Do Fiscal Rules Matter?

-Comparative Analysis of Fiscal Performances in the EU and Japan-

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論文

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Abstract

There seems to exist a co-relation between fiscal rules and fiscal balances in the EU, namely during the period between the end of the 1970s and the mid-1990s, there were actually no fiscal rules and European accumulated debt to GDP ratio increased steadily. However, during the period between the mid-1990s and 2008, when the "Stability and Growth Pact" was introduced, the ratio declined. In the past several years, after the Pact was in reality relaxed, again the ratio increased.

In democratic societies, like the EU and Japan, there appears to be strong biases towards budgetary deficits, as politicians have to pay special attentions to voters in their constituencies. Therefore, in order to introduce fiscal disciplines and to reduce budgetary deficits, introductions of fiscal rules might be effective.

Key words; budgetary deficit, accumulated debt, Stability and Growth pact, Fiscal Compact, European Semester

JEL classification numbers: H30, H60, O52, P50

1. Introduction

The Japanese government raised its consumption tax rate from 5 percent to 8 percent in April 2014. Considering the rapid deterioration of Japan's fiscal performance, increasing the tax burden on its consumers seems to be unavoidable as Japan's ratio of accumulated debt to its GDP reached as high as 220 percent in 2013, the highest among major OECD countries. Why has the Japanese fiscal balance deteriorated to such a considerable extent? In contrast, despite the Euro crisis, which was triggered by default risks for national bonds of some EU member state, the same ratio for the EU has improved. In this paper, we will compare fiscal performances in the EU, some EU member states, and Japan by focusing on fiscal rules, which might be effective tools for introducing fiscal discipline.

2. Overview of fiscal performances

We will firstly review two tables on recent fiscal performances in the EU and Japan; ratios of budgetary deficits to GDP and ratios of accumulated debts to GDP. As is seen in Table 1, which illustrates budgetary deficits to GDP, Japan has constantly recorded a high ratio, while in the EU it has steady declined to almost 3 percent in recent years. As is well known this 3 percent threshold is one of the criteria required by the Maastricht Treaty to introduce the Euro[1]. As a result, the EU's budgetary deficits are not considered to be serious anymore except for Greece. The question then arises, how have they succeeded in reducing their deficits?

Table 1：Ratio of budgetary deficit to GDP (%)

	2010	2011	2012	2013	2014
EU	-6.4	-4.5	-4.2	-3.2	-3.0
Germany	-4.1	-0.9	0.1	0.1	0.2
France	-6.8	-5.1	-4.9	-4.1	-4.4
Greece	-11.1	-10.1	-8.6	-12.2	-1.6
Japan	-8.3	-8.8	-8.7	-8.8	-7.5

Source; European Commission, *European Economy*

Nevertheless, there is still a problem, which is now causing unstable Euro exchange rates, as seen in recent foreign exchange markets. According to Table 1, some member states have comparatively high budgetary deficit to GDP ratios, while others have not. In fact, in 2012, Germany recorded a budgetary surplus, while the budget deficit/GDP ratios in Greece exceeded 10%. What are the reasons for the fiscal performance differences among the member states?

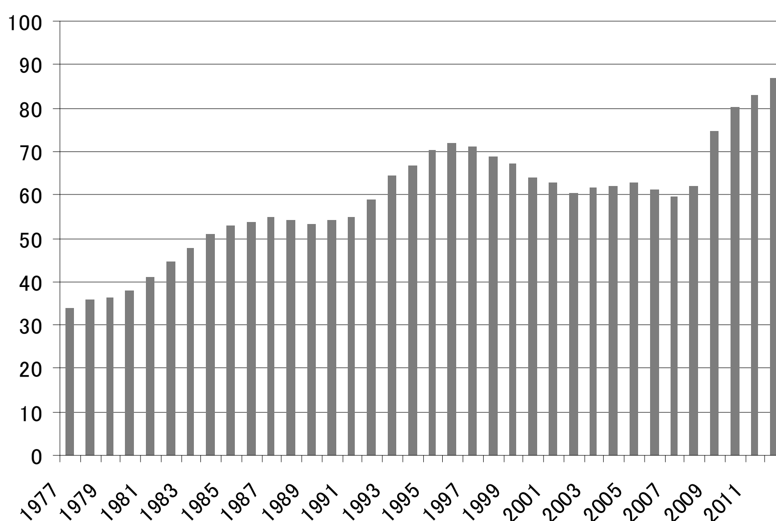
Table 2 : Ratio of accumulated debt to GDP (%)

	2010	2011	2012	2013	2014
EU	78.4	81.3	85.0	87.1	88.1
Germany	80.3	77.6	79.0	76.9	74.5
France	81.5	85.0	89.2	92.2	95.5
Greece	146.0	171.3	156.9	174.9	175.5
Japan	216.0	229.8	237.3	244.0	246.1

Source; European Commission, *European Economy*

Next, we will examine Table 2, which demonstrates changes in the ratios of accumulated debts to GDP. As is clearly seen, the ratio for Japan, 246.1 percent, is the highest among the countries in this table. As for the member states, again there are wide differences in their performances. It is to be noted here that, according to the Maastricht Criteria, which define conditions for introducing the Euro, the ratio should be less than 60 percent.

Figure 1: Ratio of accumulated debt to GDP of the EU (%)



Source: European Commission, *European Economy*

Now, we will review developments in the public debts/GDP ratio of the EU as shown in Figure 1. As can be seen in the figure, changes in the ratio can be divided into three periods; the first from the end of the 1970s until the mid-1990s, the second from the mid-1990s until 2008 and the third from 2008 until recent years. The first period can be characterized as “steadily increasing”, and in fact the ratio rose from approximately 35 percent to 70 percent. In the second period, on the other hand, it declined from 70 percent to almost 60 percent. And, in the third period, when the so-called “Lehman Shock” happened, it jumped to the 80-90 percent level. What are the reasons behind these changes in the ratio?

As is known, due partly to declining growth potentials, average growth rates in mature economies like the EU and Japan have declined, which tends to reduce tax revenues. On the other hand, these areas are facing demographic changes, in the form of ageing societies, which tend to increase social security related expenditures. Therefore increasing budgetary deficits in these areas seem to be unavoidable. Furthermore, due to inefficient fiscal systems, budgetary balances steadily deteriorated as we have seen in the first period in Figure 1. When evaluating the EU’s monetary unification, called the Economic and Monetary Union, the criticism is often leveled that if the flexibility of a discretionary fiscal policy is lost due to the “Stability and Growth Pact” [2], which will be discussed shortly, it is difficult to implement expansionary fiscal policy, thus exacerbating recessions. However, reality is somewhat different; the public debt outstanding continued and, as a result, there was not enough room to exercise the above Keynesian fiscal policies.

However, in 1996, when the EU introduced the “Stability and Growth Pact”, which required fiscal discipline, the debt/GDP ratio had declined remarkably in the second period. It is noted that the pact imposes sanctions on member states that violate fiscal discipline rules. In this respect, the pact appeared to have a significant impact on the fiscal balance. In 2008, the “Lehman Shock” happened in the U.S., and it had profound impacts not only in the U.S., but also in the EU. Furthermore, due partly to the “flexible interpretation” of the Pact, which we will discuss later, almost all European countries seem to have lost financial discipline and implemented looser fiscal policies in order to mitigate the seriousness of this external shock.

In more recent years, triggered by the Euro crisis, the EU has tried to implement fiscal discipline and as a result, fiscal performances in the EU area improved as we have seen in Table 1. Although various approaches and previous works on the relationship between fiscal rules and fiscal performances have been published, the conclusion of almost all of them seems to be that fiscal rules like the pact, play an important role in controlling fiscal performance or that fiscal rules are important factors that determine a budget deficit, especially taking the second period into consideration.

3. Fiscal Rule Theories

Here, we will review economic works and theories which discuss fiscal performances. According to a Keynesian approach, governments should implement expansionary fiscal policies in recession periods, while tightening fiscal policies in boom periods, thus reducing business cycle swings and realizing stable economic development. However, as is seen in Table 1, in almost all countries and in almost all periods, budgetary balances have been deficits, even in boom periods. There seems to have been a deficit-bias in each country. In order to analyze the factors behind this fact, there have been many works and lots of discussions. Amongst these, we would firstly like to summarize the "fiscal illusion theory." According to Buchanan & Wagner (1977)[3], a budget deficit tends to expand as a result of present expenditure preferences, since future budget constraints cannot be fully foreseen. Similarly, in the inter-temporal redistribution model, which Cukierman and Meltzer (1989)[4] and others have insisted, even if people recognize future budget constraints, present voters will claim their current interests, sometimes in the burdens on future generations who do not have voting rights at the present.

Next, the "common pool problem" appears to be important. According to Weingast, Shepsle and Johnsen (1981)[5], politicians tend to prefer policies that favour people in their own constituencies. It is to be noted that the funds spent for their policies are widely collected from the general population and are pooled as a common source of revenue.

Under such political circumstances, the longer that a coalition government exists and the larger the number of political parties in the coalition that are involved, the larger the fiscal deficits become. This is because coalition governments tend to pay special attentions to each of the member parties and consequently to politicians involved in a large number of vested interest groups. Based on such analysis, various proposals have been made aiming at budget deficit reductions. For example, according to von Hagen (1992)[6], the more transparency in the decision-making process, the less the budgetary deficit. This seems to be because politicians' degree of freedom may be undermined. Therefore, he emphasized the importance of a transparent decision-making process in fiscal policy. Furthermore, to improve fiscal transparency Kopits and Craig (1998) insisted that fiscal transparency should be divided into several categories; institutional transparency, transparency in public accounts, and transparency of indicators and projections. They also emphasized that each category should be more transparent[7].

According to them, establishment of an independent regulatory authority is vital in order to improve "institutional transparency". The authority should be independent, and thus pay little attentions to voters. From that perspective, the European Commission's involvement seems to be important, since European Commissioners as well as their staff are required to be independent from their home country and voters there.

Next, regarding the "transparency of accounts"; generally, the government sector budget system is very complex and it is not easy for people to assess fiscal policies. Again, the Commission's staff with their deep knowledge of fiscal policy and fiscal system can play a role in reducing deficit bias. Moreover, "an economic index to be used and the transparency of prediction" has been important, as it is often observed that governments decide their policies based on optimistic economic forecasts, and upon appropriation requests based on excessive revenue hopes. Therefore, policies and their evaluation should be based on realistic scenarios. Since the Euro crisis, it has already been decided that the Commission can intervene each country's fiscal policy decisions. We will discuss this later.

Moreover, based on such a development, the analysis of ways of imposing rules on fiscal policy has become popular in recent years in order to avoid arbitrary fiscal policy, sometimes with deficit bias. According to Kopits and Symansky (1998), "a fiscal policy rule is a permanent constraint on fiscal policy" [8]. However, which targets should be aimed for; budgetary balance or public debt outstanding? In fact, as was seen during the 1990s, a significant number of member states introduced fiscal rules, targeting mainly budgetary balances and debt to GDP ratios. Marneffe, van Aarle, and van der Wielen and Vereeck (2011), using panel data analysis, examined the Eurozone during the period 1995 to 2008 for countries,which introduced fiscal rules [9]. They concluded that constraints on outstanding debt and fiscal balance are effective in order to introduce fiscal discipline.

4. A Fiscal Rule Model [10]

Here, we will continue to examine the effects of fiscal rules on fiscal performances by constructing a very simple game theory model with two countries; country G and country F. Both countries are member states of the EU and can enjoy various benefits (B) by forming the Economic Monetary Union (EMU). Reducing uncertainty of exchange rate changes and/or banking charges are examples of these benefits. We also suppose that the two countries can adopt two different or two opposite fiscal policies; a tight fiscal policy with discipline (here called "discipline strategy") and a loose fiscal policy with no discipline (called "no discipline strategy").

On the other hand, in order to participate in the EMU, where a fiscal discipline policy is required, the countries have to pay expenses or costs (C). Although various expenses can be considered, cutting expenditure and/or increasing the tax level are unpopular among people. In democratic countries, governments and politicians should consider these fiscal measures as a "Cost". The net benefits that each country enjoys can be denoted by (B − C), as is evident. In addition, B > C should hold, otherwise neither country would participate in the EMU.

Now, we will further assume that country F adopts the no discipline strategy when it

joins the EMU without paying costs or C, which implies that F does not reduce budgetary deficits. In other words, F aims at being a “free rider”, while country G adopts the discipline strategy in order to observe the EMU rules. We will also suppose that the benefits of the EMU fall to B/2 for each country, as the two countries can share these benefits equally. Therefore, the net benefits for country F are considered to be
$(B/2)$,
while those for country G are
$(B/2 - C)$
and vice-versa as is seen in Table 3.

Table 3: Fiscal Rule Model with no sanctions -Payoff Matrix-

		Country G	
		Discipline	No discipline
Country F	Discipline	B − C, B − C	B/2 − C, B/2
	No discipline	B/2, B/2 − C	0, 0

Moreover, although there is a case where no discipline strategies are taken, and in which both countries aim at being “free riders”, the monetary union would fail and neither country would enjoy any benefits. The payoff matrix of the game is summarized in Table 3. Here, suppose
$B/2 > B - C > 0 > B/2 - C$ ……… (1)
Clearly, (1) can be simplified as
$B > C > B/2$.

As we saw earlier, it is clear that $B > C$ holds. However, $(C > B/2)$ means that one of the countries adopts the no discipline strategy and the other country’s benefits are less than its cost. Therefore, the other country has to adopt a similar no discipline strategy or fiscal policy. In such a case, the game will fall into the well-known “prisoner's dilemma.” As a result, the introduction of the common currency will fail and the EMU will collapse.

Next, in order to make the EMU successful, we will consider the case where the EU imposes a fine or sanction (S) on a country that violates the fiscal discipline rule. First, we examine country F. Net benefits will be $(B - C)$ if country G is assumed to have a discipline strategy in order to observe the rules. However, if country F adopts the no discipline strategy in order to be a “free rider”, F’s net benefits are defined as $(B/2 - S)$.
We can compare two opposite strategies by country F,
$(B - C) - (B/2 - S) = S - (C - B/2)$

If the EU decides the level of sanction to satisfy

$S > C - B/2$ ……… (2)

then $(B - C) > (B/2 - S)$,

which means that F should adopt a discipline strategy to observe the rules.

If we suppose that G adopts a no discipline strategy and F adopts the discipline strategy, F's net benefit would be

$B/2 - C$.

If F also adopts no discipline strategy, then, there will be no monetary union and F's net benefits will be $(0 - S)$. We will compare F's two different policies

$(B/2 - C) - (0 - S) = S + (B/2 - C) > 0$ (∵ (2))

This means that in spite of G's strategy, F would adopt a discipline strategy. Therefore, in conclusion, sanctions on a country that does not observe the rules should be effective in making the country observe the rules and vice-versa.

Table 4：Fiscal Rule Model with Sanctions
-Payoff Matrix-

		Country G	
		Discipline	No discipline
Country F	Discipline	B − C, B − C	B/2 − C, B/2 − S
	No discipline	B/2 − S, B/2 − C	− S, − S

The EU introduced the Stability and Growth Pact, which defined sanctions against countries with no discipline fiscal policy, in 1996. As we have seen in Figure 1, the EU's debt/GDP ratio declined significantly. We can assume that the pact had a significant impact on the EU or EU member states. However, due to Germany's violation of the pact caused by the considerable burdens of German unification, the German budgetary deficit/GDP ratio exceeded the threshold set by the EU. Against such a background, the EU did not impose sanctions and adopted a "flexible interpretation". Since then some member states seem to have lost fiscal disciplines and this became an important factor in the deterioration in fiscal balances since the end of 2000s which might have triggered the Euro crisis. In other word, fiscal rules with sanctions do have an effect.

5. European Semester and Fiscal Compact

In order to avoid a future recurrence of the Euro crisis, the EU has implemented various measures, which we will examine in this section. Firstly, the EU introduced the "European Semester"[11] starting in January, 2011. Its purpose is to improve the transparency of fiscal policy, and it consists of three surveillances, called macro-economic imbalance surveillance, structural reform surveillance, and fiscal policy surveillance. Amongst these, macro-economic imbalance surveillance seems to be most important. Namely, each of the member states has to present its "Stability and Convergence Programme" and its fiscal policy for the next year to the European Commission.

The Commission evaluates the fiscal policies of the member states and will summarize its evaluation results by May or June each year. Then the EU Council will adopt the evaluations by the end of June, or the end of the first semester. Each country can then submit its budget draft to its own Parliament. Thus, in the stage before budget draft decisions in each country, half a year (the Semester) will be spent undergoing surveillance by an independent regulatory authority, viz. the European Commission. In other words, member states cannot implement their own fiscal policy without obtaining consent from the EU,.

Next, we will examine the "Fiscal Compact"[12], which took effect in January 2013, and 25 member states, except for Great Britain and the Czech Republic, signed and introduced (there were 27 member states at the time of signing). However, within five years, it is due to be included in the legal framework of EU after effectuation. The outline of the Compact is as follows. The most important element is the introduction of a financial equilibrium rule. The signatory has to commit to balancing or moving into the surplus of the general government fiscal balance and has to enact this domestically. That is, the goal in the medium term for each country is to reduce its ratio to GDP to less than 0.5 percent. However, when the public debt outstanding / GDP ratio is less than 60%, the budgetary deficit to GDP ratio is permitted to rise to 1 percent. In addition, this commitment is deliberated in the European Semester mentioned earlier.

If a country in the EMU adopts a "no discipline" fiscal policy and violates the above condition, European Court of Justice can impose a fine of 0.1 percent of GDP on the country as a sanction. In a sense, the compact can be regarded as a new version of the Stability and Growth Pact.

6. Conclusions

As we have seen above, there seems to be a strong co-relation between fiscal rules and fiscal performances in the EU. During the period from the 1970s to the mid-1990s when there were actually no fiscal rules, the EU's fiscal performance had deteriorated. However, with the view towards the realization of the EMU, the EU introduced the Stability and Growth Pact which included sanctions against member states with little or no fiscal discipline. The EU's accumulated public debt to GDP ratio then declined remarkably. However, facing Germany's violation of the pact, due mainly to huge unification costs, the EU gave up sanctions. This had a profound impact on other member states, which had deficit biases. Triggered by the risk of a Greek default, the Euro faced crisis and the EU again introduced another fiscal rule, the European Semester and Fiscal Compact, which is again improving fiscal performances in the EU. If therefore,the EU would avoid sanctions on member states wluich violate the "Fiscal Compact" ,the EMU might fail.

What lessons can we draw from the European experiences? Japan has not yet adopted fiscal rules to reduce its deficit bias. This might be one of the reasons for its deteriorating fiscal performance. Therefore, Japan should introduce a legal basis for rigid fiscal rules in exchange for the degree of freedom of fiscal policy. It should be noted that Japan has already significantly lost the degree of freedom of its fiscal policy, due to highest or worst performance and has no or little room for discretional fiscal policy. Considering European experiences, Japan seems to have to introduce fiscal rules, before it will raise its consumption tax from current 8 percent to 10 percent, scheduled in 2017.

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[1] According to the Treaty on the European Union, there are five criteria to introduce the common currency; the Euro. Less than 3 percent of government deficits as percent of GDP and less than 60 percent governm ent debts as percent of GDP are two of these five criteria. The purpose of these two criteria is to ensure su stainable public finances. See
http://ec.europa.eu/economy_finance/euro/adoption/who_can_join/index_en.htm
(Accessed on Nov 3. 2014)

[2] In order to ensure sustainable public finance, the EU introduced the Pact in 1996. It stipulated that the member states which violate fiscal rules can be fined as much as 0.5 percent of their GDP. See
http://ec.europa.eu/economy_finance/economic_governance/sgp/index_en.htm
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[10]See Kubo(2003), "OOSHUU TOOKOO RON(in Japanese, *The Theory of European Integration*), Minerva Shoboo, pp.121-127

[11]See the Commissions website;
http://ec.europa.eu/economy_finance/economic_governance/the_european_semester/index_en.htm
(Accessed on Nov. 3, 2014)

[12]Its former name is "Treaty on Stability, Coordination and Governance". See the Commission's website;
http://www.eurozone.europa.eu/euro-area/topics/treaty-on-stability,-coordination-and-governance-(tscg)/
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