

Discussion of “Should the ECB Coordinate EMU Fiscal Policies?”*

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This is a clever paper whose title is nothing short of tantalizing. The opportunity does not often arise to read and debate whether the monetary authority in the euro zone should be assigned an additional mandate toward designing (not to mention negotiating and managing) national budgetary stances across member states. Should the European Central Bank coordinate EMU fiscal policies? I suspect that question is shorthand for a longer one, which can be split into two parts: First and foremost, should EMU countries coordinate their fiscal policies? And, if so, is there a role for the ECB to play? Most of the paper is really about the first part of the question, and so is this discussion. But the ECB part is important, and the last paragraphs provide some remarks on the subject.

As a preamble and general point, this paper provides a fairly complicated and somewhat tortuous assessment of game-theoretical scenarios for an analysis of the institutional architecture of the euro zone. It requires and deserves repeated readings, with open mind and full attention. Given the limits of a short note, in what follows I will focus on what are arguably the most relevant elements at the very core of the model, while overlooking unnecessary detours and abstracting from excessive details.

The basic framework considers two countries, H and F, both parts of a monetary union with a single monetary authority (M) in charge of interest rate policy. H and F have independent fiscal stances. To appreciate the basic message of the paper, one need not pay much attention to the specific components of the fiscal stance and their transmission mechanism to the real economy, whether this involves public spending, tax policies, or debt management. It is

*The views expressed here are those of the author and do not necessarily reflect the position of the Federal Reserve Bank of New York, the Federal Reserve System, or any other institution with which the author is affiliated.

sufficient to think of the fiscal stance simply in terms of national policies boosting or contracting demand for output, affecting prices domestically and abroad in the process.

H, F, and M all choose their stances anticipating private agents' reactions (that is, before agents' decisions) and knowing the realization of the current state of nature (that is, after observing the shocks). In the comparison of social costs and benefits, the welfare metrics is a country-specific loss function for H and F, and a union-wide loss function for M. Both H and F choose their actions by optimizing either their national loss functions or a union-wide loss function, even though in both cases their "true" loss function and welfare metrics remains the country-specific one.

If all policymakers optimize the union-wide loss function, we have a cooperative equilibrium (C). If not, H and F can make decisions simultaneously (Nash style, without internalizing the reaction function of the other country) or can act as leaders (first-movers Stackelberg style) or followers.

By assumption, the central bank M always acts as a strategic follower. Why is this the case? The authors' rationale—combining the lack of predictability of fiscal policy as a tool for short-term stabilization and its low-frequency uncertainty—may not sound fully convincing. Economic history in Europe and elsewhere suggests that things can go the other way around, with central banks internalizing the fiscal reaction functions in their decision-making process, particularly when public debt and deficit levels are large and fiscal "space" is limited at the national level due to past profligacy or miscalculation. Imposing a specific hierarchical configuration onto the strategy space of the policymakers appears unwarranted and limits the comprehensiveness of the analysis. According to the authors, monetary leadership is "less likely to be adequately explained by a model with full and complete information," which is a true statement but perhaps also a way to bypass the problem rather than solving it. And in a footnote they write: "There is some empirical evidence in favor of fiscal leadership against monetary leadership," but this seems to be valid "only for the United Kingdom and Sweden," two economies that hardly provide a paradigm for a representative euro-zone country.

At any rate, ruling out monetary leadership leaves us with three non-cooperative regimes: one defined as [HF]M, in which fiscal

authorities play Nash with each other and Stackelberg with M; one defined as HFM, in which H is leader; and a third defined as FHM, in which F is leader (the mirror opposite of the latter). At this point the paper asks three key questions.

Question 1 is whether regime C is necessarily better than all non-cooperative regimes above. The answer is no, as the solution depends on the nature of the macroeconomic shocks hitting the economies. If the relevant shocks are productivity/technology related, then C is Pareto preferred but not a sustainable equilibrium. If the relevant shocks are cost-push disturbances, then C can emerge as one of the multiple sustainable equilibria, but it is not Pareto preferred in the union as a whole.

Question 2 asks what is the prevailing equilibrium if H and F can *choose* their leader/follower status, based on the comparison of alternative outcomes ranked in terms of the national loss functions. The answer is: it depends. Under productivity shocks, [HF]M is a unique Nash equilibrium, and we have a prisoner's dilemma situation. Under cost-push shocks, HFM and FHM are both Nash equilibria.

Question 3 considers what happens if H and F can choose *both* whether to be leader/follower *and* whether to adopt the union-wide objectives rather than the national ones. The answer, as you may have guessed, is: it depends. Under productivity shocks, [HF]M is unique and robust. Under cost-push shocks, things get tricky.

Let's inspect the stylized mechanisms underlying the previous results. Start with the symmetric case and overlook at a first reading country-size differences, home bias in preferences, and even cross-border net lending, etc., all relevant but not first-order nuances.

Consider the case of *supply shocks*, positive at home relative to foreign. Without nominal rigidities, H prices fall relative to F, country H's terms of trade worsens, and world demand for H products increases relative to F products. This is the efficient allocation, and there is no need for any fiscal response. With nominal rigidities, instead, H output increases less than potential, and the output gap generates deflationary pressures. H fiscal authority expands its stance to stabilize H inflation.

This intervention has two effects. First, there is a spillover abroad: in the foreign country a positive output gap opens up and inflationary pressures increase, prompting F to cut its fiscal stance.

Second, there is a union-wide externality: H inflation is stabilized, henceforth average union-wide inflation is stabilized as well and there is less need for the central bank M to adjust the common monetary stance. Under cooperation, H and F would internalize these effects. Absent fiscal coordination, they don't.

In the [HF]M equilibrium the fiscal authorities move simultaneously before the monetary authority. H anticipates that if it eases its fiscal stance, average union-wide inflation is stabilized, and M reduces rates, which stabilizes H inflation. So H has less incentive to increase its stance, and the H fiscal stance ends up being closer to the efficient response. Similar considerations hold for F, with opposite sign. Relative to C, [HF]M delivers more volatile inflation in both countries (which worsens welfare) but more stable output and consumption.

In the regime with sequential fiscal moves HFM, the leader H expects that—by increasing its fiscal stance—flation in country F increases and so does union-wide inflation, leading to higher interest rates. This destabilizes H inflation. So H moves its fiscal stance less than under [HF]M. Country F instead cuts its fiscal stance, and M lowers rates to fight deflation. Producer inflation is more volatile in both countries than under [HF]M. Consumption and output are closer to the efficient allocation in the home country (offsetting the welfare loss from inflation) but not in the foreign country.

To sum up, under supply shocks welfare in the home country is higher under HFM than under [HF]M but lower than under C. Welfare abroad under HFM is lower than under [HF]M. Union-wide welfare under HFM is lower than under [HF]M, and both are lower than under C.

Now consider *cost-push shocks*—say, negative shocks in country H and positive in country F. Marginal costs and inflation fall in H, while they increase in F. Union-wide demand shifts from F to H. Income and consumption increase in the home country and fall abroad.

Under [HF]M both fiscal authorities rely on the monetary authority to stabilize inflation, thus they do little, and consistently union-wide inflation moves little. Relative to C, local inflation is slightly more volatile (reducing welfare), but consumption and output are more stable.

Under the HFM regime country H can improve welfare relative to [HF]M, similar to the case under productivity shocks. H does little, even less than under [HF]M. Inflation is on average negative in the union. M cuts rates. H inflation is stabilized. F consumption does not fall much.

In sum, under HFM the leader H gains relative to [HF]M but also relative to C. Interestingly, the follower F also gains relative to [HF]M, so there is no reason to fight over leadership. HFM and FHM are both equilibria.

These in a nutshell are the key results of the paper (some extensions are considered in section 5), providing a nuanced answer to the first question of whether EMU countries should coordinate their fiscal policies: sometimes yes, sometimes no, mostly depending on the nature of the disturbances hitting the economy. But what about the second question: If so, what role should the ECB play?

For a partial answer the reader needs to wait until the conclusive pages—specifically, the first paragraph of section 6—and most explicitly in the conclusion (echoing a sentence in section 1 of the paper): “The pervasive multiplicity of policy equilibria and coordination failures suggests an important coordinating role for a supranational authority. This role can be *naturally* taken by the central bank, as it has access to the same information as the fiscal authorities and can easily communicate with them.”

“Naturally” (my italics) may be a bit of an overstatement here. Even within the abstract boundaries of the theory, there is no intrinsic institutional comparative advantage for the monetary authority—which is already quite busy dealing with its price stability mandate—to deal with the coordination of fiscal stances. And thinking in terms of the actual institutional architecture of the European Union, there may be other supranational authorities that could play this role, starting with the Commission.

These considerations notwithstanding, the key question and raison d'être of the paper can perhaps be addressed most fruitfully in the context of the current policy debate on the design of the fiscal/monetary policy mix in Europe. As emphasized repeatedly in the literature, most recently in a VoxEU e-book (Bénassy-Quéré and Giavazzi 2017), there exists a broad consensus on the need for countercyclical fiscal policies in the euro zone, particularly through automatic stabilizers. But such consensus on the substance of such

policies does not rule out different views on how to set them up. Particularly controversial are proposals calling for (even a small) central budget to fund macroeconomic stabilization programs or investment projects. They would require issuance of common debt which would have to be served based on a common resource. Ça va sans dire, the problem is made more difficult by extraordinarily high levels of legacy public debt in some countries. Legacy debts block any form of insurance scheme across member states, since they involve different probabilities of crisis across countries.

And here is where a potential role for the ECB actually emerges, to go back to the paper's key question. The related literature once again is abundant and still growing. Picking randomly from the heap, in a 2016 VoxEU piece (Corsetti, Higgins, and Pesenti 2016) my coauthors and I consider the possibility of instituting a fund with the ability to buy national public debt (from countries satisfying specific fiscal criteria) and issue a safe asset, in the form of Eurobonds, with an explicit ECB backstop.

This fund could naturally be given responsibility to coordinate fiscal policy in response to euro-zone shocks. In normal times, its main function would not interfere with national fiscal policymaking. In the presence of large recessionary shocks, however, it would take charge of setting the required degree of fiscal accommodation at the union level, which may possibly require short-run deviations from deficit criteria in some countries. This fund, in coordination with the ECB, would guarantee the face value of its bonds, not of national public debt. Access to the fund would only be conditional on clear fiscal criteria, ensuring fiscal discipline at the national level, and would be denied to countries violating these criteria.

Details regarding the aforementioned fund and its backstop are bound to differ drastically across institutional proposals and analytical frameworks. The key point here is that there may indeed be a role for the monetary authority to guarantee the viability of programs entailing state-contingent, union-wide fiscal coordination in response to cyclical downturns. The first paragraph of section 6 considers an extension of the model which attempts precisely to introduce such an arrangement, extending the policy instruments available to the central bank while maintaining the model assumptions regarding strategic leadership and monetary-fiscal policy interactions. Interestingly, the introduction of borrowing and lending from the central-bank-led

fund modifies the ranking of policy regimes and affects the size of welfare losses. These are promising directions for future extensions of the model, which are bound to bring its analytical apparatus closer to the ongoing policy debate.

References

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