and provisions which have been suggested by the authorities and financial market actors as a foundation of health in their activities. Besides, the consistency of market actors discipline should be enforced.

ii. Intensification of research and monitoring is aimed to generate a policy recommendation in order to maintain the stability of financial system. The Philippines and Indonesia have mitigation opportunities with this strategy, in which both countries have implemented an early warning system at macro and micro -prudential level in managing the occurrence of systemic risks.

iii. Increasing coordination and cooperation among relevant institutions is crucial to be done in the period of crisis. Coordination is among actors of financial safety net consisting of central bank, financial supervision institutions, and the Ministry of Finance. Coordination and cooperation have been undertaken by policy makers both in the Philippines and in Indonesia, so that the two countries have possibility to perform the financial risk mitigation by those strategies.

iv. Determination of a safety net framework and resolution of crises to manage financial crisis and transmission that will occur. These things including policies and procedures of the lender of last resort and deposit insurance will replace full warranty. The instrument of *lender of last resort* strategy has been applied by Bangko Sentral ng Philippinas (BSP) and Bank Indonesia (BI). In addition, the instrument of deposit insurance has also been implemented by both countries as evidenced by the establishment of the Philippines Deposit Insurance Corporation (PDIC) since June 1963 and the Indonesian Deposit Insurance Corporation (IDIC) since September 2005. By seeing the readiness of the two countries through this strategy, both countries are likely to carry the financial risk mitigation.

## 5. CONCLUSION

Economic conditions European Union as a driving factor as indicated by fluctuations in economic growth, EU banking exposure and previous lending from EU causes fluctuation in financing either to the Philippines or to Indonesia, so the decline in economic growth and banking exposure in the EU will respond with a contraction of international bank lending from the European Union to the Philippines and Indonesia. In addition, the EU economic turmoil due to bilateral debt crisis caused shocks to the financial markets in the Philippines and Indonesia indicated by the fluctuation of international bank lending in line with the fluctuation of the economic growth of the EU. Therefore, it is necessary to improve the attractiveness of the withdrawal of international bank financing by promoting economic growth and reducing government debt ratio through optimization of debt restructuring agency in the Philippines and Indonesia. In addition, it is necessary to implement the strategy instruments in framework of financial stability system including: the implementation of Basel III, market discipline, strengthening micro and macro prudential indicators, coordination between both internal and external policy authorities, preparation of lender of last resort, fixing deposit insurance ceiling, as well as the resolution of crisis.

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