I would like to thank Fritz Breuss for the attention that he has paid to the reading of my paper, and for his comments.

He has extremely well summarized the main findings and contributions of my paper! Here are my answers to his comments.

First, I thank the reader for mentioning the paper by Neck-Haber-McKibbin (2005). After the integration of new Central and Eastern European countries, they analyze the benefits of various levels of cooperation for economic stabilization. In case of demand shocks, they find that cooperating behaviors and more active monetary (based on inflation targeting) and budgetary policies are usually beneficial. On the contrary, in case of supply shocks, more passive policies and fixed rules appear to increase welfare; then, cooperation appears to benefit only to the larger player. I have read and I have mentioned this interesting analysis in the new version of my paper, as well as other recent papers dealing with the subject of cooperation between heterogeneous countries; in particular, a survey by Beetsma and Giuliodori (2010).

Assumptions with limited real life value

Indeed, the reader is right to mention that budgetary policies are constrained by timeconsuming democratic decision mechanisms. Regarding budgetary policies, it takes time to take and to implement decisions. However, if an increase in budgetary expenditures is decided, I think that the effect on the economic activity level is quite fast: it increases quickly the global demand. On the contrary, even if a decrease in interest rates will lead to an increase in economic activity, this transmission can take some time. Economic agents must realize that the returns on their sparing have been reduced, and then decide to adjust their behaviors. They will consume more and spare less, but this adjustment is not instantaneous. That is why I have considered a lag of one period in the transmission mechanism of monetary policy. In the new version of my paper, I have specified this point in footnote 1.

The mechanisms described in my paper concern the stabilization of shocks in 'normal times'. Therefore, the current European debt crisis is not well described by my paper. Indeed, the problem of this crisis is that anticipations and confidence have been given an extreme importance. Thus, the European Central Bank has used mechanisms (OMT) mentioned by the reader mainly to avoid the defiance of the financial markets. Monetary policy transmission mechanisms take time to operate. However, in this period of crisis, the huge efficiency of monetary policy is to be able to influence very quickly the confidence of the financial markets and therefore anticipations, by ensuring that the ECB will take whatever necessary decision in order to avoid that the indebtedness of an EMU member country becomes unsustainable.

I must agree with the fact that my model is not well suited to deal with the problem of the current European debt crisis. Public debts are not considered in this model, neither the importance of anticipations on financial markets to increase government bond spreads on these debts; macro-economic imbalances (divergences in competitiveness and current accounts differentials) are not considered. The aim of this paper was limited to the study of the advantage or not of budgetary cooperation for the stabilization of demand or supply shocks in the framework of a structurally heterogeneous monetary union. Regarding the current European situation, the teaching of my model is thus only that even the proposition of more budgetary cooperation between the member countries of the monetary union would not necessarily help to solve the current crisis. Indeed, in the framework of a structurally heterogeneous monetary cooperation can sometimes be detrimental to the stabilization of economic activity levels. I am currently working on new papers dealing with the problem of the European debt crisis, of the Fiscal compact, of the possibility of Eurobonds. However, these fundamental questions were not the subject of the current paper...

The specificity of the Euro crisis is not captured in the model

I agree with the fact that my paper deals with demand or supply disturbances in 'normal times'. The current European debt crisis is very different, because it is not only a problem of 'disturbances', it is also a matter of confidence. Financial markets have doubts about the sustainability of the public debts of some European countries, and even about the future of the Euro. Therefore, whereas government bond spreads had become quite negligible before 2007, they reached unsustainable levels for some EMU member countries with the current crisis. There are huge financial (and not only real and trade) linkages between the European countries, which can explain the importance of the phenomenon of contagion on the financial markets, and confidence has been given a new power.

I fully agree with all the comments of the reader, which are, obviously, extremely relevant and fully right. However, even if the current debt crisis is an extremely topical question today, and if I am myself currently working on this question, this was beyond the scope of the current paper. I must only agree with the reader that in the framework of the current financial and European debt crisis, traditional New-Keynesian models and traditional macroeconomics have their limits...

Which kind of cooperation?

In my paper, I have only considered the possibility of cooperation between the budgetary authorities. I have not considered the possibility of a 'full' budgetary-monetary cooperation in the determination of the policy-mix in the monetary union. Obviously, many papers show that a monetary-budgetary cooperation is welfare optimal, that a 'full' cooperation increases welfare in comparison with a limited budgetary cooperation. But in my paper, I voluntarily confined my analysis to a budgetary cooperation which could even be 'partial', between a limited number of country. I wanted to show the limits of such a cooperation which could be, for example in Europe, limited to some Northern member States with sounder budgetary situations and closer structural parameters. The result of my model is then that such a partial budgetary cooperation would not always be beneficial.

As underlined by the reader, the statutes of the European Central Bank mention that it must remain independent, and define its monetary policy independently of the budgetary authorities and of the pressures of the national governments. That is also why I have not considered the case of a 'full' monetary-budgetary cooperation. Nevertheless, it is obvious that in the exceptional circumstances of the current public debt crisis in Europe, the ECB had to put in place and use exceptional mechanisms, in order to preserve the euro and the financial system. We are in a situation where non conventional monetary instruments had to be used. Therefore, the specificity of this crisis and of the current situation could not be captured by my model, which mostly concerns the functioning of the institutions in 'normal times', without taking into account the exceptional necessity to use non conventional monetary instruments (OMT).