



**BANKA**  
**SLOVENIJE**  
BANK OF SLOVENIA  
EUROSYSTEM

# Rethinking Monetary–Fiscal Policy Coordination

Edited by Boštjan Jazbec and Biswajit Banerjee



Proceedings of a seminar jointly organised by the  
Bank of Slovenia and the International Monetary Fund

# Rethinking Monetary–Fiscal Policy Coordination

---

*Edited by*  
*Boštjan Jazbec and Biswajit Banerjee*

**BANKA**  
**SLOVENIJE**  
BANK OF SLOVENIA  
EUROSYSTEM



Proceedings of a seminar jointly organised by  
the Bank of Slovenia and the International Monetary Fund

© 2017 Bank of Slovenia and International Monetary Fund.

**Disclaimer:** The views expressed in this book are those of the authors and do not necessarily represent the views of either the Bank of Slovenia or the International Monetary Fund (IMF), its Executive Board, or IMF management.

Typesetting and cover design by Anil Shamdasani ([www.shamdasani.co.uk](http://www.shamdasani.co.uk)).

CIP - Kataložni zapis o publikaciji  
Narodna in univerzitetna knjižnica, Ljubljana

336.74(4)(082)(0.034.2)

RETHINKING monetary-fiscal policy coordination [Elektronski vir]:  
proceedings of a seminar jointly organised by the Bank of Slovenia and  
the International Monetary Fund / edited by Boštjan Jazbec and Biswajit  
Banerjee. - El. knjiga. - Ljubljana : Bank of Slovenia, 2017

Način dostopa (URL):

[www.bsi.si/publikacije-in-raziskave.asp?MapaId=2198](http://www.bsi.si/publikacije-in-raziskave.asp?MapaId=2198)

ISBN 978-961-6960-12-0 (pdf)

I. Jazbec, Boštjan  
289822720

Also available at:

[www.bsi.si/publikacije-in-raziskave.asp?MapaId=2198](http://www.bsi.si/publikacije-in-raziskave.asp?MapaId=2198) (page in Slovene)

[www.bsi.si/en/publications.asp?MapaId=1867](http://www.bsi.si/en/publications.asp?MapaId=1867) (page in English)

[www.imf.org/external/np/exr/seminars/index.htm](http://www.imf.org/external/np/exr/seminars/index.htm)

# Table of contents

---

<i>Acknowledgements</i>	<i>iv</i>
<i>List of abbreviations</i>	<i>v</i>
<i>Foreword</i>	<i>vii</i>
<b>Opening remarks</b>	<b>1</b>
Boštjan Jazbec, <i>Governor, Bank of Slovenia</i>	
Giovanni Dell'Ariccia, <i>Deputy Director, Research Department, IMF</i>	
<b>Panel 1: The coordination of monetary and fiscal policy – principles and practical experience</b>	
Summary of Panel 1	9
Presentations by Lead Speaker and Panellists	11
General discussion	31
<b>Panel 2: Fiscal policy implementation in the EU institutional framework and implications for monetary policy</b>	
Summary of Panel 2	41
Presentations by Lead Speaker and Panellists	45
General discussion	76
<b>Panel 3: Conducting monetary policy when fiscal space is limited</b>	
Summary of Panel 3	83
Presentations by Lead Speaker and Panellists	87
General discussion	129
<b>Closing remarks</b>	<b>141</b>
Fabrizio Coricelli, <i>Paris School of Economics and CEPR</i>	
<i>About the speakers</i>	<i>144</i>
<i>About the editors</i>	<i>151</i>

## Acknowledgements

---

First, and foremost, we would like to thank Marija Žiher for her painstaking support in all stages of the preparation of the manuscript. We also thank the following people for their key role in organising the seminar: Polona Flerin, Karmen Juren, Tatjana Brunček and Ksenija Berdnik. Our thanks also go to Anil Shamdasani for overseeing the production of the book.

## List of abbreviations

---

BAMC	Bank Asset Management Company
CBA	Central Bank of Armenia
CDO	collateralised debt obligation
CDS	credit default swap
CEE	Central and Eastern European
CNB	Croatian Central Bank
CSR	country-specific recommendations
CZK	Czech koruna
EB	extended benefits
EC	European Commission
ECB	European Central Bank
ECOFIN	Economic and Financial Affairs Council
EDP	Excessive Deficit Procedure
EFB	European Fiscal Board
EFSF	European Financial Stability Facility
EFW	European Fiscal Watchdog
EMU	European Monetary Union
ESA	European System of National and Regional Accounts
ESCB	European System of Central Banks
ESM	European Stability Mechanism
EU	European Union
EUC	Emergency Unemployment Compensation
FDI	foreign direct investment
Fed	US Federal Reserve
FX	foreign exchange
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
IFI	independent fiscal institution
IMF	International Monetary Fund
LTRO	longer-term refinancing operation
NPL	non-performing loan
OECD	Organisation for Economic Co-operation and Development
OMT	Outright Monetary Transactions
MoF	ministry of finance
MTO	Medium-term objective

NCB	national central bank
SGP	Stability and Growth Pact
QE	quantitative easing
UK	United Kingdom
US	United States
ZLB	zero lower bound

## Foreword

---

In the aftermath of the global financial crisis, policymakers in many countries face considerable challenges in fostering sustained strong growth, price stability and financial stability. In general, economic recovery has been slow and inflation has stayed below accepted definitions of price stability. In response, monetary policy has become increasingly accommodative, relying on unconventional policies, such as large-scale government bond purchases and negative interest rates in some countries. Yet there is broad agreement that there are limits to the scope of monetary policy actions and their effectiveness. Sustainable growth and price stability will require a coherent, integrated policy strategy that also includes contributions from fiscal and structural policies – as well as appropriate policies to contain financial risks.

This book contains the proceedings of the high-level seminar on “Rethinking Monetary–Fiscal Policy Coordination” organised by the Bank of Slovenia and the International Monetary Fund on 19-20 May 2016 in Portorož, Slovenia. The seminar explored the thinking of policymakers and academics on the roles and coordination of monetary and fiscal policies in the European Union and elsewhere. Three main topics were taken up in separate sessions: (i) principles and practical experience in the coordination of monetary and fiscal policies; (ii) fiscal policy implementation in the EU institutional framework and implications for monetary policy; and (iii) conducting monetary policy when fiscal space is limited.

Speakers in the first session underscored that central bank independence is a cornerstone principle of modern economic policymaking. Independence is critical for central bank credibility, which in turn is of paramount importance for transmitting policy impulses to the economy. Independence also implies that monetary–fiscal policy coordination will be achieved with the monetary and fiscal authorities acting independently within their mandates. Participants recognised the potential advantages, in some circumstances, of using fiscal policy to support the demand-stabilising efforts of the central bank – but also emphasised associated practical risks.

Participants in the second session noted that the EU’s fiscal policy framework aims to ensure that no individual member state runs excessive deficits or builds up excessive debts. The increase in public debt experienced by many European countries after the global financial crisis – brought on both by the

deep recessions and the need to support their banking systems – constrains fiscal policy’s ability to assist in output stabilisation. That said, countries with fiscal space are well advised to use it as needed to assist monetary policy in closing the negative output gaps and raising potential growth. And even in countries without fiscal space, fiscal policy can still support growth by reducing distortionary taxes and unproductive or poorly targeted expenditure while increasing productive investment.

Finally, the last seminar session explored the challenges of conducting monetary policy when fiscal space is limited, and the special difficulties in the European context. Monetary policy has to fulfil its price stability mandate, keeping inflation close to target. With interest rates near zero, the substantial use of unconventional monetary measures to stimulate domestic demand has been appropriate. With such demand support, output gaps in Europe are gradually closing. To raise growth further, structural policies that raise investment, labour force participation and productivity need to pick up the torch.

We are grateful to Biswajit Banerjee for taking primary responsibility for editing the proceedings of the seminar. Our thanks also go to Marija Žiher for providing invaluable support in the preparation of the manuscript, to Anil Shamdasani for excellent and swift handling of its production, as well as to everyone who helped to make the seminar a success, in particular, Polona Flerin.

**Tobias Adrian**

*Financial Counsellor & Director  
Monetary and Capital Markets Department  
International Monetary Fund*

**Boštjan Jazbec**

*Governor  
Bank of Slovenia*

## Opening remarks

---

*Boštjan Jazbec, Governor, Bank of Slovenia*

It is a great pleasure to welcome you all to the high-level seminar on “Rethinking Monetary–Fiscal Policy Coordination” organised jointly by the Bank of Slovenia and the International Monetary Fund. It is a great honour to have a very distinguished gathering of central bank governors, senior officials of governments and international institutions, leading academics and practitioners to discuss a very critical issue that occupies the minds of policymakers in the euro area and elsewhere.

The objective of the seminar is to explore current thinking on the roles and coordination of monetary and fiscal policies. The presentations and discussion will focus on three main themes: (i) the principles and practical experience in the coordination of monetary and fiscal policies; (ii) fiscal policy implementation in the EU institutional framework and implications for monetary policy; and (iii) conducting monetary policy when fiscal space is limited. I will now briefly touch on these themes in general terms.

Policymakers in the euro area face considerable challenges in fostering sustained strong growth, price stability and financial stability. Following the onset of the global financial crisis, economic recovery has been slow and growth remains lacklustre. Inflation is much below the medium-term objective of lower than, but close to 2%. For some time now, inflation has been continually weaker than expected and market-based measures of inflation expectations stand at historical lows. Therefore, monetary policy has become increasingly accommodative, relying on several non-standard measures and negative interest rate policy.

There is broad agreement that in the current setting there are limits to the scope of monetary policy actions and their effectiveness for lifting the euro area economy. Concerns are mounting that the outlook may be one of a prolonged period of low inflation and low interest rates, which can adversely affect both the real and financial sectors. Therefore, many of us have emphasised on numerous occasions that “monetary policy cannot be the only game in town”. Strong sustainable growth, price stability and financial stability will require a coherent, integrated policy strategy that also includes fiscal and structural policies.

## 2 Rethinking Monetary–Fiscal Policy Coordination

The message on the importance of fiscal policy supporting monetary policy is founded on historical precedence. In 1936, prescribing the way out of the Great Depression, Keynes wrote:

*“It seems unlikely that the influence of [monetary] policy on the rate of interest will be sufficient by itself. I conceive, therefore, that a somewhat comprehensive socialization of investment will prove the only means of securing an approximation to full employment.”*<sup>1</sup>

These words are very relevant at the current juncture as well.

The ECB has emphasised that fiscal policies should support the economic recovery while remaining in full compliance with the EU’s fiscal rules. Otherwise, credibility in the fiscal framework cannot be maintained. A critical question, therefore, is whether the prevailing rules could be barriers to achieving the desired coordination of monetary and fiscal policies.

There are two key prerequisites for obtaining effective fiscal support to monetary policy within the Stability and Growth Pact rules. Governments must have adequate fiscal space, and fiscal policy must ensure the sustainability of public finances. In both respects, there appears to be little room for a meaningful fiscal expansion within the existing rules. There is broad agreement that the fiscal framework has failed to ensure long-term sustainability while avoiding procyclical fiscal behaviour. Countries did not build up sufficient fiscal space during the pre-crisis expansionary period, and fiscal space narrowed following the onset of the financial crisis. Public debt increased sharply during the crisis years and the policy focus turned to an austerity mode when market pressures heightened. Most of the euro area countries still face long-term fiscal sustainability issues and are expected to keep their fiscal consolidation efforts, in terms of the cyclically adjusted deficit, ongoing. In 2016, only four countries – namely, Germany, Luxembourg, Cyprus and Estonia – have fiscal space for additional discretionary measures according to the Stability and Growth Pact rules.

What then is the way forward? It has been emphasised on many occasions that for countries without fiscal space, fiscal policy can still support demand by altering the composition of the budget. In particular, it has been pointed out that consideration should be given to cutting distortionary taxes and unproductive expenditure and to increasing investments that improve total factor productivity over the medium term. Investment and structural reforms that increase the growth potential of the economy create fiscal space by raising future government revenues. It should be noted that some of these measures

<sup>1</sup> Keynes, J.M. (1936), *The General Theory of Employment, Interest and Money*, London: Macmillan & Co., Chapter 24.

will require political resolve and social support, as they are likely to affect social entitlements. Some analysts have remarked that these measures will not have much impact in the short term.

Should there be a rethinking of the monetary policy framework? In a recent blog in April 2016, former Chairman of the Federal Reserve, Ben Bernanke, argued that:

*“under certain extreme circumstances - [such as] sharply deficient aggregate demand, exhausted monetary policy, and unwillingness of [fiscal authorities] to use debt-financed fiscal policies - [money-financed fiscal programs, colloquially known as helicopter drops] may be the best available alternative” and that “it would be premature to rule them out”.*<sup>2</sup>

Earlier in this vein, in 2003, Bernanke had recommended that Japan fight deflation through an expansionary fiscal policy financed by permanent purchases of government debt by the central bank. The *permanency* of central bank purchases of public debt rules out that the new debt will ever be placed on the market, thereby eliminating Ricardian equivalence effects and preventing new public debt accumulation.

However, an essential aspect of money-financed fiscal programmes is that they involve revocation or suspension of central bank independence. Precisely for this reason, and because governance of money-financed fiscal programmes is inherently difficult (since it creates perverse incentives for legislators to facilitate tax cuts or spending when such actions no longer make macroeconomic sense), this option is not something that central banks in general are discussing or even considering.

In the euro area, the principle of central bank independence is one of the cornerstones of the economic policy constitution enshrined in the Maastricht Treaty. A fundamental expectation is that monetary–fiscal policy coordination will be achieved with different institutions acting independently within their mandates. To preserve this framework, the focus should be on improving the governance structure so as to ensure that the euro area does not gradually slide into a regime of fiscal dominance. Within the constraint of its given mandate, the ECB has moved towards improving the policy mix through the expansion of its balance sheet aimed at stimulating economic activity.

It is my sincere hope that the seminar will provide a useful springboard for moving forward with bolder policy actions and reforms that will help put the euro area on a path of strong sustained growth and price stability.

2 [www.brookings.edu/blog/ben-bernanke/2016/04/11/what-tools-does-the-fed-have-left-part-3-helicopter-money/](http://www.brookings.edu/blog/ben-bernanke/2016/04/11/what-tools-does-the-fed-have-left-part-3-helicopter-money/).

**Giovanni Dell’Ariccia**, *Deputy Director, Research Department, International Monetary Fund*<sup>3</sup>

Let me start by thanking Governor Jazbec and the Bank of Slovenia for their hospitality. Let me also welcome you all on behalf of the IMF’s side of the organising committee. It is a pleasure and a privilege to be at this high-level seminar with so many distinguished participants.

I would like to discuss three inter-related issues that I am sure will be addressed in much greater detail in the seminar sessions today and tomorrow. My aim is more to ask questions than to provide answers, as I feel there are many in this room far more qualified than me to provide the latter.

The first issue is central bank independence and how it came to be. I will discuss in general terms the idea that monetary policy can and should be delegated to a separate agency protected from short-term political pressures, and that it should be set independently from the fiscal stance.

The second issue is how the post-crisis experience has challenged this model. In particular, I will touch upon how the need to deviate from the pre-crisis consensus model has reignited pressures on central banks and potentially led to threats to their independence.

Finally, I would like to reflect on the potential role for coordination between fiscal and monetary policy when there is limited fiscal space and conditions are close to a liquidity trap. In that context, I will briefly discuss “helicopter money”, on which I think my views are in line with those of Governor Jazbec.

### **The pre-crisis consensus and central bank independence**

During the 25 or so years before the crisis, we thought of monetary policy as having one target (namely, inflation) and one instrument (namely, the policy rate). As long as inflation was stable, the output gap was likely to be small and stable and monetary policy did its job. We thought of fiscal policy as playing a secondary countercyclical role, with political-economy constraints sharply limiting its usefulness. This is a bit of a caricature, but not too far from the consensus view prevailing at the time.

Looking at it in more detail, monetary policy had a simple mandate: price stability. Stable and low inflation was presented as the primary, if not exclusive, target of central banks (sometimes with output or unemployment as a secondary

3 The views in this presentation are those of the author and do not necessarily represent those of the IMF, its management, or its Executive Board.

target). This was the result of a coincidence between the reputational need of central bankers to focus on inflation rather than activity and their desire, at the time, to decrease inflation from the high levels of the 1970s.

This view also was rooted in a strong intellectual framework. First, there was a well-understood time inconsistency for fiscal authorities with the temptation to inflate public debt away, as in the Barro-Gordon model.<sup>4</sup> Second, in the New Keynesian models, typically characterised by nominal rigidities as the only frictions, a *divine coincidence* emerged (as Olivier Blanchard and Jordi Gali called it)<sup>5</sup> – the best monetary policy can do when facing demand shocks is to maintain inflation stable. In practice, this also meant low. This would automatically guarantee the lowest output gap, or the same level of activity that would prevail in the absence of nominal rigidities.

Since we had a measurable target – the inflation rate – the central bank could be easily held accountable for its actions while at the same time it could be vindicated against undue criticism. For instance, the central bank could show after a tightening that the inflation rate was right below the target. Thus, it could more easily resist *ex ante* pressures to keep monetary policy on an excessively easy stance.

There was also another simplification: a mono-dimensional and observable instrument – the policy rate. This simplification relied on two assumptions. First, what mattered were prices and interest rates and not the underlying monetary aggregates or liquidity. Second, well-functioning financial markets would transmit the monetary stimulus across the economy. So, all one needed to do was to move the policy rate and the entire economy would adjust accordingly. This also meant that the separation from the fiscal authorities could be strengthened through explicit limits on central bank action, such as no monetary financing of the deficit.

To summarise, the pre-crisis consensus framework allowed transparency, accountability and limits on central bank actions. This led to the delegation of monetary policy, which became the primary macroeconomic countercyclical lever, to a politically acceptable non-elected agency. This was the foundation of the operational independence of central banks.

4 Barro, R.J. and Gordon, D.B. (1983), “A Positive Theory of Monetary Policy in a National-Rate Model”, *Journal of Political Economy* 91(4): 589–650.

5 Blanchard, O. and Gali, J. (2007), “Real Wage Rigidities and the New Keynesian Model”, *Journal of Money, Credit and Banking* 39(S1): 35–65.

In contrast, fiscal policy had a much more limited role from the cyclical point of view. This was very different from earlier decades in which fiscal policy was the centre of macroeconomic policy (for instance, as Governor Jazbec mentioned, in the wake of the Great Depression).

There were several reasons for this limited role of fiscal policy. First, there was widespread scepticism about the effects of fiscal policy, mostly based on Ricardian equivalence arguments. This was combined with a sense that the leads and lags associated with the effects of changes in the fiscal stance were too long and poorly understood for fiscal policy to be an effective countercyclical tool. Second, since monetary policy could maintain a small and stable output gap, there was little reason to use another instrument. Third, in several countries, the priority was to stabilise and possibly decrease typically high levels of debt. Finally, fiscal policy was seen as highly exposed to risks of political interference.

Overall, at least until the global financial crisis, this macroeconomic policy setup was seen as a highly successful model. It was often credited for the Great Moderation and explains the prevalence of inflation-targeting frameworks across advanced economies and, increasingly, in emerging market countries.

### **Post-crisis needs led to new (yet old) mandates and new instruments**

With the onset of the financial crisis, this model was challenged. Central banks had to do things that were very different from what they had been doing in the previous 25 years (but not *that* different when judged with a longer history in mind). For example, they provided liquidity to a variety of agents – not only deposit-taking institutions but also other intermediaries, such as money market funds and insurance companies. They supported liquidity conditions in several asset markets and re-established and repaired broken arbitrage conditions. They also bought massive amounts of sovereign bonds.

These actions were necessary. They were justifiable both from a global welfare point of view and under long-term inflation targeting (the so-called flexible IT framework), but they were dramatic deviations from what one was used to seeing central banks do. More generally, the realisation that a low and stable inflation rate was a necessary but not a sufficient condition for macroeconomic stability led to a re-evaluation of the pre-crisis framework.

If central banks at times needed to do things that were much less transparent and much less measurable than changes in the policy rate, the political-economy and governance conditions that had allowed for delegation became

subject to discussion as well. This does not mean that we should reconsider central bank independence, but it explains why central banks have seen an increase in political pressure in so many countries.

Let me give an example. Think about macroprudential policy. Imagine that either the central bank or whatever specialised agency in charge of it decides to tighten loan-to-value ratios because it sees leverage growing and is concerned about a potential crisis. If no crisis materialises in the following year, all the critics are going to say: “See, you were paranoid. There were no reasons to tighten loan-to-value ratios. There is no problem. There is no financial instability.” Of course, it may be that the crisis did not materialise exactly because the central bank or the macroprudential agency acted. But, the counterfactual is not observable and it is difficult, if not impossible, to convince critics that a crisis outcome would have been the state of the world in the case of inaction.

This is very different from what happens with inflation. In this case, the central bank could go out and say: “See, the inflation rate is at 1.9% and, if we hadn’t tightened, we would be above target.” This vindicates the tough choice *ex ante*. Once we deviate from a simple price stability target, we have much murkier, less measureable and less observable mandates. Things are much more difficult to defend and, hence, there are more pressures on the central bank to act one way or another.

This brings me to my next point: how monetary policy has to act sometimes in support of the fiscal position of a country, and how this again may muddy the mandate. As an example, consider the situation in Italy or Spain in 2009, 2012 and 2014. From the fiscal sustainability point of view, the fundamentals of these countries cannot explain the wild swings in sovereign spreads. Instead, this can be ascribed to something akin to a Diamond–Dybvig-type bank run.<sup>6</sup> There is a liquidity component to stability in countries that are in a certain range of the debt-to-GDP ratio, and this component needs to be addressed. So, what is the role of monetary policy in this context? How can the central bank help in steering markets away from the bad equilibrium towards the good one?

In that context, President Draghi’s “whatever it takes” speech<sup>7</sup> played the role that deposit insurance plays in banking models. Essentially, Mr. Draghi was saying that the ECB was going to do whatever was needed in order to keep the euro together against the liquidity crisis. In doing so, the ECB averted the liquidity crisis altogether. Of course, it is difficult to distinguish liquidity from

6 Diamond, D.W. and Dybvig, P.H. (1983), “Bank Runs, Deposit Insurance, and Liquidity”, *Journal of Political Economy* 91(3): 401–419.

7 [www.ecb.europa.eu/press/key/date/2012/html/sp120726.en.html](http://www.ecb.europa.eu/press/key/date/2012/html/sp120726.en.html).

solvency. This raises the question of what kind of governance framework one should have to ensure that the necessary fiscal incentives are in place, once the central bank plays the role of liquidity provider of last resort on sovereign markets.

Finally, I would like to touch very briefly on so-called helicopter money. I completely share Governor Jazbec's view that the idea of helicopter money is a valid one in a model where central bank credibility is not under threat. It removes public debt from the market. Since the debt will never have to be repaid, it is more effective than other forms of fiscal financing under a Ricardian equivalence framework. However, there is a significant danger of throwing the baby out with the bathwater. The baby here is the degree of central bank credibility that we have achieved over the past 30 years. To a large extent, this credibility is the result of the governance framework for monetary policy and central bank independence adopted in the three decades before the global financial crisis.

I would argue that central bank credibility has been of paramount importance even after the crisis. It has been probably the main factor behind the lack of severe deflationary episodes. We have had very low inflation, but we have not seen major deflationary episodes after the crisis. Given the magnitude of economic contraction that we have witnessed in some countries, that is what I think any economist would have expected to happen. So, the question is how much would helicopter money buy you relative to a Nash equilibrium between the central bank and the fiscal authorities. In that model, the fiscal authorities would provide stimulus and the central bank, in its independence, would decide to set interest rates where it believed they should be, based on its mandate. This is essentially the current framework in most countries and is one that is best equipped to preserve central bank credibility. In terms of effectiveness, the difference is that hyper-Ricardian consumers would see the debt held at the central bank in the same fashion as debt held by the private sector. But we know (for example, from the experience of Japan) that markets do not look at the two in the same way. So, the benefits of helicopter money are likely to be very small and the potential costs in terms of governance may be very large.

I wish all of us a wonderful conference.

## **Panel 1**

### The coordination of monetary and fiscal policy – principles and practical experience

---

#### **Chair**

Nikolay Gueorguiev, *Unit Chief, International Monetary Fund*

#### **Lead Speaker**

Steven Phillips, *Advisor, International Monetary Fund*

#### **Panellists**

Jan Smets, *Governor, National Bank of Belgium*

Lars Rohde, *Governor, Danmarks Nationalbank*

Dimitar Bogov, *Governor, National Bank of the Republic of Macedonia*

Nerses Yeritsyan, *Deputy Chairman, Central Bank of Armenia*

## **Summary of Panel 1**

### ***Nikolay Gueorguiev***

The lead speaker, Steven Phillips, recalled the general evolution of thinking of policymakers on monetary policy and fiscal coordination over the past 50-60 years. During the Bretton Woods exchange rate system, it was generally accepted that monetary and fiscal policies would work together, and that fiscal policy had an important role to play in stabilising output. The idea of monetary policy being capable of, and sufficient for, handling stabilisation of output as well as inflation came to prominence later in the 1990s and 2000s. This was combined with the view, held by many, that fiscal policy efforts should focus on avoiding excesses and ensuring sustainability – in other words, steering clear of “fiscal dominance”. This thinking led to more independence for central banks and more constraints (e.g., rules) for fiscal policy. Today, post-global financial crisis, monetary policy’s room for manoeuvre and effectiveness are diminished, while fiscal policy is constrained by previously introduced fiscal rules and by a lack of fiscal space, real or perceived. This situation has raised several questions and debates:

- Should we now be more concerned about risks of fiscal dominance, or about insufficient fiscal policy contribution to output and inflation stabilisation? How do we find the right balance? If the risk of fiscal dominance is really a problem, is there a way that we can address it more efficiently than with rules that are overly simplistic?
- With monetary policy engaged to the limit, exchange rate moves may be large. While the overall net effect of a monetary easing on the output of a country's trading partners is likely to be positive, spillovers through exchange rate channels may cause certain strains. Is this problematic? If so, is this an argument for also using fiscal easing, rather than just monetary easing, when countercyclical policy is needed?

The panellists noted that the EU policy architecture envisaged that monetary and fiscal policies would pursue their assigned objectives without explicit coordination. In the current environment, however, most saw a need for fiscal policy coordination between the euro area member states to ensure that the desirable euro area fiscal stance is in place. They noted that small open economies usually followed the monetary policies of their main trading partners, irrespective of their formal monetary/exchange rate framework; thus, fiscal policy was their only instrument for smoothing cyclical fluctuations in output. The panellists emphasised, however, that a strong overall financial position of the government was a prerequisite for a countercyclical fiscal stance in a downturn, as it allowed fiscal easing without harming public debt sustainability and the sovereign's access to financing. They also warned of the risk of using monetary and fiscal policies in order to avoid necessary policy adjustments or structural reforms that would raise productivity and growth.

During the subsequent discussion, the audience touched upon several issues: (i) Can we devise fiscal instruments that would have the same effect on the domestic economy as monetary policy easing? (ii) Fiscal policy easing may be necessary now, but how can we make it sustainable and avoid the issue of fiscal dominance returning? (iii) What constraint does high public debt impose on stabilisation policies? (iv) What is the efficiency of monetary policy at present in terms of monetary transmission? (v) What are the benefits and costs of quantitative easing (QE), including for the financial sector as low interest rates adversely affect banks and insurance companies?

The panellists' responses included the following:

- i. Fiscal discipline strengthens economic confidence. Moreover, a rebalancing of tax away from direct income taxes towards less distortionary taxes can be beneficial for growth and job creation. In addition, targeted long-term investments in infrastructure financed by very low interest rates can support domestic demand and raise productivity.
- ii. At present, the search seems to be for mechanisms to commit fiscal policy to medium-term solvency while allowing short-term flexibility so that it can also contribute to macroeconomic stabilisation.
- iii. High public debt does constrain the ability of fiscal policy to provide stimulus, and there is no easy way to reduce debt quickly. In any case, debt reduction will require a significant structural reduction of fiscal spending, the success of which depends on the population's willingness to bear sacrifices.
- iv. On the effectiveness of monetary policy, the European Central Bank (ECB) facilitated credit expansion by improving borrowing conditions for companies and households, which resulted in stronger growth and higher inflation than otherwise.
- v. Regarding the impact of QE on financial stability, low interest rates cause difficulties for banks, insurance companies and pension funds. However, if monetary policy were to fail to achieve price stability and allow the economy to go into a prolonged period of deflation and stagnation, the financial system would suffer even more, as long-term yields would remain low for a very long time.

## **Presentations by Lead Speaker and panellists**

### ***Lead Speaker: Steven Phillips***

It is a pleasure to be here today, to engage with this distinguished panel of policymakers and experts on the topic of rethinking monetary and fiscal policy coordination.

Let me start with a quick outline of my remarks. I begin with the idea that for us to “rethink”, it is useful to first recall the history of thought and its inspirations. After reviewing the main thinking of the past 50 years or so, I will turn to two areas to talk about in more depth. One area is the problem of conducting monetary policy in a context of concerns about fiscal policy

excesses. The second area looks at some open economy aspects of monetary and fiscal policy coordination, particularly exchange rate implications. Finally, I will suggest a few issues that panel members may want to discuss.

To begin a stylised history of thinking on monetary and fiscal policy roles and coordination, let us go back to the 1950s and 1960s, when the Bretton Woods exchange rate system was in place. At that time, it was generally accepted that both monetary and fiscal policies were available tools to be put to work on the goal of stabilising the economy. Why was this accepted? One reason, perhaps, is that in those days there was not so much concern about policy excesses or policy mistakes – the skill, benevolence and credibility of policymakers were taken for granted. In addition, when the Bretton Woods system of fixed exchange rates was serving as a nominal anchor on the price level, it constrained monetary policy’s room for manoeuvre. So, there was not a sense that monetary policy was fully capable and unlikely ever to need help from fiscal policy. Since both monetary and fiscal policy tools could influence demand, why not use both, in a coordinated manner?

A very different thinking had emerged by the 1990s and continued into the 2000s. By then, a combination of factors had led many to favour a specialisation of monetary and fiscal policy roles and efforts to separate and also constrain both policies. One factor was that many more countries had flexible exchange rates following the end of the Bretton Woods system. This made monetary policy more capable, as it had more freedom. There was a view among many economists that monetary policy instruments were sufficient for demand management goals, without need for help from a less agile, slow-to-move fiscal policy. Also, there was a growing belief in the “divine coincidence” of output and inflation stabilisation goals.

Moreover, there was more concern that monetary and fiscal policies could go very wrong, for example, if policymakers yielded to inappropriate pressures. Most notably for our purposes, there was a fear of fiscal policy excesses, even to the point of “fiscal dominance”. There also was a concern that without clear policy mandates and accountability, the risks of policy excesses would be high.

Such risks were not just possibilities; they sometimes had materialised. There were cases where one could look back and say that inflation had become high, and judge that fiscal policy excess and monetary policy accommodation of this excess were to blame. However, I should note that not all experiences of excessive inflation can be attributed to slippage in fiscal discipline.

Three other developments likely contributed to concerns about policy excesses. First, the expanding size of the public sector in many economies gave rise to greater potential tensions between deficit financing and price stability.

Second, the deregulation of domestic financial systems (the end of the so-called financial repression) made it less easy for a government to fund its deficit from the private sector, and correspondingly made financing from the central bank more attractive. Third, an opening of the external capital accounts provided governments with a new source of deficit financing – but not on an unlimited basis. When a government deficit is financed externally, there is risk of a sudden stop, and even a reversal, of net external financing. So, a new concern was that the new availability of external financing would facilitate fiscal indiscipline for a while only to later end in an external financing crisis, a crash in output and perhaps an inflation–depreciation spiral.

Thus, there were plenty of worries, especially about fiscal policy excesses. The worries were not only about inflation but also about large current account deficits and financial instability and crises, not to mention crowding-out of private-sector investment and limiting potential growth. Faced with all these concerns, one might conclude that the single most important job of fiscal policy from a macroeconomic perspective was not to make things right, but to avoid doing harm.

Such concerns fuelled policy and institutional changes that allowed less discretion for fiscal policy, with fiscal rules and constraints on public debt and deficits, and in some cases limits on direct central bank credit to government. We also saw important moves to clarify responsibilities and accountability of central banks, together with more independence for central banks and freedom to act within their mandate – the so-called constrained discretion of inflation targeting. All these changes seemed logical steps to address the diagnoses that had motivated them.

But, then came the global financial crisis. The crisis led to rethinking on many fronts, including a rethinking of macro policy roles, as it gave rise to some special circumstances and problems for monetary and fiscal policy. Monetary policy found its room for manoeuvre reduced and its effectiveness diminished. It was hampered by the zero lower bound problem, and by the problem of damaged balance sheets reducing the transmission of monetary policy. Then there was a concern that keeping interest rates “low for long”, while it might have a desirable stimulating effect in the short run, would lead to excessive risk taking and eventually to a crash and a worse outcome. In addition, for some countries, deploying their own monetary policy had ceased to be an option, as they no longer had their own currency or had chosen to adopt a currency board.

Meanwhile, the potential for fiscal policy to play a supportive role also diminished, as it was constrained in many cases by previously established fiscal rules and/or by a lack of fiscal space. By the latter, I mean either policymakers' own judgement that remaining fiscal space was negligible, or a judgement by financial markets that government debt had become very risky.

Thus, we have had both monetary and fiscal policy being constrained and, with their effectiveness diminished, a recovery from the Great Recession that has been weaker than it would have been otherwise. This raises the question of whether the constraints on monetary and fiscal policy in the aftermath of the global financial crisis could, and should, be relieved in some way, or whether that would be too risky.

I want to focus on the question of the role of fiscal policy when monetary policy is constrained. In the current context, should we be more worried about an easing of fiscal policy causing harm, or should we be more worried about fiscal policy not making a greater countercyclical effort?

Many debates about monetary and fiscal policy coordination and interaction come down to differing judgements of the seriousness of the risk of fiscal dominance or of a sudden loss of confidence in public finances. Surely, we can all agree with the principle that sound, sustainable public finances are essential – a necessary, though not a sufficient, condition for stability and economic welfare. The problem is that the concepts of public sector solvency, sound finances and fiscal space are difficult to pin down in operational terms. We know that there must exist limits on fiscal deficit financing, but we do not know the precise limits. So, it is a matter of judging the distribution of risks and how close we are to a danger zone.

At times, financial markets seem to clarify the matter for us by stopping financing the deficit or financing it only at very high interest rates. However, we cannot count on markets to give us an early warning or to provide disciplinary pressure. Too often, it seems that markets do not provide pressure and then suddenly provide too much pressure, in a panic that is self-fulfilling. Considering that markets are prone to sudden switches, one may argue that a government should be extra careful to ensure it will not lose the confidence of markets. But, how careful? One may also argue that during a panic, central banks should step in and support government debt, though some will worry that this undermines incentives for fiscal discipline. Similarly, regarding quantitative monetary easing that involves the purchase of government debt, even if that policy is chosen by an independent central bank and is motivated only by

its pursuit of its inflation target, such purchases have the appearance of the central bank doing a favour for the government. To some, this brings the risk that such generosity undermines incentives for fiscal discipline.

As I have emphasised, the difficulty is that reasonable people can come to very different operational judgements on how policies should proceed because the true distribution of policy risks is not known, and we perceive risks differently. In that light, we must ask what more could be done to make the picture of fiscal solvency clear, and thus to avoid sudden deteriorations in market perceptions and jumps in the risk premium on public debt. We have to think hard about possible commitment devices that would credibly ensure the state of future public finances without excessively constraining fiscal policy in special circumstances.

Perhaps we can find ways to appropriately constrain monetary and fiscal policies, but at the same time let them have the room to ease at the right time without their action being misunderstood and triggering an unnecessary loss of confidence. That doesn't mean abandoning fiscal rules, but it may mean making them more complex – letting them give exceptions, say, when inflation is very much below target, when there is deflation, when there is a sizeable negative output gap or when the forecast from an independent, credible central bank is for a persistent negative output gap and deflation. Of course, more complex fiscal rules could open up new areas for scepticism about their application (think, for example, of disagreements about the output gap and rate of growth of potential output).

Let me touch briefly on two exchange rate aspects of monetary–fiscal policy coordination and easing that are especially relevant now. One is that with diminished transmission of monetary policy through domestic channels, an absence of stimulating help from fiscal policy means more monetary easing, a lower interest rate for a longer period of time, and so a larger effect on the exchange rate. Such currency effects are a normal part of how monetary policy works, but there is a question of how far they should go. Taking an international perspective, a policy mix in one country that leads to more currency depreciation than would some alternative mix may be a sensitive issue if it diverts demand from other countries that may also have negative output gaps. A similar sensitive issue arises when, in the pursuit of easing, monetary policy takes the form of a central bank purchasing the debt of another country's government. This can be perceived as a form of foreign exchange market intervention, as it has a larger exchange rate effect than other forms of monetary easing. Again, if fiscal policy stimulus is not available, we will see greater monetary easing effort and large exchange rate effects. That

may be an acceptable outcome (particularly if other economies are able to use their own monetary policy to offset spillover effects), or it may lead us to reconsider the constraints we have chosen to place on fiscal easing.

In closing, I admit that I have raised many questions without providing concrete answers. Let me suggest several questions that the panellists might wish to take up. First, do we agree that concerns over fiscal dominance and credibility of public finances are a key issue in monetary–fiscal policy coordination debates? If such concerns are not overstated, are there ways that we could address them more efficiently than under current rules? Second, do we think that monetary policy spillovers to the exchange rate are very problematic? If so, is this a reason to use fiscal policy easing more to take some of the burden off monetary policy? Finally, on a subject I did not touch on – namely, the stability of an economy’s financial system – do the lessons from the global financial crisis have implications for monetary–fiscal policy coordination?

### ***Panellist 1: Jan Smets***

I am honoured to participate in this seminar and want to thank the Bank of Slovenia, the International Monetary Fund and, in particular, Governor Jazbec for having invited me.

When preparing my remarks, I also strolled through the literature on monetary and fiscal coordination, focusing on what it has to say about coordination in a monetary union. In contrast to Steven Phillips, I only went back as far as 1999 where a paper by Chris Sims, the 2011 Nobel Laureate in Economics, drew my attention.<sup>1</sup> Back then, Sims was already flagging the institutional gaps in the design of EMU threatening the union’s long-term success. The title of the paper is telling: “The precarious fiscal foundations of EMU”.

Sims derived his insights from a theoretical framework<sup>2</sup> which explicitly incorporates monetary–fiscal interactions. This framework deviated from the economic paradigm of the 1990s, which prescribed a strict separation between fiscal and monetary policy. This was prompted by the belief that the

1 Sims, C.A. (1999), “The Precarious Fiscal Foundations of EMU”, *De Economist* 147(4): 415-436.

2 This unconventional perspective is labelled “the fiscal theory (or more descriptively, the real theory) of the price level”. This theory grew out of the following work: Leeper, E.M. (1991), “Equilibria under ‘Active’ and ‘Passive’ Monetary and Fiscal Policies”, *Journal of Monetary Economics* 27(1), 129-147; Sims, C.A. (1994), “A Simple Model for Study of the Determination of the Price Level and the Interaction of Monetary and Fiscal Policy”, *Economic Theory* 4(3): 381-399; Woodford, M. (1995), “Price-Level Determinacy without Control of a Monetary Aggregate”, *Carnegie Rochester Conference Series on Public Policy* 43: 1-46; and Cochrane, J.H. (1998), “A Frictionless View of U.S. Inflation”, *NBER Macroeconomics Annual* 13: 323-384.

main interaction between the two policy domains was in the form of attempts by the fiscal authority to get the central bank to finance government debt. A belief that is still widely present today, but that needs nuancing.

This conventional view inspired the institutional set-up of the euro area whereby an independent central bank at the union level focuses primarily on price stability for the area as a whole, while national fiscal policies ensure sound public finances in each country. Each authority alone should take care of its assigned objective, without relying on or needing a helping hand from the other. In order to constrain fiscal free-riding incentives that arise in a monetary union, disciplining fiscal rules were even put into law. They entail the prohibition of monetary financing of public debt, a no-bailout clause and deficit and debt rules.<sup>3</sup> EMU architects thus put everything to work to ensure a maximum degree of monetary dominance.

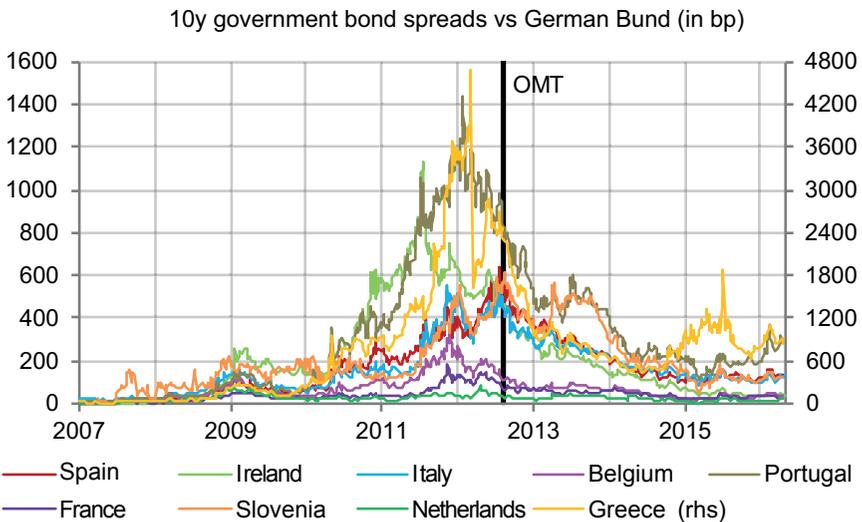
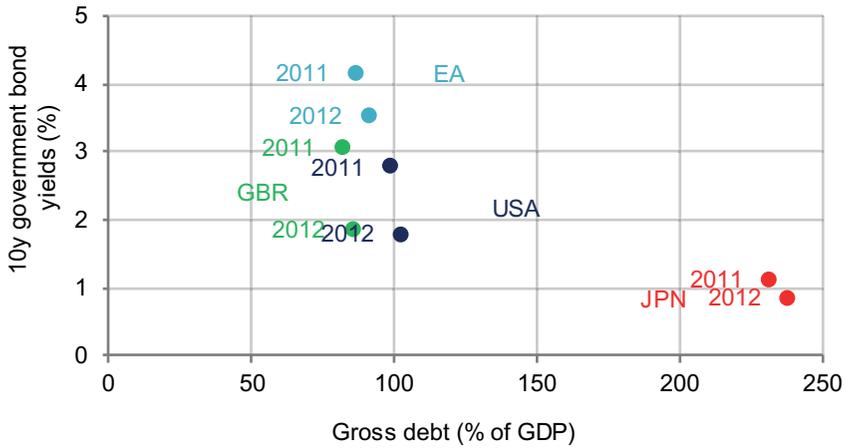
During the pre-crisis period, the Eurosystem indeed delivered on its price stability mandate. In contrast, national compliance with the Stability and Growth Pact rules was far from perfect. Nevertheless, this did not appear to have impacted the Eurosystem's stabilisation role.

The crisis altered this view. Not only did it teach us that strict compliance with rules is necessary, but also that for policies to be effective, they require an appropriate response from other policies, especially in exceptional circumstances. We need to let policies have the room to do the right thing at the right time for the right reason. This may be even more true for countries in a monetary union. In what follows, I will illustrate two areas where the original design of EMU limited the synergies between policies, making members more vulnerable to adverse shocks.

First, euro area countries effectively issue real instead of nominal debt, making them more susceptible to shocks which can have feedbacks on monetary policy. Indeed, governments no longer issue debt in their own currency but in euros, over which they have no direct control. Consequently, in the absence of an inflation cushion, the only option available to resolve unsustainable debt is outright default. Possibly based on the strong principles enshrined in the Treaty, markets assumed the Eurosystem had no role to play in sovereign insolvency and was expected not to act as lender of last resort in the government bond market – a function that a central bank in a stand-alone country implicitly does assume. This made countries, possibly even those with sound public finances, prone to self-fulfilling market expectations that threatened to turn a sovereign liquidity crisis into a solvency crisis.

3 See Articles 123, 125 and 126(2) to (14) of the Treaty on the Functioning of the European Union; the latter also reinforced by the Stability and Growth Pact.

**Figure 1:** Government bond yields and spreads versus the German bund



Sources: ECB; IMF; Thomson Reuters Datastream.

The euro sovereign debt crisis has taught us this the painful way. Fiscal fundamentals for the union as a whole were certainly no worse than those for other major advanced economies, but its borrowing costs were clearly higher as self-fulfilling market panic was allowed to gain footing. True, debt sustainability concerns were justified for some members, but certainly not for all those under pressure. In 2012, with the Outright Monetary Transactions

(OMT), the Eurosystem provided a backstop for government funding, breaking down the vicious circle between market expectations and government debt dynamics.

Let me be clear: OMT is not enough. Safeguarding long-run solvency requires decisive action by governments. In general, and as already accounted for in the original EMU design, a governance framework that ensures sound fiscal policies is needed. I therefore count on the reformed Stability and Growth Pact to deliver better results than its predecessor.

Let me now turn to a second fragility of the original design of EMU, namely, the lack of coordination among fiscal policies of individual member states and its repercussions for the conduct of monetary policy.

During and in the aftermath of the sovereign debt turmoil, several euro area countries were forced to quickly undertake fiscal consolidation which was not compensated by fiscal loosening in other countries, making the area-wide fiscal stance weigh on domestic demand. Since the strengthened fiscal governance framework places a dominant emphasis on individual countries' fiscal discipline rather than on area-wide business cycle stabilisation, this left monetary policy as the key player for macroeconomic stabilisation, requiring the Eurosystem to resort to hitherto unseen stimulus measures. That may be one reason why the recovery has been lacklustre so far. Hence the observation, in line with that of Steven Phillips, that fiscal policy probably has a bigger role to play in stabilisation than was originally acknowledged by the Stability and Growth Pact.

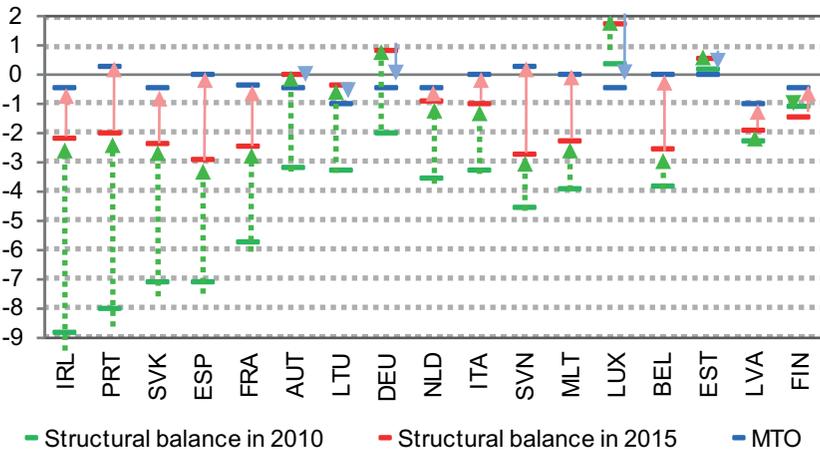
However, one should not be too pessimistic in this regard, because the fiscal rules do allow for some support to aggregate demand. First, when interest rates fall, governments' interest expenses fall as well, implying that there is more room for fiscal expansion before the headline deficit limit is crossed. Indeed, the framework uses *headline* balances and not *primary* balances. Second, on top of that, the fiscal requirements are formulated in structural terms, implying that the economic cycle is taken into account and less fiscal effort is required during recessions.

Moreover, some improvements to the framework have been introduced and are to be welcomed. In 2015, by introducing its famous "matrix", the European Commission allowed for more flexibility in the rules, leaving more leeway for fiscal policy regarding stabilisation. With this increased flexibility, we should now of course guard against the risk that those who cannot afford spend it, while those who can afford it do not. The "cannot" group is large and not only limited to countries that have been severely affected by the crisis. A case in point is Belgium, where high legacy debt leaves no room for embarking

upon fiscal stimulus. Instead, intelligent adjustment towards its medium-term budgetary objective is required and aimed for. This again highlights the careful balance between stabilisation and debt sustainability that fiscal authorities need to strike.

This brings me to a more specific, yet related aspect of the current framework that can be improved: its narrow focus on national fiscal stances, leaving the aggregate fiscal stance for the euro area undetermined. To improve welfare for the union as a whole, it seems preferable that not only monetary but also aggregate fiscal policy be determined at the euro area level. Especially when monetary policy is constrained, there appears to be a premium in coordination and better balanced fiscal actions.

**Figure 2:** Structural fiscal balances and medium-term objectives (% of GDP)



*Notes:* MTO = medium-term objective. Countries are sorted according to the size of the fiscal improvement shown over the period 2010-2015. Greece and Cyprus were not included as the former is still subject to an adjustment programme and the latter has only recently exited it. MTOs as defined in the Assessment of the 2016 Stability Programmes for the period 2017-2019. *Source:* European Commission.

One should not be too pessimistic in this regard either, as here also we see new initiatives that I applaud. By coordinating national fiscal councils, the newly created European Fiscal Board<sup>4</sup> is taking a first step towards tackling this issue.

4 The European Fiscal Board was established in October 2015, in line with recommendations in the *Five Presidents' Report*, and became operational in October 2016.

To conclude, I would like to underscore that we have to look beyond the negative consequences of monetary–fiscal interactions emphasised by the conventional macro view, and acknowledge the positive spillovers that both policy domains could have on each other. Both could enable each other to better realise their specific objective, especially when one policy is constrained. Fortunately, institutional gaps in the euro area are beginning to be addressed, acknowledging the subtle interactions between monetary and fiscal policy and hence allowing for a more optimal policy mix in which monetary dominance remains key.

### ***Panellist 2: Lars Rohde***

Denmark is the odd case out because of the fixed exchange rate regime that it followed. Let me elaborate on this.

#### **Monetary and fiscal policy in Denmark**

Since the early 1980s, Denmark has conducted a fixed exchange rate policy, first against the Deutsche mark and since 1999 against the euro (Figure 1, top panel). Over time, linking the Danish krone to the euro created a basis for achieving the same level of inflation and inflation expectations in Denmark as in the euro area. If inflation is higher in Denmark than in the euro area, Denmark's competitiveness will, all other things being equal, deteriorate.

This is well understood by both labour unions and employers' associations. The fixed exchange rate policy has therefore helped to achieve wage agreements that have supported Denmark's competitiveness.

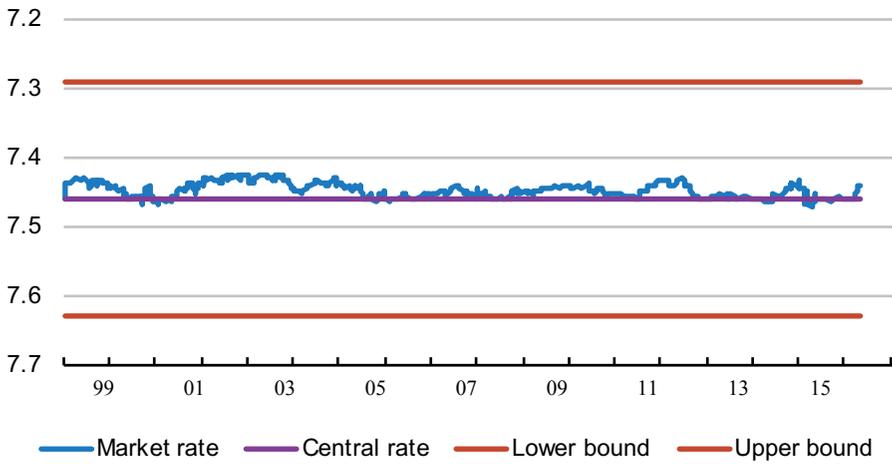
As the exchange rate is fixed, large current account imbalances are corrected by the relative wage growth in Denmark and abroad. The present large Danish current account surplus gives room for larger wage increases in Denmark relative to abroad.

The fixed exchange rate policy implies a clear distribution of responsibilities between monetary and fiscal policies. Monetary and exchange rate policies are aimed at keeping the krone stable vis-à-vis the euro (Figure 1, bottom panel), while any specific need to stabilise cyclical fluctuations in Denmark is handled via fiscal policy or other economic policies.

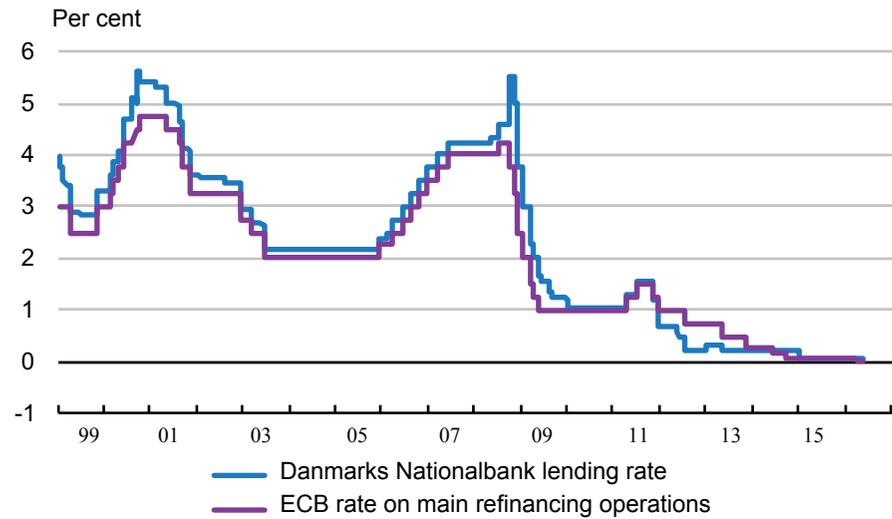
**Figure 1:** Denmark: Exchange rate and policy interest rate

Danish kroner vis-a-vis euro

Kroner per euro



Policy rate in Denmark and the euro area



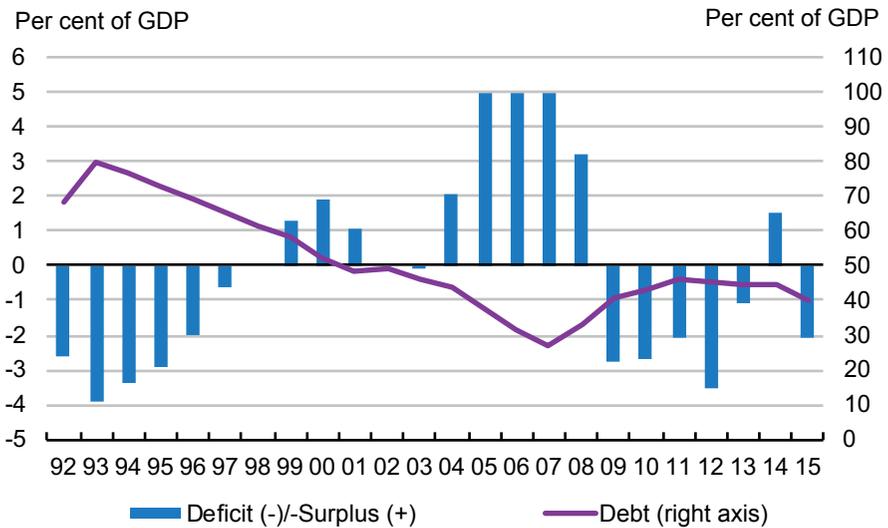
Source: Macrobond.

### Fiscal policy has to be disciplined and sustainable

Going into an economic downturn, the initial position of the public budget has to be so strong that, *inter alia*, the automatic stabilisers can take full effect without jeopardising long-run sustainability. This is a precondition for fiscal policy to be able to stabilise cyclical fluctuations. Furthermore, it is crucial that financial markets have confidence in fiscal policy. Hence, in Denmark it is very important that fiscal policy is both disciplined and sustainable.

Denmark has strong public finances (Figure 2) achieved through, *inter alia*, a budget law and medium-term fiscal plans. The fixed exchange rate policy has probably helped in achieving this, as politicians cannot rely on monetary policy to correct tax fiscal policy.

Figure 2: Denmark: Fiscal balance and public debt



Notes: Government EMU-Debt and EMU-Deficit (-)/-Surplus (+).

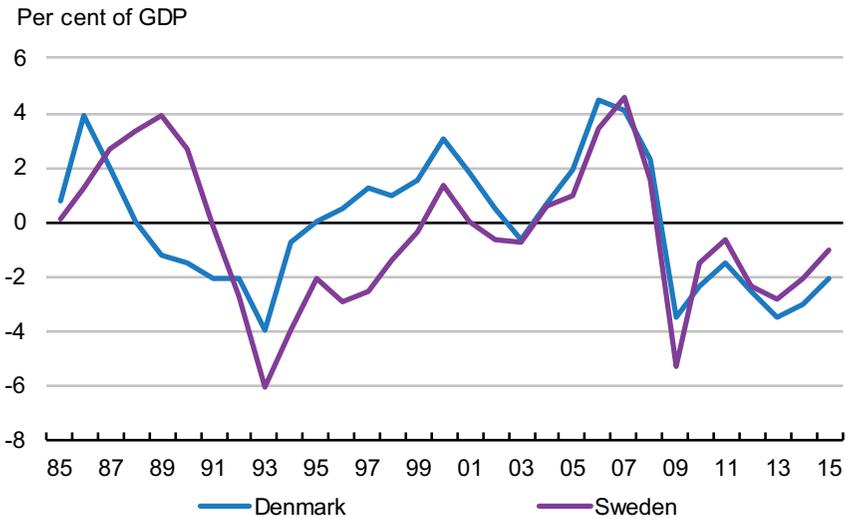
Source: Macrobond.

### An independent monetary policy is not a necessary condition for achieving stability

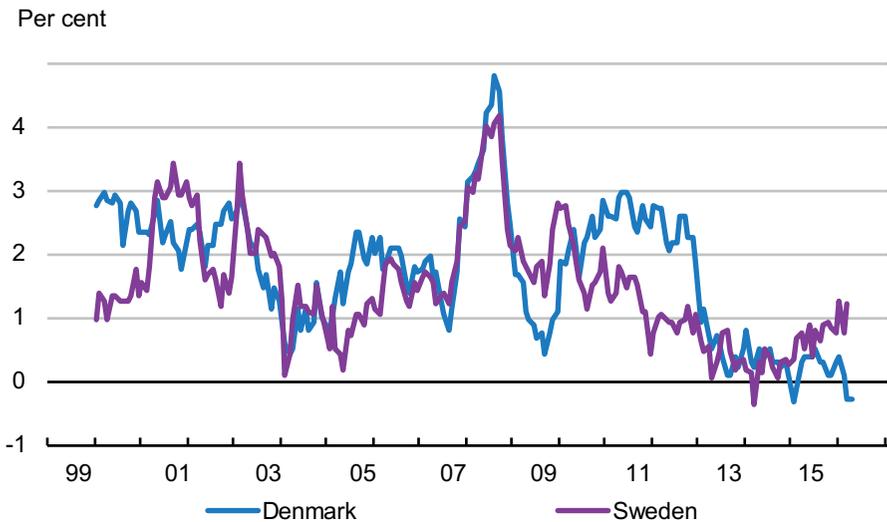
When comparing Denmark with euro area countries or countries similar to Denmark outside the euro area (such as Sweden), there is nothing indicating that the Danish economy has performed worse with respect to the stability of output and inflation (Figure 3). This is in part because the Danish business cycle is to a large extent synchronous with that of the euro area. Furthermore, fiscal policy in Denmark reacts quickly to shocks through large automatic stabilisers.

**Figure 3:** Output gap and inflation in Denmark and Sweden

Output gap in Denmark and Sweden



Inflation in Denmark and Sweden



Source: Macrobond.

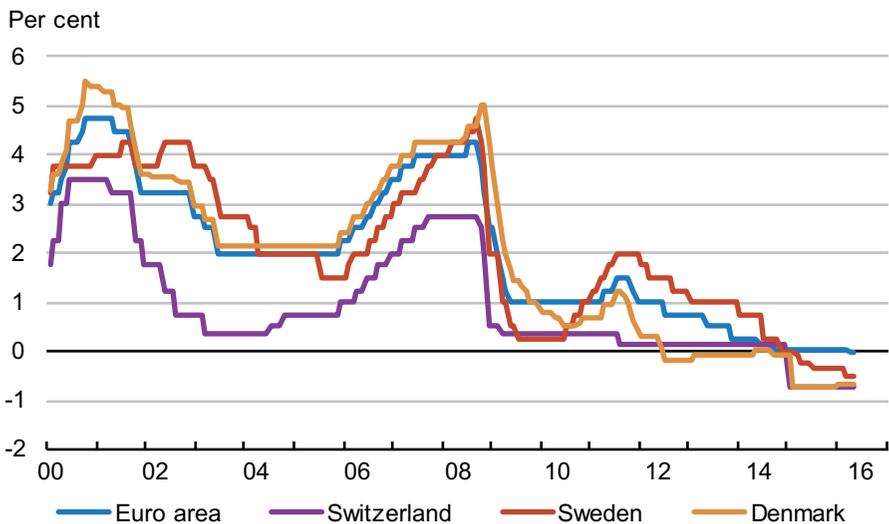
So, an independent monetary policy is not a necessary condition for achieving stability. However, it is required that other policies – i.e., fiscal – are disciplined and sustainable.

**The loss of flexibility in a fixed exchange rate regime is probably minor for small open economies**

Advanced small open economies such as Denmark and Sweden are strongly influenced by the world economy, especially the euro area. Studies, such as those from the Bank for International Settlements, have shown that the policy rates of small open economies follow those of the euro area and the United States more closely than can be explained by output gaps and inflation (i.e., the Taylor rule) (Figure 4). One reason could be that large currency shocks can create financial stability issues, for example if a country has large liabilities in a foreign currency that are not hedged.

So, in practice, for small open economies “inflation targeting” and “fixed exchange rate policy” lead to very similar monetary policy. Consequently, the loss of monetary policy flexibility in a fixed exchange rate regime is probably small – or at least smaller than is predicted by textbook theoretical models.

**Figure 4:** Monetary policy rates in selected small advanced open economies



Note: Euro Area: main refinancing operations rate; Switzerland: three-month LIBOR target range; Sweden: repo rate; Denmark: lending rate.

Source: Macrobond.

***Panellist 3: Dimitar Bogov***

Macedonia, similarly to Denmark, has its exchange rate pegged to the euro, having previously been pegged to the Deutsche mark. The country has pursued this policy from 1995 onwards, and since a one-off devaluation in 1997, the exchange rate has been stable. Of course, we have been challenged several times, but successfully overcame these challenges. I like what Lars Rohde said, as it is in line with the view that I very often express in Macedonia: for small open economies, it doesn't matter whether the monetary framework is inflation targeting or an exchange rate peg. In the end, you have to have the same prudent policies. Otherwise, although the transmission channels may be different, the outcome will always be the same. If you have upward pressures on the foreign exchange market, eventually you will end up with higher interest rates – regardless of whether you achieve this through exchange rate depreciation or through interest rate increases to defend the exchange rate. Maybe the large economies have a choice, but small economies do not have much freedom in choosing the right monetary policy.

What is the experience of Macedonia regarding the coordination of monetary and fiscal policies? An exchange rate peg means having a constraint on monetary policy. In the case of Macedonia, it is not a full constraint because the “impossible trinity” is not present, since we do not have capital mobility for various reasons. One reason is that the capital account still has some restrictions; but more importantly, in my opinion, it is the general political instability of the country which is not very favourable to capital inflows. Constraints to capital inflows enable some degree of independence to monetary policy in a fixed exchange rate regime. Anyway, it is fiscal policy that should take on the burden of adjustment when one has an exchange rate peg. This means that fiscal policy must be disciplined. When we analyse the 19 years from 1994 to 2012, we find that in half of these years fiscal policy was countercyclical, while in the other half it was procyclical. When we look at dominance, whether fiscal or monetary, we find that in and around the years Macedonia suffered shocks – 2001, when we had an internal security crisis; and 2008, when the global financial crisis started – we had fiscal dominance. Otherwise, fiscal policy was quite disciplined, especially in the period before 2001. Maybe it helped that Macedonia always had some arrangements with the IMF, and that the exchange rate peg pushed fiscal policy to be very disciplined. Before 2001, fiscal policy was subordinated to monetary policy, supporting the stability of the peg. In 2001, this was disturbed as other priorities emerged. After fiscal stabilisation in 2003, however, coordination of monetary and fiscal policy was restored and fiscal policy supported the exchange rate peg and monetary

policy. It should be noted that before 2008, fiscal deficits in Macedonia were very small – the country’s budgets were always either balanced or had a deficit of no more than 1% of GDP.

Before 2008, when the economy was booming, the government made two decisions – one favourable and one not so. The first decision was to reduce the tax burden, with corporate tax and income tax rates reduced substantially to 10%. Social contributions (the tax wedge) were also reduced. This appeared to be very beneficial after the crisis. The unfavourable development was that the windfall in the budget at that time tempted the government into spending more on higher public sector salaries, more generous pensions, increased social welfare and higher subsidies for farmers. At that time, this did not place a burden on the budget because it was in surplus. However, after 2008–2009 when there was a sharp deceleration in capital flows and foreign trade and GDP also declined, a shortfall in the budget emerged. Fortunately, fiscal policy did not reverse the action on taxes, and this proved to be supportive for businesses and the economy after 2009. There also was room for fiscal stimulus in 2009. Because budget deficits had historically been low, public debt was extremely low (at around 23% of GDP), creating the space for fiscal stimulus. Hence, fiscal policy supported economic growth in Macedonia after the onset of the global financial crisis in 2008. However, fiscal stimulus worsened the public finances, and public debt rose very quickly to the current level of 45% of GDP – public debt has thus doubled in seven years.

Monetary policy had to take the opposite stance: it had to tighten. First, because in 2009 Macedonia had to defend its exchange rate through very high interest rates. Once the situation stabilised and as economic growth picked up and the external balance was restored, monetary policy was loosened. It remained in this loosening cycle until early May 2016. Why was this possible? Because there were structural changes in the economy and the balance-of-payment position improved substantially thanks to policies aimed at attracting foreign direct investment. The policy rate of the central bank was reduced to an historically low level of 3.25%. At that time, many asked why the rate could not be lowered to 0%, as the ECB had done. We could go close to zero if fiscal policy were more balanced, but in a context in which fiscal deficits since 2008 had been between 3% and 4%, monetary policy had to keep the balances in the economy. So 3.25% is Macedonia’s “zero lower bound”. We have to have this spread vis-à-vis the ECB’s policy rate in order to preserve the exchange rate peg.

The lesson from this is that when you have disciplined fiscal policy and there is fiscal space, fiscal policy can support the economy when it is faced with a shock without endangering monetary policy. Monetary policy could tighten if necessary, but not by much. If the fiscal space were exhausted, however, then support from fiscal policy would be very difficult. Now we are wondering what will happen if Macedonia is hit by another shock. Fiscal policy has no room for expansion – our debt level is over 45%, and our limit is obviously much lower than that of the euro area countries.

#### ***Panellist 4: Nerses Yeritsyan***

The objective of monetary and fiscal policies is to achieve stable/sustainable and non-inflationary economic growth. I agree with the lead speaker, Steven Phillips, that the dominant issue in monetary–fiscal coordination is gauging and managing the risk of fiscal indiscipline, especially when the objectives of fiscal policy become solving problems of unsustainable budget deficits and debt.

The ultimate objective of both policies is to maximise the overall welfare of society, which can be achieved by keeping inflation low and employment at its potential level. Economic theory suggests that these two objectives are not mutually exclusive. Thus, strict adherence to “separation of powers” in the management of the economy will cause degeneration in the economy as fiscal and monetary authorities genuinely and rigorously pursue their own selfish objectives. This may result in serious economic distortions even if accidentally, or randomly, fiscal and monetary authorities are achieving or are close to achieving their objectives.

It is true that in the last couple of decades, countries have built up space for countercyclical monetary and fiscal policies by following prudent fiscal and debt sustainability policies. This space is quickly disappearing, however, and should be reassessed and not used to postpone necessary adjustment and structural reforms in the economy. Fiscal space should not be used to finance growing pension bills instead of implementing pension reforms, and monetary space should not be used for keeping interest rates too low for too long in order to rescue a dead or non-competitive private sector. History has shown how costly these delays can become.

Fiscal policy is a stricter constraint on monetary policy due to its lower agility. However, in the current globalised world with a growing number of open economies, monetary policy is also constrained by exchange rate and capital account volatility. The latter should also become a constraint for fiscal policy in open economies, especially when the fear of floating is not overcome. For much

of the past three decades, fiscal policy remained a major concern for monetary policy in emerging market economies. Unsustainable fiscal deficits and public debt levels created the prospect of fiscal dominance in many countries, leading to high and volatile inflation, a fear of floating and elevated risk premia on government debt. Unfavourable exchange rate dynamics – linked to weak fiscal and monetary policy credibility, low levels of financial development and a high degree of dollarisation – exposed emerging market economies to destabilising capital flows and high exchange rate pass-through. The consequence was that both fiscal and monetary policies tended to be procyclical in many countries, accentuating rather than dampening economic volatility.

The relationship between fiscal policy and interest rates is another aspect of fiscal and monetary policy interaction. The impact of fiscal policy on interest rates depends on whether the private sector is Ricardian or non-Ricardian. In a Ricardian world, fiscal deficits and debt have no consequences for interest rates, as the private sector saves the full extent of discounted tax liability implied by an increase in the fiscal deficit. In a non-Ricardian world, however, changes in fiscal deficits can lead to changes in interest rates. The classical mechanism is the “crowding-out” hypothesis, where higher fiscal deficits, with an unchanged money supply, lead to higher interest rates. In economies with fiscal dominance and a reliance on foreign credit, the mechanism that prevails is worsening default risk premia on government debt. If debt levels are too high, a country may find itself in a sudden stop or constrained in adopting expansionary policies, as it may experience higher sovereign risk premia and volatility in its costs of financing.

This increase in risk premia and volatility in the exchange rate create financial stability issues. In this case, monetary policy should deal with fiscal as well as financial-sector dominance as policy constraints. The lesson learned from the recent crisis is that central banks may serve as a first line of defence – including providing initial liquidity or rescue packages to banks – but experience has shown that if this is instead of countercyclical fiscal policies, it only delays the crisis and eventually fiscal policy should deal with consequences in more severe way. We have done a simulation analysis for small open and fragile economies which shows that some degree of temporary exchange rate management is necessary during economic turbulence driven by external shocks, which suggests more active fiscal policy or less fiscal constraint on monetary policy.

Finally, before I talk about the Armenian experience, one aspect of monetary and fiscal interaction that was overlooked and in my opinion should receive our attention is the local currency government debt market attracting international capital. In emerging market economies, local government debt markets are well developed compared to other local financial markets, but

they are underdeveloped compared to advanced economies. Governments have become complacent in addressing this issue as access to foreign currency debt becomes easier. Therefore, the target should be not only financing the deficit, but also developing a domestic savings pool as well as the appropriate infrastructure for attracting foreign saving into local currency instruments. In this case, fiscal and monetary authorities in open market economies will have more space to counteract sudden shocks. I hope at some point somebody will propose a multicurrency global trading platform with a centralised clearing and settlement system.

In Armenia, fiscal rules and formal coordination procedures between the government and the central bank play an important role. The Central Bank of Armenia (CBA) implemented an inflation-targeting policy framework in 2006 (with a target of  $4 \pm 1.5\%$ ), which has developed over time with help from the IMF and colleagues from the Czech National Bank. The current government debt level is moderate and there is no direct central bank financing, indicating the absence of fiscal dominance in the usual sense. A debt-to-GDP ceiling of 50% of the previous year's GDP has been officially set as a fiscal rule under the Law of the Republic of Armenia on the Budgetary System, and this is well implemented. The rule has survived two major shocks in the past decade.

Monetary and fiscal policy coordination takes place on institutional, operational and debt-management levels. The CBA acts as a fiscal and payment agent of the government, in accordance with a series of formal agreements and government decisions. Relations between the CBA – as a financial agent of the government – and the Ministry of Finance are not regulated under a single formal agreement but rather in separate agreements dealing with specific issues. Furthermore, additional guidelines have been issued separately, for both the CBA and Ministry of Finance staff, on how to implement the agreements in each institution.

Monetary policy operations are formally separated from debt-management transactions. The CBA has full independence in implementing its monetary policy and does not interfere in the issuance program of government securities. If not satisfied, the CBA has the right and power to issue its own securities. The cash flow forecasts produced by the Public Debt Management Department are currently shared with the CBA on a weekly basis, which helps to manage day-to-day liquidity effectively.

The CBA also provides an official opinion on the main government programmes – such as the strategic development programme, the medium-term expenditure programme, the annual budget law and the debt-management programme

– and on tax and expenditure policies. The CBA is required to provide an independent opinion on the state budget-related hearings in the Parliament, which is discussed during the presentation of the annual state budget law.

Formal coordination and information-sharing between the CBA and the MoF take place throughout the year. There are eight meetings per year for interest-rate setting, where monetary policy is discussed and where the Ministry of Finance is represented by the Deputy Minister as an observer. There are also weekly meetings attended by both institutions: on Thursdays at the Ministry of Finance to monitor budget execution and cash forecasts, and on Fridays at the CBA for monetary policy coordination. Furthermore, there are daily phone conversations between CBA and Ministry of Finance staff and daily informal meetings take place at the CBA during which participants discuss relevant issues of the day.

Overall, this policy coordination framework has served Armenia well, especially during the recent global and regional crises. After the recent oil crisis, Armenia emerged with the lowest inflation (negative), the highest growth (3.5%) and most stable currency exchange rate (14% adjustment). The financial sector also showed great resilience and built up its capital buffers, driven by the CBA's decision at the end of 2014 to increase the minimum capital requirement from 5 billion drams to 30 billion drams (US\$60 million).

In conclusion, coordination between monetary and fiscal policies remains a major policy goal and neither of these policies should have dominance over the other. A temporary departure from this rule might be necessary, but only to counteract temporary shocks and support reform-driven structural change processes. With the current dual objective of both monetary and financial stability, fiscal policy becomes an even more important constraint for monetary policy and, if ignored, it could lead to a hard landing with a larger cost to taxpayers. In this context, deepening and globalising local currency debt markets would improve policy coordination and allow more space for effective and harmless countercyclical policies.

## **General discussion**

*Nikolay Gueorguiev:* Let me pose a question to the panellists before we take some questions from the audience. Monetary policy in Europe, the United States and elsewhere has already done a lot to stabilise output and keep inflation on target. However, senior policymakers everywhere have repeatedly warned that success in this endeavour to stabilise output and inflation requires support from other policies as well. So, in the panellists' view, what role should

fiscal policy in the EU play in light of its own constraints? More generally, what is the best feasible monetary–fiscal policy mix in the EU in the current circumstances? I am pleased that we have diverse representation on the panel from countries in the euro area, in the EU and outside the EU. Sometimes, an outside view can also be very helpful.

**Jan Smets:** It is a very good question. I would say three things.

First, I think that monetary policy should do what it ought to do. In the euro area, we have a clear price-stability mandate entailing medium-term inflation of close to but below 2%. We should do whatever is necessary to meet this mandate, independent of what is happening elsewhere. In the current situation, it is really important to continue to achieve the inflation objective as it would enhance the efficiency of our monetary policy. Given the zero lower bound, it would facilitate the rebalancing of competitive positions within the euro area and it would help bring down debt positions that are still very high in some segments of the euro area economy. Indeed, the current close to zero or even negative inflation rates in the member countries contribute to rising debt positions in real terms, which weighs on the recovery. So, in order to exit from this very problematic situation we should do our job and we are doing it. What we are not doing though, is favours for the government – quantitative easing (QE) is not a sign of fiscal dominance. On the contrary, it is a reflection of our independence. It is a demonstration that we are in full control of our actions. Once policy interest rates approached their effective lower bound, we decided on QE measures because we considered them absolutely necessary. However, I recognise that, given the incomplete nature of the economic and monetary union, the asset purchase programme was designed such that it takes into account the need for protection of the ECB and the need to keep fiscal incentives in place. I am referring to the limited loss sharing, to the allocation of the programme across countries according to the ECB's capital key, and so on.

Second, it is clear that the efficiency of monetary policy will be strongly enhanced if other policies were to help. When I was a student, my professor used to say – and students present here perhaps have already heard the same saying – that monetary policy can lead a horse to water but cannot make it drink. With our monetary policy measures, we are doing just that: giving incentives to the private sector to consume and invest. However, in order to make the corporate sector invest, you need returns on capital and banks that are sound. You need a stable framework in fiscal terms and renewed structural policies that enhance economic and job growth. That is the task for governments. That is why the president of the ECB is calling on others to do their duties.

Third, I have two messages on the interaction between monetary and fiscal policy. First, in normal times, at the national level, countries have to stick to the Stability and Growth Pact. This would give fiscal policy the room to stabilise the economy in bad times. Indeed, the recovery in euro area member states would have been smoother if fiscal policies had more room to actively contribute to it. In this way, both monetary and fiscal policy would stimulate the economy. Unfortunately, only a few countries in the euro area currently possess this margin for manoeuvre. In my own country, Belgium, the margin is not there: we still have a public debt of 106% of GDP. Hence, in order for fiscal policy to regain its stabilisation function and to restore confidence, adherence to the fiscal rules is crucial. You cannot convince people to invest when Ricardian equivalence is playing, when people fear higher taxes in the future to repay public debt you are incurring today. So, the first job is to comply with the Stability and Growth Pact rules. The second job, as I already mentioned earlier during my presentation, entails completing the EMU framework. Besides monitoring and correcting national fiscal stances, we also need to pay more attention to how these add up to the fiscal stance of the euro area as a whole. Better coordination of national fiscal policies would result in a more appropriate fiscal stance for the union. In turn, this would facilitate the exchange of views on the best combination of the monetary and the fiscal stance for the euro area as a whole. For this to be possible, however, you ultimately need greater fiscal responsibility at the union level.

**Lars Rohde:** I think it is a very difficult question. I am not sure I am in a position to give good advice on that. One has to recognise that there are boundaries for the impact of monetary policy. To echo what Governor Smets said a couple of minutes ago, I think it is very difficult for monetary policy in its own right to get the inflation rate up. Why? Because, it is well recognised that inflation, at the end of the day, is a question about conditions in the labour market and the existence of idle capacity. So, how should we have inflation going forward? In my opinion, we should again echo that monetary policy is not the only game in town. If the starting point is a huge negative gap in the economy, then we should rely on other instruments (i.e., structural instruments) and also consider a balanced path where, for some period of time, you have a more relaxed fiscal policy but where you have a credible strategy for how to balance the economy in five years or ten years' time. In other words, having a trade-off, or whatever you wish to call it, between demand now and a more restrained public sector demand in the future. I think moving in that direction could, to some extent, contribute to solving the problem.

**Nikolay Gueorguiev:** How does this issue look from outside the European Union?

**Dimitar Bogov:** Usually, in Macedonia, we are in the opposite situation. We are receiving recommendations and criticism from the EU. Speaking as an outsider, the key here is that currently the EU is in a situation where monetary policy is the only game in town. There is a huge burden on the ECB. The ECB is pumping a lot of money through QE, but the monetary policy stimulus is not giving results easily and so fast. Both the money multiplier and velocity of money have fallen. Because of that, a strong response is necessary from the ECB.

But, why did the EU come into such a situation? The main problem is that during the peak of the cycle, before 2008, many of the countries ran budget deficits. In such a cyclical phase, when there were windfalls of revenues and high economic growth, it would have been wise to have had budget surpluses. But most countries did not; they had procyclical policies and increased spending during the expansionary phase. Thus, there was little room for countercyclical policy during the downturn. However, the key is to restore fiscal discipline and solid public finance management rules. Then the question is why they did not have this before? The simple answer is that there were some fiscal rules but they were simply not respected, as in the cases of Greece, Germany and France. Rules are being strengthened once again, and the important question is if they will be obeyed in the future.

**Nerses Yeritsyan:** I will be more critical in the sense that monetary easing most probably was delayed and is now aiming at the wrong target. Because of this, fiscal and structural problems have become more severe. There is a lot of discussion on this, but action-wise there is no progress. In our kind of economies, we would be dead already because of fiscal and monetary constraints and non-availability of external saving to finance our problems, whereas the rest of the world is saving to finance the problems of advanced countries, thereby delaying the adjustment process. This is a privilege, but if it is used for a long period of time there might be reversals and the consequences will become more severe.

On monetary policy independence, I want to react to Jan Smet's comment that QE shows that the ECB is independent. I would argue that if you follow independent policy, you will not be able to impose discipline on fiscal policy and structural reforms – for example, by increasing the haircut on collateral for repo-eligible government bonds or increasing haircuts for different government instruments. In this way, you would be able to impose fiscal discipline which would increase interest rates. Interest rates would not be negative if you did not collect collateral at 100% or with a 1% or 0% haircut for the collateral. For example, in the Armenian case, when we became independent from the

Soviet regime, the government could easily borrow directly from Gosbank, the state bank, without limit. The finance minister would write a cheque and the credit would go to different sectors. When we took over the central bank, the first thing we did was to get a law in place that forbade direct lending to the government. In addition, we securitised the stock of government debt to the central bank. The government then had to use those securities to raise money for the budget deficit in the private market. Interest rates went up to 100% or 200%. In the European context, the obvious early examples are Finland and Sweden. These are very good examples of how adjustment should take place. If it is delayed, then something else should be done and more vigorously than it has been done so far. That would be my reflection.

**Nikolay Gueorguiev:** Now is the time to take a few questions from the audience for the panellists.

**Suzanne Bishopric (Global Sovereign Advisors):** My question is for Lars Rohde on pensions. I am wondering how much negative and falling interest rates are contributing to the fiscal problem by making the pension funds more underfunded, because those liabilities just balloon when interest rates drop.

**Isabel Correia (Bank of Portugal):** We have to take the “rethinking” topic of this conference seriously. I believe we would not be hearing about the issue if the zero lower bound had not materialised after the crisis. Everyone was quite happy about the way monetary policy had been working for 15 years prior to the crisis. It was very much driven by having one instrument and one goal, and this created independence and credibility that were very difficult to distinguish. We should understand that when we came from the old type of monetary policy to that instrumented in interest rates, we are really playing the game of changing incentives for the agents in the economy. This is the main channel of transmission. So, when you try to compare it to fiscal policy, for me it is always a bit weird that we focus so much on the stimulus deficit part of the fiscal counterpart. What we know in terms of research is that we have instruments in fiscal policy that are very similar to the interest rate. But, these instruments are not government expenditure (G) or deficit or debt. If I used G or deficit or debt, I would not have an independent central bank. For me, I believe that we cannot really rethink the connection between fiscal and monetary policy if we do not take seriously where fiscal policy is playing a very similar role to the interest rate and begin to think about taxes. As someone has already pointed out, we have to go inside the deficit and understand what type of institutions we would have to have so that we can have fiscal roles similar to the monetary ones, but without the bound that monetary ones

have in a way that when you arrive at this situation, they really can play as substitutes to monetary policy without having anything to do with deficit or debt or fiscal space.

**Mejra Festic (Bank of Slovenia):** The Great Depression between 1929 and 1936 had very similar reasons to those we faced during the last crisis in 2008, but it was manifested on a more sophisticated level. We know that prior to the crash in 1929, there was a high overheating of the economy and exponential stock market growth. During the depression, there was a liquidity trap and we know that the Keynesian approach changed the economic trend. My personal opinion is that fiscal policy easing would be the rational option, but the question is to what extent would its combination with monetary policy be sustainable.

**(Unidentified):** I have two simple questions. In most countries, we are playing with high levels of government debt. First, what constraints do these high levels of debt impose on interest policy of central banks? Second, is there any prospect of ever getting away from these high levels of government debt?

**Andrzej Raczek (National Bank of Poland):** Today, Governor Jazbec mentioned that monetary policy should not be the only game in town. I think you have in mind the euro area. I would like to ask my colleagues about the efficiency of monetary policy, taking into account the current situation of having very low inflation for only one year and very weak economic growth for a longer period in the euro area and the whole EU. Of course, we have a very easy monetary policy. However, if we consider the impact of the very easy monetary policy of the ECB via the banking sector, which is experiencing significant problems, the credit channel is less effective than before. The exchange rate channel of transmission also is not as effective as before. If monetary policy is easy and is the only measure that is being implemented, it raises questions about the cost of this policy. It is well known that the cost is the stability of the financial sector. I am thinking not only about the insurance companies – for whom the negative spillover effect of low interest is obvious – and about the pension fund system, but also about the stability of the banking sector. Maybe we should consider having a tight monetary policy stance, given that the monetary policy of the ECB now is less effective than before and that the long-term environment of low interest rates may be very dangerous for the stability of the financial sector.

**Nikolay Gueorguiev:** Let me briefly summarise the questions from the audience for our panellists.

The first question is on the effect of negative interest rates on pensions and insurance companies. The second question is whether we can devise fiscal institutions and revenue-neutral tax rebalancing that would have the same

effect on the domestic economy as monetary policy easing, now that the zero lower bound is upon us. The third question is that fiscal policy easing maybe rational now, but how do we make it sustainable and how do we avoid the issue of fiscal dominance returning? The fourth question is on the constraints that high public debt imposes on monetary policy and how can debt be reduced. The last question is on what we think about the efficiency of monetary policy now in terms of benefits versus costs, the financial sector costs and other possible costs. How should policymakers take this into consideration?

**Lars Rohde:** I could start with the relatively simple question. It was the question about insurance companies and the impact of very low interest rates. I think it goes wider than just the impact on insurance companies. Because, if you are going from a high- to a low-return environment, it is simply a transfer from creditors to debtors. It also means that if you have to have a certain income stream in 20 or 30 years from now, you have to save more, not less, if the interest rate is lower. This is a relevant point if we are discussing QE. If QE is forcing down interest rates, it also means that people will have to save more not less, and thereby reduce the overall demand in the economy. So, there is the redistribution effect and the solvency effect for insurance companies unless they are hedged. Maybe we have made some regulatory failures. Perhaps we should have changed the regime so that insurance companies and pensions funds were forced only to deliver hedgeable products and have a regulatory environment where also liabilities were marked to market. Then, we would not have the solvency issue at least.

**Jan Smets:** Regarding the question on how we can make public finances sustainable, I think the answer is twofold: you need fiscal discipline and strong growth. Certainly, both could be enhanced in the euro area. Fiscal discipline should inspire confidence in the sustainability of public debt, which would in turn stimulate consumption and investment by the private sector. In addition, structural reforms as well as a stronger banking system should spur economic growth. In Belgium, we are now engaged in a huge tax-shift operation which is beneficial to growth and jobs and is helping to make the ECB's monetary policy more effective.

Second, regarding the efficiency of monetary policy, I believe it is most certainly having an effect. The ECB's measures have improved credit conditions, enhanced credit expansion and lowered borrowing rates for companies and households, and they are supporting growth and inflation. This is indeed difficult to prove as there is no counterfactual, but the ECB's analysis is supportive of this.

Third, what about the impact of monetary policy on financial stability? There certainly can be adverse spillovers on pensions and on the profitability of insurance companies and banks. But in the first instance, achieving price stability – which is what monetary policy measures are aiming at – is also beneficial for financial stability. If monetary policy failed to achieve price stability and allowed the economy to go into a prolonged period of stagnation, that would be bad news for the financial system. It would mean that long-term yields would remain low for a very long time. The imbalance between savings and investment within Europe and in the euro area is the ultimate reason why interest rates go down; monetary policy can be seen as accompanying that movement. This may raise financial risks, but these should in the first instance be addressed by micro- and macroprudential policies. Monetary policy, which is set for the whole euro area, cannot be geared to address problems which are very specific to some segments or regions of the euro area. For that you need targeted financial stability instruments, which fortunately have been elaborated since the crisis. We are indeed counting on them a lot.

***Dimitar Bogov:*** I would only like to touch on the Keynesian approach. There is one big difference between the 1930s and now: government budget expenditure then accounted for 20% of GDP or less, compared to 50% of GDP now. So, there is much less space for Keynesian stimulus after the crisis of 2008. Here we come to the issue of reducing the public debt. This is likely to be very difficult. We will likely live in periods of high public debt which will constrain fiscal policy in the future. What could be the exit solution here? Maybe a huge reduction in the role of the state, like what happened in the 1990s in transition economies. There is a need for structural changes in the participation of the state. Here the main question is the reduction of the tax burden instead of fiscal stimulus, which could have a similar impact at the end, but in the longer term and structurally it would be much more beneficial.

***Nerses Yeritsyan:*** I would like to add that if Keynes were alive today, he would be surprised at the current level of the wealth of nations and at how effective public institutions are. That is really impressive. Going forward, the main issue is how much sacrifice we are ready to make to make things sustainable, because the threat of adjustment is following us. It is an attitude issue whether we want to face this adjustment problem or delay it with the hope that growth will come from somewhere or people will want to work longer hours. This is not going to happen because the rhetoric in politics is the opposite: people want more pensions and higher indexation of their wages and want to work fewer hours. This is the dilemma we have to solve in the European context. This is important for us because as a young nation, we want to learn by doing the right things going forward and our neighbourhood

environment is important from that perspective. I would like to stress again the point that I mentioned earlier: the interest rate would likely be positive and significant if the ECB did not support government bonds as collateral for its operations. That would be a solution. Also, a 20% or 30% haircut on those securities would solve the problem. You would see positive interest rates immediately. This may be very revolutionary, but this sacrifice is better than sacrificing wealth. We would be poorer than we are today and the adjustment would be easier afterwards. Now, policies and institutions have kept wealth at a level that people have not felt the cost of crisis and the social fabric has not changed too much. However, sustaining the social fabric requires more rigorous effort in structural reforms if we want to escape the new adjustment causes.

**Lars Rohde:** A couple of words about the Keynesian situation in the 1930s. It is interesting to note that Belgium has just raised 100-year money in capital markets at 2%, and Ireland did the same. In Germany and Denmark, the government can raise money for 30 years at well below 1%. One idea that one could come up with is somehow to have targeted long-term investments in infrastructure financed at a very low interest rate. That would be a Keynesian-like way out of the crisis. The second point I would like to make is about strong financial institutions. In broad terms, in Europe we have been too slow and too soft on our financing institutions for too long. They should have been recapitalised in a much more radical way back in 2008-2009. The ECB has done a great job, but it would also have been helpful if the national regulators had been a little bit more strict earlier on.

**Nikolay Gueorguiev:** Let me briefly summarise the discussion.

First, the thinking of policymakers about monetary policy and fiscal policy coordination has evolved during the past 50-60 years from the acceptance that both instruments can and should be actively deployed to stabilise output and inflation in a discretionary way. That acceptance was the case in the 1950s and 1960s. The idea of monetary policy being more capable of and sufficient for handling both tasks – namely, inflation and output stabilisation – and of the need for fiscal policy to be constrained to prevent excesses came into prominence in the 1990s and 2000s.

Second, currently in many countries monetary policy effectiveness is diminished and fiscal policy is constrained by rules or by the sheer lack of fiscal space. The search at present seems to be for mechanisms to commit fiscal policy to medium-term solvency while allowing short-term flexibility so that it can also contribute to macroeconomic stabilisation.

Third, monetary policy has done a lot already to help stabilisation, but this has great spillovers to exchange rate and financial stability. The spillovers in the financial sector can be handled through prudential policies. There is a need in the EU to improve fiscal policy coordination between member states and the centre, and the EU needs to think about the EU-wide fiscal stance.

We need to be mindful that in small economies – in all countries, actually – fiscal policy at times can be procyclical and fiscal dominance can occur at least some of the time.

In small open economies, monetary policy is constrained no matter what the monetary regime is. This comes from the open capital account and large amount of capital flows. In this situation, a disciplined fiscal policy is needed to have space to stabilise output when needed.

The last observation: fiscal policy should not be misused to delay structural reforms of unsustainable policies. Let me thank the panellists and the lead speaker for their contributions and close the session.

## Panel 2

# Fiscal policy implementation in the EU institutional framework and implications for monetary policy

---

### Chair

Erik Jones, *Professor, The Johns Hopkins University*

### Lead Speaker

Ludovít Ódor, *Deputy of the Network of EU Independent Fiscal Institutions*

### Panellists

Lucio R. Pench, *Director, Directorate-General for Economic and Fiscal Affairs, European Commission*

Dušan Mramor, *Minister of Finance, Slovenia*

Agnès Bénassy-Quéré, *Professor, Centre d'Economie de la Sorbonne*

Javier J. Perez, *Head of Conjunctural Analysis Division, Directorate General of Economics, Statistics and Research, Bank of Spain*

Cláudia Rodriguez Braz, *Chairman of the Working Group on Public Finance, ESCB and Banco de Portugal*

## Summary of Panel 2

### *Erik Jones*

The discussion in this panel revolved around six themes: (i) monetary and fiscal policy; (ii) rules and discretion; (iii) complexity and simplicity; (iv) centralisation and coordination; (v) unity and diversity; and (vi) macroeconomics and finance.

The first three themes relate to the institutional framework that exists in Europe. That framework is designed to achieve sustainability rather than stabilisation. The goal is two-fold: to ensure that no member state runs excessive deficits or builds up excessive debts, and to avoid any interference from fiscal policy in the conduct of monetary policy. The implications are often procyclical. Under the current framework, fiscal authorities are encouraged to tighten as economic performance slows and to loosen as output growth accelerates. This can be seen clearly in the context of the recent sovereign debt crisis. Fiscal policy was

contractionary as the crisis deepened and then became expansionary once the ECB stepped in to underpin sovereign debt markets in July 2012. This pattern is not salutary for European economic performance. Monetary policy is set to achieve price stability and fiscal policy accommodates. As a result, monetary authorities moved too late (and did too little) to avert a recession in Europe or even to mitigate the consequences adequately.

A part of the difficulty results from the reliance on policy rules. Such rules are effective in addressing familiar problems. They are less effective in addressing problems that are unfamiliar. As a result, a number of member states faced unexpected complications. A few even confronted problems with debt sustainability. The policy response has been to proliferate new rules within the existing institutional framework. These rules address special conditions or economic circumstances. They also create incentives for member states to engage in structural reforms. The result has been to create multiple and overlapping policy frameworks. Inadvertently, this has created greater scope for discretion – by offering an implicit choice over which framework should be applied and when. In turn, this discretion has given rise to uncertainty. Looking back at the actions of key institutions in response to deviation from the rules by the member states, it is almost impossible to anticipate *ex ante* which framework would be applied.

The rules have also become more complex. The intention was to stretch the policy framework to address both sustainability and stabilisation at the same time. This intention was not without merit, but it gave rise to significant unintended consequences. Many of the policy rules now rest on sophisticated measures of economic performance that are also unstable over time. The output gap is a good illustration. This measure is important for calculating the structural budget. It builds on a mixture of real-time estimates and near-term forecasts. The methods used to make these calculations are inherently inaccurate. By implication, the revisions that are made over the passage of time, and as increasingly precise historical data can be brought into the calculations, are often many magnitudes larger than the policy target. For example, it is impossible to reduce the structural budget deficit in real time by 0.1% of gross domestic product (GDP) when revisions to the estimated output gap can be 15 times that amount or even larger. Accounting rules create another source of distortion. The rules exist to strengthen the comparability of fiscal accounts across countries. The unintended consequence is to change the way national governments interpret revenues and expenditures. For example, public investment must be treated as a current outlay even if the bulk of the financing comes from the private sector.

The implications of this complexity are not the same for all member states. Large member states with advanced economies and relatively smooth investment cycles are less affected, while smaller member states with rapidly developing economies and more uneven investment cycles are disadvantaged. These smaller countries not only face irrational policy requirements (because the targets are so unstable) but also tend to underinvest (because of how investment is treated by the accounting rules). These smaller countries are also less likely to benefit from any discretion applied in the choice of policy frameworks and they are more likely to suffer from the procyclical, price-stability-oriented monetary and fiscal policy mix.

This diagnosis of the current situation raises questions regarding how the macroeconomic policy environment could be improved. This is where the next three themes – themes (iv) to (vi) referred to at the outset – become important. The first consideration is whether Europe should continue to rely on fiscal policy coordination or whether it requires centralised fiscal institutions to balance the requirements for sustainability and stabilisation. The advantage of such institutions is that they could allow for increased market discipline to fall on sub-centralised fiscal units. If Europe had a single fiscal authority, it could enforce the “no bailout” rule more consistently. This is what many believe to be the main lesson from the United States. There, most state governments have “balanced budget” amendments or some other kind of binding fiscal policy requirement. Where these are not followed, market discipline is allowed to function. Meanwhile, the US federal government provides for macroeconomic stabilisation through a mix of automatic stabilisers and discretionary fiscal policy.

There are two problems with this line of argument. The first is that US fiscal institutions do not work as effectively as is imagined – either in terms of disciplining sub-national governments or in providing for stabilisation. There are elements that Europe could borrow from the US experience. The usefulness of supplementary federal unemployment benefits that kick in for a limited period when sub-national (or state) governments experience a profound economic shock is one example; federal deposit insurance is another. European policymakers could create similar arrangements that would backstop member-state economic performance without creating unnecessary moral hazard. Nevertheless, the willingness of the member states to construct institutions for fiscal centralisation is limited. This is the second problem with the argument for centralisation. Member state governments prefer fiscal sovereignty to fiscal solidarity. Hence, they prefer also to retain an institutional framework based on coordination rather than aggregating fiscal institutions at the European level.

The present arrangements for fiscal policy coordination are too complicated. The challenge is to make the rules simpler. The question is whether the same rules should apply to all member states. There is a political logic to equal treatment. In practice, different member states are treated differently. The “no bailout” rule is a good illustration. Although theoretically this rule applies to all member states, in practice smaller member states face discipline while larger member states get more leniency (in the sense that they are “too big to fail”). Moreover, this pattern is borne out in virtually every federal fiscal arrangement and not just in Europe. The rules for fiscal targeting should also differ depending upon the country. This creates space for much more diversity and, hence, member state sovereignty. The challenge is to build political support for such an arrangement. At the moment, that support does not exist in Germany, among other countries.

Perhaps, though, it is enough to settle for a more modest change to the current institutional framework. The completion of a European banking union could be sufficient to prevent a crisis such as the last one from recurring. Such a project would not improve the macroeconomic framework directly, but it would insulate macroeconomic policymakers from shocks emanating from the financial sector. It would also provide the cross-border risk-sharing mechanisms in the form of deposit insurance and resolution funding necessary to prevent governments from having to absorb responsibility for excessive private-sector liabilities that suddenly become unsustainable public-sector debt. Such an arrangement would not be wholly separate from the fiscal framework; both deposit insurance and resolution funding require some kind of fiscal backstop. Nevertheless, this level of centralisation should not impinge unnecessarily on member state fiscal sovereignty and it should not complicate the interaction between monetary and fiscal policy.

A banking union would be a step in the right direction. By itself, however, it would be insufficient. Europe must continue to make progress on achieving a capital markets union in order to diversify bank funding and deepen the channels for cross-border private-sector risk sharing. European financial markets also require some kind of common risk-free asset. Such arrangements will not only strengthen the institutional framework for macroeconomic policy coordination but also widen the scope for monetary policy, which has been overextended in attempting to respond to the crisis.

## **Presentations by Lead Speaker and Panellists**

### ***Lead Speaker: Ludovít Ódor***

First of all, I would like to thank the Bank of Slovenia for inviting me to this conference. A few years ago, Mervyn King said that central bankers are more obsessed with fiscal policy than with inflation. If he is right, I am definitely in the right place. Today, I am going to make the following very simple point: in order to have a functional monetary union with no overburdening of monetary policy, the euro area needs a more decentralised and depoliticised fiscal framework.

### **Sustainability and stabilisation**

Let me start with the basic fiscal objectives. A proper fiscal framework should ensure long-term sustainability while avoiding procyclical fiscal behaviour. The framework in the euro area failed on both fronts. In good times, just before the crisis hit, it did not motivate the creation of sufficient fiscal space; in bad times, it was too restrictive to stabilise the economy. In the middle of the sovereign debt crisis, when market pressures heightened, the policy debate turned into austerity mode, and more and more new fiscal rules were legislated. The mood changed only after the ECB promised to do “whatever it takes” to save the euro. But again, the pendulum has swung too far. We are now in a “who can introduce more flexibility?” phase, ignoring potential sustainability risks lurking on the horizon. In my view, this schizophrenic, Dr. Jekyll and Mr. Hyde behaviour is a direct consequence of the faulty institutional set-up and represents a real threat to the conduct and independence of monetary policy.

### **The partially finished house**

There has been a lot of debate about the potential causes of the euro area sovereign debt crisis. Among them, shortcomings in the original institutional design have played a prominent role. The *Five Presidents’ Report* recognises that the EMU is “like a house that was built over decades but only partially finished”.<sup>1</sup> In my opinion, in the area of macroeconomic management there are four very important fault lines that should be addressed in order to increase the resilience of the single currency.

First, there are blurred responsibilities between national and EU level policies. When accountabilities are not separated clearly, the political fight is often between national interests and those of Brussels. As a consequence, voters

1 Juncker, J.C. in close cooperation with Tusk, D., Dijsselbloem, J., Draghi, M. and Schulz, M. (2015), *The Five Presidents’ Report: Completing Europe’s Economic and Monetary Union*, Brussels: European Commission.

frequently see this political debate as a zero-sum game. Europe should focus more on common interests, risk-sharing mechanisms and insurance schemes, and not on fine-tuning inherently national policies. In order to find “European” values for the citizens, the subsidiarity principle has to be respected.

Second, peer pressure to achieve common macroeconomic and structural objectives has failed. With bailout mechanisms in place, member states have no real incentives to pursue sound policies if the most negative assessment they can get is “limited compliance”. Ministers will not be keen to punish their colleagues if their policies will be under investigation the next time. Moreover, the European Commission also has become more political (more or less openly), under the heavy influence of the most important member states. Without de-politicisation of policy evaluation in the euro area, procyclical behaviour will be hard to eliminate.

Third, management of the sovereign debt crisis by European leaders is a textbook example of how not to address difficult macroeconomic and financial problems. The “too little too late” behaviour actually forced the ECB to become a substitute for fiscal discipline, with all the potential moral hazard problems. Overburdening monetary policy is a real threat, which also raises important questions about central bank independence. True, it was partially also the ECB’s fault, since its monetary policy actions were not aggressive enough in the first phase of the crisis. The reduction of interest rates and quantitative easing came much later in the euro area than in the United States.

Fourth, the slow decision-making process in general in the euro area is a clear disadvantage in an increasingly globalised world, where quick actions are necessary in many cases to cope with macroeconomic shocks. Therefore, a more flexible policy framework is needed in order to remain globally competitive.

In sum, the euro area needs a much better economic policy framework, with well-functioning sticks and carrots for member states, less political influence and more flexible community-level decision-making. The question is how to achieve these goals?

### **Romanticism versus realism**

Economists have somewhat different views on how the optimal medicine should look like. Some would agree that a fully-fledged fiscal union (something like the United States of Europe) would, at least in theory, go a long way towards solving most of the problems. In the current political environment, however, only a small minority of member states would be willing to transfer more sovereignty to Brussels. If the first-best solution is unattainable, is the euro project doomed to failure or are there other options to ensure fiscal discipline?

Charles Wyplosz has argued that the fiscal policy problem in the euro area can be solved without further integration.<sup>2</sup> In his view, compulsory adoption of effective fiscal discipline frameworks by member countries should replace the several times discredited Stability and Growth Pact. At the national level, these frameworks should combine intelligent fiscal rules and independent fiscal councils adept at combining rules and discretion. At the collective level, the implementation of national frameworks should be monitored by an independent European fiscal council vested with the power to bring cases to the European Court of Justice. The “no bailout” clause should also be restored to eliminate moral hazard. In addition, Wyplosz argues that legacy debts should be significantly reduced in order to allow countries to pursue counter-cyclical fiscal policies.

Michael Bordo and Harold James agree that the euro area is still a long way from a new political equilibrium that shifts towards greater fiscal federalism.<sup>3</sup> In contrast to the minimalistic approach advocated by Wyplosz, Bordo and James propose a series of measures which amount to “partial fiscalisation”. Their rationale is quite simple, and is based on the historical analogy between the United States and the EU: in order to achieve further integration, voters should first see the value added of a common action. Europe should focus on win-win situations which would increase cross-border ties and thus represent a “strong cement to the union”. These partial fiscalisations might come in the form of reaping efficiency gains from a collective action or as insurance mechanisms at the EU level. Bordo and James provide a number of examples, among which the most prominent are the banking union, the capital markets union, common social security, an energy union and a common defence policy.

Both realistic solutions require important modifications to the institutional set-up.

### **Depoliticisation and decentralisation**

At the heart of the sovereign debt crisis in Europe lies the fundamental contradiction between bailouts and fiscal sovereignty inside a monetary union. One cannot have both at the same time. With the benefit of hindsight, it is clear that absent resolution mechanisms and strong links between bank and sovereign risks were the main factors behind the bailouts in the initial phase of the crisis. Since then, major progress has been made to set up resolution schemes and to present a roadmap towards a banking (financial) union. These

2 Wyplosz, C. (2017), “Fiscal Discipline in a Monetary Union Without Fiscal Union”, in: L. Ódor (ed.), *Rethinking Fiscal Policy after the Crisis*, New York: Cambridge University Press.

3 Bordo, M. and James, H. (2017), “Partial Fiscalization: Some Historical Lessons on Europe’s Unfinished Business”, in: L. Ódor (ed.), *Rethinking Fiscal Policy after the Crisis*, New York: Cambridge University Press.

are absolutely necessary building blocks of any successful currency union. Creditors and shareholders have to bear a large part of the losses stemming from insolvency of banks or even sovereigns.

Important lessons can be learned from the functioning of existing federations. The degree of central control varies considerably within them. One extreme possibility is reliance purely on market discipline – i.e., having a credible “no bailout” policy (as in the United States). The other extreme is full solidarity between member states, when bailout is widely expected. It should be noted that the design of area-wide fiscal rules is heavily dependent on the approach chosen. In the former case, almost no monitoring by the centre is necessary, while if one chooses the latter approach, very detailed rules and coordinated fiscal policy are unavoidable to fight moral hazard.

The current situation in the euro area is somewhere between these two extremes. Europe is balancing between the low credibility of the “no bailout” clause in the Treaty and the need to avoid free-riding. Irrespective of the final model chosen, a fundamental redefinition of accountability between the centre and national authorities would be necessary in any case. In my view, Europe needs a decentralised and depoliticised fiscal framework to ensure fiscal discipline in the long run.

### **Maze or pyramid?**

Several considerations have to be taken into account when reforming the fiscal framework in Europe. First, in my view, it is necessary to better align theory and the actual design of fiscal rules and institutions. The fundamental conflict between using the one-size-fits-all approach and at the same taking into account country specificities has often led to reliance on escape clauses, special regimes and “other factors”. As a result, Europe has ended up with a complex web of sometimes contradictory rules and procedures.<sup>4</sup> Paradoxically, the system relies on so many rules that the final verdict is in fact a discretionary decision by the European Commission/Council in many cases. Despite the large number of rules, the decisions are still very hard to predict.

Second, the division of labour between the community and national level is blurred. There is no clear separation of accountability and responsibility. The European framework combines a non-credible “no bailout” principle, sovereignty of member states in budgetary issues, the Stability and Growth Pact, and funds such as the European Stability Mechanism (ESM) or European

4 See Ódor, L. (2014), “The Good, the Bad and the Ugly: Lessons from the first phase of implementation of the new European fiscal framework”, Council for Budget Responsibility Discussion Paper 3/2014, Bratislava (available at [http://www.rozpocetovarada.sk/download2/gbu\\_final.pdf](http://www.rozpocetovarada.sk/download2/gbu_final.pdf)).

Financial Stability Facility (EFSF). It is necessary to define when and under what conditions intervention from the centre is warranted. Moreover, current discussions about a stronger fiscal union might add another layer of challenges, namely, the question of the proper design of fiscal rules and institutions at the community level. It is also important to limit political influence over the application of rules and procedures as much as possible.

Third, current fiscal indicators allow fiscal gimmickry, and real-time evaluation of structural budget balances is more art than science. More appropriate methodological tools are available in the literature, but their application is often hampered by the current institutional set-up.

A solution to these three fundamental problems I propose with Gábor Kiss is similar to the arrangement advocated by Wren-Lewis.<sup>5</sup> The first line of defence against irresponsible fiscal policy behaviour should be at the local level, using home-grown fiscal rules and independent fiscal institutions. The community level in our proposal is represented not only by the European Commission, but also by an independent fiscal watchdog for the euro area.<sup>6</sup> These institutions should, in our view, focus primarily on avoiding free-riding and procyclicality at the level of the whole area and on managing countries breaching European limits.

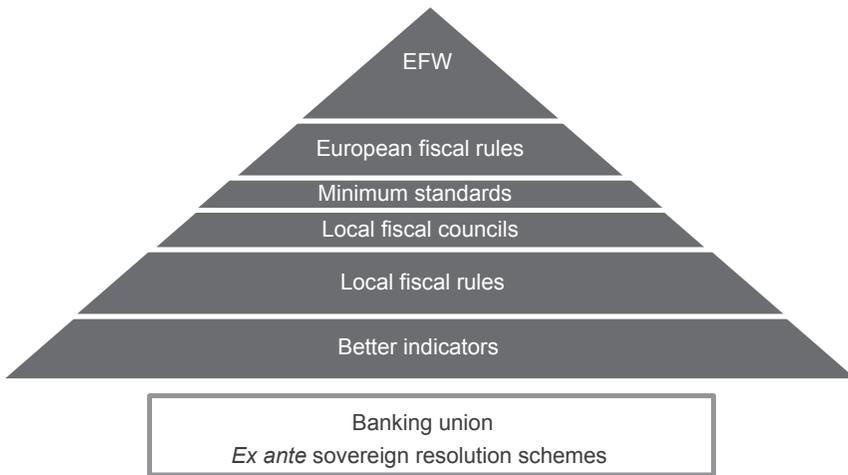
A decentralised fiscal framework is also more compatible with the current situation in the EU, where not all member states have introduced the single currency. For member countries outside the euro area, it would be hard to accept more central budgetary oversight.

As I stated earlier, it is not possible to separate the issue of fiscal frameworks from the question of the overall set up of a currency union. Therefore, at the bottom of Figure 1, I list two important pre-conditions to be met: a fully functional banking union and a stronger “no bailout” principle. One should, however, note that strengthening the “no bailout” clause is not possible without sound macroprudential policies and an effective banking union. Even if it is unlikely to achieve full credibility of the “no bailout” principle, as is the case in the United States (at least in the medium term), the greater the losses absorbed by shareholders and creditors, the easier the design of fiscal rules at the community level.

5 Ódor, L. and Kiss, G.P. (2017), “Lost in Complexity: Towards a decentralised fiscal framework in Europe”, in L. Ódor (ed.), *Rethinking Fiscal Policy after the Crisis*, New York: Cambridge University Press; Wren-Lewis, S. (2003), “Changing the Rules: Why we should not accede to EMU’s current fiscal regime”, *New Economy* 10(2): 73–78.

6 It should be noted that there are important differences between the European Fiscal Watchdog (EFW) in our framework and the European Fiscal Board (EFB), which was set up later.

**Figure 1:** Proposal for a new European fiscal framework



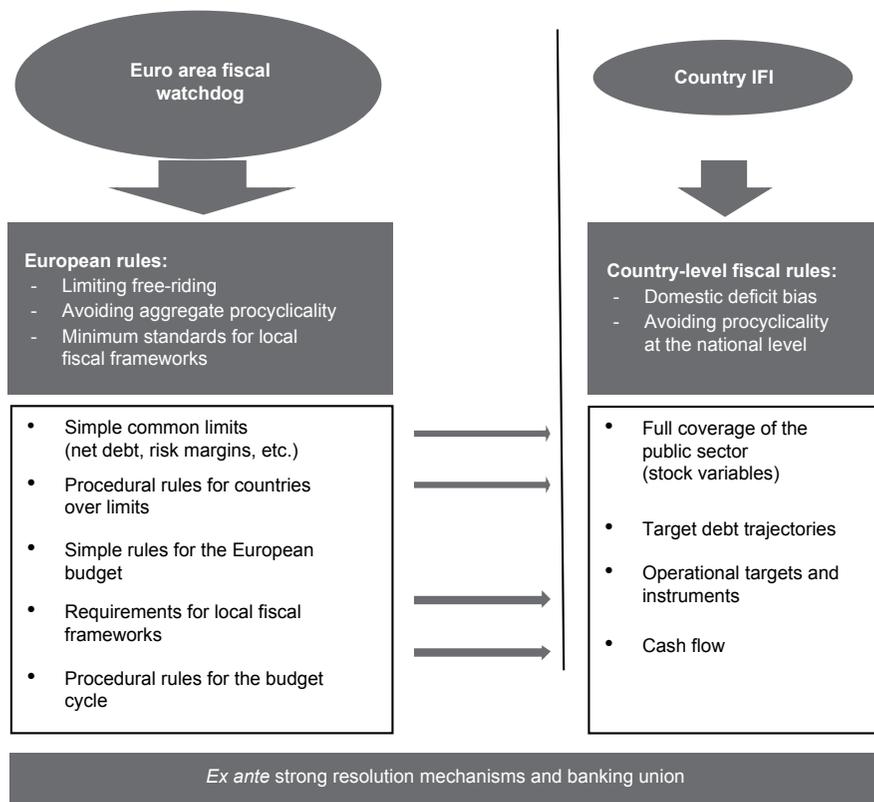
### **Separation of accountabilities**

The problem of deficit bias in currency unions arises both at the local level and the level of the whole area. In my view, the obvious approach would be to build a hierarchical system of responsibilities. When there is no sign of free-riding behaviour with potential contagion effects, the national level should be responsible for fighting against the local deficit bias. In that case, a country-specific, tailor-made solution that is more in line with theory and based on better fiscal indicators should be designed.

Area-level rules and institutions should primarily focus on problems concerning common interest. High on this list are possible contagion, free-riding behaviour or, for example, counter-cyclical aggregate fiscal policy. In the case of a fully credible “no bailout” clause, centrally imposed fiscal rules on member states are not even necessary. If the euro area is successful in putting in place clear rules for burden sharing, banking union and debt restructuring with a strong backstop mechanism, the current trend for legislating more and more complex fiscal rules can be reversed. In my view, it would then be sufficient to operate with one or two simple rules. These rules should not target yearly balances in national budgets. Instead, they should fight against the deficit bias occurring at the euro area level. One can imagine various possibilities suitable for this purpose: debt levels, sustainability indicators or, for example, sovereign risk indicators. It is important, however, to design rules not with target levels, but rather with maximum values tolerated by the community (one common threshold). Countries operating below these thresholds would be free to conduct

their fiscal policy if they respect minimum benchmarks (the universal 3% deficit limit can be abolished). If the limits are breached, however, oversight from the centre should step in. The sovereignty principle should be significantly reduced when the agreed limits are exceeded.

**Figure 2:** Separation of fiscal responsibilities in the euro area



The hardest problem to tackle is avoiding aggregate procyclicality of fiscal policy in exceptionally bad times (when monetary policy is constrained by the zero lower bound). There are two potential solutions: central risk-sharing mechanisms, or better coordination of fiscal policies. I am very sceptical of the latter since it is not trivial to measure and combine country-specific multipliers.

### **Concluding remarks**

Over 25 years ago, the Delors Report<sup>7</sup> stressed the importance of macroeconomic policy coordination and flexible national (structural) policies for a successful economic union. It also emphasised the key role of the subsidiarity principle. The questions today are where to draw the line between national and European policies and how to design the right incentive structures for policymakers. The pool of potential solutions is limited by the (un)willingness of citizens to transfer much more power to Brussels. Therefore, as Wyplosz<sup>8</sup> points out, we have to find the constrained optimum.

There is a relatively widespread consensus that completing the Single Market and the banking (financial market) union are necessary building blocks for a more stable European currency in the long run. The issues are much more controversial in case of fiscal and structural policies. Moreover, monetary policy is pushed to its limits in order to substitute for the inaction in those two areas. If a United States of Europe is not on the list of realistic options in the foreseeable future, the only alternative is to reform the incentive structure for national policies.

As I have argued, in case of fiscal discipline, we should move towards a decentralised and depoliticised framework. This is theoretically more sound and practically more enforceable than the current web of complicated rules and procedures. Europe should base its fiscal framework on synergies between smart fiscal rules and independent fiscal institutions both at the national and the euro area level.

### **Issues for discussion**

- How can the incentive structure of national policies (fiscal and structural) be reformed in order to ease the burden on monetary policy?
- Is it possible to pursue counter-cyclical aggregate fiscal policy without central risk-sharing mechanisms?
- What are the options for reducing the complexity of the euro area's fiscal framework? What roles should independent fiscal institutions play (both at the national and European level)?

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

8 Wyplosz, *op. cit.*

***Panellist 1: Lucio R. PENCH***

Many thanks to the organisers for having invited me. I have three points to make on:

- i. the origins of the EMU fiscal framework: the Maastricht assignment;
- ii. reflections on the Great Recession and its aftermath (we may also call it “the reality check”);
- iii. possible ways forward for the EMU fiscal framework, which were mentioned by Ludovít Ódor in his presentation.

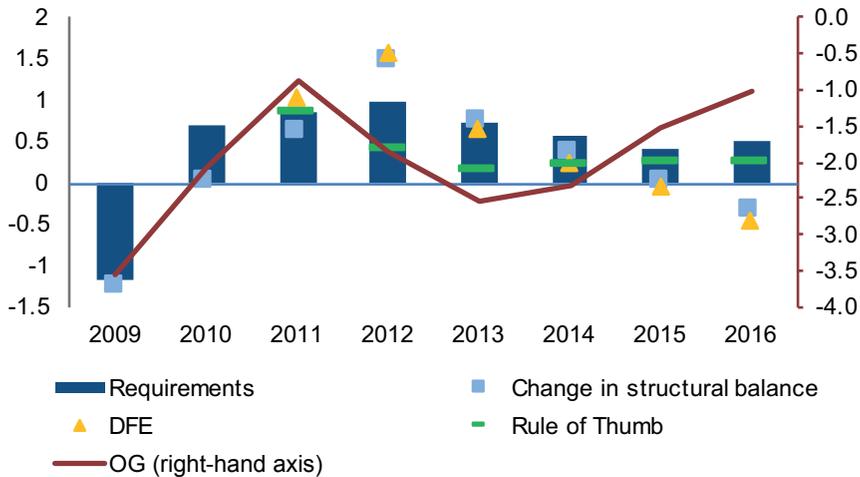
We can quickly go over the first point, the Maastricht assignment, partly because it is well known and partly because it has been dealt with in some of the earlier presentations. A characteristic of this unique experiment – centralised monetary policy in the hands of an independent central bank with price stability as an objective, and decentralised fiscal policy in the hands of sovereign member states subject to supranational rules – is the set of rules that are supposed to govern the interaction between fiscal and monetary policies. A common feature of these rules is that they are proscriptive as opposed to prescriptive in nature. The Treaty bans excessive government deficits and monetary financing of government deficits and does not allow the bailout of governments.

What are the conceptual underpinnings of these constructions? I think the underlying idea is that the supranational monetary policy was in need of protection from – as opposed to coordination with – fiscal policy. If you read the writings of Otmar Issing,<sup>9</sup> it stands out very clearly that the very word “coordination” was seen with suspicion from the side of the ECB. Why so? Because it was seen to be possibly protecting from national fiscal policy affected by pervasive deficit bias. This seemingly peculiar attitude of the ECB had two conceptual underpinnings: the superiority of monetary policy in dealing with shocks that macroeconomic policy can address; and the belief that discretionary fiscal policy, more often than not, ended up destabilising rather than stabilising the economy. I would say that the introductory presentation highlighted that these were very much part of a broader consensus going well beyond the euro area.

9 See, for example, Issing, O. (2005), “The role of fiscal and monetary policies in the stabilization of the economic cycle”, speech at the International Conference on “Stability and Economic Growth: The Role of the Central Bank”, Mexico City, 14 November (available at [www.ecb.europa.eu/press/key/date/2005/html/sp051114.en.html](http://www.ecb.europa.eu/press/key/date/2005/html/sp051114.en.html)).

Let me now give you some elements of how things have changed. Figure 1 highlights the euro area fiscal stance versus the fiscal rules. The blue bar represents an admittedly not easy reconstruction of the rules because of their complexity. This, in essence, is what full compliance with the rule of the Stability Pact would represent. After 2009, when the rule was suspended, the recommendation was to do what you are doing, namely, expand. The lighter blue dot in the figure represents the change in the structural balance that occurred. The pattern is interesting: almost every year, the fiscal stance was less restrictive than full compliance with the Stability and Growth Pact would imply. This is what the ECB was officially asking for. An important exception is 2012, but you cannot blame the fiscal tightening in that year on the rules by any stretch of imagination, because the structural balance is much higher than the fiscal rule would have implied. In fact, if you use a more sophisticated assessment, by examining the discretionary fiscal effort shown by the yellow dot, you see that the effect was even bigger. We know the reason for this: before the “whatever it takes” speech by Mario Draghi on 26 July 2012,<sup>10</sup> uncertainty over what the ECB would do in terms of providing liquidity to member states in distress was pervasive. Thereafter the pattern changes. If you move to today, you see that the requirement may have slowed down somewhat, but fiscal policy is actually becoming more expansionary rather than restrictive.

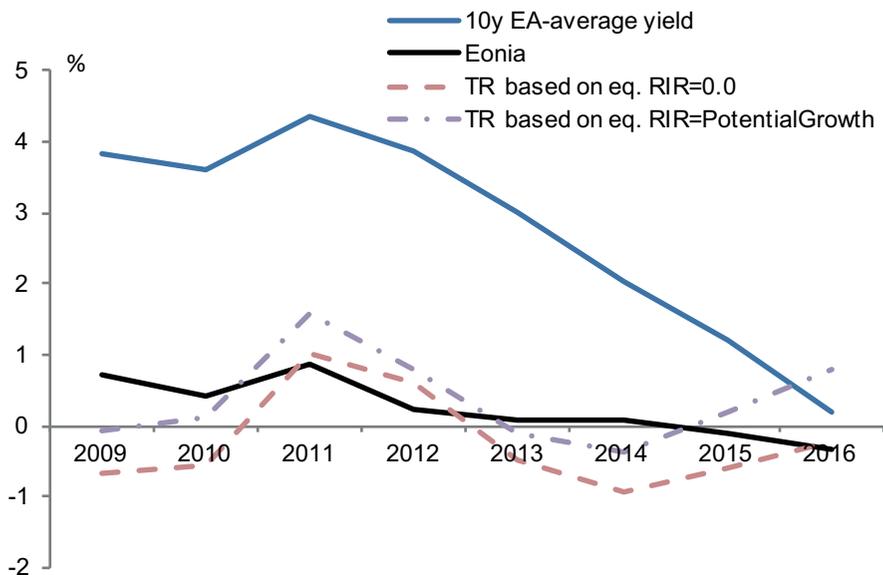
**Figure 1:** Euro area fiscal stance versus fiscal rules (% of potential GDP)



*Note:* DFE = discretionary fiscal effort; OG = output gap.

Could one have done better in terms of a rule? I have a final element in the rather complicated Figure 1. The green bars are the results that would provide a rule that is perhaps more economically sophisticated. This rule of thumb deals with sustainability and stabilisation on an equal footing, whereas the EU rule put sustainability ahead. That gives somehow different results, but still one may question whether it would give the right policy mix. Why so? Because we know what is behind it. In Figure 2, euro area monetary policy is compared with the Taylor rule, which is represented by the two dotted lines in which the equilibrium interest rate is set either at zero or at the potential growth rate. Before the crisis, we all thought that the equilibrium interest rate was 2%. I did not consider this rate here, because it would yield results with not much sense. In the figure, we see at least two episodes in which the policy rate is above what would be given by the Taylor rule. In the second episode, you have the quantitative easing, and that is why you have a long-term interest rate that gives a better idea of debt than the policy rate.

**Figure 2:** Euro area monetary stance versus the Taylor rule



What can we conclude from this? There has been a pendulum pattern. As Ludovít Ódor said, it is all procyclicality as before. In this regard, I would like to make three points. First, full insulation of monetary policy – basically the old ECB model – is partly responsible for the procyclical excesses of fiscal policy. Remember what happened in 2012 and what we have seen. Second,

the deficit bias may not be the sole externality of fiscal policy that the EMU fiscal framework has to protect against. Linked to that is the conclusion that the fiscal rule should reflect both objectives of sustainability and stabilisation. But – and this is my final and a very difficult point – it may not be possible to encapsulate the right balance in a rule. It is a judgement call that is particularly difficult when monetary policy is constrained. This is the lesson that I draw from comparing a more sophisticated rule with the outcome and stance of monetary policy.

I see two alternative ways forward for the EMU fiscal framework. I put a question mark here because I am not sure exactly about the position taken in Lúdvít Ódor’s presentation. It seems to me that Mr. Odor’s presentation largely embodies a kind of a return to Maastricht. He recommends decentralised fiscal policies, subject to “sustainability benchmarks” and “oversight from the centre” in case of the agreed limits being exceeded. I have three points: (i) it looks to me like a bit of a rehashing of the original Maastricht assignment, perhaps without the Pact but with the rules of the Treaty; (ii) it does not deal with the (non-theoretical) case of stabilisation deficit at the level of the euro area; and (iii) I do not know whether what Jean-Claude Trichet called “federalism by exception” is a politically viable option.

I call my alternative “Overcoming Maastricht”. I would suggest that a centralised stabilisation capacity is needed to meet the challenges highlighted by the crisis. It should be integrated with stability-oriented national rules and a credible “no bailout” rule at the EU level. That is my conclusion.

### ***Panellist 2: Dušan Mramor***

I would like to give you some insights into how a finance minister lives under the circumstances of existing EU fiscal rules. The question is: Is it survivable or not? The whole idea in the existing EU fiscal rules is that of counter-cyclical policy: you save in good times, and you can use that fiscal space in bad times. The idea is logical. However, the problem is its implementation. Let me present to you the example of Slovenia. To comply with EU fiscal rules, as a finance minister of Slovenia I have the goal of reducing the structural fiscal deficit by 0.6 percentage points of GDP every year for several years, as we have a very high nominal budget deficit and our medium-term objective is to achieve a nominal surplus of 0.5% of GDP, as measured by EU accrual accounting standards ESA 2010. This is determined by the European Commission on the basis of the current situation and forecasted economic developments in Slovenia.

We have to go through three stages of tricky planning to achieve the structurally adjusted deficit reduction target of 0.6 percentage points of GDP through adopting appropriate annual budgets. As in most EU countries, budgets in Slovenia are adopted and carried out on a cash accounting basis. Therefore, the required level of nominal deficit reduction in the cash budget should be calculated in three stages. In the first stage, the reduction needed in structural terms is determined (i.e., 0.6 percentage points of GDP). In the second stage, the reduction needed in ESA 2010 accrual terms that is consistent with the structural deficit reduction target is calculated. In the third stage, through the conversion of accrual to cash basis, the actual reduction of the budget deficit needed is found.

The calculation of the structural deficit is the first thing that makes our life impossible. The structural deficit depends on the output gap – its calculation and its stability over time. In the case of Slovenia, six consecutive estimates in three years of the output gap for 2015 varied from -2% to -0.4% of GDP; the estimate of the level of structural deficit and its needed reduction is very much a moving target. Even if the European Commission fixes the target of a 0.6 percentage point reduction in the structural deficit, how can we determine by November each year, when the budgets for the following two years are prepared, the needed ESA 2010 deficit reduction if the output gap – and hence, the target – moves in this way from November onwards into the budget year and beyond?

Unfortunately, this is not all. Eurostat constantly changes its interpretation of ESA 2010 after a budget is adopted, during and after the budget year. This continuously changes the ESA 2010 budget results and alignment with the fiscal rules. One example of how the interpretation can change is the decision over what is included and what is not included in the public sector. Another example is how certain special transactions are treated, such as those of the Slovenian 100% state-owned Bank Asset Management Company (BAMC, or the so-called bad bank). Hence, the finance minister prepares the budget on the basis of the prevailing Eurostat interpretation of which institutions are regarded as the public sector; but Eurostat subsequently makes changes during the budget year. The same applies for other interpretations. The treatment of BAMC's transactions changed three times during the budget year. But, this is not all. Eurostat changes its interpretations even once the year is over. These changes were substantial for Slovenia in April of 2016, for example, with Eurostat stating that they would treat certain transactions from 2015 differently. Consequently, Slovenia's ESA 2010 deficit for 2015 was revised upwards by 0.7 percentage points of GDP in April 2016. For comparison, the corresponding increase for Ireland was 1 percentage point of GDP and

for Slovakia, where additional institutions were included in the public sector, it was 0.5 percentage points of GDP. Recall that the European Commission looked at these figures in April 2016 to determine compliance with fiscal rules in the previous year (i.e., 2015).

In order for us to implement fiscal policy within the European Commission rules, these April interpretations of Eurostat should be communicated to me nearly two years earlier, during the budgeting process, and should not change afterwards. However, as I noted earlier, the required deficit reduction turned out to be an impossible moving target, causing me sleepless nights and putting pressure on my staff to come up with precise Eurostat interpretations and the relevant calculations. My staff tried hard to get relevant inputs from Eurostat, but concluded that what they got made no economic sense. Slovenia's statistical office was also fighting Eurostat. In the end, Eurostat said that if we did not comply, they would use an interpretation that would result in the budget deficit being not 2.9% of GDP deficit, but over 3% of GDP, which would make Slovenia subject to the excessive deficit procedure. We complied.

As already mentioned, the issue of the calculation of the output gap not only is problematic for a finance minister under the Stability and Growth Pact rules, but also has important negative consequences for the economic policies of EU members. I asked my staff to look into the European Commission's output gap methodology and to compare the results through the years. They first focused on 2007, when Slovenia's economy was clearly overheated. The European Commission's methodology that was used in 2006 to predict the output gap in 2007 produced the following result: for the overheated Slovenian economy in 2007, it predicted practically a 0% output gap and, consequently, a 0% structural deficit. In contrast, the result of the calculations for 2017 on the basis of the European Commission's methodology is that Slovenia has the highest positive output gap in the EU, at 6.9% of GDP, thus predicting a seriously overheated economy. But where is Slovenia really at in terms of overheating? We have deflation, the external current account is in surplus to the tune of 7.3% of GDP, unemployment is much higher than the long-term average, and domestic demand is weak. In short, no overheating whatsoever. Nevertheless, the calculations on the basis of the European Commission's methodology mean that in these circumstances of a weak economy, we have to reduce our structural deficit by 1 percentage point of GDP, implying a very restrictive fiscal policy. In fact, it is even more restrictive than it seems, as a 1 percentage point reduction in the structural deficit converts into a much higher reduction in the headline ESA 2010 deficit. Before Eurostat's last adjustment, Slovenia achieved a reduction of 1.2 percentage points of GDP in the headline ESA 2010 deficit in 2015. This was equivalent to only a 0.2 percentage point reduction in the

structural deficit. Imagine if the same applies to the calculations for 2017. The requirement of a 1 percentage point reduction in the structural deficit could translate into a reduction of up to 2 percentage points in the headline ESA 2010 deficit (potentially even more on a cash flow basis). That would without doubt completely “kill” the Slovenian economy.

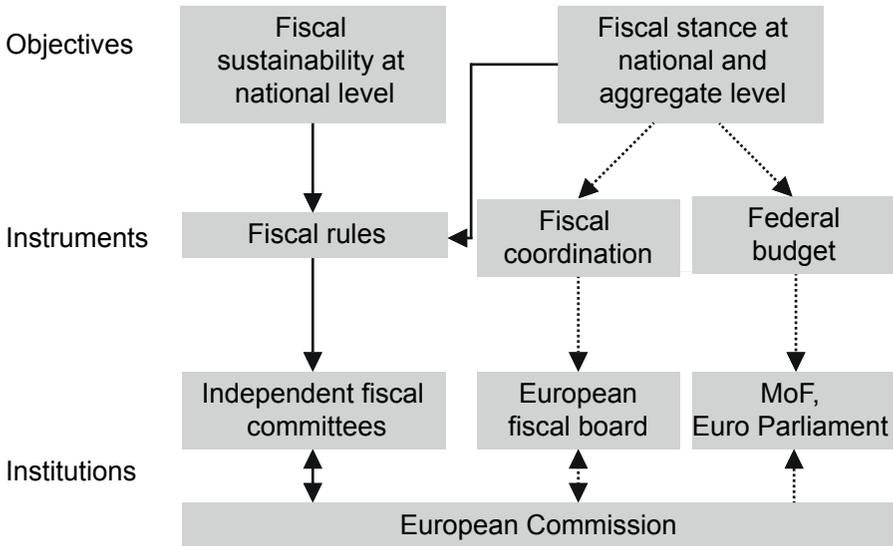
The EU methodology is intuitively quite logical, but it produces completely illogical results. Thus, when it is claimed that this methodology is “rocket science”, I say “but for a rocket that does not fly”. Unobservable variables, problematic inputs, a problematic timeframe and fantastic differences between results make it ill-suited to the task, and implementing it results in severely procyclical fiscal policy that prevents the EU from exiting the crisis.

I also would like to mention Eurostat’s methodology of accrual-based accounting as one of the negative growth factors. For example, we have the EU investment programme, the “Juncker Plan”, in which one of the sub-programmes is energy-saving investments. Let us say that you have government buildings which are not insulated and do not have the most efficient heating and cooling systems, and that you bring in private money to invest into energy-saving investment and investors are paid out of the savings. How is this accounted for under the EU methodology? Private money that comes for this investment is treated as public expenditure in the year of investment. This increases the debt level of the country, so in the end, it is counted as contributing to the deficit. And this is not the only problematic rule. All investments of the public sector are on an accrual basis of ESA 2010 and are accounted for as expenditures in the year that the investment is made. In the private sector, business investment is not expenditure – it is not an item on the income statement; only depreciation is. If you have a small economy with investment cycles which are very pronounced and you try to pull out of a crisis with fiscal stimulus in the form of accelerated investment, you are unable to as the rules of the Stability and Growth Pact are breached.

Therefore, we have a big problem with the implementation of the EU’s fiscal rules, which are in principle sensible. I pointed this out at the Euro Group and ECOFIN meetings. To my knowledge, this was the first time in 15 years that the European Commission and ECOFIN recognised that there are some problems with the methodology. Subsequently, Slovenia was not required to reduce its structural deficit next year by 1 percentage point (as calculated using the methodology), but by only 0.6 percentage points, as it was clear that the calculation of the Slovenian structural deficit for the next year completely defies economic logic.

**Panellist 3: Agnès Bénassy-Quéré**

I am going to talk about fiscal policy and fiscal policy coordination in the euro area. In this regard, we have objectives, instruments and institutions (see Figure 1).

**Figure 1:** Fiscal policy in the euro area

There are two objectives: fiscal sustainability at the national level, and fiscal stabilisation at the national and aggregate levels. In textbooks, however, you will see that there is only one objective – fiscal stabilisation – and that there is one constraint – the intertemporal budget constraint. In the monetary union, fiscal sustainability is considered an objective in itself, so you can imagine a monetary union where fiscal sustainability is an objective because of the large spillovers going through the financial system.

So, let us say there are two objectives. We started in 1999 with only the top-left part of Figure 1, with only quite simple fiscal rules as an instrument to achieve fiscal sustainability at the national level. Then, through several successive reshufflings of the Stability and Growth Pact, the objective of fiscal stabilisation at the national level was introduced through some flexibilities, making the rules much more complex. I would say that we could perhaps find ways to simplify these, looking for example at what the Germans did with the adjustments accounts whereby you can put some expenditures in the account and the account needs to balance over the cycle, so you no longer

need to calculate the structural deficit. We then have the institutions. In order to promote national ownership, independent fiscal councils were introduced at the national level. This is shown in the first column of Figure 1.

During 2011–2013, the aggregate fiscal stance of the euro area was procyclical. With the ECB running out of instruments, the idea of an aggregate fiscal stance emerged. But how can this be organised in practice? There are two ways: fiscal coordination, or fiscal integration through a federal budget. Somewhat surprisingly, it is not so evident that fiscal coordination is easier than having a federal budget. Let me explain.

It must be very clear that fiscal coordination is necessary only in exceptional times when you have large spillovers. There is a literature showing that fiscal spillovers are much higher at the zero lower bound, so there is a case for fiscal coordination at such times, but not necessarily at normal times when the fiscal spillovers are not so evident to estimate. I very much agree that we should keep in mind the subsidiarity principle that in normal times there should be more weight on local institutions, provided they abide by the rules. The European Commission is organising fiscal coordination with the newly created European Fiscal Board, which will be the equivalent of national councils but at the aggregate level. The good thing is that you do not need to change the Treaty to do this. In the short and medium term, there is no other choice since in the next two or three decades, most fiscal policy will likely remain at the national level. This is where the weapons are, and you should coordinate where the weapons are and not somewhere else. But, the bad thing is that there is a lot of intrusion into national affairs – basically, you are asking a government to do something other than what the citizens want their own government to do. This is really very difficult.

Now let us think a bit about the other possibility: the federal budget. You should not think of a federal budget as something very large. In the United States, as Erik Jones said, most of the budget has nothing to do with stabilisation. So, it is wrong to say that since you have a federal budget of 20% of GDP in the United States, with 2% of GDP in the euro area you would have one tenth of the US stabilisation capacity. This is completely wrong because you do not have all the spending that doesn't move over the cycle. Even if very small, a federal budget can help to design more simple rules at the national level. Why are national rules so complex? Because you have to incorporate within just one rule the two objectives of fiscal sustainability and fiscal stabilisation. So you need flexibility, and in the end you do not understand the rule. In federal countries, the rules are much stricter and simpler, but they are compensated by a federal budget.

Now I am going to talk under the supervision of Erik Jones, who can correct me. Just take a look at the unemployment insurance system in the United States. It is a state-level system that is mostly funded at the state level. The coverage is generally 26 weeks – sometimes less, sometimes more. The contributions, eligibility, and replacement rates all differ across states. There are two federal layers: the Extended Benefits (EB) system, co-financed at the state level and federal level; and the newly created Emergency Unemployment Compensation (EUC) agency. The federal layer offers a temporary extension of benefits when the unemployment rate surges. During the crisis in 2009, the insurance coverage went up to 99 weeks – an enormous increase – and the average federal transfer to states was about 0.5% of GDP, which is large. The cost in normal times is small: \$42 per worker per year (0.6% of the first \$7,000 of earnings). It could be larger in more generous countries in Europe. You can see here that as a reinsurance scheme, it is not so large.

Why am I talking about this? Because such a scheme may prove to be a good combination for Europe – an incentive to reform macroeconomic stabilisation and a social initiative. We should keep in mind that what we are discussing today is not easily understandable to the public; it is very technocratic. We have a lot of Europhobia and so the next initiative needs to have a social component, something for the people. We should think of the success of the Erasmus Programme – for those students who benefited from it, it changed their life in practice. Incentive to reform, why? To get into this kind of reinsurance system, you need a lot of convergence (not harmonisation) of labour markets without too much moral hazard, because it is only in very bad times that a country would benefit from the reinsurance. A variant of it could be a cheque for the unemployed, a kind of Erasmus Programme for workers.

I will finish with a comparison of monetary integration and fiscal integration. The European system was one of coordination of monetary policies. It failed and was reshuffled. It was able to continue up to 1999 because there was a firm decision to pursue monetary integration. In my view, coordination of fiscal policies is something that we can do today. It will work only if we have the long-term project of a fiscal union. The EU is a currency without a sovereign. We may be right to have a currency without a sovereign, but the euro area is an outlier in the world. We must make sure that it is sustainable to have a currency without a budget. I know that the United States may not be an example for Europe, but at least it is something that does exist and has done for a long time. We should look for things that do exist and work.

***Panellist 4: Javier J. Perez***

I would like to speak on the reform of EU fiscal rules framework: credibility, options and lessons for monetary policy.

**Overview: Main issues**

A consensus view has emerged around the general idea that EU fiscal rules have become too complex.<sup>11</sup> Despite this complexity, the architecture of the EU's fiscal framework lacks tools for the implementation of euro-area-wide fiscal stabilisation actions in particular, especially at times when monetary policy may be subject to constraints (e.g., at the zero lower bound). A number of proposals are currently being put forward to correct the two sets of (interrelated) problems.

I argue in this presentation that the Achilles' heel of the EU fiscal framework is to be found in its implementation flaws rather than in its complexity. At the end of the day, the evolution of the fiscal rules framework has been a quest to find the most resilient set of rules and procedures possible. The available international experience shows that no set of rules has been ever resilient to lack of commitment, political pressure and time-inconsistency in their implementation. To improve the credibility of any new or old set of rules, greater participation has to be afforded to well-monitored national institutions (decentralisation) and, in particular, local fiscal watchdogs.

Credibility and the ability to implement consistent policies are also key elements for the second issue at stake. On the one hand, a case could exist for pursuing an aggregate fiscal expansion if the euro area were subject to an adverse, symmetric shock. The "euro area fiscal stance" being an abstract concept, the practical implementation of such a policy would depend on the incentives of heterogeneous member states. A win-win situation would be one in which countries with enough fiscal space pursue expansionary policies, while countries with limited fiscal space stick to policies geared towards fiscal sustainability, constrained by well-designed rules. Nonetheless, moral hazard problems – i.e., lack of trust or political willingness by the first group, and/or lack of incentives or free-rider attitudes in the second group – can make such a virtuous equilibrium hard to achieve. On the other hand, a case exists for putting in place euro-area-wide stabilisation tools to cope with adverse, mostly asymmetric, shocks. An example of such a tool would be a common

11 See Ódor, L. and Kiss, G.P. (2017), "Lost in Complexity: Towards a decentralised fiscal framework in Europe", in L. Ódor (ed.), *Rethinking Fiscal Policy after the Crisis*, New York: Cambridge University Press.

unemployment insurance scheme. That said, a design that is immune to moral hazard problems like those mentioned above would be needed for any new (or old) scheme to work.

### **Is “complexity” really the problem?**

“Maastricht rules” were simple. The medium-term anchor was public debt, with a numerical reference value set at 60% of GDP, and the operational target was the public deficit level, with a consistent reference value set at 3% of GDP. The system was completed by a set of procedural guidelines designed to prevent deviations from targets *ex ante* (the preventive arm of the SGP), and to correct deviations *ex post* should they occur (the corrective arm of the SGP). A “no bailout” clause aimed at shielding the whole system.

These rules have been in place for almost two decades, with limited changes. An initial period of “stress” linked to the 2000s dot-com economic recession, and the true test of the most recent euro area sovereign debt crisis, led to the development of additional safeguards and procedures, and to the completion of design lags. The details are well known. Nonetheless, the evolution into a more complex set of rules followed from the very attempt to implement the fiscal rules framework: coverage against multiple contingencies (including rules governing “flexibility”), resilience during recessions, improved incentives schemes, better-defined concepts (as in the case of the structural balance), and so on. The fact is that real-world situations are complex, and legislative systems and institutions across the world tend to become complex when trying to provide adequate answers for any state of nature. This is what history teaches us.

The question that remains to be answered, then, is whether any system of rules is doomed to become too complex? This is particularly relevant when one tries to assess the merits of current proposals to restart the EU’s fiscal framework around a reduced set of principles. In particular, many experts suggest that more prominence should be given to the public expenditure rule as the operational target of the system of fiscal rules.<sup>12</sup> Let me focus on this issue, because recent experiences with such rules in some countries has not been encouraging.

The first feature of a government expenditure rule is that the measure of public expenditure that is to be constrained has to be defined. Which expenditures are to be excluded from the rule? Unemployment benefits? Large one-off payments? Public investment? The exclusion of unemployment benefits

12 See, among others, Claeys, D. and Darvas, Z. (2016), “How to reform EU fiscal rules”, *Bruegel Opinion*, April (available at <http://bruegel.org/2016/04/how-to-reform-eu-fiscal-rules/>).

would be granted by its mainly cyclical nature, which leads to the issue of defining which part of that expenditure item is cyclical and which is structural. The exclusion of large one-off payments is not a clear-cut issue either, as the definition of such events is far from obvious when assessed in real time. Just to provide a few examples: Would bank bailouts always qualify? In other words, how large is “large”? What about exceptional expenses related to health outbreaks? And exceptional defence spending linked, for example, to terrorist attacks or geopolitical tensions? The exclusion of public investment takes us back to the problems experienced by “golden rules” in the past.

The second (nice) feature of public spending rules is that they are set to constrain public finances in the medium term. But, in order to define a medium-term spending plan, one needs an estimate of the relevant country’s potential GDP growth and a medium-term price anchor. The latter is easy, as the ECB’s target is medium-term inflation. But the former feature brings us back to square one: if we were able to define potential GDP in real time without controversy, it is likely that nobody would be unhappy with estimating structural government balances.

We can keep endlessly discussing the “optimal set of fiscal rules” and devoting a great deal of honest intellectual effort to redefining rules every now and then. This is a necessary endeavour because, as I have argued above, institutional systems have to evolve to accommodate new situations and to learn from past mistakes. But what the political economy literature teaches us is that the willingness of the relevant actors (countries, the European Commission and the Council of the EU) to apply a given set of rules is the key to this debate.

### **Complexity of the rules or (real-time) implementation problems?**

Let me provide some examples of practical issues that affect the implementation of any rule, and that if dealt with by technical, non-biased bodies, would certainly reinforce any efforts to make the system of fiscal rules work. I will skip the widely analysed core issue of the causes of structural government balance revisions,<sup>13</sup> with the interesting insight that real-time macro forecasts are one major source of the real-time bias in the estimation of output gaps, and will focus on some less standard topics.

A first example has to do with statistics. The production of fiscal data in Europe is the responsibility of independent national statistical offices and is subject to scrutiny by the European Commission (Eurostat). Nonetheless, the literature shows that, from a political economy point of view, governments

13 Analysed in, for example, Hernández de Cos, P., Lacuesta, A. and Moral-Benito, E. (2016), “An exploration of real-time revisions of output gap estimates across European countries”, Bank of Spain Occasional Paper 1605.

might have incentives to resort to creative accounting practices so that the initially released figures are distorted. In addition, frequent past data revisions imply shifts in subsequent targeted/projected paths over the medium term, given that government targets and projections are linked to the base year in which these targets/projections are produced. Moreover, even in the cases in which revisions do not present a clear recurrent pattern but are nonetheless frequent, the comparison of successive paths of government targets might be blurred, and may eventually undermine the soundness and consistency of fiscal policy choices over time.

**Table 1:** Revisions to government balance-to-GDP ratios (d) over time, from initial (Spring of year 1) to final release (Autumn of year 4)

Pool of 15 EU countries (1998–2008)

<b>Revision after 4 years:</b> $r_t^8 = d_t^8 - d_t^1$		<b>Revision after 3 years:</b> $r_t^6 = d_t^6 - d_t^1$	
Mean	-0.34***	Mean	-0.18**
Standard deviation	1.04	Standard deviation	0.83
Noise-to-signal ratio	0.43	<i>No. of observations</i>	135
<i>No. of observations</i>	119		
<b>Revision after 1 year:</b> $r_t^3 = d_t^3 - d_t^1$		<b>Revision within 1st year:</b> $r_t^2 = d_t^2 - d_t^1$	
Mean	-0.02	Mean	0.00
Standard deviation	0.62	Standard deviation	0.53
<i>No. of observations</i>	150	<i>No. of observations</i>	165

*Notes:* \*\*\*statistical significance at 1%; \*\* statistical significance at 5%.

*Source:* de Castro, Perez and Rodríguez-Vives (2013)

Moving to fiscal data, revisions to government balance figures should, in principle, be explained by the normal and necessary updates in the underlying statistical sources and/or by methodological improvements and changes in accounting standards. Nevertheless, data revisions are not random. Table 1 shows how subsequent government balance revisions in the EU led to higher deficits during the 1998–2008 period. Furthermore, some recent research<sup>14</sup> shows that preliminary government balance data releases are biased and

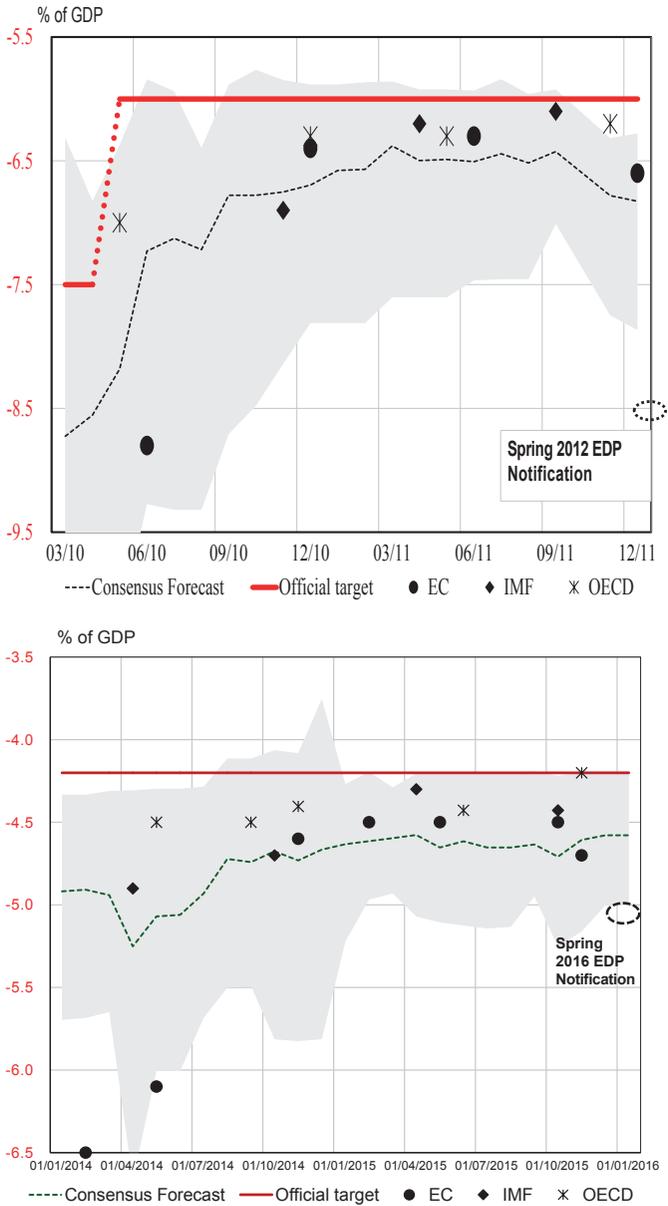
14 See De Castro, F., Pérez, J.J. and Rodríguez-Vives, M. (2013), “Fiscal Data Revisions in Europe”, *Journal of Money, Credit and Banking* 45(6): 1187–1209.

inefficient predictors of subsequent releases, that such systematic bias in government balance revisions is a rather general feature of the EU, and that expected real GDP growth and political cycles explain revision patterns. In addition, Eurostat's decisions and methodological clarifications leading to forced data revisions explain a large amount of the bias towards lower government balances, providing evidence that some individual countries might have distorted preliminary releases of data by using accounting rules in a partial way.

The second example has to do with the ability to anticipate fiscal slippages in real time. On this point, I argue that there is room for more analysis, in light of a recent strand of the literature that looks at fiscal forecasting and monitoring issues. Figure 1 shows how international organisations and private sector analysts forecasted the 2011 and 2015 Spanish government balance over time. The initially released balance (the "Spring Excessive Deficit Procedure notification") turned out to be outside of the range of all forecasts, including that of the European Commission. The forecast errors are striking, not only for their size but also because of the fact that even estimates produced with information up to the very end of the year were far off the released data. A recent line of research shows that these errors could have been reduced if a formal and transparent role had been assigned to short-term fiscal indicators based on public accounts data.<sup>15</sup> In the case of the example chosen for Figure 1, the forecast errors turned out to be extremely policy relevant. As regards the 2011 forecast, the shock undermined the fiscal credibility of the newly elected Spanish government, acting as a catalyst for the sovereign debt stress that Spain was subject to over the course of 2012 and for the associated change in the EDP policy path. As for the 2015 error, it led to Spain being subject over the course of 2016 to a step-up in the EDP process, and led to a new change in the EDP adjustment path that affected the credibility of the entire EU system of fiscal rules.

<sup>15</sup> For a discussion of the case of Spain and for references to other studies for the EU as a whole, see Pedregal, D.J., Pérez, J.J. and Sánchez, A.J. (2014), "A toolkit to strengthen government budget surveillance", *Hacienda Pública Española / Review of Public Economics* 211(4): 117–146.

**Figure 1:** Evolution of government balance forecasts for Spain for 2011 (top panel) and 2015 (bottom panel) from the European Commission, IMF and OECD



Source: Author's calculations.

A third example is related to the previous one and looks at the ability of independent institutions such as the European Commission to reduce biases in monitoring fiscal rules in real time. Recent research<sup>16</sup> shows that the fiscal forecasts of international agencies are affected to some extent by the same type of problems that the literature widely acknowledges for governmental forecasts: bias linked to political cycles or the influence of opportunistic GDP cycles. The main reason is that informational shortages may lead staff of independent agencies to internalise “political biases” in governmental forecasts when trying to grasp genuine “private information”, given that international analysts have to solve a signal extraction problem to separate “true” from “biased” information in data provided by governmental agencies themselves.

### **What can be learnt from the implementation flaws?**

The previous examples have clear-cut policy implications.

First, independent national fiscal institutions might be a natural option, to the extent that they may have better access to inside national information than international organisations, allowing them to perform closer monitoring of official budgetary projections, in particular regarding transparency requisites, accountability and the threat of sanctions. National fiscal watchdogs tend to have better inside knowledge of the legal framework, more granular data knowledge, and also advantages when dealing with legislation and government documents in national language. This could be of particular relevance to highly fiscally decentralised countries, given the hurdle of dealing with centre-subnational financing arrangements.

Second, we need to devote more resources to developing, monitoring and auditing statistics, as the basis of the whole system of fiscal rules is reliable data. A balance has to be struck between the number of economists commenting on and analysing data, and the number of statisticians producing them.

Finally, short-term fiscal indicators (monthly and quarterly fiscal data) should be formally included in the European multilateral fiscal surveillance process. Their formal use in the public discussion would certainly enhance the preventive arm of the Stability and Growth Pact, making it possible to acknowledge fiscal slippages early enough that pressure to take corrective measures could be put on governments by EU institutions and the public at large

16 See, for example, Merola, R. and Pérez, J.J. (2013), “Fiscal forecast errors: governments versus independent agencies?”, *European Journal of Political Economy* 32(C): 285–299.

### **The way forward: Decentralisation or EU-wide mechanisms?**

The preceding discussion would lead me to favour Ludovít Ódor’s “realist” option – i.e., the EU needs to move the emphasis to reinforcing national fiscal frameworks, including by giving more prominence to national fiscal watchdogs. Further decentralisation to the national level, though, carries the need to incorporate a credible “no bailout” clause by the centre (i.e., by the European Commission and the monetary union partners). The international experiences of subnational fiscal crises are not very promising in this regard. The key open question here is: What is the legal design that would allow a credible application of the “no bailout” clause? At the EU level, the recent bailouts of programme countries indicate that for the monetary union to survive, a lax approach may have to be taken in certain circumstances. Within EU countries, the recent Spanish experience also shows that strict national rules may not provide a credible safeguard when it comes to bailing out regional governments subject to high fiscal stress.

The latter example makes it clear that for the monetary union to move forward, a parallel movement in the direction of centralisation is also needed beyond the role that credible fiscal rules may provide as implicit coordination mechanisms. In this regard, the proposal of the Presidency to deepen the fiscal pillar of EMU is warranted. The recent economic crisis, in particular through its sovereign debt crisis face, has made it extremely clear that for a monetary union to function properly, some type of common or coordinated fiscal capacity at the area level should be put in place. The latter applies, in the first place, to the design of centralised risk-sharing mechanisms to cope with asymmetric shocks. Moreover – and even more importantly at the current juncture of low economic growth and the zero lower bound – a smart management of the available fiscal space at the euro area level should cater for the development of some type of common discretionary response to cater for shocks of a symmetric, aggregate nature.

The strengthening of a centralised fiscal capacity, though, has to be designed so as to minimise moral hazard risks and permanent transfers from some countries to others. There are various alternatives in the literature that do respect these conditions and, as a consequence, deserve to be explored and adopted. The EMU project clearly deserves bold steps to be taken in this regard. Beyond “public risk-sharing mechanisms”, though, it is important to stress that there is margin to improve “private risk sharing” at the EMU level. Eliminating barriers to a more complete integration of capital, credit and

labour markets is a must from this perspective. In this regard, completing a genuine banking union is a necessary companion for further developing the fiscal pillar in the EMU.

### ***Panellist 5: Cláudia Rodriguez Braz<sup>17</sup>***

The recent economic and financial crisis led to a widespread increase in general government deficits and debt in EU member states. The increase was more acute in countries with structural weaknesses and fragile public finances that faced the impact of pronounced economic recessions and strong public support to the financial sector. This environment placed severe pressure on the EU's institutional framework, which has undergone several changes to adapt to the new challenges. Amongst these adjustments, it is important to highlight the higher degree of complexity/flexibility introduced in the Stability and Growth Pact and the establishment of independent fiscal institutions (IFIs) at the national level to reinforce the monitoring role of the European surveillance mechanism. In the context of the economic recovery, improved underlying fiscal positions (albeit still with very high debt ratios) and fully operational IFIs in most member states, it might be useful to have an informed discussion on the role of fiscal policy and the optimal institutional set-up in the current juncture. In this respect, two questions are certainly relevant:

- Can fiscal policy play a role in stabilising the economy at the euro area level?
- What role should IFIs play in the European fiscal architecture?

Related to the last question, another noteworthy question is:

- If a bigger role is allocated to IFIs, does fiscal analysis at the level of national central banks become obsolete?

I will now address these three questions in turn.

### **Can fiscal policy play a role in stabilising the economy at the euro area level?**

In simple terms, a fiscal stance can be described as the impact of fiscal policy on economic activity. However, its measurement is not straightforward. Most economic analysis uses a definition based on the change in the cyclically adjusted (or structural) general government balance (total or primary). The

<sup>17</sup> The views expressed here are my own and do not necessarily represent those of Banco de Portugal or the Working Group on Public Finance (WGPF) of the European System of Central Banks. The opinions conveyed here have benefited substantially from the discussions and the work carried out by the WGPF, which is a privileged forum for fiscal policy analysis.

concept has been widely applied at the country level, but the notion of a euro area fiscal stance, as the aggregate of national policies, and its appropriateness received limited attention in the past. However, this situation has changed recently for three reasons:

- i. the prevailing economic conditions associated with low protracted growth, a still significant negative output gap (-1.1% in 2016 in the euro area as a whole, according to the Spring 2016 European Commission forecasts)<sup>18</sup> and an unemployment rate that is expected to remain high, in particular in countries that were most severely hit by the crisis;
- ii. constrained monetary policy, with interest rates crossing the zero lower bound and the implementation of non-conventional measures; and
- iii. institutional developments, with the establishment of an independent advisory European Fiscal Board by October 2015<sup>19</sup> (expected to become operational by mid-2016) mandated to evaluate the euro area fiscal stance.

Given these conditions, it is easy to understand the debate around the use of national fiscal policies for exceptional support for a faster closure of the euro area output gap. However, as there are still considerable risks to sovereign debt sustainability prevailing in several countries, the answer to this question depends ultimately on how the costs associated with the failure to meet the stabilisation and sustainability objectives are assessed and weighed.<sup>20</sup>

The application of discretionary fiscal policy has well-known serious drawbacks. Indeed, besides the implementation lag, given the time period that usually exists between recognising the need for an intervention and the actual enacting of a fiscal measure, there also are problems associated with the reversibility of such fiscal measures and the limited capacity to assess the state of the economy in real time. In fact, this explains the strand of the literature advocating that in normal times, the stabilising role of fiscal policy should be based solely on the functioning of automatic stabilisers. In a situation where an expansionary fiscal policy in one member state would be used to stimulate the economic activity of the euro area as a whole, the uncertainty in terms of the magnitude of spillover effects adds to the above-mentioned shortcomings.

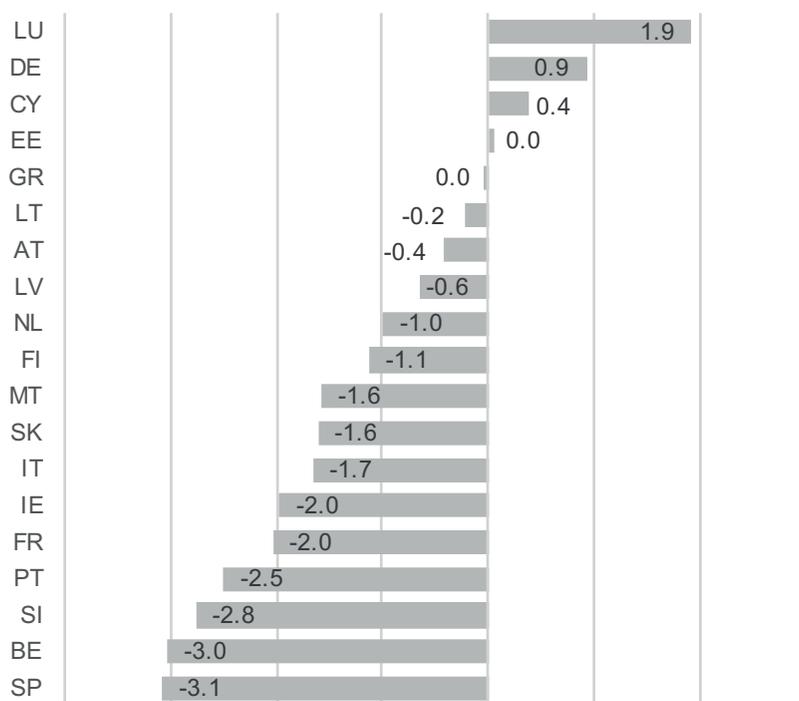
18 [https://ec.europa.eu/info/publications/economy-finance/european-economic-forecast-spring-2016\\_en](https://ec.europa.eu/info/publications/economy-finance/european-economic-forecast-spring-2016_en).

19 “On steps towards completing Economic and Monetary Union”, Communication from the European Commission, October 2015 (available at <https://ec.europa.eu/transparency/regdoc/rep/1/2015/EN/1-2015-600-EN-F1-1.PDF>).

20 See European Commission (2015), *Report on Public Finances in EMU 2015*, Brussels (available at [https://ec.europa.eu/info/publications/economy-finance/report-public-finances-emu-2015\\_en](https://ec.europa.eu/info/publications/economy-finance/report-public-finances-emu-2015_en)).

In the original set-up of EMU, the fiscal stance should be determined by the national objectives to ensure fiscal sustainability and not be driven by stabilisation needs. However, the Stability and Growth Pact includes several elements that consider the state of the economy in the application of fiscal rules. For example, in the definition of the Medium-Term Objective (MTO), a safety margin is taken into account in order to safeguard respect of the Treaty reference values for the deficit and the debt at times of negative output gaps. Additionally, in the preventive arm of the Pact, the pace of convergence towards the MTO also takes into account the cyclical position of the economy (the new “flexibility matrix”) and, in the corrective arm, a general escape clause might be used in case of a severe economic downturn for the euro area or the EU as a whole. All these provisions do not automatically ensure a desirable euro area fiscal stance and, as such, the original focus on sustainability of the EU fiscal architecture remains.

**Figure 1:** Fiscal space in the euro area, 2016



*Note:* Fiscal space measured by the difference between the 2016 structural balance (EC) and the MTO.

*Source:* European Commission and own calculations.

The recourse to fiscal policy for stabilisation purposes depends heavily on an evaluation of the fiscal space. According to the IMF,<sup>21</sup> fiscal space can be defined as the availability of budgetary room that allows a government to provide resources for a desired purpose without any prejudice to the sustainability of a government's financial position. While there is some agreement around this broad definition, the actual measurement of fiscal space varies widely depending on the method or model used, which points to the need for caution when delivering policy recommendations. If a simple, rules-based definition based on the difference between the European Commission estimate for the 2016 structural balance and the country-specific MTO is used, it can be shown that currently the fiscal space in all euro area countries is very limited, with the exception of Luxembourg, Germany and, to a lesser extent, Cyprus (see Figure 1). It is important to highlight that the absence of fiscal space does not preclude a growth-friendly recomposition of government revenue and expenditure, where economic activity would benefit through means of the different fiscal multipliers of the instruments used.

In any case, if a more expansionary euro area fiscal stance were judged to be desirable, this would require coordination of fiscal policies. Following the *Five Presidents' Report*,<sup>22</sup> there has been some discussion of the creation of a fiscal capacity which could address, amongst other possibilities, asymmetric macroeconomic shocks. If a proposal of this type were to materialise, it would have the advantage of ensuring ex ante national contributions, while allowing efforts to be directed to countries with greater negative output gaps, which typically have higher fiscal multipliers. However, there would be the risk of free-riding behaviour, in particular through the postponement of important structural reforms. In addition, it should be noted that a fiscal capacity *per se* would only ensure an impact in the euro area fiscal stance in case of mismatch between the timing of contributions and the use of funds or the existence of a direct borrowing facility at the aggregate level. A fiscal union (or a euro area treasury, as foreseen in the *Five Presidents' Report*) would make a desirable fiscal stance easier to achieve, as fiscal sustainability and stabilisation would be determined at the euro area level. However, this would imply potentially significant risk sharing and consequently would require a far-reaching transfer of fiscal sovereignty to the euro area level, which could be considered a drawback from the perspective of some individual member states. Finally, it

21 Heller, P.S. (2005), "Understanding Fiscal Space", IMF Policy Discussion Paper PDP/05/4 (available at [www.imf.org/external/pubs/ft/pdp/2005/pdp04.pdf](http://www.imf.org/external/pubs/ft/pdp/2005/pdp04.pdf)).

22 Juncker, J.C. in close cooperation with Tusk, D., Dijsselbloem, J., Draghi, M. and Schulz, M. (2015), *The Five Presidents' Report: Completing Europe's Economic and Monetary Union*, Brussels: European Commission.

is worth highlighting that both a fiscal capacity and fiscal union would need to be carefully designed and their practical implementation would likely be a lengthy process.

### **What role should independent fiscal institutions play in the European fiscal architecture?**

With the establishment of IFIs in almost all EU countries, a debate on the role of these institutions in the European fiscal architecture has emerged. Some argue that Europe should move towards a decentralised framework in terms of fiscal surveillance. If this was to be the case, IFIs could play a crucial role.

According to a survey carried out in the second half of 2015 by the ESCB Working Group on Public Finances (the results of which were not made public), the IFIs' setup and functioning are currently found to have limited weaknesses. However, there are still some concerns in terms of staff resources, access to information and the risk of political bias in the respective assessments.

The tasks of IFIs are diversified, but most make an *ex post* assessment of key budgetary documents, such as the budget and the update of the stability and convergence programmes. As they have no sanctioning power, their effectiveness comes mainly through peer pressure exerted by the influence of public opinion. If IFIs were to deviate from their monitoring role, for example by proposing concrete guidelines for the fiscal measures to be adopted by governments, they would most likely be considered responsible for the almost inevitable failures.

One possible solution to this dilemma would be to improve the institutional framework by reinforcing the set of rules at the national level. The design of an optimal fiscal rule is, however, extremely difficult. On the one hand, overly simple rules are transparent and easily understood by the public but do not work because they are easily circumvented. On the other hand, state-contingent rules are best, but a certain degree of complexity may lead to manipulation and uneven implementation. It is also important to note that political economy arguments are relevant not only at the enforcement stage, but also at the time of the approval of the rule, where loopholes may deliberately be left in place.

To sum up, reinforcement of the national fiscal frameworks to allow IFIs to play a greater role would replicate to some extent the problems faced at the EU level.

### **If a bigger role is allocated to IFIs, does fiscal analysis at the national central bank level become obsolete?**

Some argue that there is a “fiscal policy obsession by central banks”, but at times of institutional rearrangement it is definitely worth rethinking the role of national central banks in fiscal analysis.

While all central banks in the European Union publicly communicate to some extent on government fiscal policies, there is considerable heterogeneity in the scope and method of communication. There have been a few changes recently in most central banks’ public communications on fiscal policies, but these have mostly gone in the direction of more public communication.

Communication by central banks on fiscal policies can be regarded as a complement rather than a substitute to the public and independent assessment of fiscal councils. Several arguments support this view. First, central banks are concerned with the implications of fiscal policy for monetary policy. Second, the public scrutiny of governments’ fiscal policies improves if different independent institutions are publishing the respective assessments, as there are more informed views on the subject. Third, central banks can refer to the IFI assessments, reinforcing the messages to be conveyed. Finally, the past experiences of countries where an IFI has existed for a long period co-existing with fiscal analysis carried out by the central bank, as for example is the case in the Netherlands with CPB, supports the complementary view.

### **General discussion**

*Erik Jones:* I would like to start by asking a few questions to the panellists. The audience can then chip in with any questions or concerns they may have.

Can you have a credible “no bailout” clause with political entities of such radically different sizes? It is one thing to let the city of Mobile in Alabama go bankrupt. But, can you really let New York City go bankrupt? By the same token, can you have a credible “no bailout” clause when sovereign and bank finances are so deeply intertwined? If you were to look at the history of the United States, when states tend to get bailed out is when their banks are in trouble. So, the savings and loans crisis was all about bailing out state-based banking systems. Spain would have loved that in 2012.

The second set of issues has to do with perceptions of solidarity. Every time I talk to finance ministers about successful structural reform, they tell me that national ownership is the key. But, they only say that in the context of their own country. When they look at other countries, they describe national ownership in terms of moral hazard. I wonder if you can reconcile the tension, because

I sense the absence of a German voice on this panel who would look at the structural reform debate and say that the concessions that you need to offer to make that work are not concessions that we want to see.

The third issue has to do with the explanation or justification of cross-border transfers, particularly in the context of unemployment insurance, especially when unemployment surges generate histories. Here, I would point to cases like Italy and Belgium, where cross-regional transfers to support unemployment ended up as a long-term problem and developed into serious political movements against the unity of the country. In Italy, that did not play out as badly as it could have done. In terms of simple rules that you can get at the sub-national level if you have a federal fiscal entity, I wonder about that fallacy of composition. Think about how much easier President Obama's life would have been in 2010–2011 if the state governments had not all been following balanced budget rules and crushing public sector employment at the same time. Obama introduced fiscal stimulus and then the state governments subtracted it because they all followed the same very simple fiscal rules. I think that Obama would have preferred not to have had that.

The last issue is how we insulate our fiscal authorities from the activities of the private sector. A lot of the private-sector debt creation is going to migrate into the public sector. If you want to see an example of that, look at the whole pay cheque lending issue in the United States. Pay cheque lenders are short-term, small dollar lenders. They are all regulated at the state level and the federal government is terrified of these guys because of their implications in terms of social distress and, ultimately in the long term, in terms of fiscal policy.

**Ardo Hansson (*Eesti Pank*):** I think the Chair has led us to this point on whether the panellists have any view on the desirability of an orderly state bankruptcy or insolvency procedures for sovereigns in Europe and whether this is a part of the institutional framework. As you listen to Minister Mramor on how difficult it is and that everything is changing, that there are countries that think rules are too flexible and others that think that they are not flexible enough, maybe market forces are a bit of a substitute. Could you simplify things if you had a bit more market discipline? A recent paper by Dellas and Tavlas<sup>23</sup> compared the gold standard with the recent European experience. The gold standard was a very extreme corner solution, with a common currency but no common institutions and no coordination. Presumably, fiscally at least it worked. So, whether or not rules are moving somewhere in that direction, substituting markets for rules might make sense.

23 Dellas, H. and Tavlas, G.S. (2013), "The Gold Standard, the Euro, and the Origins of the Greek Sovereign Debt Crisis" (available at <https://object.cato.org/sites/cato.org/files/serials/files/cato-journal/2013/9/cjv33n3-13.pdf>).

**Giovanni Dell’Ariccia (IMF):** I was surprised that nobody mentioned the banking union in this panel. A full banking union is probably one of the most striking differences between the US system and what we have in the euro area. You can have the city of Detroit going bankrupt but not leaving the dollar. In the euro area at the moment, you cannot have severe distress on the fiscal side without risking a run on the banks. We witnessed something like that very recently. What is the minimum level of banking union that would change the situation?

**Mejra Festic (Bank of Slovenia):** We know that we have different GDP structures, different productivity and different purchasing power across European countries. Nevertheless, there are some trends and intentions for fiscal centralisation and fiscal union. I would like to compare fiscal union with the European deposit insurance scheme phases. It is too early to implement the European deposit insurance scheme because we have less systemically important banks, different supervision of these banks, different bankruptcy procedures, different out-of-court restructuring and compulsory debt settlement. So what is your opinion, if we compare these two instruments? Within what time span would it be feasible to fulfil and integrate fiscal union and the European deposit insurance scheme?

**Johannes Clemens (Deutsche Bundesbank):** Drawing on his experience, Minister Dušan Mramor showed us how fiscal policy functions in reality, especially with regard to the structural budget balance. As Javier Perez pointed out, I would say that the measurement problem of the structural budget balance or potential output is not just in the volatility of its measurement but also in its bias. Usually, those who estimate potential output have a bias towards overestimating it. From a political economy angle, this is quite rational. It is a great story for politicians to be below potential output most of the time because then you can do something. This is for me a theoretical explanation for the debt bias of fiscal policies. I also would like to raise another point related to the interconnection between fiscal stance and the Stability and Growth Pact limits that started in 2012. Should this be interpreted as the functioning of Mario Draghi’s “whatever it takes” statement<sup>24</sup> in order to give a signal that the fiscal policy stance could be loosened because monetary policy would bail out fiscal policy?

**Erik Jones:** We have questions on market discipline, banking union, deposit insurance, measurement bias and fiscal stance. I would like to invite each of our panellists to respond to any of the themes that they want.

**Cláudia Rodriguez Braz:** More market discipline is surely welcome, but it is not possible to safeguard an adequate reaction of markets to the circumstances and with appropriate timing. Indeed, there is some literature that points to sudden (and over-) reactions by financial markets. Overall market discipline can help, but it is not a solution to all problems *per se*.

A question was also asked about the possibility of having a mechanism for the orderly restructuring of debt. My opinion is that the issue is not on the table for the time being. In the current European framework, in particular at the euro area level, a mechanism exists solely for assisting in case of liquidity problems (the European Stability Mechanism) but not for when solvency is a high risk. In any case, I believe that some steps in the direction of establishing such a mechanism will be adopted in the coming years.

The establishment of a European deposit insurance scheme would go in the direction of decoupling banks from sovereigns and help in managing sovereign crises. There are, indeed, some similarities in the difficulties of establishing a European deposit insurance scheme and a fiscal union. As has been pointed out here today, a fiscal union with sovereign states that have different national rules, different cultures, different fundamentals and different social preferences will be extremely difficult to launch in the near future.

Finally, I fully agree that the discussion of the use of fiscal policy with a stabilisation purpose that occurred in 2012 might have been distorted because of the potential output bias. In any case, the sustainability objective should have been present at the time, as the fiscal space was also quite limited then.

**Lucio R. Pench:** There are too many questions on the table. It was remarked that banking union was absent from the discussion. It is a good remark. Speaking in a personal capacity, it remains a question whether we should implement a full banking union, including the fiscal back stop, deposit insurance and all the other elements. Could this conceivably be enough over and above a fiscal union to make a full banking union work? It is true that a banking union, if so implemented, would have important stabilisation properties. Still, I wonder whether in the absence of a common safe asset, one would have an opposite comparison with the situation in the United States.

This links to the issue of a sovereign restructuring mechanism. At the end of my presentation I spoke, though vaguely, about the reinstatement of the “no bailout” rule which, in fact, was avoided in the course of the crisis. I believe it could be argued that precisely because of the problem with relying exclusively on market discipline, a solution that would go in the direction of reinstating the “no bailout” rule, including exposure limits for public debt on banks, should

be explicit as to be accompanied by other elements in terms of creation of a common safe asset. One could envision a grand bargain, ideally, but this would be very difficult to implement in practice.

**Agnès Bénassy-Quéré:** On the “no bailout” clause, there is a very good book by Cottarelli and Guerguil<sup>25</sup> that looks at the experience of federal countries, where sub-national entities have fiscal problems that are as dirty as what we have in the euro area. It is very clear that there is no bailout for small entities; you let them fail. But for the big entities this is never the case, not even in Germany. We will have to deal with these dirty solutions. However, we won’t be safe unless sovereign debts can be restructured without triggering a systemic crisis. I think the ESM could play a role here to stop contagion when this kind of thing happens. In the short term, we have a problem with the banks. For the banks, a big challenge is how to diversify sovereign risk on their asset side. Sometimes we forget that sovereign bonds are the ultimate source of liquidity. So, we should not penalise banks for holding these bonds. I agree that they should hold diversified debt in safe assets. The challenge is how to move from one situation to the other.

For deposit insurance, I do not understand why we are not restricting deposit insurance to those banks which are directly supervised by the SSM. Who should pay for an error in supervision? At one point, if you do not have a backstop for deposit insurance and if the SSM makes a massive error on a bank, then you have to ask the national government and other banks of the country to pay for the error. This is impossible. We need to put fiscal responsibility in line with governance.

About unemployment insurance, what is important is the difference between the unemployment rate and the moving average of unemployment rate. It is not a permanent transfer; after two years it stops. In France, you have a stable unemployment rate, so unemployment insurance would not benefit this country. There have been some simulations showing that during the past such a scheme would have benefited Germany and Spain, with no permanent transfers. You can design it so that it does not happen.

**Eudovít Ódor:** When I presented the proposal for the new institutional framework, there were two items at the bottom of Figure 1 – the two necessary building blocks for any kind of successful fiscal framework in the euro area. First, a well-functioning banking (or financial market) union. Currently, we have too much reliance on bank financing compared to the United States, high concentration risks and zero sovereign risk weights. In my view, there is still

25 Cottarelli, C. and Guerguil, M. (2015), *Designing a European Fiscal Union: Lessons from the Experience of Fiscal Federations*, Abingdon, UK: Routledge.

a lot of work to do in order to create a financial Single Market. The second necessary element I mentioned was an *ex ante* sovereign resolution scheme. Europe should face the moral hazard problem not only from the borrower side (by implementing smart fiscal rules in synergies with fiscal independent institutions) but also from the lender side. It can be done by specifying (*ex ante*) the amount of losses bond investors can expect in case of sovereign insolvency. In that case, market participants will be more reluctant to lend to irresponsible governments. Also, market signals can be enhanced through the presence of truly independent fiscal institutions capable of uncovering the true state of public finances in real time.

My second point is on the uncertainty surrounding the real-time measurement of the output gap. We estimated this uncertainty by comparing different vintages of the structural budget balance calculated by the common EU methodology. In the case of structural adjustment, the average difference between the most optimistic vintages compared to the most pessimistic ones was around 0.5% of GDP. Moreover, for countries that joined the EU in 2004, the sign of the change in the output gap changed in 40% of the cases. In my view, instead of focusing on the structural budget balance, it is much better to use the evolution of expenditures (adjusted to discretionary revenue measures) as the most important operational guide for fiscal policy.

**Dušan Mramor:** We also made an analysis of what the mistakes here are. There is a big difference between new EU member states and old EU member states. The smaller the country and the newer the member, the bigger the difference. You know which country has the best results? Germany. So, this methodology is quite well adapted to the changes in Germany, but it is not well adapted for especially small countries. It is procyclical, and what we found is that the output gap is positive when it should not be. That means that it is pushing fiscal policy to be restrictive. At the same time, more restrictive fiscal policy is the consequence of uncertainty, as I explained earlier during my presentation. So, the new EU members are forced to have much more severe austerity programmes than are sensible in order to be within the lines of the Stability and Growth Pact. *Ex post*, you find out that the fiscal stance was too conservative. It is very interesting when you study this topic. There are many questions – very big ones – but I leave this today to academics.

**Javier J. Perez:** This discussion on observables is important, but I will draw your attention to the fact that observables are sometimes quite hard to understand when it comes to accounting issues. Sometimes, relying on observables is a complicated theme.

On the “no bailout” clause, the problem is that the only real solution to this clause is to have some type of debt-restructuring mechanism. This is what we have learnt from the experience of other areas, including the United States. Otherwise, there is an intermediate alternative: “funds for conditionality”, which is what we do with the ESM. But, the restructuring can have many forms.

Finally, on national ownership and on coordination of fiscal and monetary policies, since monetary policy is at the zero lower bound, in case of an “accident” it could be the case that some type of fiscal stimulus is needed at some point. The governance of a “coordinated fiscal reaction” is complicated, as there are many ways of implementing it. How can we share the burden among countries? Sometimes, the debates just focus on asking Germany to expand public investment. I do not think this is the only way. We should be creative and think about this issue from different perspectives, playing with the flexibility embedded in the current fiscal rules framework.

## Panel 3

# Conducting monetary policy when fiscal space is limited

---

### Chair

Dubravko Mihaljek, *Bank for International Settlements*

### Lead Speaker

Hans-Helmut Kotz, *SAFE Policy Center, Goethe Universität, Frankfurt and  
Center for European Studies, Harvard University*

### Panellists

Ardo Hansson, *Governor, Eesti Pank*

Jozef Makúch, *Governor, National Bank of Slovakia*

Boris Vujčić, *Governor, Croatian National Bank*

Gent Sejko, *Governor, Bank of Albania*

Vitas Vasiliauskas, *Chairman, Bank of Lithuania*

Lubomír Lízal, *Board Member, Czech National Bank*

## Summary of Panel 3

### *Dubravko Mihaljek*

A short answer to the question implicit in the title of this session – How difficult is it to conduct monetary policy when fiscal space is limited? – is “very difficult”. There is broad agreement on several issues regarding monetary and fiscal policies considered on their own and interacting with each other. However, we still do not fully understand how the two policies could be effectively combined in a new post-crisis environment in Europe. We are still far from understanding how to create the conditions for implementation of structural policies, which everyone sees as a key ingredient of the macroeconomic policy mix in the prevailing environment.

First, on monetary policy. All panellists seemed to agree that without the expansionary measures taken so far, economic growth in Europe would have been much weaker. That said, further easing is not seen as a priority at this

point. For instance, Estonia is experiencing nominal wage growth of 6.5%, with inflation negative and real GDP rising by only about 1.5% *per annum*. As Ardo Hansson asked pointedly, does one need to further stimulate the economy in this situation and get wages growing at 8% a year? Or, take the case of Slovakia, which is not showing clear signs of overheating. Jozef Makúch noted astutely that it was not necessary to consider further accommodative measures at this point, given that the recently introduced non-standard measures have not had the time to do what they were intended to do. Moreover, banks have already seen margins between lending and deposit rates severely squeezed. So, additional lowering of policy rates would further reduce banking sector profits.

In the case of Croatia, Boris Vujčić argued persuasively that the focus should not be on further easing but rather on bank and corporate balance sheets repair. The Croatian National Bank has already created 2.5 to 3 times more liquidity, in relative terms, than the ECB by relaxing the macroprudential tools that had been tightened during the credit boom. However, banks cannot place all that liquidity because the real sector is highly indebted and lacks adequate equity and collateral to resume borrowing. The Bank of Albania faces a similar challenge. It lowered policy rates from 6.5% in 2008 to a historical low of 1.25% at present, injected liquidity into the banking system, and widened the range of eligible collateral for central bank lending facilities. And yet, Gent Sejko was concerned that the easy financing conditions thus created were not being transmitted to the real sector because of extreme risk aversion of domestic banks – or rather, their parent institutions in the euro area – and high indebtedness of Albanian firms.

Regarding fiscal policy, there was broad agreement that the concept of fiscal space was too elusive and difficult to measure to be a reliable benchmark for the calibration of fiscal policy, not to mention the adjustment of fiscal and monetary policy stances. In country after country, the amount of fiscal space was grossly overestimated in the run-up to the crisis. So how could anyone be sure that the countries being asked to “do more” in terms of fiscal policy today really had the room to do so? Vitas Vasiliauskas presented some shocking evidence to this effect: only four out of 28 EU countries fully complied with the fiscal provisions of the Stability and Growth Pact this year. Ardo Hansson argued that having a bit of fiscal space did not mean a country should use it. In particular, countries in EMU needed more fiscal space than otherwise because, as Hans-Helmut Kotz put it cogently, there were no backstop facilities at the national level – national central banks in the common currency area could not act as lenders of last resort to rescue domestic banks as, for instance, the Bank of England did. Lubomír Lízal reminded us that even in countries

which looked fiscally sound at first sight, fiscal space was an illusion when one took into account contingent public-sector liabilities arising from health care, pensions and other costs of ageing populations.

Even without questioning the concept of fiscal space, many panellists had reservations about the potential effectiveness of fiscal expansion at this juncture. There was broad agreement that most countries had room to boost private investment and keep deficits unchanged by altering the composition of taxes and public spending, for instance by reducing the tax burden on labour and capital and cutting red tape. However, the idea that one could jump-start an economy recovering from the financial crisis by pumping public funds into infrastructure projects seemed a bit simplistic. Granted, there was the possibility of locking in near-zero or even negative funding costs for some advanced economy governments, and most economies did have significant public infrastructure needs, as illustrated by Hans-Helmut Kotz.

However, implementing large-scale projects is tricky. Good governance and thorough cost-benefit assessments are crucial for appropriate project selection and preventing cost overruns. Even in advanced economies, the planning and execution of infrastructure projects may not be as efficient as often assumed. Even if current funding costs are low, this does not necessarily mean that all public projects are worthwhile. Interest rates will at some point rise from the current exceptionally low levels. With a project's expected life of several decades, the rates of return would have to be assessed against interest rates over the long term.

A related point concerns the impact of low interest rates on public debt. As Boris Vujčić noted, low interest rates have temporarily prevented a snowballing of debt servicing costs and made fiscal positions look better than they really are. Lower interest payments also seem to translate into higher credit ratings – rating agencies do not seem to look through the current record-low interest rates fully when evaluating sovereign creditworthiness. But, this effect will not last forever. This is one more reason to start working on structural reforms.

With monetary policy overburdened and fiscal policy generally having limited room for manoeuvre, the use of complementary policies to support growth becomes a key issue. One option explored by non-euro area members such as the Czech Republic (and earlier, Switzerland) is foreign exchange intervention to limit currency appreciation. Lubomír Lízal outlined the achievements of this approach so far, but noted that it could not be recommended more generally. The Czech Republic, like Switzerland, was running external surpluses and

had a strong banking system. Nevertheless, the idea that exchange rate policy could be used to support the inflation targeting framework is becoming more mainstream.

Hans-Helmut Kotz reminded us of another macroeconomic policy that has been almost forgotten since its heyday in the 1970s and 1980s: incomes policy. One of the few countries that still practices incomes policy is Germany. The institutionalised practice of coordinated wage settlement and disciplined labour unions have provided a highly effective way of restraining real exchange rate appreciation.

Regarding structural policies, a key challenge in practice seems to be finding and then seizing a window of opportunity to implement such reforms. There are always plenty of excuses: strong resistance to health care and pension reforms in ageing societies (known in Japan as “silver democracy”); a prolonged weakness in economic conditions that increases labour unions’ focus on employment protection; weak fiscal positions, which make it difficult to compensate the losers from reforms; and so on. But on those rare occasions when politicians finally seize the opportunity and implement structural reforms, they seem to work small wonders – witness the Hartz reforms in Germany in the 2000s, or currently (and half the world away), the energy and telecoms reforms in Mexico. Most often, however, structural reforms are implemented under duress, as in Spain post-crisis, which partly gives them negative publicity.

From the OECD work, we know by now quite a bit about the benefits and costs of structural reforms in the short and long run. However, we know precious little about the political economy of their implementation. Another shocking statistic discovered by Vitas Vasiliauskas is that none of the EU states fully addressed any out of more than 100 country-specific recommendations by the European Commission for 2015 and 2016, while more than 90% of reform recommendations were addressed with only limited or some progress.

This brings us to a deeper issue raised by Hans-Helmut Kotz: the analytical foundation of euro area policymaking is the rational expectations revolution in macroeconomics and its policy ineffectiveness proposition. One corollary of this theory is strict separation between monetary and fiscal policies. Monetary policy was thus assigned a single objective (price stability) and a single instrument (the interest rate). Fiscal policy was assigned largely the allocation role (ideally, as neutral as possible), while its stabilisation function was reduced to automatic fiscal stabilisers (given that discretionary policy of any kind was deemed suboptimal) and ensuring debt sustainability, i.e., satisfying the intertemporal budget constraint. There was no need, or indeed scope, for monetary–fiscal policy coordination in this world. These ideas stood in

sharp contrast to the earlier Keynesian teaching, which argued that monetary and fiscal policies acted through a common funnel – aggregate demand – and therefore could and should be coordinated to find an optimal stance of individual policies.

Nor was there any concept of financial stability policies in this idealised world, partly because we did not experience the full effects of financial liberalisation and globalisation until we were hit by the global financial crisis. Central banks that used macroprudential tools before the crisis, such as Croatia and Spain, were considered in some ways offbeat: how could their policymakers pretend to know what “excessive” credit growth was?

Eight years after the global financial crisis, it is clear whose policies went off track. The panellists all seemed to agree that the separation of monetary and fiscal policies would not be tenable in the future. A new macro policy framework was needed, in which monetary and fiscal policies worked together and were combined with macroprudential, structural and, perhaps, incomes policies to achieve sustainable growth with macroeconomic and financial stability.

## **Presentations by Lead Speaker and panellists**

### ***Lead Speaker: Hans-Helmut Kotz<sup>1</sup>***

This is an outstanding opportunity because the topic of the panel is relevant not only for the euro area but also for beyond, including the United States. In my presentation, I would like to touch upon three points.

First, this talk would have lasted two seconds in 2007. At that time, there was no debate on this issue because there was no issue of monetary and fiscal policy mix. The roles of the two policies were completely separated. The canonical pre-crisis view was that there was a clear assignment of tasks, clear responsibilities and no reason to coordinate. The question then is why we have changed our views so significantly between August 2007 and now. The second point that I would like to highlight is what is different now, in terms of monetary policymaking, for conducting central bank policy in a fiscally stressed environment. The third point is what this means for the European Monetary Union (EMU) and why EMU is such a complicated environment for this issue.

1 Co-authored with Günter W. Beck, University of Siegen and SAFE Policy Center, Goethe Universität, Frankfurt.

## **Reassessment of macro policy options**

Coordination of monetary and fiscal policies (which used to be called the “two macro handmaidens”) fell by the wayside as an issue of policy debates in the early 1980s.<sup>2</sup> Over time, a view became dominant that a clear-cut division of labour between domains of policymaking should prevail. More precisely, given that there was no long-run trade-off between wage inflation and employment, monetary policy should focus on underwriting the stability of purchasing power. Fiscal policy was about the provision of public goods and had a purely allocation function, whilst simultaneously honouring the intertemporal public-sector budget constraint. In this framework, the level of employment was largely seen as the upshot of the workings of the labour market.

These policy approaches reflected theoretical developments – the Monetarist revolution (including the expectations-augmented Phillips curve) as well as the policy-ineffectiveness proposition (as it arose in a rational-expectations model with instantaneous market clearing), largely of the 1960s and 1970s. From there, as a logical corollary, a coherent policymaking setup was derived: central banks had a mandate with a primary objective – namely, providing for a low level of inflation. Monetary policy was optimised by taking fiscal policy and wage policy as given. No need for coordination; everyone was supposed to do their homework.

This canonical view has been reassessed in the wake of the global financial crisis. With monetary policy limited by the zero lower bound of nominal interest rates, the burden of macro-stabilisation (reducing the output gap) could not be carried by central banks alone. Meanwhile, in a number of cases, fiscal policies ran up against liquidity and solvency constraints. Some countries were deemed by markets to be on an unsustainable fiscal path. Solvency was threatened. Apparently, there was even no room for letting automatic stabilisers do their work, let alone deploying discretionary fiscal impulses to bring output closer to trend. In fact, some believed that this was a non-issue, claiming that there was (and is) no output gap at all. It is all about misallocated resources, an uncompetitive supply side (that is, overcapacities). Moreover, monetary policy is substantially more complicated in Europe’s monetary union, with its centralised monetary authority and multitude (19) of fiscal policies, operated on a decentralised level and coordinated by a set of rules (the Stability and Growth Pact, the Fiscal Compact, etc.).

2 See Blinder, A. (1982), “Issues in the Coordination of Monetary and Fiscal Policy”, in *Monetary Policy Issues in the 1980s*, Kansas City, MO: Federal Reserve Bank of Kansas City, pp. 3–34.

In this presentation, we will briefly sketch the canonical view (that prevailed up to the global financial crisis) on the appropriate mix between fiscal and monetary policy and then highlight questions as they arose in the wake of the crisis, leading to a sudden (positive) reappraisal of macro policy instruments. This also meant the re-emergence of the old perspective on the coordination issue between monetary and fiscal authorities. More particularly, with monetary policy restricted by the zero lower bound, fiscal policies were supposed to use fiscal space, given that it existed. Again, these issues are obviously more complicated in the case of the euro area, given its substantial divergence in the set-up and shape of national fiscal policies.

### **Policy objectives, mandates and interaction between fiscal and monetary policies**

#### *Monetary policy: The price norm*

For a quarter of a century now, modern monetary policy has been understood as inflation targeting, pursuing a price norm of about 2%. In the consensus view, it was the task of the independent monetary authority to engineer an output gap that credibly delivered on this promise. Monetary policy reaction functions (Taylor rules) concisely captured this approach.

#### *Fiscal policy: Debt sustainability*

At the same time, fiscal policy was supposed to deliver fiscal sustainability, honouring the inter-temporal budget constraint – that is, preventing unstable dynamics from arising. The net present value of ordinary public sector revenues had to be at least as large as the present value of expenditures.

The time path of the debt to GDP ratio ( $\Delta b$ ) can be usefully understood as reflecting the evolution of four factors:<sup>3</sup>

$$\Delta b = d + (r - g)b$$

where  $d$  is the primary (non-interest) deficit as ratio to GDP;  $r$  is the real interest rate on government debt;  $g$  is the growth rate of GDP (i.e., the tax base); and  $b$  is the existing ratio of outstanding public debt to GDP.

As is also well known, the debt-to-GDP ratio rises without bounds with a primary deficit and a positive wedge between the real interest rate and the growth rate of the tax base (i.e.,  $r > g$ ).<sup>4</sup> Another untenable constellation would

3 See, for example, Tobin, J. (1984), “The Monetary Fiscal Policy Mix in the United States”, in P. Jackson (ed.), *Policies for Prosperity: Essays in a Keynesian Mode*. Cambridge, MA: MIT Press, pp. 142–167.

4 Often, to separate out the inflation effect, this condition is also expressed in nominal terms as  $R > g + \pi$ , with  $R$  as the nominal interest rate, and  $g$  and  $\pi$  standing for the growth rate of nominal GDP.

be the same positive wedge ( $r > g$ ) with a primary surplus, but insufficient to counterbalance the high starting level of debt ( $b$ ). Japan, for example, needs a high primary surplus (in the non-interest part of the budget) only to stabilise its very high debt ratio, very low funding costs notwithstanding. It suffers from a large volume of outstanding debt relative to GDP and a very low growth rate of nominal GDP.

This is, of course, only arithmetic or accounting, but it emphasises that we have to acknowledge all four “parameters” when thinking about the trajectory of government debt.<sup>5</sup> It is also remarkable that over the last century, only about a third of the increase (or the fall) in the debt-to-GDP ratio was “due” to primary deficits (surpluses).<sup>6</sup> The rest was accounted for by the constellation of growth, nominal interest rates and inflation. In other words, the link between deficits and debt is less pronounced than is often believed.

This is where a short-term coordination issue between monetary and fiscal policy arises, in terms of how to underwrite a sufficient utilisation of resources (a small output gap). This short-term macro-stabilisation issue has been at the core of the original debate about the structural interdependence between monetary and fiscal policy.

However, what about long-term sustainability? The inter-temporal government budget constraint requires that in the long run, the present value of future surpluses can absorb (i.e., is equal to) today’s debt. Alas, this transversality condition is very vague indeed. Woodford, for example, has strong reservations over whether it is appropriate to conceive of the government as optimising “subject to given market prices and a given budget constraint.... For the government is a large agent, whose actions can certainly change equilibrium prices and an optimizing government surely should take account of this in choosing its actions” (p. 693).<sup>7</sup>

An indication of this analytical lacuna is the inability to come up with an optimal level of public debt<sup>8</sup> or a threshold beyond which debt becomes uncontrollable. This also means that fiscal space – the distance to distress – is a rather imprecise concept.<sup>9</sup> The debt-sustainability frontier is to a large degree

5 We put *parameters* in quotation marks since they are clearly not simply givens, exogenously determined. Macro policies, for example, could have an impact on the output gap. Structural policies could raise trend growth.

6 See, Abbas, A.N.B., El-Ganainy, A. and Horton, M. (2011), “Historical Patterns and Dynamics of Public Debt: Evidence from a New Data Base”, *IMF Economic Review* 59(4): 717–742.

7 Woodford, M. (2001), “Fiscal Requirements for Price Stability”, *Journal of Money, Credit, and Banking* 33(3): 669–728.

8 See, for example, Villieu, P. (2011), “Quel objectif pour la dette publique à moyen terme?”, *Revue d’Économie Financière* 3(103): 79–98.

9 The concept has been developed, in particular, by IMF economists; see Ostry, J., Ghosh, A. and Espinoza, R. (2015), “When Should Public Debt Be Reduced?”, IMF Staff Discussion Note SDN/15/10, June.

defined by a vector of political forces – the acceptability of a programme to generate the required primary surplus, through tax hikes and/or expenditures cuts.

Unsustainability (i.e., not meeting the solvency constraint) or the perceived capacity to roll over debt appears to lie in the eye of the beholder. It is here that the ECB's Outright Monetary Transactions (OMT) programme of the summer of 2012, with its spread-dampening effect, comes in.

## **Perspectives on monetary policy in a stressed fiscal environment**

### *The short run*

Macro-stabilisation works through what James Tobin called a “common funnel”. Tobin was, of course, referring to aggregate demand. Monetary policy bears on aggregate spending via its effects on interest rates and interest-sensitive expenditures. Fiscal policy impacts aggregate demand via taxation and spending decisions. It is ultimately the total size of the monetary *and* fiscal policy package that counts.<sup>10</sup>

In this light, monetary and fiscal policy are not really separate tools;<sup>11</sup> there is an inherent, inevitable interdependence with regard to output stabilisation or smoothing of the cycle.<sup>12</sup> This leads to the issue of coordination: in the wake of the global financial crisis, pulling away budgetary policy from stress territory and, at the same time, preventing fiscal trouble from derailing monetary policy.

But then, even if the desire to cooperate exists, coordination amounts to an intricate challenge, for the following reasons: different objectives, different preferences (time horizons) and different assessments (models).

This makes the implementation of consistent policies difficult and seemingly speaks for “clear separation” and “rule-based” policies. The central bank minimises a loss function (defined in output and inflation deviations) by operating a monetary policy (Taylor) rule with the Phillips curve (the supply side) as a constraint. Also, in view of substantial difficulties – in particular, lags – in fiscal policy implementation, monetary policy was seen as by far more flexible to respond to macro-stabilisation issues.

10 The monetary-fiscal policy *mix* was seen as an instrument to influence output composition (between consumption and capital expenditures). A tight money, expansionary fiscal policy mix (à la Reagan-Volcker), leading to higher inflation-adjusted interest rates, was deemed to reduce capital expenditures and, hence, to slow down growth.

11 See Tobin, J. (1982), “Money and Finance in the Macroeconomic Process”, *Journal of Money, Credit and Banking* 14(2): 171–204; and Tobin, J. (1984), *op. cit.*

12 This is, of course, acknowledged by monetary theorists. Carl Walsh, for example, writes about the recognition that “fiscal and monetary policies are linked through the government sector’s budget constraint”; see Walsh, C. (2010), *Monetary Theory and Policy*, Cambridge, MA: MIT Press, p. 135.

*The long run*

Fiscal policy was supposed to meet the debt sustainability condition – i.e., meet the solvency constraint – by generating a primary surplus which could compensate for a potential wedge between interest rates and growth. In other words, the sustainability of a budgetary course with a constant debt ratio requires

$$b \leq \frac{d}{(r - g)}$$

to hold. That is, in the long run the existing debt-to-GDP ratio has to be smaller than the primary surplus divided by the wedge between interest rates and growth.

Here, seemingly, monetary policy was in no way involved; it simply had to deliver on its inflation objective. In other words, the monetary financing option appeared to be barred. But, as Sargent and Wallace have stressed, it is ultimately the consolidated government budget constraint which must be honoured.<sup>13</sup> Therefore, given dynamically unsustainable debt positions, fiscal policy can force monetary policy's hand. The intertemporal budget constraint implies a binding limit for a price-stability-oriented central bank.

EMU's Stability and Growth Pact acknowledged this interdependence between monetary and fiscal policy.<sup>14</sup> It was conceived to protect the central bank against consequences as they potentially arise from unsustainable fiscal policies. Hence, the ECB's independence was not deemed to be a sufficient condition for providing price stability. Nor was bond markets' capacity to rein in sovereigns with a strong deficit bias (through higher risk premia). This could be understood as an institutional response to the “unpleasant monetarist arithmetic” – establishing that central banks ultimately are resigned to giving in when fiscal policy embarks on an unsustainable course.<sup>15</sup>

13 Sargent, T.J. and Wallace, N. (1981), “Some Unpleasant Monetarist Arithmetic”, *Federal Reserve Bank of Minneapolis Quarterly Review* 5(3).

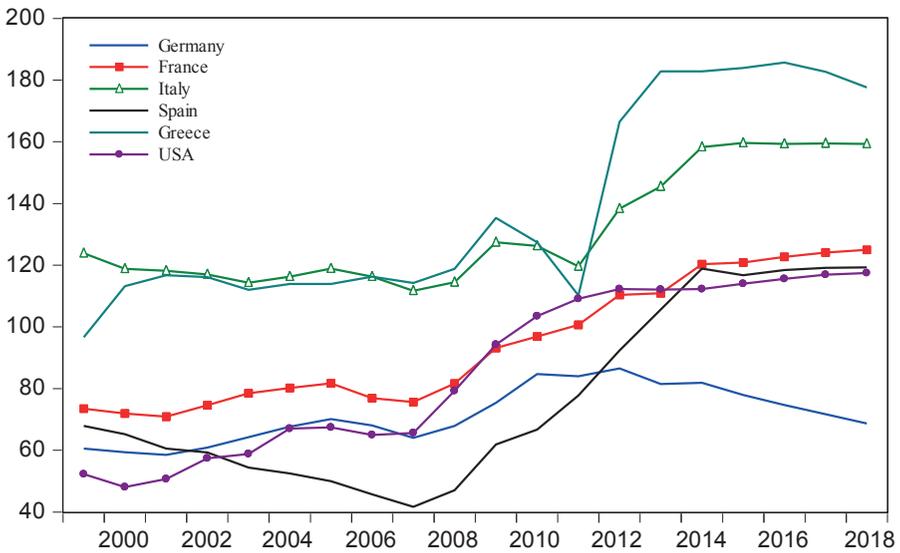
14 See Canzoneri, M.B., Cumby, R.E. and Diba, B.T. (2002), “Should the European Central Bank and the Federal Reserve Be Concerned about Fiscal Policy?”, in *Rethinking stabilization policy: A symposium*, Kansas City, MO: Federal Reserve Bank of Kansas City, pp. 333–389.

15 The fiscal theory of the price level, starting from the observation that modern central banks control short-term interest rates (and not the money supply), argues that in the long run it is fiscal policy which pins down the path of the price level; see Woodford (2001), *op. cit.*. But this is, as Alan Blinder insists, a very long run or an “infinite run” that does not impose “any serious constraints” on actual politics; see Blinder (1982), *op. cit.*

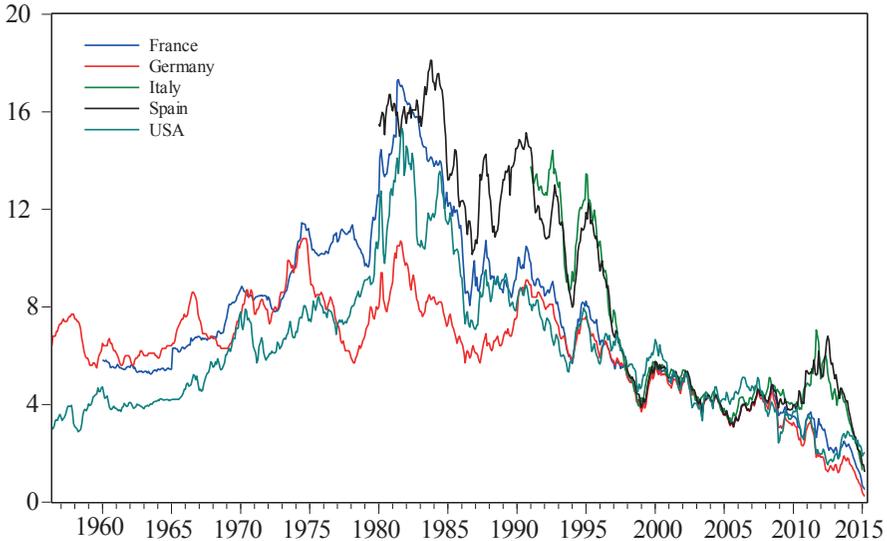
### The global financial crisis, the euro crisis and a reassessment of the monetary–fiscal policy mix

The global financial crisis ushered in a substantial reassessment. Faced with a dramatic fall in output, a corresponding rise in unemployment (except for the case of Germany) and central banks that were compelled to become highly unconventional (when reaching the effective lower bound), not only were automatic stabilisers left to do their work but also discretionary fiscal policy was rehabilitated. This came with a swift and very large increase in the level of public debt (see Figure 1). Interest rates on government bonds, however, continued their long-term downward trend, except for the case of peripheral euro area economies (see Figure 2). In the latter cases, liquidity as well as solvency issues implied at times a substantial widening of spreads against safe assets. The threat of a euro area break-up (euphemistically dubbed “redenomination risk”) called for a compensation.

**Figure 1:** Debt as a ratio to GDP (%)



Source: OECD.

**Figure 2:** Government bond yields (%)

Source: FRED, Federal Reserve of St. Louis.

Overall, the global financial crisis has demonstrated that:

- price stability did not provide (simultaneously) for financial stability;
- debt positions can become vulnerable and untenable – and rather suddenly so (e.g., Ireland and Spain) – with purported fiscal space becoming a chimera; this holds particularly true for sub-sovereigns (i.e., member states of monetary unions); and
- sovereign risk premia are evidently related to the access (or not) to lender-of-last-resort or backstop facilities (e.g., Spain versus the United Kingdom).<sup>16</sup>

The very substantial fiscal and monetary response to the global financial crisis – large increases in deficits and debt, substantial expansion of central bank balance sheets – at the same time did not lead to a commensurate increase of interest rates, risk premiums or inflation, at least not in the United States or EMU's core.

<sup>16</sup> See De Grauwe, P and Yuemei, J. (2013), “From Panic-Driven Austerity to Symmetric Macroeconomic Policies in the Eurozone”, *Journal of Common Market Studies* (51): 31–41.

In any case, there appears to be a Tobin-type “common funnel” also in the long run. Monetary policy cannot deliver without a sustainable fiscal policy.<sup>17</sup> However, this was still a world where banks – or non-bank banks (i.e., banks’ functional substitutes) – did not matter. In a number of cases during the global financial crisis, however, it was the banking sector and private-debt instability eroding a presumed fiscal space extremely rapidly (think of Ireland or Spain). This has to be accounted for in policymaking going forward. The euro area’s Macroeconomic Imbalance Procedure (for sure, delicate and complicated) is a first attempt at addressing these issues.

*Cooperative monetary policy: Is it feasible...*

Debt-to-GDP ratios (in cross-country, longitudinal analyses) have a statistically, but not so much economically, significant impact on long-term interest rates. Also, in a number of studies, thresholds with substantial confidence bands show up.<sup>18</sup> In panel analyses, those non-linearities come largely from EMU member countries, possibly capturing a break-up and ultimately an inflation risk (in a new, devalued currency).<sup>19</sup>

Fiscal stress does impact monetary policy.<sup>20</sup> Monetary policy could be forced to accommodate an inevitable adjustment to a more sustainable position. Or, it might become subject to the dominance of fiscal policy. But, it cannot disentangle itself from this inescapable interdependence.

Accommodative monetary policy, however, might reduce incentives to adjust budgetary trajectories to a sustainable path. Fiscal policy might stay longer on an ultimately untenable course, eventually wreaking havoc with the inflation objective. While this moral hazard story is plausible, empirically, monetary support was a necessary condition of fiscal consolidation.

With fiscal policy embarked on an unsustainable path, there is not much that monetary policy could achieve. Fiscal dominance prevails. In Europe, in a number of cases, it would be more appropriate to read things through a lens of financial dominance. Fiscal policy, despite having the space in at least

17 Woodford (2001, *op. cit.*) has an epigraph of Karl Brunner’s: “Proposals for a monetary rule require a supplementary proposal of a fiscal rule”.

18 See, for example, Cechetti, S., Mohanty, M.S. and Zampoli, F. (2010), “The Future of Public Debt: Prospects and Implications”, Bank for International Settlements Working Paper No. 300, Basel; and Reinhart, C., Reinhart, V. and Rogoff, K. (2012), “Debt overhangs: Past and Present”, NBER Working Paper No. 18015, Cambridge, MA.

19 Greenlaw, D., Hamilton, J., Hooper, P. and Mishkin, F. (2013), “Crunch Time: Fiscal Crises and the Role of Monetary Policy”, NBER Working Paper 19297, Cambridge, MA. Employing updated long-term interest-rate and government debt data for euro area economies, we ran panel fixed-effects regressions in the spirit of Greenlaw et al. (2013). Our results confirm their findings - they are largely driven by observations from euro area peripheral economies.

20 Greenlaw et al. (2013), *op. cit.*

some member states, let the ECB take care of a number of fragile banks. Clearly, monetary policy can only buy time, not deliver a solution to Europe’s overcapacity in banking.

More specifically, against the background of unconventional monetary policy, large-scale asset purchase programmes should also lead to substantial losses on the central bank’s balance sheet when rates ultimately rise, mechanically increasing with the duration of assets bought. Although, what concerns the ECB is that this could mean a substantial shock to its capital buffer, the duration of assets acquired being significantly lower than in the case of the Federal Reserve. While central banks can do without equity for a while and up to a limit, their political and budgetary independence would evidently suffer.

*... and what is the difference in Europe’s EMU?*

EMU member states are sub-sovereigns. They float their bonds in a currency over which they have no agency. The ECB is prohibited by the European Treaties from acting as a lender of last resort to EMU governments. Therefore, liquidity risk premia (not unlike uninsured roll-over risk for bank debt) have become so pertinent in the EMU. That is also what gave its clout to the announcement of conditional Outright Monetary Transactions in the summer of 2012. At the same time, OMT is the best that EMU member states in fragile fiscal positions can hope for.

Hence, EMU member countries with barely any fiscal space to show for cannot rely on “their” central bank – the ECB is supra-national, or stateless. Relief could only come from partner countries using their capacity to reduce output gaps (cushion the shock), restructuring (with its inevitable repercussions on vulnerable financial institutions) or a mutualisation of sovereign risks (Eurobonds). The latter option seems to be far “out of money”.

In view of a prevalent deficit bias – especially in polities with proportional representation and, hence, frequent coalition governments – fiscal rules to control debt as well as focusing on structural, cyclically corrected deficits (i.e., letting automatic stabilisers do their work) make sense.<sup>21</sup> However, given the high variance in output gaps across EMU member states, automatic stabilisers sometimes might need some substantial discretionary support, as the global financial crisis has demonstrated. This is infeasible under the current institutional features of the EMU. The SGP is prone to being procyclical at the country level. The recently installed European Fiscal Board might be tasked with assessing the appropriateness and need for a discretionary stance.

21 See Alesina, A. and Perotti, R. (1995), “The Political Economy of Budget Deficits”, *IMF Staff Papers* 42(1): 1–31.

Going forward, a number of questions and open issues have to be addressed. Monetary and fiscal policy actions are inextricably linked, in the short as well as the long run. In the wake of the global financial crisis, both responded to financial instability. How should policy account for this “omitted” (crucial) variable? With fiscal space gone, are there any options left for monetary policy? Can we get back to the pre-crisis, Great Moderation environment? Or do we have to reconsider in the new world (with non-standard monetary policy interventions and an enlarged set of tasks) the assignment of stabilisation tasks and ways to coordinate these (rule-oriented or situation-dependent, discretionary)? What makes the euro area different? Can the United States be a blueprint?

Banking union, for example, is an attempt to respond to the inexorable link between money and credit.<sup>22</sup> But, of course, the link between euro area sub-sovereigns and their national banks has not been severed. Moreover, this is a potentially large source of fiscal instability. In the case of a systemic crisis, the bail-in option will not be available. Unfortunately, however, banking crises are typically systemic. In redesigning its financial regulatory system after the global financial crisis, the United States has not opted for a bail-in approach. It, of course, has a federal backstop.

### ***Panellist 1: Ardo Hansson***

The focus of this session links back to monetary policy, but we cannot get away from what we discussed during the sessions yesterday. Just to start, I would say that an accommodative monetary policy stance in the euro area is warranted now simply because inflation is below target and we have a very clear mandate. That is not very controversial. Inflation is driven significantly, although not entirely, by commodity prices. Sometimes we forget how substantial this commodity price shock was. We usually look at oil prices. However, if we look more broadly and include metals, food prices, construction material prices and so on, they are probably 50% down in three years, and commodities are in all kinds of goods and services that we consume. It was quite a serious shock.

Yesterday, we talked about the difficulty of measuring the output gap and that it is probably closing now. If we look at unemployment rates, they are slowly coming down. So, the output gap is probably closing, and that is good news. It probably shows that at the margin, things are beginning to work. Looking forward, we have to keep our expectations somewhat realistic.

<sup>22</sup> See Kotz, H.-H. (2017), “Monetary union, banking union: Money and credit, inexorably linked”, in L. Papademos (ed.), *Banking Union and Monetary Policy*, Princeton, NJ: Princeton University Press (forthcoming).

Sometimes we get overly pessimistic about the cyclical positions. We refer to the earlier period as the Great Moderation. But in many countries, it was also a period of great excess, maybe not so much in the fiscal accounts but certainly the financial sectors, balance of payments, and so on were quite out of balance in many countries. Looking back, and knowing what we now know, we probably regret some of the things we did, but these now create our current initial conditions and give us more headwind. Since the outbreak of the crisis, to the extent that there was overleveraging before, it has subsequently got even worse.

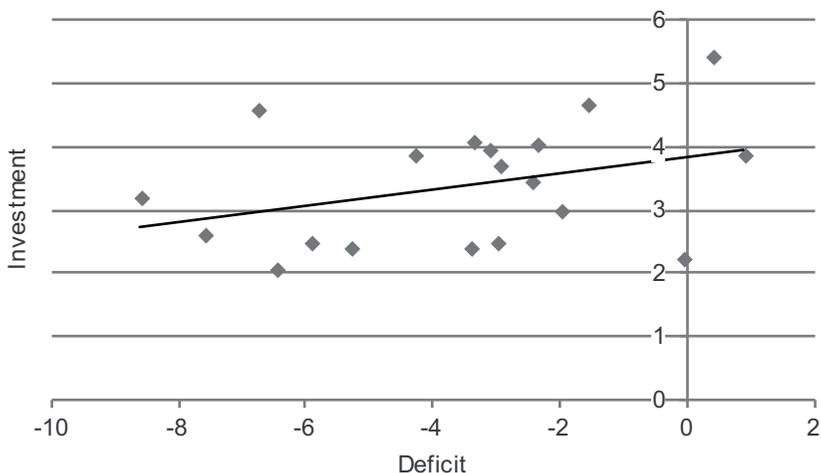
Moreover, measuring the output gap is tricky. This might also require a focus on labour market indicators. We see this in some countries such as Slovakia and the Baltic states, which admittedly do not account for a large share of the euro area economy. When you simply look at the output gap in GDP terms, it seems to be below potential. However, if you look at what is going on in the labour market, it is quite different. You may say that the economy is overheated. Thus, potential growth may not be as high as if you could filter it out from the GDP growth series. In Estonia, we currently have GDP growth of about 1.5% but wage growth of around 6.5%. This is very tricky. Potential growth might be even lower than we think. Getting inflation back to a higher level is important, but it is only a part of the challenge.

There is also a primitive mantra which says that those countries that have fiscal space should use it. However, many of the countries that have fiscal space tend to be operating near or above full employment, and they should not be encouraged to drive their domestic economies even more out of balance. At the same time, most of the countries which could do with some stimulus do not have fiscal space. This was brought out in the presentation by Claudia Braz yesterday, which showed only two or three countries in the EU that have the potential to use fiscal space. This mantra is also incorrect in implying that fiscal space should ideally be zero. In other words, if you have fiscal space, you should use it up. In fact, you should build up a bit of fiscal space.

Yesterday, we also talked about the aggregate fiscal position of the euro area. This is a concept that probably makes sense in the United States. However, if we have over 95% of our public expenditure at national or sub-national levels, this concept is quite policy irrelevant. Making a comparison, for example, with this hotel: what is the average temperature in this hotel? It is defined and measurable, but what does it mean if I aim for an average temperature of 22 degrees, while it is currently 18 degrees? Someone comes in and says, “since all of our thermostats are at maximum except the one in this conference room, you people will have to bear 40 degrees because we need to get average

temperature up”. You have to look country by country, because fiscal policy in a monetary union should be targeted more at domestic challenges than it might be otherwise.

**Figure 1:** General government lending and gross fixed capital formation of euro area countries, average 2011–2015 (% of GDP)



Source: AMECO, European Commission.

Figure 1 shows the correlation between public investment and deficits in the euro area. You can change the time period, you can try to define it in structural terms, but the basic point is that there does not seem to be any relationship. If you think that creating space to run larger deficits would make everyone start undertaking public investments, this would probably not help. In the end, this will dissipate in the consumption side and you could end up even worse off – you have dissipated your fiscal space, but you have not permanently channelled those expenditures into growth.

We should not only talk about what to do now, but also why we got into this situation. Since that was most of yesterday’s discussion, I will only say that if you have a monetary union, you need more fiscal space than otherwise. Turning to what to do about monetary policy, it should remain broadly accommodative at this point in time, but there are two qualifiers. The first is the need to maintain a degree of patience because there are lot of special forces at play behind the current low inflation. We have had quite an unusual and severe commodity shock, and the extent of leveraging – maybe overleveraging – is substantial. It will not go away anytime soon. That does create some headwinds which will

naturally make the transition a bit longer. Some work done at the Bank for International Settlements concludes much along the same lines. Second, you can also choose the composition of monetary policy instruments which will deliver a given broad stance, but do so more carefully. You can always think of an instrument having an effect on inflation, but also as having either positive or negative spillover effects. By carefully considering all of these effects, you can choose a mix to get the same impact on inflation but with different side effects on, for example, the behaviour of enterprises and the behaviour of governments. Maybe you can deal more with moral hazard, issues on financial stability, and so on. It is like a doctor prescribing a medicine – of course, they want you to get well, but there are many ways of getting well and you want to make sure that there are as few negative side effects as possible.

With regard to fiscal policy, there is a composition question. On both the revenue and expenditure sides, there is a lot of scope in many countries to move to more growth-friendly mixes. Naturally, there is no mechanistic rule that says once public debt rises above 90% or 80% or 60% of GDP, everything automatically moves from sustainable to unsustainable. However, we are not in a world of public debt at 30% of GDP, where we could have a discussion about counter-cyclical policies. In many countries, there is more need to restore fiscal space and maintain confidence.

### ***Panellist 2: Jozef Makúch***

Let me begin my presentation with a question to which an answer is widely sought: Is monetary policy facing a “new normal”, or is the current situation merely a temporary phenomenon? This seminar provides an ideal setting in which to explore the answer.

#### **Monetary policy implementation remains challenging**

In recent years, central bankers have been facing a number of serious and unprecedented challenges. While finding ourselves in uncharted waters, we must still steer a course that takes us to our objectives. The long-running deviation from the inflation target raises the questions of whether the target is correct and whether the time is right for its reassessment. Some people argue that an increase in the target could raise inflation expectations, while others say that reducing the target would be reflective of a long-term low-inflation environment. In my view, such discussions are still at the academic level. There needs to be research into whether inflation-target adjustments in other countries have had favourable and clear effects on expectations and on the transmission of monetary policy to the economy as a whole.

### **Inflation is subdued despite monetary policy accommodation**

Despite a continuous and substantial easing of monetary policy conditions, the inflation target is being missed, mainly owing to strengthening headwinds. How is monetary policy supposed to outweigh sudden and unexpected shocks in oil prices, especially when they involve a combination of demand and supply shocks? As studies show, a supply shock should have a positive impact on commodity-importing economies, and we see this most noticeably in the inflation rate. Is there a further pass-through to the wider economy, however, that would stimulate the demand side? The answer here seems to be: not as effectively as we would expect. The impact of sudden and unexpected oil price shocks in an environment of prolonged high unemployment, slower growth and very low inflation (even turning into deflation) may be putting downward pressure on inflation expectations.

### **What should the monetary policy response be?**

I firmly agree with other speakers that monetary policy cannot deliver its full potential in the absence of sustainable and responsible fiscal policy. But if that ideal is not being practised, it may be asked whether monetary policy should, or could, be still more aggressive? The scope for deploying standard instruments is almost exhausted. We have even shown that interest rates are not zero-level bound; they can be lower still and we are now testing how low they can go. Looking closely at interest rates, it is clear and logical that monetary policy transmission has a greater impact on lending activity than on deposit-taking business. The resulting narrowing of margins has had a significant, but still manageable, negative impact on banking sector profits. If, however, further easing of monetary policy is necessary, it will have to be conducted cautiously so as not to bring about a totally counterproductive threat to financial stability. I myself do not see much room for manoeuvre here.

At a time when liquidity is excessive, bond yields and interest rates remain at all-time lows and the ECB balance sheet is as large as it has ever been, inflation still remains muted. In what other ways could monetary policy be accommodative? Recently, unconventional instruments were introduced on the assumption that they were temporary, short-term measures, but the situation has changed and we should therefore get used to a new normal in the monetary policy arsenal. There is a role here, too, for the academic debate to explore the potential for using other, new non-standard instruments as the need may arise. The question is whether they will be as effective as earlier measures.

In the case of the euro area, there is no need at present to consider further accommodation. The recent non-standard measures have not had sufficient time to do what they were intended to do.

### **No excuses for fiscal policy**

The effectiveness of monetary policy is, as we have been taught, heavily dependent on the environment in which it is implemented. While monetary policy has tools to stimulate demand, it cannot influence the performance of the supply side of economy, which is crucial for sustainable growth. Although the scope for fiscal policy is limited, we should not take that as a new normal. We should not see fiscal policy as some kind of Sleeping Beauty. At the time when monetary policy targets and the ECB mandate were being formulated, it was assumed that responsible fiscal policy and the responses of product and labour markets to imbalances would be sufficiently strong and flexible to prevent extended deviation from the equilibrium. As it turned out, that assumption was not universally valid. Since fiscal policy was not always conducted responsibly in the good times, it has been unable to aid monetary policy in the bad times by easing conditions and supporting economic growth. But despite the lack of fiscal leeway, it is incumbent on governments not only to consolidate public finances, but through reforms, to lay the ground for stimulating the supply side of economic growth. In the short term, governments must assume growth-friendly consolidation by making efficiency savings in those areas of the public sector where the potential for productivity gains is significant.

### ***Panellist 3: Boris Vujčić*<sup>23</sup>**

I took the task of reflecting on the conduct of monetary policy in a limited fiscal space situation very seriously. First, I will examine how much fiscal space exists and then look at the possibilities for monetary policy – not only for pure monetary policy but also for macroprudential policy, which I believe is very important and has been often overlooked. In the latter context, I will shed light on the implementation of counter-cyclical monetary policy in Croatia.

### **Fiscal space and cyclicity of fiscal policy in the EU**

Expectations as to what monetary policy can achieve in Europe have risen over the course of the crisis. Demands that it should go beyond its principal mandate of price (and financial) stability and try to support economic recovery more directly have come from both politicians and the general public. What

<sup>23</sup> I would like to thank Josip Funda, Igor Ljubaj and Alan Bobetko for their valuable contributions.

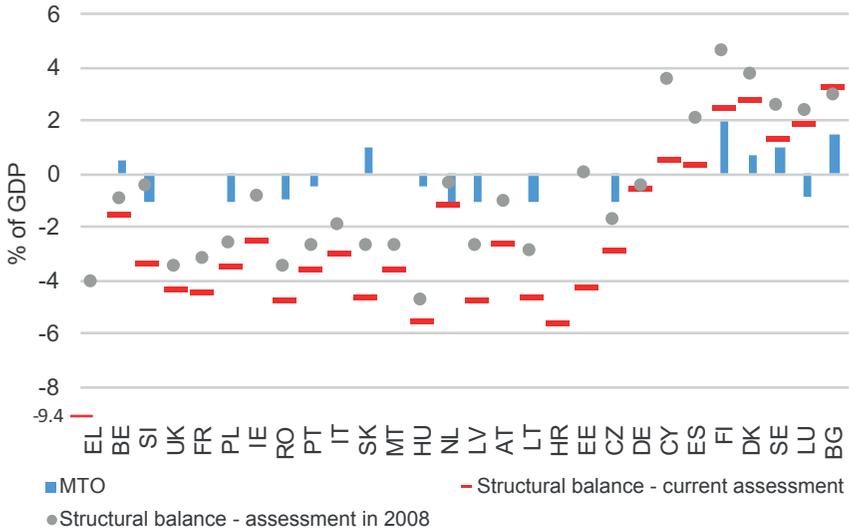
has led to such developments, especially when we know that it is fiscal policy that can have a more direct and faster effect on the real economy? You build a road, your investments go up, maybe you will create some multiplier effects, your GDP increases – it seems quite simple. So, why would you go in for all these complicated LTROs, OMTs, QEs, etc.? The answer to this question lies in problems of debt sustainability for all sectors of the economy, including the government, which has substantially narrowed the fiscal space (see Figures 1 and 2), while structural reforms take time to deliver tangible results.

This lack of fiscal space in most European economies can be largely attributed to the lack of prudent fiscal policies in good times (before the crisis erupted and escalated), when most countries were running high structural deficits and procyclical fiscal policies. However, somewhat in their defence, at that time most countries were not fully aware of the magnitude of structural fiscal imbalances, as potential GDP levels were perceived to be higher than they are now estimated to have been for the same period. *Ex post* assessment of structural balances by the European Commission for 2007 for almost all EU countries are less favourable than estimates presented in the Commission's Autumn 2008 forecast.<sup>24</sup>

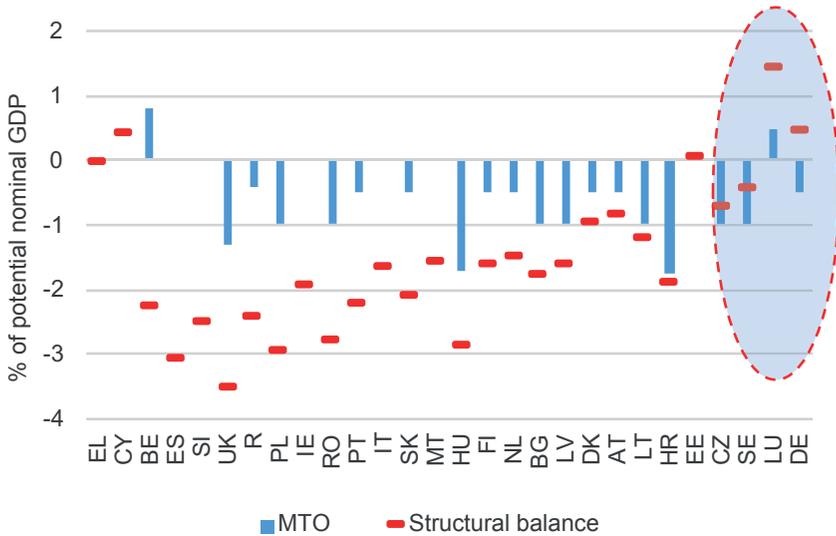
There are many definitions of fiscal space. For example, the IMF defines it as the scope that policymakers have to calibrate the pace of fiscal adjustment without undermining fiscal sustainability. In other words, short-run room for manoeuvre must always be weighed against the objective of fiscal sustainability over the medium to long run. However, with a fiscal framework that contains relatively strict rules, it is the rules-defined fiscal space that matters and we can forget about debt limits and other, more theoretical approaches. So, to put it simply, the difference between a country's structural balance and its Medium-Term Objective (MTO) is the measure for fiscal space in the EU.

24 [http://ec.europa.eu/economy\\_finance/publications/pages/publication13290\\_en.pdf](http://ec.europa.eu/economy_finance/publications/pages/publication13290_en.pdf)

**Figure 1:** Fiscal space in 2007



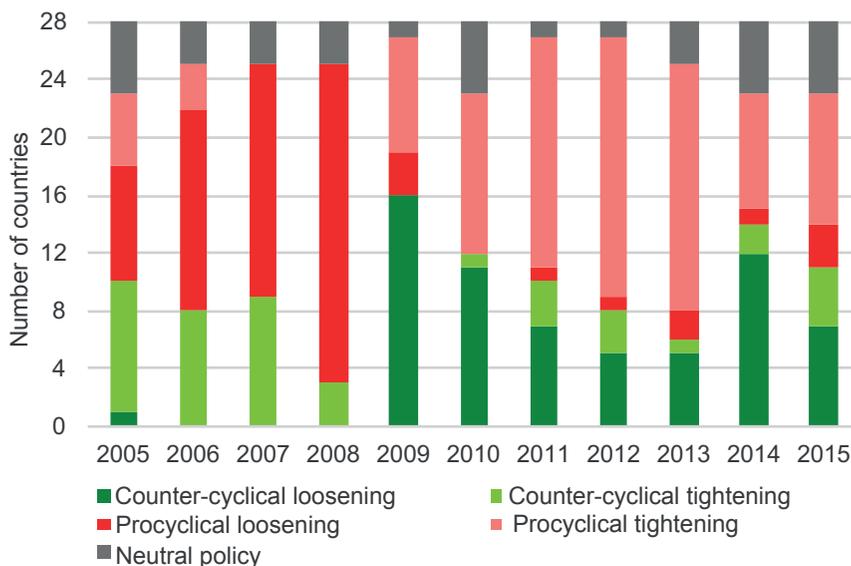
**Figure 2:** Fiscal space in 2016



*Note:* A positive difference between the structural balance and the country-specific Medium-Term Objective (MTO) is a simple measure of fiscal space. Currently, the European Commission provides only a cyclically adjusted budget balance for 2007. In order to estimate the structural balance for 2007 based on current assessment of potential GDP, we have assumed that the one-off measures provided in the European Commission’s Autumn 2008 forecast have not changed. *Source:* European Commission.

As the European fiscal framework was less strict at the beginning of the crisis, even without fiscal space, countries did try to stimulate their economies and a package of stimulus measures was also prepared at the EU level in 2009 and 2010. However, the escalation of the sovereign debt crisis in the euro area put fiscal policy into urgency mode, with the ultimate objective of bringing debt levels back to sustainable paths. So, procyclical fiscal tightening dominated in the EU in the 2011–2013 period (Figure 3).

**Figure 3:** Cyclicality of fiscal policy in the European Union

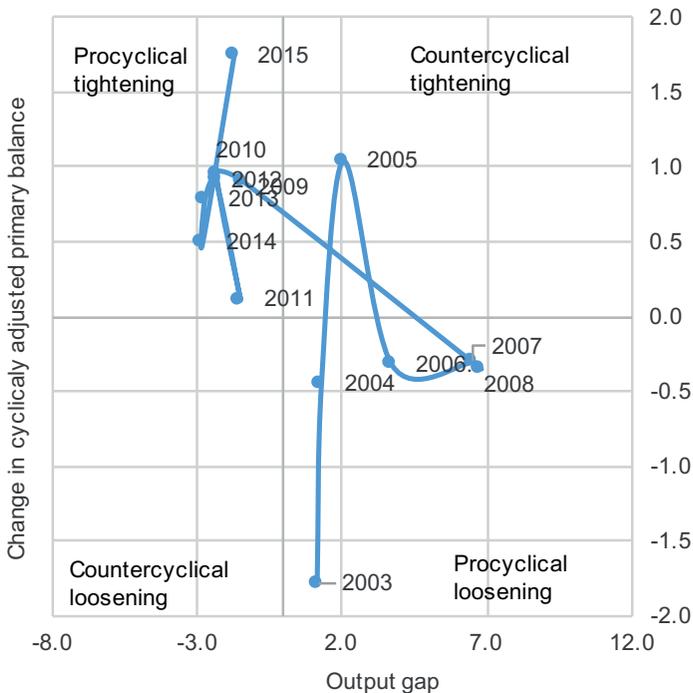


Source: Ameco database.

Croatia's fiscal policy was procyclical both before and after the onset of financial crisis. Fiscal policy procyclicality is well known in the literature and, although there is no unanimity among economists about the optimal cyclical behaviour of fiscal policy, there is broad consensus that procyclical policies should be avoided as they add to macroeconomic instability. From a Keynesian point of view, that is, a procyclical fiscal policy amplifies fluctuations in real output, thereby leading to prolonged recessions in bad times. From a neoclassical point

of view, a procyclical fiscal policy is in conflict with the consumption- and tax-smoothing principles, which prescribe that government spending and tax rates should remain unaffected by business cycle fluctuations.<sup>25</sup>

**Figure 4:** Cyclicality of fiscal policy in Croatia



Sources: CBS and CNB.

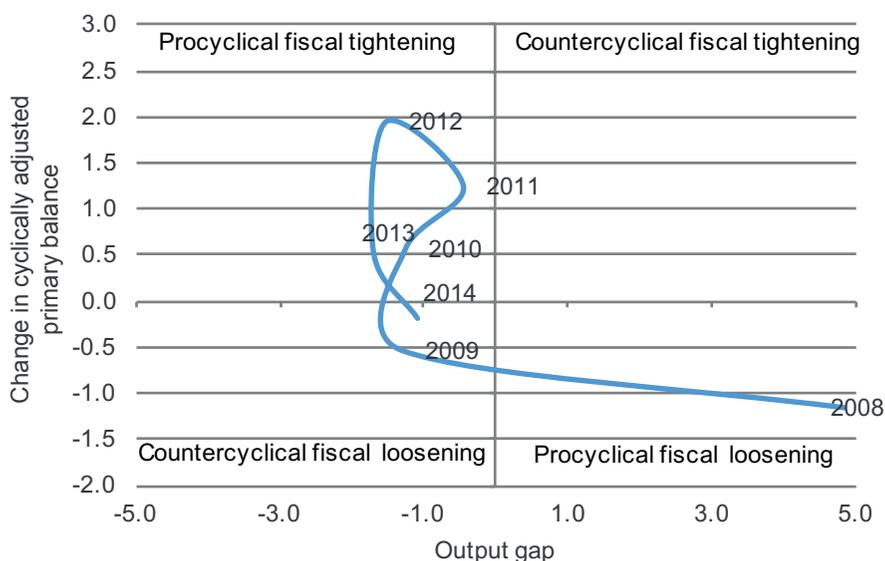
Nevertheless, procyclical fiscal policies were, and still are, a Croatian reality. During 2003–2008, the Croatian economy was seemingly doing well and real GDP was above its potential level while, at the same time, the structural primary deficit deteriorated, which had a procyclical effect on economic activity. Only in 2005 was there an adjustment of the underlying primary balance, leading to a counter-cyclical fiscal policy. The lack of fiscal space also led to procyclical fiscal behaviour in the crisis period. The fiscal adjustment was especially notable in 2015, when the cyclically adjusted primary balance improved by almost 2.0% of GDP. For the sake of clarity, what is relevant

<sup>25</sup> See Andersen, L.A., and Nielsen, L.H.W. (2008), “Fiscal Transparency and Procyclical Fiscal Policy”, University of Copenhagen (available at [http://web.econ.ku.dk/epu/Fiscal%20Transparency%20and%20Procyclical%20Fiscal%20Policy%20\\_jan%2008\\_.pdf](http://web.econ.ku.dk/epu/Fiscal%20Transparency%20and%20Procyclical%20Fiscal%20Policy%20_jan%2008_.pdf)).

here is whether the amount of resources that the government is placing in the economy is increasing or decreasing, which is different from a simple change in the government deficit.

However, Croatia is not an exception in such behaviour. On the contrary, a procyclicality bias can be observed in many other EU countries. This was especially the case before the crisis (the good times), and after the onset of the sovereign debt crisis (the bad times), as already shown in Figure 3. Looking at Central and Eastern European (CEE) countries only, some did have a counter-cyclical stance in different years. But if you look at a GDP-weighted average of the fiscal stance, again you get the fact that fiscal policies were actually in the wrong place before and after the crisis, basically acting procyclically rather than counter-cyclically (Figure 5).

**Figure 5:** Cyclicity of fiscal policy in CEE EU member states

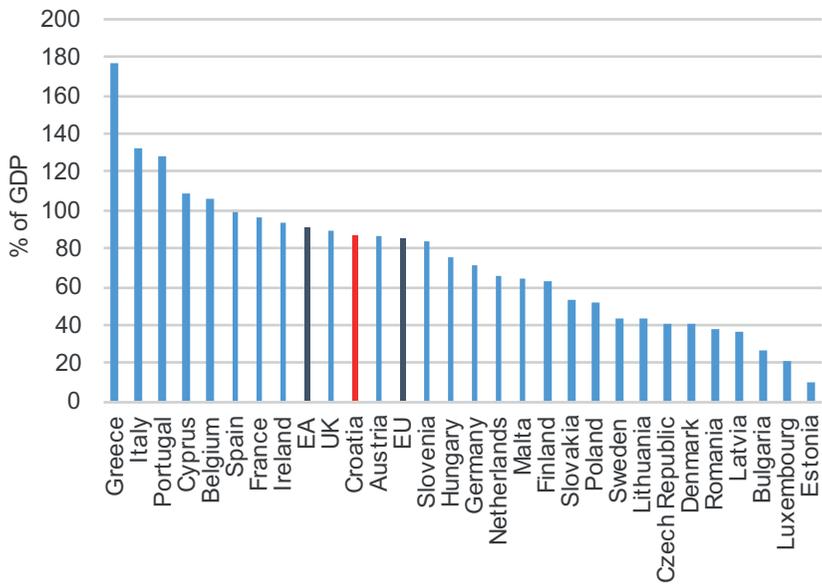


*Note:* Output gap and change in cyclically adjusted primary balance are computed as GDP-weighted averages of CEE EU member states. The impact of government assistance to the financial sector is excluded from the calculation of the cyclically adjusted primary balance.

*Source:* AMECO database.

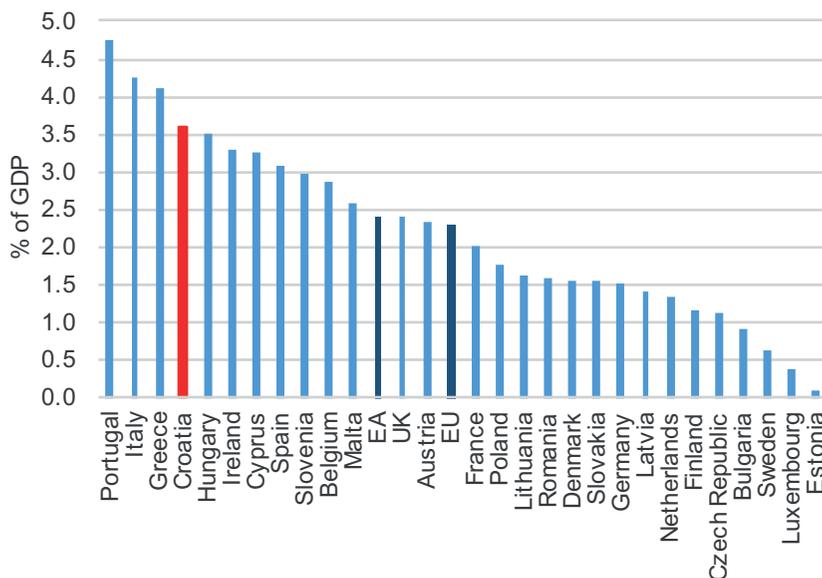
Such a policy orientation has led to a gradual public debt stabilisation in the EU after a strong surge in debt-to-GDP ratios during 2009–2010. In 2015, public debt in the EU28 declined from the previous year. However, it was still almost 25 percentage points of GDP higher than in 2008. Notwithstanding the increase in the debt-to-GDP ratio, interest payments in the EU decreased somewhat due to a decline in borrowing costs. However, as the debt level remains high in many countries, the heavy burden of interest payments weighs on the ability of fiscal policy to stimulate the economy. Here, Croatia stands out as a country with one of the largest increases in the debt-to-GDP ratio and one of the highest interest payments-to-GDP ratios in the EU, having almost doubled in the past seven years. This makes the budget quite sensitive to interest rate shocks, and therefore the contractionary fiscal policy will probably have to continue for a while (Figures 6 and 7).

**Figure 6:** General government debt, 2015



Source: Ameco database.

**Figure 7:** Interest payments, 2015

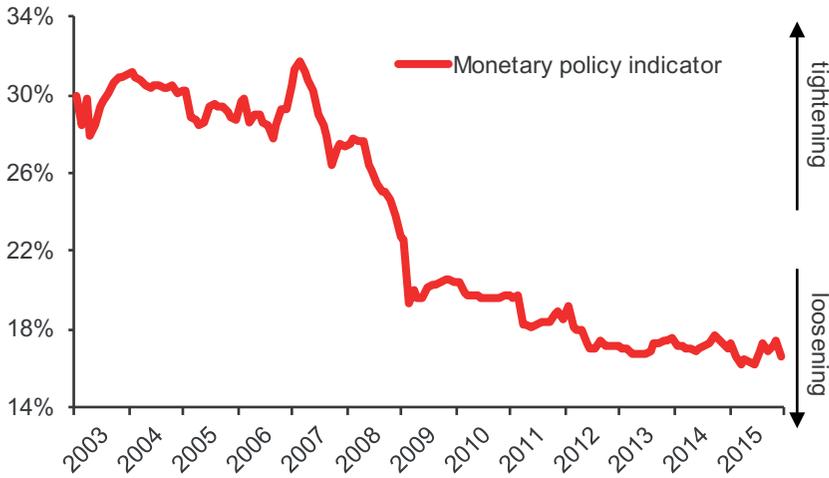


Source: Ameco database.

### Counter-cyclical monetary policy in Croatia

The Croatian National Bank (CNB) has maintained a counter-cyclical monetary policy stance since well before the start of the crisis. In the pre-crisis period, this entailed maintaining a large part of credit institutions' assets as a regulatory buffer to curb what was perceived by the CNB as an excessive and unsustainable credit growth. These measures proved to be very beneficial in giving some independence in monetary policymaking. Credit growth was heavily taxed, and banks were asked to have a lot of foreign exchange liquidity. Measures involved strong penalisation of abundant capital inflows in the banking sector, while capital requirements were linked to foreign exchange lending to the borrowers who were not hedged. This forward-looking policy stance enabled the CNB to release large amounts of foreign currency liquidity following the onset of the crisis (Figure 8), while at the same time keeping the banking system highly capitalised, stable and resistant to shocks. Therefore, with the stubborn recession in Croatia, the monetary policy stance in recent years has been highly accommodative and strongly oriented towards leaning against the cycle (Figure 9).

**Figure 8:** The Croatian National Bank’s monetary policy indicator

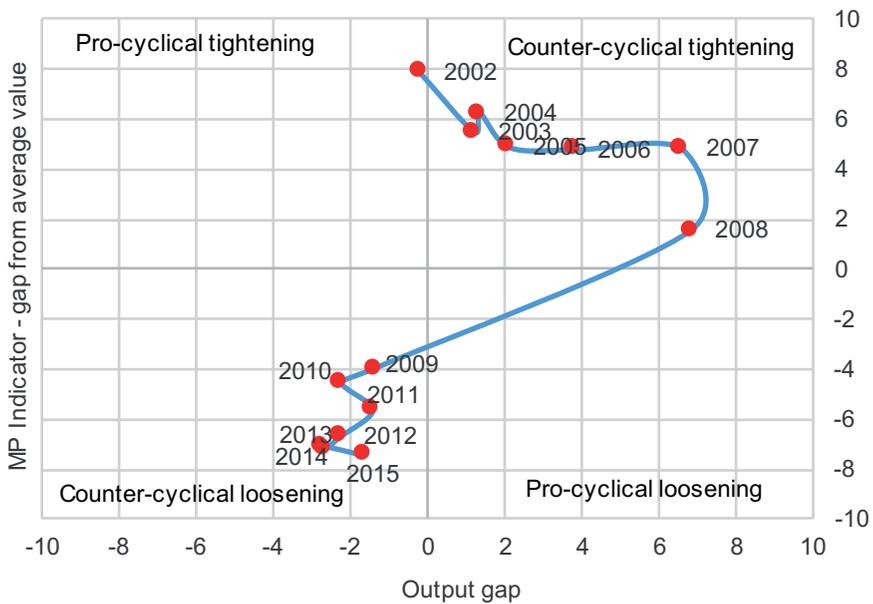


*Note:* Monetary policy indicator = credit institutions’ assets required by regulation/total credit institutions’ assets. Assets required by regulation (net of excess liquidity) include calculated reserve requirement in Croatian kuna, allocated reserve requirement in foreign currency, marginal reserve requirement, CNB bills and minimal foreign currency liquidity.

*Source:* CNB.

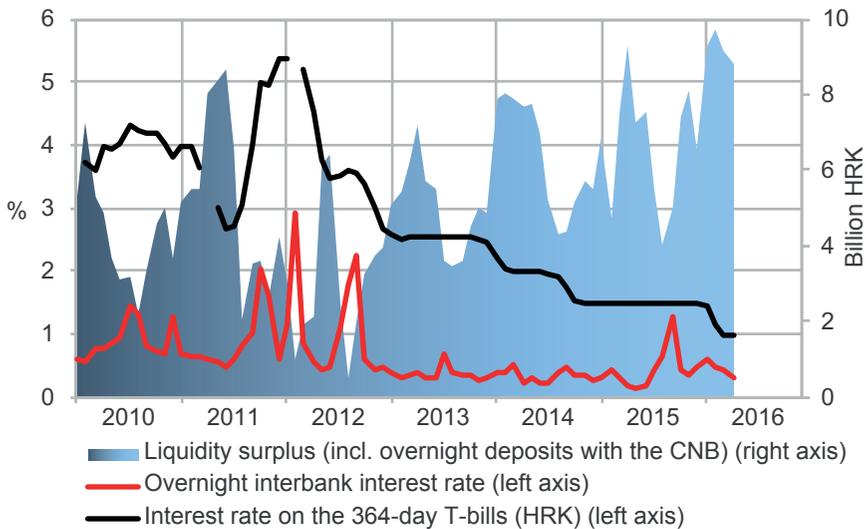
To conduct proper policy actions, awareness of the cyclicity is crucial. As in the case of fiscal policy, if the macroprudential policy or prudential policy is in the wrong place in one part of the cycle, it will surely be in the wrong place in the other part of the cycle. This is what happened in many other countries where prudential regulation and marginal regulation costs were increased through the crisis. On the one hand, central banks had very expansionary monetary policies, while on the other hand marginal regulation costs were going up for the banks, offsetting to some extent the monetary policy effects. Leaning against the cycle in the case of Croatia was clearly counter-cyclical (Figure 9).

**Figure 9:** The Croatian National Bank’s leaning against the cycle: Monetary policy stance and output gap



Source: CNB.

Nowadays, the CNB is further boosting the already exceptionally high liquidity of the monetary system, which in relative terms is several times higher than in the euro area. In 2016, the CNB also introduced structural repo operations through which it started providing liquidity with a four-year maturity, clearly showing that the expansionary stance will be maintained for some time. This led to an additional decrease in money market interest rates. The yield of T-bills in Croatian kuna with a one-year maturity fell below 1% in March 2016, an historically low level (Figure 10). The overnight interbank interest rate also recorded favourable developments, averaging 0.5% during the first quarter of 2016.

**Figure 10:** Surplus liquidity and money market interest rates

Source: CNB.

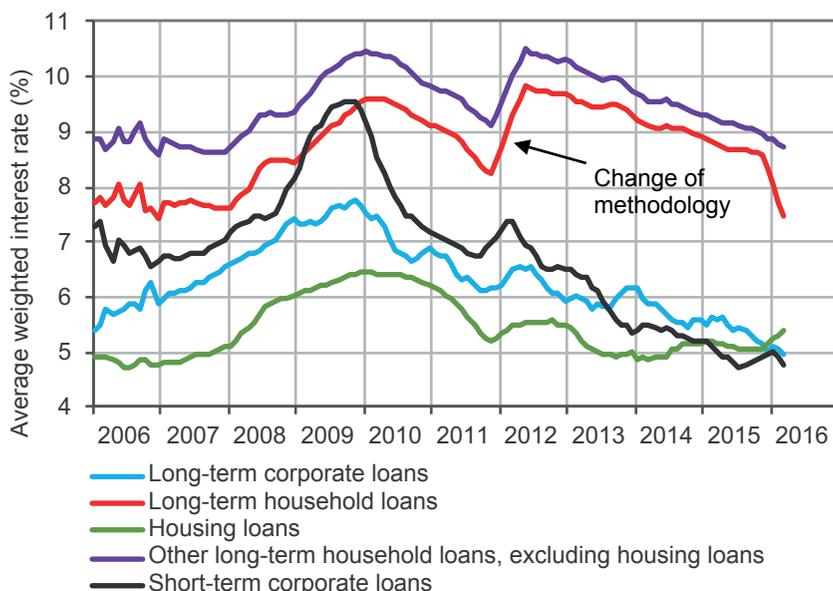
In line with monetary policy efforts, financing conditions have been improving. The average interest rate on short-term corporate loans fell from 7.5% in 2009 to 4.8% in March 2016, while the cost of long-term corporate loans decreased by almost two percentage points in the same period (Figure 11). It should be noted that due to emerged global and sovereign risks, a peak in interest rates was recorded in 2009, even though the monetary counter-cyclical response to the crisis was already substantial. Financing costs for households have generally also been on a downward path.<sup>26</sup>

Notwithstanding the monetary policy efforts, interest rates for firms and households remain significantly higher than in the euro area. Obviously, their stronger downward adjustment is constrained by structural factors, most notably the sovereign risk. In fact, the risk of default matters more now than it did prior to the crisis. Although lending rates have generally fallen from their pre-crisis levels, at the same time they have become more divergent and dispersed, in line with the divergence of the perceived sovereign risks

<sup>26</sup> The interest rates on housing loans jumped considerably in December 2015 because of the conversion of loans in Swiss francs. The level of the renegotiated interest rates on converted loans was determined by a special law and, for a significant portion of those loans, it was higher than the market interest rate currently applicable to newly approved housing loans indexed to the euro. In contrast, the average interest rates on the total of newly approved long-term household loans (including housing loans) fell considerably as a result of the conversion, as the share of newly approved housing loans in all long-term household loans rose sharply in the process of conversion and the interest rates on those converted loans were, as a rule, much lower than those on non-housing long-term loans.

(Figure 12). This suggests that there is still room for further lowering of interest rates in Croatia, but the pace will depend on a number of factors that are beyond the scope of domestic monetary policy, including macroeconomic fundamentals and investor perceptions. Overall, financing conditions are much easier and interest rates are lower, but it matters even more how the country is perceived on a risk-scale basis.

**Figure 11:** Domestic bank interest rates

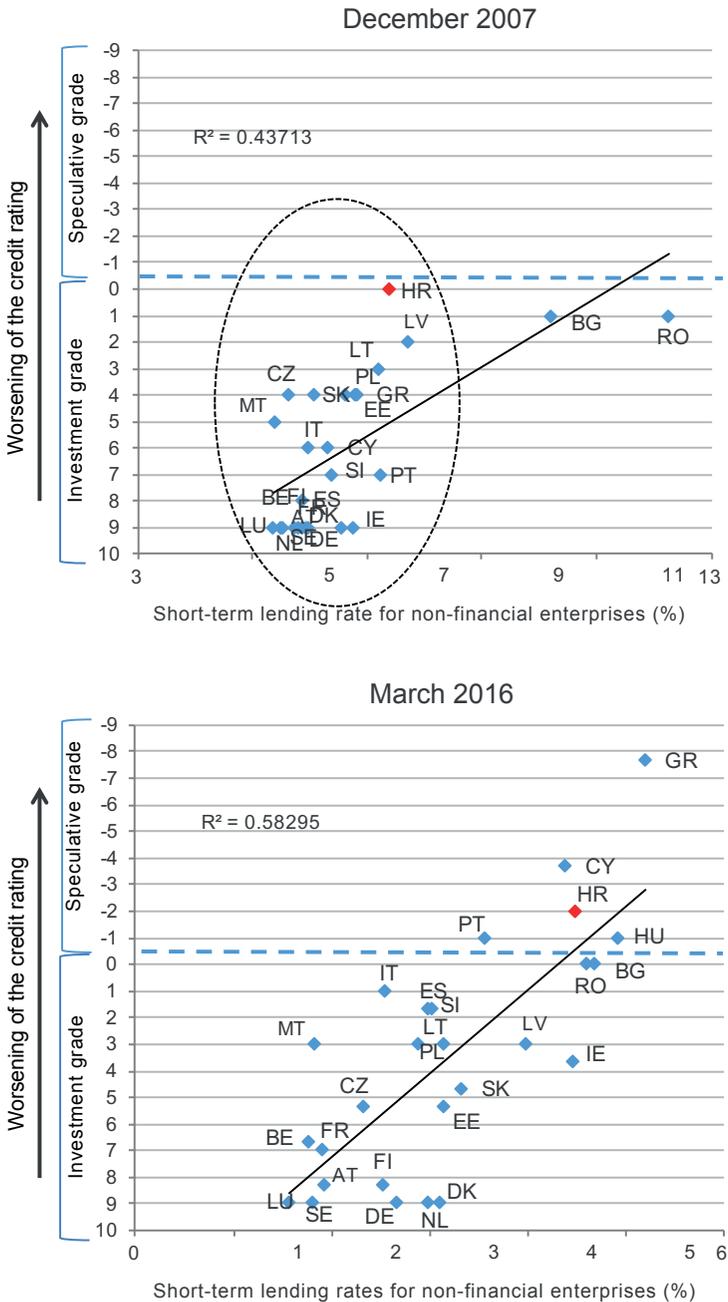


*Note:* Interest rates on new businesses calculated as a 6-month moving average.

*Source:* CNB.

On the other hand, this also points to potential spillover risks to local corporate borrowing costs from global monetary policy tightening. In fact, a rise in global interest rates would produce an automatic increase of the already high sovereign debt burden through the “snowball effect”, and the growing refinancing costs of government would be passed on and mirrored in higher interest rates for enterprises.

**Figure 12:** Credit ratings and bank interest rates for short-term corporate loans



*Note:* Rating is expressed as average numerical value or rating grades by the three major rating agencies (Fitch, Moody's and Standard & Poor's; for 2007 only Fitch). Numerical values represent positive/negative distance from investment grade BBB-/Baa3. Rating ranges between -9 and 9, where -9 represents the lowest speculative grade (C by Fitch and Moody's, and R by S&P), and 9 represents the best possible grade (AAA by Fitch and S&P and Aaa by Moody's). Lending rates refer to new lending to non-financial corporations with maturity up to one year amounting to up to €1 million.

*Sources:* ECB, Bloomberg and Fitch Ratings.

### **Concluding remarks**

The need for fiscal adjustment leads to higher expectations of monetary policy. This has not taken monetary policy beyond the mandate of central banks, but pressure on them is certainly present. On the contrary, by supporting the economy through historically low interest rates and unconventional policies, central banks are exactly contributing to the fulfilment of the main objective. However, they are running out of ammunition. Surprisingly, debates are now emerging over whether expansionary fiscal policy should be used exceptionally at the current juncture in order to support the closure of output gaps. This points to a further need for coordination of different streams of economic policy. Otherwise, as Gürkaynak and Davig have emphasised, trade-offs for central banks will be worsened and the incentives of other policymakers distorted.<sup>27</sup>

In the case of Croatia, with a monetary framework based on exchange rate stability – which is the corner stone of inflation expectations and of financial stability – degrees of freedom are reduced. Nevertheless, as a result of prudent monetary policy before the crisis, the CNB has managed to provide ample liquidity to the financial sector and maintain financial stability. However, monetary policy can only buy time and lower the cost of structural reforms; it cannot provide liquidity *ad infinitum*. A key policy priority is to embark anew on deep structural reforms that will increase the competitiveness of the domestic economy and the efficiency of the public sector.

<sup>27</sup> Gürkaynak, R. and Davig, T. (2015), "Perils of central banks as policymakers of last resort", VoxEU.org, 25 November (available at <http://voxeu.org/article/central-bankers-policy-makers-last-resort>).

#### ***Panellist 4: Gent Sejko***

Before going into more detail on the topic of this panel, I would like to share some thoughts with you regarding the coordination of monetary and fiscal policies.

The price stability mandate of central banks and their operational independence do not lessen the need for effective coordination between monetary and fiscal policies. At a strategic level, the foremost objective of macroeconomic policy is to achieve sustainable growth, in a context of price stability and a viable external account.

This goal requires the contribution of both fiscal and the monetary policies, within their respective domains, as well as a fair degree of coordination amongst them.

On a macro scale, a balanced policy mix and an effective policy coordination requires:

- i. *Policy sustainability*: monetary and fiscal policies need to be on a sustainable path. Prevailing academic consensus requires this sustainability to be anchored in simple and effective policy rules, such as an inflation-targeting regime and some kind of fiscal sustainability law. Furthermore, sustainability is mutually reinforcing: inflation expectations can only be anchored if fiscal policy does not raise destabilising fears while, at the same time, the fiscal policy can be more sustainable if it is not burdened by excessively high interest rates, fuelled by a not-so-credible monetary policy.
- ii. *Policy credibility*: monetary and fiscal policies need to be credible. Policy credibility arises from a combination of a clear and sustainable policy framework, the right structure of incentives, as well as a positive track record.
- iii. *Policy awareness*: in other words, the recognition of different goals, different transmission channels and different time frames, informing and constraining monetary and fiscal policies.

In the long run, a balanced policy mix would minimise demand volatility, enhance the allocation of resources and promote long-term growth. Effective policy coordination would limit the fiscal deficit to a level that can be financed via capital markets, without recourse to monetary financing, without distorting the allocation of resources, and without unsustainable external borrowing. Effective policy coordination would also bind monetary policy towards achieving its price stability mandate, thus reducing long-term risk premia

and supporting financial stability. As a corollary to all that I have mentioned, a weak stance in one policy area burdens the other policy area with excessive demands.

This brings me to the specific topic of this panel: conducting monetary policy when fiscal space is limited.

The aftermath of the recent crisis left all economies in the region struggling to reignite economic growth. Most of the countries are doing this while at the same time facing the pressing need to consolidate their public finances.

Albania is no exception. Although the repercussions of the crisis were not so severe, economic growth has almost halved compared to its pre-crisis trajectory. Aggregate demand is unable to generate full employment of labour and capital, while CPI inflation has continuously undershot our target. In this economic landscape, our monetary policy has taken an ever-more expansionary stance: the policy rate (currently at 1.25%) is at an historical low, which would have been unthinkable a few years ago; we have increased our liquidity injection operations as well as expanded the range of acceptable collateral; and we have also made use of conditional forward guidance as an alternative instrument of monetary policy.

On the other hand, our public debt jumped from around 55% of GDP in 2008 to around 72% of GDP today, on account of the joint action of automatic stabilisers and some degree of counter-cyclical fiscal stimulus. However, this fiscal expansion was thought to be unsustainable, especially given the difficult financing conditions in international financial markets. It was also thought to be counterproductive, because of crowding-out concerns in the presence of tight liquidity conditions in domestic financial markets and because of negative feedback loops through higher risk premia.

As a result, our fiscal policy is now locked on a consolidation path, aiming to bring the public debt below 60% of GDP by the end of this decade. This means that monetary policy remains the only counter-cyclical tool to stimulate economic activity. Taking everything into account, I believe fiscal consolidation, coupled with an expansionary monetary policy, delivers the correct policy mix in the country.

However, given our experience so far, I would like to conclude my speech with three observations:

- i. Monetary policy remains effective even in the presence of fiscal consolidation. In Albania, we have been able to steer interest rates into a downward trajectory and to stimulate credit growth in domestic currency. However, the effectiveness of monetary policy is hampered by fiscal contraction.

While the two policies moving in opposite directions would not be ideal in the best of times, it is doubly undesirable in the presence of balance-sheet adjustment in the private sector and heightened risk premia and deleveraging in the financial sector.

- ii. Monetary policy can still achieve its goal of price stability in the presence of fiscal consolidation. However, this statement needs to be qualified further. From a longer-term perspective, inflation remains a monetary phenomenon. If a central bank is committed to its price stability mandate, and given enough time for the monetary transmission mechanism to work, there should be no reason why we should not be able to meet our inflation targets. However, there are two caveats here:
  - *In pursuit of its inflation target, a central bank can, and might, be forced to engage in unconventional monetary policy tools.* This is very much the case when central banks are flirting with the limits of conventional instruments of monetary policy (the zero lower bound of policy rates or extreme risk aversion in the financial system). As we know, unconventional tools can both be distortionary and present us with the risks of unintended consequences in terms of financial stability. Under certain premises, the risk associated with employing unconventional monetary policy tools might be sufficiently strong to revisit the scope or the speed of fiscal consolidation;
  - *A prolonged undershooting of the inflation target might decouple inflation expectations from the inflation target of central banks, requiring a more active monetary policy.* This is not an argument against the policy mix *per se*; rather, it is a reminder of the crucial role that central bank communication and management of expectations should have.
- iii. We should avoid burdening monetary policy with too many goals or risk losing our credibility. With public finances highly indebted, politicians have been only too happy to place the burden of economic recovery on central banks. As central bankers, we might enjoy this visibility, but we must be cautious to not get carried away. We must always remind ourselves of what monetary policy can and cannot achieve: we can ultimately affect nominal variables in the economy (i.e., the price level), but we can affect neither long-term growth nor general prosperity in the economy. To that extent, I think we must always remind politicians to carry out their duties on structural reforms and make best use of the breathing space provided by monetary policy.

***Panellist 5: Vitas Vasiliauskas***

This is the right place and the right time to discuss various issues related to fiscal policy and monetary policy. Some of the issues of my presentation were already touched upon in the previous panels. But, since I was taught at university that *repetitio est mater studiorum*, I believe that repetition will be helpful in our case as well. Let me start by framing these issues and conclude with a couple of directions that I think should guide the solutions.

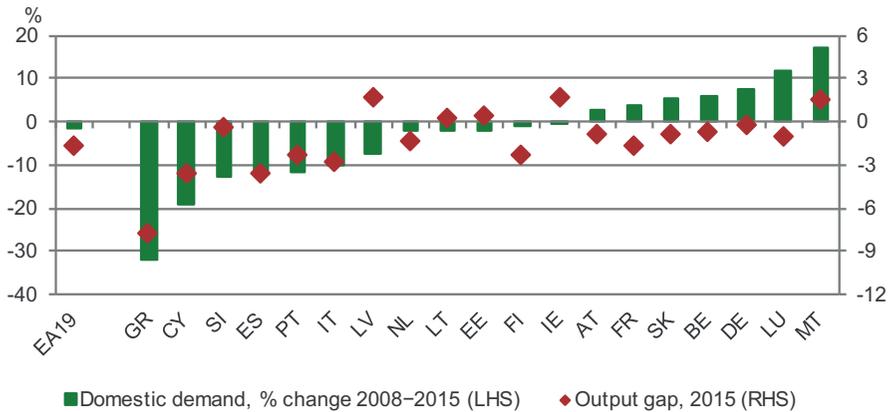
The euro area has to deal with the worst of both worlds: weak potential growth and a cyclical recovery. After the global financial crisis, a number of structural issues emerged in many states. High structural unemployment, lack of competitiveness, inefficient judicial procedures and the burden of non-performing loans (NPLs) – countries are dealing with these with varying degrees of success. These are difficult issues due to their short-term costs. But, from the perspective of long-term growth it is imperative that these reforms are continued and that, in most cases, the progress should be faster.

At the same time – and this is an issue for today’s discussion – the cyclical recovery, and especially domestic demand, is very fragile. The incentives to consume and to invest are still rather weak. It will take a while before the views of consumers and businesses independently converge. A push “from outside” is needed.

Let me back this up with some facts.

First, euro area domestic demand is continuing to grow too slowly, and has been doing so for too long. If we look at the cumulative percentage change since the peak in 2008 – the green bars in Figure 1 – it is still negative. The traditional measure of the cyclical position – the output gap (the red diamonds in the figure) – shows broadly the same picture. Seven years have passed, but a number of member states are still producing below their potential.

Second, the aggregate euro area indicator masks large variations between cyclical positions of member states. Some countries are well into the recovery stage, while many others still have sizeable output gaps.

**Figure 1:** Domestic demand and output gaps

Source: European Commission, Eurostat.

How can episodes like this be prevented?

The institutional design in the euro area foresees the role of business cycle stabilisation for monetary policy. The role of fiscal policy is seen as automatic and as stabilising the economies in response to (mostly small) non-systemic asymmetric shocks. Gaps in this design emerge when a number of economies are subject to negative shocks that are sufficiently large to affect the whole region. The current situation is a good illustration of that.

To offset shocks of this magnitude, the desirable effect can be achieved by a combined policy response. The Eurosystem's accommodative monetary policy has been gradually reinforced through several packages since 2014. We observe that monetary accommodation has improved confidence and financial conditions. The ECB's focused communication and the commitment to monetary easing until inflation returns to the long-term target has prevented deflationary environment.

Let me now turn to fiscal policy. Debt levels, which are above the Maastricht criterion of 60% of GDP in a majority of the member states, highlight sustainability concerns. Meanwhile, large negative output gaps indicate the need for stabilisation policies.

So how can we find the right balance between the economic stabilisation and debt sustainability objectives of fiscal policy? My first direction is a credible fiscal framework. In recessions, despite a counter-cyclical fiscal policy stance, credible long-term fiscal commitments should be able to convince markets

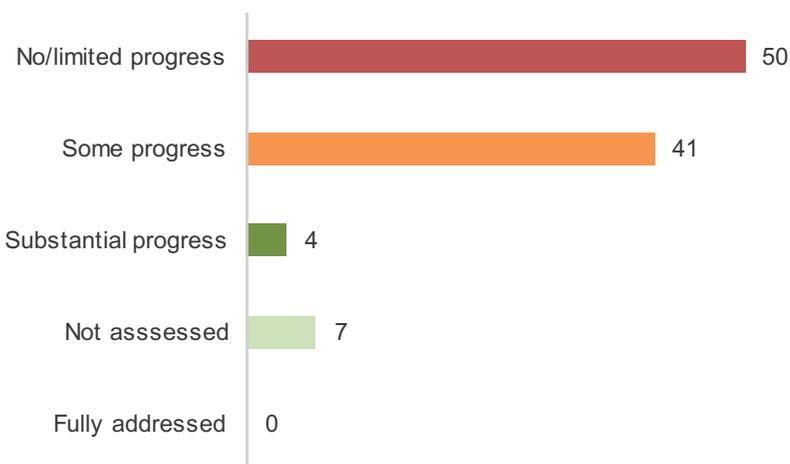
of the determination of member states to steer their debt ratios towards the Maastricht rule. It would then be possible to create some fiscal space in the short term which would help to put more emphasis on the economic stabilisation objective.

The current fiscal framework, de jure, foresees some of these principles. De facto, the picture is far from this. With strong emphasis on sustainability of public finances but without real corrective action, member states are losing confidence and credibility in bond markets. As a result, countries have to bear negative consequences without proper gains from the real structural changes in public finances.

Let us have a look at some evidence.

While dealing with the recent economic challenges, the EU has proved its ability to take on ambitious commitments. But, at this stage, the most important thing is the ability to deliver what was agreed. Just to illustrate: at the moment, according to the European Commission's assessment of the draft budgetary plans for 2016, only four EU member states fully comply with the provisions of the Stability and Growth Pact. Moreover, none of the EU states fully addressed any out of 102 country-specific recommendations for 2015/2016. More than 90% of all reform recommendations were implemented only with limited or some progress (Figure 2).

**Figure 2:** Progress on implementation of country-specific recommendations, 2015–2016

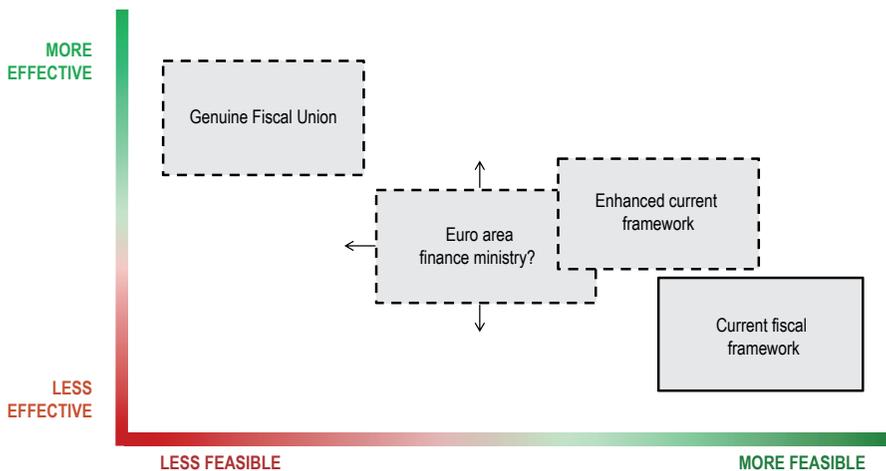


Why is the EU’s track record in complying with the agreed rules so poor? More importantly, how can that be changed?

We need strong political will to enforce what we jointly agreed on by strengthening and making the existing rules more binding. Currently, there is room for interpretation and enforcement is almost non-existent. Clarity and simplicity of the rules, as well as compliance and enforcement mechanisms, should be among the main guiding principles. These are the necessary conditions for credibility of fiscal policies in the euro area.

Another direction is feasibility. There are many policy proposals on the table. They range from fully fledged fiscal union with substantial component of federalism, to minor improvements to the current framework, to no changes at all. Very often, suggestions that look economically attractive are not feasible to implement in practice. For example, at the current juncture, a genuine fiscal union with a common euro area budget and borrowing capacity is hardly feasible owing to political and legal constraints. The idea of a euro area finance ministry is also likely to be controversial in most member states.

**Figure 3:** Effectiveness and feasibility of alternative fiscal frameworks



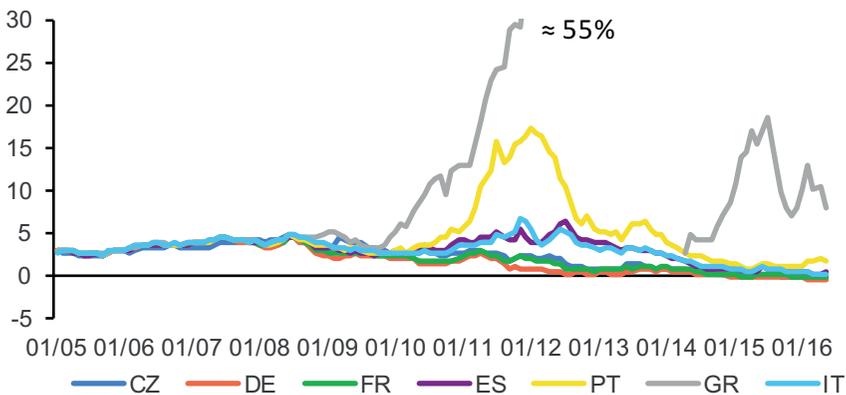
However, better enforcement of our existing rules could also be achieved by enhancing the current fiscal framework. Higher transparency, policy credibility over the longer term and limited leeway for interpretation would be the objectives of these potential changes.

The experience of the last few years has shown that the current fiscal framework has some limitations, especially when economies are hit by large negative shocks. Thus, changes may be warranted. The content and details of these changes may vary, but concrete policy proposals should be discussed with two guiding principles in mind. These changes should (i) ensure credibility of the fiscal framework, and (ii) be politically feasible.

### ***Panellist 6: Lubomír Lízal***

I would like to talk about the Czech experience with monetary policy when fiscal space is limited. Briefly, I would like to give you some flavour of *Living on the Edge*, if I might go back to the musical analogy used by my predecessor.<sup>28</sup> Actually, the debate is not whether fiscal policy is the most efficient. That is certain. The question always is whether there is space for fiscal policy that can and should be used.

**Figure 1:** Five-year government bond yields of selected countries (% p.a.)



Source: Bloomberg L.P., Thomson Datastream.

I would like to use Figure 1 to illustrate that, in general, any perception may sometimes be completely wrong. In particular, at one extreme, perceptions of no specific sovereign risk were widespread before 2008, when all countries in Europe were more or less equal. After the crisis, you get complete divergence of yields, which is just the other extreme of the same type of belief.

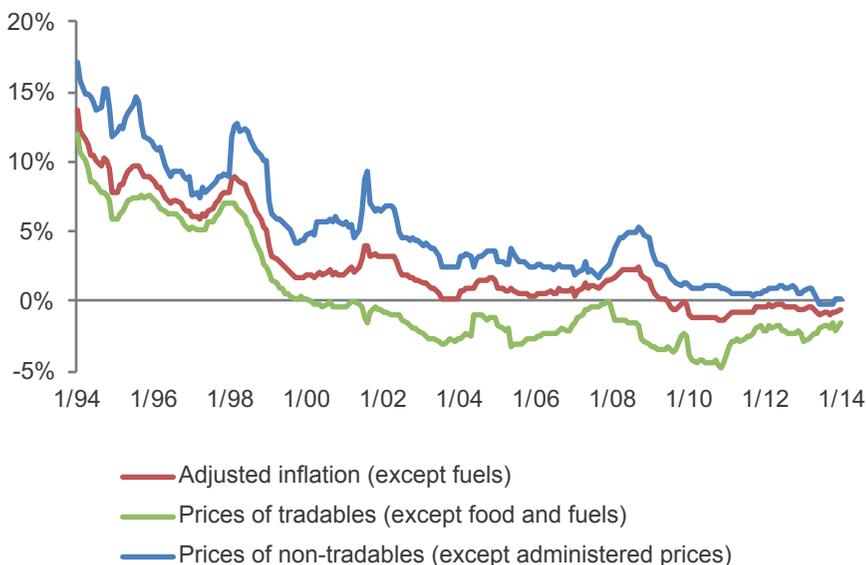
This graph illustrates two things I consider to be important. First, if you see such a huge movement of the pendulum from one extreme to the other, you might be worried about your own position, especially when you are not certain whether the extremes were truly extreme.

The other thing is that, historically, all the small CEE countries are typically viewed by analysts as being one big animal, not a group of small, sometimes rather different species. The outside world does not distinguish the differences. This is quite a dangerous situation for these countries. Typically, you have a first movement that can be quite problematic, with huge overshooting, and after that you probably see some correction. But the message is that the volatility can be excessive with regard to individual fundamentals. Boris Vujčić has shown that the Czech Republic had a public debt of somewhere around 40% of GDP. From that you would conclude that the Czech Republic has quite substantial space for fiscal expansion, fulfilling the SGP and all the criteria that were there. That is a rational view. But, Czech fiscal policy was procyclical before the crisis. Following the crisis and the related havoc on sovereign bond markets, an anti-deficit policy climate came into being. It was not easy to be expansionary again, especially when the markets were on the verge of punishing countries that had been having problems with fiscal deficits. This leads me to my second point.

One part of the problem we might have is the space that is truly available. The second binding limit is the *perceived* space available. Given the discipline of the markets that might be behind the curve or with a wrong swing of the pendulum, the perceived fiscal space limits could be more detrimental than the actual limits. You can see that although fiscal policy was expansionary to some extent at the beginning, it was also procyclical with the real cyclical position. So, monetary policy somehow had to react to that and provide the needed additional stimulus. One thing I should mention regarding the local situation is that Czech core inflation had been negative for a long time, basically since the start of the crisis (see adjusted inflation in Figure 2). As the outside environment was not that detrimental from the point of view of inflation, the central bank was able to cope with the situation using standard instruments. But at the end of 2012, we got to the zero bound with our statutory rates. At that time, the Czech National Bank switched to so-called technical zero, which means that all deposit interest rates were set close to zero.

**Figure 2:** Situation of the Czech economy in 2013

Core (adjusted) inflation and prices of tradeables and non-tradeables (year-on-year % change)



You can see the small blue dip at the end of the series of the non-tradeable part of inflation in Figure 2. At that time, both elements of inflation – domestic and foreign – were on the verge of going into a deflationary spiral. So the question was what to do next. As an inflation-targeter, you might have certain well-justified exemptions as regards deviations from headline inflation, but that was not the case in 2013. At that time, central banks were facing limits on standard monetary policy and had to use other instruments. We saw a lot of forward guidance, but there were also other instruments on the table. Given the specific situation of the Czech economy and the Czech financial sector, we had yet another problem (or maybe a blessing). We were in the opposite situation to the majority of countries from a financial stability point of view. We are a net lender and the Czech financial sector was, and still is, healthy and flooded with liquidity. During the financial crisis, the Czech Republic and its public money did not have to save or help any bank operating in the country. That actually means we were very close to what we might call a liquidity trap. In that respect, you need to think about what a QE-type programme would be doing. It would be putting further liquidity into a segment that does not need

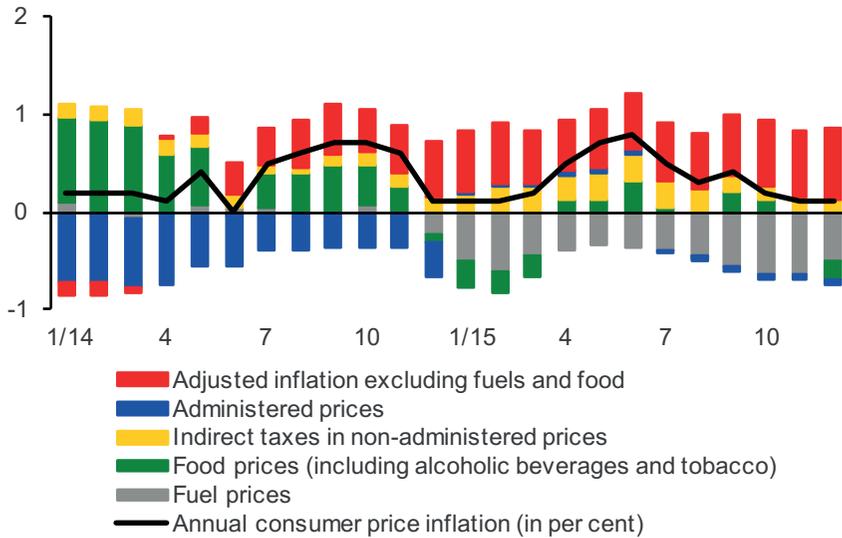
it. In addition, all the excessive liquidity was parked at the central bank at that time anyway. It was clear that providing liquidity would not bring about any further monetary easing. The other thing I should mention is that, although there was a debate about forward guidance, we were not sure it would provide enough of a stimulus at that time. And last but not least, negative rates – although they had been discussed, with the exception of the Danish central bank, there were no cases of negative rates in 2013. But, most importantly, we were afraid that the future might not be as bright as was perceived and that another round of monetary easing would be needed. In that case, we would face the same dilemma. Going slightly negative means you can go a bit further, but if you need a substantial further loosening of monetary policy, you have the same dilemma of choosing yet another instrument.

We opted for a foreign-exchange-type commitment. This is a modified version of what you can find in the papers by Lars Svensson, the former deputy governor of the Swedish central bank, on escaping a liquidity trap. We introduced some modifications, but the economic principle was the same: the central bank would announce a commitment to weaken the currency to a level that is sustainable with respect to achieving the set inflation target. From that perspective, we believed that such a commitment – and I also refer to the discussion in the first panel yesterday – is a problem-solver in a situation where other channels of monetary policy pass-through are not working that well.

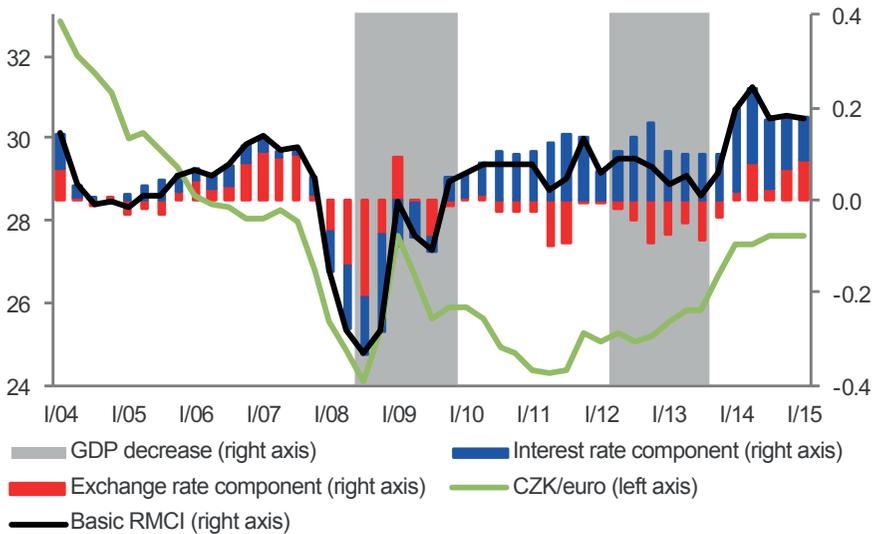
To provide you with some flavour of how it worked: it worked quite well on the real economy but not on inflation. In short, the situation of the Czech economy in 2013 was characterised by extremely sluggish domestic demand. The problems were of a domestic nature and did not relate to changes in foreign demand. In this situation, we needed to loosen the monetary conditions, and here the exchange rate commitment served us well. However, inflation remained quite low and was even lower than before. Figure 3 shows the components of inflation. The red bars are domestic pressures, and you can see that after the commitment they turned from negative to positive. Headline inflation is being pushed down by oil and commodity prices, truly external factors out of the control of the central bank.

**Figure 3:** Contributions of the components of inflation

Annual percentage changes; contributions in percentage points



From this perspective, I would argue that the commitment has served us well, although we have postponed the exit from the commitment several times due to the fact that we have been in an era of low international commodity prices and of disinflation from the euro area. Figure 4 summarises the real monetary conditions, separating the effect of the interest rate from that of the exchange rate. You can see that the central bank has always been on the loose side with the interest rate, but with a floating exchange rate it is really the rate – see the red bars below zero before the foreign exchange commitment – that has been continuously tightening the monetary position.

**Figure 4:** Czech monetary conditions

*Note:* Positive values refer to easy monetary conditions and negative values to tight monetary conditions.

*Sources:* Czech National Bank calculations.

When using the exchange rate, you always have to have a debate about beggar-thy-neighbour policy. Any policy using the exchange rate, of course, is always suspected of doing just that. Here, I have two simplified facts explaining why our exchange rate commitment is not a beggar-thy-neighbour policy. If you look at the effective exchange rate, you can see that the commitment set the rate in real terms at more or less where it was before the crisis in 2007. Why? During the crisis, the Czech currency witnessed quite a substantial appreciation, up to 10%. You can also see that other CEE peers – such as Hungary and Poland – that had higher inflation before the crisis had more standard space to loosen their monetary policy, and thus also witnessed an accompanying decline in the real exchange rate. For us, there was also a ripening of the sweet-gone-sour fruits of low inflation before the crisis. Since we were a low inflation country (close to Germany in terms of inflation numbers), our standard monetary space was also limited. And last but not least, as a paradox, one cannot use the beggar-thy-neighbour label for the exchange rate policy in our case, because after the commitment weakened the currency, we witnessed an increased rate of imports. A completely counter-intuitive effect has been achieved. The reason is that with the exchange rate commitment we have moved the real interest rate

down, stimulating demand for investment – and the majority of the investment is of an import nature. We saw an effect opposite to that which you would normally see with a beggar-thy-neighbour policy.

## **General discussion**

***Dubravko Mihaljek:*** Are there any points that panellists would still like to make, any emphasis that they would like to add, any reactions to what others have said? We have, broadly speaking, moved from considering room for monetary policy in a situation where countries do not have their own monetary policy and fiscal policy is constrained by rules to situations where countries have quite a bit of space both because fiscal policy is relatively disciplined and other instruments have been used, like foreign exchange rate like the case of the Czech Republic and counter-cyclical macroprudential tools in Croatia. A recurrent theme of these presentations is that with ongoing fiscal consolidation, it helps a lot when there are some structural reforms. One particular form of structural reform that would be desirable in this circumstance, and was mentioned by Boris Vujčić, is corporate-sector restructuring; in particular, equity injections in the corporate sector so as to boost the collateral base that could then help restart the transmission mechanism through the banking sector.

***Bojan Ivanc (Chamber of Commerce of Slovenia):*** A comment on your view on sustainable future GDP growth of the euro area. Potential growth is based on productivity, on working age and how long we spend working, as well as on the ratio of working age population to the total population. The demographics are pretty negative for EU monetary union. Also, if we examine productivity in the past and then try to project it forward, we have to admit that the job market currently is different from what it was years before. More jobs are in the service sector, where productivity cannot increase as fast as in the manufacturing sector. In terms of productivity, this is bad news for future GDP growth. My point is that if you see lower GDP growth going forward, that would mean that the fiscal space is limited already and that the country should tighten fiscal policy. Otherwise, in times of a new crisis there would be no space left.

***Suzanne Bishopric (Global Sovereign Advisors):*** My question is about creating more fiscal space through cleaning out the closet effectively. Boris Vujčić talked about low asset valuations impeding the borrowing capabilities of companies. What other techniques are there to free up that capacity? Policies such as assets sales, bankruptcy improvements to make the process more streamlined and write-offs might free up the liquidity.

**Mojmir Mrak (Faculty of Economics and Center of Excellence in Finance, Ljubljana):** I have one question for the panel. We are talking about limited fiscal space and we always somehow come to the issue of a very high level of public debt. What are the views of the panellists regarding the ways to bring down debt to a sustainable level? Because the 60% debt-to-GDP ratio has proved not to be a sustainable level for some countries. I remember that Slovenia had a problem getting access at a debt level of 45% of GDP. What are the alternative ways of bringing down the debt ratio? Primary surplus? It takes very long. Privatisation? Yes, but it also has limited success. We are basically talking about a process of 10–15 years. What about inflation? Maybe these are questions for the people from governments, but it would be useful to have the views of central bankers.

**Erik Jones (Johns Hopkins University):** Three quick questions. First, reflecting on this panel and the second panel that we had yesterday afternoon, can we identify the fiscal space before the factors, or is it something we only recognise after it has passed? It seems there is a significant measurement problem. Second, can we mark a clear boundary between monetary policy and fiscal policy, particularly when monetary authorities are engaging in seemingly unending large-scale asset purchases? I am just curious. Third, I was very struck by Vitas Vasiliauskas' presentation on the failure of reform. How do we explain that every single country is failing to engage in reform? Because political will ceases to be a minimum category when nobody has it. Is there something about the political reform process that needs to be revisited?

**Mejra Festic (Bank of Slovenia):** Related to the protracted period of economic recovery and all the pressures faced by the banking sector – on account of low or negative interest rates, income risk, low interest margins, unstable structure of liabilities, deposit outflows and other associated risks – for how long are these pressures sustainable for the banks from the point of view of banking sector consolidation and fiscal consolidation?

**Lucio Pench (European Commission):** I would like to go back to a point that was made in the introductory remarks. In the first phase of the crisis, we had an unprecedented increase in public debt – reflecting expansionary fiscal policy worldwide – associated with large revenue losses and unchanged expenditure trends. Against this background of very high public debt, not only has a rise in inflation not materialised, but we find ourselves in the opposite situation. In this context, let me draw attention to the fact, highlighted by my esteemed friend Francesco Papadia,<sup>29</sup> that nominal interest rates are probably at their lowest level ever. I do agree with the point made by Ardo Hansson

that we should be realistic about growth prospects; namely, the pre-crisis trend may not resume. Still, when we think about the difference between the interest rate and growth rate, which is what matters for public debt sustainability, we should acknowledge that something unusual is happening. Contrary to common assumptions, as reflected in the intervention by Boris Vujčić, the interest rate–growth rate differential is not feeding the “snowball effect”, but is working the other way around. Current data and the forecasts for the next few years suggest that more and more countries will benefit from a snowball effect in reverse. In turn, this suggests the existence of a situation of excess saving or excess demand for safe assets. I believe that in our reflection on the role of fiscal policy, we should factor in this peculiar situation and the concomitant need for deleveraging, which was highlighted in several presentations.

**Steve Phillips (IMF):** I have two questions related to the Czech Republic’s use of the exchange rate to achieve monetary policy objectives. The first question is whether this technique is generalisable to other economies. Is there something special about the Czech Republic that made the technique more likely to succeed and less likely to run into problems, compared with other economies that are larger or less open to trade? The second question picks up on the suggestion that this was a beggar-thy-neighbour policy. A beggar-thy-neighbour policy would seek to divert demand by weakening the real exchange rate. But I understand that was not the intention. The Czech authorities were not trying to change the real exchange rate but rather to stimulate inflation, hoping that wages and prices would respond to the weaker nominal exchange rate, so that the initial competitive advantage would be eroded. I wonder to what extent that has happened.

**Nikolay Gueorguiev (IMF):** I have one question and one comment. The question is about the ECB and inflation. Not all inflation is the same – there is demand-driven inflation and cost-push inflation. This may become very relevant a few months from now when the effect of energy prices on inflation may suddenly become positive as the base effect gets out of the picture, or if energy prices continue to go up as they have in the past few weeks. I am curious about what the panellists think is the right policy response in the euro area if headline inflation goes to, say, 2.5% but core inflation remains at 1%, real wages do not particularly respond and demand continues to be depressed.

The comment is on the fiscal dividend of QE. Let me use the occasion to advertise work we did in the context of the 2015 Article IV Consultation discussions on Slovenia. We tried to estimate what is the benefit to the public in terms of interest savings for all euro area countries from QE relative to the (admittedly hard to estimate) counterfactual without QE. We found that it

is not negligible – in the neighbourhood of 0.25 to 0.75 percentage points a year, depending on the country’s level of debt and how expensive it has been. Now the interesting question is what to do with this dividend, which most likely cannot go on forever. So, it is natural to say let us save it in full. There is a good argument that in an environment of deficient demand as well as deficient supply of infrastructure, some would be spent on infrastructure in the countries that need such investment most badly.

**Matija Lozej (Central Bank of Ireland):** Since Ireland was mentioned several times, let me comment on that. The reason why fiscal space has disappeared in Ireland is because this was all done before the “whatever it takes” statement by Mario Draghi; so bond spreads went up. If this had been done afterwards, it might be that things would work differently and the sovereign could go through by itself. My question is whether you think that such a statement, that brings the spread together or keeps them within a range, would be a sensible policy when, for instance, inflation is very low, and whether this should be institutionalised.

**Ardo Hansson:** With regard to the issue that fiscal space is limited and that it might take another 10 or 15 years. During the second session yesterday, Lars Rohde presented data that showed that public debt relative to GDP in Denmark is gradually coming down. If you look at Sweden and Canada and some other historical periods, you could find cases where the situation looked desperate but owing to various factors – good fiscal policy, good structural policy and some good luck – the debt-to-GDP ratio crept down a few percentage points per year. I do not know of any country that has done anything terribly dramatic overnight and suddenly cut a lot of debt or suddenly implemented one reform that kicked off great growth. I think it is a little bit of all the different elements of the debt accumulation equation.

Second, identifying fiscal space in real time is a real challenge, and some of the presentations this morning tried to make that point. In our case (Estonia), the apparent output gap was not that large in the middle of the boom. However, now in retrospect, the European Commission says it was +10 or +12% of GDP. Had we known that at that time, there would be a different policy response. In real time, there is a bias towards thinking you are pretty close to potential output and afterwards you learn that there was this cyclical component you did not even really think you had. It is probably necessary to look at a range of indicators and synthesise them. I made a similar point about looking at labour market indicators. We had a discussion with the IMF about Estonia’s level of fiscal space. Anybody can combine these different indicators in different ways. One says you are above capacity, the other says you are below, and in the end

the government has to make an informed judgement. In our case, when I see labour costs or wages growing at above 6.5% a year, to me that is a red flag that says you are probably going too far and that you do not have enough room to expand, regardless of what others say. If you conduct the thought experiment and ask if I want to further stimulate the economy and get wages growing at 8% a year, probably not.

**Vitas Vasiliausaks:** I would like to touch upon a few aspects of the various questions from the audience related to my presentation, namely, the negative factors that can influence sustainable GDP growth and how we can explain the lack of fulfilment of country-specific recommendations (CSR). Every year, our country gets a lot of recommendations from various institutions, starting with the European Commission, the IMF during its Article IV missions, as well as others. We receive a lot of valuable advice from them. Of course, there is no common recipe for all countries, and we have to talk about country-by-country specifics and individual solutions. If we are talking about the magical word or term “structural reforms”, we should keep in mind that their content depends on various individual cases. For example, in my country (Lithuania), for the last three years we got essentially the same recommendations in relation to reform of the labour market, pensions and the tax system. I think it is more or less the same situation in the other countries relating to the more than 100 unfulfilled or not fully implemented CSRs. I have a very simple view of why this is the case. First, there is no political will to implement reforms. Second, we have a very short political cycle and politicians quite often are short-term oriented. Third, we still need to implement those corrective and compliance-enhancing functions that have been agreed upon at the European level. When it comes to deciding on the appropriate action in the case of non-fulfilment, colleagues at various councils think: “Maybe I will be next? Perhaps I should then be more flexible today?” I think these three things must be improved and then we can talk about a better situation in the future.

**Jozef Makúch:** I have two points. First, monetary policy cannot be a substitute for fiscal policy. This is not only because of our mandate; the problem is broader than that. Second, monetary policy faces the heterogeneity of fiscal policies across the euro area. Yesterday’s presentations were excellent, including the one by Agnès Bénassy Quéré. Among the questions for policymakers may be how to extend integration in fiscal institutions and how to make fiscal policy and monetary policy more consistent and coordinated at the euro area level.

**Boris Vujčić:** The way to address structural issues in the corporate sector is not only by providing more equity but also by cleaning up balance sheets. This is going on throughout Europe, including in my country (Croatia). There have

been assets sales in countries that have had the biggest problems, like Ireland and Spain. But those who bought these non-performing assets went elsewhere when the liquidity dried up and as the provisioning increased throughout the crisis. There were also more incentives for the banks to sell, plus you had changes in management in most of the banks. New management in commercial banks are more willing to sell the old people's babies, but they do not want to sell their own at 15 cents to the euro. This is the price. Then you have a problem: well capitalised banks can do it, poorly capitalised banks have a great problem admitting what shape they are in. If you look around Europe, poorly capitalised banks are still holding on to extending, pretending and trying to shuffle through. This is the problem. Unlike the United States, we have not fixed the banking problem in Europe yet. Of course, there is a huge difference in the bankruptcy procedures compared to those in the United States. In Europe, they are much less efficient than in the United States. This matter should be fixed through structural reforms, for which there is not that much political will.

As for the sustainable level of public debt, I do not know what it is.

I agree with Ardo Hansson that fiscal space is more an art than a science. You have to look at everything, including whether I have space to manoeuvre in the short run which will basically enable a medium- to long-run debt sustainability goal. This kind of thing changes over time from year to year, and it is very difficult to estimate what the potential rate of growth of output is and what are the implicit fiscal liabilities. The problem in Ireland was mentioned: Ireland had a huge implicit fiscal liability. It is very difficult to be honest *ex ante* about how things are and even to see through them. Sometimes people see and do not want to admit, sometimes they do not see. It is always the combination of the two things. For example, the right way to examine the fiscal position is to look at the net fiscal position in terms of the explicit and implicit fiscal liabilities. The European Commission accounts for the implicit fiscal liabilities, but the private market looks only at the headline public debt. For example, if you have a country which nationalised its private pension system and reduced the public debt, and Moody's and Standard & Poor's upgraded their ratings on this basis, it gives a completely wrong incentive to the policymakers to do exactly the wrong thing. We have a lot of problems in the way that we look at the public accounts. At the moment, we have something that is not conducive to good fiscal policymaking and is providing the wrong incentives.

I will skip the question on the difference between monetary policy and fiscal policy when central banks embark on large-scale asset purchases.

There was a question on the banking sector. I see a lot of problems for the banking sector in Europe to reinvent their business model in the medium to long run. People from the banking sector can say more about that. The business model in CEEs is to get money cheap in the home market and lend expensively in the CEEs. This is a very simple model that worked fine for some time. However, what you see now is that the whole CEE region is becoming like the Czech Republic, where the loan-to-deposit ratios are going the other way around. Soon you have more deposits than loans, and the banking model does not work that much any longer. Regulatory costs have gone up, fees are difficult to increase at the moment and, with no interest margins, you cannot expect banks to charge significant negative interest rates to the retail sector. Interest rates go to zero and stay there. Maybe for corporate large holders of deposits you can, but for the rest it is very difficult. I am not giving investment advice, but for the banking sector is very difficult to see the business model in the medium term.

On the snowball effect, I did not say that low interest rates do not help reduce the snowball effect. Of course they do, by definition. I said that most increases in the public debt happened not because of the primary balances but because of the snowball effect. Of course, it was the interest rate. This is probably the most that it does because it does not have much impact on the real economy, but it is reducing the snowball effect for the government. That cannot last forever. You cannot rely on extremely low interest rates forever to do the trick with the fiscal position. That is why we need structural reform.

**Hans-Helmut Kotz:** The point that Erik Jones stressed – the difference between *ex post* reasoning and *ex ante* analysis – is of the essence. Let me illustrate. Just try to recall why virtually all of us had such confidence in economic perspectives in early 2007. Against this background, it is enlightening as well as somewhat amusing to listen to all those who, with precious *ex post* or hindsight knowledge, now tell us why all was flawed at that time. To be honest, critical voices were in a tiny minority at the time, and were treated as grumbling dissenters from benign conventional views. I recall when a good friend of mine, Thomas Mayer, was derided as a doomsayer when he was expressing concerns about Spain, noting that one third of European growth came from there, mainly out of construction which had a share of about 14% of GDP. Another instance is, of course, Raghuraj Rajan's speech given in 2005 at the Jackson Hole conference. Rajan, then the IMF's chief economist, made the case that trouble might arise from the uncharted interactions of micro-hedging instruments (such as credit default swaps and collateralised debt obligations); they might add up to macro trouble. In the ensuing discussion,

Rajan was literally treated as a sort of a backward-minded finance Luddite. I also recall the reaction to the publication of a not-very-positive article on credit default swaps in the Bundesbank's Monthly Report of December 2004.

To be brief, group thinking abounds in technocratic policymaking circles. To counter this prevailing fact and to enrich our decision basis, there is a need for critical thinking. Let me highlight two points from our discussion which I find remarkable. The Croatian Governor, Boris Vujčić, told us that he conducted monetary policy by using macroprudential instruments. Of course, long ago this would have been deemed as unconventional, that is, unacceptable. When the Bank of Spain, building on empirical evidence, started using statistical provisioning – what is now called “dynamic provisioning” – to quasi-automatically slow down credit growth, it was assessed as not being in line with international accounting standards. Nobody even wanted to discuss it in 2004, 2005, and so on. Dampening credit growth was judged as pretence of knowledge: how can you know that private credit is not in line with fundamentals? What can justify public intervention? This amounts to falling back on old-fashioned capital controls. Meanwhile, of course, the general sentiment has changed very fundamentally indeed. There are good reasons for a reassessment of those instruments. In Germany, for example, house prices in a few regions are rising at a clip which leaves room for doubt. The ECB's monetary policy, conducted with an eye on the euro area average, obviously cannot address this.

The second issue I would like to discuss has to do with the coordination of macro policy tools. Incomes policy, be it implicit or explicit, used to be part of the macroeconomic toolbox in some Northern European economies. Take again Germany, where wages evolve more or less in line with productivity, and labour unions feel a responsibility for their firms. This impacts the real exchange rate, which of course still exists in the monetary union. Coordinated wage settlement institutions thus provide macro stabilisation. To understand what is happening in the euro area, it is crucial to think about the interactions of the variety of industrial relations that we have. This is not important for the United States incidentally. The United States has not fared that outstandingly well after the global financial crisis. The ratio of gross debt to GDP went up from about 60% to 107%. A number of states actually took a larger hit in terms of GDP per capita than Greece. Real median household income is somewhere close to that in the late 1980s, not to speak of the lower income deciles, which are around what prevailed in the 1960s. The United States is challenged by quite similar issues of productivity, potential growth and so on.

In short, we have to seriously think about the coordination of fiscal policy and monetary policy in order to achieve macro stabilisation in a fiscally constrained environment. Both work through the same funnel, to quote James Tobin. The global financial crisis ushered in very high levels of debt. They force us to reconsider how our economies work and adapt to that. Governor Boris Vujčić is right. Historically, according to Rogoff and Reinhart, 70% of debt deleveraging came from inflation and not from growth.

**Boris Vujčić:** There is a question that we have not answered: why we cannot produce inflation now to help debt leverage.

**Hans Helmut Kotz:** Two points. First, only unexpected inflation would ultimately help, if I may say so. Otherwise, both parties to the debt contract would account for it. Second, our lacklustre nominal (and real) growth of output has to do with both demand and supply. To quote Paul Samuelson, the Lord gave us two eyes to watch both. It is a general equilibrium question. If you just look at the supply side, if you just care about structural issues, you will end up where we are in Europe. Brad De Long, Larry Summers, Paul Krugman and others have launched an important debate in the United States. They insist that, given the environment we are in, we should invest more in infrastructure, broadly understood. What I see in Cambridge, Massachusetts, where I live about five months a year, is that public sector infrastructure evidently has quite some room for improvement. Unfortunately, though not to the same degree, similar issues exist in Germany. We have had to shut down bridges that have not been appropriately maintained. This has been called “saving”. Actually, it is undermining Germany’s future capacity to produce. There are other options. It is not only the supply side.

**Gent Sejko:** There are many issues. Regarding growth, from the view point of a transition country like Albania, which has still to complete the transition process, we have faced the same phenomenon as the other countries in the region and even wider in the euro area. We had a drop in economic growth, and now our challenge is how to achieve sustainable growth and go back to the levels we had before 2008. This requires revising the economic model and undertaking certain structural reforms, some of which are ongoing. But, these reforms have to be carefully considered and smartly undertaken by the government and all the actors. This is not possible with monetary policy alone. The central bank has to play its role, but without a clear strategy and good structural reforms undertaken by the government, we cannot achieve the desirable growth.

With regard to the questions on banking sector deleveraging and the risk premium, we cannot support growth without good support from lending. We look for foreign direct investment, but at this point financial support is also very crucial. After 2008, banks faced difficulties in countries like ours. Most of them have their headquarters in EU countries so they are under the ECB's regulatory framework, and most of them are deleveraging. These policies are reflected in a less aggressive lending policy, at least less so than before. As the central bank, we are very carefully watching the equilibrium between monetary policy and financial stability. On one side, we apply certain models to achieve our price stability, which is our main focus; but on the other side, this is achieved only in a good economic climate, which has to be significantly impacted by lending as well. However, we cannot push banks too much because there is a high NPL portfolio. So we need to care about the balance between financial stability and monetary policy. There is only one way, in terms of financial stability and in terms of banking. If banks do not have a good performance in lending, they have to be more prudent. However, there is potential. The story links economic growth and the financial stability role, but also the need to identify where the best potential of the country is. Once it was construction and that still could remain, but there are also some other industries which have advantages and can be attractive, like tourism, agriculture or, in some countries, mining. These are all linked together.

**Lubomír Lízal:** A lot has been said about the questions, and I will be more provocative. I would say that there is no fiscal space. And we know it *ex ante*. The idea of looking just at government debt is fine in the short term, but in the long term – looking at the prospects, the implicit debts, accounting for an ageing population, for the fact that you have promises for the pension system, for health care getting more expensive as longevity constantly increases – it is giving you the same answer I gave you, namely, there is no space on the fiscal side. It is really very difficult to admit that. From the long-term perspective, it goes beyond any political cycle. In this regard, I am quite sceptical. I think what we are going to see is just some sort of muddling through. Whenever there is a problem, we fail to get to the heart of it. This is what has been mentioned regarding infrastructure investment. Over past decades, governments have been inclined to cut investment rather than current expenditure. There has even been an incentive to increase the implicit burden. If there is a problem with unemployment, what are we going to do? We will give an incentive to retire early. But this is just another form of borrowing from the future. The root of the problem is that at the beginning of the past century, we invented how to borrow from the future, and we are now using it all the time. So, this is probably putting a limit on future development in the general sense.

One more point related to debt. Of course, when governments were facing the financial crisis, it was easy to say “no more taxpayers’ money”. It is really popular to say that, but it is also to some extent limiting our ability to invest, in the sense that the state – as the major investor in infrastructure and other parts of the economy – is cutting investment expenditure because there are other pressures, especially as regards fulfilling expenditures that have a short-term horizon with respect to the political cycle. The only remaining party that can pick up the investment financing needs is private investors in the financial sector. However, at the same time we are giving them the wrong incentives, saying that you need more capital deleverage and that you should match the maturities of your liabilities and assets. This is destroying the last tool that was there for investing in long-term growth and long-term prospects. Given all that, I would be a little bit sceptical.

I agree with the point on the Czech Republic’s use of exchange rate policy. What lay behind it was a need to change expectations – to move inflation expectations and, hence, real interest rates. But that is always difficult to explain to the general public. I even had difficulty explaining it to economists. I am rather sceptical about the usefulness of generalising the model to other countries. The situation was specific. It was a self-inflicted contraction of the Czech economy, and we had excess liquidity. I would agree that this requires specific conditions.

**Dubravko Mihaljek:** Would anyone like to address the question on good and bad inflation?

**Ardo Hansson:** It is a good point, but one does not approach this mechanistically. We have a very detailed model, a multi-year model where we synthesise all the monetary and the real effects and look at the medium term. The deflationary effect of falling commodity prices is weakened at some point in time as the base effect is eliminated. Much of that is already built into the model. We look through these short-term fluctuations. One does not attach a lot of importance as long as we see that the medium-term anchor and our measure of inflationary expectations are all right. Patience works in both directions: when we see there is a period which was hit by negative shocks, we filter some of them out. But, now we have seen oil prices go up a lot and we do not quickly react in the other direction. It requires looking at the future horizon through these models and evaluating them.

**Dubravko Mihaljek:** Mr. Kotz, a last word on the Irish experience.

**Hans-Helmut Kotz:** That is a very important question. Why? Monetary policy has been supra-nationalised in the ECB. This is tantamount to having a *stateless* money. From this perspective, EMU member states are sub-sovereigns. They

cannot rely on their central bank providing liquidity when in trouble. EMU's institutions were conceived without anything like a backstop facility. Crises on the scale we experienced were not foreseen. Therefore, a backstop facility was not a part of the plan. It was also rejected since such an insurance mechanism might create the wrong incentives. Therefore, the European Stability Facility was only introduced against strong resistance in 2010, as were the permanent European Stability Mechanism and President Draghi's "whatever it takes" policy. There is a good case to be made that those contingent liabilities which flew in the face of the Irish might have been dealt with in a significantly less costly way, as the question asked by Matija Lozej surmised, had such a backstop facility been around as well as ways of restructuring and unwinding banks. A monetary union without a facility addressing the roll-over risk for liquidity (not solvency) issues of member states is one which is very vulnerable. Maybe, Mr. Chairman, you are on the right way – letting me end with this more positive note.

***Dubravko Mihaljek:*** After 2½ hours, it is hard to summarise in one sentence. One of the messages of this panel is that we need to look out of the conventional toolbox. Several ideas were mentioned: macroprudential tools, wage policy and the coordination of fiscal policy and monetary policy, the overall umbrella topic of this conference. The idea that there may have been too much emphasis on trying to look for policies that boost supply is fine, but it is more long term. We also need to look at demand management ideas.

## Closing remarks

---

*Fabrizio Coricelli, Paris School of Economics and CEPR*

Coordination between monetary and fiscal policy is at the heart of the current debate in Europe. As evidenced in several presentations at this seminar, the issue involves not only problems of macroeconomic management, but also deeper problems of the process of integration in the European Union. Indeed, while at least in the euro area, monetary policy has been transferred to a common institution – namely, the ECB – fiscal policy remains in the hands of individual countries and, more importantly, the common rules are increasingly seen as an obstacle to needed policies to stimulate the timid recovery of output and employment in the EU. The problem is that, differently from monetary policy, a sizable fiscal stimulus requires public expenditure that has to be financed by those countries that have government resources, either through taxation or through their commitment to service the debt generated to finance public expenditure. A large fiscal stimulus at the EU level would necessarily involve a redistribution of resources and/or a redistribution of liabilities on debt issued to finance the stimulus. For this reason, the issue of coordination between fiscal and monetary policy is deeply rooted in the broader issue of further integration in the EU.

There was broad consensus in the seminar on the need for a more effective countercyclical fiscal policy in the EU and on the need for “positive” measures such as EU-wide public investment projects or common social expenditure in the form of, for instance, common unemployment benefits. Policies based simply on constraints coming from common rules risk further reducing support for the EU project.

Returning to the main theme of the seminar, the key question addressed was what roles fiscal and monetary policy can play in getting the economies of the EU and the euro area out of a “stagnation trap”. In this regard, views were divided. Some believed that the problem of anaemic growth in Europe was due to structural issues that cannot be tackled by monetary/fiscal policies. Others emphasised the fact that monetary policy had practically exhausted its tools to stimulate the economy, and thus fiscal policy should take the lead.

The heterogeneity between fiscal positions, especially debt-to-GDP ratios, of the “periphery” and the “core” of the euro area is a major obstacle to an effective common fiscal policy. Nevertheless, one manifestation of the problems associated with the lack of coordination between monetary and fiscal policy in

the euro area has been the fact that ECB policy has been driven by the objective of avoiding a debt crisis through policies that ended up with commercial banks purchasing government debt with funds injected by the ECB.

### **Beyond the contrast between lack of demand and supply bottlenecks: Financial crisis**

The continuing debate on whether growth is blocked by lack of demand or by supply-side bottlenecks neglects the fact that the Great Recession was mainly driven by a financial crisis. Financial crises involve both supply-side channels and demand-side channels. To draw a “mechanical” analogy, a financial crisis can be represented as a car engine breaking down. Thinking about pure demand as the fuel needed for a car to run, it is clear that without repairing the engine, the car cannot run. This does not mean that the fuel is not needed for the car to run. Repairing the engine in the current context of Europe means fixing the financial sector, which in many countries is still in a weak condition eight years since the start of the crisis. Especially in the periphery of the euro area, the financial sector is still dysfunctional, with credit allocation very inefficient. As a result, the real economy suffers from lack of credit. There is ample evidence that banks purchase government bonds rather than lending, and that the lending that is carried out seems to be still directed to financing inefficient firms in order for them to repay the old debt with the banks (“zombie lending”). In summary, the recovery in several EU countries is undermined by the dysfunctional role of the financial sector.

At the time of the creation of the euro, one major criticism, especially from the United States, of the construction of the European Monetary Union was the lack of fiscal backing to the newly created ECB. In the current debate, one of the main drawbacks of the euro has been identified as the lack of “monetary” backing for fiscal policy. In other words, countries in the euro area face a problem in their sovereign debt because of the absence of a national central bank that could eventually monetise such debt.

### **Fiscal backing of ECB policy and monetary backing of fiscal policies**

These positions seem not well founded and in some ways rather dangerous. Indeed, they downplay the role of the euro as an asset for countries otherwise subject to serious risks of runs on their currencies. If Italy, Portugal or Greece were to abandon the euro in favour of reintroducing their national currency, they would hardly benefit from the possibility of printing money to “monetise” their debt. In the context of open economies and free mobility of capital, the result would be a flight out of their national currencies with consequent deep crises, rather than a reduction of the burden of government debt.

In summary, despite clear difficulties, a more efficient coordination between monetary and fiscal policies in the euro area and in the EU calls for deeper integration in Europe. Such a road does not appear popular these days. However, a “closer EU” is not a romantic and unrealistic dream, but perhaps the only way to ensure against disintegration of Europe.

## About the speakers

---

**Dimitar Bogov** is Governor of the National Bank of the Republic of Macedonia. He has 21 years of work experience, including nine years in management positions in the government sector, one year in business consultancy and four years in a senior position in the largest Macedonian bank. From February 2007 to May 2011, Mr. Bogov was Vice Governor of the National Bank of Republic of Macedonia responsible for financial markets, foreign exchange reserves management and payment systems. He holds an MBA from Sheffield University.

**Cláudia Rodriguez Braz** is Head of the Public Finance Unit in the Public Finance and Structural Studies Division at the Banco de Portugal. She is also Chairperson of the Working Group on Public Finance at the European System of Central Banks (ESCB). Ms. Rodriguez Braz graduated in 1996 from the Nova University of Lisbon and continued her studies at the same university, attending the master's and PhD programmes. Alongside, she taught several courses from 1996 to 2007. Ms. Rodriguez Braz contributes extensively to regular publications of the Banco de Portugal and has a frequent advisory role to the Board of Banco de Portugal regarding public finance issues.

**Agnès Bénassy-Quéré** is a Professor at Paris School of Economics, University of Paris 1 Panthéon Sorbonne, and Chairperson of the French Council of Economic Analysis. She is also a member of the Commission Economique de la Nation (an advisory body to the finance minister), the French macro-prudential authority, the Cercle des Economistes, and is affiliated with CESIfo. After obtaining her PhD in Economics from University Paris-Dauphine, Professor Bénassy-Quéré worked for the French Ministry of Economy and Finance and then moved to successive academic positions at Universities of Cergy-Pontoise, Lille 2, Paris-Ouest and Ecole Polytechnique. She also has served as Deputy Director and Director of CEPR, as a columnist at France Culture and as a member of the Shadow ECB Council.

**Fabrizio Coricelli** is Professor of Economics at Paris School of Economics, Université Paris 1 Panthéon-Sorbonne and a Research Fellow of the Centre for Economic Policy Research (CEPR). He is also CEPR-Director of the European Central Banking Network. He has served as Director of Research at the European Bank for Reconstruction and Development (2007-08), Economic Adviser at the European Commission (2001-2002), Senior Economist at the World Bank (1989-1993) and Economist at the International Monetary Fund

(1987-1989). His research and professional activity has concentrated on the economics of emerging markets, with a special focus on transition countries. He holds a PhD in Economics from the University of Pennsylvania.

**Giovanni Dell’Ariccia** is Deputy Director of the Research Department at the International Monetary Fund, where he supervises the activities of the Macro-Financial Division. Previously he worked in the Asia and Pacific Department. Mr Dell’Ariccia holds a PhD from MIT and a bachelor’s degree from the University of Rome. He is a CEPR Research Fellow. He has published numerous papers in major economics and finance journals.

**Nikolay Gueorguiev** is Unit Chief in the European Department at the International Monetary Fund. He has been the IMF Mission Chief for Slovenia and Austria since October 2015. Previously, he served as the Mission Chief for Ukraine, Croatia, and Moldova. Prior to joining the IMF, he was a Deputy Minister of Finance in Bulgaria. Mr Gueorguiev holds a PhD in Economics from the University of Maryland at College Park, where he specialised in open economy macroeconomics, international finance, and economics of the transition to a market economy.

**Ardo Hansson** is the Governor of Eesti Pank and a member of the Governing Council of the European Central Bank since June 2012. Dr. Hansson worked for the World Bank from 1998 to 2012, where he worked on several countries in Eastern Europe and the Western Balkans and also served as Lead Economist of the World Bank’s Economics Unit in China. During 1991–1997, he held several senior positions in the Republic of Estonia, including Economic Adviser to the Estonian prime minister and adviser to the minister of foreign affairs. Dr. Hansson was also a member of the Monetary Reform Committee and a member of the Supervisory Board of the Bank of Estonia during 1993–1998. During the 1990s, he also was engaged in short-term consulting assignments for the governments of Mongolia, Poland, Slovenia and Ukraine. He graduated from the University of British Columbia in 1980 and earned a PhD in Economics from Harvard University in 1987. Following the completion of his studies, Dr. Hansson held faculty and research positions at several well-known universities in Canada, Finland and Sweden. He has published numerous articles on economic policy.

**Boštjan Jazbec** is Governor of the Bank of Slovenia since July 2013. He is also a member of the Governing Council of the European Central Bank. Dr. Jazbec has previously worked as a short-term consultant for the European Bank for Reconstruction and Development (EBRD) and the World Bank in Washington, DC. In July 2003, he was appointed to the Board of the Bank of Slovenia and held this post until 2008. Thereafter, until June 2013, he worked

as a consultant to the International Monetary Fund at the central banks of Kosovo and Suriname. He graduated from the University of Ljubljana and continued his studies at the Central European University in Budapest and Prague. After completing his PhD studies in Economics at the Institute for Advanced Studies in Vienna, Dr. Jazbec defended his doctoral thesis on real exchange rate determination in transition economies at the University of Ljubljana.

**Erik Jones** is Professor of European Studies and International Political Economy and Director of European and Eurasian Studies at the Paul H. Nitze School of Advanced International Studies of the Johns Hopkins University. He is also a Senior Research Fellow at Nuffield College, University of Oxford. Professor Jones is the author of several books and editor or co-editor of more than 20 books or special issues of journals on topics related to European politics and political economy, including the reference works *The Oxford Handbook of the European Union* (2012) and *The Oxford Handbook of Italian Politics* (2015), and the teaching works *Developments in European Politics 2* (2011) and *Europe Today, Fifth Edition* (2014). Professor Jones is a contributing editor of *Survival* and co-editor of *Government and Opposition*. His commentary has appeared in numerous outlets including the *Financial Times*, *New York Times*, *USA Today*, and other major newspapers across Europe and North America.

**Hans-Helmut Kotz** is Program Director of the SAFE Policy Center, Goethe University, Frankfurt. He also is a Resident Fellow at Harvard's Center for European Studies, directing its European Economic Policy Program as well as teaching in Harvard's Economics Department. In addition, Professor Kotz is on Freiburg University's Economics faculty, where he received the University Teaching Award. From 2002 to April 2010, he was a member of the Executive Board of Deutsche Bundesbank, in charge of financial stability, markets, statistics and IT, and a member of committees of the ECB, the BIS, the FSB as well as the OECD, where he was chair of the Financial Markets Committee. He was also the Deutsche Bundesbank Deputy for the G7/G8 and the G20 process. Professor Kotz has published widely and is involved in a number of academic institutions.

**Lubomír Lízal** is a member of the Bank Board of the Czech National Bank since February 2011. He is currently also a member of the Executive and Supervisory Committee of CERGE-EI and of the Governing Board of the Dynamics of Institutions and Markets in Europe research network. He was Deputy Director for Science in 2002, and Director of the Economics Institute of the Czech Academy of Sciences and CERGE during from 2003 to 2008. In 2006, he qualified as an Associate Professor in Economics at

Charles University. Mr Lízal graduated in Systems Programming from the Czech Technical University and holds a PhD in Economics from CERGE, Charles University.

**Jozef Makúch** is Governor of the National Bank of Slovakia (NBS) and a member of the ECB's Governing Council since 2010. As Governor of the NBS, he is also a Governor of the International Monetary Fund and an Alternate Governor of the European Bank for Reconstruction and Development. Previously, he served as a member of the NBS Bank Board and Executive Director (1993–1996 and 2006–2010). He was appointed Chairman of the Slovak Financial Market Authority in 2000, and served as Chairman of the ÚFT Board of Directors from 2002 to 2005. Mr. Makúch graduated from the University of Economics in Bratislava in 1976 and was a faculty member there from 1978 to 1994. He is currently a member of the academic councils of the University of Economics in Bratislava, of the Economics faculties of the University of Economics in Prague and Matej Bel University in Banská Bystrica (Slovakia), and of the Administrative Council of Comenius University in Bratislava. Mr Makúch also sits on the editorial boards of several economic journals. He is the author of numerous professional works published in Slovakia and abroad.

**Dubravko Mihaljek** is Head of Macroeconomic Analysis in the Monetary and Economic Department at the Bank for International Settlements. Prior to this, Dr. Mihaljek was a staff member of the International Monetary Fund (1990–1999) and Assistant Researcher in the Economics Institute, Zagreb (1982–1989). He initially studied at the University of Zagreb and subsequently obtained a master's degree at the University of Minnesota and a PhD in Economics at the University of Pittsburgh. He has published numerous empirical and policy-oriented papers on macroeconomics, international economics, banking and finance, transition economies and health care financing.

**Dušan Mramor** was Minister of Finance of the Republic of Slovenia at the time of the seminar. He also served as Minister of Finance from 2002 to 2004. Dr. Mramor is currently a Full Professor of Finance in the Faculty of Economics, University of Ljubljana. During his tenure at the University of Ljubljana, he has served as Associate Dean and the Dean of the Faculty of Economics and as Chairman of the Board of the University. He was a Recurring Visiting Professor at the Central European University, and a Research Associate and Visiting Scholar at the School of Business, Indiana University. Currently, he is a Vice-President of the Board of European Institute for Advanced Studies in Management in Belgium, a member of International

Advisory Board of Maastricht University School of Business and Economics in the Netherlands, and until August 2014 was a member of Initial Accreditation Committee and European Advisory Committee of AACSB in the United States. *The Banker* magazine selected Dr. Mramor as “European Finance Minister of the Year 2016”.

**Ludovít Ódor** is Deputy of the Network of EU Independent Fiscal Institutions and a member of the Council for Budget Responsibility. After graduating in Mathematics and Management from Comenius University, he worked as a financial market analyst for ČSOB bank and as an economist with the Slovak Rating Agency (2001–2003). From 2003 to 2005, Mr Ódor was the Chief Economist and Director of the Institute for Financial Policy at the Ministry of Finance. He then served as a member of the Board of the National Bank of Slovakia until September 2010, and subsequently as an advisor to the prime minister and finance minister until 2012. Since 2016, he is a Visiting Professor at the Central European University in Budapest. Mr Ódor is the author of numerous publications, both in Slovakia and abroad, and co-author of a number of reform projects, including the Constitutional Act on Fiscal Responsibility.

**Lucio R. Pench** is Director for Fiscal Policy and Policy Mix in the Directorate-General for Economic and Financial Affairs of the European Commission, which he joined in 1989. In this capacity, he has served as the Commission’s chief negotiator on the reform of the Stability and Growth Pact. His earlier assignments include heading the fiscal policy and surveillance unit in the same Directorate and a stint as adviser in the Group of Policy Advisers reporting to the Commission President. His interests and publications focus on macro-fiscal issues, including the relationship between policies and the EU institutional frameworks. He holds a master’s degree in International Relations (economics focus) from the Fletcher School of Law and Diplomacy.

**Javier J. Perez** is Head of the Conjunctural Analysis Division at the Directorate General of Economics, Statistics and Research of the Banco de España. Mr Perez was previously in charge of the Fiscal Policies Unit within the same Directorate General. Prior to joining the Banco de España at the end of 2008, he served as Principal Economist in the Fiscal Policies Division of the European Central Bank, as Senior Research Officer at centrA in Seville, and as Associate Professor at the Pablo de Olavide University in Seville and Complutense University in Madrid (from which he holds a PhD in Economics). He is a regular contributor to policy and academic workshops and seminars, primarily in the fields of fiscal policies, public debt, and fiscal and economic forecasting. In these fields, he has published extensively in national

and international journals, such as *Public Choice*, *Fiscal Studies*, the *Scandinavian Journal of Economics*, the *Journal of Money, Credit and Banking*, and the *European Journal of Political Economy*, among others.

**Steven Phillips** is Advisor in the Monetary and Capital Markets Department of the International Monetary Fund. He joined the IMF in 1991 and has previously served as Chief of the Open-Economy Macroeconomics Division of the Research Department as well as Chief of the Regional Economic Studies Division of the Western Hemisphere Department. He has led IMF missions to Chile, the Dominican Republic and Mexico, and also worked on Latvia and Russia, among others. He holds a PhD in Economics from the University of California at Berkeley.

**Lars Rohde** is Chairman of the Board of Governors of Danmarks Nationalbank since February 2013. In this capacity, he is also a Governor of the International Monetary Fund. From 1998 to 2013, he was CEO of the Danish Labour Market Supplementary Pension Scheme. In the 1980s he held various executive positions within Danish financial institutions. He has also served as a member of the Board of Copenhagen Stock Exchange, the Committee on Corporate Governance in Denmark, the Board of Association of Danish Mortgage Banks, as an expert member of the Swedish government commission on National Pension Fund and as a member of Long Term Investors Council for the World Economic Forum.

**Gent Sejko** is Governor of the Bank of Albania and Chairman of its Supervisory Council since February 2015. He started his banking career in 1992 as Head of Credit Division of the National Commercial Bank. Thereafter, he worked as an Inspector at the Supervision Department of the Bank of Albania until 1998. Subsequently, he worked for Deloitte & Touche as senior auditor and consultant and for the American Bank of Albania as Head of Internal Audit and Compliance Division. In 2002, Mr. Sejko returned to the Bank of Albania's Supervision Department as Head of Division for on-site examinations. He held a number of managing positions at Raiffeisen Bank from during 2004 to 2010, and was the Deputy General Manager and Head of Retail Department and Branches Network for Société Générale Albania from 2010 to February 2015. Mr. Sejko graduated from the University of Tirana in 1991 and earned a master's degree in International Accounting and Financial Management from the University of Glasgow in 1997.

**Jan Smets** is Governor of the National Bank of Belgium since March 2015. Soon after graduating, he joined the National Bank of Belgium where he worked for a number of years in the Research Department. From 1988 to 1994, he worked for the federal Belgian government and later became head of the

economic cabinet of the prime minister. In 1994, he returned to the National Bank of Belgium to become Head of the Research Department. In 1999, he was appointed member of the Board and at the same time also General Commissioner for the introduction of the euro in Belgium. For 15 years, he has been acting Chairman of the National High Council on Employment. He has chaired the “Public sector borrowing requirements” section of the national High Council of Finance for several years. As a governor of the central bank, he occupies a number of functions in international and national financial organisations and institutions.

**Vitas Vasiliauskas** is Chairman of the Bank of Lithuania since April 2011. Prior to this, Mr Vasiliauskas was a lawyer, specialising in financial law, and an associate partner at the law firm LAWIN Lideika, Petrauskas, Valiūnas ir partneriai (2004–2011). Earlier, he was the Vice Minister of Finance of the Republic of Lithuania (2001–2004), after being promoted from the position of Director of the Tax Department, Ministry of Finance (1998–2001). Mr Vitas Vasiliauskas started his career in the public sector as a lawyer and Head of the Tax Recovery Division of the State Tax Inspectorate (1995–1998). He completed his law studies at Vilnius University in 1996 and received his PhD in Social Sciences (Law) in 2004. He has remained active in the academic world throughout his career and is currently a Lecturer of the Chair of Public Law of Vilnius University Faculty of Law (since 2010). Previously he was a Lecturer of the Chair of Constitutional and Administrative Law (2004–2010) and assistant of the Chair of State and Law Theory and History of Vilnius University Faculty of Law (1997–2004) at Vilnius University Faculty of Law.

**Boris Vujčić** is Governor of the Croatian National Bank since July 2012. He joined the central bank in 1997, and was Director of the Research Department for three years before becoming Deputy Governor in 2000, a position to which he was re-appointed in 2006. Mr Vujčić became an Associate Professor in the Faculty of Economics of the University of Zagreb in 2003. He also teaches at the Diplomatic Academy of the Croatian Ministry of Foreign Affairs in the Department of Mathematics of the University of Zagreb. Mr Vujčić holds a PhD in Economics from the University of Zagreb.

**Nerses Yeritsyan** is Deputy Chairman of the Central Bank of the Republic of Armenia. His previous experience includes working at the Parliament of the Republic of Armenia, the Central Bank of Armenia (CBA) and the Minister of Economy of the Republic of Armenia. At the central bank, he successively held the positions of Advisor to the Chairman, Head of Monetary Policy Department, Member of the Board, Senior Advisor to the Chairman (Deputy Chairman of the Managerial Board), and Acting Head of the Financial

Monitoring Center. He has also served as advisor to the Dutch Executive Director at the International Monetary Fund. Dr. Yeritsyan holds a PhD in Economics and is the author of several scientific articles.

## About the editors

---

**Boštjan Jazbec** is Governor of the Bank of Slovenia since July 2013. He is also a member of the Governing Council of the European Central Bank. Dr. Jazbec has previously worked as a short-term consultant for the European Bank for Reconstruction and Development (EBRD) and the World Bank in Washington, DC. In July 2003, he was appointed to the Board of the Bank of Slovenia and held this post until 2008. Thereafter, until June 2013, he worked as a consultant to the International Monetary Fund at the central banks of Kosovo and Suriname. He graduated from the University of Ljubljana and continued his studies at the Central European University in Budapest and Prague. After completing his PhD studies in Economics at the Institute for Advanced Studies in Vienna, Dr. Jazbec defended his doctoral thesis on real exchange rate determination in transition economies at the University of Ljubljana.

**Biswajit Banerjee** is Chief Economist of the Bank of Slovenia since April 2014. He is also a member of the Monetary Policy Committee of the European Central Bank. Dr. Banerjee is a former senior staff member of the International Monetary Fund, where he led surveillance and programme missions to several countries in central and southeastern Europe. He also previously taught at Haverford College, the Wharton School of the University of Pennsylvania, and the University of Oxford. He has served as an external advisor to the Minister of Finance of the Slovak Republic, and has conducted training courses in financial programming for senior government officials of Bangladesh. Dr. Banerjee received his doctorate in Economics from the University of Oxford, which he attended as a Rhodes Scholar. He has numerous publications in leading academic journals.

# Rethinking Monetary–Fiscal Policy Coordination

---

Monetary policy has become increasingly accommodative in response to the global financial crisis, relying on unconventional policies, such as large-scale government bond purchases and negative interest rates in some countries. Yet there is broad agreement that there are limits to the scope of monetary policy actions and their effectiveness. Sustainable growth and price stability will require a coherent, integrated policy strategy that also includes contributions from fiscal and structural policies – as well as appropriate policies to contain financial risks.

This book contains the proceedings of the high-level seminar on “Rethinking Monetary–Fiscal Policy Coordination” organised by the Bank of Slovenia and the International Monetary Fund on 19-20 May 2016 in Portorož, Slovenia. The seminar explored the thinking of policymakers and academics on the roles and coordination of monetary and fiscal policies in the European Union and elsewhere. Three main topics were taken up in separate sessions: (i) principles and practical experience in the coordination of monetary and fiscal policies; (ii) fiscal policy implementation in the EU institutional framework and implications for monetary policy; and (iii) conducting monetary policy when fiscal space is limited.

**Boštjan Jazbec** is Governor and **Biswajit Banerjee** is Chief Economist at the Bank of Slovenia, Ljubljana, Slovenia.

ISBN 978-961-6960-12-0



9 789616 960120 >