INTRODUCTION

Marika Cioffi,[*] *Daniele Franco*[*] *and Maria Rosaria Marino*[*]

The importance of fiscal rules and institutions in shaping budgetary outcomes has long been recognized, but national experiences have been very different. In some countries rules and institutions contributed to improving fiscal outcomes. In others, results were less positive. The European Union's fiscal framework has also shown some problematic aspects.

These issues will be particularly relevant in the coming years, when many countries will have to cope with the consequences of the economic and financial crisis that began in 2008, which has led to massive increases in debt ratios. Effective fiscal rules and institutions will be essential in ensuring rapid consolidation and the efficient allocation of resources, in a context in which demographic change will exert additional pressures on budgets.

It is important to identify the features of fiscal frameworks that are most supportive of sound policymaking. The recent national experiences with fiscal rules and procedures can be particularly relevant in this regard. Some frameworks were more effective than others in ensuring safer budgetary positions in the pre-crisis years. The debate focuses on the role of medium-term budget orientation, constitutional rules, top-down budgeting, automatic correction mechanisms and independent forecasts and policy assessment.

Several countries have moved in two new directions: the introduction of formal rules and procedures concerning the control of public expenditure and the creation of independent fiscal institutions. Expenditure rules, which usually complement balanced-budget rules, are designed to tackle the deficit bias directly and avoid pro-cyclical policies. Independent institutions, which can have very different structures and tasks, aim at making fiscal policy more consistent with medium-term targets and increasing transparency.

In the European context, there is an extensive debate on the performance of the common fiscal framework before and during the crisis. Wide-ranging reforms of EU governance have been introduced, strengthening and broadening the monitoring of national policies and developments and enhancing fiscal coordination. Some changes pose new technical and policy challenges.

Several of these issues were already examined in the 2001 workshop, which was devoted to the theme of *Fiscal Rules*. What is new is the urgency triggered by the crisis: procedures and institutions guiding the fiscal consolidation process and ensuring an effective allocation of resources are even more necessary now than they were ten years ago. This is particularly true at the EU level, where the sovereign debt crisis has posed the toughest challenge to the euro area.

The papers presented at the workshop, like this volume, were organized in four sessions. Section 1 examines the recent experience with national fiscal frameworks. Section 2 is devoted to the European context, considering both the evolution of EU rules and how some countries adapted their rules and institutions to the evolving common framework. Section 3 considers the role of expenditure rules and independent fiscal institutions. Section 4 examines how some countries are moving ahead, either enhancing existing procedures and institutions or introducing more radical innovations.

[*] Banca d'Italia, Economic Research and International Relations Area.

1 National fiscal frameworks: the experience

Section 1 focuses on the effectiveness of national fiscal frameworks. It includes papers on Brazil, India, Slovenia and the United States, plus two papers that examine G7 countries and seven countries that have introduced fiscal responsibility laws.

The paper by Byron Lutz and Glenn Follette examines the effectiveness of budgetary rules in the United States and how they map into budget outcomes. The federal government has no restrictions from constitutional provisions and few from statutory legislation; by contrast, nearly every state government faces constitutional and statutory limitations on the power to run budget deficits as well as other fiscal restrictions. The authors find little evidence that statutory budget rules affect budget decisions. At times they are correlated with better budget outcomes because changes in rules and in policy both reflect a change in the preferences of policymakers. By contrast, rules that are constitutionally based appear to be more effective, leading to lower levels of debt, smaller deficits, and more pro-cyclical budget outcomes at the state level than at the federal level.

Ana Teresa Holanda de Albuquerque's paper provides an overview of Brazilian fiscal policy after the launching of the Real stabilization plan in July 1994. In particular, the paper analyses the main fiscal measures undertaken in the aftermath of the Plano Real and their impact on net debt. It also examines the effects of the Fiscal Responsibility Law on sub-national goverments' fiscal accounts, the management of fiscal policy from 2003 to 2008 and the countercyclical measures taken after October 2008. Finally, the paper considers the main challenges to be tackled in the future. The author estimates that in the near future the ratio of public sector net debt to GDP will fall as a consequence of high primary surplus targets, lower interest rates and economic growth. However, the government has to take measures to strengthen the control of current expenditure, in order to allow more room for public investment, and to make a step forward in the announced reform. In particular, the author claims that it is necessary to face the growing gap between pension obligations and contributions, to reduce the tax burden on labour, which compromises employment and competitiveness, and to simplify the tax system.

The paper by Brajamohan Misra focuses on the linkage between fiscal consolidation and macro-economic developments in India. Following the expansionary fiscal policy of the eighties, the nineties were mostly a phase of fiscal consolidation. The efforts to restore the fiscal balance through tax reforms, expenditure management, institutional reforms and financial sector reforms led to a reduction of fiscal deficits both at the federal and the state level. The fiscal deterioration in the late nineties and in the first years of the new century sparked a debate on the necessity for rule-based fiscal consolidation. The Fiscal Responsibility and Budgetary Management (FRBM) Act, which came into force in 2004, contains targets for debt, deficit and guarantees, ameliorates fiscal transparency and envisages democratic control over fiscal policy via better-informed public opinion. The early results were rewarding in terms of low deficits and rapid economic growth. This process continued smoothly until 2007-08, but the fiscal consolidation came to a halt during the following global financial crisis, and fiscal stimulus measures resulted in a rise in deficits. The national government resumed fiscal consolidation in 2010-11. The states will begin the fiscal consolidation process in 2011-12.

The paper by Paolo Mauro summarizes the findings of a research project on fiscal consolidation policies in G7 countries. The author claims that a systematic and comprehensive analysis of past adjustment plans and their outcomes provides useful insights for fiscal consolidation in the future. In the paper, fiscal adjustment plans are identified on the basis of large envisaged reductions in debts and deficits. That is, the analysis goes beyond past successes to examine attempts that eventually failed. It tracks ex post outcomes compared with ex ante plans, looking at deviations from targets in revenues or expenditures and the factors underlying such deviations. The analysis provides indications for the design and implementation of current

adjustment plans along three dimensions: the rationale and design of fiscal adjustment programmes; the implementation of the programmes and the underlying macroeconomic factors; and the political and institutional determinants of the implementation record.

Lili Liu and Steven B. Webb analyse the characteristics and effects of fiscal responsibility laws in seven countries – Argentina, Australia, Brazil, Canada, Colombia, India and Peru. Fiscal responsibility laws are designed to address the short time horizons of policymakers, free-riding among government units, and principal-agent problems between national and sub-national governments. The paper describes how the laws differ in terms of quantitative targets, the strength of sanctions, the methods used to increase transparency, and the level of government that enacts the legislation. The evidence shows that fiscal responsibility laws can help coordinate and sustain commitments to fiscal prudence, but they are no substitute for commitment and should not be viewed as an end in themselves. The authors argue that a common trait of successful fiscal responsibility laws at the sub-national level is the commitment of central government to its own fiscal prudence, which is usually reinforced by the application of the law at the national as well as the sub-national level.

Slaven Mićković focuses on public finance developments in Slovenia. The significant slowdown in economic activity in 2009 due to the international financial crisis and the collapse of external demand resulted in a fall in government revenue that is not expected to be reversed in the coming years. Mićković stresses that the success of crisis prevention and crisis resolution strategies depends heavily on adequate domestic fiscal frameworks. The key elements of the new Slovenian fiscal framework are medium-term budgetary objectives and expenditure ceilings. The latter would operate independently of revenues, which are affected by the economic cycle. Targeting deficit and debt at the same time allows for the reconciliation of multiple policy targets, such as safety, speed and quality of convergence.

In his discussion, Andrew Haughwout identifies three reasons why the public sector requires tighter regulation than the private sector. The first is time-inconsistency. Public sector decision makers may be tempted by the incentives to reap the benefits of high spending today and leave the bills to future generations of taxpayers, whereas in the private sector the value of a firm incorporates the decisions made by today's decision makers. The second reason concerns objectives: while in the private sector the maximization of profits is the main goal and term of reference, in the public sector objectives are numerous. The third reason is the sheer complexity of public budgets, which makes monitoring very difficult. All three of these features creates problems in ensuring that budgets remain consistent with a country's long-term economic needs. Commenting on Mićković's paper, Haughwout argues that while the feedbacks between fiscal decisions and private macro-economic outcomes (the so-called concept of budgeting with impact) are extremely important and constitute the fundamental driver of fiscal rules, formalizing them is complex and involves many subjective elements. Referring to Liu and Webb's paper, he claims that most of the rules in place require less information than budgeting with impact and may be thought of as shorthand, readily implementable versions of that concept. Haughwout stresses that rules should encourage fiscal policies that foster good outcomes in the private economy. He argues that a more complete analysis of these rules would be needed to determine whether they improve economic outcomes, reduce the variability of tax rates and make bailouts less likely. He concludes that the two papers provide insight into the difficulty of designing welfare-enhancing fiscal rules.

Commenting on the papers by Mauro and Misra, David Heald considers whether the 2008 global fiscal crisis has changed views concerning discretionary fiscal policy. While previously there was a broad consensus that automatic stabilizers were preferable to discretionary policy actions, it is not clear whether that position has actually changed, or whether it is only the extreme severity of the crisis that has created a special case. Concerning the paper by Mauro, Heald argues that crucial factors in the analysis are the criteria chosen for "success" and the timescale for judging

whether a fiscal consolidation has been successful. It matters whether one looks only at the period to which the consolidation applies or at the longer period. Furthermore, he argues that there is no point in talking about fiscal transparency without good data and that substantive transparency is more important than communication. Commenting on the paper by Misra, Heald suggests that aggregate data are informative but it would be very interesting to know more about variation between the state governments and about the size of local government in India, for which there are no consistent data. Moreover, it would be helpful to have more description of the policy actions undertaken and their impact on the public accounts. Finally, Heald stresses the importance of the discussion of off-budget and one-off items, in particular pay arrears, which sounds alarming, and capital receipts from auctions.

Ernesto Rezk discusses the papers of Lutz and Follette and of Holanda de Albuquerque. As to the first paper, Rezk agrees with the authors that states' constitutional budget rules are binding, impose restrictions on the fiscal conduct of state governments and, in turn, increase pro-cyclicality, but he wonders about the role of creative accounting and overly optimistic projections in sidestepping the rules. He also points to the importance of ascertaining whether surpluses stemmed from budget rules or from executive and congressional decisions. In the discussion of the paper by Holanda de Albuquerque, Rezk recognizes that fiscal rules have been effective in improving the budgetary outlook in Brazil but, in his opinion, it is not clear whether this new condition will be lasting. He notes that the main challenges in the near future are the reduction of the debt-to-GDP ratio, better allocation of expenditure via higher public savings, narrowing the growing gap between pension benefits and contributions, overcoming the inflexibility of the central government budget due to the fact that a good part of revenues is earmarked to specific programmes and mandatory expenditure, and simplifying the tax system and reducing the tax burden.

2 Fiscal rules and institutions in the European Union

Section 2 discusses the recent reforms of European fiscal and economic governance and some relevant developments at the national level. In particular, the first three papers examine the effects of the crisis on public finances and the design of the new European fiscal rules. The fourth focuses on the relationship between fiscal institutions and the credibility of sovereign borrowers. Two papers analyse in detail the experiences of two countries. The last shifts the focus to sub-national public finances.

Martin Larch, Lucio Pench and Christine Frayne examine the reform package proposed at the EU level to strengthen European economic governance and address the weaknesses of the previous framework highlighted by the financial crisis. The package includes provisions for stronger economic policy coordination and crisis resolution mechanisms. The legislative package (the "six-pack") aims to strengthen fiscal surveillance, as embodied in the Stability and Growth Pact. In particular, the rules preventing fiscal imbalances and those designed to correct excessive deficits are made more stringent and sanctions are made more automatic, thus narrowing the scope for national government discretion in the conduct of budgetary policy. Furthermore, the legislative package extends multilateral surveillance to the detection and correction of macroeconomic imbalances, which worsened financial tensions during the crisis, and introduces the Excessive Imbalance Procedure, flanked by a specific enforcement mechanism.

Sebastian Barnes notes that while the origins of the financial crisis were not mainly fiscal, pre-existing fiscal problems complicated its management. Even before the crisis, debt-to-GDP ratios displayed an upward trend in many OECD countries, mainly attributable to insufficient fiscal tightening in good times. There was also an increase in off-balance-sheet pension liabilities, mainly due to population ageing. Against this background, there was very little room for stabilization

policies during the crisis in several countries. The experience of the crisis demonstrates, according to Barnes, that European countries have to engage in sweeping fiscal reforms. In particular, he advocates strict conditionality for EFSF and ESM loans and greater symmetry of financial regulators' treatment of sovereign bonds and other assets. Excessive risk concentration, particularly in bonds of home governments, should be avoided. Moreover, while recognizing the usefulness of the recently approved changes to the EMU fiscal framework, Barnes advocates tighter monitoring of national fiscal positions by means of more complete and accurate Stability Programmes, more sophisticated methodologies to assess structural budgetary positions, and more transparent information concerning off-balance-sheet liabilities and debt management strategies. National frameworks need to be strengthened as well, by means of fiscal rules (in particular medium-term expenditure rules) and independent fiscal councils.

Christian Kastrop and Werner Ebert discuss the evolution and the present state of the Stability and Growth Pact (SGP). In their view, when the first version of the SGP was approved policymakers were excessively confident that markets would discipline fiscal profligacy in the euro area by means of higher sovereign risk premia. Moreover, they were not concerned by possible macroeconomic imbalances, which were deemed quite unlikely. Finally, the SGP did not consider the importance of national fiscal institutions, as it relied entirely on the effectiveness of "peer pressure" among member States. The second version did not fill those gaps. What is worse, its credibility was hampered by the "original sin" of the 2003 Franco-German case. Concerning the latest institutional developments, the authors welcome the approval of the "six-pack", the fiscal compact and a European crisis resolution mechanism. However, they stress that the latter should be completed and strengthened in at least two directions. First, a new ad hoc independent agency should be created to assess whether a country's position is unsustainable or illiquid. Second, in the case of insolvency, the European Stability Mechanism should play the role of a mediator between markets, crisis countries and the rest of the euro area countries.

Anna Iara and Guntram B. Wolff present a unique data set on national fiscal rules, built by the European Commission, covering eleven euro area countries from 1999 to 2010. They use the information to construct an index of the strength of national fiscal frameworks based on five dimensions: (1) the legal basis of the rule (which may vary from party-coalition agreements to the Constitution), (2) the possibility of revising the fiscal targets, (3) the mechanisms for monitoring compliance and enforcement, (4) the existence of pre-defined enforcement mechanisms and (5) media visibility. They subsequently study to what extent their index impacts on the 10-year sovereign yield spreads against the German Bund. They show that, after controlling for country-fixed effects and other standard covariates (such as global risk aversion and fiscal fundamentals), stronger fiscal rules significantly reduce the spread, especially in periods of high risk aversion. This remains true when instead of the fiscal rule index, its components are used one by one. However, the legal base turns out to be the most important dimension. Results are robust, among other things, to the exclusion of the last years of the sample, and to the use of quarterly data. The results support the emphasis given by the recent European governance reform to national fiscal rules.

Jürgen Hamker presents an overview of the 2009 German constitutional reform introducing a public debt brake and discusses how and to what extent this reform addresses the weaknesses of the previous "golden rule", which proved unable to limit the increase in the debt-to-GDP ratio. The reform relies on a clear-cut concept of balanced budget, refers to stricter definitions of exceptions and mandatory redemptions and contains a reference to the Stability and Growth Pact. However, whether the debt brake will be able to safeguard sustainable public finances in Germany ultimately depends on the clarification of some issues underlying the implementation of the new rules. Among them: the exclusion of financial transactions from the borrowing limit; the methodology used for cyclical adjustment; the adjustment path to be laid down for the transitional period, and the likely insufficient safety margin inherently associated with a binding constitutional limit. According to

Hamker, for the debt brake to work properly it is necessary to define a clear and simple rule while taking into account all the issues listed, in order to attain a clear interpretation and avoid dangerous loopholes.

Robert Boije and Albin Kainelainen hold that the national Medium Term Budgetary Framework (MTBF) played a pivotal role in assuring relatively favourable development of the Swedish public finances both before and after the 2008-09 financial crisis. Sweden, in fact, was able to keep its deficit and debt ratios below the SGP threshold even though it enacted significant fiscal stimuli. The MTBF includes: a surplus target over the business cycle; an expenditure ceiling covering primary expenditure and old-age pension system spending; a rigorous budgeting process which adopts a top-down perspective where different expenditure proposals are set against each other and spending has to be accommodated within the expenditure ceiling. In 2011 the Swedish government published the "Swedish Fiscal Policy Framework", a document meant to serve as a code of conduct for fiscal policy. The Code, covering a number of aspects of fiscal policy (role of fiscal frameworks, medium-term budgetary framework, external evaluation, stabilization policy, governmental interventions on financial markets, openness and transparency) aims at increasing transparency and strengthening the confidence in the sustainability of the public finances.

Julio Escolano, Luc Eyraud, Marialuz Moreno Badia, Juliane Sarnes and Anita Tuladhar study the relationship between the cyclically adjusted general government primary balance and fiscal decentralization. In particular, considering EU countries over the years 1995-2008, they show that the balance improves with spending decentralization but worsens with revenue decentralization (defined as local own revenues as a share of general government revenues) and with transfer dependency (defined as transfers to local government as a share of total local government revenues). This result is robust to different econometric specifications as well as to different definitions of the dependent variable (*i.e.*, change in the debt instead of the cyclically adjusted primary balance). The fact that different dimensions of fiscal decentralization have opposite effects on fiscal outcomes can be explained, according to the authors, by local governments' tendency to overspend, which can be countered by resource rationing from the centre. They also find that the role of fiscal rules seems rather minor and argue that this may be due to a lack of implementation and/or to frequent changes in the rules themselves.

Carlo Cottarelli, in his discussion, highlights the similarities between the papers of Larch et al. and Barnes. The papers agree that the EMU fiscal framework, even after the recent reforms, is imperfect and needs to be improved. Cottarelli concurs, even if he appreciates the European reform efforts, as do the authors of the two papers. He lists his own concerns. First, the expenditure rule embodied in the reformed preventive arm of the pact is based on real-time estimates of potential growth, which may prove inaccurate. Second, the new debt criterion may be problematic, mainly because it does not take cyclical factors into account. Third, it is not clear how pension reforms will be evaluated by the Commission. Fourth, the enforcement of the new rules is still subject to political capture by the Council. Finally, the crisis resolution mechanism appears incomplete.

In the discussion of the paper by Iara and Wollf, Vítor Gaspar's main point is the possibility of omitted variables. Indeed, it may be the case that the adoption of strict budgetary rules reflects a strong commitment to budgetary virtue (which is in turn difficult to observe and measure). More generally, many other relevant variables may be in the information set of the investors, and it is very hard to control for all of them in the regression analysis. Concerning the paper by Ebert and Kastrop, Gaspar warns that no crisis resolution mechanism, no matter how well designed, can avoid significant pain in case of sovereign restructuring. He argues that the design of an adequate crisis resolution mechanism has to be approached with the tools of contract theory, taking into account the differences between sovereign and private borrowers. Gaspar thinks that the features of the European stability mechanism by and large comply with the requirements of the theory, striking a correct balance between ex ante moral hazard and ex post insurance. However, there are a couple

of problematic points. First, as it starts from 2013, private sector involvement makes access to new finance difficult for the distressed sovereign. Second, a case-by-case approach to debt restructuring could be more appropriate than a "one size fits all" set of rules.

Concerning the papers by Bojie and Kainelainen, Philip Rother agrees that fiscal rules are important to ensure prudent policies in good times, but he is more sceptical about the effectiveness of fiscal rules in reducing debts and deficits in bad times. He also stresses the importance of transparency in the implementation of the rules, especially in countries which do not have a transparent policy process. In commenting on the paper by Hamker, Rother notes that it may serve as a reminder of the risk represented by loopholes, which can be exploited even in a context in which there is widespread consensus on the need for sound public finances. To allay this problem, fiscal rules need to be simple, so that compliance (or lack thereof) can be clearly observed by the public. Another lesson from the German case is that setting up an effective framework may be more difficult in a context in which fiscal responsibilities are decentralized to lower levels of government. Concerning the paper by Escolano et al., Rother points to some technical issues, such as possible reverse causality in the regression. In other words, it is possible that it is the strength of the fiscal position that drives the amount of expenditure decentralization and not the other way around. Moreover, he notes that the results support the old strategy of "divide and rule": with expenditure devolution, a strong central finance minister faces a potentially wide range of spending ministers who are relatively weak. In such an environment, rules at the sub-national level may indeed be unnecessary, while revenue devolution combined with encouragement to tax competition at the sub-national level can bring further economic benefits.

3 New developments: independent authorities and expenditure rules

The papers included in Section 3 discuss two issues that have recently become prominent in the policy debate. First, the role that can be assigned to independent fiscal agencies. Overall, there is a consensus that such institutions can be helpful in providing credible projections and independent policy evaluations, if endowed with adequate resources and if granted full independence from the political process. The second issue is the possible role of expenditure rules, as a complement to deficit rules. Again, there is a consensus that they can be helpful, even if further reflection is warranted concerning their optimal scope, the variables involved, their degree of flexibility, and other implementation details.

George Kopits reviews some pre-crisis trends in public finances and discusses how governments reacted to the crisis by introducing new institutions or reforming old ones. The first important feature of the pre-crisis period is the change in the patterns of sovereign financing: the relative weight of foreign investors decreased vis-à-vis domestic investors and, in emerging markets, bond financing replaced official loans and bank loans. A second feature is represented by the difficulties encountered by important international institutions. In particular, the IMF found it increasingly difficult to rein in private lenders to support an adjustment programme. EMU rules were repeatedly broken and suffered a loss of credibility. The third feature is the markedly different fiscal stances across countries: fiscal policy was very prudent in most Asian and Latin American countries and lax in some EU countries. As a reaction to the crisis, an increasing number of countries adopted national fiscal rules and/or created independent fiscal agencies. The author signals in particular the institutional changes made by the UK (an ambitious balanced-budget rule and a new independent fiscal agency) and contrasts them with the choices in the opposite direction made in Hungary. He notes that the UK was rewarded by the market with a decrease in risk premia, Hungary penalized by an increase.

Mostafa Askari, Kevin Page and Stephen Tapp describe the developments in Canadian

public finances since the mid-nineties, when the federal debt-to-GDP ratio had reached about 70 per cent, from 18 per cent in 1974. This explosive growth prompted a fiscal consolidation effort, with a series of budget surpluses that brought the debt down to about 30 per cent in 2008. This result was also due to improvements in the fiscal institutions: fiscal rules at the local and at the federal level were introduced, setting explicit objectives for deficits, expenditures and other budgetary variables both at the national and at the provincial level (some of these rules were abandoned later on); budgetary projections were based on independent forecasts and incorporated prudent assumptions. In 2006, a new body, the Parliamentary Budget Office, was created, with the mandate to provide independent analysis to Parliament on public finance issues. Canada is now confronting the new short- and medium-term fiscal challenges posed by the global financial crisis, as well as the long-term challenges posed by population ageing. The authors conclude with some policy suggestions to improve Canadian fiscal institutions.

In the Netherlands, before the national elections, at the request of the political parties, the Bureau for Economic Policy (CPB) publishes an economic evaluation of their electoral platform. The paper by Frits Bos and Coen Teulings discusses the merits and limitations of this process. The evaluation of election platforms can serve as a disciplining device against unrealistic electoral promises. More in general, it can help political parties to credibly inform voters about their platforms and to design more efficient policies. The first exercise took place in 1986 and over time the number of parties involved, the detail of their policy proposals, and the scope of the analysis have increased markedly. In particular, nowadays the evaluation not only concerns the direct budgetary effects of the platforms for the next political cycle, but also the indirect effects due to general equilibrium and behavioural feedbacks, longer-term effects and distributional effects. According to the authors, even if the broader scope of the evaluation exercises might be problematic, the rules of the Dutch evaluation are designed with the goal of making the whole process independent from politics, allowing good communication between parties and the evaluator, and guaranteeing the quality and objectivity of the evaluation.

Roel Beetsma, Benjamin Bluhm, Massimo Giuliodori and Peter Wierts explore the determinants of the difference between *ex post* budget outcomes and first-release outcomes published towards the end of the year of budget implementation (so-called revision error). The measurement of revision error is important because if the first releases are accurate, they can be taken as a useful signal that a tightening of fiscal policy may be needed and, given that first-release data are closest to the information set available to policymakers when they implement their policies, they might be useful in understanding policymakers' behaviour. Using information from the EU Stability and Convergence Programmes for the period 1998-2008, the authors find that first-release figures are systematically over-optimistic compared with the final, *ex post* figures, and that the revision error depends mainly on over-optimism about revenues. Furthermore, a substantial part of the over-optimism arises from the revision of the estimate of the previous period's balance (base effect); the remainder reflects the growth effect (the difference between the growth in nominal revenues and that in nominal expenditures). Regression analysis indicates that economic and political factors play only a limited role in explaining the revision bias and its components. However, some institutional characteristics – such as the characteristics of fiscal rules, the existence of a medium-term budgetary framework and the degree of transparency – significantly reduce the revision error.

The topic of Marc Robinson's paper is the appropriate design of expenditure ceilings. He defines an expenditure ceiling as a quantitative limit to the amount of spending of the State or of a ministry, which applies to a single year or to a limited number of years (therefore, contrary to expenditure rules, ceilings are not meant to last indefinitely). Robinson points out that neither the cabinet nor the minister of finance should impose an expenditure ceiling on a ministry without a previous round of formal resource requests from the spending ministries, which have information

on policy priorities and available projects. Robinson proposes a budget process in which strict expenditure ceilings are imposed on each ministry only for existing programmes, while for new projects only a government-wide ceiling is set. New projects are allocated to ministries taking their proposals into account, therefore adopting a bottom-up approach. Robinson proposes that this process should be complemented by a spending review which could lower the initial resource ceilings for the existing projects of each ministry. Taken together, such rules maximize allocative efficiency and guarantee aggregate expenditure control. Another issue is whether the ceilings should be multi-annual. Robinson points out that this would have important drawbacks: first, estimates of future spending needs under current policies are rarely accurate; second, new priorities often emerge which require a change in the allocation of funds.

Sebastian Hauptmeier, Jesus Sánchez-Fuentes and Ludger Schuknecht discuss the role of expenditure policies in explaining fiscal developments in EMU. Starting from 1999, they compare actual primary expenditure trends with those that would have prevailed if countries had followed "neutral policies", *i.e.*, policies based on mechanical expenditure rules. In particular, they contrast actual expenditure dynamics with those implied by rules that anchor expenditure growth to potential (or long-run) GDP growth. It turns out that although on average the gap is relatively small, the expenditure "stance" differs significantly across countries. All sample countries except Germany pursued expansionary expenditure policies before the crisis; on the contrary, Germany's stance was very restrictive. This implies that in several countries debt levels under neutral expenditure policies would have been much lower than they actually were. Rule-based expenditure policies could have led to much safer fiscal positions, and would have helped EU countries to comply with the Stability and Growth Pact. Furthermore, an empirical analysis of the determinants of the expenditure stance confirms the role played by budgetary institutions, the political business cycle and government stability. An obvious policy implication of these findings is the recommendation to introduce rigorous public expenditure rules.

Fabrizio Balassone, Daniele Franco and Stefania Zotteri argue that the introduction of formal multi-annual expenditure ceilings can help Italy attain a balanced budget. The authors show that Italy has a poor record with respect to the gap between medium-term fiscal targets and results and that the gap is mainly due to slippages in nominal primary expenditures. The recent introduction of an explicit role for expenditure dynamics in the European fiscal framework (the Stability Pact has been modified so that, normally, the growth rate of expenditures should be equal to or less than the growth rate of potential output) strengthens the argument for introducing an expenditure rule in Italy. Moreover, other European countries have effectively implemented similar mechanisms to control public spending. Finally, the authors discuss the desirable features of an expenditure rule (such as the expenditure items that should be considered, the degree of flexibility, and so on) both in general and in the Italian context.

In their discussion of Kopits' paper, Armela Mançellari, Gerti Shijaku and Jonel Kristo advance the hypothesis that the wrong policy choices that led to the crisis could be due to rationality failure. Concerning possible institutional solutions to such failures, they suggest that for developing countries like Albania, fiscal guidance from outside is often needed and welcome. They also advocate forms of mutual debt underwriting and mutual guarantees on bond issues among the members of an economic and/or political union. In their discussion of the paper by Beetsma, Bluhm, Giuliodori and Wierts, they stress that in order to improve the quality of early fiscal data releases, rules are important and their enforcement should be rigorous.

Ranjana Madhusudhan, discussing the papers by Askari, Page and Tapp and by Bos and Teulings, notes that the institutional solutions devised in Canada and the Netherlands are remarkably similar. In both countries it is considered necessary to endow the fiscal councils with adequate resources and independence from politics. One difference is that in Canada the uncertainty surrounding the policy evaluation is explicitly acknowledged (for example, via the use

of fan charts). Moreover, in Canada the effects of policies are also monitored in the implementation phase, while in the Netherlands the focus is on *ex ante* evaluation. However, Madhusudhan praises the role of the Dutch council as a well-respected political watchdog. She notes that evaluating an electoral platform is a fairly difficult task, as party proposals are often complex and multifaceted, while there are a number of social values that are worth pursuing, often not mutually compatible. These inherent difficulties of platform evaluations add to the purely technical difficulties of macro and fiscal projections. She agrees with both papers that it is important to use structural balances in evaluation exercises and stresses the importance of transparent assumptions, comprehensiveness (with particular regard to off-balance-sheet items), full dissemination of the evaluation results and an explicit analysis of local government activities.

While praising the budgetary procedure proposed by Robinson, Javier J. Pérez warns that the distinction between current policies and new projects might not be clear-cut in practice. Moreover, it is not obvious that keeping such a distinction is advisable (this is the idea behind the zero-base budgeting approach). Pérez also points out that, in order to judge the relative merits of different expenditure rules, one needs to spell out plausible behavioural assumptions about the motivations of ministers. Concerning the contribution by Hauptmeier, Sánchez-Fuentes and Schuknecht, Pérez considers possible extensions of their simple expenditure rules. For example, expenditure growth could be linked not only to GDP growth but also to revenue volatility, as well as to the need to build fiscal room for manoeuvre for bad times. Moreover, he warns that the crucial question of the optimal amount of public expenditure for a country remains to be addressed. In the case of Italy, which is the focus of the paper by Balassone, Franco and Zotteri, Pérez suggests more sophisticated expenditure rules, which might take into account the debt level or interest expenditure, at least transitorily. Finally, Pérez asks what the legal status of expenditure rules should be.

4 National fiscal frameworks: the way forward

Section 4 examines how some countries are moving ahead, either enhancing existing procedures and institutions or introducing more radical innovations. The papers focus on four countries (Iceland, Israel, New Zealand, Russia) and two areas – Central Europe and Latin America.

Teresa Ter-Minassian discusses the role that structural-balance-based fiscal rules could play in moderating pro-cyclicality and ensuring longer-term debt sustainability in Latin America. She notes that among the prerequisites for the effective adoption and implementation of structural-balance-based fiscal rules are a strong political commitment, a stable macro-economic environment, a minimum set of public financial management requirements, reliable fiscal statistics, adequate external scrutiny and appropriate enforcement mechanisms. In some countries these conditions are rather demanding, suggesting a gradualist approach. These countries could begin with systematic calculation and dissemination by the authorities of structural indicators to assess the fiscal stance and inform budgetary policy. At a later stage the indicators could be enshrined in a fiscal rule. The paper examines the role of structural-balance-based fiscal rules at the sub-national level and reviews the experiences of Chile, Colombia and Brazil.

Luis Carranza, Christian Daude and Ángel Melguizo analyse trends in public and total infrastructure investment in six large Latin American economies since the early eighties. They note that low and volatile public investment in infrastructure is one of the causes of slow long-term output growth in many Latin American countries. High financing costs due to weak fiscal sustainability seem to have contributed to low levels of infrastructure investment. This suggests that fiscal consolidation and public infrastructure investment could be complements, rather than substitutes. Accordingly, the paper discusses how fiscal frameworks in the region can be reformed

to create fiscal space for more public infrastructure investment. The authors assess the implementation of fiscal rules which take into account public investment in several countries and pay special attention to some recent developments in Peru, where fiscal rules have created space for public investment.

Sergey Vlasov examines the Russian public finance system and the main fiscal reforms that were carried out after the dissolution of the USSR. The paper considers the issues of macroeconomic stability and fiscal sustainability and focuses on the role of revenues from non-renewable resources, which are likely to decline in the long run. He notes that the budget balance and the fiscal impulse largely reflect the structural components as well as the cyclical oil (and gas) component, while the non-oil cyclical component has a relatively minor impact. Vlasov advocates switching from actual budget balancing to structural budget balancing for the purpose of managing the non-oil part of the budget. This would allow the government to respond automatically to the business cycle and to better control the value of government net worth. Managing the oil part of the budget via the mechanism of the oil-and-gas transfer is more efficient, as it contributes more strongly to the equal distribution of the revenues from non-renewable resources.

Adi Brender examines the development of the public expenditure rule that was introduced in Israel after the successful fiscal consolidation programme launched in 2003. The new rule was to set a ceiling to public spending that would increase at the same rate as the long-term growth rate of the economy. There would be a provision reducing the rate of increase of expenditure on the basis of the distance of the debt–to-GDP ratio from the 60 per cent level. The ceiling would also be adjusted on the basis of statutory tax rate changes. The proposed rule aimed at combining consistency with a long-term specified target, a-cyclicality and transparency. The rule that was eventually adopted deviates from these targets in several ways, raising problems in terms of pro-cyclicality, transparency and consistency. Some loopholes may allow pro-cyclical expenditure expansions. Taxes were excluded from the rule while maintaining the existing annual deficit ceilings. Brender notes that fiscal rules are predominantly a matter of national consensus on the need to reach common goals. Well designed rules can emerge when the surrounding conditions are appropriate for consolidation, but under such circumstances their specific design may be less critical.

Gunnar Gunnarsson examines the conduct of fiscal policy in Iceland in the period before the financial crisis of 2008 and identifies the weaknesses of the fiscal framework. He points out that revenue growth masked a deficit bias. The rule that was supposed to set a limit to the growth of public consumption did not work properly. Significant problems also emerged at the local government level. The fiscal impact of the crisis was very severe and the fiscal consolidation effort accordingly great. In this context, Iceland introduced an extensive reform of its fiscal framework, supported by the IMF. The reform was centred on medium-term budget planning, top-down formulation and approval of the budget, tighter budget execution and controls, a budget-balance rule for local governments, and tighter coordination between central and local governments. Gunnarsson examines these changes, highlights the advances made and finally discusses what is missing from the reform agenda. He notices that there is room for improving the statutory basis of the new framework and that there is no independent fiscal council monitoring and assessing fiscal policy.

Anne-Marie Brook draws lessons for New Zealand from the last economic cycle and surveys the options for strengthening the stabilization role of fiscal policy in future economic upturns. She notices that making fiscal policy less pro-cyclical in upturns is very difficult, especially for reasons of political economy. She emphasises that one should actively seek to avoid offsetting the automatic fiscal stabilizers, by putting in place institutional structures that promote greater transparency and accountability and build public support for the need for large fiscal surpluses during upturns. After reviewing the economic literature on the stabilization role of fiscal policy, she

argues that fiscal stabilization is particularly important for New Zealand and considers several possible improvements in the fiscal framework. Among the options that she examines are the use of *ex ante* spending plans (de-linking expenditure from revenue outcomes), the introduction of a stabilization fund to safeguard revenue windfalls and the creation of an independent fiscal council.

L'udovit Ódor focuses on the fiscal policy frameworks which should be introduced in Central European countries. He examines both the fiscal conditions of these countries (usually characterized by a relatively low level of debt, chronic deficits, problematic long-term fiscal prospects and fiscal transparency problems) and their current fiscal frameworks. He argues that in this environment the focus of fiscal rules should shift from flow variables to the concept of net worth. The balance-sheet approach would make the public more aware about unsustainable public finances and would not hamper structural reforms. He also supports the introduction of multi-year nominal expenditure ceilings together with independent fiscal institutions and suggests that all these aspects should be included in a single Fiscal Responsibility Act together with basic requirements for transparency and procedural rules. Ódor concludes that fiscal frameworks are not magic solutions. There is a need for broad political consensus.

Sergio Clavijo comments on the papers by Ter-Minassian and by Carranza, Daude and Melguizo. He notes that both support the implementation of structural fiscal rules and emphasise the need to develop sophisticated institutional arrangements and comprehensive fiscal information. He appreciates Ter-Minassian's stress on the use of flexible and realistic rather than hard-and-fast rules that would later have to be modified or would be eluded. In particular, he notes that she correctly argues in favour of introducing fiscal watchdogs, distinguishing temporary from permanent shocks and having fiscal-range instead of point targets. As to the paper by Carranza, Daude and Melguizo, Clavijo agrees on the role that fiscal rules can play in making room for public investment, which is lagging in many Latin American countries, and on the need to increase the contribution of capital markets to infrastructure development.

Philippe Frouté comments on the papers by Brender, Vlasov and Gunnarsson. He notes that the three countries examined in the papers share some patterns: the 2008 crisis hit them in a favourable fiscal context, revealed structural problems and called into question their fiscal sustainability. The countries reacted, inter alia, by revising their approach to fiscal rules. While the fiscal reforms underway in Russia were postponed, new fiscal rules were introduced in Iceland and Israel. Frouté points to some possible weaknesses in the fiscal framework of the three countries. Iceland has not introduced measures to tackle the excessive expansion of credit. In the Israeli rule the higher the debt ratio the lower the convergence speed; this can postpone the fiscal adjustment. In the case of Russia, the postponement of the rules envisaged for the use of non-renewable resources highlights the lack of guidelines to deal with exceptional circumstances.

Walpurga Köhler-Töglhofer comments on the papers by Brook and Ódor. She notes that while the New Zealand paper focuses on the question of how to enhance the stabilization function of fiscal policy, the paper on Slovakia aims primarily at improving the long-term sustainability of public finances. On Brook's paper, she notes that one of the most promising options for making fiscal policy more effective in stabilization is the introduction of a fund for this purpose, which would receive revenue windfalls in good times, while money would be drawn out in periods of negative output gap. The effectiveness of the fund would depend on accurate assessments of the economic cycle. Köhler-Töglhofer points to the positive aspects of Ódor's proposal, such as the fact that the government would have more generous expenditure ceilings if it implemented reforms that improve the long-term sustainability of the public finances. She also observes that the measurement of net worth is not straightforward. The rule would be rather complex. Moreover, one would still need a methodology to calculate cyclical and structural revenues and expenditures and to deal with the problems connected with the calculation of the change in net worth, since this is based on the assessment of such assets as state-owned companies.