

Enhanced Fiscal Integration in the EMU?

ESM-ECFIN-GCEE
Workshop Proceedings

Edited by Ralph Schmitt-Nilson

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Enhanced Fiscal Integration in the EMU?

Proceedings of the joint workshop, organised by the European Commission, the European Stability Mechanism and the German Council of Economic Experts on 19 September 2017

Edited by Ralph Schmitt-Nilson

Abstract

This volume presents the proceedings of the workshop organised by the Directorate-General for Economic and Financial Affairs (ECFIN) jointly with the European Stability Mechanism (ESM) and the German Council of Economic Experts (GCEE) on 19 September 2017 in Brussels. The workshop aimed at raising awareness about the fiscal policy architecture in Europe and its potential future developments and contributing to the expert debate on these issues. It consisted of two sessions with two panels each. Short presentations of expert or research contributions were followed by a debate with the audience. The first session was devoted to a review of the European experience with fiscal policy coordination and governance, including perspectives on the euro area fiscal stance. The second session focused on fiscal risk sharing and stabilisation in the euro area. It explored different options of a fiscal stabilisation function and their design.

JEL classification: E61, E62, H60, H50

Keywords: public finances, fiscal policy, fiscal stance, fiscal policy coordination and governance, fiscal integration, fiscal capacity, stabilisation function.

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European Commission
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Economic and Financial Affairs



European Stability Mechanism



German Council
of
Economic Experts

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AGENDA



19 September 2017

"Enhanced fiscal integration in the EMU?"

Workshop co-organised by the European Stability Mechanism, the European Commission, and the German Council of Economic Experts

Albert Borschette Congress Center, Room: 4D, Rue Froissart 36, Brussels

Agenda

MORNING SESSION

- 08:30-09:00** **Registration and welcome coffee & viennoiseries**
- 09:00-09:30** **Introductory remarks**
Rolf Strauch (European Stability Mechanism), Lucio Pench (European Commission)
- 09:30-11:00** **First panel on lessons learned from fiscal coordination and governance**
- *Wolf Heinrich Reuter (German Council of Economic Experts)*
 - *Tigran Poghosyan (International Monetary Fund)*
 - *Lucio Pench (European Commission)*
 - *Mark Hallerberg (Hertie School of Governance)*
 - *Olga Francova (European Stability Mechanism)*
- 11:00-11:15** ☕ **Coffee break**
- 11:15-12:45** **Second panel on Euro area fiscal stance – experience and perspectives**
- *Mateusz Szczurek (European Fiscal Board)*
 - *Agnès Bénassy-Quéré (Paris School of Economics)*
 - *Marien Ferdinandusse (European Central Bank)*
 - *Gilles Mourre (European Commission)*

12:45-13:45 🍽️ **Lunch break**

AFTERNOON SESSION

- 13:45-14:00** **Introductory remarks**
José Leandro (European Commission)
- 14:00-15:30** **Third panel on enhancing fiscal stabilisation and risk sharing in the EMU**
- *Cinzia Alcidi (CEPS)*
 - *Ramon Marimon (European University Institute)*
 - *Pietro Reichlin (LUISS Guido Carli)*
 - *Jochen Andritzky (German Council of Economic Experts)*
- 15:30-15:45** ☕ **Coffee break**
- 15:45-17:15** **Fourth panel on a euro area fiscal stabilisation function and its design**
- *Nicolas Carnot (European Commission)*
 - *Daniel Gros (CEPS)*
 - *Yves-Emmanuel Bara (French Treasury)*
 - *Andreja Lenarčič (European Stability Mechanism)*
- 17:15-17:30** **Closing remarks**
Jochen Andritzky (German Council of Economic Experts)

INTRODUCTORY REMARKS

Rolf Strauch¹

Ladies and gentlemen,

Welcome to this workshop on how to enhance fiscal integration in the monetary union. Before I start, let me, on behalf of the ESM, thank the two co-organisers: The European Commission, and the German Council of Economic Experts.

The *causa finalis* why we are here is that the euro area still needs to improve the functioning of its economy. Some deficiencies remain in place, despite the progress in strengthening Europe's institutional architecture over the crisis. This is inherent to the fact that euro area is a monetary union consisting of 19 different countries. Integration is by necessity a stepwise process and it needs to be in tune with the political and economic realities of Member States. Europe has already taken profound steps in economic integration through the establishment of the single market and the euro in the past half century, which is showing clear benefits. It has taken another landmark step in the last decade through the creation of the Banking Union. Now it is time to address remaining vulnerabilities.

The timing of this conference, right after the State of the Union speech of Commission President Juncker last week, is good. I'd like to refer also to the Commission's reflection paper on deepening of the Economic and Monetary Union, which addresses these remaining problems and proposes ways to solve them. Among other things, it suggests improving the fiscal policy framework and advancing fiscal integration. We are not being asked to invent a magic potion. But, doing so in a sensible manner may well contribute to making Europe's economy more resilient.

Today's programme consists of two topics that the political debate has taken up in recent months. First, the fiscal rules and how they have been applied. We will hopefully be able to simplify them in the near future, to make them easier to understand and apply. The second topic concerns the establishment of a fiscal capacity to support countries that are hit by an asymmetric shock, and other ways to promote fiscal stabilisation and risk-sharing in the monetary union. Let me focus on the second.

Establishing a euro area fiscal capacity is an important task. I hope we will establish one in the future. So the aim of this workshop is to come up with ideas that are not just academically rigorous, but also practical. We need something that works. Another requirement is that we don't want to double work, replicating something that already happens elsewhere. In our exchange of views today, we should assess the benefits and shortcomings of the various proposals on fiscal risk-sharing and economic stabilisation functions that are on the table so far and at the same time explore new ideas.

As a first guide to this dialogue, I suggest that we first ask ourselves what deficiencies there are in the current fiscal policy framework. Secondly, we need to establish how any new functions would fit in the overall architecture and where we can benefit from additional elements. And thirdly, we should try to achieve as much as we can without pooling more resources than needed.

It is equally important to keep in mind that permanent fiscal transfers and debt mutualisation are impossibilities at the moment, mostly because we have not yet been able to overcome sufficiently structural disparities between national economies. Relatedly, avoiding moral hazard is an important consideration. On all these points, I believe we will hear some good ideas today.

Let me sketch out some of the fiscal instruments we currently have at the supranational level and look at the elements that need to be reinforced. The European Union already benefits from the EU budget,

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especially through regional policy funds which ensure convergence among regions. Net transfers can amount to 4 percent of GDP², which is a considerable amount of money. Secondly, the European Investment Bank, which is in charge of implementing the Juncker plan, promotes investment. Finally, the ESM provides a firewall against a loss of market access. It disburses cash only in return for strict economic reform programmes, and its function can therefore be applied during a crisis only if all else fails. The Commission's Balance-of-Payment assistance plays a similar role outside the euro area.

With this list, it is clear that a function that would address countries' vulnerability to severe asymmetric shocks is a remaining critical gap, in particular in the euro area where countries are facing a common monetary policy. Such a stabilisation function could provide funding to increase fiscal space in bad times. It would thus allow for full operation of automatic stabilisers and some discretionary stimulus at the national level. With this it would help better smooth severe asymmetric shocks and safeguard overall euro area macroeconomic stability.

Different options have been floated for such a function by academics, politicians, European institutions and think tanks. These ideas range from common European unemployment insurance, or reinsurance scheme, to proposals for a macroeconomic stabilisation fund. On these options, there are different ideas as to whether the stabilisation function should address only large shocks, or smooth all cyclical variation and on exact design of the function. We also need to explore whether we can combine our ideas with the U.S. experience with rainy day funds and unemployment insurance, although these need to be adapted to the needs and the structural settings that are specific to the EMU.

Some may object by saying that establishing a new institution in the monetary union is nearly impossible. But, let me take the ESM, my own institution, as an example that that is not necessarily true. The period after the global financial crisis hit Europe in 2007 and when things worsened during the euro debt crisis, provided enough momentum for the euro area countries to establish the ESM, a lender of last resort for sovereigns. This function that did not exist before in the monetary union and many would have not imagined beforehand. Member States have put enormous trust in the ESM and its role has evolved over time. But, the ESM does not operate in an institutional vacuum. From its inception, it has been deeply embedded in the institutions of the monetary union through its connections with the Eurogroup, the Commission and the ECB, and through its links to the macro-economic governance framework and the Banking Union. We can learn from this how new institutions and functions can be introduced in an existing European framework in a complementary way.

These are some ideas on what we can discuss today. Let me underscore the importance of this workshop again. We are discussing very practical issues on how to continue to build Europe, to make monetary union more robust and the economy more resilient.

² Maximum average net transfers for the period 2007-2018 were 3.8% for Lithuania.

Lucio Pench³

Today the EMU is at a crossroads. Having a conference on "Enhanced fiscal integration in the EMU?" is thus very opportune and timely. I am glad that the European Commission, the European Stability Mechanism and the German Council of Economic Experts ("Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung") joined forces to organise this exchange of views amongst experts. The European Commission, more specifically the Directorate General Economic and Financial Affairs, is pleased to be physically hosting this event on its premises in Brussels.

In his very pertinent introductory remarks, Rolf Strauch touched upon the issue of a fiscal capacity for the euro area. I strongly agree that a fiscal capacity is an important element for the architecture of a deepened EMU. It would complement other crucial elements, such as the completion of the banking union, the capital markets union and, possibly, a safe asset. The crisis revealed that the euro area economy is not sufficiently resilient against large shocks, be they symmetric or country-specific. This experience calls for the creation of a stabilisation function to complement national fiscal stabilisers. On 19 September 2017, Commission President Juncker kick-started important initiatives in all these fields in his State of the Union address. At the same time, the possible form and design of a fiscal capacity are still open and need to be discussed thoroughly. This holds for the economics behind it as well as the institutional setting and design.

The role of fiscal rules is the other main issue to be discussed at this conference. Why do we need fiscal rules in the euro area and what is their purpose?

In a currency union, there are important externalities among Member States. If one fails, the repercussions affect everyone, as witnessed in the euro crisis. That is why there is a strong need for fiscal coordination and fiscal rules among decentralised national fiscal policies; particularly in absence of a major central budget. This has been widely recognised since the inception of the euro. Nor should the operation of a central fiscal capacity be seen as alternative to fiscal rules. On the contrary, having a common stabilisation mechanism supplementing national automatic stabilisers would underpin a prevailing or exclusive focus of fiscal rules on sustainability. At the same time, the existence of such a mechanism should not be confounded with that of a major central budget, for which neither the political nor the economic conditions are in place.

The alternative to fiscal rules and possibly further fiscal integration is to rely exclusively on market pressures, but this has well-known shortcomings. Market discipline usually kicks in too late and too abruptly. This can be visualised like a kink in the financing conditions: even when fiscal positions deteriorate, financing conditions tend to stay mostly flat. However, once market perceptions change interest rates abruptly increase to prohibitively high levels, de facto cutting the sovereign from market access. Some still advocate market discipline as a substitute for fiscal rules, but this remains a minority view. The debate is not new. I owe to Professor Niels Thygesen, the chair of the European Fiscal Board, an anecdote about the discussions that took place in the Delors Committee, which outlined the contours of the EMU. A number of participants, including Niels Thygesen himself, were in principle in favour of highlighting the disciplinary role of financial markets for public finances. The most sceptical of all, however, was Alexander Lamfalussy, who was also possibly the one with the greatest experience with the actual workings of the market, having had a long career in banking before moving to head the Bank of International Settlements.

Going forward, how can fiscal rules be further improved and what would be the "best" design? Today's system of rules is the result of a long process of evolution. At this conference, participants will, among

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other things, discuss how well it works today and what the remaining shortcomings are. There are some main dimensions along which improvements and adaptations can be envisioned.

First, what is the right balance between the central level and the national level in the design and implementation of fiscal rules? Central design and implementation seem more apt to ensure equal treatment. A relegation of some functions to the national level on the other hand, could be conducive to increased ownership.

Second, the design of fiscal rules and elements of an improved architecture of EMU have repercussions on one another. The banking union and a safe asset could break the doom-loop between sovereigns and banks, possibly allowing for more market pressures in the system. As already mentioned, a fiscal capacity could supplement national fiscal stabilisers, potentially allowing for less complex, more stability-oriented rules.

It is a pleasure to welcome such a distinguished group of academic and professional economists to this conference.

1. FIRST PANEL ON LESSONS LEARNED FROM FISCAL COORDINATION AND GOVERNANCE

1.1. DESIGN AND EFFECTIVENESS OF FISCAL RULES AND FRAMEWORKS

By Wolf Heinrich Reuter⁴

Abstract: Across all rules, countries and years fiscal rules are complied with in around 50% of the years. However, they have an effect on fiscal variables also if they are not always complied with. Fiscal rules seem to act as benchmarks or targets for policy makers and the public rather than ceilings. Stronger enforcement and more independent monitoring of the rules could increase compliance and thus their effectiveness in counteracting the deficit bias of politicians.

Introduction

In the aftermath of the sovereign debt crisis the EU and its member states strengthened their fiscal frameworks. Therefore, among other regulations the so called Two-Pack, Six-Pack and Fiscal Compact added new provisions and institutions to the existing regime. Some key elements of the resulting framework are various types of numerical fiscal rules, which should also be introduced or strengthened at the national level, restricting the discretion of governments. From a theoretical perspective such rules are introduced to counteract the deficit bias of governments and politicians. This deficit bias is well documented in the literature (see e.g. Wren-Lewis, 2011, for an overview) and can arise due to e.g. common fiscal pools, asymmetric information between voters and governments, short-sightedness of politicians or spill-overs in monetary or fiscal unions.

The empirical literature so far concentrated on the analysis of the effect of the introduction of such fiscal rules. Studies usually looked at differences in various fiscal and macroeconomic variables associated with the existence or strength of (different types of) fiscal rules. Those analyses overall do find an effect of fiscal rules on various aspects of fiscal policy. The introduction or strength of fiscal rules is associated with lower fiscal deficits (e.g. Debrun et al., 2008), lower sovereign interest rate spreads (e.g. Heinemann et al., 2014, or Iara and Wolff, 2014), lower output volatility (e.g. Fatas and Mihov, 2006) and more fiscal space (e.g. Nerlich and Reuter, 2015). However, all these studies only look at the existence or strength of fiscal rules and do not take into account if a country complied with its fiscal rules or not. This contribution summarises two papers (Reuter, 2015, 2017) looking at compliance with national fiscal rules to answer if compliance or non-compliance with fiscal rules changes fiscal policy making and which features are associated with higher or lower compliance probabilities.

Data

The analysis is based on a dataset of compliance with national fiscal rules which are or were in force in the EU28 from 1995 or 2015. There are two major datasets summarising information on national fiscal rules in the EU28: European Commission (2014) and IMF (2015). Those datasets acted as starting point for the collection of the corresponding legal documents setting out the fiscal rules in national legislation. With the help of native speakers, translators and lawyers the exact variables constrained by the fiscal rules and the numerical limits imposed on the constrained variables by the rule were extracted from the legal text. The data to afterwards actually calculate compliance and the distance between constrained variable and numerical limit was taken from the European Commission's AMECO and Eurostat's Government Finance Statistics datasets. The compliance calculated this way might differ from the legal compliance

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observed e.g. by fiscal councils or the European Commission, due to complicated escape clauses, assessment margins and various discretionary rule elements.

Descriptive Statistics

Average compliance across all rules, countries and years was around 50 % (Table 1), i.e. on average countries in half of the years complied with their fiscal rules and in the other half they did not. However, with respect to the type of fiscal rule, debt rules (88%) were complied with by far more often than budget balance (35%) or expenditure rules (45%). One reason is that debt rules more often constrain stock rather than flow variables and compliance is on average higher with rules constraining stock variables. The relative predominance of debt rules is also one of the reasons why compliance is on average higher in non-euroarea and former transition countries.

To increase compliance fiscal rules are often augmented by automatic sanctions or correction mechanisms. Indeed rules with such features are on average more often complied with (61 %) than without pre-defined actions (43 %) in case of non-compliance. There is no clear pattern when comparing compliance across time periods. While compliance is slightly lower before 2000 (46%), it is relatively high in the crisis years 2006-2010 (56%).

Table 1: Average compliance frequency, EU28, 1995-2015 (Source: Reuter, 2017)

<i>Rule Type:</i>	<i>All Rules</i>	<i>BBR</i>	<i>DR</i>	<i>ER</i>
Avg. Compliance	51%	35%	88%	45%
Observations	316	150	78	88
<i>In case of non-compliance:</i>	<i>Autom. sanct./ corr. mech.</i>	<i>Oblig. to respond/ justify</i>	<i>No pre-defined action</i>	
Avg. Compliance	61%	55%	43%	
Observations	61	73	168	
<i>Countries:</i>	<i>Euroarea</i>	<i>Non-EA</i>	<i>Former transition</i>	<i>Not form. tran.</i>
Avg. Compliance	42%	62%	69%	39%
Observations	165	151	130	186
<i>Time periods:</i>	<i>1995-2000</i>	<i>2001-2005</i>	<i>2006-2010</i>	<i>2011-2015</i>
Avg. Compliance	46%	52%	56%	50%
Observations	48	73	81	114

Notes: Average compliance in % of years in subsample indicated above horizontal line. BBR – Balanced Budget Rule; DR – Debt Rule; ER – Expenditure Rule; PC – Political Commitment; CA – Coalitional Agreement; L – Statutory Law; C – Constitution; GG – General Government Level; CG – Central Government Level; RG – Regional Government Level; LG – Local Government Level; Euroarea countries: Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Slovakia, Slovenia, Spain; Former transition economies: Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia.

Policy reaction to (non-)compliance

Reuter (2015) investigates if and how policy makers change fiscal policy after complying with a fiscal rule or not and if the margin plays a role. Therefore, the current difference between constrained variable and numerical limit ($\Delta^R F$) is regressed in an econometric exercise on its value for the previous period and a set of control variables. To identify if the actual introduction of the rule into national legislation is responsible for the adjustment of fiscal policy, compliance with each rule is not only calculated for the years the rule was actually in force, but for the full sample period. This way it can be tested if the reaction differs depending on having a fiscal rule or not.

Table 2: Dynamic of difference between constrained variable and numerical limit (Source: Reuter, 2015)

Dep. Var.: $\Delta^R \mathcal{F}_{t,0}$	(1)	(2)		(3)
$\Delta^R \mathcal{F}_{t-1,0}$		0.89*** (0.05)	$\Delta^{R+} \mathcal{F}_{t-1,0}$	0.97*** (0.06)
\mathcal{R}_t	-3.32*** (0.79)	-1.00** (0.50)	$\Delta^{R-} \mathcal{F}_{t-1,0}$	0.55*** (0.07)
$\mathcal{R}_t \times \Delta^R \mathcal{F}_{t-1,0}$		-0.21*** (0.07)	\mathcal{R}_t	0.23 (0.60)
			$\mathcal{R}_t \times \Delta^{R+} \mathcal{F}_{t-1,0}$	-0.32*** (0.12)
			$\mathcal{R}_t \times \Delta^{R-} \mathcal{F}_{t-1,0}$	0.14 (0.13)
N	287	275	N	275
R ² (within)	0.40	0.80	R ² (within)	0.81

Notes: Estimation results for Equation (1); controls, rule and time fixed effects included in all regressions; standard errors clustered by country, rule and year; dependent variable is the change in the difference of the constrained variable to its numerical constrained Δ^i ($\Delta^R F_t$) or the change of the constrained variable ($\Delta^i F_{t,0}$) from one year to the next, explanatory variables are the same variable for the earlier of the years $\Delta^R F_{t-1,0}$, split into positive $\Delta^{R+} F_{t-1,0}$ and negative $\Delta^{R-} F_{t-1,0}$ values, and a dummy variable being one if the fiscal rule is in force in the respective years R_t .

Table 2 shows the results of the main regression in Reuter (2015). First, the introduction of a fiscal rules (R_t) does have a significant negative effect on the variable constrained by it (Column 1). E.g. if the rule constrains the public deficit, as already shown in various studies, it is on average lower after the introduction of a fiscal rule. Second, generally the constrained fiscal variables have a tendency to converge towards the numerical limit set by the fiscal rules. They do that from above, i.e. in case of non-compliance, and from below, i.e. in case of compliance, and independent of the rule being actually in force in the respective year. This convergence, however, is stronger if fiscal rules are in force.

When splitting the distance into positive (Δ^{R+}), i.e. non-compliance, and negative (Δ^{R-}), i.e. compliance, values, an interesting pattern emerges. It seems that fiscal policy has a general tendency to increase constrained variables, if the value is below the (virtual) numerical limit. In case of non-compliance there is no symmetric effect in the other direction, if there are no fiscal rules in force. With fiscal rules, policy makers significantly reduce the distance between constrained variable and numerical limit if they were non-compliant in the previous period.

Determinants of compliance

Reuter (2017) analyses which countries in which years and under which circumstances complied with their fiscal rules and which did not. Therefore, a binary variable is created, which is one if a country complies with a specific fiscal rule in the respective year and zero if not. This variable can only be observed for years in which the rule was actually in force. The determinants of this binary variable are looked for in a panel logistic regression, i.e. effectively asking which variables do significantly change the probability of compliance of a country. The tested controls include rule-specific variables, like the rule type, the monitoring framework or the media visibility, country-specific variables, like the output gap, debt level, government ideology or fragmentation, and supranational variables, like the presence of the reformed stability and growth pact or an IMF programme.

It turns out that among the rule-specific variables especially the independence and design of the monitoring and enforcement bodies, together with them issuing real time alerts, increase the probability

of compliance. Furthermore, rules that constrain larger parts of the general government finances and which constrain stock rather than flow variable are associated with a higher compliance probability.

From the country-specific group of variables it is interesting that none of the business cycle variables, like output gap, GDP growth or inflation, seem to be significant determinants of compliance. On average across all countries, rules and years, compliance is not higher in years with good economic conditions. However, a more fragmented government and higher degree of decentralisation decrease the compliance probability. Those variables are associated with the deficit bias of governments which was among the original reasons why fiscal rules were introduced in the first place. So it seems that rules do not entirely eliminate the effects of the deficit bias. Similarly, political business cycles are also visible, as compliance probability on average is lower in election years.

Many other potential determinants of compliance with fiscal rules were also tested, but most do not turn out to be significant. So, e.g., neither forecast errors nor combinations of fiscal rules seem to significantly change the probability of compliance. Furthermore, the history of fiscal rules, like how many years they are in force or which government introduced them, did not turn out significant.

Conclusions

Overall fiscal rules, which are on average complied with around half of the years, seem to act more as benchmarks or targets rather than ceilings. They seem to steer fiscal policy towards the numerical limit of the rules. However, the original rationales to introduce fiscal rules, i.e. the reasons for the deficit bias of government, are still significant determinants of non-compliance. While rules do seem to have an effect on fiscal variables also if they are not always complied with, a stronger enforcement and monitoring can make them more effective in counteracting the deficit bias.

Literature

Debrun, X., Moulin, L., Turrini, A., Ayuso-i Casals, J. and Kumar, M. S. (2008), "Tied to the mast? National fiscal rules in the European Union", *Economic Policy* 23(54), 298-362.

European Commission (2014), "Database on Numerical fiscal rules in the EU Member States", Online at http://ec.europa.eu/economy_finance/db_indicators/fiscal_governance/fiscal_rules/index_en.htm.

Fatas, A. and Mihov, I. (2006), "The macroeconomic effects of fiscal rules in the US states", *Journal of Public Economics* 90(1-2), 101-117.

Heinemann, F., Osterloh, S. and Kalb, A. (2014), "Sovereign risk premia: The link between fiscal rules and stability culture", *Journal of International Money and Finance* 41, 110-127.

Iara, A. and Wolff, G. B. (2014), "Rules and risk in the euro area", *European Journal of Political Economy* 34, 222-236.

International Monetary Fund (2015), "Fiscal Rules Dataset, 1985-2014", Online at <http://www.imf.org/external/datamapper/FiscalRules/map/map.htm>.

Nerlich, C. and Reuter, W. H. (2015), "Fiscal rules, fiscal space and procyclical fiscal policy", ECB Working Paper 1872, European Central Bank.

Reuter, W. H. (2015), "National numerical fiscal rules: Not complied with, but still effective?", *European Journal of Political Economy* 39, 67-81.

Reuter, W. H. (2017), "When and why do countries break their national fiscal rules?", Working Paper 01/2017, German Council of Economic Experts.

Wren-Lewis, Simon (2011) "Comparing the Delegation of Monetary and Fiscal Policy", Discussion Paper 540, Department of Economics, Oxford University.

1.2. FISCAL POLITICS IN THE EURO AREA

By Tigran Poghosyan⁵

Abstract: This note summarises the main findings from a book chapter on fiscal politics in the euro area. It first shows how national and supranational political economy factors affect fiscal outcomes. Then, it provides some evidence on a series of policy biases, including fiscal procyclicality, excessive deficits, distorted budget composition, weak compliance, and lack of evenhandedness in applying the rules. The note concludes by offering some reflections on future governance reforms.

Euro area (EA) countries have faced a significant accumulation of public debt in the past three decades. This is despite the Stability and Growth Pact (SGP) being at the core of the European fiscal governance framework. The literature has explored the causes of the deterioration of fiscal positions. A number of key factors have been identified, such as the shortcomings of the design of fiscal rules, the incomplete nature of the Economic and Monetary Union (EMU), the role of fiscal stimulus undertaken following the crisis, the materialisation of contingent liabilities, and low nominal growth. Surprisingly, the role of political economy factors has received far less attention.

A recent book titled "Fiscal Politics" published by the IMF's Fiscal Affairs Department includes a chapter in which –together with Luc Eyraud and Vitor Gaspar– we revisit the fiscal developments in the EA through the prism of political economy factors⁶. The chapter distinguishes between national and supranational political economy factors explaining suboptimal fiscal outcomes.

- National political economy factors. Among others, these factors include politicians' re-election concerns and partisanship, incentives to deviate from previous promises when economic agents have already adjusted their expectations and behaviour (the "time inconsistency" issue), failure by line ministries or coalition parties to internalise the cost of competing claims on the government revenue pool (the "common pool" issue), or the population's misperception of the government's intertemporal budget constraint ("fiscal illusion"). These factors can lead to adverse fiscal outcomes, such as procyclicality, deficit bias, inefficient revenue and expenditure composition, and have been studied widely.
- Supranational political economy factors. These factors, which are less documented, characterise political economy and policy coordination problems that come on top of the ones prevailing at the national level. They include: supranational common pool problems, distorted incentives in the presence of fiscal spillovers across countries, a biased enforcement of the rules (due to the incomplete separation of powers between the European Commission and the European council of finance ministers) and a perceived lack of democratic legitimacy. These factors can also lead to suboptimal outcomes, such as poor compliance and enforcement of the SGP, lack of evenhandedness, and low public trust and confidence.

The chapter then assesses the track record with the SGP, with a focus on supranational political economy factors, using a sample of 19 EA countries over 1999-2015. The empirical analysis is performed using the AMECO database maintained by the European Commission and the real-time database building on various vintages of the Stability and Convergence Programs submitted by member states.

The results can be summarised as follows:

⁵ International Monetary Fund, e-mail: tpoghosyan@img.org. The views expressed in the text are the views of the author only and may not, under any circumstances, be interpreted as stating an official position of the International Monetary Fund.

⁶ See Eyraud, L., Gaspar, V. and Poghosyan, T. (2017), "Fiscal Politics in the Euro Area", in: Vitor Gaspar, Sanjeev Gupta, and Carlos Mulas-Granados (eds.), Fiscal Politics, Washington: International Monetary Fund, pp. 439-476. The chapter is also available as an IMF Working Paper at: <https://www.imf.org/en/Publications/WP/Issues/2017/01/30/Fiscal-Politics-in-the-Euro-Area-44601>.

- *Procyclicality.* The SGP provides room for fiscal policy to stabilise macroeconomic fluctuations through automatic stabilisers and discretionary policy. However, in practice, the EA countries have pursued a procyclical fiscal stance and prevented automatic stabilisers from operating freely. The regression analysis suggests a negative and significant association between changes in output gap and changes in structurally adjusted balances, suggesting that fiscal stance has loosened in periods when output was growing above its potential rate (and vice versa). The analysis based on real-time data suggests that fiscal plans were acyclical, but ex-post outcomes deviated from the plans leading to procyclicality.
- *Deficit bias.* An important objective of the SGP is to prevent excessive deficits and debt expansion. Our empirical analysis provides evidence of such biases. Fiscal reaction to business cycles has been asymmetric, with fiscal policy being procyclical in good times and acyclical in bad times. Countries do not tend to build up buffers in upswings, leaving them exposed to shocks in downswings.
- *Distorted budget composition.* Political factors had detrimental effects on fiscal policy not only through a suboptimal fiscal stance, but also through suboptimal budget composition. This was especially noticeable in periods of fiscal consolidation, when government preferences have been tilted toward cutting productive (but politically less costly to reduce) investment spending and increasing distortionary taxes. In some countries, the disproportional cuts in public investment have led to a large investment gap, which we proxy as the difference between observed public investment and investment that would stabilise the ratio of the stock of public capital to GDP. The erosion of public capital stock can have adverse implications for the potential growth of the economy and, consequently, weigh on fiscal sustainability.
- *Weak compliance.* To prevent excessive deficits and debt build-up, the SGP has established a complex system of numerical constraints. To simplify the compliance analysis, we considered four main numerical rules: the 3 percent of GDP nominal deficit ceiling, the 60 percent of GDP debt ceiling, the medium-term objective (MTO) in structural terms, and a benchmark fiscal effort of at least 0.5 percent per year in structural terms when structural balances are below MTOs or the country is under Excessive Deficit Procedure (EDP). The comparison of ex-post outturns with these numerical targets reveal a poor record of compliance with the key rules. For instance, the MTO was violated in 80 percent of observations under consideration, with almost two-thirds of countries exceeding the MTOs in every single year. It is also notable that governance reforms implemented over 2005–13, such as increased flexibility, greater automaticity in enforcement, and greater ownership supported by revisions in national legislation, have not had an evident impact on compliance (without correcting for other factors).
- *Drivers of weak compliance.* Decomposing weak compliance into underlying factors suggests that planning was adequate (ex-ante compliance was strong), but poor execution resulted in a substantial deviation from plans and poor ex-post compliance. For instance, countries in the Excessive Deficit Procedure (EDP) were planning to reduce their overall deficits, on average, from above 3 percent of GDP to below 1 percent of GDP in the third year of the forecast horizon. However, the actual outturns deviated from the plans so widely that the resulting average deficits exceeded the 3 percent of GDP ceiling by about 2 percentage points.
- *Evenhandedness.* If deviation from the plan is the main factor behind poor compliance, a natural question is whether these deviations, which may reflect poor enforcement of the rules, have affected all countries in a similar way or whether countries have behaved differently, perhaps because some benefited from more lenient treatment. Our empirical analysis provides mixed evidence on the lack of evenhandedness in enforcement between large and small countries. On the one hand, we find that larger countries tend to stay in the EDP for longer. On the other hand, larger countries under the EDP

are not asked to adjust deficits at a slower pace relative to smaller countries. Hence, the evidence on the lack of evenhandedness is inconclusive.

The empirical results summarised above suggest that the SGP has not been successful in guarding countries against suboptimal fiscal outcomes. In our view, this is because the reforms have fallen short of addressing the political economy factors at the core of weak compliance. Past reforms have focused mostly on enhancing the economic basis of the rules and upgrading their design. Less emphasis has been placed on ensuring that political incentives are well aligned with compliance. This approach may have reached its limits. If political incentives are not there, the most sophisticated revisions to the framework will not materially improve fiscal outcomes. Therefore, it is critical that future reforms consider the political economy dimension.

To make fiscal rules work politically, the incentive structure could be further strengthened on both sides – by establishing more credible sanctions and by creating more tangible benefits for countries complying with the SGP. Although this is a very difficult task in the absence of a political union, future reforms could be guided by two general principles:

- *Making sanctions more politically acceptable.* The current system of sanctions and "mandatory" remedial actions lacks credibility. Financial sanctions for countries under EDP exacerbate the financial difficulties of already distressed governments, limiting the appropriateness of the sanctions and their scope for use in bad times. Also, elevated sanctions carry a stigma and a political cost that make their application very unlikely. Our view is that initial and/or small deviations should entail small financial costs so that they face less political opposition, while repeated and/or larger deviations could be penalised more heavily. But, in any case, the enforcement of sanctions is likely to remain a highly contentious issue as long as member states retain sovereignty over fiscal issues. A credible enforcement system will require further political integration.
- *Creating tangible benefits for compliers.* The current fiscal framework is heavily tilted toward negative incentives in the form of sanctions and corrective actions. By comparison, the benefits associated with complying with the SGP are not always clear in the short run. The main benefit should be to preserve access to low-cost financing, but market discipline was not effective in the EMU prior to the global financial crisis. Several options could be considered to reinforce the rule-benefits nexus in the eyes of member states and citizens. One possibility involves linking the volume of structural funds and other EU subsidies to compliance with rules. Another possibility is to establish a stabilisation capacity in the EA and condition access to this central fiscal capacity on past compliance with rules. More generally, the fiscal framework should be designed in such a way that policymakers can establish a clear link between compliance and a well-functioning EMU that delivers price stability and robust growth. To support this macroeconomic objective, fiscal rules should be consistent with the conduct of ambitious demand- and supply-side policies that boost growth in both the short and medium terms.

In the longer term, it is unlikely that reforms to the SGP alone will be sufficient to correct the policy biases that have plagued the functioning of the monetary union. The reason is that these biases are rooted in the overall architecture of the EA and the interplay between its various dimensions – fiscal, monetary, banking, and financial. Many argue that a partial approach focusing on the fiscal framework alone is not sustainable.

At the same time, there is no single comprehensive model toward which the EA should converge. Experience with existing federations suggests a range of options for alleviating the political economy pressures and fostering fiscal discipline. To simplify, these options can be arranged along a continuum structured around two polar models. The first model would leave large autonomy to member states, while reinforcing market discipline. The model at the opposite end of the spectrum would rely more extensively

on a center-based approach at the expense of a permanent loss of fiscal sovereignty for EA members. The ultimate scope and shape of the new architecture will remain a matter of social and political preferences in Europe.

To conclude, one of the main lessons from the paper is that the most sophisticated improvements in the design of the framework will not bear fruit unless they also garner political and public support. By strengthening the economic basis of the rules, reform of the SGP has made significant progress, but efforts should continue on two fronts – right design combined with right incentives. It is possible and desirable to have a stronger system of incentives, including gradual and proportionate sanctions and clear benefits for compliers. In the longer term, a lasting solution must combine market discipline and stronger fiscal governance. Fiscal union will, if it happens, be an aspect of a comprehensive architecture accompanying bank and capital markets unions. It would reflect political choices in Europe.

1.3. LESSONS LEARNED FROM FISCAL COORDINATION AND GOVERNANCE

By *Lucio Pench*⁷

Abstract: This short paper aims to give a flavour of some lessons learned about the evolution and performance of fiscal policy in the EMU in the pre- and post-crisis years. Current challenges and possible ways forward for the EMU fiscal governance are analysed looking at its three key dimensions: rules, institutions and enforcement.

Introduction

The Economic and Monetary Union (EMU) has weathered an existential crisis. Economic growth in the euro area has regained momentum and some of the macroeconomic imbalances that led to, or were exacerbated by, the crisis (e.g. excessive private and public leverage, competitiveness losses, external deficits, etc.) have started to decline. New instruments have been put in place or are work in progress: a crisis management capacity (e.g. European Stability Mechanism – ESM, Outright Monetary Transactions - OMT), an encompassing economic governance framework (Stability and Growth Pact - SGP, Fiscal Compact, Macroeconomic Imbalance Procedure, European Semester, etc.), Banking Union, Capital Markets Union. However, the house is unfinished and the legacy of the crisis still weighs on the economy of several countries where unemployment rates remain stubbornly high and investment well below pre-crisis levels. Moreover, the euro area as a whole remains vulnerable to future shocks to which monetary policy alone may be inadequate to respond.

At the same time, the EMU's governance framework has become a very divisive issue, particularly when it comes to fiscal policy. This contribution reviews the main aspects of fiscal policy in the EMU. It starts by recalling in section 1 the evolution of the views on the role of fiscal policy in the EMU before and after the crisis. Section 2 goes through the changes made to the EMU fiscal framework since the Maastricht Treaty of 1992, focusing in particular to the innovations introduced in response to the crisis. Section 3 discusses the pro-cyclicality of fiscal policy in the EMU during and after the sovereign debt crisis; section 4 concludes on the main aspects of fiscal governance (i.e. rules, institutions and enforcement), including some ideas about possible ways ahead.

1. Fiscal policy in the EMU: an evolving view

If one takes a look at how the EMU's fiscal framework has evolved over the last 25 years, it is clear that the early foundations remain visible. The architecture of fiscal policy in the EMU continues to be designed with the main objective of pursuing fiscal sustainability. While the role of discretionary fiscal policy to support economic stabilisation has been implicitly recognised since the crisis, this aspect remains secondary and limited to very specific circumstances.

The initial vision of the EMU's fiscal framework in the Maastricht Treaty was founded on the conventional view that each Member State should keep their "own house in order". The main purpose of the common fiscal rules was to address the deficit bias at national level, which the creation of the single currency would arguably re-inforce, with negative spillovers on the common monetary policy across Member States. Monetary policy appeared as the main tool to steer the business cycle in the euro area. In turn, automatic stabilisers were deemed sufficient to deal with (idiosyncratic) macroeconomic shocks, and discretionary fiscal policy was essentially judged ineffective and undesirable in most, if not all, circumstances. That original vision implied that the risk of bail out dominated monetary policy-fiscal policy relations.

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The financial crisis made evident the importance of discretionary fiscal policy in the case of large common macroeconomic shocks hitting the EMU⁸. Then, the sovereign debt crisis (2010-2012) pressed euro area Member States to "strengthen the joint foundation". The crisis had in fact highlighted the potential threat from the sovereign-bank "doom loop" and the absence of a lender of last resort for (solvent) sovereigns under market pressure⁹. With monetary policy reaching its effective lower bound, higher fiscal multipliers and cross-country spillovers mean that discretionary fiscal policy matters again. At the same time, the available fiscal space differs across Member States. Under such conditions, the relevance of the aggregate fiscal policy stance and the need for more coordination in fiscal policies across euro area Member States seem to be widely, if not unanimously, accepted by academics and policymakers.

2. E(M)U fiscal rules: a living framework

The toolbox of the Economic and Monetary Union has been built over time¹⁰. The EU framework typically evolves through incremental changes; this incremental approach has advantages, but also drawbacks. On the one hand, the subsequent reforms allow the framework to benefit from all the lessons learnt over time; on the other hand, the requirements and indicators that have accumulated over time risk overlapping, if not creating inconsistencies, while at the same time some aspects may remain neglected.

While the current EMU fiscal framework is still fundamentally based on the Maastricht Treaty and the accompanying nominal thresholds for deficit and debt, the original SGP specifying it dates from 1997 and underwent a first reform in 2005 (placing at its centre the MTO, the medium-term budgetary objective of close-to-balance in cyclically adjusted terms). The more comprehensive, crisis-inspired reforms of 2011 (the so-called "Six-Pack"), aimed to promote fiscal adjustment in good times (through the introduction of the "significant deviation" procedure) and operationalise the "sufficiently diminishing" debt reduction requirement in the Treaty (through the introduction of the "debt reduction benchmark"). The introduction of the reverse qualified majority voting in the enforcement of the rules also intended to increase the degree of automaticity. Significantly, the 2011 reform also addressed the need for strong national budgetary frameworks (through the Directive on national budgetary frameworks¹¹). It appeared evident that ownership of the rules and some key building blocks underpinning sound budgets at national level were needed to support the enforcement of rules at the EU level. The 2011 reform also recognised the need to strengthen surveillance beyond the strictly fiscal domain, introducing the Macroeconomic Imbalance Procedure. In 2013, the "Two-Pack" reform was introduced. It provided for closer monitoring of countries under the Excessive Deficit Procedure (EDP) and enhanced (ex-ante) surveillance and coordination of fiscal policies, through the assessment of Draft Budgetary Plans by the Commission. The reforms also mandated the creation of national independent bodies to monitor national fiscal rules.

Since the crisis, a number of additional tools have been introduced (Figure 1). Some of these elements, like the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (TSCG), which includes the Fiscal Compact, and the ESM, are new intergovernmental instruments rather than EU legislation. At the same time, there has been a significant effort to refine the application and interpretation of the rules to ensure that they appropriately cater for the macroeconomic environment as well as for the specific circumstances of each country. Essentially, the focus has somewhat shifted towards delivering on policy commitments rather than reaching nominal or structural targets, as the former are in principle

⁸ See for instance the Commission communication of 26 November 2008 for a European Economic Recovery Plan at http://ec.europa.eu/economy_finance/publications/pages/publication13504_en.pdf.

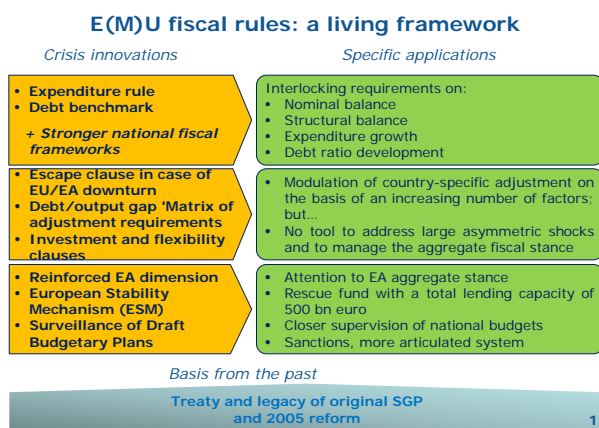
⁹ Only in July 2012, thanks to Mr Draghi's commitment that "...within our mandate, the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough..." the risk of a break-up of the euro area receded (<https://www.ecb.europa.eu/press/key/date/2012/html/sp120726.en.html>).

¹⁰ The legal basis of the Stability and Growth Pact can be found at https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/stability-and-growth-pact/legal-basis-stability-and-growth-pact_en.

¹¹ Directive 2011/85/EU.

under the control of governments, whereas the latter are not. Moreover, the need to take into account broader macroeconomic conditions has led to the introduction of rule-bound flexibility in the system (e.g. structural reform and investment clauses).

Figure 1: The crisis impact on E(M)U framework



Source: European Commission.

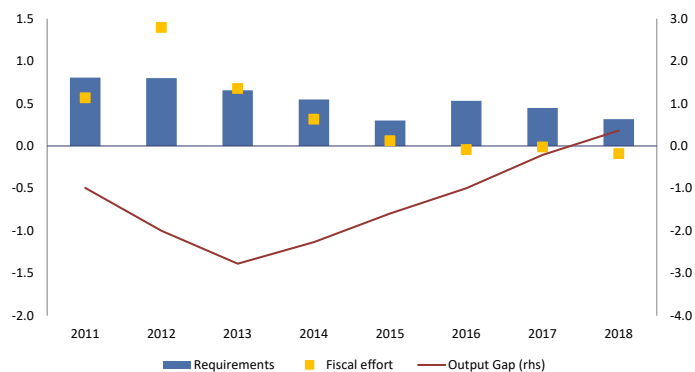
This greater focus on policy actions as opposed to deficit outcomes and the renewed emphasis on public debt has translated into a multiplicity of rules/indicators. The introduction of the structural budget balance in 2005 was a first attempt to move away from a purely outcome-based approach. However, the last decade has highlighted some now well-known weaknesses in the structural balance approach, particularly its reliance on an unobservable variable, the output gap, for the position in the cycle and on standard assumptions for the behaviour of revenues. In the pre-crisis period, expenditure increases funded by windfall revenues turned out to be unsustainable. In the post-crisis period, the methodology for estimating the output gap, even though commonly agreed, has been subject to growing criticism by key stakeholders. The introduction of the expenditure benchmark in 2011 attempted to address those concerns, increasing at the same time the number of indicators used to assess the fiscal effort. The introduction of the debt reduction benchmark in the corrective arm of the SGP has added another (outcome-based) rule to the framework.

3. Reality check: the pro-cyclical swing of the fiscal pendulum

After having peaked during the crisis, headline deficits have decreased throughout the EU. The number of countries with deficits above 3% of GDP has gradually declined from a high of 23 in 2010 to just 2 in 2016. Therefore, virtually all Member States have now moved into the so-called preventive arm of the SGP. At an aggregate level, the headline deficit in the euro area fell from 6.2% of GDP in 2010 to 1.5% in 2016. This compares to a deficit of 4.1% of GDP in Japan and 5.0% in the United States in 2016.

However, the sole fact that headline deficits have declined does not appear to be sufficient to argue that the SGP has functioned well. In particular, the implementation of the SGP has not prevented - some would say it has led to - a pro-cyclical pattern of fiscal policy during the sovereign debt crisis and in its aftermath. Indeed, the bulk of fiscal consolidation took place over 2011-2013, at a time when economic growth was very low or even negative in several countries, thereby exacerbating the downturn further. In turn, since 2014 the fiscal adjustment (based on the change in the structural balance) has come to a halt while activity has been picking up and the euro area economy has been growing above potential (Figure 2).

Figure 2: **The pro-cyclical swing of the fiscal pendulum: aggregate euro area fiscal effort versus requirements and output gaps (% of potential GDP)**



Source: European Commission 2017 Autumn Forecast.

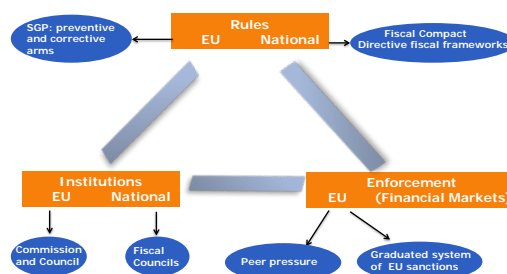
In other words, we observed the typical pro-cyclical fiscal pendulum: tight fiscal policy in the years when the economy was mired in recession, followed by a pause in fiscal consolidation once the recovery ensued. Developments in vulnerable Member States highlight the role of market pressures in forcing adjustment in certain cases in a context characterised by significant institutional shortcomings in the euro area, including "full insulation" of monetary policy. While the sizeable pro-cyclical fiscal consolidation adopted in 2011-2012 by vulnerable countries was instrumental in their regaining credibility and thus facilitating the deployment of unconventional monetary policies by the ECB, a number of Member States with fiscal space and no financing constraints also implemented large fiscal adjustments at that time. Since 2014 when financial market pressure began to ease there has been evidence of fiscal fatigue, particularly in vulnerable Member States.

Overall, the experience of the crisis suggests that deficit bias may not be the sole externality that the EMU fiscal framework needs to protect against. "Smart" fiscal rules needs to reflect both sustainability and stabilisation objectives: the right balance is a judgement call that is particularly difficult when monetary policy is constrained.

4. Fiscal governance: state of play and avenues of reform

Fiscal governance in the EMU is characterised by three key dimensions: rules, institutions and enforcement (Figure 3). Since the Six-Pack reform and, in particular, the Fiscal Compact, for rules and institutions there are both EU and national aspects, although the substantive rules remain largely defined at the EU level, with the MTO at the centre of both the SGP and the Fiscal Compact. While the Fiscal Compact has introduced national "correction mechanisms" against significant deviations, a uniform system of sanctions to enforce the rules is in place only at EU level. In the Maastricht construction, the prohibition of monetary financing of deficits (Art. 123 of TFEU) and the "no-bail-out clause" (Art. 125 of TFEU) can be read to add the threat of financial market pressures to that of the political mechanisms of peer pressure and sanctions. At the same time, the heavy reliance on rules can be read as sign of scepticism toward the fiscal disciplining role of markets.

Figure 3: Fiscal governance: state of play



Source: European Commission.

Rules

In the current set-up, the core fiscal rules have been established at EU level, through the admittedly complex interplay of substantive and procedural rules between and within the corrective (EDP) and preventive (MTO) arms of the SGP. The national level has been subsequently incorporated into the EU's fiscal governance framework essentially through the Directive on national fiscal frameworks and, more visibly, through the intergovernmental Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (TSCG), incorporating the Fiscal Compact subscribed by all euro area Member States in March 2012. However, the primacy of EU rules remains and national rules are a supplement that mirror EU provisions.

Some critics argue that the current fiscal rules suffer from a one-size-fits-all problem hampering genuine national ownership. If the lack of national ownership was seen as the main obstacle to the proper implementation and enforcement of fiscal rules, a systemic reform of the EMU's fiscal governance could conceivably make EU rules subsidiary to national ones. Rather than simply reinforcing or reproducing at national level substantive rules already defined at EU level, national rules might be allowed a significant degree of differentiation to reflect national preferences and situations. The alternative reform option of aiming at a fully-fledged federal system for the EMU's architecture does not appear to be realistic at this point in time given the lack of consensus among Member States and policymakers.

What would a more decentralised system of fiscal governance look like? If the national dimension became predominant in the daily guidance of fiscal policy makers, a strong medium-term debt sustainability constraint should become a common feature of national rules, taking the form of a "debt anchor". This rule should impose the achievement of a medium term primary balance target that ensures debt levels decline toward an agreed threshold at an adequate pace. The achievement of the target primary balance could, for instance, rely on an expenditure rule binding on annual budgets for the length of the legislature. National fiscal rules thus satisfying a strong sustainability constraint would arguably make redundant further substantive rules established at EU level. In particular, there would be no strong reason for the existence of a separate set of encompassing fiscal rules built around the MTO, i.e. the preventive arm of the SGP. The corrective arm of the SGP, the EDP, could recover the original function envisaged for it in the Treaty i.e. dealing with "gross errors" in budgetary policy. This would imply restoring the original indicative value of the 3% of GDP excessive deficit threshold and doing away with the near-automaticity of the procedure introduced by the SGP. The identification of "gross errors" in budgetary policy would give a prominent place to the assessment of the robustness of the national fiscal rules,

particularly, the existence of a strong sustainability constraint, both in the formulation of the rules and in their implementation.

In terms of legislative changes, this systemic reform would require a substantial strengthening of the directive on national budgetary frameworks and a substantial scaling down, arguably a dismantling, of the SGP's preventive arm regulation. Surgical but fundamental amendments should also be made to the SGP's corrective arm regulation, including the elimination of the "overarching condition" which makes the opening of an EDP automatic, at least for high-debt countries, in case of breach of the 3% of GDP deficit threshold if the "close and temporary condition" is not respected.

Institutions

The EMU's need for a coordination framework for fiscal policies does not seem workable without a set of common rules. However, fiscal rules cannot cope with all contingencies and trying to do so might be a self-defeating exercise. Rules need to be complemented by institutions.

The current set-up, in terms of institutions, mirrors that of fiscal rules, since the key bodies for defining the rules, assessing compliance, and enforcement are the European Commission and the Council. National institutions, specifically, fiscal councils, are a relatively recent innovation in many Member States, owing their existence to the same instruments responsible for the incorporation of national fiscal rules into the system of EU fiscal governance (i.e. the Directive on national budgetary frameworks, the Two-Pack and the Fiscal Compact) and sharing with them the same accessory and instrumental character with respect to the substantive EU fiscal rules. In particular, not only are the mandates of national fiscal councils strictly limited to monitoring, as opposed to enforcement, they also suffer from the same structures resulting from the imposition of a one-size-fits-all set of fiscal rules that applies to all Member States. In practice, this means that national fiscal councils are called to assess compliance with rules that they might not consider appropriate for the situation of their country.

A systemic reform of the EMU's fiscal governance towards more decentralisation should include a reform of national institutions consistent with that of national fiscal rules. Robust national fiscal rules would demand a parallel strengthening of the mandate of national fiscal councils. In particular, the endorsement of national fiscal rules by the national fiscal councils could be made a necessary condition for their adoption. National fiscal councils could be put in charge of the quantification of the economic variables (medium-term growth, interest rate, etc.) necessary for the operationalisation of the fiscal rules.

The change in the mandate of national institutions would imply a corresponding evolution in the division of labour with EU institutions. In particular, the EU level should retain the role of monitoring and sanctioning "gross errors" in budgetary policy, with the Commission (and the Council) remaining responsible for budgetary surveillance, as per the Treaty provisions. The difference compared to the current regime would be that the surveillance associated with the preventive arm of the SGP would be much less intrusive. Instead of imposing annual structural adjustment targets ahead of the national budgets, the EU level would normally limit itself to assessing whether robust fiscal rules and fiscal councils are in place and working as intended.

The EU level might also gain a new function by operating a common stabilisation mechanism if it were put in place. A possible stabilisation mechanism could be used to smoothen the fiscal impact of significant downturns or booms for individual countries or the euro area as a whole. It would thus help reduce the pressure on fiscal rules to deliver economic stabilisation and focus them on the objective of sustainability.

Regarding the role of the European Fiscal Board (EFB), if the system reform went in the direction of devolving more powers to the national level, one could see the EFB retaining its current advisory role at

EU level. In particular, it could be envisaged that a possible Commission opinion on the soundness of national fiscal rules should take in to account the advice of the EFB.

Enforcement

In the current set-up, the core fiscal rules established at EU level are backed, in case of non-compliance, by a graduated system of sanctions administered by the Commission and the Council. While the current system of governance leaves open the possibility of national enforcement mechanisms supplementing the EU system of sanctions, it does not encourage its development. Enforcement, or lack thereof, has often been cited as the weakest link in the chain of EU fiscal governance. Irrespective of its economic merits, the worth of any fiscal rule will be open to doubt if it cannot be demonstrably enforced. While ostensibly backed by sanctions, the EU fiscal governance system raises the question of the enforceability of rules towards fiscal sovereigns. While the sanctions provided for by the Treaty and the Six-Pack have never been applied to date, Member States losing (or at risk of losing) market access have been supported by macroeconomic adjustment programmes with financing through the EFSF/ESM linked to strict conditionality.

It has to be recognised that a systemic reform going in the direction of greater devolution of powers and responsibilities to national fiscal rules and national fiscal councils would not necessarily address the ultimate question of enforcement. At the same time, the existence of important externalities from "gross errors" in national budgetary policies provides the rationale for an EU system of fiscal governance, at least for countries sharing a common currency.

Two polar solutions seem conceivable to make enforcement more effective. One solution would envisage the possibility of a takeover of national budgetary powers by the EU level in case of "gross errors" posing a threat to the orderly functioning of the euro area. The expression "federalism by exception" has been used to underline the ultima ratio nature of the proposed remedy to persistent and damaging failure of national fiscal rules and institutions¹². "Federalism by exception" would require a fundamental change in the Treaty allowing for an extraction of budgetary sovereignty from Member states in case of "gross errors" posing a threat to the orderly functioning of the euro area. This amendment might also dispense the current instrument originally aimed at correcting "gross errors", the EDP. However, this option may suffer from the same objection as a fully-fledged model of fiscal federalism in that it could be politically infeasible.

The other solution would be to rely on market forces as the ultimate sanctioning mechanism for unsustainable fiscal policies. Greater reliance on financial markets to ensure fiscal discipline would be consistent with an overall reform thrust towards greater decentralisation since their impersonal force is largely immune to the political backlash accompanying perceived interference with national fiscal sovereignty. Reliance on market forces would also be in line with the original spirit of the no-bail-out rule in the Treaty. A restoration and strengthening of the no-bail-out rule would probably demand a parallel in-depth reform of financial regulation and systems, in particular, regarding the treatment of national sovereign's exposures to their banking systems and, possibly, the availability of a safe asset alternative to national government bonds.

However, markets are a notoriously imperfect mechanism for disciplining fiscal behaviour due to their (very) non-linear reaction function and the risk of self-fulfilling debt runs. Tackling the problem of sovereign exposures in the banking systems may not be enough to contain the explosive ramifications of

¹² See in particular Jean-Claude Trichet (2012) "European economic governance: towards and economic and fiscal federation by exception" http://www.csfederalismo.it/images/Lectures_files_2015/LECTURE_2012_Jean-Claude_Trichet_En.pdf and Jens Weidmann (2012) "Everything flows? The future role of monetary policy" https://www.bundesbank.de/Redaktion/EN/Reden/2012/2012_06_14_weidmann_everything_flows_the_future_role_of_monetary_policy.html.

sovereign debt restructuring. In turn, this would make discipline mechanisms that rely on such restructuring open to the criticism of time-inconsistency. In order to stem excessive public borrowing without feeding financial instability through market discipline, one possibility might be to effectively apply market pressure "at the margin" of the issuance of public debt, for example by obliging high-debt countries to issue a large share of junior bonds. GDP/inflation-linked may be a particularly interesting option to explore in this connection.

Conclusions

The EMU needs a framework for fiscal policy coordination and this unavoidably entails the need for common rules. However, fiscal rules alone cannot cope with all contingencies and thus have to be complemented by effective institutions. Still, the experience of the current fiscal governance framework raises questions about the enforceability of such rules towards sovereigns.

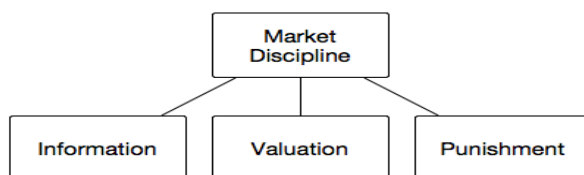
This paper has briefly discussed some possible avenues for the reform of the EMU fiscal governance. In particular, given that an architecture based on a fully-fledged federal system does not appear to be a realistic option at this point in time, it might be conceivable to enhance national ownership and thus change the balance between the European and national level in the EMU framework. This would have repercussion not only on the rules themselves, but also on the role of institutions and enforcement.

1.4. LESSONS FROM FISCAL FEDERALISM IN THE AMERICAS

By Mark Hallerberg¹³

What lessons can Europe draw from fiscal federalism in the "Americas?" The United States (US) in particular appears in several discussions. As a federation it has existed more than two centuries, so it is an obvious reference point. Some of the "lessons" drawn from this case, however, have been wrong. Moreover, there are other federations from the Americas that are relevant for the European case. To provide some context, this paper begins with a discussion of when markets can discipline the fiscal behaviour of states¹⁴. It then provides an overview of the US system. It contrasts the US example with Brazil, which has experienced surpluses as well as alarming deficits at the sub-national level. The paper concludes with the observation that the way forward for Europe is probably on a Brazilian, rather than an American, path.

The key point to understand is that markets can play a very useful role in disciplining fiscally profligate governments. The ideal scenario runs as follows. A government increases the debt burden. Markets believe the risk of default has increased, and it demands a higher interest premium on the new debt. The more borrowing the government wants, the higher the costs of the debt. At some point, the marginal benefit to the government of either expenditure cuts or tax increases is higher than increased borrowing. There is usually a role for the public, and voters in particular, in this story: voters see market assessments, and bad assessments hurt the reputation of the government and make it more likely that the government will lose the next election.



Moreover, in theory this type of discipline should work better under a monetary union. Exchange rate risk not a major cause of fluctuations of sovereign bond prices. The European Central Bank is potentially proactive in providing liquidity, which is supposed to prevent volatility during financial crises.

There are, of course, several problems with this market ideal. Investors do not have perfect information on governments. They may therefore rely on rating agencies to do their homework for them. Markets may also not provide the pressure in gradual fashion as presumed; Mosley (2000) finds, for example, that markets may not react at all, then may "overreact" when concern about a given country's ability to repay increases beyond a certain point. And it is unclear where the relevant cut-off point is where markets react—Argentina's gross debt burden was less than 60% of GDP in 2001 when it defaulted, while Japan's is above 200% today.

Market discipline can be effective in maintaining fiscal discipline if three factors are present.

First, markets need **reliable information** on the financial state of the government and a good sense of the future policies of the government to the extent they will affect the sustainability of public finances. The tax legislation passed in the US in December 2017, for example, suggests that the federal government will have fewer resources at its disposal. Investors can read the tax bill and decide whether it makes them

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¹⁴ A more extensive discussion of the theory is available in Hallerberg (2011).

more worried about the federal government's debt burden. Markets also care about implicit liabilities in the financial sector¹⁵.

Second, market should have an **accurate valuation** of the solvency of the state; that is, its estimate of the solvency of the state should approximate actual solvency. Market discipline cannot function if there is no correspondence between the two. Market actions would then not send useful signals to governments and voters. Studies on whether investors pay close attention to the fiscal health of governments suggest that they pay more attention when a government is perceived to get in trouble (e.g., Mosley 2000). In follow-up work, Brooks, Cunha and Mosley (2015) argue that investors pay attention to the individual characteristics of developed countries but that they use heuristics, such as region, for developing countries. Moreover, if a higher level of government is responsible for the lower level of government markets will care about the fiscal sustainability of the higher level of government only. The sovereign bond ratings of lower levels will then be close to the ratings of the higher levels of government. A "no bailout clause" that is not credible to markets leads to this situation.

Finally, there has to be some **expectation of punishment** of the government if markets raise interest rates or even stop financing the government's government. This punishment should come from the people. This is easier under democracies than under autocracies, and easier when elections are competitive so that the incumbent party has an expectation of losing the next election if they make mistakes. Note, too, it is important that voters understand that the government is at fault for the market reaction. If the government can deflect the blame to nature (e.g., "floods", "earthquakes") or to another body ("it is Europe's fault") then market discipline does not have the effect of increasing fiscal discipline.

One can then use these three criteria to ask whether market discipline is effective in a given polity. To begin with examples from the Americas, it is fairly straightforward to explain why market discipline is present at the sub-national level, that is, at the state level, in the United States. First, information on the finances of American states is pretty easy to get. There are issues with what is on and off budget in some cases (Kousser et al. 2008), so the information is not perfect, and during the financial crisis there were some games played especially with contributions to pension systems, but there is comparable data across all states. Credit rating agencies also provide assessments for most states. Second, and related to the credit agencies, their ratings vary both across time and state. In early 2018, they ranged from a high of AAA in ten states according to Standard & Poors to a low of BBB- in Illinois¹⁶.

There are clearly state-dependent valuations, and the reason is not a formal no "no bailout" rule in the US constitution. There is no such prohibition (Henning and Kessler 2012). In fact, state budgets are not mentioned in the Constitution. However, 49 of 50 states have some sort of "balanced budget" requirement, which all came from statehouses, not the center.

The development of these fiscal rules should be of interest to a European audience. They date back to 1840, when several states spend too much on investment projects, and especially on railroads and canals. Nine states at the time defaulted, while another four partially repudiated their debt. States called for federal help. The proposal in Congress was to give state governments \$1 million per US senator and \$650,000 per US Representative. This meant that the federal government would have needed to pay \$200 million (about \$1.4 trillion in today's dollars). A majority of states, however, had little or no debt, and their representatives in Congress voted against the proposal. By 1857, most state constitutions had a balanced budget amendment (Wibbels 2003).

¹⁵ Copelovitch, Gandrud, and Hallerberg (Forthcoming) examine the relative transparency of figures concerning the financial sector of countries, and they find that there is a market premium a country pays when financial sector transparency is low especially when the overall debt burden is low.

¹⁶ Comparative data appears on the web page of the California State Treasurer. See <http://www.treasurer.ca.gov/ratings/current.asp>. Accessed 21 February 2018.

Concerning punishment of governments that run larger debts and that receive market signals that this is unsustainable, some would argue that many US states are too small for the story to be only about "domestic" (or state-level) fiscal performance. There is, however, evidence that voters punish governors anyway for the performance of their state budgets (Peltzman 1992). Consistent with the recommendations of fiscal federalism scholars like Oates (1999), macro-economic policy is mostly run at the federal (or central) governmental level.

Yet this last issue gets at a common myth in debates in the United States about the role of the federal government. Some claim that this level of government is responsible for unemployment insurance. This means that when there is an asymmetric shock the centre redistributes money from the healthier parts of the monetary union to the weaker parts. This automatic function of the program smooths out the shock. In practice, American states pay most costs during "normal" times through a tax on employers¹⁷. That the tax is levied on businesses per employee is a common feature across all states. Rates, however, vary. States determine what a "base salary" is that is used to multiply against the "rate" of the tax¹⁸. Rates also vary based on how frequently formerly employed persons of a given company file for unemployment insurance¹⁹. States are expected to set aside some money during "good" times for their unemployment funds. Yet, all else equal, states that suffer from negative asymmetric shocks generally have to decide whether they want to cut benefits per unemployed or whether they want to raise the tax. The federal government does have an opportunity to step in if there is legislation passed to support unemployment insurance at the state level. In practice, this legislation passes when there is a general shock across the country. The federal government extended benefits that were due to expire after 26 weeks (the usual benefit length) during and after the global financial crisis, or during the period 2009-13. There are also separate trade readjustment allowances designed to extend benefits for workers who lost their jobs because of foreign competition. These funds as well depend upon Congressional reauthorisation and are also more common during general economic downturns. But the point is the same—most of the costs of unemployment insurance during an asymmetric shock are borne by the state in question. It also fits the results from a recent IMF Working Paper (Poghosyan et al. 2016), which indicate that federal government's smoothing of idiosyncratic shocks across states is low.

Could the European Union approximate this American model?

Clearly, information provision was uneven in the run-up to the crisis. It seemed that markets were surprised at the extent of Greece's fiscal problems. One could argue, however, that one of the important changes to the governance structure of the European Union through the European Semester and the various reporting requirements concerning it is the increase in the amount, and quality, of information about the fiscal health of member states. In terms of valuation, Article 125 of the Lisbon Treaty is the so-called "No Bailout Clause". One can argue about whether the initial bi-lateral package for Greece, the EFSF, and the ESM represented bailouts, but these packages—together with the outright monetary transactions (OMT) policy from the European Central Bank—clearly weaken the link between valuation and the true likelihood of default. In terms of voter punishment of incumbent governments, there is at least the possibility that some Member State populations with fiscal problems successfully pass the blame

¹⁷ As of Fall 2017, the federal rate was 6.0% on the first \$7000 of income for an employee. But in practice there is a tax credit for the state tax up to 5.4%. In practice, many firms pay a federal tax of .6%, or \$42 a year per employee.

¹⁸ For example, in California a business pays 3.4% on the first \$7000 per employee's salary. In Illinois, the base is \$12960 and the rate is 3.75%, so for employees making at least \$12960 the business is paying about double the tax per employee in Illinois than in California. This example comes from <https://quickbooks.intuit.com/t/taxes/how-new-businesses-can-minimize-their-unemployment-insurance-tax-rates/>. Accessed 22 February 2018.

¹⁹ One "game" some state legislatures play to balance their budgets is to underfund these trust funds in good times. See, for example, the example of Massachusetts, where over a 16 year period the legislature blocked adjustments to top up the fund 15 times.

<https://www.bostonglobe.com/news/politics/2014/04/24/things-you-need-know-about-unemployment-insurance/HussoaG9Lp9RrV2cBODVSP/story.html>, accessed 22 February 2018.

for their problems to Brussels and/or Berlin in the eyes of voters. But the weakest link is clearly the absence of a credible "no bailout" clause.

Brazil faced a similar dilemma at the end of the 1990s, and this case is instructive for the European Union. It has 26 states plus the federal district of Brasilia. Prior to 2000, the central government repeatedly bailed out the state governments (Rodden 2003). During a financial, and fiscal, crisis at the turn of the century, the federal government introduced a series of measures. State governments negotiated expenditure and budget balance limitations with the federal government. There were bodies meant to be politically independent that were created in each of the states to monitor their fiscal performance, and many of them performed their function well (Melo et al. 2014; see also Melo et al. 2009 on state audit courts). In terms of punishment, there is evidence that voters noticed fiscal performance and were less likely to support incumbents where outcomes were below what was expected (Arvate et al. 2009). But there were also explicit punishments for state and local officials who violated the fiscal rules. They could be banned from running for office in the future. In rare cases they could even be jailed. In terms of their jurisdiction, it would be banned from receiving federal transfers in the following year if it did not correct the deviation in the current year.

In terms of the performance of the Brazilian system, initially it was a success. Most sub-national governments reached their targets in the 2000s. But the system seemed to create incentives for a lot of create accounting when the economy weakened beginning in 2014. Technically, states and municipalities continued to run balanced budgets in aggregate. To get there, however, these same governments paid salaries late so that they would not be counted in a given fiscal year, defaulted on loans that the federal government had guaranteed, and did not serve federal loans (which the assent of the federal government in 2016, which encouraged this type of behavior)²⁰. This suggests that in times of stress this type of system does not work well.

In terms of lessons for Europe, what one observed in this case was that the no bailout clause on its own was not credible, so the monitoring and the punishments were increased as compensation. The monitoring is clearly present in the EU through both the European Commission and through national fiscal councils. An additional European equivalent would be to restrict transfers from the Union under other policies, such as structural funds, if the violations continued. Moreover, such punishments would be enforced. An extension of fiscal rule violations to the criminal code would be another logical implication, but one that would not make sense in the European case. Policy-makers as a rule are not prosecuted under the criminal code for policy decisions. The broader lesson is to make a no bailout clause credible as in the American case as a first best option. Failing that, a second best is to devise mechanisms that make it unlikely that a bailout is needed in the first place.

References

- Arvate, P., Avelino, G. and Tavares, J. (2009), "Fiscal Conservatism in a New Democracy: 'Sophisticated' versus 'Naïve' Voters", *Economics Letters*, February.
- Brooks, S.M., Cunha, R. and Mosley, L. (2015), "Categories, Creditworthiness, and Contagion: How Investors' Shortcuts Affect Sovereign Debt Markets", *International Studies Quarterly* 59 (3):587–601.
- Copelovitch, M., Gandrud, C. and Hallerberg, M., forthcoming, "Financial Data Transparency, International Institutions, and Sovereign Borrowing Costs", *International Studies Quarterly*.

²⁰ See IMF 2016 Article IV Consultation, available at <https://www.imf.org/external/pubs/ft/scr/2016/cr16348.pdf>. Accessed 23 February 2017.

- Hallerberg, M. (2011), "Fiscal Federalism Reforms in the European Union and the Greek Crisis", *European Union Politics*, 12: 127-142.
- Henning, R. and Kessler, M. (2012), "Fiscal Federalism: US History for Architects of Europe's Fiscal Union", *Essays and Lectures* 669, Bruegel.
- Kousser, T., McCubbins, M.D. and Moule, E. (2008), "For Whom the TEL Tolls: Can State Tax and Expenditure Limits Effectively Reduce Spending?", *State Politics and Policy Quarterly* 8: 331-361.
- Melo, M., Carlos Pereira, A. and Souza, S. (2014), "Why Do Some Governments Resort to 'Creative Accounting' But Not Others? Fiscal Governance in the Brazilian Federation", *International Political Science Review*, 35 (5): 595-612.
- Melo, M., Carlos Pereira, A. and Figueiredo, C.M. (2009), "Political and Institutional Checks on Corruption: Explaining the Performance of Brazilian Audit Institutions", *Comparative Political Studies*, 42 (9): 1217-44.
- Mosley, L. (2000), "Room to Move: International Financial Markets 1530 and National Welfare States", *International Organisation*, 54 (4): 737-73.
- Oates, W. (1999), "An Essay on Fiscal Federalism", *Journal of Economic Literature*, 37 (September), 1120-1149.
- Peltzman, S. (1992), "Voters as Fiscal Conservatives", *Quarterly Journal of Economics*, 107: 327-261.
- Poghosyan, T. Senjadji, A.S. and Cottarelli, C. (2016), "The Role of Fiscal Transfers in Smoothing Regional Shocks: Evidence from Existing Federations", *IMF Working Paper* 16/141.
- Rodden, J. (2003), "Federalism and Bailouts in Brazil", In Rodden, J., Eskeland, G.S. and Litvack, J. Eds., "Fiscal Decentralisation and the Challenge of Hard Budget Constraints", Cambridge: MIT Press, 213-248.
- Wibbels, E. (2003), "Bailouts, Budget Constraints, and Leviathans: Comparative Federalism and Lessons from the Early U.S.", *Comparative Political Studies*, 36 (5): 475-508.

1.5. EUROPEAN FISCAL GOVERNANCE AND NEW PROPOSALS ENHANCING FISCAL DISCIPLINE AND STRUCTURAL REFORMS

By Olga Francova²¹

Abstract: The original European Economic and Monetary Union (EMU) framework with the Stability and Growth Pact at the centre of economic governance proved inadequate. The pressure of the financial, economic, and debt crisis drove the introduction of several new elements. Currently, the European Union (EU) institutions, Member States, and academia have suggested additional initiatives to remedy remaining shortcomings. The main challenge is to define a framework conducive to the implementation of structural reforms while maintaining sustainable public finances. This contribution examines how these reform proposals could enhance the incentives for fiscal responsibility and the implementation of structural reforms. Special focus is put on a) further use of the EU budget, b) creation of a fund for structural reforms and c) fiscal capacity. The contribution also looks at the interaction of these proposals with EU fiscal rules.

1. Introduction

Current political stability provides an opportunity to address not only persisting challenges in the EU fiscal framework but in overall EU economic governance. The so-called European electoral year has come to an end and the period before the next European Parliament elections, which will influence the Union political cycle in 2019, can be used to take further steps towards a new governance framework. The debate determining the future EU fiscal framework will be conducted in the context not only of EMU deepening, but also of the future set-up of the Multiannual Financial Framework (2021-2028) and post-Brexit institutional changes. The Commission's strategic publications²² were the first contributions to the debate about the future of EMU and paved the way for the preparation of a clear roadmap to address outstanding issues.

The initial incentive mechanisms anchored in the EU governance framework proved inefficient. Member States rejected the original plan to implement automatic sanctions in the Stability and Growth Pact in the run-up to the single currency's introduction. They opted instead for a system characterised by gradual sanctions potentially leading to fines and partial suspension of the European Structural and Investment Funds. The experience gained suggests that disincentives to fiscal profligacy proved inefficient, despite the underlying threat of imposing financial sanctions. The unsatisfactory fiscal outcomes automatically raise the question whether it is possible to design a balanced incentive mechanism that would be better tailored to the needs of the euro area and reflect the current economic and institutional context.

Defining changes in the EU governance framework is challenging, because they need to be conducive to the implementation of structural reforms as well as to the maintenance of sustainable public finances. Europe has made considerable progress in reducing macroeconomic imbalances since the beginning of the crisis. Recent European Fiscal Board²³ and European Commission economic assessments, however, highlight persisting differences in the economic situation of the euro area member states. Although the Commission has not yet activated the corrective arm of the Macroeconomic

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²² European Commission (2017), "White paper on the future of Europe and the way forward", "Reflection paper on the Deepening of the Economic and Monetary Union", "Reflection paper on the Future of EU Finances", December package of European Commission's proposals including the "Roadmap for deepening Europe's Economic and Monetary Union".

²³ European Fiscal Board (2017), "Assessment of the prospective fiscal stance appropriate for the euro area".

Imbalance Procedure, it has selected 12 countries for an in-depth review²⁴. Despite reforms introduced at national and EU level, high private and public indebtedness together with high unemployment in some countries are weakening the economic prospects of several Member States. The remaining economic challenges call for initiatives aimed at increasing the resilience of Member State economies.

Legal and political constraints limit the scope for rethinking the euro area governance toolkit. Since the beginning of the crisis, numerous proposals on how to improve the euro area governance framework have been floated by the EU Institutions²⁵, the International Monetary Fund, and the Member States. Renowned researchers such as A. Sapir and G. B. Wolff²⁶ have also called for complex euro area reforms. As desirable as these steps may be, in the EU context any considerable leap forward would require a change in the Treaty. This could be a lengthy and politically demanding exercise as pointed out, for example, by Charles Grant²⁷ and Fasone and Beukers²⁸. Therefore, this contribution elaborates on the proposals whose implementation would not require a Treaty change but only minor revisions of the legislative framework.

This contribution considers the pros and cons of three proposals floated in the debate about the euro area's future. The main focus is on different kinds of incentive schemes and their potential interaction with fiscal rules. First, it examines the idea of reinforcing the link between the Structural and Investment Funds and the European Semester, developed by Poghosyan and Eyraud²⁹. Second, it considers the benefits and downsides of establishing a fund dedicated to the promotion of structural reforms³⁰. Third, it looks at the fiscal capacity as an incentive for fiscal responsibility³¹. In his September State of the Union speech, European Commission President Jean Claude Juncker suggested that the last two instruments could be part of a euro area budget line together with a special instrument supporting reforms in euro area pre-ins³².

2. New EU instruments as incentives for responsible national economic policy

The article assesses the three proposals from a theoretical as well as a practical perspective. The basic theory of incentive schemes was formulated e.g. by Dixit³³, who defines incentive schemes as a combination of rewards and penalties. He differentiates between two cases: a) when the prominent feature is a reward for positive actions; b) when it is a penalty for undesirable activity. The key point is to understand what incentivises the agent to prefer a good action over an undesirable one. In practice, the implementation of certain proposals can be questioned based on empirical evidence related to similar initiatives or due to their potential shortcomings related, in particular, to their implementation in the euro area context.

a) Reinforcing the link between the Structural and Investment Funds and the Stability and Growth Pact

Since the beginning of the crisis, substantial progress has been made in economic policy coordination. Further improvements, however, are necessary to make the euro area resilient in the medium term. The European Semester contributed to the streamlining of economic policy coordination.

²⁴ European Commission (2017), "Alert Mechanism Report 2018".

²⁵ European Commission (2012), "Communication from the Commission. A Blueprint for a Deep and Genuine Economic and Monetary Union - Launching a European debate".

²⁶ Sapir, A., Wolff, G., B., (2015), "Euro-Area Governance: What to reform and how to do it".

²⁷ Grant, C., (2017), "Macron, Merkel and the future of the euro".

²⁸ Fasone, C., Beukers, T. (2015), "EMU and national constitutional conditions to long term change".

²⁹ Eyraud, L., Poghosyan, T., Gaspar, V., (2017), "Fiscal Politics in the Euro Area".

³⁰ For details see e.g. Rubio, E. (2013), "Which Financial Instrument to Facilitate Structural Reforms in the Euro Area?".

³¹ E.g. Carnot, N., Kizior, M., Mourre, G., (2017), "Fiscal stabilisation in the Euro-Area: A simulation exercise", Carnot, N., (2017), "European Fiscal Governance and Cyclical Stabilisation: Searching for a Lasting Arrangement".

³² Juncker, J.-C., (2017), "State of the Union Address, 13 September 2017".

³³ Dixit, A., (2000), "IMF programmes as Incentive Mechanisms".

The conditionality link between the Stability and Growth Pact and the Structural and Investment Funds has been strengthened by the provisions of the legislation governing the 2013-2020 Multiannual Financial Framework. This link was used when it came to redirecting the flows of structural funds in some Member States in response to the financial and economic crisis³⁴. However, it has never been used as an incentive for responsible fiscal policy-making within the Stability and Growth Pact³⁵. The basic rationale is that sanctioning a country that is already under economic strain undermines the credibility of such steps and the reasoning behind them.

Eyraud, Poghosyan and Gaspar propose rewarding high-performing countries with additional structural funds or other EU subsidies³⁶. One could imagine an agreement to disburse a certain percentage of the European Structural and Investment Funds based on a Member State's performance in implementing structural reforms and respecting the Stability and Growth Pact.

This proposal has several caveats related mainly to the precise design of the incentive mechanism. It might be difficult to establish a scheme that would provide sufficient incentives to motivate national governments to respect pre-agreed commitments in exchange for ex post disbursed financing, especially in the environment of low interest rates. The size of a performance remuneration buffer would need to be carefully calibrated to provide sufficient incentive on the one hand without being unnecessarily high on the other. In addition, it is difficult to imagine that financial reserves ex ante constituted e.g. within the EU budget for remuneration of progress related to the reform efforts of the Member States would not be used elsewhere. It would be difficult not to employ such reserves, for example, to alleviate the impact of a severe asymmetric shock or to address unexpected challenges arising from a complex geopolitical environment. Moreover, it will be challenging to design the scheme in a way that will motivate the participation of the Member States that are assumed to be performing well³⁷.

b) Establishing a dedicated fund promoting structural reforms

The Commission³⁸ and the Member States have put forward several proposals for an instrument supporting structural reforms at supranational level. The European Commission drafted the initial proposals in 2012³⁹ and further detailed them in a subsequent Communication on Competitiveness and Convergence Instrument⁴⁰. In the media, such proposals were often floated under the umbrella of the German proposal of reform contracts⁴¹. The Commission's Reflection Paper on the EU Finances also mentions the potential set-up of a dedicated fund. More detailed proposals are expected in May 2018.

From an economic perspective, the common goal of these proposals is to increase the economic resilience of the Member States. They reflect the need for the euro area to deal with long-term structural challenges that are apparent in some economies. Strong links between EU Member States' economies and potential positive spillover effects can benefit all stakeholders.

The European Commission's proposal for a Convergence and Competitiveness Instrument would complement the current governance framework and address pressing economic challenges. The

³⁴ Structural Reform Support Service was established in response to the need for technical assistance in several Member States. Former programme countries such as Greece and Cyprus have benefitted from the assistance.

³⁵ In 2016, the debate about potential suspension of the structural funds in the case of Portugal and Spain was not concluded, despite the fact that the conditions for suspension were met.

³⁶ Eyraud, L., Poghosyan, T., Gaspar, V., (2017), "Fiscal Politics in the Euro Area".

³⁷ For details see e.g. Rubio, E. (2013), "Which Financial Instrument to Facilitate Structural Reforms in the Euro Area?".

³⁸ The latest proposals are described e.g. European Commission (2017), "Communication from the Commission to the European Parliament, the European Council, the Council and the European Central Bank – Further Steps Towards Completing Europe's Economic and Monetary Union: A Roadmap".

³⁹ European Commission (2012), "Blueprint for a deep and genuine economic and monetary union Launching a European Debate".

⁴⁰ European Commission (2013), "Communication from the Commission - Towards a Deep and Genuine - Economic and Monetary Union - The introduction of a Convergence and Competitiveness Instrument".

⁴¹ Open Europe (2013), "Reform Contracts".

incentive mechanism the Commission previously suggested would imply financial support conditioned upon full and timely implementation of reforms specified in the contractual arrangement that the Commission and the Member State negotiate. The Council would approve the reform timetable and the content. The proposal, outlined in 2013, would anchor the contractual arrangement reflecting the Country Specific Recommendations within the European Semester. Depending on the precise set-up the contractual arrangements could also cover recommendations resulting from the Macroeconomic Imbalance Procedure. The Member States could then report on their progress in the National Reform Programmes. The Commission would monitor and assess compliance with the contractual arrangements. In case of non-compliance, the deadline for implementation could be extended or the support could be withheld. The instrument would be financed by new resources in the form of dedicated contributions based on the GNI key or newly defined resources⁴².

Such a proposal could bring economic benefits, but it would face several practical obstacles. The Commission proposal could significantly underpin the conduct of structural reforms. It reflects academics' criticism of repeated Member State non-compliance with their Country Specific Recommendations. It also addresses the need to tackle economic challenges at national level. However, the nature of the structural reforms can make it difficult to reach an agreement on the content of contractual arrangements. Such an instrument could also face political obstacles due to the need for extra financial resources or risks of fiscal transfers between the Member States.

Designing appropriate conditionality linked to the disbursed funds would provide a country's incentive mechanism: compliance is rewarded if the Member State implements certain policy changes. Making financing or other benefits conditional should incentivise the governments to achieve the pre-agreed outcome⁴³. Ex post conditionality represents an instrument that should ensure that certain outcomes or policies are achieved⁴⁴. Domestic opposition to reforms that are perceived as externally imposed generates ownership problems and can impinge on the efficiency and effectiveness of reforms. Therefore the reforms should be addressed in a bilateral agreement between the Member State and the European Commission, thereby fostering home-grown support for the reforms introduced. The proposal also reflects earlier comments by Cotarelli⁴⁵ highlighting that a clear institutional mechanism is necessary to track possible deviations from the targets and translate them into incentives for the implementation of corrective action. An important additional element would be the division of the overall agreement into single policy areas subchapter to ensure that stalemate in one area does not lead to the withholding of overall financial support. If the funding is subdivided into separate envelopes reflecting single policy areas, one can better guarantee at least partial progress if government priorities change.

A careful and well-targeted approach when setting conditions should be adopted with ex ante provisions embedded in the legislation governing the new instrument. Both the IMF and EU institutions have used structural conditionality in adjustment programmes to determine whether or not to disburse tranches. A review-based approach allows considerable flexibility in determining whether a country has implemented the specified structural measures adequately and whether to disburse financial support. This element, if correctly implemented by the monitoring body, makes it a timely safeguard against potential non-compliance. The conditionality as well as its monitoring will play a crucial role in the success of the programmes potentially financed by the structural reform support instrument. These elements would perform a dual role: as incentive for the beneficiary Member State and as a safeguard for its peers. The introduction of safeguards in the form of conditionality could also avoid tensions related to the euro area's structure as a multinational currency union.

⁴² European Commission (2013), "Communication from the Commission - Towards a Deep and Genuine - Economic and Monetary Union - The introduction of a Convergence and Competitiveness Instrument".

⁴³ Ivanova, A., (2006), "Outcomes-Based Conditionality: Its Role and Optimal Design".

⁴⁴ Dixit, A., K., (2000), "IMF Programs as Incentive Mechanisms. Princeton University".

⁴⁵ Cotarelli, C., (2009), "Fiscal Rules-Anchoring Expectations for Sustainable Public Finances".

The introduction of contractual arrangements can enhance fiscal sustainability in the long run by promoting structural reforms. However, the sequencing of the phase-in, the financing structure of the arrangements and the interaction with fiscal rules will be crucial. Structural reforms are a demanding undertaking and mitigating their potential short-term negative impact could require substantial financial resources. In addition, the interaction of this instrument with fiscal rules needs to be specified, especially when it comes to the use of flexibility clauses within the Stability and Growth Pact. The implementation of structural reforms should be promoted but not used as a pretext for fiscal profligacy. This implies clear and predictable standards for the conduct of fiscal policy that can no longer be relaxed.

Such an instrument could play a complementary role to ESM financial support. ESM programmes are designed to resolve a crisis situation and re-establish market access. This instrument could ensure that reforms launched during the ESM programme will continue during the post programme period and that the positive trend will not be reversed. It could also increase market trust in the Member State's policies and further support its return to the market.

c) Introducing a euro area fiscal capacity

The introduction of a central fiscal capacity is proposed with the aim of mitigating the cyclical fluctuations of euro area member states' economies and smoothing the effects of economic downturns without foreseeing fiscal transfers. General economic reasoning points to the need to conduct countercyclical fiscal policies by encouraging saving in economically good times and enabling the drawdown of the accumulated funds during economic downturns. According to the Five Presidents' Report, the fiscal capacity should not foresee fiscal transfers and it should primarily *"improve the cushioning of large macroeconomic shocks and thereby make EMU overall more resilient"*. Several more detailed proposals were put forward including the euro area stabilisation instrument⁴⁶ and the European Investment Budget⁴⁷. Although the proposals mentioned differ considerably in terms of their precise structure, they share a common denominator in the form of ex ante eligibility based on compliance with predefined fiscal and structural criteria.

From a theoretical perspective the fiscal capacity represents an additional opportunity to incentivise Member States to conduct responsible fiscal policies. As the fiscal capacity would constitute additional fiscal buffers and potentially entail the possibility to borrow at supranational level, it can be considered a benefit of euro area membership. Its close link to national fiscal policy makes it a good instrument to incentivise fiscal discipline. Eligibility criteria based on compliance with the EU fiscal framework would require a precise specification of conditions for withdrawals of accumulated funds. Such an incentive mechanism would basically replicate the one put in place with the accession criteria for euro area membership. The details of an ex ante eligibility arrangement would depend on the precise set-up of the fiscal capacity. The most straightforward solution would be to link the eligibility criteria to the adherence to Council recommendations within the Excessive Deficit Procedure over recent years. In this context, particular emphasis should be put on the conduct of counter cyclical fiscal policy in economically favourable times.

The establishment of the fiscal capacity would preferably go hand in hand with the adjustment of the fiscal rules, especially in terms of simplicity, to ensure compatibility. The relationship between fiscal capacity and the fiscal rules needs to be carefully calibrated. If the eligibility criteria are related to the outcomes of the Excessive Deficit Procedure, the fiscal rules might also need to be streamlined to make the assessment of potential non-compliance easily observable. Establishing a fiscal capacity will increase the fiscal space available in the case of an economic downturn and ensure that savings are made during favourable economic times. Both the savings as well as withdrawals made by the euro-area

⁴⁶ Carnot, N., Kizior, M., Mourre, G., (2017), "Fiscal stabilisation in the Euro-Area: A simulation exercise".

⁴⁷ E.g. proposal by Bara, Y.-E., Castets, L., Ernoult, T., Zakhartouchouk, A., (2017), "A contribution to the work on the strengthening of the euro area".

member states should be accounted for within the Excessive Deficit Procedure. This should, however, not entail laxer fiscal rules or increased complexity. A return to the nominal values of the fiscal targets could be considered if the fluctuation of the economic cycle is properly reflected in the design of the fiscal capacity. This would be facilitated by reflecting the cycle in the amount of savings and locking those funds into the system, i.e. making them automatic. The revision of the rules should also concern the statistical treatment of financial contributions to, and withdrawals from, the euro area level. The additional element in the form of fiscal capacity should not increase the complexity of the euro area fiscal framework.

3. Conclusions

As vague as the three proposals are for the moment, a closer look already reveals their drawbacks. First, the necessary prerequisite for establishing any instrument is agreement on its financing. The example of EU budget negotiations clearly demonstrates the challenges the Member States will be facing, especially when it comes to determining priorities to be supported, access and disbursement criteria. The main issue might be ensuring a balanced and even-handed approach across the Member States.

New frameworks and policies could provide strong incentives to ensure that the intended goals – compliance with the fiscal rules and implementation of structural reforms – are achieved. Increased risk-sharing through fiscal capacity should be accompanied by well-defined eligibility criteria. Similarly, conditions reflecting the reform goals and specifying the consequences of non-compliance should complement recourse to the fund dedicated to structural reforms. Participating in risk-sharing arrangements as well as benefitting from the structural reform fund should be conditioned to provide safeguards against moral hazard. Finally, conditional access should also alleviate potential tensions given that the euro area is a multinational currency union.

The establishment of a fund dedicated to structural reforms could lead to the removal of structural reform exemption clauses from the Stability and Growth Pact. The exemptions granted based on the current fiscal framework in order to account for structural reforms could be more confined or even abolished depending on the size of the newly constituted fund. Simplified set of fiscal rules would also reduce the information asymmetries between the Member States and make the fiscal rules more even handed as well as understandable to the public.

The ultimate success of reformed governance framework depends not only on the design features of the new standalone instruments, but mainly on their interaction with the overall euro area governance framework. The pragmatic approach towards the implementation of new proposals should take into account economic reality and the experience gained so far with the idiosyncrasies of the EU institutional framework. Well-designed additional elements could underpin its functioning by reducing its complexity and providing financial incentives on the one hand and safeguards against moral hazard on the other.

References

- Brunnermeier, M.K., James, H., Landau, J.P. (2016), "The Euro and the Battle of Ideas", Princeton University Press, ISBN 978-0691172927, 2016.
- Carnot, N. (2017), "European Fiscal Governance and Cyclical Stabilisation: Searching for a Lasting Arrangement", CEPS and Intereconomics, Brussels, April 2017.
- Carnot, N., Kizior, M., Mourre, G. (2017), "Fiscal stabilisation in the Euro-Area: A simulation exercise", CEB Working Paper, no 17/025, October 2017.
- Cotarelli, C. (2009), "Fiscal Rules—Anchoring Expectations for Sustainable Public Finances", IMF Fiscal Affairs Department, December 2009.

Dixit, A.K. (2000), "IMF Programs as Incentive Mechanisms", Princeton University, 21 June 2000.

European Commission (2012), "Communication from the Commission. A Blueprint for a Deep and Genuine Economic and Monetary Union - Launching a European debate", Brussels, November 2012.

European Commission (2013), "Communication from the Commission - Towards a Deep and Genuine - Economic and Monetary Union - The introduction of a Convergence and Competitiveness Instrument", Brussels, March 2013.

European Commission (2017), "White paper on the future of Europe and the way forward", Brussels, March 2017.

European Commission (2017), "Reflection paper on the Deepening of the Economic and Monetary Union", Brussels, May 2017.

European Commission (2017), "Reflection paper on the Future of EU Finances", Brussels, June 2017.

European Commission (2017), "Alert Mechanism Report 2018", November 2018.

European Commission (2017), "Communication from the Commission to the European Parliament, the European Council, the Council and the European Central Bank – Further Steps Towards Completing Europe's Economic and Monetary Union: A Roadmap", December 2017.

European Court of Auditors (2015), "Financial Assistance Provided to Countries in Difficulties", Special Report, September 2015.

European Fiscal Board (2017), "Assessment of the prospective fiscal stance appropriate for the euro area", June 2017.

Eyraud, L., Poghosyan, T., Gaspar, V. (2017), "Fiscal Politics in the Euro Area", IMF Working Paper, WP/17/18, January 2017.

Fasone, C., Beukers, T. (2015), "EMU and national constitutional conditions to long term change", Ademu Working Paper Series, WP 2016/039.

Grant, C. (2017), "Macron, Merkel and the future of the euro", May 2017, CER Bulletin, Issue 114, June, July 2017.

Ivanova, A. (2006), "Outcomes-Based Conditionality: Its Role and Optimal Design", IMF Working Paper, WP/06/128, May 2006.

Juncker, J.-C. (2017), "State of the Union Address", 13 September 2017.

Kincaid, G.R. (2016), "The IMF's role in the Euro Area Crisis: What are the Lessons from the IMF's Participation in the Troika", BP/16-02/06 IMF, Independent Evaluation Office, July 2016.

Open Europe (2013), "Reform Contracts", 22 November 2013.

Rubio, E. (2013), "Which Financial Instrument to Facilitate Structural Reforms in the Euro Area?", Policy paper 104, Notre Europe – Jacques Delors Institute, December 2013.

Sapir, A., Wolff, G.B. (2015), "Euro-Area Governance: What to reform and how to do it", Bruegel Policy Brief, Issue 2015/01, February 2015.

1.6. SUMMARY OF DISCUSSION

The introductory panel discussion was devoted to the EU experience with fiscal coordination and governance. The contributions reflected on the experience of the Member States with fiscal policy coordination and different ways of ensuring their compliance. The panellists tackled a number of related aspects including the importance of independent monitoring bodies, improvements in incentive mechanisms, market enforcement mechanism, and potential synergies with other elements of governance framework. Despite continuous efforts to improve functioning and efficiency of the fiscal rules, further evolutions could be considered. They could include better tailoring to particular national needs, removing institutional barriers to the efficient functioning of the markets and promoting positive incentives for complying countries. Linkages of fiscal rules with possible new instruments such as fiscal capacity or an instrument incentivising structural reforms were raised as well.

Several participants discussed the right degree of flexibility of fiscal rules. Overall, there was support for the view advocating an evolution of the rules allowing explicitly for a stabilisation objective, while seeking to restore the no-bail-out discipline. On the euro area experience with fiscal rules, some participants highlighted that "one size fits all" fiscal rules are not efficient, evoking a system of more tailor-made fiscal rules. Others questioned if there was not an inherent trade-off between flexibility and transparency. Some suggested that the enforcement of rules should include more carrots and less sticks.

There was a lively discussion about the merits and limits of market discipline. There was a general feeling that market discipline and fiscal rules should complement each other. However, several interventions highlighted that ahead of the crisis market discipline has not been effective. In particular it appeared to work in an asymmetric manner, as it was mute in good times, while in bad times, markets amplified spillovers among monetary union members. Fiscal rules should contribute to accumulation of fiscal margins during boom periods that would provide safety buffers in the economically unfavourable times. Some participants suggested that frequent changes in the economic governance framework, including of fiscal rules, had contributed to market volatility. In order to ensure long-term financial stability, it was evoked that efforts of policy makers would need to address low level of trust between different actors: markets, Member States, international and European institutions.

2. SECOND PANEL ON EURO AREA FISCAL STANCE – EXPERIENCE AND PERSPECTIVES

2.1. EURO AREA FISCAL STANCE AND ITS OPERATIONALISATION PERSPECTIVES

By Mateusz Szczurek⁴⁸

Abstract: Euro area fiscal stance is a useful notion for the purpose of coordination of fiscal policies as countercyclical instruments in times of extremely low interest rates. European Fiscal Board's judgement of the broadly neutral EAFS being appropriate in 2018 was linked with the asymmetry of macro stabilisation policy options created by interest rates bounded at zero. Such neutral stance need not be incompatible with the Stability and Growth Pact. The notes describes main keys along which a desired EAFS can be distributed among Member States and proposes a mechanism utilising Macroeconomic Imbalance Procedure to address Stability and Growth Pact's asymmetry which does not include provisions for over-achieving countries if Euro Area slump calls for a looser fiscal stance.

The importance of EU-wide fiscal coordination gained prominence during the 2008-2009 crisis. The notion of the Euro Area fiscal stance (EAFS) has since regained prominence in academic discourse (Bénassy-Quéré, 2016), the EU legal framework⁴⁹ and in strategic plans drafted by EU institutions ("The Five Presidents Report" of 2015). The role European Fiscal Board (EFB) was tasked in its mandate by the European Commission to form an economic judgement on the appropriate fiscal stance at the euro area level against the background of EU fiscal rules.

Does worrying about the aggregate fiscal stance make sense?

Notwithstanding the fact that European Fiscal Board is obliged to advise on the EAFS, the notion does have a justification, at least in some economic circumstances. The critical factor here is the zero lower bound (ZLB) faced by the monetary policy of the European Central Bank. With reduced monetary policy effectiveness in influencing demand, the role of fiscal policy on the aggregate level increases. Higher fiscal multipliers in ZLB conditions, slumps and when financial sector is weak are reported by a number of studies (IMF, 2013).

Higher efficacy of fiscal policy in a slump need not necessarily call for a concerted fiscal action at the European level. After all, suboptimal conditions in individual Member States can be dealt with domestic fiscal policy. Two factors need to be taken into account: (i) externalities of national policies and (ii) Stability and Growth Pact's (SGP) asymmetry towards fiscal tightening, especially for countries starting with high debt levels.

There are both positive and negative externalities of a fiscal impulse in an open economy. The former could run through international trade or relative wage channels; the latter could operate via the Euro real effective exchange rate, interest rates, resource availability, financial market and banking sector stability. Similarly to the overall fiscal multiplier, the net positive externalities are likely to be higher with output gaps large and monetary policy at ZLB (In 't Veld, 2016). If individual Member States ignore externalities in such circumstances, the aggregate policy will end up too tight.

The SGP, after its numerous application revisions does take into account business cycle and allows for higher spending in bad economic times. Still, the ability of Member States to run countercyclical policy in

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⁴⁹ Recital 23 of Regulation (EU) 473/2013.

bad times is limited when debt levels are high. There is an asymmetry here towards tightness of policy, to some degree counterbalancing the well-documented deficit bias in fiscal policy. The SGP rules are generally geared towards fiscal sustainability and not towards (country or union level) macro stabilisation. No penalties are envisaged for running fiscal policy that is "too tight". This approach contributes to fiscal sustainability, but in the world of very low nominal interest rates and high multipliers this asymmetry can lead to suboptimal demand policy.

Once (and if) normal times of higher nominal and real interest rates return, the fiscal policy in general and a notion of EAFS in particular become far less important as an active demand policy instrument. The standard arguments of long lags, legislative inertia (especially strong in case of a multi-country coordination) making fiscal micromanaging of the cycle difficult are valid in all times. But in "normal economic conditions", these arguments would be strengthened by the combination of lower fiscal multipliers, more balanced positive and negative spill-overs and higher potency of monetary policy as a stabilisation tool. EAFS is a macroeconomic stabilisation mechanism for extraordinary times⁵⁰.

Estimating the right stance

As long as the EU or the Euro Area lack own fiscal and debt capacity, stabilisation, not fiscal sustainability is the key factor in determining desired fiscal stance of the Euro Area. To some degree, fiscal sustainability of individual Member States is a matter of common concern for the EU as reflected in the EU fiscal framework. This is linked with implicit and explicit support mechanisms for countries in a fiscal crisis. On the other hand, the experience of 2010-2013 points to the possibility of fiscally stronger Euro Area countries attracting capital inflows and enjoying lowered treasury bond yields in response of a crisis in other countries. Overall, the concept of fiscal sustainability cannot be easily scaled to the whole Euro Area, it is primarily a national concern, just as debt is national.

In its assessment (European Fiscal Board, 2017) on the appropriate level of the EAFS from the point of view of Euro Area stabilisation needs, the European Fiscal Board uses judgement based on (i) output gap measures and forecasts, as calculated by the Commission, OECD and the IMF; (ii) financial cycle indicators, (iii) level of short and long interest rates; (iv) inflation; (v) labour market indicators, and (vi) external balance measures. The idea is to avoid reliance on a single indicator of slack or of overheating and taking account also supplementary measures of economic imbalances.

The assessment of the European Fiscal Board pointed to the Euro Area still remaining below its potential in 2017, and arriving at its potential on a number of measures in 2018. In the hindsight, by end-2017, the recovery is on a far firmer footing. The EFB judgement of the broadly neutral EAFS being appropriate was linked with the asymmetry of macro stabilisation policy options created by interest rates bounded at zero. Increasing interest rates in case of overheating is always possible, while cutting them markedly below zero is impossible when a risk of a deflationary spiral appears.

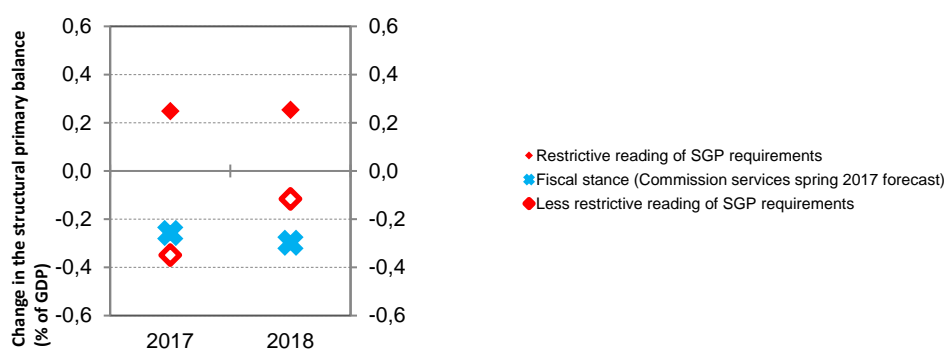
Establishing a desired fiscal stance for the Euro area as a whole is just the first step. Before turning to operationalisation options, it is worth considering if the desired EAFS can be compatible with the budget rules of the Stability and Growth Pact. If not, there are two options. We can be faced with a sustainability problem in numerous member states that needs to be addressed at the expense of macro stability. Alternatively, the Stability and Growth Pact itself is excessively strict, incompatible with macro stability and needs to be changed.

Is neutral stance compatible with SGP in 2018? The answer is a "qualified yes". Figure 1 shows the Commission's estimate of EAFS, and a range of aggregated fiscal stances as dictated by two readings of the SGP. Restrictive reading (solid diamond in Figure 1) reflects Member States implementing the

⁵⁰ As an aggregate measure of Euro Area fiscal policy, EAFS would remain useful when judging the appropriate monetary policy.

structural adjustment requirements, including the leeway granted by the flexibility clauses. Overachieving Member States keep their structural balance unchanged. Less restrictive reading assumes using the fiscal space by the countries that are above their Medium Term Objective structural budget level, while Member States under the corrective arm apply less restrictive nominal strategy, relying improving nominal gains brought by the economic upturn.

Figure 1: Fiscal stance and SGP requirements



Source: European Fiscal Board, 2017.

The range of SGP-compatible fiscal outcomes described above does encompass the desired broadly neutral stance – but only provided some fiscal space is used up by the countries that have it. The alternative is either tightening of euro area fiscal policy or (like it was in 2016) the aggregation hiding suboptimal composition. In the latter case, looser euro area fiscal stance would be delivered by the countries with fiscal sustainability problems.

Potential operationalisation

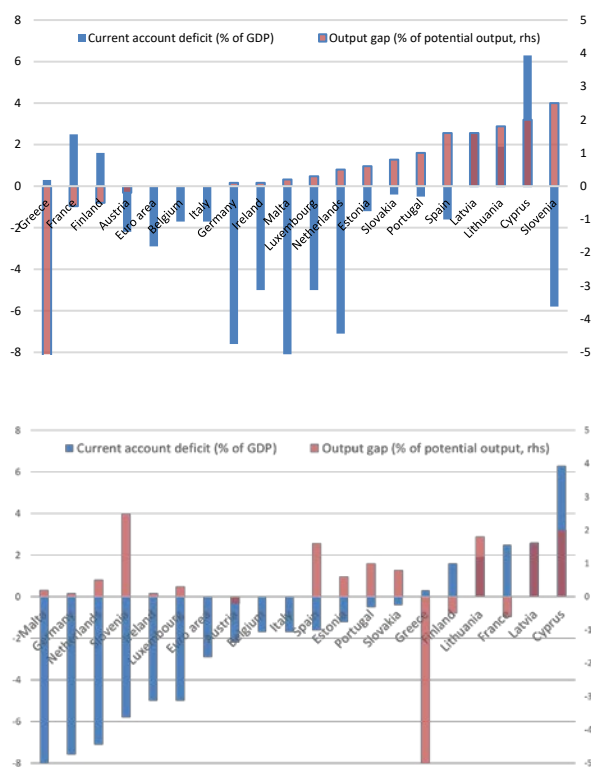
The SGP in its current form does not need to be incompatible with the appropriate euro area fiscal stance, at least with economic conditions not worse than in 2016-2018. There is, however, a long way from establishing a theoretical possibility of a desired fiscal coordination outcome and actually achieving it. Also, the aggregation of the fiscal stance may take many different forms, supporting or detracting from individual countries' fiscal sustainability and other objectives of the EU.

A somewhat stylised description of the current approach to aggregation would be a bottom-up procedure described as follows. The EAFS is a result of a distributed optimisation exercise, taking into account limits dictated by the SGP, macroeconomic stabilisation needs, and broadly defined political constraints in individual Member States. Fiscal policy externalities are unlikely to carry substantial weight in the optimisation equation (itself likely to vary across the EU). Despite of this, achieving a desired euro area fiscal stance could still happen in the zero rates environment if the (likely positive) externalities of the fiscal impulse meet a deficit bias created by political constraints.

Assuming Member States' ability to coordinate, a top-down approach could be envisaged. After establishing a desired EAFS, it is then "distributed" across individual Member States. Such distribution could happen using an output gap, fiscal space or current account keys. The distribution mechanism could operate on the basis of a combination of several factors, using weighting system constrained with SGP rules. In some economic circumstances, both achieving the aggregate EAFS and the process of distribution itself could contribute to the community goals.

Figure 2 shows euro area member states ranked by size of their output gap (left panel) and their current account deficits (right panel). For the sake of clarity it abstracts from SGP constraints. Higher weighing of the former would help to synchronise business cycles and increase overall multiplier of the EAFS. Distributing the fiscal impulse in countries with higher current account surpluses would help to limit intra-euro area imbalances, contributing to the real exchange rate realignment in times of very low inflation.

Figure 2: Output and current account distribution



Source: European Commission Spring forecast.

An example of an EAFS distribution mechanism based on external imbalance key could be as follows. A country (i) with fiscal space and (ii) subject to Macroeconomic Imbalance Procedure established on the basis of excessive current account surplus is obliged to contribute extra funds to the EU budget. This contribution would increase the country's own ESIF envelope, provided the ESIF-financed investment is made sufficiently quickly. If the country fails to deploy the funds within specified timeframe, the funds increase the general EU budget. Such a system would help to eliminate the asymmetry of the SGP, which does not include provisions for over-achieving countries.

Any potential operationalisation of the prospective EU central fiscal stabilisation capacity needs to deal with the same issue of EAFS distribution key. Unemployment reinsurance system or investment support for depressed Member States would be equivalent to higher output gap weight in the EAFS distribution algorithm, generating risks of a politically poisonous "permanent transfer union". Investment protection scheme targeting current account surplus countries would help to minimise permanent transfers, but would risk short-term increase of business cycle desynchronisation and overheating in some Member States.

A mechanism similar to European Fund for Strategic Investments is country envelope-free. However, as it concentrates on bankable, preferably "shovel-ready" projects, additionality remains a serious concern. A method for ranking "European value-added", or "social return" of investment projects would be needed to address the public investment gap and scale the fund to play a more substantial counter-cyclical role.

Whichever central weighting of the EAFS distribution key is used, it is likely to clash with national preferences of dealing with sustainability – stabilisation trade-off and with policy priorities in some Member States. It is a normal cost of community-based macroeconomic policy management. Similarly, single monetary policy creates the cost of "wrong" interest rate from the point of view of some Member States' preferences.

References

Bénassy-Quéré, A. (2016), "Euro-area fiscal stance: definition, implementation and democratic legitimacy", European Parliament.

European Fiscal Board (2017), "Assessment of the prospective fiscal stance appropriate for the euro area".

IMF (2013), "Reassessing the Role and Modalities of Fiscal Policy in Advanced Economies", IMF Policy Paper, pp. 17-28.

In 't Veld, J. (2016), "Public Investment Stimulus in Surplus Countries and their Euro Area Spill Overs", European Economy, Economic Briefs (16).

Juncker, J.-C., Tusk, D., Dijsselbloem, J., Draghi, M., Schulz, M. (2015), "Completing Europe's Economic and Monetary Union", Brussels.

2.2. EURO AREA FISCAL STANCE: FISCAL POLICY WITHOUT A BUDGET

By Agnès Bénassy-Quéré⁵¹

Abstract: The fiscal stance of the euro area is essentially the result of constrained national fiscal decisions. Looking at other advanced economies counter-cyclical fiscal policy appears more the exception than the rule, at least as far as discretionary policy is concerned. Still, the euro area could improve its policy setting by reducing its reliance on the weak concept of output gap, by connecting the debate on fiscal policy with that on other macroeconomic stabilisation tools, and by limiting the coordination to specific times. If fiscal coordination continues to be an impossible task, then a stabilisation capacity at euro area level may appear appropriate.

Within the euro area, government expenditure at national and infra-national levels represents an average of 47 percent of GDP, whereas expenditure at EU level amounts to around 1 percent and expenditure at the euro area level is close to zero. This situation is at odds with that of existing federal countries. In Canada –one of the most decentralised federal countries– state and local expenditures represent 56 percent of the total.

The peculiar organisation of the euro area concerning fiscal policy of course derives from its political organisation. However it raises a challenge for a monetary union, for three reasons. First, there is a mismatch between the issuers of sovereign debts and the perimeter of the monetary union, creating a vulnerability related to the lack of de facto lender of last resort (de Grauwe and Ji, 2013). Second, there is no fiscal instrument for macroeconomic risk sharing: a member state hit by an asymmetric shock will not benefit from temporary net transfers. Third, there is no instrument to complement monetary policy in aggregate stabilisation, either in a downturn, when monetary policy may be constrained by the zero lower bound, or in a boom, if for instance the central bank had to face the combination of low consumption price inflation and high asset price inflation.

To address the latter concern, the concept of an "aggregate fiscal stance" has been developed by the European commission. The idea is to mimic what a common fiscal policy would produce in terms of fiscal stabilisation: expand in bad times and contract in good times. This attempt to carry out fiscal policy without a budget so far has not been successful. A key reason is that national budgets are voted by national parliaments that are accountable to national citizens rather than to foreign citizens. Member states are committed to complying with the Stability and growth pact and the Fiscal compact, which they have approved. In theory they, also need to apply article 5.1 of the TFEU stating that "The Member States shall coordinate their economic policies within the Union", and article 121.1 saying that "Member States shall regard their economic policies as a matter of common concern and shall coordinate them within the Council". In practice, however, the coordination of fiscal policies has proved weak: at best, Member states have complied with fiscal rules, with little concern about their individual contributions to the aggregate fiscal stance.

Here we first highlight the fact that counter-cyclical policy is far from being the rule even outside the euro area: the lack of fiscal stabilisation at euro area level may not be only due to inadequate fiscal rules or the lack of a euro area budget. Then, we make a few suggestions on how to improve the current framework.

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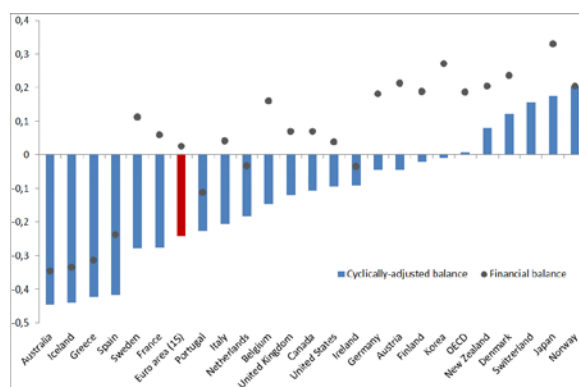
1. Counter-cyclical fiscal policy is more the exception than the rule

One way to measure how fiscal policy tends to stabilise or destabilise the economic cycle is to calculate the correlation between the year-on-year variation in the fiscal balance and the output gap. A positive correlation means that fiscal policy becomes more restrictive when the economy is booming while it is expansionary in a downturn: fiscal policy is counter-cyclical. The correlation may be measured based on the financial balance, or on the cyclically-adjusted balance. In the former case, the measure includes the automatic stabilisers; in the latter one, it is restricted to discretionary fiscal policy – what is generally labelled the "fiscal stance".

Figure 1 reports both measures of fiscal stabilisation for OECD countries over the 1995-2017 period. For the OECD as a whole, there is no correlation between the fiscal stance (the variation in the cyclically-adjusted balance) and the output gap, meaning that discretionary fiscal policy is neutral – neither pro nor counter-cyclical. For the euro area, the correlation is negative, meaning that discretionary fiscal policy on average is pro-cyclical. However, several countries outside the euro area –Australia, Sweden, Iceland and even the United Kingdom, Canada and the United States– also display strongly pro-cyclical discretionary policies.

Most of the time, automatic stabilisers compensate for destabilising discretionary policies: The correlation between the variation in the financial balance and the output gap is negligible for the euro area as a whole, although still negative in some countries, although still negative for Greece, Spain and Portugal. It can be argued that several peripheral countries were hit by fiscal crises after 2009, which annihilated their ability to carry out counter-cyclical fiscal policies. Conversely, 2009 was an exceptional year in terms of fiscal policies, with large stimulation packages in most advanced economies (and in some emerging market economies).

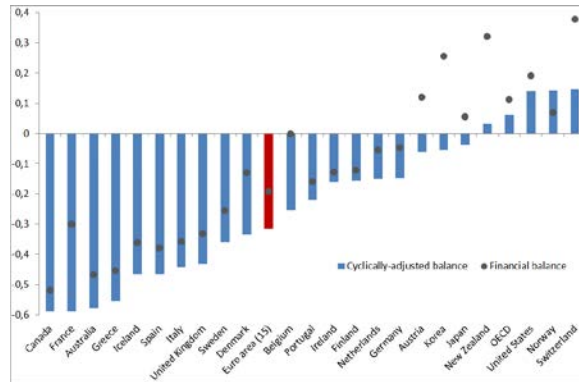
Figure 1: Correlation between the variation in the fiscal balance and the output gap, 1995-2017



Source: Author's calculations based on OECD Economic Outlook, November 2017.

Figure 2 reports the same calculations for the 1995-2008 period. Strikingly, most countries now appear with negative correlations, both for discretionary fiscal policy and for the overall fiscal balance, with the notable exceptions of the United States, Norway and Switzerland. Many countries with strongly pro-cyclical policies belong to the euro area. However, Canada and the United Kingdom are also in this camp.

Figure 2: Correlation between the variation in the fiscal balance and the output gap, 1995-2008



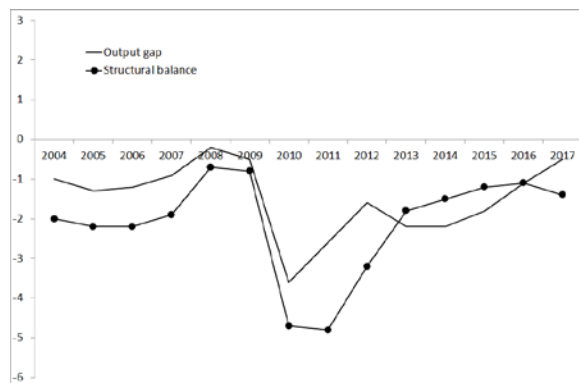
Source: Author's calculations based on OECD data.

It can be concluded from this graphical analysis that pro-cyclical policies are not a specificity of the euro area, although euro area countries are generally concerned by this feature. In fact, pro-cyclicality appears to be more marked in good times than in bad times, whereas the Stability and growth pact is more binding in bad times.

2. Suggestions to improve the current euro area framework

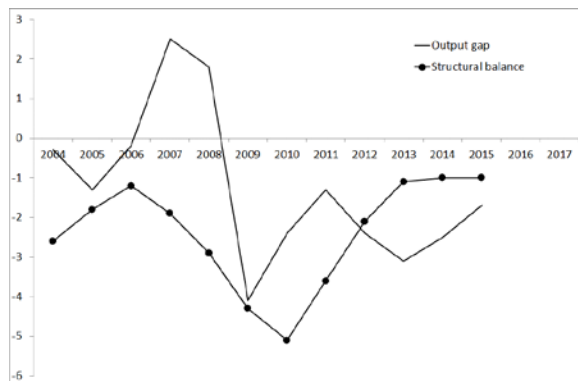
The reasons for pro-cyclical fiscal policies have been studied in the literature (see e.g. Cimadomo, 2016). They point forecast errors as a major issue: governments may intend to carry out counter-cyclical fiscal policies but due to forecasts errors (especially on the output gap), fiscal policy turns pro-cyclical ex post. Figures 3 and 4 illustrate this feature for the euro area. Based on real-time data (here, European Commission's forecasts in spring t-1 for year t), fiscal policy appears counter-cyclical in Figure 3, since the structural balance tends to move in tandem with the output gap, with a correlation of 0.75 over 2004-2015. This is no longer the case in Figure 4 which is based on final series of output gap and structural balance. The correlation between the output gap and the structural balance drops to 0.17 over the same period.

Figure 3: Fiscal policy in real time: expected aggregate structural balance and output gap (in percent of potential GDP)



Source: European Commission forecasts, various vintages, and author's calculations. "Real time" refers to spring forecasts in year t-1 for year t.

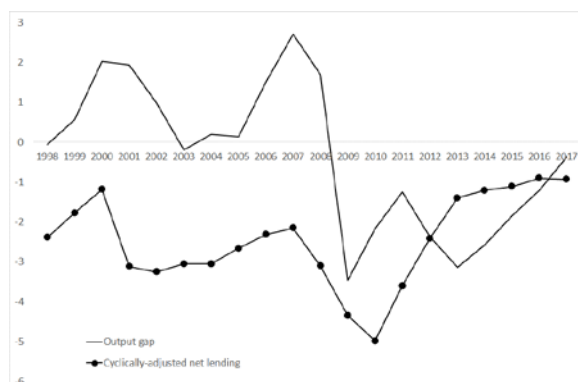
Figure 4: Fiscal policy ex-post: final aggregate structural balance and output gap (in percent of potential GDP)



Source: European Commission forecasts, various vintages, and author's calculations. "Final" refers to the figures given in spring t+2 for year t.

Another source of pro-cyclical fiscal policy is the combination of procyclical financial markets (that lend more easily in good times), procyclical fiscal rules (that do not much constraint public spending in good times while limiting the deficit in bad times), and the political economy of fiscal policy (whereby governments tend to spend tax windfalls in good times). Figure 5 shows that over a relatively long period, the euro area as a whole has failed to bring its aggregate cyclically-adjusted government balance to zero in good times, as if governments had failed to save the unexpected windfalls of the booms. In turn, years 2012 and 2013 saw the aggregate deficit be reduced while the output gap was experiencing a "second dip", partly due to financial constraints in several euro area countries.

Figure 5: Cyclically-adjusted budget balance and output gap, euro area, 1998-2017 (in percent of potential GDP)



Source: European Commission, Ameco database.

In order to improve the cyclical properties of fiscal policy, it has sometimes been proposed to substitute a spending rule to the existing deficit rule and/or to exclude public investment from the numerical fiscal rules (see Guerguil et al., 2016). A rule based on the cyclically-adjusted (or structural) balance in theory should reduce the extent of pro-cyclicity. However it relies on a variable –the output gap– that cannot be observed even after several years. An avenue for reform would be to free fiscal rules from the output gap, or to complement the output gap with another measure of the saving-investment imbalance, namely the current account (see Bénassy-Quéré, 2016). The advantage of the current account is that it can directly

be observed, and it can better be forecast: over the 2004-2015 period, the mean square difference between real time data (the spring t-1 forecast of the EC) and final data (the spring t+2 figure) is 0.5 percent of GDP for the output gap, against 0.28 percent for the current account. Another way to compare forecast accuracy is the correlation between real time and final variables. Over the same period, it is 0.44 in the case of the output gap and 0.75 in the case of the current account.

The current account cannot substitute for the output gap in fiscal rules. However, the two measures of macroeconomic imbalances could be used to collectively think about the euro area's fiscal stance and its possible distribution across euro area member states.

Such coordination will always be difficult for institutional and political reasons. One way to overcome these difficulties could be to limit coordination to specific circumstances where monetary alone cannot stabilise the euro area economy as a whole, so a policy mix would be required. Such circumstances could appear at the zero lower bound, or in boom time, for instance in case of low consumer price inflation but booming asset prices. Macroeconomic coordination would ideally involve other policy areas such as macro-prudential policy or tax policy. Such multi-factor policy could be organised through a streamlined Macroeconomic imbalances procedure (see Bénassy-Quéré, 2015).

The difficulties of fiscal coordination and the making of a euro area's fiscal stance today should not come as a surprise given the national mandate of policy-makers. The radical way of overcoming them would be to substitute integration for coordination, as it was done for monetary policy after the early 1990s crises of the European monetary system. In a sense, the problem faced today in the fiscal area is similar: the European fiscal system is not working well, which may justify introducing a joint fiscal capacity in order to internalise part of fiscal policy externalities and help the euro area as a whole to design more adequate fiscal policies.

References

- Bénassy-Quéré, A. (2015), "Economic policy coordination in the euro area under the European Semester", Report for the European Parliament (ECON), PE 542.676, November.
- Bénassy-Quéré, A. (2016), "Euro area's fiscal stance: definition, implementation and democratic legitimacy", Report for the European Parliament (ECON), PE 574.424, July.
- Cimadomo, J. (2016), "Real-Time Data and Fiscal Policy Analysis: a Survey of the Literature", *Journal of Economic Surveys*, vol. 30, no 2, pp. 302-326.
- De Grauwe, P. and Ji, Y. (2013), "Self-fulfilling crises in the Eurozone: an empirical test", *Journal of International Money and Finance*, 34. 15-36.
- Guerguil, M., Mandon, P. and Tapsoba, R. (2016), "Flexible Fiscal Rules and Countercyclical Fiscal Policy", IMF working paper WP/16/8.

2.3. EURO AREA FISCAL STANCE

By Marien Ferdinandusse⁵²

Abstract: This paper provides a short-overview of recent assessments of the euro area fiscal stance. It also presents a possible metric for assessing the euro area fiscal stance, which is agnostic about the relative weights of the stabilisation and sustainability objectives of the stance and considers them separately. This approach can be used as a disciplinary device which informs on the possible existence and size of trade-offs between both objectives in a transparent way, when assessing the aggregate stance. This is distinct from the Stability and Growth Pact (SGP), which synthesises the two, placing a stronger emphasis on the latter. The operationalisation of the concept of the euro area fiscal stance brings challenges, for example related to the relationship with the SGP.

The euro area fiscal stance is not a new concept. The 1989 Delors report⁵³ and related background studies already contained a call for coordinating budgetary and macroeconomic policies in order to define an aggregate EMU fiscal policy stance (see Kamps et al, 2017). However, unlike other elements of the Delors report, such as budgetary rules, no procedure for assessing and coordinating the euro area fiscal stance was initially included in the architecture of Economic and Monetary Union (EMU).

In the absence of centralised or coordinated fiscal policy, the euro area fiscal stance is the sum of national policies. Those are guided by the European Union's common fiscal framework, the Stability and Growth Pact (SGP), which assigns a central role to automatic stabilisers in absorbing macroeconomic shocks. Automatic stabilisers contribute to smoothing out the business cycle without the need for the government to undertake any action. They do not require the cyclical position of the economy to be measured nor an active implementation.

With the euro area entering the double-dip recession in 2012 the concept of aggregate fiscal stance started to receive more attention. The 2009 and 2012 recessions led to a very strong surge in unemployment and significant risks of deflation, while the conventional monetary policy tools were reaching their limits. This led to a debate as to whether discretionary fiscal policy could exceptionally have a greater role in macroeconomic stabilisation, and the recognition that the independent conduct of national policies may not lead to an appropriate fiscal stance for the euro area as a whole.

This greater attention to the euro area fiscal stance was reflected in two important institutional changes. First, after the so-called "two-pack" reform of the SGP of 2013, the euro area fiscal stance started to play a role in the assessment by the European Commission of the draft budgetary plans of the Member States for the next calendar year, and is followed by an assessment by the Eurogroup. Second, the Five Presidents' report (June 2015) highlighted the need to reflect on ways to ensure that "the sum of national budget balances leads to an appropriate fiscal stance at the level of the euro area as a whole". This triggered the setting up of the European Fiscal Board (EFB), which was given the task of advising the European Commission on the appropriateness of the euro area fiscal stance within the rules of the SGP. The members of the EFB were appointed in October 2016.

The assessments of the euro area stance that the European Commission, EFB and Eurogroup have made since 2013 in almost all cases call for a broadly neutral fiscal stance (see table 1). A notable exception was the call of the European Commission at the end of 2016 for a fiscal expansion in 2017. However, this call was not seconded by the Eurogroup. Against the background of a relatively short history, the question

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⁵³ Committee for the Study of Economic and Monetary Union: Report on Economic and Monetary Union in the European Community (1989), Office for Official Publications of the European Communities, Luxembourg.

arises: how can the euro area fiscal stance be assessed? This contribution aims to provide some reflection on this question.

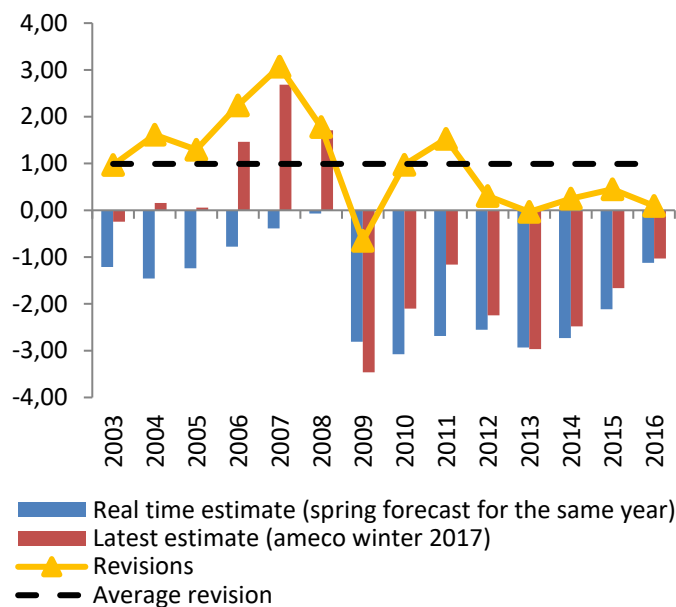
Table 1: Assessments of fiscal stance by Commission, European Fiscal Board (EFB) and Eurogroup

	Commission	EFB	Eurogroup	Δ SPB *
end-2013 (for 2014)	Broadly neutral fiscal stance, which should contribute to the recovery		The planned fiscal effort for 2014 is broadly appropriate	0.2 (for 2014)
end-2014 (for 2015)	Absence of fiscal tightening appears a broadly acceptable balance		Broadly neutral planned fiscal stance reflects a balance between sustainability and current weak cyclical conditions	-0.2 (for 2015)
end-2015 (for 2016)	Neutral aggregate euro area fiscal stance for next year appears broadly appropriate; vigorously resume consolidation once the recovery takes hold		Broadly neutral planned fiscal stance reflects a balance between sustainability and stabilisation	-0.2 (for 2016)
mid-2016 (for 2017)	Appropriate to pursue a broadly neutral stance; modulation [...] if and as the recovery accelerates or decelerates		Broadly neutral aggregate fiscal stance in 2017 strikes an appropriate balance	
end-2016 (for 2017)	A fiscal expansion of up to 0.5% of GDP is considered desirable for 2017		Recalls mid-2016 assessment. Strike an appropriate balance between sustainability and need to strengthen the recovery	-0.3 (for 2017)
mid-2017 (for 2018)	A broadly neutral EA fiscal stance in 2018 seems appropriate. Need for a differentiation between MS	Neutral fiscal stance for EA as a whole seems appropriate; at country level formidable dilemma		-0.3 (for 2018)

Note: * projected change in the structural primary balance according to the European Commission Spring Forecast.

The fiscal stance concept aims at capturing the fiscal impulse that derives from discretionary policy action, i.e. excluding the effect from the automatic stabilisers. In practice, two measures of the fiscal stance can be used. The first is a top-down measure that is based on the change in the cyclically adjusted balance, which corrects the headline fiscal balance for the effects of the economic cycle (or a variant thereof, for example the structural primary balance). The second is a bottom-up estimate of discretionary fiscal measures, which sums up the estimated yields of policy actions considered by governments. Both these measures entail a significant degree of uncertainty, as it is difficult to estimate the effect of the economic cycle or the yields of discretionary measures, especially in real time. For example, there was an average difference of 1 percentage point between estimates of the euro area output gap between 2003 and 2016 in the Commission Spring Forecast of the same year and the estimate in the Winter Forecast of 2017.

Chart 1: Euro area output gap: real-time estimates and revisions



Source: AMECO, ECB staff calculations.

In addition to the uncertainty inherent in any assessment of the fiscal stance, an aggregated euro area fiscal stance may not adequately capture the impact of country-specific fiscal policies on the euro area economy. Most notably, this occurs if a fiscal impulse that originated in one country spills over to other euro area Member States in the presence of strong trade links and the interest rate channel in the monetary union. Depending on the magnitude of such spill-over effects, the assessment of the euro area fiscal stance may differ from the sum of the aggregated of national fiscal stances.

On top of the difficulty of measuring the fiscal stance comes the difficulty of assessing its appropriateness. An appropriate fiscal stance should combine both (short-term) stabilisation and (long-term) sustainability objectives. Output stabilisation through discretionary measures relates to the role of fiscal policy in bringing an economy to its full potential. This occurs through positive (or negative) demand effects, which eventually result in stimulating non-utilised resources (or addressing over-utilisation of capacity). This is to ensure that the economy does not remain considerably below (or above) its potential for an overly long period of time. The existence of a persistently negative output gap may spill over to potential output and increase the likelihood of hysteresis. Similarly, a persistent positive gap is unwarranted as it increases the risk of overheating. Naturally, short-term output stimulation with a fiscal expansion would add debt and increase sustainability risks. In this context, fiscal policy needs to also ensure sustainability of public finances as a prerequisite for stable economic functioning.

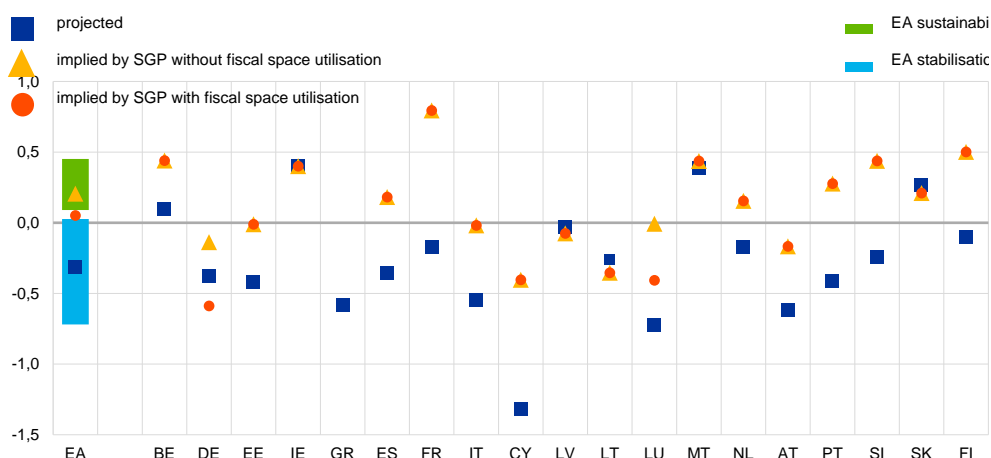
Finding the right balance between sustainability and stabilisation objectives is even more challenging at the aggregate euro area level than for individual countries. Any optimal fiscal policies at the individual country level may not necessarily entail optimal fiscal policy for the euro area as a whole. The position of countries in the business cycle might be different. Also, there may be different preferences for the euro area and at the national level regarding the importance of the two objectives. Moreover, inconsistencies may arise if countries are unable to perform the required stabilisation functions on account of sustainability concerns and if other countries with significant fiscal space have insufficient incentives to pursue expansionary policies. The optimal aggregate euro area fiscal stance must strike the right balance for all euro area countries. Since fiscal policy in EMU is a national responsibility, sovereign debt sustainability must be ensured in all euro area countries. Debt sustainability indicators applied to the euro area aggregate debt ratio are not meaningful and can be used for indicative purposes only. Regarding the

stabilisation objective, its achievement at the aggregate level should not be achieved at the expense of creating or widening country imbalances in the euro area.

A metric for assessing the euro area fiscal stance is presented in Bańkowski & Ferdinandusse (2017). While more detail can be found in this paper, a short summary of the metric is that desirable outcomes are defined for each objective of the fiscal stance separately. A desirable fiscal stance from the stabilisation point of view is considered to be one that ensures a closure of the output gap by 50 to 100% of its starting value over a two year period. To measure the second objective, fiscal sustainability, the analysis relies on a modified version of the European Commission's S1 indicator. This metric quantifies the fiscal adjustment needs necessary to bring the government debt-to-GDP to a sustainable level in a pre-defined time horizon, namely 60% between 2025 and 2035. The desirable fiscal stance resulting from both indicators is expressed in ranges to reflect the measurement uncertainty and inherent arbitrariness of defining the objectives of fiscal policy.

An illustration of this methodology shows that there are trade-offs involved in achieving the two objectives. Starting from the European Commission's Spring 2016 European Economic Forecast, a mildly expansionary euro area fiscal stance in 2016-17 would have been warranted from a stabilisation perspective (see chart 2, green range), while the sustainability objective would require a slight tightening (light blue range). These trade-offs may arise particularly in situations when large consolidation requirements owing to elevated sustainability risks conflict with the need for a supportive fiscal policy in response to an adverse macroeconomic shock. The 2016 Spring Forecast implied an expansionary euro area fiscal stance in the middle of the range of the stabilisation objective (dark blue square). However, the fiscal stance implied by the Stability and Growth Pact tilts towards the sustainability objective (yellow triangle). Taking into account the fiscal loosening that the SGP allows, but not requires, from countries with positive fiscal space, would bring the euro area fiscal stance slightly closer to the stabilisation objective (orange circle). The SGP provisions may not automatically ensure an appropriate euro area fiscal stance, primarily on account of a certain asymmetry. The SGP requires fiscal tightening in countries with debt sustainability concerns, but it does not stipulate an expansion in the presence of positive fiscal space.

Chart 2: Illustrative euro area fiscal stance assessment (2016-17) (in percentage point of GDP)



Notes: The SGP requirements, which are expressed in overall structural balance changes, are translated into structural primary balance changes by subtracting projected interest payments. This is with a view to aligning the quantitative SGP requirements with the definition of the fiscal stance outlined as the change in the structural primary balance. The SGP requirements are not available for Greece, given that the country remains under the EU/IMF economic adjustment programme.

Source: Bańkowski, K. and M. Ferdinandusse (2017). Calculations based on the European Commission's Spring 2016 European Economic Forecast and country-specific SGP requirements.

The methodology developed in Bańkowski & Ferdinandusse (2017) might be used as a disciplinary device that informs the assessment of the euro area fiscal stance. The analysis is not meant to substitute the Stability and Growth Pact (SGP), which remains the only relevant legal framework for coordinating

national fiscal policies in the euro area. The analytical exercise is agnostic about relative weights of the stabilisation and sustainability objectives and considers them separately, unlike the SGP framework that synthesises the two and places a stronger emphasis on the latter. Neither is this metric intended as the only conclusive measurement of the fiscal stance. Alternative approaches to assess the euro area fiscal stance have been developed, for example by also including a backward-looking element to the assessment (European Commission, 2016). The value of the above approach is that it allows to analyse the possible interactions between the two relevant objectives for the euro area fiscal stance, which is made transparent by an explicit quantification of both objectives.

Given the uncertainties surrounding fiscal stance assessment, any policy recommendation regarding the euro area fiscal stance should err on the side of caution. First, an assessment of the (euro area) fiscal stance needs to acknowledge the uncertainty that applies to its measurement. The difficulty in determining the size of discretionary fiscal policy measures, compounded with difficulties surrounding the measurement of a country's position in the business cycle, renders the determination of the magnitude and even the direction of fiscal policy (i.e. pro- or countercyclical) very challenging in practice. Secondly, a recommendation to change the fiscal stance needs to weigh the benefit of discretionary fiscal actions against its drawbacks. Discretionary fiscal measures may provide an effective demand-supporting tool to counteract deep downwards swings in the cycle or periods of prolonged subdued growth with constrained monetary policy. However, the drawbacks of discretionary fiscal policy actions are well established. In addition to the uncertainty regarding the cyclical position, these relate to the implementation lag of fiscal policies and the problem of reversibility, while the scope for such policies is limited by debt sustainability concerns. These drawbacks underlie the broad consensus that automatic stabilisers represent the desirable form of the fiscal policy response to adverse shocks of a usual magnitude.

It is important in the assessment of the fiscal stance to distinguish normal from exceptional times. This raises the question whether the "escape clause" that was introduced with the reform of the SGP in 2011 and allows for temporary deviations from the fiscal rules under certain economic circumstance should be specified. In periods of "severe economic downturn" for the euro area as a whole, member states under the SGP's preventive arm may be allowed to temporarily deviate from their adjustment path towards the MTO. Under the corrective arm, EDP deadlines may be extended. However, the definition of a "severe economic downturn" has not been defined, beyond the stipulation that it relates to "a negative annual GDP volume growth rate or [...] an accumulated loss of output during a protracted period of very low annual GDP volume growth relative to its potential"⁵⁴. To align the assessment of the euro area fiscal stance with the SGP, it would be helpful to spell out more clearly what criteria would be considered to correspond to a severe economic downturn; what fiscal sustainability means in this respect, and who is responsible for their determination.

References

- Bańkowski, K. and Ferdinandusse, M. (2017), with contributions from Attinasi, M.G., Checherita-Westphal, C., Palaiodimos, G. and Trindade Campos, M.M., "Euro area fiscal stance", ECB Occasional Paper 182, January 2017.
- European Commission (2016), "Report on Public Finances in EMU 2016".
- Kamps, C., Cimadomo, J., Hauptmeier, S., Leiner-Killinger, N. (2017), "Reflections on the Euro Area Fiscal Stance", *Intereconomics*, Volume 52, May/June 2017, Number 3, pp. 125-131.
- Juncker, J.-C., Tusk, D., Draghi, M., Dijsselbloem, J. and Schulz, M. (2015), "Completing Europe's Economic and Monetary Union", European Commission, Brussels.

⁵⁴ Article 2(2) of the SGP's corrective arm regulation. The Code of Conduct to the SGP further states that the indicator for assessing accumulated losses of output is the output gap.

2.4. A FISCAL STANCE FOR THE EURO AREA: SO RELEVANT AND YET SOME KEY ISSUES

By Gilles Mourre⁵⁵

The debate over the fiscal stance of the euro area, i.e. the orientation of fiscal policy in terms of its impact on short-term economic activity, is fairly recent. Although the concept appears in the 1989 report of the Delors Committee on economic and monetary union in the European Community, fiscal policy in the architecture laid down by the Maastricht Treaty was primarily seen as a national matter. The concept of the euro area's fiscal stance was implicitly introduced in the Two-Pack legislation adopted in mid-2013.⁵⁶ The debate on the euro area's fiscal stance was actually kindled in the ECOFIN and the Eurogroup by the European Commission, based on various contributions, not least its Communication of 16 November 2016.

This short contribution focuses first on the reason for seeking an appropriate fiscal stance for the euro area as a whole. Second, it briefly discusses what an appropriate aggregate fiscal stance could be, taking today's situation as an illustration. Third, it looks at the thorny question of the appropriate country composition. In particular, it examines the euro area fiscal stance resulting from appropriate national fiscal stances. Lastly, it concludes by raising the question of whether the existing institutional setting is able to ensure the appropriate fiscal stance for the euro area as a whole.

1. An appropriate fiscal stance for the euro area: why?

Recently, some have questioned the relevance of the very concept of a Euro Area Fiscal Stance. The dividing lines across Member States could be summed up by a paraphrase of the famous quote by the French mathematician, physicist and philosopher Blaise Pascal: "The truth on this side of the Rhine, error on the other". Some economists, typically in the North and East of Europe, question the reason d'être of the fiscal stance concept, seeing it as an unnecessary distraction. First, they argue the well-known inefficiency of discretionary fiscal policy and fine-tuning in normal times and advocate the need to prioritise the policy agenda focused on longer-term growth, rather than shorter-run demand management, through the conduct of significant structural reforms. Second, they highlight that the focus should remain on fiscal sustainability through a strict and literal respect of the EU's fiscal rules, which could be blurred and thereby weakened by the concept of a euro area fiscal stance. The latter would introduce a strong dose of judgement, potentially undermining the current framework, which they argue should remain based on rules and focused on national fiscal policies. Lastly, demand spillovers are weak and local, in the sense that they affect neighbouring countries mostly, not necessarily those with depressed demand.

⁵⁵ European Commission, e-mail: gilles.mourre@ec.europa.eu. The views expressed in the text are the views of the author only and may not, under any circumstances, be interpreted as stating an official position of the European Commission. This analysis borrows heavily from the findings of European Commission (2017), "An Overview of the 2017 Stability and Convergence Programmes and an Assessment of the Euro Area Fiscal Stance for 2018". The author is also indebted to Eloïse Orseau, Matteo Salto, Nicolas Carnot, Philippe Mohl, Edouard Turkish and Lucio Pench for their collective contributions to the analysis of the euro area fiscal stance. My thanks are extended to Peter Koh for his valuable editing suggestions.

⁵⁶ Article 7 of Regulation (EU) No 473/2013 of 21 May 2013 provides: "[...] 4. The Commission shall make an overall assessment of the budgetary situation and prospects in the euro area as a whole, on the basis of the national budgetary prospects and their interaction across the area, relying on the most recent economic forecasts of the Commission services. The overall assessment shall include sensitivity analyses that provide an indication of the risks to public finance sustainability in the event of adverse economic, financial or budgetary developments. It shall also, as appropriate, outline measures to reinforce the coordination of budgetary and macroeconomic policy at the euro area level. [...] The methodology (including models) and assumptions of the most recent economic forecasts of the Commission services for each Member State, including estimates of the impact of aggregated budgetary measures on economic growth, shall be annexed to the overall assessment. [...] 5. The Eurogroup shall discuss opinions of the Commission on the draft budgetary plans and the budgetary situation and prospects in the euro area as a whole on the basis of the overall assessment made by the Commission in accordance with paragraph 4. The results of those discussions of the Eurogroup shall be made public where appropriate." See also recital 23 of the same regulation: "Also, based on an overall assessment of the draft budgetary plans by the Commission, the Eurogroup should discuss the budgetary situation and prospects for the euro area as a whole."

Other economic observers, including many European think-tanks and most international institutions, such as IMF, OECD and ECB, claim that it is crucial at the current juncture to ensure an appropriate fiscal stance for euro area as a whole. While fiscal intervention should remain the exception, there is a case here and now for seeking an appropriate euro area fiscal stance because monetary policy is constrained by the zero lower bound of interest rates. In such a case, fiscal policy is an acceptable substitute to accommodate common shocks. In an environment where nominal interest rates are persistently low, fiscal multipliers should be higher, making fiscal policy more efficient. Second, demand stabilisation is needed to avoid growth hysteresis, the social and political costs of slumps, giving credibility to intelligent fiscal rules. Third, although demand spillovers are not overwhelmingly high, they are not negligible either. Lastly, macroeconomic stability can be viewed as a key common good in the euro area, at the root of business confidence in a very integrated trade and economic area.

With a view to ensuring a proper fiscal stance at the current juncture, the advocates of strengthening fiscal coordination refer to three economic facts pointing to the imperfect working of the Economic and Monetary Union since the outbreak of the crisis. The macroeconomic adjustment has been asymmetric across Member States, with the countries with a large current account deficit correcting it by tightening demand. Conversely, the “surplus” countries continue to run even larger current account surpluses. This led to fragile domestic demand, especially in the first years of the recovery, as illustrated by a large current account surplus for the euro area as a whole. Second, inflation is very low and beneath the 2% price stability target, which suggests the difficult task of monetary policy in a context where financial stability remains a matter of concern. Moreover, the recovery is atypical in that it is strongly supported by policies, particularly monetary policy (e.g. very low key ECB interest rates and large quantitative easing). Third, the level of employment, especially in terms of hours worked, suggests that labour underutilisation inherited from the crisis and its persistence (or “hysteresis”) continue to exert a drag on the level and growth of potential output.

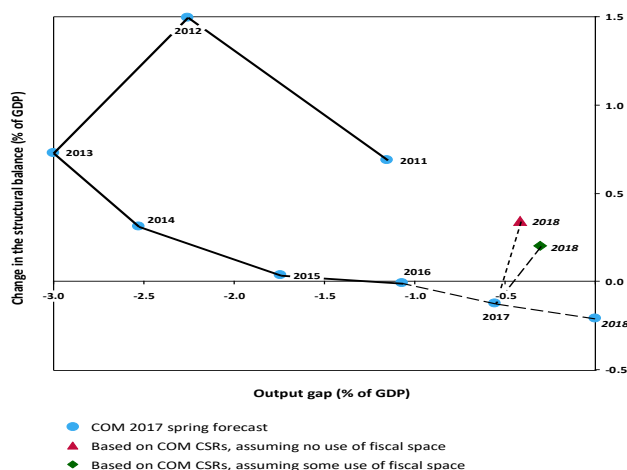
2. What is the appropriate aggregate fiscal stance? An illustration based on today's situation

The fiscal stance has been broadly neutral following the "great consolidation" of 2011-2013

The fiscal stance was broadly neutral between 2015 and 2017 following a period of restrictive fiscal policy of over 0.5% between 2011 and 2013. This sharp adjustment went beyond the requirements of the Stability and Growth Pact, because of sizeable market pressures especially for some countries under financial distress.

Looking ahead for 2018 and as seen in Figure 1, the euro area stance would become restrictive again, if the requirements of the Country-Specific Recommendation were to be strictly applied. The euro area stance would be more neutral, though still slightly restrictive, if the countries with fiscal space were to use it. At the same time, the Commission's spring forecast points to a neutral fiscal stance, on the expansionary side, predicting a sub-optimal country distribution, by which some countries risk significantly deviating from their fiscal requirement, while others do not use their available fiscal space.

Figure 1: Euro area fiscal stance between 2011 and 2018: descriptive & hypothetical for 2018



Source: Author's calculations

Weighing stabilisation and sustainability targets

Taking a step back, three key methodological considerations are of particular relevance and will help structure the analysis, when assessing the proper balance of the stabilisation and sustainability objective at one point in time and in a particular Member State.

First, is there a risk of non-linear developments, often called “cliff-effects”, which makes one of the objectives more stringent or pressing? A persistent demand shortfall rooted in the asymmetry of the correction of imbalances would give more weight to stabilisation, as well as the risk of hysteresis from the crisis (related to the high long-term unemployment and low investments).

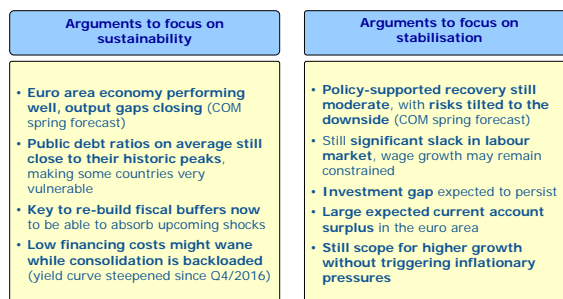
Second, we need to consider the efficiency of the available policy instrument at a particular point in time. In a situation where monetary policy faces numerous constraints and reaches the zero lower bound (i.e. where nominal interest rates are close to zero), fiscal policy appears particularly efficient. This is because of the absence of crowding out via higher real interest rates or exchange rate appreciation. Put another way, the fiscal multipliers increase with such economic conditions.

Third, it is crucial to check the adverse effects of addressing one objective at the expenses of another, through a serious cost-benefit analysis. Stabilising the economy, that is, avoiding an abrupt withdrawal of fiscal policy that would weaken the recovery, is affordable since there is a low cost of delaying sustainability-orientated consolidation at the current juncture, given the low level of interest rates and the compressed sovereign spreads. This can also be seen in the absence of short-term fiscal risks, as measured by the S0 indicator calculated by the European Commission.

An illustration of balancing the two objectives at the current juncture

A broadly neutral EA fiscal stance seems appropriate at the current juncture, since balancing the two objectives of short-term stabilisation and long-term sustainability. As the two objectives may lead to policy actions of opposite direction, that is fiscal expansion on the one hand and fiscal consolidation on the other hand, Figure 2 presents the arguments on both sides.

Figure 2: The balance of arguments to determine the appropriate the fiscal stance for 2018



Source: Illustration prepared by author

It should be highlighted that the fiscal stance should always be formulated in broad terms, not in very precise terms. Doing otherwise would represent an unproductive and largely illusory fine tuning of fiscal policy, which cannot be accomplished in practice due owing to the well-known shortcomings of discretionary fiscal policy. For instance, a broadly neutral actually means strictly neutral, very mildly expansionary or very mildly contractionary. Therefore, the adequate fiscal stance is not a point estimate but a range of possible fiscal orientation. This uncertainty is not only conceptual: could we with high precision tell what it is the appropriate stance? No, since this arises from an economic narrative considering a set of economic arguments, rather than an infallible algorithm. The uncertainty is also statistical. There is no perfect indicator measuring the fiscal stance. The structural budget balance is handy, since it is directly related to fiscal surveillance, but the primary budget balance is a more accurate indicator, since it disregards movement in interest rates. An even better concept is the discretionary fiscal effort, calculated by comparing the growth rate of net expenditure with the medium-term growth of potential output (see Carnot and de Castro, 2015).

3. Beyond the aggregate: how should individual countries contribute to an optimal fiscal stance?

The tension between the "Top-Down" and "Bottom-Up" approaches

From a euro area perspective (top down), stabilisation is most relevant, since sustainability is not an area-wide concern in normal times when there are no short-term risks of contagion. The confidence crisis that affected the whole euro area in 2011-2012 was of course an exception and a (rare) example of cliff-effects, as captured by the S0 indicator, which flashed red for most euro area countries. In this exceptional period, sustainability concerns clearly dominated the objective of stabilisation.

By contrast, sustainability bites at country level (bottom-up) and needs to be taken in account seriously in countries affected by large public indebtedness and/or sizeable implicit liabilities coming from population ageing. The EU's fiscal rules indeed aim to ensure that decentralised fiscal policies in the monetary union remain sustainable at national level, which is a condition for avoiding adverse spillovers across Member States or, even worse, euro area contagion.

There is a tension between the top-down and bottom-up approaches: the difference is mainly the sustainability issues of specific countries. The Commission communication of 16 November 2016 highlighted that the case for a "positive fiscal stance at the level of the euro area" is made from a hypothetical fiscal policy centralisation perspective, "as if there were a Finance Minister for the euro area as a whole." This idea is followed up in the Speech of the State of the Union delivered by the President of the European Commission, Jean Claude Juncker in mid-September 2017. Indeed, the euro area still

consists of individual countries with different stabilisation needs and above all different degrees of fiscal space. The Commission recognises the reality of the euro area and hence the gap between what may be desirable from the perspective of the euro area and what can be expected from countries that remain responsible for their public finances (in the absence of a centralised fiscal capacity).

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An illustration based on Member States' plans of the appropriate fiscal stance at country level: trade-off or overlap between the two objectives?

The appropriate fiscal stance can be assessed against needs for fiscal sustainability – displayed by the yellow range in Figure 3 – and economic stabilisation – shown by the dark blue range. For a vast majority of countries (all but four), the two ranges do not overlap, pointing in different directions. In general, while fiscal sustainability tends to suggest the need for consolidation, the need for fiscal stabilisation would indicate the relevance of modest expansion. For very highly indebted countries, however, the balance of arguments would tend to lean more towards sustainability-orientated consolidation. Yet another example of the delicate balancing act between the two objectives. The situation is opposite for a limited number of countries, for which fiscal sustainability would allow some expansion.

The red crosses in Figure 3 show the planned fiscal stance presented by Member States in their 2017 stability programs. They suggest that Member States with sustainability issues plan a consolidation, giving more weight to this objective. However, the Commission's spring 2017 forecast, projects a laxer stance for these countries, slanted toward stabilisation. These results would indicate that, while Member States are aware of their sustainability challenges, they experience difficulty to implement the needed fiscal adjustment, possibly due to political economy reasons.

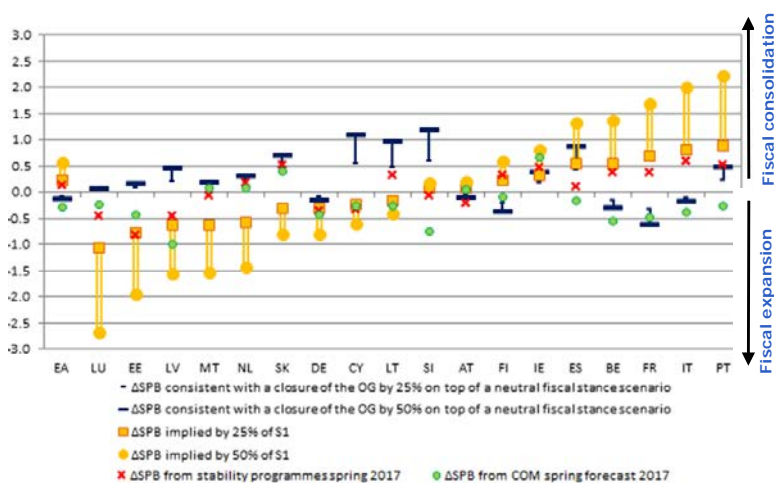
How to achieve the appropriate geographical composition of the euro area fiscal stance?

Achieving a broadly neutral euro area fiscal stance in 2018 requires different Member States to adopt different policies, depending on the sustainability of their public finances. A good way to achieve an appropriate euro area fiscal stance is to ensure that countries with high public indebtedness effectively consolidate their budget, while countries with fiscal space use it to close their output gap⁵⁷.

By contrast, there is a "bad" way to achieve the appropriate euro area fiscal stance. First, countries with high public indebtedness use the fiscal space they do not have: they don't adjust and even expand. Conversely, countries with sustainable public finance do not use the fiscal space they have: they adjust while they could expand.

⁵⁷ Given the need for a majority of EU countries to perform a reasonable fiscal adjustment and the economic and political difficulty for the less numerous countries with fiscal space to use it all at once, the aggregation of appropriate fiscal space at national level may lead to a euro area fiscal stance "neutral on the restrictive side" rather than a stance strictly neutral. Therefore the real tension between the top down and bottom up approach can be slightly mitigated by the fact that the fiscal stance should always be formulated in broad terms, not in very precise terms.

Figure 3: Appropriate the fiscal stance for 2018 according the two objectives



Note: The fiscal stance is measured by the change in the structural primary balance (DSPB). The sustainability criterion is based on the S1 indicator and assumes that 25 % to 50 % of the indicated change in the SPB is implemented in 2017, corresponding to more or less frontloading of the consolidation effort if S1 is positive. For countries with a negative S1, this indicates some scope for expansionary policies in response to possible stabilisation needs. The stabilisation criterion is measured as the change in the SPB for which fiscal policy reduces by 25% (short blue bar) or 50% (long blue bar) the output gap that would result from a neutral-fiscal policy scenario in 2018, (see European Commission (2016): The 2016 Stability and Convergence Programmes, Institutional Paper 34, September). In other words, this output gap closure of 25% or 50% is achieved in addition to the spontaneous output gap closure, as projected in Spring 2017 Commission forecast (adjusted by assuming neutral fiscal stance). This assumes that fiscal policy always plays a countercyclical role, either supporting the closure of the output gap or mitigating its widening. If the neutral-fiscal-policy assumption implies that the output gap is changing sign, then the stabilisation objective caps the closure of the output gap at 100%, thus avoiding pro-cyclicality. The red crosses show the planned changes in the structural primary balance presented by Member States in their 2017 stability programmes, as recalculated by the Commission using the commonly agreed methodology for potential output. The green dots show the change in the SPB according to the Commission spring 2017 forecast, which is derived on a no-policy change assumption. **Source:** European Commission (2018).

The geographical composition of the fiscal stance should also take into account three important but often overlooked considerations. First, the economic literature shows that cross-country spillovers – although not overwhelmingly high - can have an effect. Second, the quality of public expenditure matters a great deal. Public investment in particular can play a role in stimulating growth in the long term. Third and related to the previous point, structural reforms are also key to boosting growth in the longer term.

4. As a conclusion, which institutional setting to ensure an adequate fiscal stance?

The natural questions arising from the existence of a possible mismatch between the country-specific and aggregate approaches would be: how to reconcile the two and by means of which institutional setting? It is a tricky issue well beyond the remit of this short paper. This conclusion just aims to sketch a few broad - and not necessarily mutually exclusive - options, by level of institutional ambition, running from an evolutionary method to a more substantial overhaul.

A first avenue would be to exploit the current setting to the full. This would involve strengthening the “soft” coordination of the ECOFIN and the Eurogroup, while using the existing flexibility within the fiscal rules. This economical option may be insufficient in terms of enforcement, especially if countries with sustainability issues are not committed to fiscal discipline and those with fiscal margin do not use it.

A second avenue would be to reform the fiscal rules, for instance, by integrating the stabilisation objective into a rule based-system that is mostly driven by fiscal sustainability. However, this could imply potentially high risks for the predictability and credibility of the fiscal surveillance system, because fiscal

rules would remain an instrument for two distinct objectives. The thorny issue of balancing the two adequately would have to be seriously addressed. The enforceability of such a multi-goal system could therefore be challenging in practice.

A third avenue would be to strengthen the role of market forces, an option included in the Commission's Reflection Paper on the deepening of the economic and monetary union of May 2017 . The Banking Union and Capital Markets Union should be completed to ensure better risk-sharing and risk-prevention. This includes the financial backstop to the Single Resolution Fund, the European Deposit Insurance Scheme and further measures to reduce financial sector risks. It could also include farther-reaching measures to complement the Financial Union, possibly including a European safe asset and a new regulatory treatment of sovereign bonds.

Moving up a gear, a fourth option would be to add a fiscal stabilisation capacity to the third option. As a result, the institutional architecture could be changed more substantially. This stabilisation capacity could top up the existing automatic fiscal stabilisers embedded in national budgets in case of large asymmetric shocks. It could even mitigate large common shocks, when monetary policy is overburdened. This would relieve the stabilisation burden off the shoulders of the fiscal rules, which could thus primarily focus on sustainability. At the same time, the 2017 State of the Union Address by President Jean-Claude Juncker stressed the challenge of avoiding permanent transfers and moral hazard, leading to a relaxation of the needed fiscal adjustments and structural reform efforts.

References

Carnot, N. and de Castro, F. (2015), "The Discretionary Fiscal Effort: an Assessment of Fiscal Policy and its Output Effect", *European Economy, Economic Papers* 543, February 2015.

European Commission (2016), "The 2016 Stability and Convergence Programmes: An Overview and Implications for the Euro Area Fiscal Stance", *Institutional Papers*, 34, 2 September 2016, https://ec.europa.eu/info/publications/2016-stability-and-convergence-programmes-overview-and-implications-euro-area-fiscal-stance_en

European Commission (2016), "2017 European Semester: Communication on Fiscal Stance", 16 November 2016, https://ec.europa.eu/info/publications/2017-european-semester-communication-fiscal-stance_en

European Commission (2016), "Report on Public Finances in EMU 2016", *European Economy, Institutional Papers*, 045, available at: http://ec.europa.eu/economy_finance/publications/eeip/pdf/ip045_en.pdf

Part III: Government investment in the EU: evolution and challenges.

Part IV: The fiscal stance in the euro area: Methodological issues. The gist of this analysis was also presented in Orseau E. and M. Salto (2016).

European Fiscal Board (2017), "Assessment of the prospective fiscal stance appropriate for the euro area" 20 June 2017, https://ec.europa.eu/info/sites/info/files/prospective_euro_area_fiscal_stance_2017_0.pdf

European Commission (2017), "An Overview of the 2017 Stability and Convergence Programmes and an Assessment of the Euro Area Fiscal Stance for 2018", *Institutional Papers*, 59, 18 July 2017, https://ec.europa.eu/info/sites/info/files/ip059_en.pdf

European Commission (2017), "Reflection paper on the deepening of the economic and monetary union", COM(2017) 291 of 31 May 2017, https://ec.europa.eu/commission/sites/beta-political/files/reflection-paper-emu_en.pdf

European Commission (2017), "President Jean-Claude Juncker's State of the Union Address 2017", authorised version delivered in the European Parliament Plenary Chamber in Strasbourg, 13 September 2017, https://ec.europa.eu/commission/state-union-2017_en

Orseau, E. and Salto, M. (2016), "Measuring and assessing the fiscal stance in the euro area: Methodological issues", paper presented at the European Central Bank conference Fiscal policy during and after the crisis 10-11 November 2016, Frankfurt am Main.

2.5. SUMMARY OF DISCUSSION

The second panel focused on the euro area fiscal stance. Many contributions highlighted the need to discuss the fiscal stance at the level of the euro area more prominently. The contributions addressed mainly the current dilemma between sustainability and stabilisation functions of fiscal policy. Several speakers wondered if national fiscal stances should be derived from an aggregated fiscal stance considered adequate in a top-down approach. Output gaps and current account balances were named as possible indicators that could serve as a base for such an approach. It was widely proposed that a centralised fiscal stabilisation capacity could contribute to an adequate fiscal stance. However, some contributions suggested that a centralised fiscal stabilisation capacity would not resolve the issue of how to allocate the adequate aggregate stance across national fiscal policies. The potential further use of the Macroeconomic Imbalances Procedure (MIP) was also discussed and several improvements to its functioning suggested. The question whether coordination is easier than integration, drawing a parallel with the failure of monetary coordination in the 1980's and 1990's was raised.

The discussion with the audience tackled the obstacles related to the management of the euro area fiscal stance. The merit of assessing the aggregate fiscal stance in a monetary union was widely acknowledged. However, the discussion covered potential caveats stemming from short term fiscal fine-tuning of the fiscal stance that could turn out to unrealistic and even counterproductive. Some participants also argued that the euro area fiscal stance should only be a bottom-up concept, derived from the national fiscal stances deemed adequate from a national perspective only. The interventions touched upon questions of reliable measurement that might complicate the decision on the appropriate allocation of the fiscal stance. In this context, the current account balance was considered problematic by many, as it only partly mirrors the business cycle.

The implications of pursuing an aggregate fiscal stance on national fiscal policies were highlighted. The question was raised if the correction of internal imbalances required that some countries would see their economies run at full capacity or even overheat. Similarly, deriving a justification of national fiscal policy priorities from an active management of the aggregate fiscal stance was considered politically challenging. Some highlighted the risks related to the increased emphasis on fiscal stance including potential relaxation of fiscal discipline and potential overheating of well performing economies.

INTRODUCTORY REMARKS FOR THE AFTERNOON SESSION

*By José Eduardo Leandro*⁵⁸

The euro area is today enjoying an economic upswing, broadening across sectors and Member States. Unemployment is at lowest in eight years and confidence is at its highest in a decade; however this picture is marred by the euro area's persistent economic and social divergences.

The Reflection Paper on EMU puts a lot of emphasis on these divergences, their negative consequences for the whole EU economy and the need to address them. As a solution it proposes a "toolbox for renewed convergence", which contains tools – at the national and at the central level. Structural reforms are the primary tool at the national level, while the EU budget and a new stabilisation function could be used at the central level. Why do we need a fiscal capacity for the euro area?

There is quite a broad –even if not unanimous– consensus among economists and a growing consensus among the policy makers that the euro area needs a central stabilisation function. The Five Presidents Report and the Reflection Paper argued for a stabilisation function which should be able to address large shocks, complementing national fiscal stabilisers.

The crisis originated in broad macroeconomic and financial imbalances and the absence of common budgetary instruments constrained the policy response and contributed to aggravate its length and depth. When monetary policy faces limits, the addition of national fiscal policies may not constitute an appropriate aggregate stance. A stabilisation capacity would improve macroeconomic stability by complementing the national stabilisers and the ECB action against large shocks; in so doing, it would also facilitate compliance of national policies with fiscal rules.

We have to follow up on the Reflection Paper and analyse concrete design options for the stabilisation function in order to prepare for its implementation at the latest by 2025.

Now is time to be concrete: we should be ready to address the main questions about such a stabilisation function.

What form should this tool take: a public investment protection system in the case of recession, or a European unemployment re-insurance mechanism, or both? How would the revenue be raised? Which eligibility criteria and which triggers should be used?

What size should it have? It does not necessarily need a large average size to be effective. As a basic illustration, levying 0.1% of GDP annually allows the disbursement of about 1% of GDP every ten years, i.e. the typical frequency of significant downturns. In this regard the comparisons of the size with typical federal budgets (which are around 20% of GDP) are misleading as such budgets serve extensive allocative and distributional functions, beyond stabilisation. Several simulations, notably for the case of an unemployment re-insurance scheme, suggest a size of the function ranging between 0.03% and 1.8% of GDP, providing relevant stabilisation effects.

The reflection paper on the deepening of the EMU envisages several design options for the stabilisation function, including an investment protection scheme, an unemployment reinsurance scheme and a rainy day fund.

A rainy day fund leaves the allocation of support fund at the discretion of Member States, while an investment protection scheme and an unemployment reinsurance scheme target the funds on expenditures that are especially useful to support in downturns.

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These mechanisms could collect revenues in good times, which would also help reducing the accumulation of imbalances, and provide financial support after large common or asymmetric shocks.

They could be activated on the basis of cyclical conditions, either common or country-specific, such as the unemployment rate: e.g. linking amounts of contributions, to and from the scheme, to levels and changes of the unemployment rate.

An investment protection scheme could provide financial resources to national budgets to preserve the planned levels of investment, so that public investment is not cut in times of recession. The latter could be achieved by supporting well-identified priorities and the continuation of already planned projects or activities at national level, such as infrastructure or skills development.

An unemployment reinsurance scheme could be based on transfers from/to the national schemes and help maintaining a high level of cohesion in downturns.

I would like to invite you to discuss about the key design features of such a stabilisation function.

- We should think about the interaction between stabilisation performed at different levels (European and national) and by different actors (public and private);
- should the ESM have a role to play in this area, and if yes, how;
- what should be the articulation of such a mechanism with the EU's budgetary framework;
- to be effective, a stabilisation function should be coupled with a borrowing capacity. How should that work?
- how to minimise moral hazard and avoid permanent transfers.

These are preliminary thoughts about the design of a macroeconomic stabilisation function. In many cases we will have to face important trade-offs entailing difficult decisions, but if we want to make our economic and monetary union robust and sustainable we cannot further delay it. Now is the time to put forward concrete proposals.

3. THIRD PANEL ON ENHANCING FISCAL STABILISATION AND RISK SHARING IN THE EMU

3.1. ASYMMETRIC SHOCKS VERSUS DOMESTIC SHOCKS IN THE EURO AREA: WHAT POLICIES?⁵⁹

By Cinzia Alcidi⁶⁰

The aftermath of the sovereign debt crisis that started in 2010 brought to the fore discussions on the capacity of the euro area to deal with shocks. While the issue had generated academic research and policy debate in the years preceding the introduction of the euro, the topic then disappeared for about two decades. In addition to the effects of the crisis, two unexpected factors revived the discussions. First, despite expectations that shocks would become rarer and less asymmetric after the introduction of the euro, the crisis hit with extreme force and in a very heterogeneous fashion across member states. Second, higher financial integration fostered by the euro did not result in greater cross-country risk-sharing. Both factors seem to point to an underestimation of the importance of asymmetric shocks for the euro area and of the role of different channels to deal with them, beyond stabilisation provided by traditional national fiscal policy.

In this short contribution, I will focus on two specific issues: identifying the nature of shocks in the context of a monetary union and delineating the implications for shock absorption policies.

Business cycle fluctuations versus asymmetric shocks

Most macroeconomic literature on stabilisation policies investigates the capacity of the fiscal stance to counter shocks, which are defined as business cycle fluctuations and usually measured as deviations from the country's potential and long-term growth. When comparing cross-country stabilisation capacity, the literature usually considers both gross domestic product (GDP) and how discretionary fiscal measures respond to country-specific cyclical fluctuations. The reason for this focus is the assumption that changes in GDP reflect changes in unemployment and vice-versa. Automatic stabilisers, which are counter-cyclical by definition, account for the responses to changes in unemployment. They usually do not require a policy decision and vary across countries.

Within the analysis of the functioning of monetary unions, the literature that examines the stabilisation capacity of fiscal policy and more broadly the mechanisms used to smooth the impact of shocks, usually assesses responsiveness to asymmetric shocks rather than to fluctuations in the business cycle. Unlike business cycle fluctuations, asymmetric shocks are relative and defined as deviations of a country's GDP from the average of the monetary union, rather than from its long-term GDP. As pointed out in Alcidi (2017), both of these metrics are important in the Economic and Monetary Union (EMU), where national governments are fully sovereign on fiscal policy. However, they reflect different perspectives and do not necessarily deliver the same assessment about stabilisation capacity nor automatically point to the same policy recommendations.

The emphasis on asymmetric shocks in monetary unions is in part a legacy of the optimum currency area (OCA) debate, according to which the cost of having abandoned monetary policy sovereignty increases when the exposure to asymmetric, and potentially large, shocks is high. Under this theory, the synchronisation of cycles is the main solution to the problem⁶¹. Under this hypothesis, deviations from the average are very small or virtually non-existent, suggesting that underlying shocks are not

⁵⁹ This contribution is largely based on the work done under the FIRSTRUN Project, <http://www.firstrun.eu>.

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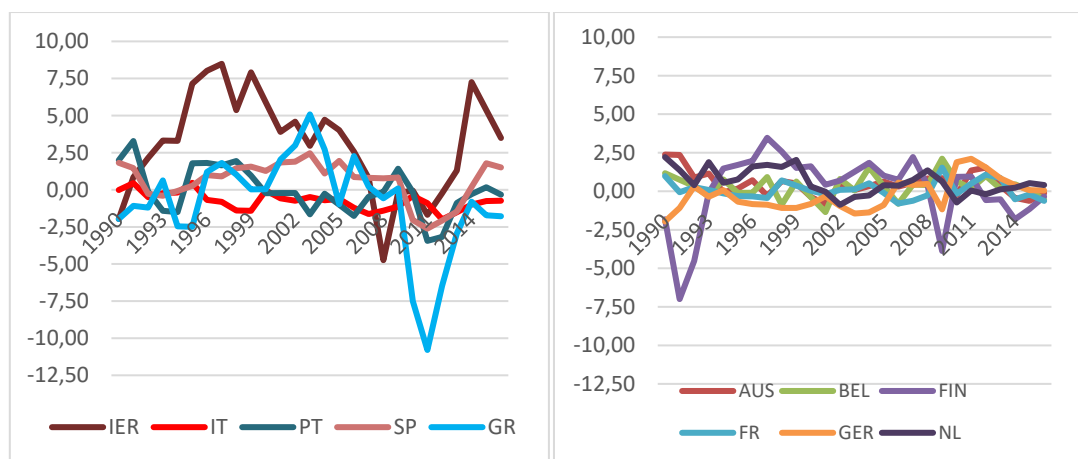
⁶¹ See for instance Bayoumi and Eichengreen (1992).

significantly idiosyncratic and the single monetary policy can respond to cyclical fluctuations, which are the same in all countries. In reality, this is the case if synchronisation implies not only co-movements in the national business cycles but that cycles are of similar magnitude. The theory posits that the two metrics identified above coincide.

The euro experience suggests that this is not necessarily the case. As shown in Belke et al. (2016) and Alcidi et al. (2017), euro area business cycles tend to be highly and positively correlated. While the degree of correlation was extremely high in the first years of the euro, it has declined drastically in recent years. In addition, some member states tend to exhibit cyclical fluctuations of different amplitudes.

Figure 1 shows evidence for the case of asymmetric shocks defined as deviation from the weighted average of the euro area over about 30 years, splitting core and peripheral. This method of measuring shocks, which is the most used in empirical literature⁶², attempts to measure the capacity of countries that are part of a monetary union to absorb the impact of shocks through different mechanisms, including cross-country risk-sharing and intertemporal smoothing through saving decisions.

Figure 1: Real gross domestic product growth rates, deviations from euro area average (1990–2016)
(Periphery left-hand scale, core right-hand scale)



Source: Own calculations, based on OECD Economic Outlook 2017.

The two charts in Figure 1 point to more volatility and idiosyncratic shocks in peripheral countries, with the exception of Italy, than in core countries where, if one excludes the Finnish crisis of the early 1990s, deviations from the mean are between - 2.5% and 2.5 % of GDP.

The results have two implications. First, monetary policy is likely appropriate for most member states, but for some could amplify shocks: both negative shocks, by being too tight in recessions, or positive ones, by being too loose during expansions. Second, since there is little doubt that domestic fiscal policy responds to GDP shocks as defined by business cycles rather than relative to the euro area average, one should not expect fiscal policy to play a key role in addressing negative asymmetric shocks, unless they go hand in hand with domestic recessions. The latter cannot be taken for granted.

⁶² Asdrubali et al. (1996) initiated this literature, which has been revived since the euro crisis. Among others, see Alcidi and Thirion (2016) and Alcidi et al. (2017a).

There are other mechanisms, mostly based on the functioning of financial markets, which in principle can absorb or smooth the impact of asymmetric shocks as defined above.

Shock absorption capacity in the euro area: the role of market integration

The methodology proposed in Asdrubali et al. (1996) and its extensions, as in Areazza et al. (1999), Alcidi et al. (2017a), Alcidi et al. (2017b), and Alcidi and Thirion (2017) provides a comprehensive and in-depth analysis of how to smooth the impact of GDP shocks in the euro area. The methodology is used to quantify cross-member state private risk-sharing, consumption-saving intertemporal decisions, and the role played by international credit markets. The authors repeat the same exercise for the US and take the US capacity to deal with shocks, measured on a fully comparable data, as the euro area analysis' benchmark. A number of results are strongly in line with existing literature. First, the euro area's shock absorption capacity has always been weaker than that of the US, particularly since 2010. This means that a fall in euro area GDP results in a much greater fall in private consumption than in the US.

Furthermore, US capital markets are the most powerful channel for absorbing the impact of idiosyncratic shocks. This capacity is on the order of 50%, despite a sharp decline and ensuing recovery since 2008. In the euro area this is much smaller, though the use of fully comparable data reveals that until 2008 it was higher than usually estimated at about 30% instead of the 10% most-often found in the literature⁶³. Despite this, after 2009 capital markets seemed to become completely dysfunctional and served only to amplify the impact of shocks rather than smooth them. Alcidi et al. (2017) suggest two possible explanations for these findings. The first is that after 2009, euro area dynamics differed in core and peripheral countries and the strong variation in peripheral countries drove average findings. This is the result of a much deeper downturn and financial fragmentation. The second explanation relates to the persistence of shocks. Following the permanent income theory, if a shock is persistent or permanent, savings are not effective in smoothing consumption. This implies that if savings are to play an important role in reducing the impact of shocks on consumption, negative persistent shocks are unlikely to be smoothed effectively. By contrast, given its nature, cross-country risk-sharing through capital markets should be "immune" to persistent shocks, at least as far as shocks are uncorrelated across countries.

Empirical results suggest that euro area net savings both private, in particular the corporate sector, and public, as fiscal policy, are more important in smoothing the impact of shocks than capital markets – which are intended as cross-member state private transfers associated with cross-border ownership of assets. In addition, results also suggest that asymmetric shocks are persistent in the euro area, at least relative to the US, with some countries remaining systematically above or below average growth for many years. As shown in Alcidi et al. (2017), Italy is an extreme case: on the one hand, the Italian real GDP growth rate has been below the average for the last 20 years; on the other hand, the magnitude of the deviations has always been relatively small. In contrast, Ireland's deviations have been positive for most of the sample, with the exception of the years 2008–2012. Volatility in Ireland has been very high.

The combination of persistent shocks and the weak role of capital markets can explain low shock absorption in the euro area.

Although it may sound counterintuitive, the poor performance of financial markets in providing stabilisation capacity through cross-country risk-sharing is not independent of either the high, and fast-growing, degree of financial integration that characterised the first decade after the introduction of the euro, or of the fragmentation that followed the debt crisis. As financial integration occurred mostly through cross-border bank lending, which led to the accumulation of debt and the eventual crisis, the

⁶³ This difference is because in the US accounting system companies' retained earnings are counted as international factor income and not as savings. See Alcidi et al. (2017a) for more details.

markets' behaviour at the start of the crisis resulted in a sudden halt in lending rather than providing risk-sharing.

Concluding remarks

The assumption that domestic fiscal policy in euro area member states can deal with asymmetric shocks, which is central in the OCA theory, is unlikely to reflect reality. In a monetary union, asymmetric shocks may be very different from country-specific recessions or booms, and national governments are concerned with stabilising domestic business cycles rather than reducing deviation from the average of the union. Not even synchronisation of business cycles can guarantee that the two coincide.

In a monetary union, the key channels to absorb the impact of asymmetric shocks are cross-country risk sharing, either led by markets or by common fiscal resources, and consumption smoothing through credit markets. Focusing on the first channel only, we can say that poorer performance (as compared to the US, of capital and credit markets in absorbing asymmetric shocks in the euro area) indicates there is still room to improve cross-country risk-sharing through financial markets. A prerequisite for the effectiveness of both the capital and credit market channel is that integration is not driven by cross-border lending only. The crisis has shown that credit flows can abruptly stop and even reverse, if claims and inflows are concentrated, as was the case in the euro area until 2010. Cross-border debt flows are not an instrument for risk sharing, but they can smooth consumption over time in the face of temporary shocks. By contrast, geographically diversified ownership of capital fosters market risk-sharing and can smooth the impact of asymmetric shocks, even when they are persistent. The exact aim of the Capital Markets Union is to foster integration within capital markets. If this aim is successfully achieved, it could have an impact on the absorption capacity of asymmetric shocks in a monetary union.

References

- Alcidi, C. and Thirion, G. (2016), "Assessing the Euro Area shock absorption capacity: Risk-sharing, consumption smoothing and fiscal policies", CEPS Special Report No. 146, CEPS, Brussels (<https://www.ceps.eu/publications/assessing-euro-area%E2%80%99s-shock-absorption-capacity-risk-sharing-consumption-smoothing-and>).
- Alcidi C. (2017), "Fiscal Policy Stabilisation and the Financial Cycle in the Euro Area", European Economy Discussion Paper 052 (https://ec.europa.eu/info/publications/economy-finance/fiscal-policy-stabilisation-and-financial-cycle-euro-area_en).
- Alcidi, C. and Thirion, G. (2017), "Fiscal risk sharing in response to shocks: New lessons for the euro area from the US", FIRSTRUN Research Paper (http://www.firstrun.eu/files/2017/03/D3.3-US-EA-fiscal-risk-sharing_final_ed.pdf).
- Alcidi, C, D'Imperio, P. and Thirion, G. (2017a), "Comparing risk-sharing and consumption smoothing patterns in the US and the euro area. A closer look at the data" (https://www.ceps.eu/system/files/No%202017_04%20Alcidi%20et%20al%20EMU%20vs%20US%20Risk%20Sharing.pdf).
- Alcidi, C, D'Imperio, P. and Thirion, G. (2017b), "Intertemporal risk-sharing in the EMU: Disentangling the role of international credit markets and of the governments".
- Alcidi, C., Asshoff, S. and Domnick, C. (2018), "Business cycle synchronisation: Comparing the Euro Area and the US", mimeo.
- Asdrubali, P., Sørensen, B. and Yosha, O. (1996), "Channels of interstate risk sharing: United States 1963-1990", Quarterly Journal of Economics 111 (4): 1081-1110.

Arreaza, A., Sørensen, B.E. and Yosha, O. (1999), "Consumption Smoothing through Fiscal Policy in OECD and EU Countries", in: Poterba, James M., and Jürgen von Hagen (1999), eds., *Fiscal Institutions and Fiscal Performance*, Chicago, The University of Chicago Press, pp. 1959-1980.

Bayoumi T. and Eichengreen, B. (1992), "Shocking Aspects of European Monetary Unification", Published in *Adjustment and Growth in the European Monetary Union*, Francisco Torres and Francesco Giavazzi eds, Cambridge University Press; Cambridge, 1993.

3.2. AN OPTIMAL DESIGN TO ENHANCE FISCAL STABILISATION AND RISK SHARING IN THE (CONSTRAINED) EMU

By Ramon Marimon⁶⁴

Abstract: Based on my current work, with Árpád Ábraham, Eva Carceles-Poveda and Yan Liu "On the optimal design of a Financial Stability Fund"⁶⁵, I briefly present a "constrained efficient risk-sharing mechanism" or Fund, which takes into account that transfers across countries cannot become permanent transfers, but can be implemented in a heterogeneous union, and can also account for moral hazard problems. The Fund contract outperforms existing sovereign debt contracts in terms of consumption smoothing, fiscal stabilisation, financial stability, and debt sustainability.

We have been asked to address five questions:

1. Does Europe need fiscal risk sharing at supranational level and if so, what kind?
2. What are the design modalities of the options put forward (including how the transfers are triggered and financed)?
3. What could be the role of existing fiscal backstops?
4. What are the stabilising properties of different options?
5. Is there any credible solution mitigating the issue of moral hazard? Do the different options provide for ways to avoid permanent transfers among countries?

The *Five Presidents' Report* (2015) has already provided an answer to (1):

"For all economies to be permanently better off inside the euro area, they also need to be able to share the impact of shocks through risk-sharing within the EMU."

The italics (which are mine) are relevant. It is not that there is a "need" for supranational risk sharing, but that the euro area economies can be better off if they do it. As is well known, federal states provide risk sharing across states, as long as the federal budget receives less in revenues, without proportionally reducing public services, from stressed states or regions; in addition, most federal states have targeted risk-sharing programmes and/or emergency funds. The minimalist EU budget does not allow for these different forms of risk sharing – even less so the non-existent EA budget – while a common monetary policy and constraints on fiscal policies restrict member countries' capacity to smooth GDP shocks⁶⁶. However, rather than discussing existing programmes, I would like to put forward a design for an optimal risk-sharing mechanism (i.e. 2), to show that the five presidents are right in saying that EMU would be a better place to be, with an appropriate risk-sharing mechanism.

In addressing (2) I would also address (4) and (5) and conclude by addressing (3) – more specifically, I will briefly comment on the existing *European Stability Mechanism*, in light of the proposed mechanism.

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⁶⁵ Respectively at: European University Institute, SUNY Stony Brook, and Wuhan University. This research is part of the ADEMU Project, "A Dynamic Economic and Monetary Union". ADEMU is funded by the European Union's Horizon 2020 Programme under grant agreement N° 649396 (ADEMU).

⁶⁶ For example, Furceri, D. and Zdzienicka, A. (*Open Economies Review*, 2015) estimate that the percentage of non-smoothed GDP shocks are 20% in Germany and 25% in the USA, while they are 70% in the euro area (15; 1978-2010); using the same methodology Lanati, M. (EUI, 2017) estimates that in the euro area (19; 1995-2015) 83% of the shocks are not smoothed.

My discussion is based on my current work "**On the optimal design of a Financial Stability Fund**", with Árpád Ábraham (European University Institute), Eva Carceles-Poveda (SUNY at Stony Brook) and Yan Liu (Wuhan University), ADEMU Working Paper (forthcoming). But before I briefly present our findings, a remark on the title of our session is in order.

Stabilisation and risk sharing can be viewed as separate policies – the former smoothing consumption through time within one country, the latter through space in a large union; nevertheless, they are linked. First, pursuing the same objective, they are substitutes: if countries in a union do not follow countercyclical fiscal policies they are more dependent on risk sharing from other union members in adverse situations. Delegation of monetary policy to the independent European Central Bank has been an effective way of addressing the time-inconsistency problem of national monetary policies: running competitive devaluations, which are disruptive in a single market. Fiscal policies are also subject to a time-inconsistency problem: the inability to pursue proper countercyclical fiscal policies, particularly in times of bonanza. Second, they are also complementary if they are properly designed: the only way to prevent risk-sharing transfers from becoming permanent redistributive transfers is by being countercyclical, that is, countries must contribute their fair share to the common pool in times of relative bonanza. In sum, a first test for a properly designed risk-sharing mechanism is whether it satisfies this complementarity between stabilisation and risk sharing and, therefore, also addresses the time-inconsistency problem of national fiscal policies.

A tale of two Economies

Our benchmark economy is modelled and calibrated to match the main stylised facts of the euro area "periphery" or, during the euro crisis, "stressed" countries (Portugal, Ireland, Italy, Greece and Spain) over the period 1980-2015. During this period, sovereign debt was the main instrument used by governments to absorb shocks (e.g. banking and financial crises) and satisfy their budget constraints, and their indebtedness has made them vulnerable and, ultimately, "stressed". In spite of the development of the European financial sector in this period, households' participation in it has been limited. Therefore, financial markets are modelled as being incomplete, and sovereign debt as being non-contingent long-term defaultable debt, in our benchmark economy (which we have labelled IMD). We then subject our economies to shocks (to Total Factor Productivity and the Government Liabilities) with the same characteristics as the ones observed in the data, and compare the performance of the IMD economy with an economy which has access to a "properly designed" Financial Stability Fund (which we have labelled Fund).

By "properly designed" we mean taking into account (5) and delivering the best possible answer to (4). That is, (5): we build on the theory of *Recursive Contracts* (which I have jointly developed with Albert Marcet) to design a "constrained efficient risk-sharing mechanism", as a long-term contract between a risk-averse and relatively impatient country – which acts as a benevolent representative agent – and a risk-neutral agent (the Fund, which has access to international capital markets and does not default on its promises). We take into account the three constraints that we think are most relevant for EMU: first, risk sharing transfers should never become permanent transfers (no redistribution); second, governments can implement costly policies to reduce their liabilities (no "moral hazard problems"); third, countries with very different liabilities and histories of shocks should be able to have a Fund contract (no need to converge in order to start the Fund).

Before addressing (4) we need to take a closer look at the "Data" and "IMD" columns of Table 1. They show a remarkable fit between the "stressed countries" statistics (from the AMECO dataset) and our IMD calibrated economy, except that, if anything, our IMD economy – with a simpler market structure – performs slightly better than the observed economies: the "primary surplus to GDP ratio" is positive in IMD while it is negative in "Data" and, more importantly, the "correlation between the primary surplus

to GDP ratio" and GDP", $\rho(PS/Y, Y)$, is negative in "Data" and positive in IMD⁶⁷; similarly, consumption is slightly smoother in IMD than "Data" (see $\rho(C, Y)$).

Table 1: "Stressed" EU economies vs. IMD and vs. the Fund

Moments	Data	IMD	Fund
Mean			
Debt to GDP ratio	77.29%	76.56%	186.65%
Real bond spread	3.88%	3.76%	-0.02%
G to GDP ratio	20.18%	19.62%	19.31%
Primary surplus to GDP ratio	-0.78%	1.30%	3.57%
Volatility			
$\sigma(C)/\sigma(Y)$	1.49	1.47	0.35
$\sigma(N)/\sigma(Y)$	0.92	0.69	0.62
$\sigma(G)/\sigma(Y)$	0.91	0.86	0.53
$\sigma(\text{real spread})$	1.53%	0.93%	0.21%
Correlation			
$\rho(C, Y)$	0.88	0.76	0.57
$\rho(N, Y)$	0.67	-0.13	0.94
$\rho(PS/Y, Y)$	-0.29	0.11	0.95
$\rho(G, Y)$	0.35	0.07	0.03

Table 1 provides a first answer to (4). In particular it shows that, when both economies are in their steady state, the economy with the Fund performs significantly better than the IMD economy in terms of:

- the allocation of consumption (& employment)*: consumption (& employment) are less volatile and less (more) procyclical [In Table 1: $\sigma(X)/\sigma(Y)$, $\rho(X, Y)$, $X=C, N$].
- The countercyclical aggregate fiscal position*: primary surpluses are highly procyclical [In Table 1: $\rho(PS/Y, Y)$].
- The government bond spreads are very low (& negative)*: when Fund liabilities take the form of long-term (contingent) bonds the real spreads are very low (& negative) [In Table 1: "Real bond spread"].
- A higher capacity to borrow*: the average level of debt is higher, which also means that in a severe shock (a rare event) a country with a Fund contract disposes of a large line of credit [in Table 1: "Debt to GDP ratio"].

Figures 1 and 2 also confirm these properties of the Fund vs. the IMD. In the upper left panel in both figures we can see a sequence of productivity shocks (i.e. low values of θ are bad shocks) and of shocks to government expenditures (i.e. high values of g are bad shocks). The dashed strips in all the panels correspond to periods during which, in the IMD economy, there is a sovereign debt default episode followed by a period of exclusion from credit markets, with the dashed strip ending when the economy regains access to the credit market. To see the above properties, note that a) while output is more volatile with the Fund, consumption is less volatile and employment commoves with productivity shocks; b) the primary surplus also follows productivity shocks; c) positive bond spreads are high and persistent in the IMD economy while practically inexistent with the Fund (just a few episodes of very small negative

⁶⁷ It should be noted that if we consider euro area "non-distressed" countries for the same period, the "correlation between the "primary surplus to GDP ratio" and GDP" remains negative (-0.24). Which shows how pervasive the aggregate fiscal time-inconsistency problem is.

spreads), and d) along the path, the economy with the Fund borrows more, indicating that the level of sustainable debt is higher.

Figure 1: IMD vs. FSF Business Cycle Paths: shocks and allocations

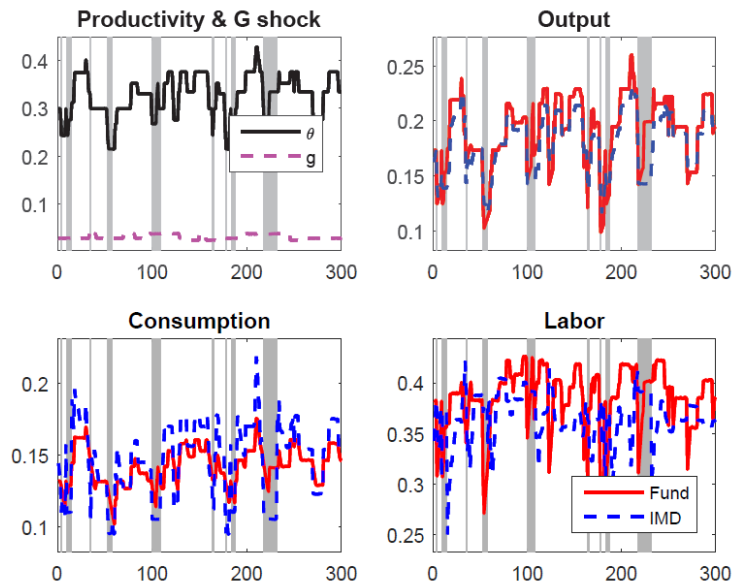
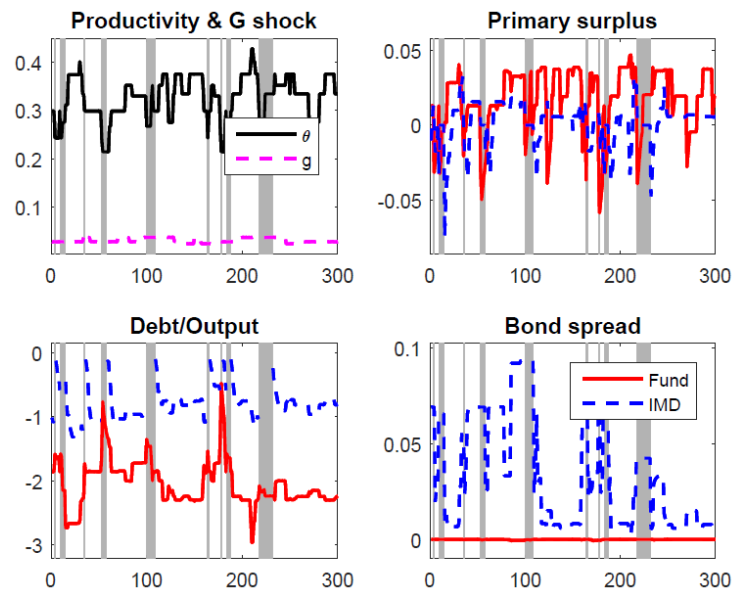


Figure 2: IMD vs. FSF Business Cycle Paths: shocks and assets



There are other interesting properties of the Fund, which we cannot discuss in detail here. We just mention three:

- i) *Crises*: when an economy suffers a very severe negative shock (i.e. lowest θ and highest g), for the IMD economy it is an "austerity crisis" – hard work and low consumption – while in the Fund economy the crisis is more benign – a small drop in consumption but also a drop in employment since productivity is very low. This is due to the fact that, such a shock being a rare event, the economy with the Fund has, in general, sufficient credit to borrow from, while credit is scarce in the IMD economy.
- ii) *Welfare*: all the advantages of the Fund can be summarised in the welfare gains – in terms of consumption equivalent values – of having a Fund contract vs. having uncontingent defaultable debt contracts (IMD). In our calibration it is of the order of 6.5 percentage points.
- iii) *Capacity to absorb debts*: given that debt sustainability is higher within the Fund, its capacity to absorb existing debts is also higher, and this difference is extreme if the economy is in a bad state (in our calibration, economies in such a state with the IMD economy can absorb less than 2% debt/GDP, while it can absorb more than 95% debt/GDP with a Fund contract). This also shows that the Fund satisfies our "third constraint": there is no need to converge, or eliminate, or mutualise, most existing debts to start a Fund contract.

The last property also shows that the Fund can be used as a "fiscal backstop" – or as a mechanism to confront the existing "debt overhang" problem in the euro area. However, question (3) refers to "the role of existing fiscal backstops", and within the euro area this role should naturally correspond to the ESM, which was originally designed as a "crisis resolution mechanism". Without entering into detail, there do not seem to be legal restrictions for the ESM to implement Fund contracts. However, there are qualitative and quantitative differences between how the ESM absorbs existing debts, or lends to countries in stress, and the Fund contracts briefly described here. The main difference is in the "conditionality" of the contracts.

An ESM contract transforms existing liabilities of a country-in-crisis into long-term debt payable to the ESM, but while the debt itself is not contingent, the conditionality is in the form of a "package" of reforms that the country must undertake in order to get the credit. That is, the structure is similar to other IMF or euro crisis (troika) rescue contracts, except for the more generous debt transformation plans of the ESM. In contrast, the Fund contract does not envision a separate "package" – always costly to monitor and enforce – but rather, payments are conditional on observables (GDP, or GDP gap, government liabilities and existing level of debt). More precisely, a country's past performance is used to estimate its underlying risk profile (the stochastic process driving $\{\theta, g\}$ in our model), from which the contract can be designed and then future (positive and negative) payments be determined. The contract can also account for "moral hazard" (an element not present in the above calibration). In sum, on the one hand, it is in the interest of the borrowing country to implement necessary reforms, since this can improve the terms of the contract; on the other hand, the contract itself – through its conditional transfers – requires that the borrowing country follow a countercyclical fiscal policy.

Two closing remarks: first, that one can design simpler or less contingent contracts than the ones presented here – this may help their implementation, while at the cost of some loss of efficiency with respect to the above "constrained efficient Fund contract". Second, that the Fund contract can be decentralised as a long-term state contingent contract, which can be priced (as we did in our calibrations to obtain, for example, bond spreads). This does not imply that a private market for such contracts can develop without public institutional support.

3.3. RISK SHARING ACROSS THE EMU: THE ROLE OF PUBLIC INSTITUTIONS

By *Valentina Milano and Pietro Reichlin*⁶⁸

Abstract. In this policy brief we review some of the available evidence on the degree and sources of risk sharing in the Eurozone, compared with the US federation, especially drawing on Milano (2017), which updates the estimates on the variance decomposition introduced in Asdrubali et al. (1996) up to 2014 and identifies the contribution to risk sharing in the Eurozone of the EU public institutions (ESM, ESFS, ESFM).

Introduction

Risk sharing across EMU countries falls short of the level achieved in other federations (such as Canada, Germany and the US) by a wide margin. This observation has been documented in various studies, such as Sala-i-Martin and Sachs (1991), Bayoumi and Klein (1997), Sørensen and Yosha (1998) and Von Hagen and Hepp (2013). Updates and refinements of this work up to 2014 (Alcidi et al. (2016), Furceri and Zdzienicka (2015), Rogantini Picco (2015), Milano (2017)) confirm these findings and offer some answers to the following key questions. To what extent the lack of risk sharing within the EMU is a consequence of (i) the limited role of centralised fiscal policies, (ii) the effort of peripheral countries to comply with the rules of the growth and stability pact or (iii) the lack of a developed and internationally integrated financial market? How well did the US and the Eurozone institutions respond to the financial crisis in terms of risk sharing and GDP shocks absorption? In this contribution we review some of the basic findings of this large literature and present some novel results based on the experience of the recent EMU sovereign debt crisis. In particular, we refer to Milano (2017) for most of the estimates of the degree of risk sharing within the EMU and the US. The latter is based on a variance decomposition introduced by Asdrubali et al. (1996). This methodology generates a set of coefficients, each one representing the contribution to total risk sharing from four different mechanisms: net factor income flows from abroad, capital depreciation, international fiscal transfers and national savings. Each coefficient should be interpreted as the average percentage of idiosyncratic country-specific GDP shocks that are smoothed via the above mentioned sources and their sum represents a measure of total risk sharing. Milano (2017) extends this methodology to identify the contribution to risk sharing coming from households, corporate and public savings, and from the EU financial institutions created after the sovereign debt crisis, i.e., the ESFS, the ESFM and the ESM. The main message can be summarised in these three points.

1. The US Federation achieves more intensive risk sharing largely because of a more integrated financial market.
2. Public (national and super-national) institutions have a larger role in providing risk sharing in the EMU than in the US, especially after the implementation of the ESFS, ESFM and the ESM, and the contribution of these institutions to risk sharing after the big recession more than compensated the dis-smoothing caused by a pro-cyclical fiscal consolidation and by households' increased precautionary savings.
3. By splitting the interval 1999-2014 into the pre-crisis ('99-'06) and the post-crisis ('07-'14) sub-intervals, we observe that there was a rise in the degree of risk sharing in the second sub-interval relative to the first for the Eurozone and a fall for the US federation.

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Point one is widely shared in the existing literature. Already Sørensen and Yosha (1998) have pointed out that, within the EU, and unlike the US federation, "neither factor income flows nor cross-border flows of physical goods contribute much to international risk sharing (Sørensen and Yosha (1998), p. 235)". The same authors consider this circumstance a good reason to allow for larger fiscal imbalances within the EMU. In particular, in their view, "an important implication is that the restrictions on budget deficits imposed by the Maastricht Treaty should be relaxed, allowing governments to run large deficits in response to output shocks, at least until alternative risk sharing mechanisms develop (*ibidem*)". However, based on the experience of the 2010-11 sovereign debt crisis, we know that systemic factors and fiscal imbalances may have contributed to financial instability and the fragmentation of financial markets in the Eurozone.

Point two has not received much attention in the literature. We refer to the role of public institutions in providing risk sharing across a federation as the sum of the percentage of GDP shocks that are smoothed via international (interstate) fiscal transfers and state (country)-level public savings. Using the estimates in Milano (2017) for the period 1999-2014, we can claim that this sum was higher for the EMU than for the US. In fact, international (interstate) transfers provided for the purpose of risk sharing have a negligible effect on risk sharing in the EMU, whereas they smooth about 19% of state-specific shocks in the US. On the other hand, state-level public savings are constrained by a balance budget rule in the US, whereas, in the EMU, government budgets have had a large role in smoothing GDP shocks, in spite of the Growth and Stability Pact. In particular, in the EMU, public savings have smoothed about 28% of country-specific GDP shocks in the period 1999-2014. Furthermore, for the GIIPS countries, financial flows from the ESFS, the ESFM and the ESM have more than compensated the negative impact on risk sharing of the fiscal consolidation and the reversal of cross-border positions of debt obligations after the 2011 sovereign debt crisis. Then, overall, the US federation is able to achieve a larger level of risk sharing than the EMU mainly because of a more integrated financial market or because the nature of the shocks hitting the US economy makes financial markets a better mechanism for providing insurance compared to Euro Area.

Point three is very much related to point two. It is well known that the degree of risk sharing falls substantially during downturns, so that the policies of supra-national authorities may be sometime more effective than the market mechanism. Furceri and Zdzienicka (2015) have estimated a 20 years rolling window of the percentage of unsmoothed GDP shocks for the EMU countries over the period 1975-2010 and found that this has increased from 58% (in the interval '79-'99) to 66% (in the interval '90-'10). On the other hand, according to the estimations in Milano (2017), the percentage of unsmoothed shocks in the interval 2007-2014 fell by eight points in the Euro Area compared to the period 1999-2007, whereas it increased by ten points in the US. This implies that, by re-evaluating the post-crisis experience over a longer period, the Euro Area appears to have performed relatively well in terms of GDP shock smoothing. This is a remarkable achievement if we put it in the context of the big boom-bust cycle of capital flows experienced by the Euro Area from 1993 to 2011, with a peak in 2007 (with a volume of capital flows at 40% of GDP) and a trough in 2009 (less than 5% of GDP). In other words, a large fraction of the adverse GDP shocks experienced by the Euro Area countries is explained by global (systemic) financial factors (i.e., not country specific) and they are strongly correlated with indicators of financial market volatility (see Lane (2013)). We can say that the 2007-2008 big recession and the 2010-11 EMU sovereign debt crisis revealed that financial markets are sometime unable to provide adequate insurance and they may, instead, contribute to excess volatility and fragmentation across sectors and regions. In fact, it is important to understand what type of risks are more likely to be important in the Euro Area before we make specific proposals to improve the degree of risk sharing in the Euro Area. For instance, Ang and Longstaff (2013) have shown that there is much less systemic risk among US sovereigns than among the Euro Area sovereigns, and that macro economic fundamentals are much less important than financial market variables in explaining the failure to achieve full insurance across countries and states. All this suggests that centralised supra-national institutions may be more effective in providing insurance across the Euro Area, and, then, EU public institutions, like the ESM, should continue to play an important role now and in the future even if more fiscal and political integration will be achieved.

Empirical Strategy

The procedure introduced by Asdrubali et al. (1996), and pursued also in Sørensen and Yosha (1998), Furceri and Zdzienicka (2015), Rogantini Picco (2015) and Milano (2017), gives rise to the estimation of a set of coefficients representing the percentage of idiosyncratic country-specific GDP shocks that are not smoothed via the available instruments in a sample of countries over a time interval. Lack of consumption smoothing is roughly equivalent to the sample covariance between the growth rates of country-specific consumptions and GDP as a ratio to the sample variance of GDP growth rates. Then, total risk sharing means that national consumption growth rates are totally uncorrelated with the national GDP growth rates on average across the Federation. In turn, the degree of risk sharing can be decomposed into the sum of four components, each one representing the percentage of GDP shocks that are smoothed on average (across the sample) via four channels:

1. factor income flows, i.e., insurance via capital income arising from cross border asset ownership,
2. capital depreciation,
3. net international transfers from/to a central authority,
4. national savings, i.e., intertemporal reallocation of consumption obtained through borrowing and lending flows and performed by the private and public sector.

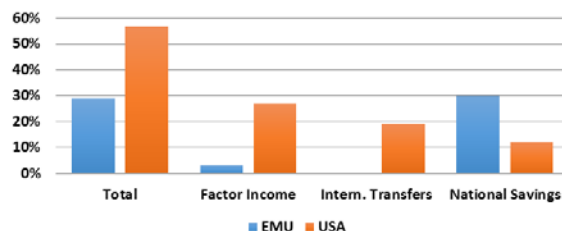
In Milano (2017), the fourth channel is decomposed into the three corresponding sub-channels arising from households, corporate and government savings, and, for the post-crisis period 2007-2014, it is further decomposed into the contribution to consumption smoothing of two sub-channels underlying government savings: the public net lending to markets (including the ECB) and the one to the ESFS, the ESFM and the ESM. From now on, when we say that "net factor income" or "depreciation" or "international transfers" or "savings" smooth $x\%$ of GDP shocks (or contribute $x\%$ to risk sharing), we imply that the corresponding coefficients take a value equal to $0.0x$.

Results

a) Comparing the EMU with the US

As shown in figure 1, country specific GDP shocks are only partially smoothed, both in the EMU and the US, but much more so in the US. Within the time interval 1999-2014, total risk sharing is about 29% in the former and about 57% in the latter. Figure 1 also shows that, in the EMU, risk sharing is almost entirely accomplished through the savings channel (internal and external borrowing and lending by the private and the public sector), smoothing about 30% of idiosyncratic shocks, whereas, in the US, it is accomplished through a diversified range of mechanisms: factor income flows (smoothing about 27% of shocks), direct transfers from the Federation (19%) and savings (12%). In turn, risk sharing from the savings channel in the EMU is almost entirely generated through the government budget. Between 1999 and 2014, EMU government savings smoothed about 28% of shocks, compared to 11% from corporate saving and -7% from households (although this estimate is not significant). Quite interesting, since the smoothing capacity of the net factor income channel is a proxy for the efficiency of international financial markets in providing insurance (within the Union or Federation), we conclude that the EMU lags behind the US Federation by a wide margin. If these markets in the EMU were as much developed as in the US, the degree of risk sharing in the former region would be roughly comparable.

Figure 1: Risk Sharing in EMU and US 1999-2014)



According to the estimates in Milano (2017), the introduction of the common currency has generated some limited benefits in terms of risk sharing. The estimated value of total risk sharing (i.e., $1-\beta_u$) was about 22% in the interval 1970-1999. This conclusion differs from some earlier estimates provided by Demyank et al. (2007) and Afonso and Furceri (2008) suggesting that overall consumption smoothing through international credit markets has slightly declined in the Euro Area following the introduction of the Euro and up to the big recession. This was mostly a consequence of a more modest role of private credit (as compared to public savings), less counter-cyclical credit flows and large inflows of capital in Peripheral Europe (from the Core) up to 2006, due to a perception that the adoption of a common currency limited country risks. However, ten years after the big recession, the situation has changed significantly in terms of investors' behaviour and because of a significant overhaul of the EMU architecture and ECB interventions.

b) Before and After the Big Recession

From figures 2 and 3, we see that, after the big recession (i.e., in the 2007-2014 period), the percentage of idiosyncratic national GDP shocks smoothed through the available channels increases substantially in the EMU (from 23% in the 1999-2006 period to 31% in the 2007-2014 period), whereas it falls in the US (from 70% to 60%). Furthermore, these changes hide some notable modifications in the way risk sharing is achieved. In both areas the percentage smoothed through factor income flows falls dramatically: from 7% to 2% (i.e., by 71%) in the EMU (although these estimates are insignificant) and from 40% to 22%, (i.e., by 45% in the US). In other words, capital markets failed to provide more insurance during the crisis. In the US, the contribution to income smoothing of direct transfers and savings increases by a modest amount: from 19 to 22% and from 10 to 15%, respectively. In the EMU, instead, the amount of risk sharing achieved through savings jumps up from 15 to 39%, whereas the one achieved through direct transfers remains very close to zero. Since risk sharing through corporate savings does not change significantly and households' savings contributes negatively after 2007, the increase in the degree of risk sharing achieved in the EMU in this period is entirely achieved via government saving (i.e., rising deficits following negative shocks and official lending).

Figure 2: Risk Sharing in EMU before and after the recession

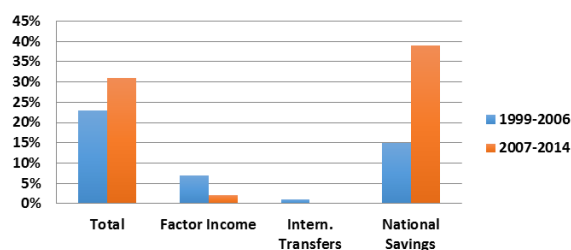
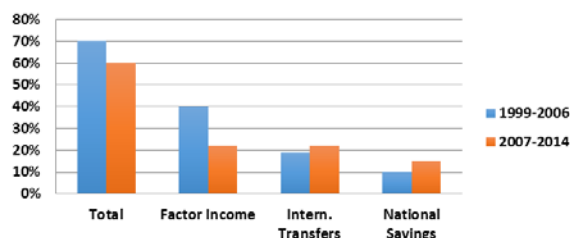


Figure 3: Risk Sharing in USA before and after the recession



c) The Role of Public Institutions

To assess the amount of risk sharing provided by public institutions, we can lump together into a single estimate the risk sharing provided by international (interstate) transfers and net lending of countries (states) governments. Notice that risk sharing through governments net lending is almost zero for the US Federation, as US states are subject to balanced budget rules. In particular, all US states, with the exception of Vermont, have constitutions imposing some form of balanced budget rule (In 38 states no deficit can be carried forward from one fiscal period to the next, and in 44 states the governor's proposed budget must be balanced). Moreover, Follet and Lutz (2010) have shown that states spending has been pro-cyclical (in contrast to the federal government policy) most likely because of the inability to run fiscal deficits. According to the 2009 data provided by Ang and Longstaff, the average debt-to-GDP ratio for US states is 7.1%, versus 87% for Eurozone countries. To have a sense of the different institutional settings in the US and the Eurozone, recall that, over the period 1998-2015, the deficits of the Eurozone countries have exceeded the 3 percent ceiling in more than three-quarters of total country-year observations (see Eyraud, Gaspar and Poghosyan (2017)). On the other hand, international transfers within the EMU provide almost no risk sharing because of very limited centralised budget for insurance purposes. Then, in the period '99-'14, total risk sharing provided by public institutions (central and local) was about 28% in the EMU (through governments savings) and 19% in the US (through transfers to/from the federal Government). The same numbers for the after-recession period ('07-'14) are 38% and 22%, respectively. In other words, the contribution of public institutions to risk sharing is much higher in the EMU than in the US. Notice that these measures do not take into account the amount of loans from the ECB to banks after the recession and, then, the contribution to risk sharing of public institutions in the EMU is probably higher than estimated.

By splitting net borrowing of national governments into that obtained through markets (including central banks) and through Centralised Public European Institutions (CPEI), i.e., the ESFS, the ESFM and the ESM, we observe that the latter have played a very important role in the after-recession period (figure 4), smoothing about 55% of shocks. As mentioned above, this figure probably underestimates the contribution of the centralised public institutions of the EMU, because it does not include the lending facilities provided by the ECB to national banks at below market rates. One may conjecture that these loans explain why the percentage of shocks smoothed via corporate savings increased from 13% in the pre-recession period ('99-'06) to 16% in the post-recession period ('07-'14). In any case, the reason why the effective net percentage of shocks that were smoothed overall after the recession in the EMU is only 38% is that two channels played a significantly negative role: governments net borrowing from markets (whose contribution to risk sharing has been -17%) and households savings (-12%). Not surprisingly, the magnitude of these numbers is almost entirely driven by the behaviour of Peripheral Europe (Greece, Ireland, Portugal, Spain), which faced fiscal consolidation and reduced access to credit markets. For this group of countries, in the 2007-2014 period, the estimated beta coefficients related to government net borrowing from markets is about -63% and the one related to government borrowing from CPEI is about 86%. On the other hand, for the core countries in the EMU these numbers are, respectively, 73% and 3%.

Figure 5 shows the patterns of the government net lending to CPEI (EU net lending) and to markets for Peripheral Europe.

Figure 4: Risk Sharing in EMU 2007-2014

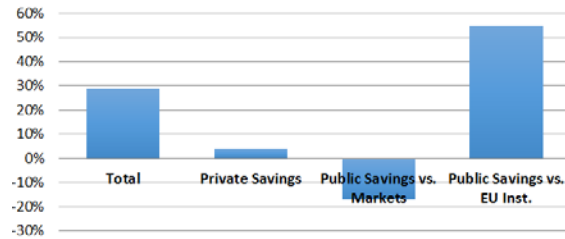
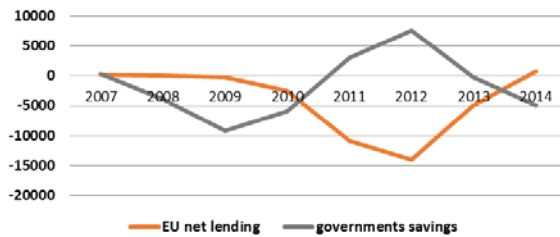


Figure 5: Savings and EU Net Lending: euro per capita, 2007, 2014
 EMU Periphery (excluding Italy)



Concluding remarks

A comparison between the EMU and other federations suggests that the "optimal" or "feasible" degree of risk sharing that can be achieved in a federation depends on how important are the institutional barriers to becoming a true federal state, i.e., on the existing mix of public policies and market institutions and, most importantly, on the explicit and implicit barriers to cross border flows, the presence of a supra-national banking authority, and on the ability of supra-national political authorities to impose and enforce country-specific fiscal rules and policies. It is well known that the EMU lacks all of these mechanisms to a large degree, and, then, we should not expect the degree of risk sharing within EMU countries to be anywhere near the one achieved in other federations with a strong federal authority, such as the US or Germany. Looking at the experience of strong federations, we see quite clearly that these allow for very little fiscal flexibility at the state level, in exchange for additional risk sharing through cross border financial transactions and fiscal transfers. Hence, one may reach the conclusion that there is a trade-off between the degree of risk sharing achieved through state-level public savings and the degree of risk sharing achieved through other mechanisms, such as international transfers and factor income flows. Namely, if the EMU were to achieve a stronger political integration, and imitate the US model, member states would have to give up almost entirely the option to smooth GDP shocks through public budgets. Based on the available estimates, it appears that this loss could be adequately compensated by the remaining risk sharing mechanisms only if the Eurozone were able to achieve full integration of capital markets, remove all barriers to cross border capital flows and establish a centralised banking authority. However, because systemic (financial) factors, as opposed to macroeconomic fundamentals and country-specific shocks, have proved to be the key drivers of GDP volatility in the Eurozone, financial market integration may not be enough. The estimates presented above show that public EU institutions, particularly the ECB, the ESFS, ESFM and ESM, despite the existing barriers to political and financial integration, played an

important role after the sovereign debt crisis, and avoided a dramatic fall in the degree of risk sharing generated by systemic risks. However, this poses more than a challenge to overall stability of the Eurozone. Public borrowing remains the main tool to improve consumption smoothing but large public debts, limited enforceability of EU policy recommendations, implicit guarantees and moral hazard considerations imply that this is a sub-optimal arrangement.

References

Alcidi, C., D'Imperio, P., Thirion, G. (2016), "Intertemporal Risk Sharing in the EMU: Disentangling the Role of International Credit Markets and of the Governments". Mimeo.

Afonso, A. and Furceri, D. (2008), "EMU enlargement stabilisation costs and insurance mechanisms," *Journal of International Money and Finance*, Vol. 27, No.2, pp. 169- 87.

Ang, A. and Longstaff, F.A. (2013), "Systemic Sovereign Credit Risk: Lessons from the US and Europe", *Journal of Monetary Economics*, 60, 493-510.

Asdrubali, P., Sorensen, B., Yosha, O. (1996). "Channels of interstate risk sharing: United States 1963-1990". *Quarterly Journal of Economics*, 111, 1081-1110.

Bayoumi, T., Klein, M. (1997). "A Provincial View of Economic Integration", *IMF Staff Papers*, 44, 534-556.

Demyank, Y., Ostergaard, C. and Sorensen, B. (2007), "Risk Sharing and Portfolio Allocation in EMU", *European Commission Working Paper*, Brussels.

Eyraud, L. Gaspar, V. and Poghosyan, T. (2017), "Fiscal Politics in the Euro Area", *IMF W.P. WP/17/18*.

Follet, G. and Lutz, B. (2010), "Fiscal Policy in the United States: Automatic Stabilisers, Discretionary Fiscal Policy Actions, and the Economy", *Finance and Economics Discussion Series*, The Federal Reserve Board.

Furceri, D., Zdzienicka, A. (2015). "The Euro Area Crisis: Need for a Supranational Fiscal Risk Sharing Mechanism?", *Open Economies Review*, 26, 683-710.

Milano, V., (2017) "Risk Sharing in the Euro Zone: the Role of European Institutions", *mimeo*, LUISS G. Carli.

Lane, P.R. (2013), "Capital Flows in the Euro Area", *European Economy, Economic Papers* 497.

Rogantini Picco, A. (2016), "International Risk Sharing in EMU", *Mimeo*.

Sala-i-Martin, X., Sachs, J. (1991), "Fiscal Federalism and Optimum Currency Areas: Evidence for Europe from the United States", *NBER W.P.* 3855.

Sorensen, B., Yosha, O. (1998). "International risk sharing and European monetary unification", *Journal of International Economics*, 45, 211-238.

Von Hagen, J., Hepp, R. (2013). "Interstate Risk Sharing in Germany: 1970-2006", *Oxford Economic Papers*, *Oxford U.P.*, 65 (1), 1-24.

3.4. FISCAL STABILISATION IN THE EMU - SOME CAVEATS

By Jochen Andritzky⁶⁹

Abstract: In theory, a mechanism for fiscal stabilisation has obvious benefits for a currency union. However, in practice it is no panacea. Too little attention has been devoted to its potential pitfalls. In this contribution, three issues are raised. Firstly, comparisons of the EMU with other common-currency areas such as the US need to acknowledge that EMU is fundamentally different, and that it has changed substantially since the sovereign debt crisis. Secondly, interactions between public and private risk sharing –the most powerful way of sharing risk– need to be taken into account. Thirdly, it is important to remember that a fiscal capacity is not the only channel for public risk sharing.

The very interesting contributions to this panel so far focused on the benefits and designs of a fiscal stabilisation function in the EMU. In theory, such a mechanism can benefit the overall stability of a currency union. At the same time, the discussion needs to take a deeper look at potential problems that may arise in practice. As there are other channels for risk sharing that may interact with a fiscal stabilisation function, and possible incentive effects, doubts are justified whether a fiscal stabilisation function is really the key to improving the stability of the euro area.

Firstly, one needs to be careful when comparing different common-currency areas. For instance, while the US features larger fiscal institutions at federal level, state governments are more limited in incurring deficits than euro member states. Also, markedly higher rigidities in the euro area may lead to more permanent shocks in the EMU than in the US. Recent studies like Milano and Reichlin (2017)⁷⁰ show that public institutions in the euro area display a greater shock-absorbing capacity than US institutions. It is therefore far from convincing to claim that the lack of a fiscal capacity makes the euro area unduly fragile.

Recent reforms, such as the introduction of the Banking Union, have most likely improved the ability of the euro area to force private players to share risk. Backstops such as the ESM and more sophisticated fiscal rules have also expanded the scope for public risk sharing through member states. While more risk sharing is possible, the question has to be asked whether a fiscal capacity –public risk sharing across member states– is warranted. This leads to the second point.

Increased public risk-sharing may interact with private risk sharing. The starting point of all previous contributions' is the variance decomposition by Asdrubali, Sorensen and Yosha (1996)⁷¹. The lower level of private consumption smoothing may be a European trait. (At least Germany is known for its stubbornly invariant savings rate.) But why are other channels of shock absorption contributing so little? For instance, factor incomes do not appear to cushion much of any shock. This calls for devoting more emphasis to questions of international labor mobility - or the lack thereof.

Moreover, capital flows observed in the run-up to the crisis provided a misleading picture of financial integration and convergence. In part, these capital flows led to capital misallocation and bubbles. The kind of financial integration observed prior to the crisis offered little shock absorption as extensive interbank lending compounded vulnerabilities and contagion.

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⁷⁰ Milano and Reichlin (2017), "Risk sharing across the US and the Eurozone: The role of public institutions", mimeo.

⁷¹ Asdrubali, Sorensen and Yosha (1996), "Channels of Interstate Risk Sharing: United States", Quarterly Journal of Economics, 111, 4.

However, the introduction of Banking Union, including the Single Resolution Mechanism to allow for bail-ins, has changed this picture. Deepening Banking Union and enhancing the Capital Markets Union – vital steps towards a genuine "financing union" – could improve the euro area's shock absorption abilities even more. Key to this is the promotion of cross-border equity financing and of a truly European business environment in which borders do not matter. Would a euro area fiscal capacity heighten the beneficial effects of such a move? The answer is no. Forging a "financing union" is in my view much more important than the question of a fiscal capacity.

Thirdly, a fiscal capacity must not be seen as the only way of public risk sharing in the euro area. As Milano and Reichlin (2017) show, in particular the ESM has contributed greatly to improved risk sharing by the public sector. Both proponents and sceptics of current ECB policies agree that the ECB played a major part in fighting the crisis in the euro area. Future deepening of the euro area will likely include European deposit insurance and possibly other common backstops, for instance for the Single Resolution Mechanism.

All in all, it cannot be argued that a fiscal capacity is a cause of instability in the EMU or a central missing piece in its architecture. In the current set-up, national fiscal buffers play a pronounced role. The key problem is the failure to build up these buffers and to use them appropriately. The first call to action is thus for national member states to make responsible use of the fiscal sovereignty that the Treaties left untouched.

Creating a fiscal capacity as insurance against member states' inertia may from an economic standpoint not be the most efficient approach. Indeed, the ESM already provides a powerful crisis backstop. It could be expanded, not only to pick up the pieces ex post, but also to provide appropriate incentives for good policies ex ante. Sovereign debt restructuring is a necessary complement to the ESM to safeguard its solvency and enhance market discipline.

To conclude, public risk sharing deserves a holistic approach, including a hard look at the incentive effects that a fiscal capacity may have. There are many other ways to enhance risk sharing that deserve more attention. Indeed, a fiscal capacity is possibly the most problematic of all approaches to enhancing the shock-absorbing capacity of the euro area.

3.5. SUMMARY OF DISCUSSION

Enhancing fiscal stabilisation and risk sharing in the EMU represented the focus of the third panel. Empirical work on the size of shock absorption was presented. Evidence suggested that euro area shock absorption channels are less effective than in the US. In the US, a large part of absorption is done by the capital markets, and there is also strong resilience of private savings. On the contrary, in the euro area 94% of the shocks in 2010-2013 were estimated to be unsmoothed. One contribution suggested that national and supranational public institutions played a larger role in providing risk sharing in the EMU than in the US during the recent crisis, especially after the implementation of EFSF, ESM and EFSM programmes. The contribution of these institutions to risk sharing after 2008 apparently more than compensated for negative effects of the pro-cyclical fiscal consolidation and by households' increased precautionary savings. The possible establishment of a European Stabilisation Fund based on state contingent debt contracts was also brought forward. The contracts associated with this model would deliver smaller spreads on sovereign debt, high surpluses and more smoothing but also high debt.

The discussion focused on the question whether there is a need for further fiscal risk sharing. Several participants highlighted that a fiscal capacity would enhance risk sharing and financial integration. The progress with the development of the Banking Union was acknowledged and possible synergies from the interaction between fiscal and private risk sharing were pointed out. Others pointed to means of enhancing economic resilience and strengthening market discipline: A strengthening of labour mobility, e.g. through a European Labour Contract, or further deepening of the single market were brought forward. To enhance market discipline, a debt restructuring mechanism combined with the introduction of a European safe were suggested. The introduction of GDP linked bonds and an enhancement of the precautionary toolkit of the ESM were mentioned as means to prevent crises. The participants also stressed the difficulty to compare the euro area to a federation like the US and the problems in identifying transitory and asymmetric shocks were raised.

4. FOURTH PANEL ON A EURO AREA FISCAL STABILISATION FUNCTION AND ITS DESIGN

4.1. A EUROPEAN STABILISATION CAPACITY – ECONOMIC RATIONALE AND CHALLENGES

By Nicolas Carnot*⁷², Gilles Mourre, Ralph Schmitt-Nilson

Abstract: This short paper presents the rationale of a European Stabilisation Capacity from an economic perspective, as a complement to the existing architecture and existing instruments. The paper then discusses two main avenues for the implementation of a stabilisation function, namely a dedicated stabilisation fund and a traditional budget set-up. The key features for a proper design, such as significant and timely stabilisation in the event of large economic shocks, are also highlighted, as well as the main credibility challenges, such as the need to avoid risks of permanent transfers and moral hazard.

* Speaker at workshop

1. Introduction

The crisis of the late 2000s and early 2010s has stress-tested the foundations of the euro. In response important changes to the governance of the euro have been undertaken, including the establishment of a crisis management system, the setting up of a banking union and a strengthening of macroeconomic surveillance. The European central bank (ECB) has meanwhile taken unprecedented action in order to maintain the stability of the area. But the construction remains highly vulnerable. While the business cycle outlook has recently brightened for the euro area, new shocks could easily expose again the fragilities of the single currency and test its cohesiveness. Aware of that threat, EU policy makers are engaged in a discussion to learn the lessons of the past years and further bolster the resilience of the zone⁷³.

One focal point of the EU governance debate is about the needed scale of fiscal integration. This is hardly a new topic. Already over 40 years ago the Mac Dougall report (1977) emphasised the desirability to accompany the creation of a single European currency with that of a common budget of meaningful size. The fact is that the euro area remains today an area where a centralised monetary authority cohabits with a plurality of national fiscal actors and lacks an identified "fiscal counterpart". Views on the economic necessity for such a counterpart are contentious and reflect in part political perspectives. Economically, this paper considers that the lack of any central budgetary instrument was one important factor that constrained the euro area's response to the recent crisis, contributing to an aggravation of its severity. Correlatively, the institution of a limited degree of fiscal union, if properly designed, would increase the capacity of the area to withstand future large shocks.

This paper focuses on the questions raised by the prospect of a macroeconomic stabilisation capacity for the euro area. The paper raises three main questions. First, does the EMU need a stabilisation function? (section 2). Second, which form could a stabilisation capacity take? (section 3). Third, could a credible design be achieved for a central stabilisation capacity? And how? (section 4).

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⁷³ 6 December Package. Commission Communication on "Further steps towards completing Europe's economic and monetary union: a roadmap" - COM(2017) 821: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017DC0821&from=EN>
White paper on the future of Europe - COM(2017)2025: https://ec.europa.eu/commission/sites/beta-political/files/white_paper_on_the_future_of_europe_en.pdf.

Reflection paper on the deepening of the economic and monetary union - COM(2017) 291: https://ec.europa.eu/commission/sites/beta-political/files/reflection-paper-emu_en.pdf.

Five Presidents' Report: Completing Europe's Economic and Monetary Union: : https://ec.europa.eu/commission/sites/beta-political/files/5-presidents-report_en.pdf

Section 3 and 4 uses as an illustration a couple of simulations based on unemployment-triggered reinsurance fund (see Carnot et al. 2017). Section 5 concludes.

2. Does the EMU need a stabilisation function?

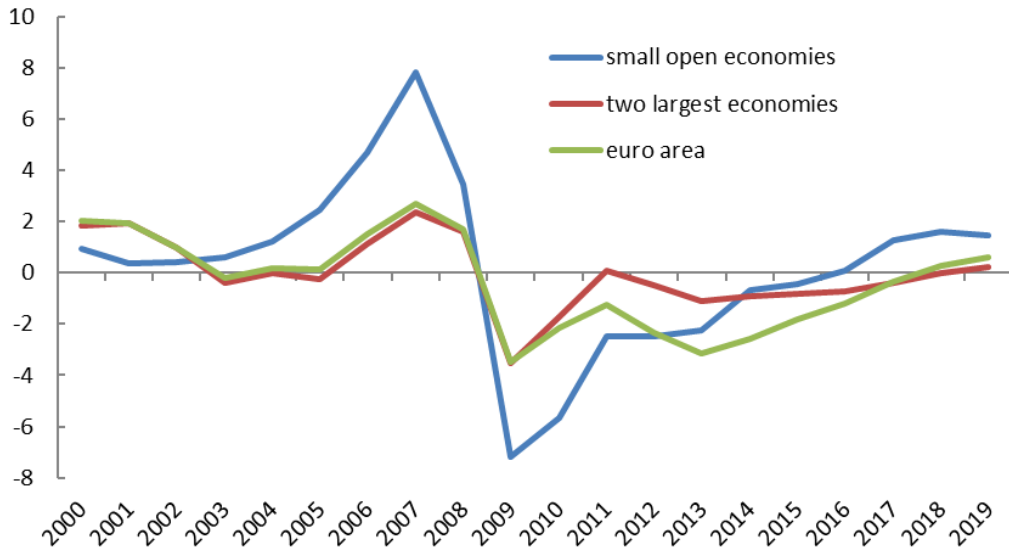
Lack of instruments on case of large shocks

In normal times, the current setting, resting on prudent decentralised fiscal policy and single monetary policy absorbing common shocks, seems to suffice in stabilising the EU economy. This corresponds to the philosophy of the Maastricht Treaty: area-wide shocks are tackled by monetary policy, while asymmetric shocks (affecting the demand side) could be fixed by national fiscal policy.

In this setting, fiscal prudence allows the automatic stabilisers to play in full, absorbing the asymmetric economic shocks in real time, while ensuring the sustainability of public finances in the medium term. National fiscal stabilisation operates primarily via automatic stabilisers, meaning that a fall in tax revenues, an uptick in social benefits and the inertia of other spending support the economy in downturns. To enable the workings of automatic and discretionary fiscal stabilisers at the national level, Member States need to create sizeable fiscal buffers, ensuring sustainable deficit and debt positions.

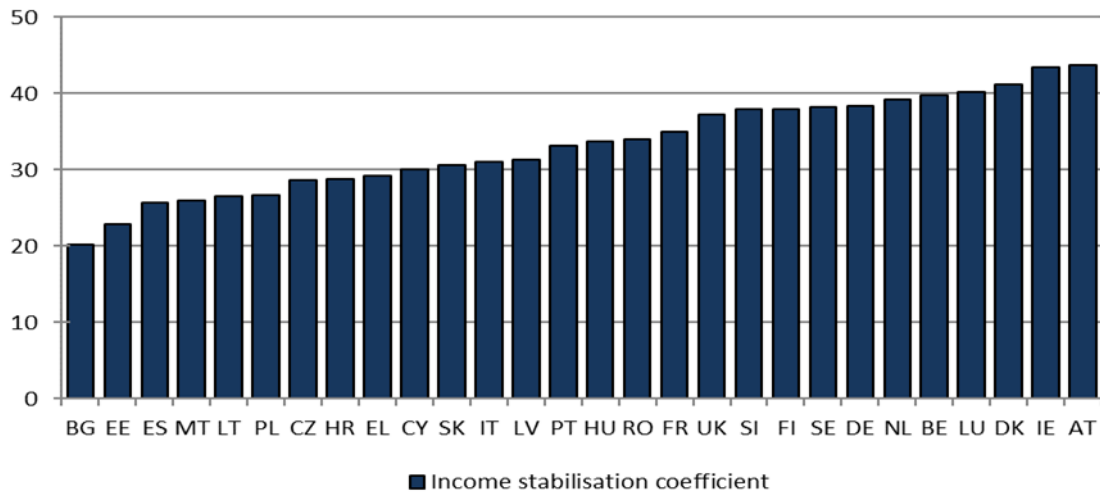
However, in the presence of large shocks, the automatic stabilisers may become insufficient to ensure proper stabilisation, especially in small open economies. Large shocks can put important strain on a Member State's public finances, leading to a rapid increase in deficit and debt levels. Significant market pressure can then build up, preventing the free operation of national stabilisers. The crisis experience shows that even Member States with low levels of public debt and seemingly sound public finances are not immune to this risk and might be in need of further fiscal policy support. Figure 1 shows that small open economies, such as Luxembourg, Ireland, Slovenia, Finland and the three Baltics, recorded very large cyclical swings in output, much larger than the euro area average. These were particularly acute during the financial crisis in 2008-10, with a sharp drop of output gaps by around 14 percentage points and a strong persistence of negative output gaps in 2011-2013. By contrast, the two largest economies of the euro area –also hit by the crisis – experienced smaller cyclical fluctuations than the whole area. At the same time, the automatic income stabilisation generated by the tax and benefits system represents below 40% for most of the euro area countries, as illustrated in Figure 2 (below 30% for one third of them; see European Commission: Public Finances Report (2017) for a more detailed discussion).

Figure 1: Disparities of cyclical variation across countries (output gap, in % of GDP)



Note: The aggregate "Small open economies" covers EE, IE, LT, LU, LV, SI, FI. The aggregate "Two largest economies" covers DE and FR. Source: AMECO, based on European Commission 2017 autumn forecast.

Figure 2: Automatic income stabilisation



Note: The graph compares the degree of automatic income stabilisation (in per cent) of the current tax and benefit system with the degree of stabilisation assuming a hypothetical average effective tax rate (AETR). Source: Author's simulations based on EUROMOD using EU-SILC data. European Commission: Public Finances Report (2017)

This is aggravated by the inability of an overburdened monetary policy to fully respond to common negative shocks. When the monetary policy hits the zero lower bound, that is, when key interest rates are very close to zero in nominal terms, it becomes more difficult to relax it further to address negative shocks affecting the whole euro area. Moreover, in better time, monetary policy will also be constrained if there is a risk for financial stability.

The use of an escape clause, provided for by the Stability and Growth Pact (SGP), could help respond to large negative shocks, but cannot replace a proper stabilisation capacity. The so-called 'general escape clause' could be used by the EU and the euro area as a whole in periods of severe economic downturn. Alternatively, an unusual event outside the control of government, such as a severe asymmetric shock affecting a specific country, can be invoked. But these escape clauses should by definition remain exceptional. More generally, some argue that they could be tricky to trigger in real time, since they require an accurate and timely identification of the economic predicament. There are also classic issues affecting the efficiency of discretionary fiscal policy, such as large lags and difficulty in phasing it out in better times. In addition, the escape clause is playing only asymmetrically, offering stabilisation in bad times, not in case of overheating.

In theory, additional stabilisation could be provided by enhanced coordination of national fiscal policies, but the latter have turned out to be difficult to implement. When some Member States are constrained in their fiscal policy, those with fiscal space could use it to promote the suitable aggregate fiscal stance, given the existence of some spillovers. But effective coordination is challenging in practice, in the absence of consensus across Member States, and in fact raises fundamental issues of principle: should national (sovereign) policies be subordinated to the achievement of an appropriate aggregate stance, or is it not preferable that the latter be directly steered, when needed, by an EU common instrument?

Main merits of additional stabilisation at the centre

Addressing large shocks is all the more relevant because of their potentially heavy economic and social costs. Sizeable economic fluctuations could durably affect labour supply, through a deterioration of the human capital, and the capital stock, via lower investment owing to a larger business uncertainty. Large shocks could therefore lower potential growth, in addition to their welfare costs. Economic shocks could also hit harder the most fragile categories, such as the low skills and the liquidity constrained households, which may also fuel populism, as seen in many countries in the aftermath of the crisis.

Given the shortcoming of the current architecture, the aim of a stabilisation function would be to actively provide support in large downturns to complement national fiscal stabilisers and monetary policy. As seen above, EMU does not seem to have efficient instruments in place to address large shocks (automatic stabilisers, escape clauses, coordination of national policy or large EU budgets) despite their potentially large costs.

There is a case for accommodating not only country-specific shocks but also common shocks, especially if the monetary policy is overburdened. Automatic stabilisers absorb all types of demands shocks, namely those affecting a country only, that is, asymmetric shocks, but also common shocks with asymmetric impact and common shocks with similar impact across countries. If the issue is to top up the automatic stabilisers, the central stabilisation should cover all types of shocks, not least because it is very delicate to identify the various types of shocks in real time. Stabilising the area wide position is generally helpful to also stabilise national shocks, given the existence of a common component in national business cycles (De Grauwe and Ji, 2016). A common fiscal capacity can thus be an instrument complementing monetary policy for stabilising area-wide shocks, at least in some circumstances.

A stabilisation capacity must be symmetric over the business cycle, so that the provision of additional support in downturns entails the need for a more rigorous build-up of buffers in better times. The interaction between fiscal buffers and stabilisation is a two-way street. A stabilisation function supplements the fiscal buffers such that in a downturn the use of both national and area-wide fiscal policy provides sufficient stabilisation. At the same time, for the mechanism to be credible and to avoid permanent transfers, it needs to enhance existing and provide additional incentives for Member States to run prudent and counter-cyclical fiscal policies also in good times.

This need for a symmetric working across upturns and downturns would require some degree of automaticity in the functioning of a stabilisation capacity. Some degree of automaticity would ensure both timely stabilisation – unlike with discretionary policy - and effective stabilisation in good times.

Some fiscal stabilisation at the centre could also limit the use of crisis-resolution mechanisms, which intervene when the economic situation has already strongly deteriorated. A fiscal stabilisation would kick-in before a country faces a severe confidence crisis signalled by high sovereign spreads, or worse, loses market access. It would reduce the risk of a country being forced to enter a macroeconomic assistance. It will therefore complete the panoply of EU policy instruments to facilitate a gradual policy response and avoid the binary situation of normal times versus crisis times.

The set-up of a stabilisation function could thus strengthen the commitment to the irreversibility of the euro. Including a new instrument for a gradual handling of large shocks would be also a strong signal about the collective commitment to preserve the integrity of the euro area, regardless of the economic conditions.

However, setting a stabilisation function is not meant to exonerate policy makers from running adequate structural policies. Member States need to improve the resilience of their economies to economic shocks, not least because fiscal crisis could result from the brutal unwinding of macroeconomic imbalances, as seen in some countries during the financial crisis. Also, some shocks are permanent supply shocks, which require a structural remedy, instead the demand accommodation suitable in the case of temporary demand shocks. At the European level, deepening the single market and using new economic surveillance tools, such as the macroeconomic imbalances procedure, are natural complements of national reform strategies. The recent financial crisis has indeed showed that countries with large macroeconomic imbalances but relatively healthy public finances at face value before the unwinding of imbalances could face a sovereign debt crisis.

A stabilisation function could support the adoption of, and compliance with, simpler, stability-oriented fiscal rules. With a common stabilisation capacity, one could allow for the working of national automatic stabilisers within the rules but avoid a fine-tuning of fiscal policy. This would reduce complexity and would facilitate a tighter implementation and re-orientation towards sustainability of the rules, as their implementation would be less exposed to the perennial criticism of ignoring stabilisation concerns. Moreover, the eligibility to the stabilisation mechanism could include reaching prudent level of fiscal balances, as a positive incentive for complying with fiscal rules.

3. Which form could s stabilisation capacity take?

In broad terms, a distinction can be made between a euro area budget with own competences and a macroeconomic stabilisation fund. A stabilisation capacity for the euro area could be designed in different ways. Traditionally, a central budget serves several key purposes, namely allocative and distributive functions. Stabilisation properties can then be considered as side effects of the former. A euro area budget would imply shifting precise competences to the European level, with the funds being spent on programmes that are conceived directly at the European level. In that approach, stabilisation properties are the by-product of a full-fledged transfer of competence. Alternatively, a macroeconomic stabilisation fund could execute budgetary transfers to national budgets under some economic circumstances, with the choice of expenditures being financed by the transferred funds left at the discretion of Member States. It would thereby mimic the stabilisation properties of traditional, much more sizeable budgets. This conceptual distinction is not watertight in practice as there are intermediary forms of instruments: for example, a macroeconomic stabilisation fund can be subject to certain conditions of use, such as the earmarking of funds to specific programmes. In that instance, the programmes remain effectively managed at the national level but they are (co)financed by the EU level.

A fully-fledged budget

A common budget for the euro area would arguably be the most ambitious design for a stabilisation function from an institutional viewpoint. The proposal was brought up several times in the past years and has gained renewed attention, by high political initiatives. In practice, a common budget would involve permanent own resources on the revenue side and permanent spending functions on the expenditure side.

While a common budget would primarily target the provision of European public goods, the stabilisation effect comes from the cyclicity of the revenues or expenditures comprising it. The reliance on cyclical revenues (e.g. corporate income tax) and countercyclical spending (e.g. unemployment benefits) contribute to macroeconomic stabilisation via automatic stabilisers at the EU level. In addition, one could foresee discretionary elements (triggered automatically or not) which could further foster stabilisation properties.

Some simulation of a common budget shows that a well-conceived design can allow for some stabilisation properties for a relatively modest size. The simulations focus on different stylised specifications. A budget of around 2% of euro area GDP with diversified revenue sources and expenditure is estimated to substitute 10% of the stabilisation achieved at national level and stabilise 4% of shocks (against 17% for national budgets). A design based exclusively on corporate income tax and spending mostly focused on unemployment benefits is expected to substitute around 20% of national stabilisation. A bigger budget would provide yet more stabilisation, but not proportionally so.

A common budget is less prone to the risk of moral hazard, but might result in indirect permanent transfers. A common budget would not entail direct contributions from and support to Member States and is thus less subject to possible moral hazard. However, it might indirectly result in income redistribution from richer to poorer countries through permanent differences in tax bases and or transfer needs. Similarly, some spending functions could be more beneficial for certain Member States. This is one of the reasons why a common budget could focus on the provision of European public goods. Nonetheless, broad political ownership and ambition are needed for the proposal to go forward. French Treasury (2013) acknowledges that a common budget requires further political integration and political accountability, also linked to the entailed greater extent of European solidarity.

Alternatively, a dedicated stabilisation fund

By contrast, a dedicated stabilisation instrument works by effectuating transfers between a central fund and national budgets with the specific aim of absorbing shocks. This action modifies the room for manoeuvre under the constraining fiscal rules and thereby raises the space for national stabilisation. In that setting, one option is to provide Member States with general budget support during downturns. This option has the merit of simplicity and ease of implementation. Alternatively, one can request the additional funding to be earmarked to specific outlays. If well-designed and implemented, this approach can increase the effectiveness of the stabilisation function and improve the composition of budgets by protecting key expenditures in downturns.

The stabilisation power of such a dedicated stabilisation instrument is potentially bigger and is scalable. For the sake of illustration, one could consider a stabilisation instrument fed by annual contributions of 0.1% of GDP. Given that large downturns tend to occur every decade or so, it would allow for a disbursement of 1% of GDP per downturn. Compared to a limited budget as lined out above, it would provide 10 times the stabilisation with 10 times smaller annual contribution. In this stylised example one would conclude that the stabilisation power is 100 times bigger.

A fiscal capacity able to provide meaningful stabilisation needs to be able to go into annual deficit and be endowed with a borrowing capacity, especially in light of large shocks. To provide actual and sizeable stabilisation a euro area budget or a stabilisation instrument needs to go into annual deficit in face of large shocks. If important assets were built up prior to the shock, those should be depleted first. However, to ensure credible stabilisation in the most relevant use-case, a truly large shock, a borrowing capacity would be needed; also to ensure equal treatment amongst Member States which will subsequently access the fund. The possibility to borrowing would need to be backed by a design guaranteeing a satisfactory rating. This means that the provision of future contributions would need to be ensured and possibly that third parties, such as European institutions or Member States would provide some form of guarantee.

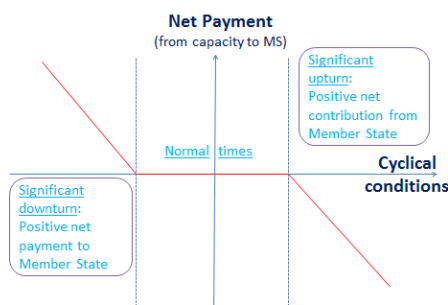
In a fund-based setting, a stabilisation function could work like an insurance mechanism. Member States would only resort to it if the shock or downturn is significant. This means that they would first use their automatic stabilisers and discretionary fiscal policy to ensure an adequate fiscal response. If these two are not enough to mitigate the shock, the stabilisation function would then kick-in. And only if and once assets of the stabilisation fund are depleted, it would borrow in order to provide Member States with additional support.

A challenging dimension of a dedicated stabilisation fund is managing temporary, but strong build-up of assets or debt. For a stabilisation instrument to be credible, it should be designed and parametrised to be in balance over the long term (see section V). However, in the medium term, the sign of the net position and its evolution over time is dependent on the starting date of the stabilisation function and is therefore largely the product of chance and not design. In a nutshell, if the inception coincides with a sustained period of solid growth, the fund would accumulate sizeable assets. If the inception coincides with a protracted period of weak growth, it would slide into a debt position. Still, the net position remains contained in a "predictable tunnel", if well calibrated. However, both stylised situations could prove challenging. The efficient use of idle assets would need to be ensured, and there might be pressure to make use of such buffers even if it is not called for by the economic circumstances. In this context, it is interesting to recall that the planned rate of depletion of the Norwegian sovereign wealth fund usually features prominently in national Norwegian elections. In case of an important accumulation of debt, there is a risk of a deterioration in financing conditions, calling for a design with strong insurances for repayment.

It would be key for the credibility of the design that the stabilisation function also incentivises the constitution of significant buffers in good times. This could be achieved by adopting a credibly symmetric approach to contributions and payments. Various triggering conditions and parametrisations are possible, but such a symmetric approach would also contribute to further reducing the risk of permanent transfers ex-post. Such a design is pictured in Figure 3, whereby contributions are increased in significant upturns. The Chart shows how net payment could evolve with or without variations also in significant upturns.

Overall, both instruments - euro area budget and dedicated funds - have distinct and complementary properties to allow for active stabilisation and a robust financial setup. A dedicated stabilisation fund would allow for active and scalable stabilisation. The existence of a permanent resource in a traditional budget setting allows for a more solid underpinning of a borrowing capacity. One option could be to add a layer of active stabilisation to a traditional budget setup. Similarly, one could allow for temporary discounts on resources of a more traditional budget or allow for temporary increases in its expenditures.

Figure 3: Net payments effectuated by a stylised stabilisation instrument



Source: Authors' illustration

4. Could a credible design be achieved for a central stabilisation capacity? And how?

Key requirements for economic and political credibility

First, a stabilisation capacity needs to yield efficient and timely stabilisation. The system should be effective in correcting large shocks timely, both positive and negative. For a stabilisation capacity to be effective, it may not provide or withdraw support at the wrong time, which would erode its legitimacy. But this crucial economic condition is not sufficient unfortunately. To be realistic and politically sustainable, a stabilisation capacity should address two other key conditions.

Second, it should not generate permanent transfers. A prominent concern is that a stabilisation capacity conceived ex ante as insurance could morph into a transfer union ex post without proper democratic legitimisation. As already highlighted above and in the Five Presidents' Report, a stabilisation capacity should not lead to permanent transfers.

Third, it should not bring about moral hazard. The promise of support in economic hardship could dis-incentivise reform efforts and the conduct of sound policies.

A key technical element for a credible design: the choice of the activation trigger

Active stabilisation would call for an activation trigger, which should be timely and effective. It should address significant cyclical shocks, common to the area and country-specific. It should avoid fine tuning of minor disturbances as well as subsidising structural weaknesses. It is therefore important to adopt an approach where the use of the stabilisation function is triggered based on compelling evidence of important cyclical disturbances. Such triggers would thus serve as quantifiable evidence of bad, normal and/or good economic times.

A stabilisation capacity can be run automatically, along pre-defined parameters for determining the triggering and amounts of payments. In this conception, the capacity works as an enhanced automatic stabiliser. The parametrisation can be designed so as to credibly ensure the balancing of the instrument over time, in particular through symmetric triggers which ensure adequate contributions in good times. It should be noted that such a careful design would not result into a one-to-one clawing back of funds.

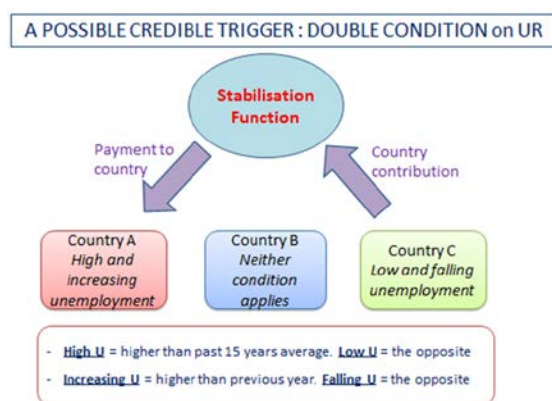
Another approach is to allow for some constrained discretion in the mechanism, concerning the recourse to the capacity or the degree and nature of support to tailor the response to circumstances. A

combination with automatic rules by default and exceptional discretion could also be envisaged, as in the US unemployment insurance system of 'extended' benefits which can be provided by the federal level on top of the regular benefits when particular conditions materialise.

Robust macroeconomic indicators are needed to assess the economic situation in real time and avoid important revisions ex post. Economically speaking the output gap is the standard measure of the cycle, see Carnot et al. (2015) for a practical proposal and an empirical investigation. However, its unobservable nature and exposure to revisions greatly complicate its credible use as a trigger. In an automatic approach, a pragmatic option is to rely on unemployment rates. Their dynamics are strongly aligned with the business cycle and reflect large downturns as well as upswings. Data is fairly harmonised in the EU and revisions are limited. Moreover, it is an economic variable that is commonly used by policy makers and the wide public.

A promising approach is to use a "double condition" on unemployment rates, whereby high and rising unemployment rates signal a downturn. In practice, one can use unemployment rates in comparison with past observed averages. For example, the stabilisation support could be triggered by the joint observance of high and increasing unemployment rates. Empirically, high and increasing unemployment rates coincide with important economic shocks (common or asymmetric). Using a minimum 'threshold' for activation helps restrict the stabilisation function to un-controversially large shocks. Symmetrically, low and falling rates could trigger (additional) contributions, see Figure 4. Furthermore, contributions and pay-offs would be linked to the cyclical momentum of unemployment, i.e. the change in the rates, thereby avoiding excessive and persisting amounts. Carnot et al. (2017) provide a detailed explanation of such a proposal, including an empirical analysis.

Figure 4: Stylised presentation of a stabilisation mechanism based on the "double condition"



Source: Carnot, Kizior and Moure (2017).

In a more judgemental approach, a broader set of indicators (involving e.g. growth, inflation and monetary policy rate) reflecting the economic situation could be assessed. It would however be essential that fine tuning is avoided and that the stabilisation capacity is activated based solely on evidence of large shocks. Still, such an approach would critically hinge upon defining non-observable equilibrium values for some variables.

Needs for additional safeguards to avoid risks of permanent transfers and moral hazard

Intrinsic design features are key to reducing risks of permanent transfers and moral hazard ante. A well-designed parametrisation of a Stabilisation Function can all but dispel the risk of permanent

transfers and moral hazard. The stabilisation pay-outs should be triggered only based on objective evidence of large cyclical shocks. The amounts of pay-outs should be tied to the "cyclical momentum", i.e. to the change in trigger variables. This would by design limit total pay-outs. Contributions need to be calibrated to match possible pay-outs in the medium to long term. One can require additional contributions in good times, in symmetry to pay-outs in bad times, to ensure fully symmetric functioning. One pragmatic option for a trigger which fits these criteria could be a double condition on high and rising unemployment rates compared to country-specific long-term trends.

Further safeguards can reinforce the credibility of 'ex post neutrality'. In the insurance logic contributions can be adjusted depending on the 'revealed' risk profile, i.e. some form of experience rating whereby contribution rates incorporate a premium or discount as function of past history. However, such mechanisms have to be carefully calibrated. Rigid repayment schedules, as entailed by a full claw-back mechanism, would risk entailing pro-cyclical fiscal policies. If their schedule doesn't match the economic recovery, there is a risk that support is withdrawn too early. In addition to experience rating, one can envisage a cap on country-specific net positions, to avoid any excessive build-up of contributions or received payments.

In addition, an element of conditionality/eligibility of Member States prior to accessing the stabilisation function could be envisaged. Such conditions could focus on compliance with the provisions of the Stability and Growth Pact and the Macroeconomic Imbalances Procedure. Moreover, they could be linked to the nature of the triggering mechanism for activation of the payments or the targeted expenditure, if some prior harmonisation would enhance the workings of the stabilisation mechanism itself.

Continued conditionality appears more challenging to implement in practice. On the one hand, continued conditionality provides more incentives to permanently comply with the SGP and the Macroeconomic Imbalances Procedure, compared with conditionality assessed at "one point in time", which could allow for subsequent relaxation after the initial effort. On the other hand, ongoing conditionality for access to a Stabilisation Function would imply that disbursements by the system would be conditional on continuous compliance with certain conditions. Such mechanisms may be very challenging to credibly implement from a political economy perspective. It may be objectively more difficult to remain fully compliant with the EU surveillance framework and pursue reforms in challenging macroeconomic conditions. Depriving Member States with such difficulties of the support of a Stabilisation Function could be perceived as unfair, turning the mechanism into a "hospital for the healthy".

5. Conclusion

The paper gives the main economic rationale for a stabilisation capacity, compared with the status quo of the current architecture. The build-up of national fiscal buffers remains primordial, but can turn out insufficient in some cases. That's why a stabilisation function should actively provide support in large downturns to complement national fiscal stabilisers and monetary policy. At the same time, providing additional support in downturns entails the need for a more rigorous build-up of buffers in better and good times.

Crucial considerations for an effective stabilisation capacity is to provide meaningful economic stabilisation in both downturns and upturns while credibly avoid permanent transfers. The possibility for a stabilisation capacity to provide swift and consistent support during downturns matters more for its stabilisation properties than its sheer size. This calls for means to provide enhanced fiscal support in deep downturns, while calling for contributions in better times.

The two stylised means of implementing a stabilisation capacity, a traditional budget setup and a dedicated stabilisation fund, are discussed. Traditionally, fiscal stabilisation is provided by sizeable

budgets, but rather as a by-product of allocative and distributive functions. A dedicated stabilisation fund would allow for enhanced and scale-able "active stabilisation". Still, it would face challenges as temporary, but strong build-ups of assets or debt could question the credibility of its setup. Means to combine elements of traditional budget setup with elements of "active stabilisation" might merit further reflections.

Credible and possible automatic triggers, as key design elements, are needed to allow for timely and effective activation. For the sake of illustration, the paper presents a double condition on unemployment rates, which appears as a credible trigger in this regard. A fiscal capacity able to provide meaningful stabilisation needs to be able to go into annual deficit and be endowed with a borrowing capacity, especially in light of large shocks. Practical proposals should chime with these economic considerations in order to be effective.

References

Carnot N., M. Kizior and G. Mourre (2017), "Fiscal stabilisation in the Euro-Area: A simulation exercise", No 17-025, Working Papers CEB from ULB -- Universite Libre de Bruxelles.

Carnot N., Ph. Evans, S. Fatica & G. Mourre (2015), "Income insurance: a theoretical exercise with empirical application for the euro area," European Economy - Economic Papers 2008 - 2015 546, Directorate General Economic and Financial Affairs (DG ECFIN), European Commission.

De Grauwe, Paul, and Yuemei Ji (2016), "How to Reboot the Eurozone and Ensure Its Long-term Survival." In *How to Fix Europe's Monetary Union: Views of Leading Economists*, edited by Richard Baldwin and Francesco Giavazzi. London: CEPR, 137–50. <http://voxeu.org/content/how-fix-europe-s-monetary-union-views-leading-economists>.

European Commission (1977), "MacDougall Report", "Report of the Study Group on the Role of Public Finance in European Integration." European Commission, Brussels. http://ec.europa.eu/archives/emu_history/documentation/chapter8/19770401en73macdougallrepvol1.pdf.

European Commission (2017), Impact of fiscal policy on income distribution, Report on Public Finances in EMU 2017, 71-131. https://ec.europa.eu/info/sites/info/files/economy-finance/ip069_iii_impact_of_fiscal_policy_on_income_distribution.pdf

European Commission (2017), Communication on "Further steps towards completing Europe's economic and monetary union: a roadmap" - COM(2017) 821: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017DC0821&from=EN> ;

European Commission (2017), White paper on the future of Europe - COM(2017)2025: https://ec.europa.eu/commission/sites/beta-political/files/white_paper_on_the_future_of_europe_en.pdf

European Commission (2017), Reflection paper on the deepening of the economic and monetary union - COM(2017) 291: https://ec.europa.eu/commission/sites/beta-political/files/reflection-paper-emu_en.pdf

European Commission (2015), Five Presidents' Report: Completing Europe's Economic and Monetary Union: https://ec.europa.eu/commission/sites/beta-political/files/5-presidents-report_en.pdf

French Treasury (2013), "A Budget for the Euro Area" – Trésor-Economics, No. 120: <https://www.tresor.economie.gouv.fr/Ressources/file/392340>.

MacDougall Report. 1977. “Report of the Study Group on the Role of Public Finance in European Integration.” European Commission, Brussels. http://ec.europa.eu/archives/emu_history/documentation/chapter8/19770401en73macdougallrepvol1.pdf.

Macron, Emmanuel (2017), “Initiative pour l'Europe - Discours d'Emmanuel Macron pour une Europe souveraine, unie, démocratique”: <http://www.elysee.fr/declarations/article/initiative-pour-l-europe-discours-d-emmanuel-macron-pour-une-europe-souveraine-unie-democratique/>.

4.2. ENHANCED FISCAL INTEGRATION IN THE EMU?

By Daniel Gros⁷⁴

Abstract: The experience of very large shocks in the economic and financial crisis has highlighted the need for a stabilisation "function" in euro the area. This contribution proposes the creation of an unemployment reinsurance scheme for the EMU along the lines suggested by the literature on the economics of insurance⁷⁵. Rather than absorbing small national shocks at the EU-level, the reinsurance mechanism proposed here would deliver a large punch once activated, but only in case of rare, major events for the labour market.

1. A fiscal shock absorber for the euro area? Lessons from the economics of insurance

The crisis revealed the need of a fiscal capacity at the EU level and this idea has found some political support. Before the crisis, it was already argued that the eurozone needed a mechanism to help Member States overcome idiosyncratic shocks. The catastrophic aftermath of the crisis makes an overwhelming case for this idea. Among the EU institutions, the project of a fiscal capacity has found some political support. For example, the President of the European Council called for "a well-defined and limited fiscal capacity to improve shock absorption capacities, through an insurance system set up at the central level" (Van Rompuy, 2012, p. 5).

In this context, proposals for shock-absorber mechanisms have been made which often neglect a key insight from the economics of insurance. Under the proposed mechanisms, a certain percentage of each upswing or downturn in the economy is offset by payments to a central fund (e.g. Dullien, 2013; Enderlein et al., 2013). This mechanism is referred to below as insurance with *shock absorber*. Instead, a mechanism by which a member state is fully insured against shocks above a certain deductible threshold is theoretically preferable. This mechanism is referred to below as insurance with *deductible*.

1.1. Insurance and convexity

Similarly to the microeconomic case, insurance at the national or EU level should assume the cost of a shock to grow more than one for one with its magnitude. The standard case for insurance at the microeconomic level is that utility functions are assumed to be concave (and hence the cost of losing income is convex). In simple terms, a shock of twice the magnitude causes more than twice the damage. At the country and the EU level, the euro crisis has vividly illustrated that the costs of large shocks can be disproportionately large, especially when the shock impairs access to financial markets. The case of Greece has also shown that the social cost of very large shocks can be extremely severe, leading to insolvency and consecutive issues such as bankruptcy costs. By contrast, the small shocks that were prevalent during the Great Moderation did not involve large costs, temporary shocks to output or income could be smoothed via savings or borrowing in capital markets.

Building on these observations, social loss functions are generally assumed to be convex. Most models assume the simplest form of convexity, namely that the social loss function is quadratic in output (or in output compared to its equilibrium level; see Blanchard and Fischer, 1989)⁷⁶. The illustrations below use this standard assumption (Figure 1).

⁷⁴ CEPS, e-mail: danielg@ceps.eu. The views expressed in the text are the views of the author only and may not, under any circumstances, be interpreted as stating an official position of CEPS.

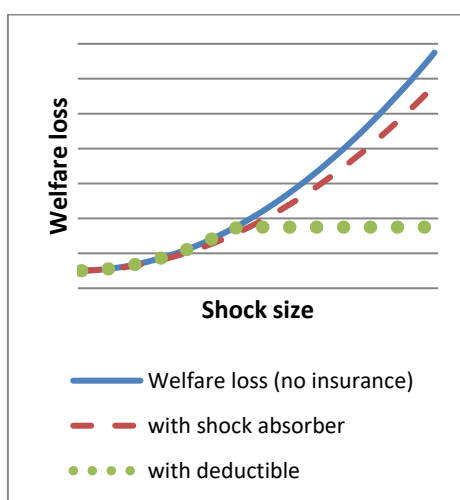
⁷⁵ See also Beblavý, Gros and Maselli (2015) for a more detailed discussion.

⁷⁶ Benigno and Woodford (2004) derive this functional form somewhat more generally. For a critique, see Mayer (2002).

1.2. Insurance with deductible: the first best option

The coverage ensured by an insurance with a deductible or a shock absorber is quite different (Figure 1). As explained above, the social loss function (solid blue lines) is growing more than one for one with the shock hitting the economy (e.g. increase in unemployment or fall in GDP). This is what the economy would be subject to in the absence of an insurance mechanism. With a shock absorber a certain percentage of the shock is offset (Enderlein et al., 2013), the welfare impact of any shock is lower (dashed red line). The alternative insurance with a deductible fully compensates all shocks above a threshold (dotted green line).

Figure 1: Welfare loss under different insurance schemes



Source: Beblavy, Maselli and Gros 2015.

An insurance with a deductible offers better coverage against extreme events. Under the first scenario, a country hit by a very large shock would of course receive a larger transfer, but the problems would not be substantially different (for instance, a welfare loss of 5% would only be mitigated to 4%). By contrast, with a deductible, most of the large shocks could then be fully offset, safeguarding financial stability. In case of a small shock the country would not receive any insurance payment.

Insurance with a deductible has been shown to be superior to a shock absorber. From Figure 1, it is not possible to say a priori whether a shock absorber or an insurance contract with a deductible is superior. However, Arrow (1974) proved that "if we stay within the class of contracts with the same expected loss, EU [expected utility] maximisers prefer a contract with full (100%) insurance above a fixed deductible"⁷⁷.

2. Proposal for a European unemployment re-insurance fund

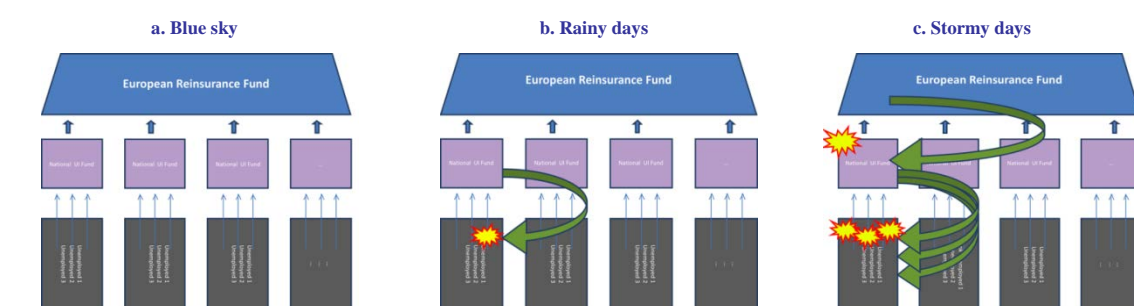
At the euro area level, a concrete proposal for a stabilisation function would be a re-insurance scheme for national unemployment "insurance" funds (Figure 2). Like the optimal insurance contract, this re-insurance scheme would only cover larges shocks. The national systems would pay regular premia

⁷⁷ See Russel (2004). See also Gollier and Schlesinger (1996) for a more general version of the theorem about the optimality of full insurance above some fixed deductible.

to a central fund. This fund would then support the national system in countries where the unemployment rate has increased suddenly above a certain threshold.

An unemployment re-insurance mechanism would provide support where crisis hit. Deep recessions come with high expenditure especially linked to unemployment benefits, combined with rising debt levels and rising risk premia. At this stage, the national unemployment "insurance" fund might be overwhelmed (in an extreme form of convexity). In such "stormy days", a country could need additional funding to cover the cost of the recession while preserving its solvability, see Figure 2 for an illustration. A European re-insurance mechanism would provide for such additional funding.

Figure 2: A proposal for a European unemployment reinsurance fund



Note: In good days, national insurance fund contribute to the Euro Area reinsurance scheme (a). When a small shock hits, national schemes are in charge of covering the cost (b). When the shock is large, the reinsurance scheme provides extra funds to cover the costs (c).

Source: Author.

The main difficulty in designing this European reinsurance scheme is the definition of its parameters. A first issue is the definition of a reference indicator triggering the disbursement. One option would be to support Member States for unemployment risks above a certain level which can be defined as the equilibrium unemployment rate⁷⁸ plus a certain margin, or as a normalised unemployment rate plus a margin depending on the volatility of the unemployment rate. Another option would be to trigger the disbursement when the unemployment rate increases rapidly. Other issues are related to the definition of the claim, the deductible, the pay-out and pay-in. In (Beblavy, Maselli and Gros 2015), we showed that while economically and politically feasible, our reinsurance proposal delivers, for a small average contribution, large shock absorption capacities.

3. Comparison with the US

In the US, the "extended benefit" scheme provides a federal layer of additional unemployment benefits in downturns. The US federal unemployment compensation (UC) programme provides income support to workers who lose their jobs for up to a maximum of 26 weeks in most states. In case of severe recessions and consequent high unemployment in a state, extended benefits can be launched, funded 50% by the state and 50% by the federal government (and exceptionally, 100% by the federal government in the 2009 stimulus package). These extended benefits entail some geographically redistributive dimension in the system. In addition, in case of a lack of liquidity, a state can borrow from federal funds, with interest charged on loans that are not repaid by the end of the fiscal year in which they were obtained. In principle, the objective of stabilising income of individuals in deep downturns is maintained, but at the same time free-riding and permanent transfers are avoided.

⁷⁸ NAWRU.

The US example provides relevant insights, but conclusions should be drawn carefully. The US system constitutes an obvious point of comparison for the euro area given that its size and geographical diversity. The integrated fiscal system of the US provides some inherent shock absorption, but research has shown that it is of limited size (the main tax directly related to GDP is the income tax, which amounts to less than 15 % of GDP. Moreover, even if this fiscal system can absorb perhaps up to 20 % of each shock, this is of limited economic in the case of large ones, given the argument above (losses are convex). However, the US unemployment insurance system provides a useful point of comparison since each State has its own system, only loosely coordinated at the federal level regarding certain key features and requirements. The federal element in unemployment benefits comes into play only during major disturbances, providing states with funding to extend (basically double) the otherwise quite limit benefits paid by most States.

4. Conclusions

The overall conclusion that emerges from these considerations is that in the face of large shocks, a system that offsets all shocks by some small fraction is of limited use. What is really needed is a system that protects against those shocks that are rare, but potentially catastrophic (e.g. loss of access to financial markets). The many minor cyclical shocks that do not impair the functioning of financial markets can then be dealt with via borrowing at the national level.

For this reason, a European reinsurance fund is proposed in the case of unemployment insurance schemes. This European unemployment reinsurance would come into play when a member state faces large shocks affecting substantially its labour market. Against small shocks, the European scheme would not be activated.

Any such scheme would raise a number of important practical issues, such as threshold effects and potentially also moral hazard problems. One could argue that coverage of 100% of costs (above the threshold) might lead to less self-insurance. All of these problems exist of course in the insurance industry as well. At the macroeconomic level, one can argue that the political cost of a deep recession will be large even if transfers from the European level limit the damage to the economy. The incentive to take measures against such shocks (for example, through national macro-prudential measures) should thus remain. A scheme that covers rare events implies a high probability that, ex post, a few countries (those hit by the rare shocks) will have received large transfers, and all those that have not been hit by such a shock during the period of observation will have made a (small) loss.

Finally having a stabilisation capacity through an unemployment reinsurance scheme may be insufficient to effectively counter the shocks affecting the economy. Two possible underlying reasons need further investigation. First, an unemployment shock absorber (Dullien, 2013) may not be equivalent to a fiscal shock absorber (Enderlein et al., 2013) and some risk to the public finances could remain despite the consolidation of the unemployment insurance. Second, the relationship between unemployment – GDP growth (Okun's law) varies greatly across Member States. Little help might be forthcoming if a large shock to economic activity does not translate into high unemployment.

References

- Arrow, K. (1974), "Optimal Insurance and Generalised Deductibles", *Scandinavian Actuarial Journal*, Vol. 1974, No. 1, pp. 1–42.
- Benigno, P.P. and Woodford, M. (2004), "Optimal monetary and fiscal policy: a linear quadratic approach", ECB Working Paper No. 345.

Beblavý, M., Maselli, I. and Gros, D. (2015), "Reinsurance of National Unemployment Benefit Schemes", CEPS Working Document No. 401 January 2015 (<https://www.ceps.eu/publications/reinsurance-national-unemployment-benefit-schemes>).

Blanchard, O. and Fischer, S. (1989), "Lectures on Macroeconomics", Cambridge, MA: MIT Press, Chapter 11.

Dullien, S. (2013), "A Common Unemployment Insurance System for the Euro Area", DIW Economic Bulletin, Vol. 3, No. 1, pp. 9-14.

Enderlein, H., Guttenberg, L. and Spiess, J. (2013), "Making One Size Fit All – Designing a Cyclical Adjustment Insurance Fund for the Eurozone", Notre Europe Policy Paper No.61.

Gollier, C. and Schlesinger, H. (1996), "Arrow's Theorem on the Optimality of Deductibles: A Stochastic Dominance Approach", Economic Theory, Vol. 7, No. 2, pp. 359–363.

Gros, D. (2014), "A fiscal shock absorber for the Eurozone? Lessons from the economics of insurance", VoxEU.org, 19 March.

Mayer, T. (2002), "The Macroeconomic Loss Function: A Critical Note", CESifo Working Paper No. 771, Munich.

Russell, T. (2004), "Catastrophe Insurance and the Demand for Deductibles", manuscript, Santa Clara University Department of Economics.

Van Rompuy, H. (2012), "Towards a Genuine Economic and Monetary Union", Report by the President of the European Council, Brussels, 26 June.

4.3. TWO BIG CHALLENGES IN BUILDING A FISCAL STABILISATION FUNCTION

By Andreja Lenarčič⁷⁹

Abstract: This contribution discusses a proposal to build up a fiscal stabilisation function in the Economic and Monetary Union (EMU) as well as the challenges to avoid permanent fiscal transfers between participants and the "first-come first-served" problem. A fiscal stabilisation function in the euro area could be designed as a common non-mutualised European Rainy Day Fund, drawing on US experience. Such a fund would be based on the saving-loan structure, which would preclude permanent fiscal transfers. In addition, different forms of credit enhancement for such a fund can be contemplated to avoid the first-come first-served trap and keep the firepower of the stabilisation function available also in systemic crises.

1. Introduction

One of the missing pieces in the EMU architecture is a fiscal capacity that would improve the ability of EMU members to withstand severe economic shocks, when these cannot be addressed by a common monetary policy, for example country-specific shocks or an asymmetric propagation of a common shock. Numerous proposals for a common fiscal stabilisation function in the euro area have been developed and discussed by academics and policy makers, yielding a rich set of options. A fiscal stabilisation function could be designed to address large shocks only, acting as insurance⁸⁰, or it could be designed to smooth asymmetries at all points in time, independently of the size of the shock, like some of the proposals for a European unemployment insurance scheme⁸¹.

Here we focus on the type of stabilisation function that addresses large shocks and two important challenges that arise in building such a capacity. The first is to design the fiscal stabilisation function that would preclude permanent transfers. We present a new option that aims at this goal. The second challenge is to establish a borrowing capacity with sufficiently high creditworthiness to back the stabilisation function even in a systemic crisis, or when a couple of larger economies would need support at the same time.

Focusing on a fiscal stabilisation function that addresses large shocks seems warranted from several aspects. First, recent literature suggests that a stabilisation function addressing exclusively large shocks can bring about good stabilising properties with relatively limited resources (see for example Allard et al. (2013), Furceri and Zdzienicka (2013) and Carnot et al. (2017)). Being limited in size, such capacity would not overburden member states' public finances, while at the same time provide support for macroeconomic stability in the euro area. Second, while in a more distant future a genuine European unemployment insurance might be feasible, it would require harmonisation of labour market regulation and unemployment protection arrangements, which could be a lengthy and cumbersome process⁸².

⁷⁹ European Stability Mechanism, e-mail: a.lenarctic@esm.europa.eu. This contribution should not be reported as representing the views of the ESM. The views expressed in this contribution are those of the author and do not necessarily represent those of the ESM or ESM policy. Parts of the contribution are based on an earlier joint work with K. Korhonen. I would also like to thank P. Bizarro, F. Dassyras, N. Giammarioli, Ll. Herrero i Sanchis, G. Olariu, R. Strauch, M. Sušec and E. Vangelista for productive discussions and useful comments. All remaining errors are my own.

⁸⁰ Some examples are Furceri and Zdzienicka (2013), Carnot et al. (2015) and Carnot et al. (2017) that work as general macroeconomic stabilisation funds, and Beblavý et al. (2015) and Brandolini et al. (2015) which develop models that act as a reinsurance of national unemployment benefit schemes.

⁸¹ A non-exhaustive list includes Dullien (2013), Lellouch and Sode (2014), Dolls et al. (2017), which are contributions related to a comprehensive project on European Unemployment Benefit Scheme led by CEPS. For an executive summary of the latter, see Beblavý and Lenaerts (2017).

⁸² A CEPS study analysing different options for European unemployment insurance and reinsurance finds that more harmonisation would be needed for a type of European unemployment insurance that would guarantee some minimal protection, than a type where the European part would just be added to national unemployment benefits. See Beblavý and Lenaerts (2017) for a summary.

Finally, a stabilisation function focusing on large shocks, where all the countries experiencing the shock have access to support, leads to higher fairness than models of stabilisation funds focusing on smoothing out asymmetries in the business cycle. For instance, Enderlein et al. (2012) propose a cyclical shock insurance fund that would provide transfers based on the difference between national output gaps and the euro area average output gap. In case of a euro area-wide recession this could lead to a situation where less affected countries need to pay into the fund, although they also find themselves in the recession (see for example Thirion, 2017).

2. No permanent transfers

As outlined in the Five Presidents Report (Juncker et al., 2015), the stabilisation function should preclude any permanent transfers. The issues of moral hazard and permanent transfers are also recognised in most of the recent literature on the topic. A necessary condition for preventing permanent transfers is to base the rules for disbursements on changes in variables rather than on their levels. With this, the function is by construction limited to cyclical stabilisation. For example, Carnot et al. (2017) show that with a smart calibration of rules for contributions and transfers, one can minimise the amounts that would be owed between participating countries if we look at sufficiently long periods⁸³. However, even if resulting net transfers are small, these could still be unacceptable to several euro area countries.

Additional ways to avoid permanent transfers are to design pay-outs as loans rather than as grants, or to design the fund in a way that would be fiscally neutral over the cycle for each country⁸⁴. Such a design is akin to having a clawback mechanism. The clawbacks have been shown to reduce the stabilisation properties of the schemes, in particular if there is little flexibility with respect to the economic conditions at the time the funds would need to be repaid (Dolls et al., 2014 and Beblavý et al., 2015). A possible solution to this is to make the repayment schedule flexible enough to accommodate prolonged or double-dip recessions or to allow a renewed withdrawal of funds if the rule for drawing would indicate that the country is eligible for another pay-out.

In the rest of this section, we sketch out a proposal for a euro area stabilisation function with a saving-loan structure that excludes permanent transfers *ex ante*.

2.1. A non-mutualised European Rainy Day Fund

Our proposal is inspired by the rainy day funds (RDFs) operated by the US states. The purpose of most US RDFs is to provide stability to the general part of the state budget that is in most cases required to stay balanced, by cushioning the cyclical fluctuations in revenues⁸⁵. The states save a proportion of revenues during periods when these are higher than anticipated and draw on the saved funds during periods when fluctuations reduce tax revenues below expected levels⁸⁶.

Our proposal translates a decentralised system of the RDFs, as implemented in the US, into a stabilisation function that could work in the European setting. The fiscal stabilisation function would operate in the form of a common non-mutualised European Rainy Day Fund (ERDF), composed of national

⁸³ In their model, if looking at a 30-year period, the maximum cumulative net transfer observed was the equivalent of 4.5% of the country's GDP.

⁸⁴ For now we disregard the possibility that a country would default on its obligation with the stabilisation facility, in which case a permanent transfer is unavoidable.

⁸⁵ In 2017, all but three US states operated one or several RDFs. As described by Balassone et al. (2007), the RDF constitutes a part of the state budget that is made up of (1) a general fund, paying out current expenditure, (2) a capital fund, financed separately through debt and motor fuel taxes, paying out infrastructure investments and (3) RDF(s). The balanced-budget requirement usually refers to the general fund and corresponding balance is measured including transfers to and from the RDF.

⁸⁶ Overall, the rules for payments to and withdrawals from the RDFs in the US vary considerably across states and even among different funds in the same state. Some rules are linked to revenues, others to economic performance. The funds also have very different target sizes, whereby generally these should be proportional to the volatility of the revenues.

compartments. In good times, countries would accumulate savings in their compartments. In bad times, they would be entitled to use the savings in their own compartment and to borrow from the rest of the fund.

The ERDF would be built on an intergovernmental basis and administered by a central entity that would monitor, invest funds, and borrow if necessary from the markets. Each member's balance would be made public on a frequent basis to enable market scrutiny and increase confidence among members on compliance issues. While withdrawals would not be subject to ex-post conditionality, the countries participating in the fund would need to comply with a set of ex-ante eligibility criteria. The fund would have the following structure:

First layer = self-insurance

The fund would be composed of national compartments, where countries would accumulate savings following pre-specified automatic rules. These could be linear, where the compartments would be paid into over a certain number of years. Alternatively, they could be symmetric to the rules for pay-outs, and would thus imply paying contributions in good times. Following a large enough trigger event, the countries would be able to draw from their own compartment according to the rule for pay-outs. One option would be to follow a "double condition" rule by Carnot et al. (2017). This rule, based on changes in the unemployment rate, has been shown to trigger contributions and disbursements in a manner that complements national automatic stabilisers in the event of larger shocks. The benefits of such a rule are twofold. First, rules based on the unemployment rate, which is a highly cyclical, harmonised, and little revised variable, are expected to work better than rules based on output gaps, which are subject to measurement problems, or rules based on changes in GDP growth, which are reported with a lag and subject to revisions. Second, since the rule is based on changes rather than on levels, it targets cyclical variation by construction and will not lead to significant net transfers in one direction. As in Carnot et al. (2017), the rule could optionally include also some triggering thresholds.

The fund would have a limited overall target size. Previous literature (Allard et al. (2013), Furceri and Zdzienicka (2013), IMF (2016)) shows that about 1-2.5% of GDP would be sufficient to supplement national countercyclical policies.

Target size for each compartment would be agreed taking into account the overall size of the ERDF and the size and volatility of each economy (for example ESM capital contribution key, corrected for volatility). In principle, the countries would not be prevented from saving more than the target size of their compartment, but the automaticity of the deposit could be relaxed beyond a technical ceiling. Countries would receive some compensation for accumulated savings, financed from interest charged on any loans given by the fund and from the proceeds from investing the funds.

An interesting open question is the statistical treatment of loans and savings in the context of the ERDF. Own savings accumulated in the fund would most likely be considered as assets, while the loans from the fund would be treated as a change in the country's liabilities. Neither would impact budgetary expenditures or revenues. Contributions and disbursements of the stabilisation function with a grant structure would instead impact the budgetary balance and thus provide fiscal space also in the context of fiscal rules.

Second layer = borrowing between the fund's compartments

After consuming their own compartments, countries would have access to limited borrowing from other compartments of the fund at a relatively low cost. The access and the amounts available would be guided by the rule for pay-outs, whereby the amounts would also be capped at x% of the size of their own compartment. The factor of x% would be calibrated based on policy and funding considerations, in particular possible effects on the creditworthiness of the fund.

Countries would need to repay the loan according to rules similar to those for contributions to the fund. The repayment of the loans could therefore take into account economic conditions and relax the negative effects of a clawback⁸⁷. In practical terms, the loan could be set up with a fixed maturity, which would be carefully calibrated to match the average business cycle duration in the euro area. At the same time, there would be mandatory early repayments according to a rule, analogous to the rule for contributions. If the loan were not repaid via early repayments due to a prolonged recession, the country would then be obliged to repay as the loan matures.

Third layer = fund borrowing

In severe recessions affecting a number of countries, the savings in the fund might not suffice to cover all the outlays defined by the rules and the fund would need to borrow.

3. Borrowing of fiscal stabilisation function on the capital markets

The ERDF fund sketched out above faces a similar challenge to many other proposals for a fiscal stabilisation function addressing large shocks, for instance Beblavy et al. (2015) or Carnot et al. (2016). These proposals, including the ERDF proposed here, can in principle work without a borrowing capacity. This would however imply a first-come, first-served problem and a limited stabilisation capacity if several large economies needed to borrow at the same time⁸⁸.

A stabilisation fund with a borrowing capacity can improve its stabilising properties and fairness in country access to the funds. Its size would depend on the precise design of the stabilisation function, calibration of the rules prescribing contributions and disbursements, and during which phase of the business cycle it would be set up. The latter would determine how much could be accumulated in the fund before the first disbursements are made. Depending on the fund's design there could be prolonged periods in which the fund would need to borrow on the markets.

Since ultimately the cost of borrowing would be carried by the countries, it is important to achieve and maintain high creditworthiness of the fund to guarantee reasonable borrowing costs. As the only purpose of the fund's market borrowings would be to bridge one or several countries' financing needs until these funds are recouped, the credit rating of the fund would likely depend upon that of the countries that need to repay the funds. This will necessarily vary in time, and undermine the stability of the rating. Further, in the case of a conservative rating approach, the stabilisation fund's creditworthiness could be aligned with the lowest-rated sovereign expected to repay the loans, as a proxy of the risk of a missed payment. It is unlikely that the rating could be aligned with a weighted average rating of all euro area countries. Note also that borrowing needs would typically arise in bad times, when several countries are hit by the shock at the same time.

In case of a fiscal stabilisation function with a grant structure, where there are no claims but only expectations of future contributions and disbursements, the credit rating would be negatively affected by the uncertainty about which countries will contribute, how much and when precisely they will contribute over the next three to five years, which is the usual time horizon that credit rating agencies use for their assessment. In sum, without credit enhancements that would improve the capacity to repay and guarantee the timeliness of repayments, it is hard to foresee a high stable credit rating for a fiscal stabilisation function.

⁸⁷ Clearly, linear rules for contributions would not respond to economic conditions, while rules based on macroeconomic developments, like the "double condition" rule by Carnot et al. (2017), can deliver flexibility in repayment.

⁸⁸ The only type of proposals that avoid these issues are the models of the stabilisation funds that aim at smoothing differences in the business cycle relative to the euro area average (for example Enderlein et al., 2012).

3.1. Options for credit enhancement

There are several options to enhance the creditworthiness of a stand-alone fiscal stabilisation fund. First, the stabilisation function could benefit from capital support akin to the one backing the ESM. The advantages of this approach are that it provides a strong credit enhancement, that the paid-in capital is treated as equity in national accounts, and that the borrowings of the fund would not be rerouted to the national debt.

Second, the participating countries could issue national guarantees on the borrowing instruments of the stabilisation fund. With some overguarantees, such a structure could provide a strong credit enhancement, as is the case for the EFSF. On the downside, any fund borrowing would be statistically treated as contingent liabilities and would be rerouted to the national public debt. Alternatively, the guarantees could be provided by the ESM or the EU budget.

Third, the fiscal stabilisation function could also issue a covered bond secured by pledging its outstanding loans and future contributions to the fund. This could work under two conditions. First, strong and commonly agreed rules for payment to the fund would be needed. Second, the fund would need to have a saving-loan structure, like the ERDF proposed above, in order to have claims to pledge. Higher rating could be achieved by overcollateralisation. An advantage of this approach would be that if a country defaults on a loan, this would likely be penalised or preceded by the loss of market access, in which case the country would ask for an ESM programme. The ESM would thus indirectly provide additional security for such covered bonds. On the downside, the cost of borrowing would be higher in this case than in the first two options. Further, the underlying would potentially be less well diversified, if only a few countries borrowed. It would also be different for each issuance implying a variation in rating and lower liquidity of resulting covered bonds. Also, earmarked contributions would not be available for stabilisation purposes. Finally, the asset-liability management to match the contributions and repayments of the bond and to redistribute the costs could be quite complex.

Fourth, credit ratings would also be favourable if the stabilisation fund had taxation powers, which would bring the format of the fund closer to a euro area budget. In this case, the stabilisation fund would need to have a dedicated stream of revenues, like the investment budget in Bara et al. (2017), or a rule for contributions as proposed by Furceri and Zdzienicka (2013) that includes yearly contributions and a rate of contribution that could be increased if needed to guarantee the repayment. On the one hand, such a set-up could be more straightforward. On the other hand, it could lead to pro-cyclicality and would in any case require an additional safety cushion, to cover for potential time gaps between repayment of borrowing and collection of increased revenues.

The amounts that the fund could borrow in the cases above would depend on the amount of capital or guarantees provided by the participating countries. If the stabilisation fund issued covered bonds as described above, the amounts would depend on how much overcollateralisation would be needed to support the credit rating. Finally, the amounts the fund could borrow would depend also on the regulatory treatment of the fund's borrowing instruments.

Credit enhancement would reduce the fund's borrowing cost. However, if the fund was an infrequent issuer without a stable investor base, the costs would also include some premium for this and potentially for not having developed a full yield curve. Further, there would also be a premium for low liquidity. Finally, as a new borrower on the market, the fund would need to compete with existing supranational issuers.

The above list shows that it is very difficult if not impossible to build credit enhancements for a standalone stabilisation function without the support of the participating countries. The fund could obtain the funds needed in other ways. It could borrow directly from a credible backstop when needed (e.g., the

EU budget or the ESM). This solution would be welcome because it would avoid parallel structures and most likely lead to significantly lower borrowing costs.

Another option would be to lower the probability of having to borrow at all by starting the fund with a ramp-up period. During this period, the countries would pay into the stabilisation fund, but would not receive any pay-outs. These payments could be in the form of a fixed annual contribution or follow the agreed rules for contributions. Such a transition period would be more attractive in the case of a saving-loan structure, where the assets and liabilities are clearly accounted for. If instead the stabilisation function is based on contributions and grants, the transition period would need to be based on annual contributions, which could be more difficult to agree on.

4. Conclusion

The political task is to design a fiscal stabilisation function that excludes permanent transfers, at least ex ante. The proposed ERDF is an example of such a fund, since the saving-loan structure by construction excludes permanent transfers. Additional advantages include limited borrowing needs, a possibility to have a ramp-up period and cheap borrowing within the stabilisation fund. Higher costs would only apply if the fund needed to borrow on the market, but these could be quite low, provided that there is sufficient credit enhancement in place. It also offers an option of collateralised borrowing. Possible drawbacks include potentially worse stabilisation properties compared to grant type of structures, due to capped payments and withdrawals and the fact that a loan is a clawback mechanism. While in principle a saving-loan structure excludes permanent transfers, these can still arise ex post in an extreme situation where one of the countries fails to repay its loan. Yet this is different from the grant structure, where the countries' net positions are always either positive or negative, even for very long periods of time.

Most of the options for a fiscal stabilisation function proposed in recent literature would benefit from a borrowing capacity. At the same time, it is difficult to imagine a high credit rating for a stand-alone stabilisation fund without the support of participating member states or existing institutions.

In sum, the literature has identified a number of good options for the design of a fiscal stabilisation function, but more work is needed to find suitable solutions that avoid permanent transfers and to establish a borrowing capacity or otherwise solve the issue of funding when the funds collected are insufficient.

5. References

Allard, C., Koeva Brooks, P., Bluedorn, J.C., Bornhorst, F., Ohnsorge, F.L. and Christopherson Puh, K.M. (2013), "Toward A Fiscal Union for the Euro Area", Staff Discussion Notes No. 13/9, September 2013.

Balassone, F., Franco, D. and Zotteri, S. (2007), "Rainy day funds: Can they make a difference in Europe?", *Questioni di Economia e Finanza*. Banca d'Italia. Occasional Paper No. 11, September 2007.

Bara, Y.-E., Castets, L., Ernoult, T., and Zakhartchouk, A. (2017), "A contribution to the work on the strengthening of the euro area", *Trésor-Economics*, No. 190, February 2017.

Beblavý, M., Gros, D. and Maselli, I. (2015), "Reinsurance of National Unemployment Benefit Schemes", *Centre For European Policy Studies*, No. 401. January 2015.

Beblavý, M. and Lenaerts, K. (2017), "Stabilising the European Economic and Monetary Union: What to expect from a common unemployment benefits scheme?", *CEPS Research Report*, No. 2017/02, February 2017.

Brandolini A., Carta, F. and D'Amuri, F. (2015), "A Feasible Unemployment-Based Shock Absorber for the Euro Area", IZA Policy Papers 97, Institute for the Study of Labor (IZA).

Carnot, N., Evans, P., Fatica, S. and Mourre, G. (2015), "Income insurance: a theoretical exercise with empirical application for the euro area", Economic Papers 546, March 2015.

Carnot, N., Kizior, M. and Mourre, G. (2017), "Fiscal stabilisation in the Euro-Area: A simulation exercise", No. 17-025, Working Papers CEB, Universite Libre de Bruxelles.

Dolls, M., Fuest, C., Neumann, D. and Peichl, A. (2017), "A Comparison of Different Alternatives using Micro Data", International Tax and Public Finances, January 2017.

Dullien, S. (2013), "A euro-area wide unemployment insurance as an automatic stabiliser: Who benefits and who pays?", Social Europe, January 2013.

Enderlein, H., Guttenberg, L. and Spiess, J. (2013), "Blueprint for a cyclical shock insurance in the euro area", Jacques Delors Institute, September 2013.

Furceri, D. and Zdzienicka, A. (2013), "The Euro Area Crisis: Need for a Supranational Fiscal Risk Sharing Mechanism?", IMF Working Paper 13/198.

International Monetary Fund (2016), "Euro Area Policies: Staff Report for the 2016 Article IV Consultation—Supplementary Information", IMF Country Report No. 16/219, July 2016.

Juncker, J.-C., Tusk, D., Dijsselbloem, J., Draghi, M. and Schulz, M. (2015), "Completing Europe's Economic and Monetary Union", June 2015.

Lellouch T. and Sode, A. (2014), "An unemployment insurance scheme for the euro area", Tresor-Economics, No. 132, June 2014.

Thirion G. (2017), "European Fiscal Union: Economic rationale and design challenges", CEPS Working Document No 2017/01, January 2017.

4.4. SUMMARY OF DISCUSSION

The last panel concentrated on a euro area fiscal stabilisation capacity and its potential design. Speakers covered different avenues that can be explored when considering implementation of such an instrument. Some advocated a facility that would address large asymmetric but also symmetric shocks, in particular in light of monetary policy possibly being limited by the zero lower bound. The fiscal stabilisation fund would make payments to Member States in bad times and collect contributions in the good times. The need to avoid permanent transfers was widely acknowledged. One solution brought forward was to establish a rainy day fund operating via loans with national compartments and inter-compartmental borrowing to be repaid in the course of a business cycle. Some presentations pointed to the need for a borrowing capacity to ensure continuous operation of a stabilisation capacity. One contribution pointed to the possible need for a credit enhancement option. Another presentation focused on a reinsurance scheme for large shocks, where countries would pay an insurance premium.

In the final discussion session, the importance of avoiding permanent transfers and the reduction of moral hazard was stressed. Some participants questioned the need for a stabilisation capacity, pointing to stabilisation properties of the Stability and Growth and the need for structural reforms to enhance economic resilience. Other participants highlighted that the stabilisation fund would only be used to provide additional fiscal space in the face of large shocks, while the Member State still has access to the markets. Some stressed that if market access was lost, the ESM would need to provide financial assistance.

CLOSING REMARKS

By Jochen Andritzky⁸⁹

This workshop has allowed for a very fruitful debate – academically sound, but still very hands-on. This is exactly what we need at this moment in time. On behalf of the European Commission, the ESM, and the German Council of Economic Experts, I would like to thank all contributors and participants. Given our institutionally very different viewpoints, working with the Commission and the ESM to set up this workshop was an extremely interesting process. We repeatedly had to strike compromises and balance views - Europe needs a lot more of this kind of thing.

On fiscal rules, a key takeaway is that they do have an effect, despite all difficulties in designing them, enforcing them, and averting unintended side effects. My conclusion is that it would be useful to subject them to a thorough review. We need to make them simpler and improve compliance, without, however, calling into question the obvious achievements we have reached together. At the same time, I would like to stress that the rules are not the sole culprit for undesirable fiscal results.

The presentations also showed that fiscal rules on their own are probably not sufficient to safeguard sustainable government finances. As a result, a common fiscal stance is an important consideration, yet coordination could prove difficult and the trade-off between stabilisation and sustainability tricky.

This dovetails with our discussion about fiscal capacity. The workshop showed there are many different ways to look at such an instrument, both in terms of economics and politics. A fiscal capacity would neither magically do away with the EMU's ills, nor would it offer some all round panacea. If you think of a fiscal capacity as an insurance mechanism, bear in mind that it would prove extremely to establish an insurance company for just nineteen policyholders – policyholders who also differ vastly in economic size, strength, and riskiness.

The German Council of Economic Experts finds it important to stress that a fiscal capacity is not the only and definitely not the most essential shock-absorbing mechanism. A comparison with other fiscal unions reveals that shock absorption can work through different channels. Those who believe the euro is doomed given its lack of fiscal capacity I think are overstating the argument for a stabilisation or insurance function.

Putting together what we have heard today, I think we have learned a great deal about different shock absorbers and about the different ways to think about fiscal integration. I hope this will advance the discussion a small step towards finding a common understanding of how to develop EMU.

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