IN-DEPTH ANALYSIS

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Does a single monetary policy need a single fiscal counterpart?

Monetary Dialogue November 2018

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Does a single monetary policy need a single fiscal counterpart?

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Abstract

The absence of a single fiscal policy in the euro area does not necessarily constitute a problem for the ECB. In a deep financial crisis poorly coordinated national fiscal policies are likely to be insufficient. But outside crisis periods spill-over effects of fiscal policy are likely to be small and of uncertain sign. Moreover, fiscal policy is always subject to policy errors and other shocks. With many different national policies, individual errors and shocks would tend to cancel out each other, at least partially, thus delivering a more stable policy in the aggregate, which should facilitate the task of the ECB to maintain price stability. EMU reform efforts should thus not aim at creating a unified fiscal policy.

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EXECUTIVE SUMMARY

The view that a single monetary policy needs as a counterpart a singly fiscal policy arose during the financial crisis, which produced a very deep recession and the widespread impression that national fiscal policy did not react enough because policy makers and parliaments in each country took their decisions based only national interests, without taking into account the spill-over effects of their national decisions on aggregate euro-area demand.

However, the crisis has been largely overcome; and experience suggests that crisis recur irregularly, but also that most of the time advanced economies are not in a financial crisis. During these 'normal' times the argument for fiscal policy coordination, or even centralization is much weaker. Outside the scenario of a deep recession resulting from a financial crisis, the spill-over effects of national fiscal policy are much weaker and the appropriate stance of fiscal policy is much more difficult to establish with certainty.

It remains of course true that a perfectly centralized decision making system for fiscal policy would by definition always yield superior outcomes. In such an idealized world the ECB would be better off because fiscal and monetary policy could be perfectly coordinated. However, fiscal policy is in reality influenced by many factors and corresponds rarely to the theoretical optimum of a policy that is used optimally to dampen the business cycle.

This contribution emphasizes this, often overlooked, aspect. It argues that a single fiscal policy might be theoretically superior, but in reality it would also be prone to wider swings and errors than the aggregate result of many national policies, each of which is subject to different shocks which would tend to cancel out each other at least partially.

1. INTRODUCTION

Two currents converge at the present time: the ECB is about to exit its active phase of 'non-standard' monetary policies and discussions on the reform of the governance of euro area are starting again. One issue in this context is that the fiscal policy framework of the euro area is different from the 'normal' case of even large economies. One key difference is the absence of a central fiscal authority. But being different does not necessarily mean worse. One should regard it as an open question whether the ECB would have an easier task if there was only one euro area Treasury, instead of 19 different, national ones.

It is true that the existence of many national fiscal authorities makes it much more difficult to co-ordinate monetary and fiscal policy ex ante. However, such ex ante coordination takes place only rarely even in countries where it would be possible. In most advanced countries central banks are tasked with keeping price stability, implicitly taking the stance of fiscal policy as given. This is also the case in the euro area, with its Maastricht framework, which implicitly assumes that one tool, namely monetary policy, should have one objective, namely price stability, which the ECB should pursue on its own.

This contribution will thus not discuss the merits of ex ante coordination of fiscal and monetary policy, but starts from the assumption that fiscal and monetary policy are only 'coordinated' ex post, in the sense that the ECB has to set its policy taking the aggregate fiscal stance as given.

The real question is thus whether the task of maintaining price stability becomes more difficult when fiscal policy is determined at the national level, taking only national economic conditions into account. The key problem is that national fiscal policy has spill-over effects because stronger demand in any one country tends to increase imports from other countries. This effect is widely assumed to have been particularly important during financial crisis.

One could thus argue that in a financial crisis uncoordinated national fiscal policies would be insufficient, thus putting a larger burden on the ECB to stabilize the economy.

However, periods of financial crisis constitute the exception, rather than the rule. During normal times the spill-over effects of national fiscal policies are likely to be much smaller, and could potentially become negative because a fiscal expansion in one country would put upside pressure on area-wide interest rates, which would dampen demand everywhere (Belke Gros (2009)). However, some spill-over effects are likely to remain even during 'normal times'. This implies that a social planner could produce a better outcome by forcing national fiscal policy to take into account the remaining spill-over effects.

That ideal exists only in theory. In reality, fiscal policy is dictated mostly by contingent political considerations and there is little fiscal/monetary policy coordination in large OECD countries (see for example the survey in IMF (2015)).

This contribution argues that during 'normal' times the existence of many national Treasuries might actually constitute an advantage since national idiosyncratic shocks would tend to cancel out each other, at least partially. A unified euro area treasury is more likely to lead to larger policy mistakes in terms of the overall fiscal stance, than the sum of many national ones.

The task of the ECB (to maintain price stability) might thus actually be easier under the current set-up under which the fiscal stance of the euro area is, compared to the US or Japan, likely to be more stable (because resulting from the aggregation of independent national policies) and less prone to over-spending (because of the fiscal rules). There is thus no need to change the institutional framework for monetary and fiscal policy in the vain attempt to obtain the ideal combination of fiscal and monetary policy.

2. FISCAL POLICY TO SMOOTH THE BUSINESS CYCLE: THEORY VERSUS REALITY

The optimal fiscal policy would of course be anti-cyclical. But, there is ample evidence in reality that fiscal policy is at best only partially anti-cyclical. This means that models which compare a monetary union without national fiscal policies to one with a unified fiscal policy which is perfectly anti-cyclical do not describe reality.

The other extreme position that anyway fiscal policy is never used to stabilize output is also wrong. As the IMF (2015) documents in a survey, governments in advanced countries tend to systematically expand deficits during downturns. However, the opposite does not seem to be the case. There is little evidence that fiscal policy is tightened during upturns. Moreover, the evidence that downturns are met by higher deficits is based only on a statistical association, which is far from perfect.

It is often argued that euro area member countries have greater difficulties in conducting counter-cyclical policies because a country in recession might not be able to run a large deficit because large deficits could lead to high risk premia. This might have been true during the euro crisis of 2011/12. But it is not true more generally.

Table 1 below shows a simple measure of countercyclical policy for all EU Member States: the correlation coefficient (in %) between the output gap and the cyclically adjusted deficit using 21 years of data from 1996 to 2017.

With a strong anti-cyclical policy that correlation should be positive and high (close to 100%) because a large output gap should lead the government to run a large deficit. The right hand side of the table shows the best performers in term of anti-cyclical policy, which are, by far Finland and Denmark. The first is in the euro area, the second has a fixed exchange rate with the euro. Being a member of the euro area is thus not an obstacle to a relatively strong anti-cyclical policy. These two countries were able to conduct a strong anti-cyclical policy because they had fiscal space, i.e. low debt levels and low deficits at the outset of the crisis.

The left hand column of the table shows the worst performers, i.e. countries where fiscal policy has been (ex post) highly pro-cyclical, i.e. deficits where high when the output gap was positive (during expansions). Italy and Greece provide good illustrations of this pattern, with a correlation coefficient between the deficit and the output gap of around minus 60 %. In other words, in these two countries fiscal policy was as much pro-cyclical as it was anti-cyclical in Denmark and Sweden. For Italy and Greece it would be convenient to argue that they were 'forced' into this pattern because they were not able to run larger deficits during the recession which came with the crisis. (In the case of Italy it was because of market pressures in the form of high risk premia. In the case of Greece, the Troika demanded a reduction in the deficit while output was collapsing.)

However, the argument that the euro works like a straight-jacket (at least for high debt countries) is only partially true. First of all, these two countries were already conducting pro-cyclical policies before the crisis. Greece was already running very large deficits during the boom years preceding the crisis.

Table 1: Pro- or anti-cyclical policies in Europe?

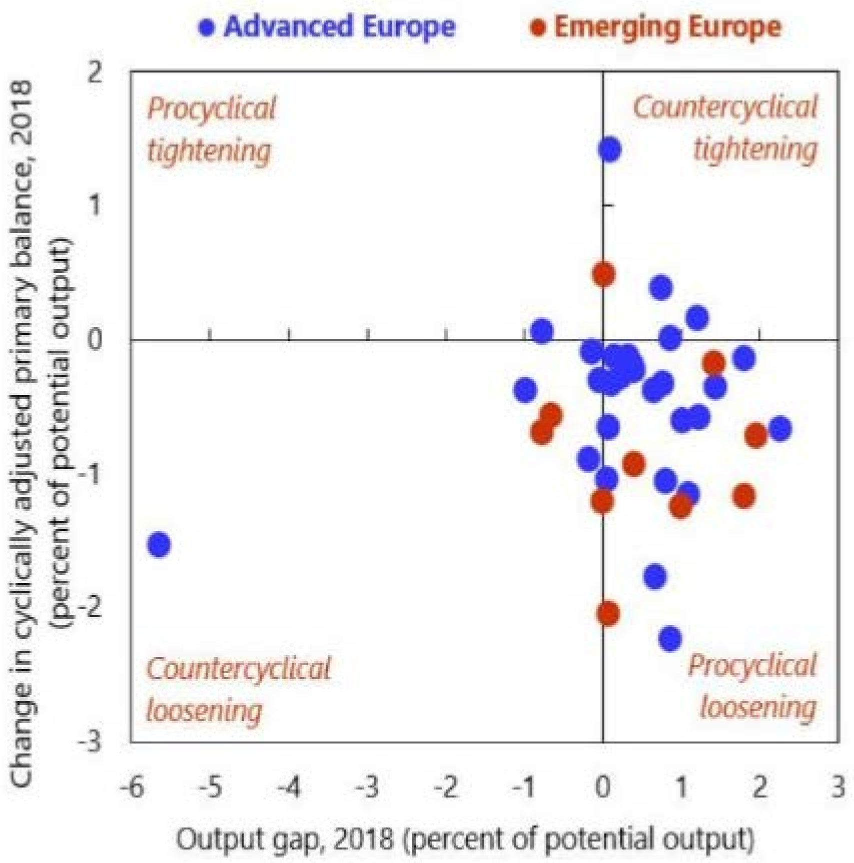
Worst pro-cyclical		Best anti-cyclical	
Hungary	-75	Finland	63
Greece	-75	Denmark	51
Estonia	-72		
Romania	-65	United Kingdom	27
Italy	-62	Sweden	21

Source: own calculation on Ameco data. Correlation coefficient in % between output gap and cyclically adjusted deficit since 1996.

Moreover, the table also shows that countries like Hungary or Romania, which have floating exchange rates, also run strongly pro-cyclical fiscal policies. There is thus little evidence that membership of the euro was systematically associated with less anti-cyclical fiscal policies. For most Member States, one finds only a very weak association between deficits and the output gap. The same applies for the euro area as a whole: there is no significant correlation between the output gap and the cyclically adjusted deficit.

The most recent IMF projections for Europe confirms once more the prevalence of pro-cyclical policies during upswings. The chart below shows for 2018 the relationship between the output gap and the thrust of fiscal policy (measured by the cyclically adjusted primary balance). It is apparent that most observations are clustered in the South-eastern quadrant, which indicates a pro-cyclical loosening.

Figure 1: Change in cyclically adjusted primary balance, 2018 (percent of potential output)



Source: IMF, *World Economic Outlook (WEO)*; and IMF staff calculations.

The argument for a common fiscal policy (or a tight coordination mechanism for national fiscal policy) is, of course, that this observed absence of a systematic counter-cyclical policy should be viewed not as part of immutable reality, but as a symptom of the malfunctioning the system, which should be changed.

3. THE BENEFITS OF DIVERSIFICATION: AN ILLUSTRATION

To give the argument in favor of a common fiscal policy the benefit of the doubt one can assume that in reality national fiscal policy is at least partially anti-cyclical, but subject to an idiosyncratic disturbance (electoral budgets, mismeasurement of the cyclical position, miscalculations of the impact of tax or benefit rule changes). In a multi-country setting this disturbance is likely to be relatively independent across countries because election cycles are not synchronized and there is no reason why a mistake in calculating the impact of a certain tax change (e.g. an increase in income tax rates on revenues) in any one country should be correlated with mistakes made in another country (especially if the tax systems differ).

This independence of national fiscal policy errors has implications for the variability of the aggregate fiscal stance.

If one considers for simplicity a euro area composed of two identical countries (i.e. countries with the same tendency for errors) the fiscal stance of the area is given simply by the sum of the fiscal stances in these two countries. However, the variability of the aggregate fiscal stance is not just equal to the sum of the variabilities. In formal terms, one can measure variability by the variance; and the variance of the sum of two variables is given by the sum of the variances, adjusted for the covariance between the two:

Variance of euro area fiscal stance = 2*Variance national level **+ 2*Covariance of national stances**

If, as argued above, the national errors tend to be relatively independent of each other, the covariance should be low, perhaps equal to zero. In this case (Covariance=0) it follows that the variance of the aggregate stance is just equal to the sum of two variances:

Variance of euro area fiscal stance $_{\text{independent policies}}$ = 2*Variance national level

However, this would be much lower than the variance of aggregate fiscal stance if one assumes that the aggregate fiscal stance would be the result of a similar policy process as at the national level. The aggregate fiscal stance would concern a budget that is twice as large. This implies that the variance of a hypothetical euro area fiscal stance would be given by:

Variance of euro area fiscal stance $_{\text{single policy}}$ = 4*Variance national level [1]

The variability of the aggregate stance would thus, in this example (with two identical countries), be twice as large at the variability resulting from two national policies, whose errors are independent from each other.

A lower variability of the aggregate fiscal does not imply immediately that two independent fiscal policies are better because fiscal policy has spill-over effects which are not taken properly into account when policy is made at the national level. But it is clear that many independent sources of fiscal policy errors have an advantage as well: if the spill-over effects are small, the risk diversification aspect becomes relatively more important.

The overall conclusion that emerges from these considerations is that it is difficult to determine a priori whether a common fiscal policy would be better for the stabilization of the business cycle. At the very least it is not a foregone conclusion that a common fiscal policy would be superior. Moreover, the relative advantages of a common fiscal policy would seem to decline as monetary and financial conditions 'normalize'. Outside financial crisis and when interest rates are no longer at the zero lower

[1] The result follows from Cov(X,X)=Var(X).

bound the spill-over effects are likely to be small and of uncertain sign. In such a 'normal' environment the risk diversification from many national fiscal policies should prevail.

In an environment of zero interest rates the spill-over effects of fiscal policy are definitely positive, implying that uncoordinated national fiscal policies might not deliver enough stabilization. In this type of environment, it becomes more difficult to decide whether a common policy would be superior.

It is mainly for a financial crisis environment that the case for a common fiscal policy appears very strong.

Box 1: Implications of EU Governance Reforms: Rationale and practical application

More in general one can argue that the need for policy coordination (and the need to impose limits on the degree of freedom for national fiscal policy) depends on the economic and financial market regime of the moment.

Table below considers the possible spillover effect of an increase in the fiscal deficit in one country on other countries of the monetary union, under different circumstances. In particular distinguishing 'normal times', times the monetary policy is ineffective and lastly times of crisis.

Table: Spillover effects in a monetary union

Relevant variables / **State of Economy & financial markets**	**Debt (stock)**	**Fiscal deficit**
Normal times	Not material?	Sign uncertain
Zero interest rate (policy rate)	Not material?	Positive
Crisis times: High risk premia	Very strong negative	Strong negative

Source: Own elaboration.

The differences among the cells are briefly motivated here.

During normal times, when financial market stability is not in danger (first row) the level of the debt does not play an important role. There is no spill-over even if (or perhaps more correctly particularly if) financial markets do price a premium for a higher debt level. Countries with a higher debt level would then face higher debt service costs, but that would not be a problem for the others or the stability of the entire financial system of the euro area. One of the aims of the Banking Union is to achieve such a situation with financing difficulties of any one member country remaining a problem of that country without negative spill-over effects to the rest of the euro area (see for instance Gros (2013a).

Under these circumstances the spill-over effects of national fiscal policy could be of either sign as argued more formally in Belke and Gros (2009). The basic economic reasoning is straightforward: a fiscal expansion in any one country leads to an increase in domestic demand, which increases

imports from the rest of the euro area. However, this increase in demand will also induce the monetary authorities to tighten its policy stance, which has a negative impact on all countries. This implies that the impact of an expansionary fiscal policy in Germany on other countries, say Portugal or the Netherlands, depends on the strength of the trade linkages and the degree to which monetary policy effects demand locally. In the illustrative case chosen here one could argue that for Portugal, whose trade linkages with Germany are rather small the negative impact from a tightening by the ECB could outweigh the increase in exports. For the Netherlands the result might be the opposite given the very intense trade relationship this country has with Germany. The rationale for an explicit ex ante coordination of fiscal policy for demand management purposes is thus rather weak during 'normal' times.

The argument changes when one considers a 'liquidity' trap situation (second row). In this case a fiscal expansion should have an unambiguously positive impact on the other countries because the ECB would not increase rates in response to an increase in demand in Germany. This simple application of standard demand management models (which are embodied in almost all of the macroeconomic models used by the Commission, major central banks worldwide and the international financial institutions in general) can thus provide a rationale for ex ante fiscal policy coordination (but not with the restrictive bias embodied in the euro area's governance framework).

During a financial crisis the nature of the spill-over changes radically. When financial markets are no longer functioning properly the difficulties of any one country can impact all the others as it was shown with the case of Greece in 2009/10. Under these circumstances a negative fiscal shock in any one country can have a very large negative impact on other countries because it can lead to a malfunctioning of financial markets throughout the entire area. Moreover, the size of the public debt matters greatly during a financial crisis. The higher the debt the stronger the negative impact of high risk premia and the larger the potential burden on the other countries if they have to support the country in financial difficulties. However, one could also argue that in a 'mild' crisis situation, when financial markets access remains for governments, but is restricted to the private sector, the spill-over effects in terms of demand become large and positive because the Keynesian multiplier increases.

This cursory consideration of the likely spill-over effects of national fiscal policy strongly suggest that the nature of these spill-overs changes nature (sign and size) with the regime under which the economy operates. From a strictly economic point of view this implies that the rationale for policy coordination changes radically from regime to regime.

During normal times the case for explicit ex ante coordination is weak as long as the general thrust of policy is not towards the accumulation of unsustainable debt levels.

During a financial crisis, by contrast, the case of fiscal policy coordination is very strong.

The most difficult case is that of a liquidity trap when short term demand considerations suggest a rationale for policy coordination because national fiscal policy would be insufficiently expansionary.

Source: Alcidi, C. and Gros, D (2014), "Implications of EU Governance Reforms: Rationale and practical application", Centre for European Policy Studies.

4. CONCLUSIONS

It is often argued that the ECB would have an easier task if there was only one euro area Treasury, instead of 19 different, national ones. This contribution does not dispute the validity of this argument, but it argues that during 'normal' times the existence of many national Treasuries might actually constitute an advantage since national idiosyncratic shock would tend to cancel out other, at least partially. A unified euro area treasury could lead to much larger policy mistakes in terms of the overall fiscal stance, than the sum of many national ones. There is thus no need to change the institutional framework for monetary and fiscal policy in the vain attempt to obtain the ideal combination of fiscal and monetary policy. That ideal exists only in theory. In reality, fiscal policy is dictated mostly by contingent political considerations and there is little fiscal/monetary policy coordination in large OECD countries.

This observed prevalence of pro-cyclical policies during upswings which one observes at the national would likely be reinforced by a single fiscal policy. The task of the ECB (to maintain price stability) might thus actually be easier under the current set-up under which the fiscal stance of the euro area is, compared to the US or Japan, likely to be more stable (because resulting from the aggregation of independent national policies) and less prone to over-spending (because of the fiscal rules).

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