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EU Fiscal and Monetary Institutions Building through Entry Deterrence Games

Yoshihiro TSURANUKI

《Abstract》

Applying the framework of an entry deterrence game conceptually, this paper analyzes how the European Union, facing challenges from the markets, moved to build or strengthen fiscal and monetary institutions such as the European Financial Stability Facility.

I Introduction

This paper examines how the European Monetary Union has evolved into a more stable institution with a more robust equilibrium. It is in the process of filling the institutional gap between the monetary union, already established, and its inadequate counterparts, such as the Stability and Growth Pact (the SGP), by strengthening its institutional base.

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This paper was originally part of the first version of my paper, “Market-driven Institution Building as Responses to the Eurozone Financial Crisis,” but was not included in the final version which was presented at the Bologna Center, School of Advanced International Studies, Johns Hopkins University on March 12, 2012. The paper was expanded from the original version.

The monetary union has progressed in response to challenges, perturbations such as France's and Germany's violations of the SGP, and a series of sovereign debt crises. There exists no realistic exit strategy either for any eurozone member country or for the monetary union because any exit by any member country not only may lead the exiting country to economic disaster but it may also cause a systemic crisis for the European Monetary Union.

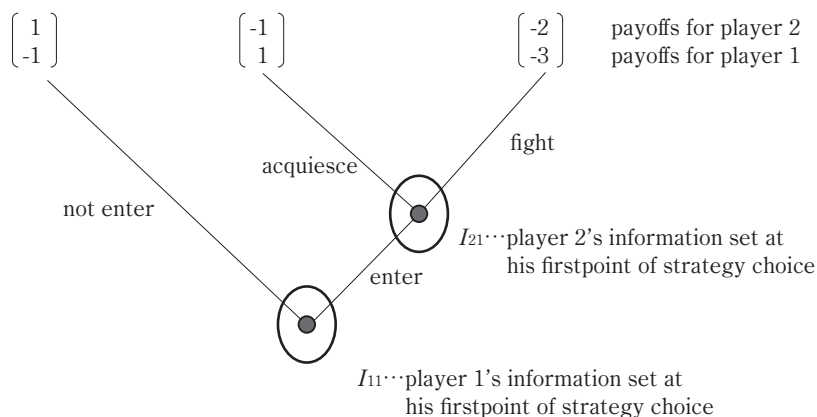
It has been pointed out that the European Monetary Union must be accompanied by a corresponding fiscal union if it is to meet the conditions for a stable monetary union.¹⁾ This lack of a corresponding fiscal union has continued to perturb the European Monetary Union and push it towards institutional reforms that lead the monetary union to becoming a more robust institution. Ceding sovereignty bit by bit and pooling resources together at the European Commission (the EC), monetary integration of the European Union (the EU) seems to be evolving into a more political entity. This seems to be one of the ways in which European integration has spilled over from functional integration into political integration.

Through a conceptual application of an entry deterrence game, this paper attempts to analyze the process of this spillover.

II Analytical Framework of the Entry Deterrence Game

In Figure 1 below, I_{11} represents player 1's information set at his first point of strategy choice and I_{21} represents player 2's information set at his first point of strategy choice, respectively. In a game below, there are two Nash equilibriums.

1) Martin Wolf, "Merkozy failed to save the eurozone," *the Financial Times* (hereafter *the FT*), December 7, 2011, p. 11.

Figure 1: Entry deterrence game

Source: Mikio Nakayama, *Shakaiteki Geimu no Riron Nyumon* (Game Theory) (Tokyo: Keiso Shobo, 2005), p. 113.

One is equilibrium 1 (not enter, fight). The other is equilibrium 2 (enter, acquiesce). In equilibrium 1, player 1 does not enter because player 2 fights if he enters. Then, player 1's payoff is -3 , if he enters. This is worse than -1 , which player 1 gets when he does not enter. Equilibrium 1 is sustained by the threat that player 2 can employ as he reacts to player 1's entering by fighting.

This, however, begins to be a threat that is not credible. If, with a small probability, player 1 enters player 2's information set, I_{21} , then player 2 reacts to player 1's entry by acquiescing. In other words, if player 1 chooses his strategy of "enter" after a slip due to a trembling hand, choosing "acquiesce" begins to be a better option for player 2. By choosing "acquiesce," player 2 gets -1 , while he gets the payoff -2 by choosing "fight." Player 2 is therefore better off choosing "acquiesce," once entering by player 1 occurs with a small probability.

This shift in the order of the payoffs between "fight" and "acquiesce" for

player 2 occurs as follows:

Suppose player 1 chooses “enter” with a small positive probability ε because there is a chance of a “tremble”, while intending to choose “not enter.” Then, the expected payoff for player 2 is

If player 2 acquiesces: $(1 - \varepsilon) + \varepsilon(-1) = 1 - 2\varepsilon$

If player 2 fights: $(1 - \varepsilon) + \varepsilon(-2) = 1 - 3\varepsilon$

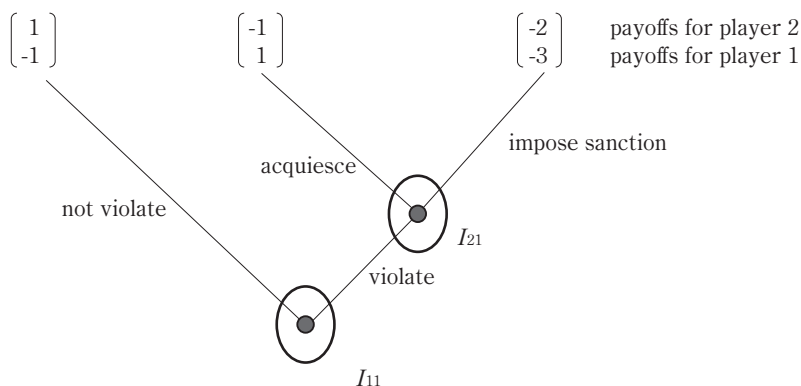
Given the payoffs above, “acquiesce” becomes the best response for player 2 to play in his response to player 1’s choice of “enter,” no matter how small ε might be, so long as it is larger than 0. Therefore, once ε becomes larger than 0, the best response for player 2 shifts from “fight” to “acquiesce.”²⁾ In this way, multiple equilibriums in Figure 1 can be refined. Equilibrium 2 (enter, acquiesce) will be selected. Equilibrium 1 (not enter, fight) will be removed as not being robust, once its stability is tested with a small positive probability of “enter.”

III Perturbation 1: SGP compliance game, November 2003

Eurozone member countries were expected to abide by the SGP because repeated violators would have severe sanctions imposed upon them. The equilibrium can be shown in Figure 2.

In this game, player 1 is any member country of the eurozone. Player 2 is the EU Council of Finance Ministers. The latter is responsible for making a decision to impose a sanction upon any repeating violator of the SGP after a recommendation to do so from the EC. There are two equilibriums.

2) Mikio Nakayama, *Shakaiteki Geimu no Riron Nyumon* (Game Theory) (Tokyo: Keiso Shobo, 2005), pp.112-114. Citation is made from pp.113-114.

Figure 2: SGP compliance game

Equilibrium 1 is (not violate, impose sanction). Equilibrium 2 is (violate, acquiesce). The former equilibrium is supported by a non-credible threat. This is because, if any big member country of the eurozone, such as France or Germany, violates the SGP with a small positive probability, the Council of Finance Ministers will fail to impose a sanction upon the violator. Rather than imposing a sanction, player 2 acquiesces in the violation by a big member country.

Thus, by perturbing the game with a small probability of ε , equilibrium 1 is eliminated, and equilibrium 2 emerges as the sub-game perfect equilibrium. When both France and Germany repeatedly violated the SGP, the Council of Finance Ministers failed to impose sanctions upon them in November 2003, although the EC had recommended sanctions. Equilibrium 1 was sustained by non-credible sanctions.

When any big country of the eurozone violated the SGP, the Council was unable to impose sanctions upon them. Jacques Chirac, the president of France, had to cut taxes out of his presidential election commitments. The German economy had been hit hard by the weak economic growth. Both

faced difficulties in abiding by the SGP. Their domestic political concerns trumped any external considerations they had of abiding by the SGP.

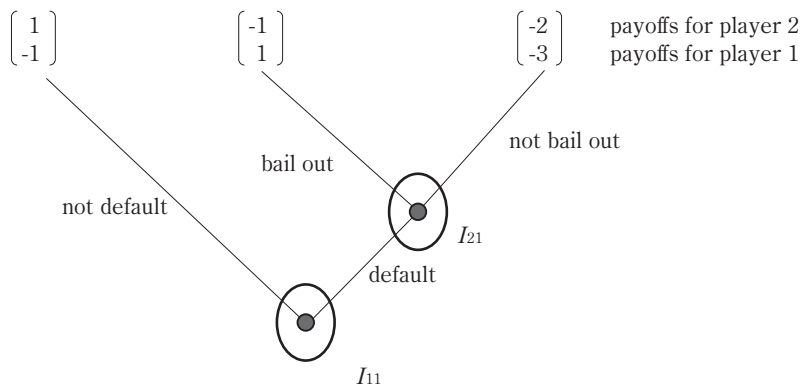
Germany was the architect of the euro system and was believed to be committed to its budgetary discipline. It was therefore quite unexpected for Germany to deviate from equilibrium 1 (not violate, impose sanction). When both Germany and France repeatedly violated the SGP, the Council of Finance Ministers preferred to acquiesce in their violations rather than impose sanctions upon them.

In the game above, once player 1 violates the SGP with a small probability of ε , then player 2 acquiesces rather than imposes sanctions. Equilibrium 2 is robust, while equilibrium 1 is weak. The latter can be eliminated, once it is subjected to perturbation. This was due to the institutional weakness involved in the SGP's sanction mechanism. It was not automatic.

This limitation on the part of the SGP had to be reformed later. In December 2011, the European Council adopted a new fiscal compact that includes a semi-automatic sanction mechanism, which is analyzed in section VII. This illustrates how perturbations in the form of France's and Germany's violations of the SGP led to a new fiscal institution that introduced a semiautomatic sanction mechanism in order to strengthen the EC.

IV Perturbation 2 : The first bail-out for Greece in May 2010

In the default deterrence game in Figure 3 above, there are two equilibriums. Equilibrium1 is (not default, not bail out). Equilibrium2 is (default, bail out). In 2010, Greece became unable to raise money by auctioning its bonds. This was because its budget deficit had reached an

Figure 3: Default deterrence game

unsustainable level. Greece lost its credit-worthiness in the sovereign bonds market. The Greek government had concealed the actual figure of its budget deficit by reporting false figures to the Eurostat. After the new government had disclosed this fact, investors lost confidence in its credit worthiness and stopped purchasing its bonds.

There is no bail-out clause in the rule book for the eurozone.³⁾ Even if a eurozone country becomes unable to raise the money in the bond markets, the European Council does not bail it out. Therefore, every member state has to discipline itself hard so as not to fall into that situation. This, however, turned out to be a threat that was not credible, and Greece stumbled into a sovereign default crisis.

At the European Council meeting in May 2010, top leaders of the EU decided to provide Greece with €110bn together with the European Central Bank (the ECB) and the International Monetary Fund (the IMF). This was the EU's attempt to bail out Greece. Thus, equilibrium 1 was eliminated

3) Ben Hall, "EU bail-out scheme alters bloc treaties, says France," *the FT*, May 28, 2010, p.4.

due to the perturbation of Greece's slipping into the position of non credit-worthiness in the financial markets. Thus, equilibrium 2 (default, bail out), in which player 1 defaults in the first move and player 2 bails it out in the second move, emerged as the sub-game perfect equilibrium in the process. The same pattern was repeated when Ireland fell into a sovereign debt crisis in October 2010 and Portugal did the same in May 2011.

For a rescue fund to bail out Greece, the EU set up the €750bn eurozone bail-out fund of the European Financial Stability Facility (the EFSF). In the EFSF mechanism (the EFSM), on behalf of the EU, the EFSM issues euro bonds, which are called EFSF bonds. Eurozone countries guarantee the EFSF bond so that it can obtain a triple A rating and can be sold at lower interest rates in the bond markets.

The EFSF bond is not a common eurozone bond of the type that would be issued in the event of a fiscal union. In the EFSF bond, each member country guarantees a certain quota. This still amounts to cooperation at the intergovernmental level. However, some investors consider it as being "issued by the eurozone as one entity," so they think it is "a first step towards a common eurozone bond."⁴⁾ A common eurozone bond can be issued as a result of political integration. Here, we can see new monetary institution building in the form of the EFSF as a result of perturbation in the form of Greece's default in the entry deterrence game in which (not default, not bail out) had been superficially supposed to be the equilibrium in the eurozone.

The EU approach is thus confirming at the institutional level a fait accompli bit by bit, and this brings about a supra-national change in substance without bringing about any formal change to the EU treaties.

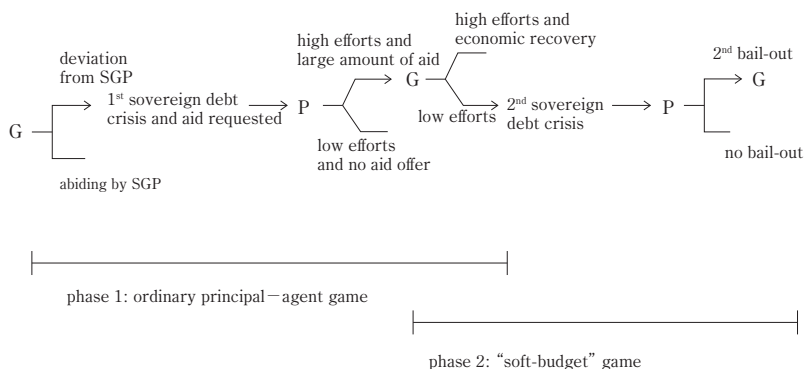
4) David Oakley, "EU bond launch set to aid Ireland," *the FT*, January 5, 2011, p. 21.

Pierre Lellouche, France's Europe minister, said: "It is an enormous change . . . It explains some of the reticence. It is expressly forbidden in the treaties by the famous no bail-out clause. De facto, we have changed the treaty."⁵⁾ His statement literally reveals the nature of European politics of this incremental approach to supra-national institution building.

V Game 4 (variation): The second bail-out for Greece as a soft budget game

The game process between the EC, the ECB, and the IMF, the so-called "troika," and Greece over the latter's bail-out from 2010 to 2011 can be described in Figure 4 below:

Figure 4: The second bail-out for Greece as a soft budget game



Source: this model is adopted and modified to suit the case of the second bail-out for Greece from a model in Hideshi Itou and Hiroshi Osano, *Incentive Sekkei no Keizaigaku* (Economics of Incentive Designing) (Tokyo: Keiso Shobo, 2003), pp. 338-344. In the abbreviations above, G stands for Greece and P stands for principal.

5) Hall, "EU bail-out scheme alters bloc treaties, says France," op.cit.

Figure 4 above shows how the original principal-agent game of the first phase developed into a “soft budget” game in the second phase. In the first phase, Greece ran into a sovereign debt crisis in 2010 as a consequence of deviation from the SGP, and it asked the EC for a bail-out. The EC worked as the principal with the ECB and the IMF to bail out Greece. Greece is here considered to be the agent who would work to put its economy back on track in exchange for aid from the troika.

In the first phase, an ordinary principal-agent game was played out between the troika and Greece. The mechanism was put into place with the €110bn rescue package of May 2010 to secure the agent’s faithful fulfillment of the agreement, a contract. To force Greece not only to accept the rescue package but also to choose to make greater efforts to implement its contractual obligations, both the conditions for the principal-agent game – participation constraint (or individual rationality) and incentive constraint (incentive compatibility) – had to be met. If they were met, Greece was expected not only to accept the offer from the troika but also to choose to make great efforts to implement the contract, restructure its economy and put itself back on track.

First, the participation constraint for Greece was that its outside option was no better than accepting the rescue package or as better as accepting it from the troika. Greece ran into the sovereign debt crisis when it became unable to raise money in the sovereign bonds market. Any country facing a sovereign debt crisis usually turns to the IMF for aid, but the IMF was within the troika. This left Greece unable to find any independent lender to negotiate with other than the troika, which included the IMF as one of its three potential co-lenders. Thus, the first condition was met.

Second, the incentive constraint for Greece was that Greece was going to be better off by choosing to make great efforts rather than small efforts

to implement the agreement, in other words, the contract. In the first rescue package, in exchange for aid, Greece was asked to cut its government deficit drastically and to restructure its economy by rationalizing the public sector and by realizing more flexibility in the labor markets. These measures would be politically costly for any government. Any agent seeking aid tends to be less likely to implement such measures after receiving financial aid. To prevent the agent from committing moral hazard, the financial aid was divided into many tranches, and each tranche had to be delivered on a quid pro quo basis in exchange for the completion of specific tasks, which were prescribed in the agreement and which the agent was expected to execute.

In particular, it is definitely necessary to avoid moral hazard as a result of any information asymmetry that may be involved in the principal-agent game. For example, Greece might deliberately fail to faithfully implement some of its contract obligations because of the principal's inability to effectively monitor whether the agent is actually fulfilling its commitments. The work that Greece was expected to do in exchange for aid therefore had to be able to be verified so that the troika could easily monitor and detect any deviation by Greece from the contract.

Under the conditions where these constraints were met, Greece was expected not only to accept the bail-out terms prescribed jointly by the EC, the ECB, and the IMF but also to faithfully implement its part of the obligations without committing moral hazard. Thus, the troika provided a large amount of aid and Greece pledged to make a great deal of effort. This became the equilibrium in the principal-agent game in the first phase.

If the mechanism above had worked, Greece would have carried out its role of restructuring the economy and overcome its sovereign debt crisis. Things did not turn out that way. In July 2011, Greece faced a second

sovereign debt crisis. The Greek government had failed to implement the troika-prescribed restructuring program. Bond markets had lost confidence in Greece's ability to service its debts. This was the second phase in the EU-Greece bail-out game. Here, time-inconsistency or the "soft-budget" problem came into play.

Since Greece had failed to faithfully restructure its economy, the troika had to abandon its bail-out plan for Greece. However, abandoning it entirely would have led to a worse payoff for the troika than continuing the bail-out with a second rescue package, because no bail-out might have led to the collapse of the euro system. A systemic collapse was definitely much costlier than bailing out Greece with a second rescue package. Although Greece had failed to choose to make great efforts to restructure its economy, the non-bail-out option did not exist for the troika once its failure, a Greek default, came to constitute a systemic crisis to the euro system. For example, it was pointed out that, "The eurozone was built on the principle of irrevocability . . . Once the possibility of a country leaving is admitted, the danger was of speculation becoming self-fulfilling"⁶⁾; "if Greece is pushed out of the eurozone because other member states refuse to fund the Greek sovereign and the European Central Bank refuses to fund Greek banks, the markets could beam in on the next most likely country to go. This could prompt a run on that country's banks and stop funding for its sovereign, financial institutions and companies. Fear might actually then force the departure of the afflicted country. Exit contagion might sweep right through the rest of the eurozone periphery – Portugal, Ireland, Spain and Italy – and then begin to infect the 'soft core' of Belgium, Austria and France."⁷⁾ A Greek exit would cause a systemic crisis.

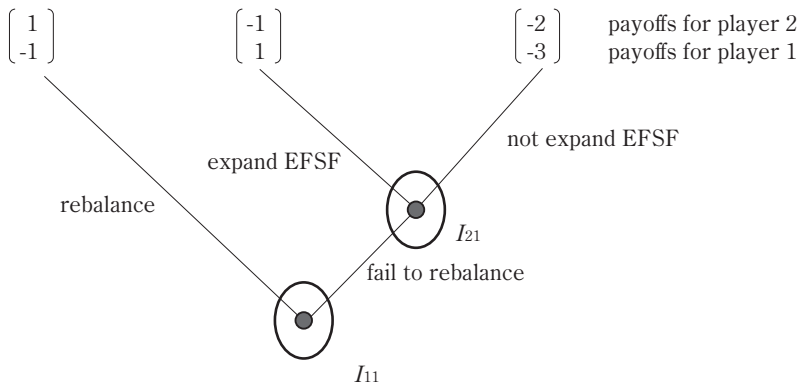
6) ralf.atkins@ft.com, "Fear of a Greek exit could strengthen Draghi's hand," *the FT*, September 6, 2012, p. 22.

Theoretically speaking, Greece, predicting the troika's not having the option of not bailing it out, was able to afford to choose to make less effort to implement its side of the bargain. Once Greece's bail-out had thus become the precondition for preventing the euro system's collapse, the troika had no way of separating Greece's rescue from the stability of the euro system. Both were inseparably interlinked with each other. Theoretically speaking, this enabled Greece to bargain not necessarily from a position of weakness, if not from a position of strength.

Under the conditions above, Greece was able to expect with certainty that the troika would come to its rescue. This enabled Greece not only to commit moral hazard by choosing to make reduced efforts to implement its side of the agreement but also to bargain hard with the troika on the terms of the second rescue package.

VI Perturbation 4: Rebalancing game

Figure 5: The rebalancing game



7) William Buiter, "The terrible consequences of a eurozone collapse," *the FT*, December 8, 2011, p. 9.

In the game above, player 1 is here supposed to be any of the so-called, periphery countries, such as Greece, Ireland, Portugal, Spain, and Italy. If any large country failed to rebalance current account deficit through a deep austerity plan and expanding exports, player 2, the other eurozone surplus countries led by Germany, would have to expand the lending capacity of the EFSF. It was therefore pointed out that “a currency union is vulnerable to balance of payments crises, in the absence of fiscal and financial integration.”⁸⁾

One German alternative to a transfer union is to help weak economies in the eurozone rebalance their deficits by both expanding imports from them and reducing its surplus with them. However, out of a strong traditional fear of inflation, Germany was not likely to boost domestic consumption to absorb imports from other eurozone countries that have large current account deficits.⁹⁾

The other option is for Germany to absorb the losses of its own banks by bailing them out. These banks are highly exposed to the Spanish bank crisis through their heavy investment in Spain’s banks. Once the latter go bankrupt, the German banks will realize large losses. Either way, surplus countries have to bear the burden arising from the reality that the European Monetary Union lacks a corresponding fiscal union.¹⁰⁾

The EU set up the €750bn rescue fund after the Greek crisis with pledges from eurozone countries, IMF loans and EU balance of payments facility. Out of €750bn, €440bn is made up of pledges from the eurozone countries. The EU, however, can use only about half the amount, because it has to put the other half in reserve to obtain a triple A rating. The real

8) Wolf, “Merkozy failed to save the eurozone,” op.cit.

9) Stephen King, “Eurozone deal fails to tackle Germany’s excess savings,” *the FT*, December 13, 2011, p. 20.

10) Wolf, “Merkozy failed to save the eurozone,” op. cit.

amount that the EU can mobilize for any bail-out is thus not enough if a country like Spain falls into default. Therefore, if Spain as player 1 falls into a default crisis, Germany and other surplus countries in the eurozone, as player 2, have to accept the expansion of the EFSF. Equilibrium 1 (rebalance, not expand EFSF) is supported by a threat that is not credible and will be eliminated as not a robust equilibrium, if a country like Spain fails to rebalance. Therefore equilibrium 2 (not rebalance, expand EFSF) can be predicted.

When it comes to rebalancing, there has been hardly any progress in the eurozone. In addition, the remaining funds available to the EFSF after bailing out Greece, Portugal and Ireland amounted to €250bn.¹¹⁾ Thus all the burdens were carried by the expansion of the EFSF which became a backstop against the eurozone's sovereign debt crisis.

Many twists and turns, however, occurred with respect to the expansion of the EFSF. Facing the urgent need to expand the EFSF's firewall capacity amid further deterioration in the sovereign bonds crisis in Spain and Italy, whose bond yields hovered near unsustainable rates¹²⁾, EU leaders agreed at a summit on October 26, 2011 on a plan to boost the firewall of the EFSF by using its remaining capital of €250bn to "provide 'risk insurance' to struggling sovereign debt issuers."¹³⁾ This was leveraging the EFSF and would boost its firewall by four to five times from €250bn to €1000bn.¹⁴⁾ However, how the plan would work in practice

11) Peter Spiegel and James Fontanella-khan, "Eurozone sets out plan for €240bn emergency funds," *the FT*, March,30, 2012, p.3.

12) Yield on Spanish 10 year bond was 5.33 per cent. Yield on Italy's bonds was 5.7 per cent after the EU summit of October 26, 2011. Richard Milne, "Doubts temper markets surge," *the FT*, October 28, 2011, p. 4. 7 per cent is generally considered to be the unsustainable rate for sovereign bonds. Richard Milne, "Policymakers need to act with Lehman style urgency," *the FT*, November 17, 2011, p. 24.

13) Tilis Demos, "Equities soar on eurozone debt measures," *the FT*, October 28, 2011, p. 24.

remained unclear.¹⁵⁾

Germany, the “principal guarantor” for the EFSF, did not make in any way reduce its resistance to expanding its lending capacity.¹⁶⁾ Angela Merkel, the chancellor of Germany, also opposed the French president Nikolas Sarkozy’s attempt to urge the ECB to provide the EFSF with unlimited liquidity.¹⁷⁾ She only conceded to agreeing to bring the European Stability Mechanism (the ESM), the permanent rescue fund, a year forward from mid-2013 to July 2012 to replace the temporary two-year limit on the EFSF and “prevent euro-wide contagion.”¹⁸⁾

The inability of political leaders to agree on expanding the EFSF to stabilize the sovereign debt crisis increasingly passed the burden on to the ECB. There had been bargaining going on between Sarkozy and other political leaders, on the one hand, and Mario Draghi, the president of the ECB, on the other. In the former’s view, stricter fiscal discipline on the part of the eurozone countries was a *quid quo pro* for the ECB’s intervention in their bond markets. Sarkozy demanded that, since political leaders had taken measures to strengthen the fiscal rules in the eurozone system by agreeing on a semiautomatic sanction mechanism in order to recover the confidence of the markets, the ECB had to do its part by intervening in the sovereign bond markets on a larger scale to help those countries which were in a debt crisis.¹⁹⁾

14) Jamil Anderlini and Richard Milne, “China set to aid Europe bail-out,” *the FT*, October 28, 2011, p. 1.

15) Demos, “Equities soar on eurozone debt measures,” *op. cit.*

16) Quentin Peel, “Members braced for battle at vital summit,” *the FT*, December 8, 2012, p. 3.

17) Quentin Peel, “Merkel’s mantra brings results without resort to big ‘bazooka’,” *the FT*, October 28, 2011, p. 4.

18) Quentin Peel and Hugh Carnegie, “Leaders back-peddled to manouvre out of crisis,” *the FT*, December 6, 2011, p. 4.

19) Peel and Carnegie, “Leaders back-peddled to manouvre out of crisis,” *ibid.*

Draghi first announced long-term refinancing operations (LTRO) in December 2011 to provide eurozone banks with unlimited liquidity for three years, expecting them to purchase sovereign bonds with ECB-provided-liquidity and making bond yields fall²⁰⁾ but he ruled out helping eurozone countries in a debt crisis with similar measures.²¹⁾

Merkel, on the other hand, seemed to suggest on March 26, 2012, that she supported the temporary expansion of the size of the rescue funds to €700bn by allowing the EFSF and the €500bn of the ESM to run in parallel until the EFSF was terminated, but she stuck to keeping the fund's size at €500bn, saying that its size should fall back to the original €500bn of the ESM when it becomes fully available. She feared domestic opposition to any further increase in Germany's financial contribution to the rescue fund.²²⁾

Before leaving office, Jean-Claude Trichet, Mario Draghi's predecessor, had expressed his opposition to the idea that the ECB play the role of "lender of last resort."²³⁾ Draghi, too, rejected politicians' demands that the ECB should support the EFSF with funds on a large scale or take measures to stabilize the long-term interest rates of eurozone sovereign bonds.²⁴⁾ He expressed having no intention to interpret in other ways the EU treaties that banned monetizing governments.²⁵⁾ The ECB under Trichet had already purchased the bonds of Greece and other eurozone

20) Mary Watkins, "ECB emergency aid no silver bullet," *the FT*, January 14/January 15, 2012, p. 12.

21) Editorial, "Draghi shelves the big bazooka," *the FT*, December 9, 2011, p. 8.

22) Quentin Peel and Peter Spiegel, "Berlin backs plan to raise euro firewall," *the FT*, March 27, 2012, p. 2.

23) Ralf Atkins, "Trichet rejects ECB role as lender of last resort," *the FT*, October 5, 2011, p. 2.

24) Wolfgang Münchau, "France and Germany look set to fudge it yet again," *the FT*, December 5, 2011, p. 9.

25) Peter Spiegel, "EU leaders deliver another round of navel-gazing," *the FT*, December 21, 2011, p. 2.

countries on the secondary market on a limited scale under its security market program. Even this had been criticized by Axel Weber, the former Bundesbank president, for being “uncomfortably” “close to breaking the taboo that the ECB should not directly finance eurozone member states.”²⁶⁾

However, Benoît Cœuré, the member responsible for market operations on the European Central Bank’s executive board, argued on June 20, 2012, for intervening in sovereign bond markets by using the eurozone rescue fund as a backstop.²⁷⁾ Mario Monti, the prime minister of Italy, also floated an idea of his that the European rescue funds purchase sovereign bonds in distressed countries to lower their yields. However, for the rescue funds to work as a backstop by purchasing their bonds, their funds needed to be expanded. This could only be achieved if they became banks. They could then directly borrow from the ECB.²⁸⁾

At last on July 26, 2012, Draghi made a statement that the ECB would do whatever was necessary to defend the euro.²⁹⁾ He had earlier recognized that the EFSF was neither a flexible nor a powerful enough tool to cope with the sovereign debt crisis.³⁰⁾ Many had already come to think that the ECB was crucial to stabilizing the eurozone’s sovereign bonds.³¹⁾

In late September, 2012, Draghi’s statement came to be interpreted as meaning that the ECB was ready to purchase unlimited amounts of eurozone sovereign bonds in distressed countries in the secondary market

26) James Wilson, “Bundesbank squares up to Draghi,” *the FT*, March 2, 2012, p. 3.

27) Ralf Atkins and Michael Steen, “Call for push on fiscal union,” *the FT*, June 21, 2012, p. 2.

28) Editorial, “Eurozone weighs another palliative,” *the FT*, June 21, 2012, p. 8.

29) Shigeyasu Osabe, “Bailout Strategy in the European Debt Crisis: Outright Monetary Transactions and the EU’s ‘New Deal’,” *Keizai-Shirin- The Hosei University Economic Review*, Vol. LXXX, No. 3, March 2013, p. 25.

30) Ralf Atkins, “Draghi warns of ECB’s limited role in crisis,” *the FT*, November 4, 2011, p. 3.

31) This reference is from editorial, “Whole world needs Europe to grow,” *the FT*, December 20, 2011, p. 10.

while imposing the condition that they must first apply to the ESM for help and agree on plans for restructuring their economies³²⁾ Thus, the ECB unveiled its “outright monetary transactions” (OMT) program on September 26, 2012, to put his words into practice.³³⁾ In response, the appetite for risk in the markets clearly improved.³⁴⁾ With this, the sovereign bond markets stabilized.³⁵⁾

Finally, the ECB came to play the role of a lender of last resort,³⁶⁾ despite there having been strong opposition from Jens Weidmann, the Bundesbank president and ECB governing council member, who “withheld a vote” on the issue of purchasing bonds in distressed countries.³⁷⁾ He argued that it violated “the EU ban on the ‘monetary financing’ or central bank funding of government debt.”³⁸⁾ On the other hand, Sarkozy thought that the “ECB should be on the front line combating the crisis.”³⁹⁾ This was the crucial institutional development for the eurozone system in overcoming one of its critical shortcomings in that it lacks a central bank that can work as a lender of last resort.

Instead of expanding the lending capacity of the EFSF or the ESM, the

32) Peter Spiegel and Miles Johnson, “EU backroom talks on Spain bailout,” *the FT*, September 21, 2012, p. 1.

33) Michael Steen, James Fontanella-Khan and Michael Stothard, “ECB signals resolve to save euro,” *the FT*, September 7, 2012, p. 1.

34) Davis Shellock, “ECB bond-buying plan drives risk appetite,” *the FT*, September 6, 2012, p. 22.

35) Michael Steen and Ralph Atkins, “Austerians take on the Spendanigans in battle for eurozone,” *the FT*, April 27/April 28, 2013, p. 2.

36) Wolfgang Münchau writes: “Despite its many design flaws, the ECB has reluctantly become a modern central bank.” Wolfgang Münchau, “Draghi is the devil in Weidmann’s eurozone drama,” *the FT*, September 24, 2012, p. 11.

37) Michael Steen, “Weidmann isolated as ECB plan approved,” *the FT*, September 7, 2012, p. 2.

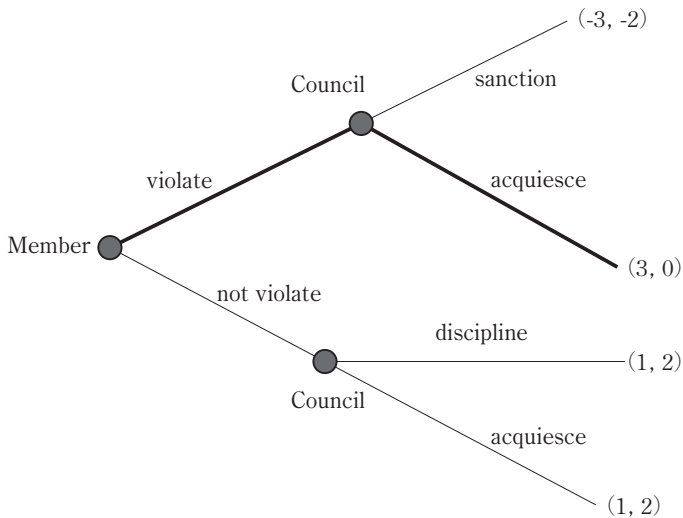
38) Ralf Atkins, “ECB under strain as its political masters bicker,” *the FT*, November 17, 2011, p. 2.

39) Atkins, “ECB under strain as its political masters bicker,” *ibid.*

eurozone obtained a backstop from the ECB. Thus, equilibrium 2 (not rebalance, expand EFSF) emerged, though in a different form from the one originally conceived.

VII Semi-automatic application of sanctions

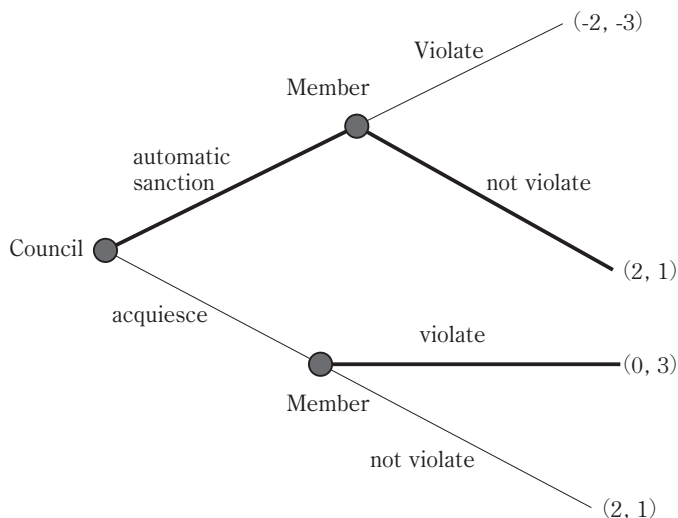
Figure 6: SGP compliance game with no pre-game commitment to enforcement



The former figures in parentheses are payoffs for a member and the latter ones are payoffs for the Council.

Source: Yutaka Suzuki's suggestion for the earlier draft of this paper (January 31, 2011).

Sarkozy and Merkel negotiated a new fiscal compact, especially over its automatic sanction mechanism, in Deauville in October 2011. Sarkozy argued for the not automatic but case-by-case application of penalties, making the final issue a political decision. Merkel argued for automatic application but conceded to Sarkozy, in exchange for his agreement on private contributions, on the question of the so-called hair-cut in bailing out

Figure 7: SGP compliance game with pre-game commitment to enforcement.

The former figures in parentheses are payoffs for the Council and the latter are payoffs for a member.

Source: Yutaka Suzuki's suggestion for the earlier draft of this paper (January 31, 2011).

(In Figures 6 and 7, information sets are not described, but the entry deterrence model remains essentially the same.)

Greece.⁴⁰⁾

Their agreement was adopted in November 2011 as the draft for the EU summit. Then, it was proposed as the draft of a new fiscal compact, the Treaty on Stability, Co-ordination and Governance, at the European Council in December 2011, and was signed at the EU summit by 25 member states in March 2012, although the UK and Czechoslovakia did not sign. Since this was an intergovernmental treaty, it required only 12 eurozone states out of the 17 member states for approval.⁴¹⁾ The compact came into

40) Peel and Carnegy, "Leaders back-pedal to manoeuvre out of crisis," *op.cit.*

41) Ken Matsui and Naoyuki Fukuda, "EU signing the fiscal pact," *Asahi Shinbun*, March 3, 2012, p. 3.

42) Hugh Carnegy and Joshua Chaffin, "Hollande hails growth pact," *the FT*, June 29, 2012, p. 5.

effect in January 2013.⁴²⁾

The new fiscal compact strengthens fiscal governance, first, by introducing a semi- automatic sanction mechanism.⁴³⁾ Second, by making it obligatory for signing countries to inscribe balanced budget rules into their national institution, it introduces a governance scheme into each national parliament as a kind of co-bearer of responsibility for their government's balanced budgets.⁴⁴⁾ Third, to ensure the signatory states inscribe the rules into their national legislation, it brings in the European Court of Justice (the ECJ) to enforce inscription.⁴⁵⁾

The Council's proposal sets a new limit of 0.5 per cent of GDP as the amount for a structural government deficit for eurozone countries. Under the new fiscal rules, each national government has to submit its annual budget plan to the European Council and the EC for review before then

42) Hugh Carnegy and Joshua Chaffin, "Hollande hails growth pact," *the FT*, June 29, 2012, p. 5.

43) Josef Joffe points out that the EC's resubmitted recommendation for a sanction must need a qualified majority for rejection and that "[a] qualified majority of the states can still nix the cruel punishment." Thus, there is still probability that recommendations might be blocked. For this reason, in this paper, the empowerment of the new fiscal compact is treated not as automatic sanctions but as semiautomatic sanctions. Josef Joffe, "Calm down, Britain. Merkely is no new Napoleon," *the FT*, December 10/December 11, 2011, p. 9.

44) Josef Joffe points out: "The most significant break with the tattered stability pact is automatic sanction — no more lengthy proceedings which came to naught in the past. Now, as soon as a euro member state in breach of the 3 per cent deficit ceiling, automatic sanctions follow . . . And members must report national debt plans in advance, which sharpen the foresight of the rating agencies . . . The central issue is whether national parliaments, which must ratify it all, will yield on their most sacred prerogative. This is the power of the purse, the very core of national sovereignty." Joffe, "Calm down, Britain. Merkely is no new Napoleon," *ibid*.

45) The new fiscal compact says: "general government budget deficits shall be balanced or in surplus: this principle shall be deemed respected if, as a rule, the annual structural deficit does not exceed 0.5 per cent of nominal gross domestic product . . . such a rule will also be introduced in member states' . . . legal systems . . . The rule will contain automatic correction mechanism that shall be triggered in the event of deviation . . . steps and sanctions proposed or recommended by the Commission will be adopted unless a qualified majority of the euro area member states is opposed." This is an exact citation from Martin Wolf's citation. Martin Wolf, "A disastrous failure at the summit," *the FT*, January 9, 2012, p. 4.

submitting the plan to its national parliament.⁴⁶⁾ The EC “can demand changes in the plan.”⁴⁷⁾ However, Brussels is only given “the power to review budgets” “not the authority to dictate changes.”⁴⁸⁾ Breaching the deficit and debt limits would lead to fines of a maximum 0.2 per cent of GDP.⁴⁹⁾

The proposal also strengthens the EC’s enforcement powers by giving it a new right to resubmit a sanctions recommendation within a month, even if such a recommendation is not approved by a qualified majority in a first submission.

In the second submission, “a majority of member states must vote to block it,”⁵⁰⁾ which makes it much more difficult for member states to block such a recommendation. Therefore, it is said, “The new rules aim to circumscribe national sovereignty even further.”⁵¹⁾ However, the EC’s recommendations for sanctions still require its second submissions not to be blocked by a qualified majority for approval; it is in fact a semi-automatic sanction.

The new fiscal compact also obliges each national parliament to inscribe the fiscal pact into legislation within a year of signing the pact.⁵²⁾ If any EU

46) Stanley Pignal, “Belgium rushes to find cuts after EU warning,” *the FT*, January 9, 2012, p. 4.

47) Hugh Carnegy, “France delays targets for reducing its budget deficit,” *the FT*, April 18, 2013, p. 4.

48) Peter Spiegel, “EU plan to rewrite budgets,” *the FT*, June 26, 2012, p. 1.

49) Pignal, “Belgium rushes to find cuts after EU warning,” *op.cit.*

50) Joshua Chaffin, “Battle of wills over European rigidity,” *the FT*, December 5, 2011, p. 2.

51) Editorial, “Europe’s ever more dangerous liaisons,” *the FT*, October 29/October 30, 2011, p. 6.

52) Joshua Chaffin writes as words of diplomats: “You cannot just say, ‘Oh, it’s the European Commission. The ball is in your court. You decide what the budget should be for France or Germany, or whomever.’” Chaffin, “Battle of wills rages over European fiscal rigidity,” *op.cit.*

53) David R. Cameron, “Fiscal pact requires reliance on a statistic that cannot be observed,” *the FT*, March 21, 2012, p. 8.

country brings another country to the ECJ for failing to incorporate the pact and make it binding national legislation, it “issue[s] a binding judgment and, in the event a party fails to comply with its judgment, impose[s] a substantial financial penalty.”⁵³⁾ The penalty can amount to a maximum of 0.2 per cent of GDP.⁵⁴⁾

In Figure 7, an automatic sanction is incorporated. Thus, (not violate, automatic sanction) becomes the equilibrium. On the other hand, in Figure 6, (violate, acquiesce) is the equilibrium. This point is overcome in the game shown in Figure 7. With the adoption of the new fiscal compact, which was designed to “bolster enforcement of the EU’s stability and growth pact,”⁵⁵⁾ Belgium made an urgent adjustment to freeze €1bn of spending in its budget plan for 2012 to avoid fines in response to a warning from Olli Rehn, the economic and monetary affairs commissioner of the EU, that its budget deficit would amount to 3.25 per cent of GDP, thus breaching the 3 per cent limit. “It is the first time an EU government has been forced to take urgent corrective action to avoid fines for breaching EU budget rules, under semi-automatic sanctions adopted” in December 2011 “to avert the need for future bail-outs.”⁵⁶⁾

Through the above process of continuous rebuilding in response to continuous challenges and perturbations to the existing equilibriums, the European monetary system has moved closer to a more robust equilibrium. It is the European way of a spill-over from economic integration into a more political integration.

53) David R. Cameron, “Fiscal pact requires reliance on a statistic that cannot be observed,” *the FT*, March 21, 2012, p. 8.

54) Ken Matsui and Naoyuki Fukuda, “The fiscal pact signed in EU,” op.cit.

55) Pignal, “Belgium rushes to find cuts after EU warning,” op. cit.

56) *Ibid.*

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