

# Challenges of the EU Financial System after the Sub-Prime Crisis

KEISUKE AOKI<sup>†</sup>

## Abstract

Triggered by the failure of Lehman Brothers in fall, 2008, a global financial crisis attacked the European countries. In this thesis, we argue about challenges of the EU financial system exposed by this financial crisis and problems of conventional growth strategy for the European countries.

Though the authority to supervise financial institutions and to carry out a fiscal policy are entrusted to each country in the EU, a financial policy such as liquidity provision and adjusting interest rates is enforced unitarily by the ECB. As a result, when financial institutions doing business for borderless in the EU faced a crisis, various problems occur when they practice prompt crisis countermeasures.

That causes one of factors letting the EU financial system non - stabilize.

JEL classification: E 42, E 44, E 52, E 58, F 33, F 36

## I . Introduction: Background and Process of Monetary Crisis in 2008

The issue of subprime loan in U.S.A. which had come to the front in summer, 2007 caused an unprecedented monetary crisis in 2008. As for

---

<sup>†</sup> School of Economics, University of Nagasaki. Comments are welcome. Email: aoki@sun.ac.jp

the beginning, the delay of the interest payment or the default of the home loan by the burst of the U.S. house bubble had let the value of financial instruments securitized subprime loans fall, therefore the management of financial institutions and investment firms holding them turned worse. After that, the influence produced suspicion fear in the whole monetary system and it developed into a global monetary crisis. The process which led to the global monetary crisis seems to have three main routes.

First, it is the short-term money market which financial institutions daily use to finance from each other. The short-term money market had a malfunction and became paralysis as money supplier remarkably decreased because of mutual credit uncertainty of financial institutions and investors.

That caused from the aggravation of financing for financial institutions which suffered a financial loss and turned worse their management. Therefore the sound financial institutions not holding securities related to subprime loan became difficult to finance, and many of them faced to a liquidity crisis.

Secondly, the value of other securitized instruments with no related to subprime loan fell, and appraisal loss of financial institutions, investment companies and general companies holding those instruments spread and the loss in weight of their assets value caused serious management difficulty. Moreover, the risk of other loan credit covered with some financial instruments like CDS (credit defaults swap<sup>1</sup>) suddenly increased because of management uneasiness of insurance companies or investment banks. They sell CDS and undertake original risks. That also brought credit uncertainty of financial institutions holding such loan credit.

---

<sup>1</sup> CDS is a credit derivative contract between two counter parties. The buyer makes periodic payments (premium leg) to the seller, and in return receives a payoff (protection or default leg) if underlying financial instruments or firms default.

The final route is below. Because of such financial uncertainty, the value of derivatives and any other financial assets such as stocks, corporate bonds, investment funds fell. Besides instruments related subprime or CDS, the decreasing value of various financial instruments caused deterioration of functions of the whole capital markets. The financial panic that spread through these three routes developed into a serious global financial crisis before long.

Financial institutions and investment companies in Europe were holding big amount of securitized financial instruments related subprime loans. There were some signs since before this problem came to the front greatly in summer, 2007. In February, 2007, the UBS in Switzerland closed their subsidiary hedge fund, Dillon, Read & Co. because of the loss of subprime-related instruments. In July, IKB in Germany filed for a rescue fund to KfW<sup>2</sup> because of the same loss. In August, BNP Paribas in France suspended operations of three of its funds. In this phase, the European Central Bank (ECB) injected cash into the financial system. The ECB lent 95 billion euros to meet banks' needs after demand for cash in the European money markets. In September, Northern Rock Bank in U.K. faced a run on the bank. This bank did not hold subprime related instruments much, but the home loan ratio for their business profit was high, and it was highly dependent on the short-term money market for the fund. Northern Rock Bank was eventually taken into state ownership in February, 2008. This event appeared that subprime loan issue was widely regarded as the serious problem for general people and society. However, at this point, it was still thought that every government of each country and each central bank could handle such financial problems individually.

---

<sup>2</sup> Refer to [http://www.kfw.de/EN\\_Home/index.jsp](http://www.kfw.de/EN_Home/index.jsp).

It was September, 2008 that the situation changed completely. A start was the failure of Lehman Brothers, a U.S. major investment bank. (They filed for Chapter 11, bankruptcy protection on September 15.) That reduced the value of securitized instruments, corporate bonds, stocks and so on greatly. Their creditor and partner financial institutions which had dealt with them for derivative business like CDS suffered a big loss. On the following day, September 16, the U.S. government announced to inject a rescue fund to AIG, a U.S. major insurance company, of which the management uneasiness had been worried. In this way, the monetary crisis originated in the U.S. has become serious. The U.S. government announced Emergency Economic Stabilization Act of 2008 to purchase from financial institutions a large amount of bad loans on September 19 and appealed to other countries for the same action, but most of European countries, such as Germany and France showed negative reactions. However, at the end of September, the crisis for the failure of financial institutions began in Europe as well. The governments of Benelux announced to inject capital for Fortis, a financial service company, based in Belgium and the Netherlands. After that, in U.K., Ireland and Germany, one after another financial institutions were nationalized or were injected public funds. (see Table 1.)

That these financial institutions were driven into the failure was caused mainly a malfunction of the short-term money market, the first route mentioned above. The counter party risk was strongly realized by the failure of Lehman Brothers, and it exerted serious influence on the finance environment of the financial institutions. They always doubt which financial institution made the loss, how much loss they had, when they will fail. In addition, doubts that the financial institutions related with Lehman Brothers might have massive loss made LIBOR raise rapidly, and most of European financial institutions faced the situation they could not get dollar

for daily settlement. (see Figure 1.) This influence extended to the transactions in euro and pound. To break this situation, on September 18, each European central bank made swap agreements with FRB and supplied dollar liquidity, but it did not change. Financial institutions which had high financing ratio from the short-term money market or had much bad loans fell into a more serious situation<sup>3</sup>.

Under this situation, the ECB supplied big amount of liquidity, but at the same time, both lending and deposit facilities were increased. (see Figure 2.) This means that financial institutions which faced difficulty for financing could not finance at the short-term money market. Besides, financial institutions of which the funds were in surplus were dealing with only the ECB, though the deposit facility rate was lower than the market rate. For the financial institutions facing a serious situation, their mutual means of financing were not available. Those institutions having been exposed to the risk of financing failure, it is found that the short-term money market did not function and was falling into paralysis.

Table 1. Trend of Monetary Crisis since mid-September

Europe		The U.S.	
		Sep.07.	• U.S. government, GSE support plan release
		Sep.15.	• Lehman Brothers failure
		Sep.16.	• FRB, bailout for AIG release
Sep.18.	• U.K. Lloyds TSB, takeover HBOS	Sep.18.	• FRB, dollar swap agreement with BOJ, ECB, BOE etc
			• FRB, emergency loan for MMMF
		Sep.19.	• U.S. government, Emergency Economic Stabilization Act of 2008 release
		Sep.21.	• Goldman Sachs, Morgan Stanley become traditional bank holding companies

<sup>3</sup> Fortis was worried for ABN AMRO holding assets deterioration. As for Hypo Real Estate, Depfa Bank faced difficulty for its financing from the markets.

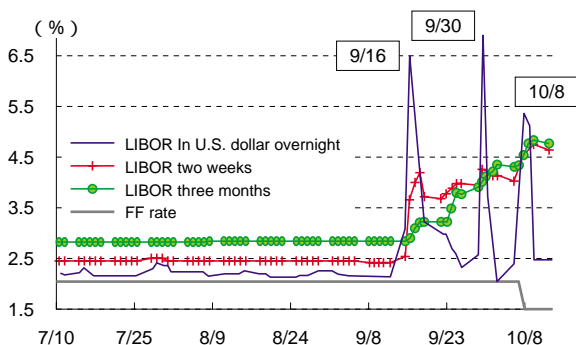
		Sep.24.	• FRB, spread swap line for each central bank
		Sep.25.	• Washington Mutual forced to close by FDIC
Sep.28.	• Benelux, Total 11.2 bn euros to Fortis capital injection		
Sep.29.	• U.K., Bradford & Bingley (B&B) nationalized, takeover by Spain Banco Santander	Sep.29.	• lower House, Emergency Economic Stabilization Act of 2008 reject
	• Iceland, Glitnir Banki nationalized, 75% stocks for 600 million euros		• FRB, TAF loans spread
	• Germany, Hypo Real Estate 35 bn euros credit line from the government & consortium of German banks.		• FRB, swap line agreement with central banks of Northern Europe and Australia
Sep.30.	• Dexia, 64 bn euro as capital injection by France • Belgium • Luxembourg government & large stockholder		• CITI, takeover Wachovia release!(After that, purchased by Wells Fargo)
	• Ireland, Deposit full guarantee		
	(Domestic main 6 banks only)		
		Oct.01.	• Senate, amended Emergency Economic Stabilization Act 2008 approve
Oct.02.	• Greece, Deposit guarantee upper limit spread (for all domestic banks)		
	• ECB Executive Board, consider reduction in interest.		
Oct.03.	• U.K. FSA, Deposit guarantee upper limit spread	Oct.03.	• lower House, amended Emergency Economic Stabilization Act 2008 approve
Oct.04.	• G 4(G•F•I•U.K.)emergency summit, reject rescue funds plan proposed by France		
	• Hypo Real Estate,credit line spread up to 50 bn euros		
	• German, Personal deposit guarantee upper limit spread		
Oct.06.	• Sweden, Deposit guarantee upper limit spread	Oct.06.	• PWG, appeal heeds for international cooperation for the crisis
	• BNP Paribas, takeover Fortis's Belgium, Luxembourg section		
	• Iceland, Act Providing for Special Powers in Exceptional Financial Market Circumstances approve!S&P, Iceland demote (A- to BBB)		
Oct.07.	• EU Finance Ministers' meeting, Deposit guarantee upper limit spread, shelve rescue funds plan! • Spain, Greece, Austria, Netherlands, Deposit guarantee upper limit spread	Oct.07.	• IMF, total loss of financial institutions estimate 1400 bn dollars in Global Financial Stability Report! (amount changed to 2200 bn dollars in Jan. 2009.)

## Challenges of the EU Financial System after the Sub-Prime Crisis

	<ul style="list-style-type: none"> <li>Spain, funds for purchasing assets of financial firms plan (up to 30 ~ 50 bn euros)</li> </ul>		<ul style="list-style-type: none"> <li>FRB, announce creation of Commercial Paper Funding Facility (CPFF)</li> </ul>
	<ul style="list-style-type: none"> <li>Iceland, Landsbanki under official management</li> </ul>		<ul style="list-style-type: none"> <li>Bernanke FRB Chairman, suggest reduction in interest rate</li> </ul>
	<ul style="list-style-type: none"> <li>Iceland, shift to fixed exchange rate system (renounced)</li> </ul>		
Oct.08.	<ul style="list-style-type: none"> <li>Austria, Personal deposit full guarantee</li> </ul>	Oct.08.	<ul style="list-style-type: none"> <li>Paulson, suggest public funds to Financial institutions</li> </ul>
	<ul style="list-style-type: none"> <li>U.K., 20 bn pounds of capital injection for main banks. (max 50 bn pounds) 250 bn pounds of government guarantee for financial Institutions</li> </ul>		
	<ul style="list-style-type: none"> <li>FRB • ECB • BOE • Canada • Sweden • Swiss CBs cooperation reduction in interest rate. BOJ strongly support</li> </ul>		
	<ul style="list-style-type: none"> <li>Iceland, Kaupthing under official management</li> </ul>		
	<ul style="list-style-type: none"> <li>Italy, rescue plan for financial institutions release</li> </ul>		
	<ul style="list-style-type: none"> <li>ECB, spread between lending and deposit facilities reduce 50 bp</li> </ul>		
Oct.09.	<ul style="list-style-type: none"> <li>ECB, supply bid amount of money at the operations</li> </ul>		
Oct.10.	<ul style="list-style-type: none"> <li>G 7, action plan including capital injection by the governments</li> </ul>		
Oct.12.	<ul style="list-style-type: none"> <li>Summit of the euro area countries, “concerted European action plan”</li> </ul>		
Oct.13.	<ul style="list-style-type: none"> <li>Germany, France etc, plan for the injection of public funds and guarantee of banks debt</li> </ul>	Oct.13.	<ul style="list-style-type: none"> <li>U.S government, preferred stock of main banks acquisition</li> </ul>
	<ul style="list-style-type: none"> <li>ECB • EOE • Swiss bank, increase currency swap with FRB and supply necessary total amount of dollar bid</li> </ul>		
	<ul style="list-style-type: none"> <li>U.K., injection of public funds to 3 domestic main banks</li> </ul>		

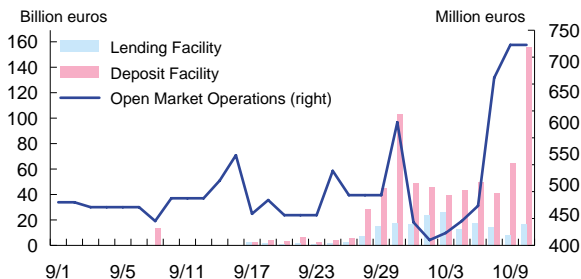
Source: News, each government, central bank announcement.

Figure 1. Transition of LIBOR (U.S. dollar)



Source: Bloomberg

Figure 2. ECB Open Market Operations and Facility Amounts of Outstanding



Source: ECB

## II. Problems of EU Financial Supervision and Crisis Management Ability

### ① Deposit Guarantee and Failure Scheme

In this financial crisis, it was exposed that the authority of the ECB was insufficient for the correspondence in the emergency. The ECB has



the authority to supply currency and to interest rate policy, but does not have one for the supervision to financial institutions, the judgment of their failure, the deposit guarantee, the protection for functions in the interbank money market and the injection of public funds. Therefore, in the crisis extending over countries, we found it difficult for the ECB to manage or control those matters. As the authority mentioned above belongs to the sovereignty of each country, in this crisis, each country announced and executed its own policies one after another; as a result, it can not be denied that the financial market was made even more confused.

The confusion seen in the EU, above all, was the deposit guarantee policy in each country. First of all, it was Ireland. Though they had EU common Deposit Guarantee Scheme (Directive 94/19/EC) in the EU, the Ireland government announced its own policy, a 100% deposit guarantee, but covering only 6 domestic main banks on September, 30.<sup>4</sup> AS this scheme was not applied to non-Irish-owned institutions, in U.K. which is a neighboring country and historically has strong economic linkage with Ireland, a large amount of deposit flew out to Irish-owned institutions from U.K.-owned. The U.K. government demanded the withdrawal from the Irish government, but they rejected it because of maintaining their own financial system. They said, under the present condition that the EU as a whole did not possess effective measures, a small country like Ireland had to deal with the problems itself.<sup>5</sup> After that, in Greece, successively in U.K. and Germany, the governments announced to increase an amount or the deposit

---

<sup>4</sup> In the EU before the crisis, under the EU Deposit Guarantee Scheme 1994 (Directive 94/19/EC), the minimum amount was 20,000 euros, and it covered all institutions in the EU. About 70% of the EU countries set 20,000 ~ 25,000 euros. Ireland was in a 20,000 euros group. Britain set about 33,000 pounds in total (deposit guarantee and insurance). In this way, the amount was different from each country.

<sup>5</sup> Refer to Financial Times (Oct', 2, 2008.)

full guarantee in order not to flow out the deposit from own countries. Their correspondence like this showed that the EU as a common framework did not function enough in it. On October, 4, EU an emergency summit (of 4 main countries, U.K., France, Germany and Italy) was held, and they agreed every EU country would cooperate in dealing with this financial crisis. However, in the Council of Economics and Finance Ministers (ECOFIN) held on October, 7, they agreed to raise an amount of the deposit guarantee and to establish the framework of EU cross-border supervision for financial institutions, but public intervention to relieve the institutions still remained to be decided at national level, not at the EU level. In this council, they also agreed to provide deposit guarantee protection for an amount of at least 50,000 euros, for an initial period of at least one year. But some countries determined to raise their minimum to 100,000 euros, so there is still big difference among member states.<sup>6</sup>

In the EU, it is difficult to construct cross-border scheme for bank failure throughout all the EU countries. The European Commission had been calling for a coordinated approach to addressing the crisis, but in the absence of any agreement, individual governments were introducing their own measures to rescue banks from collapse. That is the problem. In this EU-wide deposit guarantee scheme, they set a minimum amount of guarantee, but other articles belong to discretion of each country. Therefore, the contents of each deposit guarantee scheme practically have various differences. If there is absence of the EU common framework and consistency in the scheme, the difference of protection by the scheme effects ability to compete of financial institutions, moreover, it may be happened the problem that some deposit will be expelled from the deposit guarantee

---

<sup>6</sup> E.g. in Spain and Italy, they guarantee around 100,000 euros.

scheme. The reason why a large amount of deposit flew out from U.K.-owned institutions this time, as a result of the guarantee scheme the Irish government carried out, is exactly the absence of this consistency.

In the condition like EU that financial institutions can do business in borderless, deterioration or failure of the institution in a country is contagious to other countries, so that financial systems in several countries may be damaged at the same time. At this point, the authority of financial supervision is decentralized in each country, once happens a failure of the institution in one country, which country has the main authority to supervise is unclear, then, it might be said to select the scheme for the settlement will be hard task. If the injection of public funds is needed, to spend home tax to rescue foreign financial institutions may be the problem. If the money for rescuing the foreign financial institutions from collapse originally comes from funds mostly accumulated by the home institutions, this case may be one also.

The most of the cases for addressing failure of financial institutions are held by the following ways such as the business transfer, M&A, P&A and nationalization. The government or the Deposit Insurance Corporation usually supports funds or capital. The method of payoff or bankrupt is seldom chosen for that. Moreover, if the bank is very big and has an international presence, those methods are hardly adopted because the influence or damage to depositors, firms and the financial system is big and rather costs too much. It is what is called the too-big-to fail problem.

When the case of addressing like this is taken, there is a problem, "Who bears the cost?" When such a case is necessary, there seems to be a tacit premise that the head office located country basically bears the cost. But, if the relief funds are tax, it is expected that repulsion is caused against using home tax for foreign depositors. In this case, a burden

scheme might need to be settled in advance. For instance, related countries share the cost in proportion to the deposit balance. Starting of the procedure for addressing failure also needs to be settled as a common scheme in the EU. Though financial institutions have to obey the supervision of the authorities in every country, the participation of the authorities is essential for addressing failure also. The right of the procedure statement for failure is given not only to the financial institution concerned but to the supervisory authority in Japan, however, in Germany, it is given only to the supervisory authority, and it is to perform the judgment of addressing failure. If a bank has reached failure in that case, the responsibility of the supervisory authority may be asked.<sup>7</sup> In France, the veto for starting procedure of the bankruptcy is given to the supervisory authority. Thus there are several kinds of proceeding and each procedure is different in different countries. It may be to cause confusion.

## ② Prompt and Appropriate Measures in Coordinated Framework

After the outbreak of the crisis, a prompt public fund injection was carried out for Fortis and Dexia, both the mid-scale banks, in the end of September, and both banks were relieved. These banks could get a prompt bailout because their business had been performed fortunately within Netherland, Belgium and Luxemburg which have a historically close relationship among them. But it is uncertain whether such coordinated measures are taken after this in the EU. Through this crisis, under the present condition that each country in the EU has its own authority of financial supervision, it has become clear that taking coordinated action for a bailout of fi-

---

<sup>7</sup> In the case of Northern Rock in Britain, the report accusing FSA of improper supervision was submitted to the Parliament.(House of Commons, Treasury Committee, “The run on the Rock”).

financial institutions such as injection of public fund in order to stabilize the financial system. As the cause, a structural problem of the EU is pointed out. That is, “independent fiscal policy of each country and single monetary policy of the ECB”.

At first about the fiscal policy, under the present condition that the EU does not have a common appropriate scheme, each government has to address for too-big-to fail institutions. However, when the government faces the case to rescue the huge institution in comparison with its economic scale, a limit may come in their fiscal burden. For instance, Fortis, as stated above, had 254% of GDP in assets. Dexia had 173%. They were saved, but had huge assets.<sup>8</sup> If the necessary funds for injection swell, and the limit comes, there is risk to spread uneasiness about the financial system to all the EU. When we considered ability for fiscal burden of each country, the size of the present budget deficit of each country deserves anxiety. The budget deficits of main countries of the euro area are as follows, Germany -0.2%, France -2.7%, Italy -1.6. (of GDP, 2007.) The worst is -3.5% of Greece, which breaches the SGP criteria. When based on the situation after the crisis, further deficit expansion will be expected in many countries after 2008.

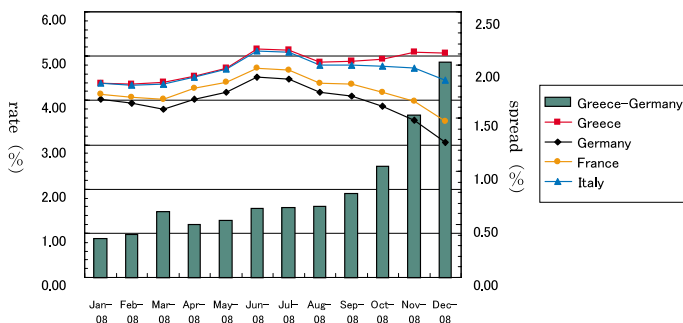
Besides, in the euro area, each risk of every country begins to be conscious of in the government bond market. Each interest rate of the government bonds in the euro area, a common currency zone, converged on the rate of the German government bond as an anchor. Each spread between two countries, Germany and others, had begun to rise slowly after around March, 2008 when financial uneasiness focused, and has showed a rapid expanse since September. (see Figure 3.) The one, especially between

---

<sup>8</sup> Refer to Financial Times (Sep', 30, 2008.), “Are European banks too big to fail?”

Germany and Greece, has indicated more than 200 bp since December, 2008. In this way, even if each country carries out an independent bailout toward the relief of the financial institutions, we cannot but say uncertain whether each country can perform its independent measures to address the crisis enough under the present conditions.

Figure 3. Long term government bond yields (10 years) and spread



Note: The spread is the difference between Germany and Greece.  
Source: Eurostat

The policy of the ECB for the financial crisis was not executed at the early stage of it. The ECB announced that they were considering both to maintain and to lower the interest rate at the Governing Council held on October, 2, and also announced they worried about losing the confidence of the ECB if they had changed their policy other than the risk evaluation to the prices stability. Judging from these remarks, it is supposed that the ECB had no intention of wiping away uneasiness of the financial system yet at that time. Facing to the further surge of the financial uneasiness and the sudden fall of the assets prices such as the stock prices, the situation took a sudden turn and the ECB carried out a concerted reduction in interest rates with five other central banks on October, 8. When the Danish central bank raised interest rates to maintain the ERM 2 range ( $\pm 2.25\%$ )

on the previous day, they announced it was the decision with intention of both the difference in interest rates for the euro area and the stability of the exchange rate of the Danish kroner. Thus, it is the decision on having discussed with the ECB beforehand, and it seems that the ECB did not examine the reduction in interest rates till then. The concerted reduction in interest rates of 8th can be said to have been the turning point to the anti-financial crisis measure of the ECB. After the reduction in interest rates of the ECB, the Danish central bank also withdrew the rise in interest rates of the day before.

The stock prices fell in spite of the reduction in interest rates of 8th, and the paralysis of the short-term money market was not improved. The wiping off of the financial uneasiness by the reduction in interest rates has little hope after all, and stronger recognition to the need for the injection of public funds instead. As mentioned above, because the authority of financial supervision is decentralized in each country and of the difficulty of executing a single monetary policy to a particular country, it is not easy to carry out prompt fiscal and monetary policies in the euro area. Forestalling the euro area countries, U.K. was the first to execute appropriate measures for reliving financial institutions including the injection of public funds. The U.K. government announced those measures several hours before the concerted reduction in interest rates. Why U.K. could take such prompt action can be said because both fiscal and monetary policies belong to the only sovereignty.

The contents of the measures were as follows. The public credit line was set for maximum 50 billion pounds. To prevent liquidity crisis, the government guarantee of 250 billion pounds and the liquidity support by the BOE were also provided. These guidelines were applied to all financial institutions in U.K. including foreign-affiliated financial institutions.

This execution started other countries following. Spain and Italy announced the foundation of the funds for purchasing the possession assets of the financial institutions and other relief measures including the injection of the capital sequentially. On October, 12, the emergency summit of the euro area countries was held and was adopted at last “a concentrated European action plan of the euro area countries”. (see details in bellow.)

The remarkable points of the plan are to have enabled the injection of prior preventive public funds to the financial institution and to give the government guarantee to all financial institutions in the euro area including subsidiary of foreign institutions in order to finance capital in the interbank money market, moreover to ensure to take these appropriate action with all euro area countries concerted and coordinated. It is hoped that the scheme adopted this time will be fixed as a coordinated economic policy of the whole euro area for the future financial crisis.

### A Concerted European Action Plan of the Euro Area Countries

1. Ensuring appropriate liquidity conditions for financial institutions.
  - ECB considering all ways and means to react flexibly to the current market environment
  
2. Facilitating the funding of banks.
  - The government guarantee is given to the interbank money market.
  - The government guarantee is given to the new medium term (up to 5 years) bank senior debt issuance.
  
3. Providing financial institutions with additional capital resources so as to continue the proper financing of the economy.



- Governments commit themselves to provide capital to financial institutions e.g. by acquiring preferred shares.
4. Allowing for an efficient recapitalization of distressed banks.
    - To ensure that existing shareholders and management bear the due and to execute appropriate restructuring plan.
  5. Ensuring flexibility in the implementation of accounting rules given current exceptional market circumstance
  6. Enhancing cooperation among European countries.

### III. Challenges of the ECB Monetary Policy

After the declaration, a concentrated European action plan, of the summit, the ECB carries out various measures to enhance the provision of liquidity and prevents the influence of the financial crisis. They are also strengthening the cooperation with the central banks of neighboring countries. Especially, to have set the credit lines for the Central and Eastern European countries as a production foothold in the EU is an appropriate measure. (see Table 2.)

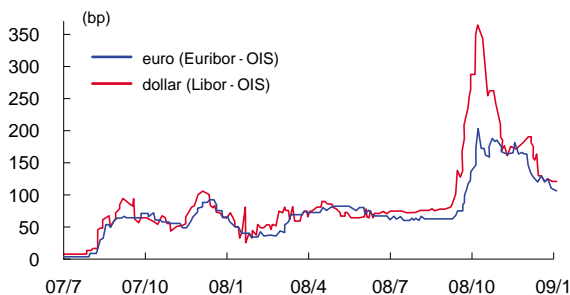
In this way, the ECB has executed various measures for the financial crisis since the concerted reduction in interest rates of October, 8. But there are difficult problems for their policy administration. The first is caused by the different economic structures of the euro area though it is pointed out whenever the monetary policy of the ECB is argued. The euro area countries are all going to recession because of this crisis, but the individual situation is greatly different by a country. It is uncertain whether

Table 2. The ECB liquidity measures and cooperation to peripheral countries

<p><b>The liquidity supporting measures to the Euro Area</b></p> <ul style="list-style-type: none"> <li>• Reducing the corridor of standing facilities from 200 bp to 100 bp.</li> <li>• The provision of liquidity equivalent to the collateral in regular bid.</li> <li>• Expanding the swap arrangement with the FRB. Providing the U.S. dollar liquidity.</li> <li>• Expanding eligible assets, marketable debt instruments dominated in dollar, yen, and pound issued in the euro area.</li> <li>• Accepting debt instruments traded on non-regulated markets, such as CDs, subordinated bonds.</li> <li>• Lowers the credit threshold for assets from A- to BBB- except ABS.</li> </ul> <p><b>Cooperation with the central banks of peripheral countries</b></p> <ul style="list-style-type: none"> <li>• ECB provides the MNB with a facility to borrow up to EUR 5 billion.</li> <li>• Same to the Denmark Nationalbank with a facility to borrow up to EUR 120 billion.</li> <li>• Same the NBP with a facility to borrow up EUR 10 billion.</li> <li>• The reciprocal swap facility with the Swiss National bank. (swap line)</li> </ul>
--

Source: ECB, each Central Banks.

Figure 4. The Risk Premium in the Interbank Markets



Note: both 3 months rate.

Source: Bloomberg.

the policy of the ECB will be desirable for all the euro area countries. For example, the economy in Germany has grown with exports and capital investments in recent years, but after this financial crisis, the external demand fell rapidly and it becomes the big cause of the German recession. While in Spain, the housing market, is called the bubble, was shrinking very fast, which causes their recession. What is worse, the unemployment rate of Spain is much higher than that of Germany. And moreover, the debt outstanding in both household and firms are greatly swelling because of the recent boom of housings and constructions, and it is pointed out the risk that economy hovers around for a long term by the adjustment pressure of the balance sheet. Japan was in the same situation in 90's. In the euro area where labor movement is not always fluid, economy and the inflation rate difference of each country are not easy to converge, and the administration of the single monetary policy of the ECB may be going to face difficulty. Because the euro area countries are all falling into the recession, the monetary policy of the ECB will proceed to ease, but the single monetary policy for the countries where each degree of the recession is different may cause the opposition among them. The ECB is pressed for difficult steering.

The second problem is that an interest rate in the interbank market is considerably exceeding the policy rate, though the ECB has enforced a large reduction in interest rates and executed the bold provision of liquidity since October, 2008. Though it is the little less level compared to just after the crisis, the mutual suspicion among financial institutions is not yet canceled, and the original functions of financing have not been restored. If such situation continues, the ECB may be enforced a policy to buy the assets of the financial institutions just like the FRB and the BOJ. Of course it is possible for the ECB by the outright transaction of the open market

operation, but on that occasion, it is necessary to examine that what kind of method the ECB carries out, for countries having the different financial characteristic. Various arguments are expected about their equitableness, effectiveness and the real effect for economy. The main method is the outright purchases of the government bonds in the U.S. and Japan, but the spread of the bond interest rate escalates by a country in the euro area as had mentioned before, therefore the size of the risk is different from each bond. In addition, the characteristics of the government bond market are different in each country, moreover, what kind of assets, from which country, and by what kind of form does the ECB buy? The structural problem of the euro area is thrust on the ECB here again.

Various financial aid packages have been proposed in each EU country since October, 2008. The European Commission proposed 200 billion euros (of GDP 1.2%) for economic measures, and is asking 170 billion euros of the amount for each country. However, in fact, it is uncertain to realize because of fiscal reasons of individual countries. Over the capital injection to financial institutions or direct aid packages of the government to the medium or small-sized firms, there is still difference for correspondence between each country and the European Commission which is particular about the fair competition rule. In any case, the EU economy caught the big damage by this financial crisis. It also brings great bad influence in the emerging countries of Central and Eastern Europe arguing with the next paragraph, and is acting as a sudden brake on the economic growth of these countries.

These small countries of the EU, inferior to potential abilities to get rid of a crisis, are easy to be affected by the main EU country economies. The stability of the financial system in the major country brings the stability of these emerging countries, and the economic recovery of the major

country also helps the recovery of emerging countries economy. The EU, especially in the euro area, has the structural problem such as “the consistency between individual fiscal policies and single monetary policy”. Under the EU common scheme, it is necessary for every EU country to pursue cooperated measures, and for the ECB simultaneously to provide sufficient liquidity and also to execute appropriate prudence policies.

#### IV. Conclusion: The Outlook for the Future Crisis

The EU economic downturn has become clear because of the financial crisis of 2008. The real GDP of the third quarter fell by 0.2% both in the EU 27 and in the euro area. Actually, in the euro area, negative economic growth showed for 2 consecutive quarters, and it is the first time for the euro area to put on record of 2 consecutive quarters since the introduction of the euro in 1999. Thus the euro area fell into a recession for the first time. In the core countries, Germany and Italy showed -0.4% (08.Q 2), and -0.5% (08.Q 3). Estonia and Latvia also fell into the recession. U.K., Spain, Hungary showed negative growth in 08.Q 3.<sup>9</sup> With the further economic downturn, the unemployment rate remains high in main developed countries, and even in emerging countries where the unemployment rate has been low supported by the economic growth, it has begun to rise gradually. With needs for measures to the sales slump and inventory accumulation, many companies are forced to production adjustment and it is very difficult to predict the rapid recovery of the EU economy in the near future.

This crisis let non-euro area countries currency of the EU drop sud-

---

<sup>9</sup> According to Eurostat. (Jan', 8, 2008.) Estonia and Latvia showed negative growth for 3 consecutive quarters since 08.Q 1.

denly. One of the reasons is that investors or company managers who feared against the small size central bank touched off a capital outflow.

The central banks of non-euro area opposed by raising interest rates but that might have the side effect of eroding the domestic economy. With the introduction of euro from January, 2009 near at hand, the confusion of the currency did not occur in Slovakia of which the own currency, koruna, fixed to the euro. Even if it was a small country, the stability of the money market could be secured as long as it was under affiliation of the euro. As a result, Denmark and Sweden announced their early introduction of euro, and Poland officially announced to aim the introduction of euro in 2012. Even Hungary which fell into the critical situation in this crisis is turning the stance of growth into an emergency response measure. In Czech, from the industrial world to the government, a voice in search of euro introduction rose.

This crisis unexpectedly has increased a unifying force to euro and it seems to develop the way to further deepening of the EU. From now, in addition to the precaution of a new financial crisis, the argument about the expansion of the euro area will attract our attention as well.

#### References

- Aydin, Brucu (2008), "Banking Structure and Credit Growth in Central and Eastern Europe Countries," *IMF Working Paper* WP/08/215, September.
- BIS (2008), *Annual Report*.
- European Union (2008), "European Union foreign direct investment yearbook 2008".
- European Union (2008), "European Economic Statistics 2008".
- IMF (2008), *Global Financial Stability Report*, October.
- IMF (2008), *Regional Economics Outlook (Europe)*, October.
- IMF (2008), *World Economic Outlook*, October.
- JETRO (2008), "The influence of the financial crisis originated from the U.S. to economic and business", *Research Reports*, December.

Y. Nishimura (2008), “Does the global financial crisis really extend to Central and Eastern Europe?” (in Japanese), *International Economic and Financial Review* (IIFRA), November. Mizuho Research Institute, all kinds of research papers.